



Joseph E. Kernan  
Governor

Lori F. Kaplan  
Commissioner

November 1, 2004

100 North Senate Avenue  
P.O. Box 6015  
Indianapolis, Indiana 46206-6015  
(317) 232-8603  
(800) 451-6027  
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TO: Interested Parties / Applicant  
RE: Transmetco, Inc / 069-19488-00067  
FROM: Paul Dubenetzky  
Chief, Permits Branch  
Office of Air Quality

### Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

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

Enclosures  
FNPER.dot 9/16/03



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**New Source Construction and  
FEDERALLY ENFORCEABLE STATE  
OPERATING PERMIT (FESOP)  
OFFICE OF AIR QUALITY**

**Transmetco, Inc.  
1750 East Riverfork Drive  
Huntington, Indiana 46750**

(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 provision of this permit is grounds for enforcement action; permit termination, revocation and reissuance, or modification; and denial of a permit renewal application. 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 2-8 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 new source review requirements and is intended to fulfill the new source review procedures and permit revision requirements pursuant to 326 IAC 2-8-11.1, applicable to those conditions.

Operation Permit No.: F 069-19488-00067	
Issued by: Original signed by Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: November 1, 2004  Expiration Date: November 1, 2009

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## SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in Conditions A.1 through A.2 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 2-8-3(b)]

The Permittee owns and operates a stationary secondary aluminum production source utilizing scrap aluminum.

Authorized individual:	Drew Heideloff
Source Address:	1750 East Riverfork Drive, Huntington, Indiana 46750
Mailing Address:	1750 East Riverfork Drive, Huntington, Indiana 46750
General Source Phone:	800-358-5040
SIC Code:	3341
Source Location Status:	Huntington
Source Status:	Attainment for all criteria pollutants Federally Enforceable State Operating Permit (FESOP) Minor Source, under PSD Minor Source, Section 112 of the Clean Air Act 1 of 28 Source Categories

### A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This stationary secondary aluminum production source utilizing scrap aluminum consists of the following emission units and pollution control devices:

- (a) One (1) natural gas-fired sweat furnace (group 1 furnace), equipped with low NO<sub>x</sub> burners, identified as SF1, equipped with a baghouse with activated carbon pre-coat to control D/F emissions, identified as BH1, capacity: 2.5 tons of aluminum scrap per hour (maximum capacity of 3.00 pounds of solid cover and wall cleaner fluxes per application each) with a holding burner rated at 1.5 million British thermal units per hour and a melting burner rated at 5.0 million British thermal units per hour. The sweat furnace, SF1, exhausts to duct work, which tees to Stack S1 and ductwork leading to the baghouse, BH1. The baghouse, BH1, exhausts through Stack S2. Automated dampers control the ductwork at the tee. When under normal operating conditions and melting scrap aluminum, the sweat furnace, SF1, will exhaust to the baghouse, BH1, which in turn exhausts to Stack, S2. During periods when the furnace is idle (i.e., holding molten aluminum over the weekend) with no melting occurring the sweat furnace, SF1, will exhaust to Stack S1.
- (b) One (1) natural gas-fired sweat furnace (group 1 furnace), equipped with low NO<sub>x</sub> burners, identified as SF2, equipped with a baghouse with activated carbon pre-coat to control D/F emissions, identified as BH2, capacity: 2.5 tons of aluminum scrap per hour (maximum capacity of 3.00 pounds of solid cover and wall cleaner fluxes per application each) with a holding burner rated at 1.5 million British thermal units per hour and a melting burner rated at 5.0 million British thermal units per hour. The sweat furnace, SF2, exhausts to duct work, which tees to Stack S3 and ductwork leading to the baghouse, BH2. The baghouse, BH2, exhausts through Stack S4. Automated dampers control the ductwork at the tee. When under normal operating conditions and melting scrap aluminum, the sweat furnace, SF2, will exhaust to the baghouse, BH2, which in turn exhausts to Stack, S4. During periods when the furnace is idle (i.e., holding molten aluminum over the weekend) with no melting occurring the sweat furnace, SF2, will exhaust to Stack S3.

- (c) One (1) electric scrap aluminum crusher, including feed hopper, identified as CR1, capacity: 5.0 tons of aluminum scrap per hour.
- (d) Five (5) conveyors, identified as CO1 through CO5, capacity: 5 tons aluminum scrap per hour.

A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]

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

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour, consisting of:
  - (1) Two (2) split systems, rated at 0.045 million British thermal units per hour each, and
  - (2) Four (4) unit heaters, rated at 0.300 million British thermal units per hour each
- (b) Equipment powered by internal combustion engines of capacity equal to or less than 500,000 British thermal units per hour, except where total capacity of equipment operated by one (1) stationary source exceeds 2,000,000 British thermal units per hour.
- (c) Combustion source flame safety purging on startup.
- (d) A petroleum fuel, other than gasoline, dispensing facility, having a storage capacity of less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month.
- (e) Refractory storage not requiring air pollution control equipment.
- (f) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (g) Paved and unpaved roads and parking lots with public access.

A.4 FESOP Applicability [326 IAC 2-8-2]

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) for a Federally Enforceable State Operating Permit (FESOP).

A.5 Prior Permits Superseded [326 IAC 2-1.1-9.5]

- (a) All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either
  - (1) incorporated as originally stated,
  - (2) revised, or
  - (3) deletedby this permit.
- (b) All previous registrations and permits are superseded by this permit.

## **SECTION B GENERAL CONDITIONS**

### **B.1 Permit No Defense [IC 13]**

Indiana statutes from IC 13 and rules from 326 IAC, quoted 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 FESOP under 326 IAC 2-8.

### **B.2 Definitions [326 IAC 2-8-1]**

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.3 Permit Term [326 IAC 2-8-4(2)] [326 IAC 2-1.1-9.5]**

This permit 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.

### **B.4 Enforceability [326 IAC 2-8-6]**

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 Termination of Right to Operate [326 IAC 2-8-9] [326 IAC 2-8-3(h)]**

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 2-8-3(h) and 326 IAC 2-8-9.

### **B.6 Severability [326 IAC 2-8-4(4)]**

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.7 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]**

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

### **B.8 Duty to Provide Information [326 IAC 2-8-4(5)(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 "authorized individual" as defined by 326 IAC 2-1.1-1(1). 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.9 Compliance Order Issuance [326 IAC 2-8-5(b)]**

IDEM, OAQ may issue a compliance order to this Permittee upon discovery that this permit is in nonconformance with an applicable requirement. The order may require immediate compliance or contain a schedule for expeditious compliance with the applicable requirement.

B.10 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)]

- (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 an authorized individual 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) An authorized individual is defined at 326 IAC 2-1.1-1(1).

B.11 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

- (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, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

- (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 2-8-4(3); and
  - (5) Such other facts as specified in Sections D of this permit, IDEM, OAQ, may require to determine the compliance status of the source.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

B.12 Preventive Maintenance Plan [326 IAC 1-6-3] [326 IAC 2-8-4(9)] [326 IAC 2-8-5(a)(1)]

- (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.

If due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

The PMP extension notification does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall implement the PMPs, including any required record keeping, as necessary to ensure that failure to implement a PMP does not cause or contribute to an exceedance of any limitation on emissions or potential to emit.
- (c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMP does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation, Maintenance, and Monitoring (OM&M) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

B.13 Emergency Provisions [326 IAC 2-8-12]

- (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, except as provided in 326 IAC 2-8-12.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describes 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 No.: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section) or,  
Telephone No.: 317-233-5674 (ask for Compliance Section)  
Facsimile No.: 317-233-5967

- (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, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

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 2-8-4(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 "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (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) IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) 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 2-8 and any other applicable rules.

- (g) Operations may continue during an emergency only if the following conditions are met:
- (1) 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.
  - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
    - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
    - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.
- Any operations shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.
- (h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

B.14 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]

- (a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provision), 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, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

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 need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

B.15 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-8-4(5)(C)] [326 IAC 2-8-7(a)] [326 IAC 2-8-8]

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a FESOP 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 2-8-4(5)(C)] The notification by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (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 2-8-8(a)]
- (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 2-8-8(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-8-8(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 2-8-8(c)]

B.16 Permit Renewal [326 IAC 2-8-3(h)]

- (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 2-8-3. 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 "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, IN 46206-6015

- (b) Timely Submittal of Permit Renewal [326 IAC 2-8-3]
  - (1) A timely renewal application is one that is:
    - (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
    - (B) 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.
  - (2) If IDEM, OAQ, upon receiving a timely and complete 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 until the renewal permit has been issued or denied.

- (c) Right to Operate After Application for Renewal [326 IAC 2-8-9]  
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 2-8 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 needed to process the application.

B.17 Permit Amendment or Revision [326 IAC 2-8-10] [326 IAC 2-8-11.1]

- (a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 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, P.O. Box 6015  
Indianapolis, Indiana 46206-6015
- Any such application shall be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) The Permittee may implement the administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]
- (d) No permit amendment or modification is required for the addition, operation or removal of a nonroad engine, as defined in 40 CFR 89.2.

B.18 Operational Flexibility [326 IAC 2-8-15] [326 IAC 2-8-11.1]

- (a) The Permittee may make any change or changes at this source that are described in 326 IAC 2-8-15(b) through (d), without 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 approval required by 326 IAC 2-8-11.1 has been obtained;
  - (3) The changes do not result in emissions which exceed the emissions allowable under 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, P.O. Box 6015  
Indianapolis, Indiana 46206-6015
- 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 which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-8-15(b) through (d) and makes such records available, upon reasonable request, to public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ in the notices specified in 326 IAC 2-8-15(b)(2), (c)(1), and (d).

- (b) Emission Trades [326 IAC 2-8-15(c)]  
The Permittee may trade increases and decreases in emissions in 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 2-8-15(c).
- (c) Alternative Operating Scenarios [326 IAC 2-8-15(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 2-8-4(7). No prior notification of IDEM, OAQ or U.S. EPA is required.
- (d) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

B.19 Permit Revision Requirement [326 IAC 2-8-11.1]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-8-11.1.

B.20 Inspection and Entry [326 IAC 2-8-5(a)(2)] [IC 13-14-2-2] [IC 13-17-3-2] [IC 13-17-3-2] [IC13-30-3-1]

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 FESOP 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, at reasonable times, 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 at reasonable times, 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, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.21 Transfer of Ownership or Operational Control [326 IAC 2-8-10] [IC 13-17-3-2]

- (a) The Permittee must comply with the requirements of 326 IAC 2-8-10 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, P.O. Box 6015  
Indianapolis, Indiana 46206-6015  
  
The application which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.22 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16] [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) 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 317-233-4320 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

B.23 Advanced Source Modification Approval [326 IAC 2-8-4(11)] [326 IAC 2-1.1-9]

- (a) The requirements to obtain a permit revision under 326 IAC 2-8-11.1 are satisfied by this permit for the proposed emission units, control equipment or insignificant activities in Conditions A.2 and A.3.
- (b) Pursuant to 326 IAC 2-1.1-9 any permit authorizing construction may be revoked if construction of the emission unit has not commenced within eighteen (18) months from the date of issuance of the permit, or if during the construction work is suspended for a continuous period of one (1) year or more.
- (c) The Permittee may request an extension of the construction or suspension deadlines in writing to IDEM, OAQ. The request shall include the reasons for the delay(s).

B.24 Credible Evidence [326 IAC 2-8-4(3)] [326 IAC 2-8-5] [62 FR 8314]

Notwithstanding the conditions of this permit that state specific methods that may be used to demonstrate compliance with, or a violation of, applicable requirements, any person (including the Permittee) may also use other credible evidence to demonstrate compliance with, or a violation of, any term or condition of this permit.

**SECTION C SOURCE OPERATION CONDITIONS**

Entire Source

**Emissions Limitations and Standards [326 IAC 2-8-4(1)]**

**C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [40 CFR 52 Subpart P] [326 IAC 6-3-2]**

- (a) Pursuant to 40 CFR 52 Subpart P, particulate matter emissions from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.
- (b) Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

**C.2 Overall Source Limit [326 IAC 2-8]**

The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

- (a) Pursuant to 326 IAC 2-8:
  - (1) The potential to emit any regulated pollutant, except particulate matter (PM), from the entire source shall be limited to less than one-hundred (100) tons per twelve (12) consecutive month period. This limitation shall also make the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable;
  - (2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and
  - (3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.
- (b) The potential to emit particulate matter (PM), from the entire source shall be limited to less than one-hundred (100) tons per twelve (12) consecutive month period. This limitation shall also make the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable;
- (c) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided that the source's potential to emit does not exceed the above specified limits.
- (d) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

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

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

C.5 Incineration [326 IAC 4-2] [326 IAC 9-1-2(3)]

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

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

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

C.7 Operation of Equipment [326 IAC 2-8-5(a)(4)]

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Except as otherwise provided by statute, rule or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

C.8 Stack Height [326 IAC 1-7]

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

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

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- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
  - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
  - (2) If there is a change in the following:
    - (A) Asbestos removal or demolition start date;
    - (B) Removal or demolition contractor; or

(C) Waste disposal site.

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

All required notifications shall be submitted to:

Indiana Department of Environmental Management  
Asbestos Section, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

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 "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (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 2-8-4(3)]**

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

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- (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, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

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 "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (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 "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the Permittee submits to IDEM, OAQ a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

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

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

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

### **Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]**

#### **C.12 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]**

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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, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

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

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Unless otherwise specified in the approval for the new emissions unit, compliance monitoring for new emission units or emission units added through a permit revision shall be implemented when operation begins.

#### **C.13 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]**

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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.

**Corrective Actions and Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]**

C.14 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68]

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

C.15 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-8-4] [326 IAC 2-8-5]

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(a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. If a Permittee is required to have an Operation, Maintenance and Monitoring (OM&M) Plan (or Parametric Monitoring Plan and Start-up, Shutdown, and Malfunction (SSM) Plan) under 40 CFR 60/63, such plans shall be deemed to satisfy the requirements for a CRP for those compliance monitoring conditions. A CRP shall be submitted to IDEM, OAQ upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and is comprised of:

- (1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected time frame for taking reasonable response steps.
- (2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan or Operation, Maintenance and Monitoring (OM&M) Plan (or Parametric Monitoring Plan and Start-up, Shutdown, and Malfunction (SSM) Plan) and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan or Operation, Maintenance and Monitoring (OM&M) Plan (or Parametric Monitoring Plan and Start-up, Shutdown, and Malfunction (SSM) Plan) to include such response steps taken.

The OM&M Plan (or Parametric Monitoring and SMM Plan) shall be submitted within the time frames specified by the applicable 40 CFR60/63 requirement.

(b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:

- (1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan or Operation, Maintenance and Monitoring (OM&M) Plan (or Parametric Monitoring Plan and Start-up, Shutdown, and Malfunction (SSM) Plan); or
- (2) If none of the reasonable response steps listed in the Compliance Response Plan or Operation, Maintenance and Monitoring (OM&M) Plan (or Parametric Monitoring Plan and Start-up, Shutdown, and Malfunction (SSM) Plan) is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.
- (3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, and it will be ten (10) days or more until the unit or device will be shut down, then the Permittee shall promptly notify the IDEM, OAQ of the expected date of the shut down. The notification shall also include the status of the applicable compliance monitoring parameter

with respect to normal, and the results of the response actions taken up to the time of notification.

- (4) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (c) The Permittee is not required to take any further response steps for any of the following reasons:
  - (1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.
  - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied.
  - (3) An automatic measurement was taken when the process was not operating.
  - (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.
- (e) The Permittee shall record all instances when response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-8-12 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- (f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

C.16 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4] [326 IAC 2-8-5]

- (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 "authorized individual" as defined by 326 IAC 2-1.1-1(1).

### **Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]**

#### **C.17 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]**

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

#### **C.18 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]**

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- (a) The source 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 "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (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 Branch, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015
- (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 "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (e) The first report covered the period commencing on the date of issuance of the original FESOP and ended on the last day of the reporting period. All subsequent reporting periods shall be based on calendar years.

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

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Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the 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 2-8-4(10)]: Sweat Furnaces, SF1 and SF2

- (a) One (1) natural gas-fired sweat furnace (group 1 furnace), equipped with low NO<sub>x</sub> burners, identified as SF1, equipped with a baghouse with activated carbon pre-coat to control D/F emissions, identified as BH1, capacity: 2.5 tons of aluminum scrap per hour (maximum capacity of 3.00 pounds of solid cover and wall cleaner fluxes per application each) with a holding burner rated at 1.5 million British thermal units per hour and a melting burner rated at 5.0 million British thermal units per hour. The sweat furnace, SF1, exhausts to duct work, which tees to Stack S1 and ductwork leading to the baghouse, BH1. The baghouse, BH1, exhausts through Stack S2. Automated dampers control the ductwork at the tee. When under normal operating conditions and melting scrap aluminum, the sweat furnace, SF1, will exhaust to the baghouse, BH1, which in turn exhausts to Stack, S2. During periods when the furnace is idle (i.e., holding molten aluminum over the weekend) with no melting occurring the sweat furnace, SF1, will exhaust to Stack S1.
- (b) One (1) natural gas-fired sweat furnace (group 1 furnace), equipped with low NOX burners, identified as SF2, equipped with a baghouse with activated carbon pre-coat to control D/F emissions, identified as BH2, capacity: 2.5 tons of aluminum scrap per hour (maximum capacity of 3.00 pounds of solid cover and wall cleaner fluxes per application each) with a holding burner rated at 1.5 million British thermal units per hour and a melting burner rated at 5.0 million British thermal units per hour. The sweat furnace, SF2, exhausts to duct work, which tees to Stack S3 and ductwork leading to the baghouse, BH2. The baghouse, BH2, exhausts through Stack S4. Automated dampers control the ductwork at the tee. When under normal operating conditions and melting scrap aluminum, the sweat furnace, SF2, will exhaust to the baghouse, BH2, which in turn exhausts to Stack, S4. During periods when the furnace is idle (i.e., holding molten aluminum over the weekend) with no melting occurring the sweat furnace, SF2, will exhaust to Stack S3.

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

### Construction Conditions

#### General Construction Conditions

##### D.1.1 Permit No Defense

This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

#### Effective Date of the Permit

##### D.1.2 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this section of this permit becomes effective upon its issuance.

##### D.1.3 Modification to Construction Conditions [326 IAC 2]

All requirements of these construction conditions shall remain in effect unless modified in a manner consistent with procedures established for revisions pursuant to 326 IAC 2.

## Operation Conditions

### Emission Limitations and Standards [326 IAC 2-8-4(1)]

#### D.1.4 General Provisions Relating to HAPs [326 IAC 20-1-1] [40 CFR 63, Subpart A]

The provisions of 40 CFR 63 Subpart A - General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, described in this section except when otherwise specified in 40 CFR 63 Subpart RRR.

#### D.1.5 Operation and Maintenance [326 IAC 20-1-1] [40 CFR 63.6(e)(1)(iii)] [40 CFR 63.6(e)(3)(i)]

Pursuant to 40 CFR 63.6(e)(1)(iii), the Permittee shall submit to IDEM, OAQ a startup shutdown, and malfunction (SSM) plan in accordance with 40 CFR 63.6(e)(3)(i) for the new affected source as defined by 40 CFR 63, Subpart RRR prior to the startup of the source.

#### D.1.6 HCl and HF (HAP) Limitations [326 IAC 2-8-4]

- (a) The addition of cover and wall cleaner fluxes to sweat furnaces, identified as SF1 and SF2, shall be limited to less than a total of 20,000 pounds of each flux per twelve (12) consecutive month period with compliance determined at the end of each month.
- (b) Compliance with these limits shall satisfy the requirements of 326 IAC 2-8-4 and the area source definition of 40 CFR 63, Subpart A as well as renders the requirements of 326 IAC 2-7 not applicable.
- (c) The Permittee shall not use chlorine injection in the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2.

#### D.1.7 PM<sub>10</sub> Limitations [326 IAC 2-8-4] [326 IAC 2-2]

- (a) The PM<sub>10</sub> emissions from each of the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, including fluxing, shall not exceed 7.58 pounds per hour.
- (b) Compliance with this limit shall satisfy the requirements of 326 IAC 2-8-4 and also make the requirements of 326 IAC 2-2 not applicable.

#### D.1.8 PM Limitations [326 IAC 2-2]

- (a) The PM emissions from each of the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, including fluxing, shall not exceed 7.58 pounds per hour.
- (b) Compliance with this limit shall make the requirements of 326 IAC 2-2 not applicable.

#### D.1.9 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from each sweat furnace, identified as SF1 and SF2, shall not exceed 7.58 pounds per hour when operating at a process weight rate of 2.5 tons per hour. The pounds per hour limitation was calculated using the following equation:

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

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

#### D.1.10 VOC Limitation [326 IAC 8-1-6]

- (a) The amount of scrap aluminum melted in each of the two (2) sweat furnaces, identified as SF1 and SF2, shall not exceed 20,702.5 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

- (b) The VOC emission rate shall not exceed a total of 2.40 pounds per tons of scrap aluminum charged (melted and/or held) from sweat furnace, SF1, exhausting through Stacks S1 and S2.
- (c) The VOC emission rate shall not exceed a total of 2.40 pounds per tons of scrap aluminum charged (melted and/or held) from sweat furnace, SF2, exhausting through Stacks S3 and S4.
- (d) Compliance with these limitations makes the requirements of 326 IAC 8-1-6 not applicable to each of the sweat furnaces.

#### D.1.11 Activated Carbon Usage Rate

Activated carbon shall be utilized to control D/F emissions from both sweat furnaces, identified as SF1 or SF2. Until IDEM, OAQ approves the performance stack test results, activated carbon shall be added at a rate of at least 0.5 pounds per hour per furnace when the melting process is in operation.

- (a) The Permittee shall determine the rate that activated carbon shall be added from the most recent valid performance stack test that demonstrates compliance with the D/F limit in Condition D.1.12, as approved by IDEM, OAQ.
- (b) On and after the date IDEM, OAQ approves the performance stack test results, the Permittee shall add activated carbon at or above the rate as observed during the compliant stack test.

#### D.1.12 Secondary Aluminum Production Limits [40 CFR Part 63.1500 (Subpart RRR)]

- (a) Pursuant to 40 CFR Part 63.1505(k)(3), the Permittee shall comply with the emission limit calculated using the following equation for dioxins and furans (D/F, which means tetra-, penta-, hexa-, and octachlorinated dibenzo dioxins and furans) for each of the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2. The Permittee shall not discharge or allow to be discharged to the atmosphere any 3-day, 24-hour rolling average emissions of D/F in excess of:

$$L_{C_{D/F}} = \frac{\sum_{i=1}^n \left( L_{ti_{D/F}} \times T_{ti} \right)}{\sum_{i=1}^n T_{ti}}$$

where  $L_{ti_{D/F}}$  = The D/F emission limit for individual emission unit in the secondary aluminum processing unit; and

$L_{C_{D/F}}$  = The D/F emission limit for the secondary aluminum processing unit.

$T_{ti}$  = The feed/charge rate for individual emission unit  $i$

- (b) Pursuant to 40 CFR 63.1505(k)(5), the Permittee shall demonstrate compliance with the emission limits of 40 CFR 63.1505(k)(3) by demonstrating that each of the natural gas-fired sweat furnaces, identified as SF1 and SF2, is in compliance with the following emission limit of 40 CFR 63.1505(i)(3):

15 ug of D/F TEQ per Mg (2.1 x 10<sup>-4</sup> gr of D/F TEQ per ton) of feed/charge from a group 1 furnace.

- (1) TEQ means the international method of expressing toxicity equivalents for D/F as defined in "Interim Procedures for Estimating Risks Associated with Exposures to Mixtures of Chlorinated Dibenzo-p-Dioxins and -Dibenzofurans (CDDs and CDFs) and 1989 Update" (EPA-625/3-89-016), available from the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, Virginia 22161, NTIS no. PB 90-145756.
- (2) The Permittee shall determine the emission standards for each of the natural gas-fired sweat furnaces, identified as SF1 and SF2, by applying the Group 1 furnace limits on the basis of the aluminum production weight in each Group 1 furnace, rather than on the basis of feed/charge.

#### D.1.13 Labeling [40 CFR Part 63.1506(b)]

The Permittee shall provide and maintain easily visible labels that shall be posted at the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2. Said labels shall identify the applicable emission limits and means of compliance, including:

- (a) The type of affected source or emission unit (e.g., Group 1 furnace, Group 2 furnace, in-line fluxer); and
- (b) The applicable operational standard(s) and control method(s) (work practice or control device). This includes, but is not limited to, the type of charge to be used for a furnace (e.g., clean scrap only, all scrap, etc.), flux materials and addition practices, and the applicable operating parameter ranges and requirements as incorporated in the OM&M plan.

#### D.1.14 Capture/Collection Systems [40 CFR Part 63.1506(c)]

Pursuant to 40 CFR 63.1506(c), the Permittee shall:

- (a) Design and install a system for the capture and collection of emissions to meet the engineering standards for minimum exhaust rates as published by the American Conference of Governmental Industrial Hygienists in chapters 3 and 5 of "Industrial Ventilation: A Manual of Recommended Practice" (incorporated by reference: 40 CFR 63.1502)
- (b) Vent melting and fluxing captured emissions through separate baghouse systems, BH1 and BH2, a closed system. Dilution air may be added to emission streams for the purpose of controlling temperature at the inlet to the fabric filters;
- (c) Exhaust group 1 sweat furnaces, SF1 and SF2, directly through Stacks S1 and S3, respectively, during hold times when no melting is occurring and flux is not being added to the furnaces;
- (d) Transition the group 1 sweat furnaces, SF1 and SF2, exhausts from Stacks S2 and S4 to Stacks S1 and S3, respectively, once the melting and fluxing operations have been completed. Once the transition has begun, flux shall not be added to either furnace; and
- (e) Operate each capture/collection system according to the procedures and requirements in the OM&M plan. The Permittee shall specify the time period that the baghouses shall be in operation after the melting process is curtailed, but prior to the switch over to the holding furnaces' stack exhausts. This time period and procedure shall be detailed in the OM&M plan.

#### D.1.15 Operation, Maintenance, and Monitoring (OM&M) Plan [40 CFR Part 63.1510(b)]

The Permittee shall submit the OM&M plan for the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, to the IDEM, OAQ.

The plan shall be accompanied by a written certification by the Permittee that the OM&M plan satisfies all requirements of 40 CFR 63.1510(b) and is otherwise consistent with the requirements of Subpart RRR. The Permittee shall comply with all of the provisions of the OM&M plan as submitted to the IDEM, OAQ unless and until the plan is revised in accordance with the following procedures. If the IDEM, OAQ notifies the Permittee at any time after receipt of the OM&M plan that any revisions of the plan are necessary to satisfy the requirements of 40 CFR 63.1510(b) or Subpart RRR, the Permittee shall promptly make all necessary revisions or additional revisions the Permittee deems necessary and resubmit the revised plan. If the Permittee determines that any other revisions of the OM&M plan are necessary, such revisions will not become effective until the Permittee submits a description of the changes and a revised plan incorporating them to the IDEM, OAQ.

Each plan shall contain the following information:

- (a) Process and baghouse parameters to be monitored to determine compliance, along with established operating levels or ranges, as applicable, for each process and baghouse.
- (b) A monitoring schedule for the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2.
- (c) Procedures for the proper operation and maintenance of the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2 and the baghouses, identified as BH1 and BH2, used to meet the applicable emission limits or standards in 40 CFR 63.1505.
- (d) Procedures for the proper operation and maintenance of monitoring devices or systems used to determine compliance, including:
  - (1) Calibration and certification of accuracy of each monitoring device, at least once every six (6) months, according to the manufacturer's instructions; and
  - (2) Procedures for the quality control and quality assurance of continuous emission monitoring systems as required by the general provisions in Subpart A of this part.
- (e) Procedures for monitoring process and baghouse parameters, including the procedure to be used for determining charge/feed (or throughput) weight if a measurement device is not used.
- (f) Corrective actions to be taken when process or operating parameters or baghouse parameters deviate from the value or range established in 40 CFR 63.1510(b)(1), including:
  - (1) Procedures to determine and record the cause of an deviation or excursion, and the time the deviation or excursion began and ended; and
  - (2) Procedures for recording the corrective action taken, the time corrective action was initiated, and the time/date corrective action was completed.
- (g) A maintenance schedule for the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, and their baghouses, identified as BH1 and BH2, that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.

D.1.16 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their control devices. If the OM&M plan required by Condition D.1.15 is developed in accordance with Section B - Preventive Maintenance Plan, then after the OM&M plan has been approved, it shall satisfy the requirements of this condition.

**Compliance Determination Requirements**

D.1.17 Testing Requirements [326 IAC 2-8-5(a)(1), (4)] [326 IAC 2-1.1-11]

Within 180 days of start-up of the sweat furnaces, identified as SF1 and SF2, in order to demonstrate compliance with Conditions D.1.7, D.1.8 and D.1.9, the Permittee shall perform PM and PM<sub>10</sub> testing of one (1) of the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, 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<sub>10</sub> includes filterable and condensable PM<sub>10</sub>. Testing shall be conducted in accordance with Section C - Performance Testing.

D.1.18 Testing Requirements [326 IAC 2-8-5(a)(1), (4)] [326 IAC 2-1.1-11] [40 CFR 63.1511, 63.1512, and 63.1513]

- (a) Pursuant to 40 CFR 63.1511(a), prior to conducting any performance test required by 40 CFR Part 63, Subpart RRR, the Permittee shall prepare a site-specific test plan which satisfies all of the requirements, and shall obtain approval of the plan pursuant to the procedures, set forth in 40 CFR 63.7(c) (General Provisions).
- (b) Pursuant to 40 CFR 63.1511(b), following approval of the site-specific test plan, the Permittee shall demonstrate initial compliance with each applicable emission, equipment, work practice, or operational standard for each of the natural gas-fired sweat furnaces, identified as SF1 and SF2, and report the results in the notification of compliance status report as described in 40 CFR 63.1515(b). The Permittee shall conduct this initial performance test within 180 days of start-up of the sweat furnaces, identified as SF1 and SF2, in order to demonstrate compliance with Condition D.1.12 and 40 CFR Part 63 Subpart RRR. The Permittee shall conduct each performance test in accordance with the requirements and procedures set forth in 40CFR 63.7(c) and 63.1511(b), (c), and (d) (Performance test/compliance demonstration general requirements). The Permittee is subject only to those performance testing requirements pertaining to D/F.
- (c) Pursuant to 40 CFR 63.1511(g), the Permittee shall establish a minimum or maximum operating parameter value, or an operating parameter range for each parameter to be monitored as required by 40 CFR 63.1510 that ensures compliance with the applicable emission limit for D/F. To establish the minimum or maximum value or range, the Permittee shall use the appropriate procedures in 40 CFR 63.1511(g) and submit the information required by 40 CFR 63.1515(b)(4) in the notification of compliance status report. The Permittee may use existing data in addition to the results of performance tests to establish operating parameter values for compliance monitoring provided each of the conditions in 40 CFR 63.1511(g) are met to the satisfaction of the IDEM, OAQ.
- (d) Pursuant to 40 CFR 63.1512(d)(1), the Permittee shall conduct performance tests to measure emissions of D/F at the outlet of the activated carbon injected baghouses, identified as BH1 and BH2, controlling sweat furnaces, identified as SF1 and SF2. Pursuant to 40 CFR 63.1512(j), the results of the performance tests for the natural gas-fired sweat furnaces, identified as SF1 and SF2, are used to establish emission rates in ug TEQ/Mg of aluminum produced for D/F emissions from each emission unit. These emission rates are used for compliance monitoring in the calculation of the 3-day, 24-hour rolling average emission rates using the equation in 40 CFR 63.1510(t).

- (e) Pursuant to Paragraphs (k), (n), (o), and (p) respectively of 40 CFR 63.1512, during the performance tests the Permittee shall comply with the requirements and use the procedures in these sections of the NESHAP for:
- (1) Measuring or otherwise determining the aluminum produced by the natural gas-fired sweat furnaces, identified as SF1 and SF2;
  - (2) Establishing an operating parameter value or range for the inlet gas temperature at the inlet to the baghouses, identified as BH1 and BH2, controlling the natural gas-fired sweat furnaces, identified as SF1 and SF2; and
  - (3) Establishing an operating parameter value for the activated carbon injection system feeder setting for each operating cycle or time period used in the performance test.
- (f) Pursuant to Paragraphs (b), (d), and (e)(3) and (4) respectively of 40 CFR 63.1513 (Equations for determining compliance), the Permittee shall comply with the requirements and use the equations, references, and/or procedures in these sections of the NESHAP for:
- (1) Determining compliance with an emission limit for D/F;
  - (2) Conversion of D/F measurements to TEQ units; and
  - (3) Determining compliance with emission limits for a secondary aluminum processing unit.

#### D.1.19 HAPs Emissions

In order to comply with Condition D.1.12, an activated carbon injection system shall be in operation and control D/F emissions from the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, at all times that the furnaces are in operation and melting aluminum or adding flux to the furnaces.

#### D.1.20 Particulate Control and Capture/Collection Systems [326 IAC 2-8-4]

In order to comply with Conditions D.1.7, D.1.8 and D.1.9, the baghouses, identified as BH1 and BH2, for particulate control shall be in operation and control emissions from the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, at all times that the furnaces are in operation and melting aluminum or adding flux to the furnaces.

#### D.1.21 Feed/Charge Determination [40 CFR 63.1506(d)]

Pursuant to 40 CFR 63.1506, the Permittee shall install and operate a device that measures and records or otherwise determines the weight of feed/charge (or throughput) for each operating cycle or time period used in the performance test. The Permittee shall operate each measurement system or other weight determination procedure in accordance with the Operation, Maintenance, and Monitoring Plan. Alternatively, the Permittee may choose to measure and record aluminum production weight from the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, rather than feed/charge weight provided that the aluminum production weight is measured for the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, within a secondary aluminum processing unit and all calculations to demonstrate compliance with the emission limits for the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, are based on aluminum production weight rather than feed/charge weight.

#### D.1.22 Fabric Filter Monitoring Requirements [40 CFR 63.1510(f)]

Pursuant to 40 CFR 63.1510, the following requirements apply to the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2:

- (a) The Permittee shall install and operate a bag leak detection system for each exhaust stack of a fabric filter.
- (b) Each triboelectric bag leak detection system shall be installed, calibrated, operated, and maintained according to the "Fabric Filter Bag Leak Detection Guidance," (September 1997). Other bag leak detection systems must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations.
- (c) The bag leak detection system shall be certified by the manufacturer to be capable of detecting PM emissions at concentrations of ten (10) milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.
- (d) The bag leak detection system sensor shall provide output of relative or absolute PM loadings.
- (e) The bag leak detection system shall be equipped with a device to continuously record the output signal from the sensor.
- (f) The bag leak detection system shall be equipped with an alarm system that will sound automatically when an increase in relative PM emissions over a preset level is detected. The alarm shall be located where it is easily heard by plant operating personnel.
- (g) For negative pressure or induced air fabric filters, the bag leak detector shall be installed downstream of the fabric filter.
- (h) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.
- (i) The baseline output shall be established by adjusting the range and the averaging period of the device and establishing the alarm set points and the alarm delay time.
- (j) Following initial adjustment of the system, the Permittee shall not adjust the sensitivity or range, averaging period, alarm set points, or alarm delay time except as detailed in the OM&M plan. In no case may the sensitivity be increased by more than one hundred (100%) percent or decreased more than fifty (50%) percent over a 365-day period unless such adjustment follows a complete fabric filter inspection which demonstrates that the fabric filter is in good operating condition.

D.1.23 Secondary Aluminum Production Compliance Determination [40 CFR Part 63, Subpart RRR]

Pursuant to 40 CFR Part 63.1510, the following conditions shall apply to the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2:

- (a) Pursuant to 40 CFR 63.1506(m), for each furnace, the Permittee shall:
  - (1) Initiate corrective action within one (1) hour of a bag leak detection system alarm; complete the corrective action procedures in accordance with the Operation, Maintenance, and Monitoring Plan; and operate each fabric filter system such that the bag leak detection system alarm does not sound more than five (5%) percent of the operating time during a six (6) month block reporting period. In calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required, each alarm shall be counted as a minimum of one (1) hour. If the Permittee takes longer than one (1) hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the Permittee to initiate corrective action.

- (2) Maintain the three (3) hour block average inlet temperature for each fabric filter at or below the average temperature established during the performance test plus fourteen (14) degrees Celsius (plus twenty-five (25) degrees Fahrenheit).
  - (3) For an activated carbon injection system, the Permittee shall maintain free-flowing activated carbon in the hopper to the feed device at all times and maintain the activated carbon feeder setting at the same level established during the performance test. Pursuant to 40 CFR 63.1503 activated carbon injection means the addition of activated carbon upstream of the fabric filter.
- (b) The Permittee shall use an activated carbon injected fabric filter to comply with the requirements of 40 CFR 63, Subpart RRR; and therefore pursuant to 40 CFR 63.1510(i), the Permittee shall:
- (1) Verify that the activated carbon is always free-flowing by inspecting the feed hopper or silo at least once each eight (8) hour period and recording the results of each inspection. If the activated carbon is found not to be free-flowing during any of the eight (8) hour periods, the Permittee shall increase the frequency of inspections to at least once every four (4) hour period for the next three (3) days. The Permittee may return to inspections at least once every eight (8) hour period if corrective action results in no further blockages of activated carbon during the three (3) day period, or
  - (2) Installing, operating and maintaining a load cell, carrier gas/activated carbon flow indicator, carrier gas pressure drop measurement system or other system to confirm that activated carbon is free-flowing. If activated carbon is found not to be free-flowing, the Permittee shall promptly initiate and complete corrective action.
  - (3) The Permittee shall also record the feeder setting once each day of operation.
- (c) Pursuant to 40 CFR 63.1510(j), for the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, the Permittee shall:
- (1) Record, for each fifteen (15) minute time period during each operating cycle or time period used in the performance test during which reactive fluxing occurs, the time, weight, and type of flux for each addition of solid reactive flux:
  - (2) Calculate and record the total solid reactive flux injection rate for each operating cycle or time period used in the performance test using the procedure in 40 CFR 63.1512(o).
- (d) Pursuant to 40 CFR 63.1510(s)(1), the Permittee shall include, within the OM&M plan prepared in accordance with 40 CFR 63.1510(b), the following information:
- (1) The identification of each emission unit in the secondary aluminum processing unit;
  - (2) The specific control technology of pollution prevention measure to be used for each emission unit in the secondary aluminum processing unit and the date of its installation or application;
  - (3) The emission limit calculated for each secondary aluminum processing unit and performance test result with supporting calculations demonstrating initial compliance with each applicable emission limit;

- (4) Information and data demonstrating compliance for each emission unit with all applicable design equipment work practice or operational standards of Subpart RRR; and
  - (5) The monitoring requirements applicable to each emission unit in a secondary aluminum processing unit and the monitoring procedures for daily calculation of the three- (3-) day, twenty-four- (24-) hour rolling average using the procedure in 40 CFR 63.1510(t).
- (e) The secondary aluminum processing unit compliance procedures within the OM&M plan may not contain any of following provisions:
- (1) Any averaging among emissions of differing pollutants;
  - (2) The inclusion of any affected sources other than emission units in a secondary aluminum processing unit.
  - (3) The inclusion of any emission unit while it is shutdown; or
  - (4) The inclusion of any periods of startup, shutdown, or malfunction in emission calculations.

D.1.24 Fabric Filter Inlet Temperature Monitoring Requirements [40 CFR 63.1510(h)]

- (a) The Permittee shall install, calibrate, maintain, and operate a device to continuously monitor and record the temperature of the fabric filter inlet gases entering baghouses, identified as BH1 and BH2, consistent with the requirements for continuous monitoring systems in 40 CFR Part 63, Subpart A.
- (b) The temperature monitoring device shall meet each of these performance and equipment specifications:
  - (1) The monitoring system shall record the temperature in fifteen- (15-) minute block averages and calculate and record the average temperature for each three- (3-) hour block period.
  - (2) The recorder response range shall include zero (0) and one and one half (1.5) times the average temperature established according to the requirements in 40 CFR 63.1512(n).
  - (3) The reference method shall be a National Institute of Standards and Technology calibrated reference thermocouple-potentiometer system or alternate reference, subject to approval by the Administrator.
  - (4)

**Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]**

D.1.25 Labeling [40 CFR 63.1510(c)]

The Permittee shall inspect the labels required in Condition D.1.13 at least once per calendar month to confirm that the posted labels as required by the operational standard in 40 CFR 63.1506(b) for the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, are intact and legible.

D.1.26 Capture/Collection System [40 CFR 63.1510(d)]

The Permittee shall inspect each capture/collection and closed vent system for the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, at least once each calendar year to ensure that each system is operating in accordance with the operating requirements pursuant to 40 CFR 63.1506(c) and record the results of each inspection.

D.1.27 Feed/Charge Determination [40 CFR 63.1510(e)]

The Permittee shall install, calibrate, operate, and maintain a device to measure and record the total weight of feed/charge to, or the aluminum production from each sweat furnace, identified as SF1 and SF2, over the same operating cycle or time period used in the performance test. Feed/charge or aluminum production within SAPUs shall be measured and recorded on an emission unit-by-emission unit basis. The accuracy of the weight measurement device or procedure shall be  $\pm 1$  percent of the weight being measured.

D.1.28 Corrective Action [40 CFR 63.1506(p)]

When a process parameter or baghouse operating parameter deviates from the value or range established during the performance test and incorporated in the OM&M plan, the Permittee shall initiate corrective action. The corrective action taken, shall restore operation of the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, and/or baghouses, identified as BH1 and BH2, to their normal or usual mode of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

In addition, the corrective actions taken shall include follow-up actions necessary to return the process or baghouse parameter level(s) to the applicable value or range of values, and steps to prevent the likely recurrence of the cause of a deviation.

D.1.29 Compliance Monitoring Requirements [40 CFR 63.1510(t)] [40 CFR 63.1510(u)]

Pursuant to 40 CFR 63, Subpart RRR, on and after the date the results of the initial performance stack test to show compliance with Condition D.1.12 are approved by IDEM, OAQ, the Permittee shall monitor the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, and the baghouses, identified as BH1 and BH2, according to the following requirements:

- (a) The Permittee shall calculate and record the three- (3-) day, twenty-four (24-) hour rolling average emissions of D/F for each sweat furnace, identified as SF1 and SF2, on a daily basis. To calculate the three- (3-) day, twenty-four (24-) hour rolling average, the Permittee shall:
  - (1) Calculate and record the total weight of material charged to each furnace for each twenty-four- (24-) hour day of operation using the feed/charge weight information required in 40 CFR 63.1510(e). If the Permittee chooses to comply on the basis of weight of aluminum produced by the emission unit, rather than weight of material charged to the natural gas-fired sweat furnaces, identified as SF1 and SF2, all performance test emissions results and all calculations must be conducted on the aluminum production weight basis.
  - (2) To provide emissions for each furnace for the twenty-four- (24-) hour period, in pounds: multiply the total feed/charge weight to the furnace or the weight of aluminum produced by the furnace for the twenty-four- (24-) hour period, by the emission rate (in lb/ton of feed/charge) for that furnace (as determined during the performance test).
  - (3) Divide the total emissions for each furnace for the twenty-four- (24-) hour period by the total material charged to the furnace, or the weight of aluminum produced by the furnace over the twenty-four- (24-) hour period to provide the daily emission rate for the furnace.
  - (4) Compute the twenty-four- (24-) hour daily emission rate using the following equation:

$$E_{\text{day}} = \frac{\sum_{i=1}^n (T_i \times ER_i)}{\sum_{i=1}^n T_i}$$

where,

$E_{\text{day}}$  = The daily D/F emission rate for the secondary aluminum processing unit for the 24-hour period;

$T_i$  = The total amount of feed, or aluminum produced, for emission unit  $i$  for the 24-hour period (tons);

$ER_i$  = The measured emission rate for emission unit  $i$  as determined in the performance test (lb/ton or mg/Mg of feed/charge); and

$n$  = The number of emission units in the secondary aluminum processing unit.

(5) Calculate and record the three- (3-) day, twenty-four- (24-) hour rolling average for each pollutant each day by summing the daily emission rates for D/F over the three (3) most recent consecutive days and dividing by three (3).

(b) Pursuant to 40 CFR 63.1510(u), as an alternative to the procedures in (a)(1) through (a) (5) above, the Permittee may demonstrate through performance tests, that each individual furnace is in compliance with the applicable emission limit.

### **Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]**

#### **D.1.30 Record Keeping Requirements**

- (a) To document compliance with Condition D.1.6(a), the Permittee shall maintain monthly records of the amount of cover and wall cleaner fluxes added to the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2.
- (b) To document compliance with Condition D.1.10, the Permittee shall maintain monthly records of the amount of scrap aluminum melted in the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

#### **D.1.31 Secondary Aluminum Production Record Keeping Requirements [40 CFR Part 63, Subpart RRR]**

Pursuant to 40 CFR Part 63.1517, the Permittee shall:

- (a) As required by 40 CFR 63.10(b), the Permittee shall maintain files of all information (including all reports and notifications) required by the general provisions and Subpart RRR.
- (b) The Permittee shall retain each record for at least five (5) years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The most recent two (2) years of records shall be retained at the source. The remaining three (3) years of records may be retained off site.

- (c) The Permittee may retain records on microfilm, computer disks, magnetic tape, or microfiche; and report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.
- (d) In addition to the general records required by 40 CFR 63.10(b), the Permittee of a furnace with an activated carbon injected fabric filter shall maintain records of:
  - (1) For a bag leak detection system, the number of total operating hours for the affected source or emission unit during each six- (6-) month reporting period, records of each alarm, the time of the alarm, the time corrective action was initiated and completed, and a brief description of the cause of the alarm and the corrective action(s) taken. (40 CFR 63.1517(b)(1)(i))
  - (2) For each of the natural gas-fired sweat furnaces, identified as SF1 and SF2, records of fifteen- (15-) minute block average inlet temperatures for each activated carbon injected baghouse, including any period when the three- (3-) hour block average temperature exceeds the compliant operating parameter value +14°C (+25°F), with a brief explanation of the cause of the excursion and the corrective action taken. (40 CFR 63.1517(b)(3))
  - (3) The following regarding activated carbon injection:
    - (A) Records of inspections at least once every eight- (8-) hour period verifying that activated carbon is present in the feeder hopper or silo and flowing, including any inspection where blockage is found, with a brief explanation of the cause of the blockage and the corrective action taken, and records of inspections at least once every four- (4-) hour period for the subsequent three (3) days. If flow monitors, pressure drop sensors or load cells are used to verify that activated carbon is present in the hopper and flowing, records of all monitor or sensor output including any event where blockage was found, with a brief explanation of the cause of the blockage and the corrective action taken; (40 CFR 63.1517(b)(4)(i))
    - (B) If activated carbon feeder setting is monitored, records of daily inspections of feeder setting, including records of any deviation of the feeder setting from the setting used in the performance test, with a brief explanation of the cause of the deviation and the corrective action taken. (40 CFR 63.1517(b)(4)(ii))
  - (4) For the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, records of fifteen- (15-) minute block average weights of total reactive flux addition rate and calculations (including records of the identity, composition, and weight of each addition of solid reactive flux), including records of any period the rate exceeds the compliant operating parameter value and corrective action taken. (40 CFR 63.1517(b)(5))
  - (5) For each continuous monitoring system, records required by 40 CFR 63.10(c). (40 CFR 63.1517(b)(6))
  - (6) For the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, records of feed/charge (or throughput) weights for each operating cycle or time period used in the performance test. (40 CFR 63.1517(b)(7))

- (7) Records of monthly inspections for proper unit labeling for the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, subject to labeling requirements. (40 CFR 63.1517(b)(13))
- (8) Records of annual inspections of emission capture/collection and closed vent systems. (40 CFR 63.1517(b)(14))
- (9) Records for any approved alternative monitoring or test procedure. (40 CFR 63.1517(b)(15))
- (10) Current copy of all required plans, including any revisions, with records documenting conformance with the applicable plan, including:
  - (A) Startup, shutdown, and malfunction plan;
  - (B) OM&M plan; and
  - (C) Site-specific secondary aluminum processing unit emission plan. (40 CFR 63.1517(b)(16))
- (11) For each of the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, records of total charge weight, or if the Permittee chooses to comply on the basis of aluminum production, total aluminum produced for each twenty-four (24-) hour period and calculations of three- (3-) day, twenty-four (24-) hour rolling average emissions. (40 CFR 63.1517(b)(17))

D.1.32 Secondary Aluminum Production Reporting Requirements [40 CFR Part 63, Subpart RRR]

- (a) Pursuant to 40 CFR 63.1510 and 40 CFR 63.1515, the Permittee shall provide notification of the anticipated date for conducting performance tests. The Permittee shall notify the IDEM, OAQ of the intent to conduct a performance test at least sixty (60) days before the performance test is scheduled. (40 C.F.R. 63.1515(a)(6))
- (b) Pursuant to 40 CFR 63.1515(b), the Permittee shall submit a notification of compliance status report within ninety (90) days after conducting the initial performance test required by 40 CFR 63.1511(b). The notification shall be signed by the responsible official who shall certify its accuracy. A complete notification of compliance status report shall include the information specified in paragraphs (1) through (8) below. The required information may be submitted in an operating permit application, in an amendment to an operating permit application, in a separate submittal, or in any combination. If a Permittee submits the information specified in this section at different times or in different submittals, later submittals may refer to earlier submittals instead of duplicating and resubmitting the information previously submitted. A complete notification of compliance status report shall include:
  - (1) All information required in 40 CFR 63.9(h). The Permittee shall provide a complete performance test report for the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, for which a performance test is required. A complete performance test report includes all data, associated measurements, and calculations. (40 CFR 63.15(b)(1))
  - (2) The approved site-specific test plan and performance evaluation test results for each continuous monitoring system. (40 CFR 63.15(b)(2))
  - (3) Unit labeling as described in 40 CFR 63.1506(b), including process type or furnace classification and operating requirements. (40 CFR 63.15(b)(3))

- (4) The compliant operating parameter value or range established for the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, with supporting documentation and a description of the procedure used to establish the value (e.g., activated carbon injection rate, fabric filter inlet temperature), including the operating cycle or time period used in the performance test. (40 CFR 63.15(b)(4))
- (5) Design information and analysis, with supporting documentation, demonstrating conformance with the requirements for capture/collection systems in 40 CFR 63.1506(c). (40 CFR 63.15(b)(5))
- (6) If applicable, analysis and supporting documentation demonstrating conformance with EPA guidance and specifications for bag leak detection systems in 40 CFR 63.1510(f). (40 CFR 63.15(b)(6))
- (7) The OM&M plan. (40 CFR 63.15(b)(9))
- (8) Startup, shutdown, and malfunction plan, with revisions. (40 CFR 63.15(b)(10))
- (c) Startup, shutdown and malfunction plan/reports. Pursuant to 40 CFR 63.1516(a), the Permittee shall develop and implement a written plan that contains specific procedures to be followed for operating and maintaining the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and baghouses, identified as BH1 and BH2, used to comply with the standard. The Permittee shall also keep records of each event as required by 40 CFR 63.10(b) and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in 40 CFR 63.6(e)(3). In addition to the information required in 40 CFR 63.6(e)(3), the plan shall include:
  - (1) Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended; and
  - (2) Corrective actions to be taken in the event of a malfunction of a process or bag-house, including procedures for recording the actions taken to correct the malfunction or minimize emissions.
- (d) Excess emissions/summary report. Pursuant to 40 CFR 63.1516(b), the Permittee shall submit semiannual reports within sixty (60) days after the end of each six- (6-) month period. Each report shall contain the information specified in 40 CFR 63.10 (c). When no deviations of parameters have occurred, the Permittee shall submit a report stating that no excess emissions occurred during the reporting period.

A report shall be submitted if any of these conditions occur during a six- (6-) month reporting period:

- (1) The corrective action specified in the OM&M plan for a bag leak detection system alarm was not initiated within 1 hour.
- (2) An excursion of a compliant process or operating parameter value or range (e.g., activated carbon injection rate or screw feeder setting, fabric filter inlet temperature, definition of acceptable scrap, or other approved operating parameter).
- (3) An action taken during a startup, shutdown, or malfunction was not consistent with the procedures in the plan as described in 40 CFR 63.6(e)(3).

- (4) Either or both of the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, were not operated according to the requirements of Subpart RRR.
  - (5) A deviation from the three- (3-) day, twenty-four- (24-) hour rolling average emission limit for the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2.
- (e) Performance test results. Pursuant to 40 CFR 63.1516(b)(3), the Permittee shall submit the results of any performance test conducted during the reporting period, including one (1) complete report documenting test methods and procedures, process operation, and monitoring parameter ranges or values for each test method used for a particular type of emission point tested.
- (f) Annual compliance certifications. Pursuant to 40 CFR 63.1516(c), for the purpose of annual certifications of compliance required by 40 CFR Part 70 or 71, the Permittee shall certify continuing compliance based upon, but not limited to, the following conditions:
- (1) Any period of excess emissions, as defined the semiannual report, that occurred during the year were reported as required by this subpart; and
  - (2) All monitoring, record keeping, and reporting requirements were met during the year.

D.1.33 Notification of Actual Startup [40 CFR 63.5(b)(4)] [40CFR 63.5(b)(5)(ii)]

Pursuant to 40 CFR 63.5(b)(4), the Permittee shall submit a notification of the actual date of startup of the new affected source, delivered or postmarked within fifteen (15) days after the actual startup date in accordance with 40 CFR 63.5(b)(5)(ii).

D.1.34 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.1.6 and D.1.10 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 an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

## SECTION D.2

## FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-8-4(10)] Scrap Crusher and Conveyors

- (c) One (1) electric scrap aluminum crusher, including feed hopper, identified as CR1, capacity: 5.0 tons of aluminum scrap per hour.
- (d) Five (5) conveyors, identified as CO1 through CO5, capacity: 5 tons aluminum scrap per hour.

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

### Emission Limitations and Standards [326 IAC 2-8-4(1)]

#### Construction Conditions

#### General Construction Conditions

##### D.2.1 Permit No Defense

This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

#### Effective Date of the Permit

##### D.2.2 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this section of this permit becomes effective upon its issuance.

##### D.2.3 Modification to Construction Conditions [326 IAC 2]

All requirements of these construction conditions shall remain in effect unless modified in a manner consistent with procedures established for revisions pursuant to 326 IAC 2.

#### Operation Conditions

### Emission Limitations and Standards [326 IAC 2-8-4(1)]

##### D.2.4 PM<sub>10</sub> Limitations [326 IAC 2-8-4] [326 IAC 2-2]

- (a) The PM<sub>10</sub> emissions from the electric scrap aluminum crusher, including feed hopper, identified as CR1, shall not exceed 0.002 pounds per hour.
- (b) The PM<sub>10</sub> emissions from the conveyors shall not exceed 0.007 pounds per hour.
- (c) Compliance with this limit shall satisfy the requirements of 326 IAC 2-8-4 and also make the requirements of 326 IAC 2-2 not applicable.

##### D.2.5 PM Limitations [326 IAC 2-2]

- (a) The PM emissions from the electric scrap aluminum crusher, including feed hopper, identified as CR1, shall not exceed 0.003 pounds per hour.
- (b) The PM emissions from the five (5) conveyors, identified as CO1 through CO5, shall not exceed a total of 0.015 pounds per hour.
- (c) Compliance with this limit shall make the requirements of 326 IAC 2-2 not applicable.

D.2.6 Particulate [326 IAC 6-3-2]

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

- (a) The electric scrap aluminum crusher, including feed hopper, identified as CR1, shall not exceed 12.1 pounds per hour when operating at a process weight rate of 5.0 tons per hour.
- (b) The conveyors shall each not exceed 12.1 pounds per hour when operating at a process weight rate of 5.0 tons per hour.
- (c) The pounds per hour limitation was calculated using 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

### SECTION D.3

### FACILITY OPERATION CONDITIONS

#### Facility Description [326 IAC 2-8-4(10)] Insignificant Activities

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour, consisting of:
  - (1) Two (2) split systems, rated at 0.045 million British thermal units per hour each, and
  - (2) Four (4) unit heaters, rated at 0.300 million British thermal units per hour each
- (b) Equipment powered by internal combustion engines of capacity equal to or less than 500,000 British thermal units per hour, except where total capacity of equipment operated by one (1) stationary source exceeds 2,000,000 British thermal units per hour.
- (c) Combustion source flame safety purging on startup.
- (d) A petroleum fuel, other than gasoline, dispensing facility, having a storage capacity of less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month.
- (e) Refractory storage not requiring air pollution control equipment.
- (f) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (g) Paved and unpaved roads and parking lots with public access.

(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 2-8-4(1)]

#### Construction Conditions

#### General Construction Conditions

##### D.3.1 Permit No Defense

This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

#### Effective Date of the Permit

##### D.3.2 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this section of this permit becomes effective upon its issuance.

##### D.3.3 Modification to Construction Conditions [326 IAC 2]

All requirements of these construction conditions shall remain in effect unless modified in a manner consistent with procedures established for revisions pursuant to 326 IAC 2.

#### Operation Conditions

There are no specific operating conditions applicable to these insignificant activities.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)  
CERTIFICATION**

Source Name: Transmetco, Inc.  
Source Address: 1750 East Riverfork Drive, Huntington, Indiana 46750  
Mailing Address: 1750 East Riverfork Drive, Huntington, Indiana 46750  
FESOP No.: F 069-19488-00067

**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:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE BRANCH  
P.O. Box 6015  
100 North Senate Avenue  
Indianapolis, Indiana 46206-6015  
Phone: 317-233-5674  
Fax: 317-233-5967**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)  
EMERGENCY OCCURRENCE REPORT**

Source Name: Transmetco, Inc.  
Source Address: 1750 East Riverfork Drive, Huntington, Indiana 46750  
Mailing Address: 1750 East Riverfork Drive, Huntington, Indiana 46750  
FESOP No.: F 069-19488-00067

**This form consists of 2 pages**

**Page 1 of 2**

- |   |
|---|
| <input type="checkbox"/> This is an emergency as defined in 326 IAC 2-7-1(12) <ul style="list-style-type: none"><li>• The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and</li><li>• The Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16</li></ul> |
|---|

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 <sub>2</sub> , VOC, NO <sub>x</sub> , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

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

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

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

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

A certification is not required for this report.

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

**FESOP Quarterly Report**

Source Name: Transmetco, Inc.  
 Source Address: 1750 East Riverfork Drive, Huntington, Indiana 46750  
 Mailing Address: 1750 East Riverfork Drive, Huntington, Indiana 46750  
 FESOP No.: F 069-19488-00067  
 Facilities: Two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2  
 Parameter: Amount of scrap aluminum melted  
 Limit: 20702.5 tons per twelve (12) consecutive month period with compliance determined at the end of each month for each furnace.

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

Month	Amount of Scrap Melted (tons)	Amount of Scrap Melted (tons)	Amount of Scrap Melted (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**

**FESOP Quarterly Report**

Source Name: Transmetco, Inc.  
 Source Address: 1750 East Riverfork Drive, Huntington, Indiana 46750  
 Mailing Address: 1750 East Riverfork Drive, Huntington, Indiana 46750  
 FESOP No.: F 069-19488-00067  
 Facilities: Two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2  
 Parameter: Amount of cover and wall cleaner fluxes added  
 Limit: Less than a total of 20,000 pounds of each flux per twelve (12) consecutive month period with compliance determined at the end of each month.

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

Month	Amount of Flux Added (pounds)		Amount of Flux Added (pounds)		Amount of Flux Added (pounds)	
	This Month		Previous 11 Months		12 Month Total	
	Cover	Wall Cleaner	Cover	Wall Cleaner	Cover	Wall Cleaner

- 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**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)  
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: Transmetco, Inc.  
Source Address: 1750 East Riverfork Drive, Huntington, Indiana 46750  
Mailing Address: 1750 East Riverfork Drive, Huntington, Indiana 46750  
FESOP No.: F 069-19488-00067

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

Page 1 of 2

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."	
<input type="checkbox"/> NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.	
<input type="checkbox"/> THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD	
<b>Permit Requirement</b> (specify permit condition #)	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	
<b>Permit Requirement</b> (specify permit condition #)	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	

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

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

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

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

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

A certification is not required for this report.

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

Technical Support Document (TSD) for a Federally Enforceable State Operating Permit  
(FESOP)

**Source Background and Description**

**Source Name:** Transmetco, Inc.  
**Source Location:** 1750 East Riverfork Drive, Huntington, Indiana 46750  
**County:** Huntington  
**SIC Code:** 3341  
**Permit No.:** F 069-19488-00067  
**Permit Reviewers:** Mark L. Kramer / Frank P. Castelli

The Office of Air Quality (OAQ) has reviewed a FESOP application from Transmetco, Inc. relating to the construction and operation of a stationary secondary aluminum production source utilizing scrap aluminum.

**Source Definition**

IDEM, OAQ has reviewed the relationship between Transmetco, Inc. and Transwheel Corporation to determine whether or not these two (2) companies are a single source.

- (a) Transmetco, Inc., a stationary secondary aluminum production plant utilizing scrap aluminum, is located at 1750 East Riverfork Drive, Huntington, Indiana 46750; and
- (b) Transwheel Corporation, a stationary aluminum wheel reprocessing plant, is located at 3000 Yeoman Way, Huntington, Indiana 46750.
- (c) The SIC codes from the plants do not share the same first two (2) digits. The SIC code for Transmetco is 3341 while the SIC code for Transwheel is 3714.
- (d) There is a common ownership between the two (2) plants. The two (2) owners of the plants both own fifty percent (50%) of each plant.
- (e) The management teams of the plants do not have anyone in common nor are there any common employees between the two (2) plants.
- (f) Rejected aluminum wheels from Transwheel are delivered to Transmetco for recycling into aluminum ingots while Transwheel produces reprocessed aluminum wheels. Transmetco will initially procure approximately 1.5 million pounds of scrap aluminum per month. Transmetco will sort these "scrap wheels" and sell approximately five percent (5%) of them (75,000 pounds per month) to Transwheel. Transwheel will sell its accumulated scrap to Transmetco. This is estimated to be 8,000 to 10,000 pounds per month which represents approximately three percent (3%) of Transwheel's monthly volume. Neither Transmetco nor Transwheel will sell any of their finished products to the other company. The final products produced by each plant are different. Transwheel has a contractual agreement to purchase scrap cores from Transmetco. Transwheel will maintain similar, existing, agreements with two (2) other aluminum smelting plants.

- (g) These plants are located approximately 0.25 miles apart and are not on contiguous properties. In addition there are no physical connections between the plants such as a dedicated rail spur or a pipeline.

Therefore, IDEM, OAQ has determined that these two (2) plants will be considered two (2) separate sources. Transmetco, Inc. will be issued a separate FESOP which will not affect the source status of the Transwheel Corporation operating under its existing FESOP Renewal 069-17145-00056, issued on September 9, 2003.

#### **Permitted Emission Units and Pollution Control Equipment**

There are no permitted emission units operating at this source during this review process.

#### **Unpermitted Emission Units and Pollution Control Equipment**

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

#### **New Emission Units and Pollution Control Equipment Receiving Advanced Source Modification Approval**

The application includes information relating to the prior approval for the construction and operation of the following equipment pursuant to 326 IAC 2-8-4(11):

- (a) One (1) natural gas-fired sweat furnace, equipped with low NO<sub>x</sub> burners, identified as SF1, equipped with a baghouse with carbon pre-coat, identified as BH1, capacity: 2.5 tons of aluminum scrap per hour (maximum capacity of 1.00 pound of solid flux per hour) with a holding burner rated at 1.5 million British thermal units per hour and a melting burner rated at 5.0 million British thermal units per hour. The sweat furnace, SF1, exhausts to duct work, which tees to Stack S1 and ductwork leading to the baghouse, BH1. The baghouse, BH1, exhausts through Stack S2. Automated dampers control the ductwork at the tee. When under normal operating conditions and melting scrap aluminum, the sweat furnace, SF1, will exhaust to the baghouse, BH1, which in turn exhausts to Stack, S2. During periods when the furnace is idle (i.e., holding molten aluminum over the weekend) with no melting occurring the sweat furnace, SF1, will exhaust to Stack S1.
- (b) One (1) natural gas-fired sweat furnace, equipped with low NO<sub>x</sub> burners, identified as SF2, equipped with a baghouse with carbon pre-coat, identified as BH2, capacity: 2.5 tons of aluminum scrap per hour (maximum capacity of 1.00 pound of solid flux per hour) with a holding burner rated at 1.5 million British thermal units per hour and a melting burner rated at 5.0 million British thermal units per hour. The sweat furnace, SF2, exhausts to duct work, which tees to Stack S3 and ductwork leading to the baghouse, BH2. The baghouse, BH2, exhausts through Stack S4. Automated dampers control the ductwork at the tee. When under normal operating conditions and melting scrap aluminum, the sweat furnace, SF2, will exhaust to the baghouse, BH2, which in turn exhausts to Stack, S4. During periods when the furnace is idle (i.e., holding molten aluminum over the weekend) with no melting occurring the sweat furnace, SF2, will exhaust to Stack S3.

- (c) One (1) electric scrap aluminum crusher, including feed hopper, identified as CR1, capacity: 5.0 tons of aluminum scrap per hour.
- (d) Five (5) conveyors, capacity: 5 tons aluminum scrap per hour.

### **Insignificant Activities**

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

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour, consisting of:
  - (1) Two (2) split systems, rated at 0.045 million British thermal units per hour each, and
  - (2) Four (4) unit heaters, rated at 0.300 million British thermal units per hour each
- (b) Equipment powered by internal combustion engines of capacity equal to or less than 500,000 British thermal units per hour, except where total capacity of equipment operated by one (1) stationary source exceeds 2,000,000 British thermal units per hour.
- (c) Combustion source flame safety purging on startup.
- (d) A petroleum fuel, other than gasoline, dispensing facility, having a storage capacity of less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month.
- (e) Refractory storage not requiring air pollution control equipment.
- (f) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (g) Paved and unpaved roads and parking lots with public access.

### **Existing Approvals**

The source does not have any previous approvals issued by IDEM OAQ.

### **Enforcement Issue**

There are no enforcement actions pending.

### **Recommendation**

The staff recommends to the Commissioner that the FESOP renewal be approved. This recommendation is based on the following facts and conditions:

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

An administratively complete FESOP renewal application for the purposes of this review was received on June 18, 2004. Additional information was received on July 9, 14 and 23, 2004.

There was no notice of completeness letter mailed to the source.

### Emission Calculations

See pages 1 through 6 of 6 of Appendix A of this document for detailed emission calculations.

The HAPs from fluxing in the two (2) sweat furnaces has been calculated for the two (2) types of solid flux as follows:

(a) A-130 F containing chloride

The use of A-130 F solid flux will produce HCl. For conservatism, the maximum usage rate of 1.00 pound per hour per furnace has been assumed as opposed to average rate of 0.500 pounds per hour per furnace. The manufacturer of the flux estimates that they expect 95% of the applied flux will be dissolved into the aluminum, leaving no more than five (5%) percent of the flux to be emitted to the atmosphere.

Therefore, the amount of HCl for both furnaces is:

$$2 * 1.00 \text{ lbs of flux/hr} \times 0.05 \times 8,760 \text{ hr/yr} \times 1 \text{ ton}/2,000 \text{ lbs} = 0.438 \text{ tons/year}$$

For conservatism to check if the HCl would exceed the major source level of a potential to emit of ten (10) tons per year of a single HAP, it is assumed that all of the flux applied was emitted as HCl. Thus, the potential to emit HCl for both furnaces is:

$$2 * 1.00 \text{ lbs of flux/hr} \times 8,760 \text{ hr/yr} \times 1 \text{ ton}/2,000 \text{ lbs} = 8.76 \text{ tons/year}$$

(b) AMLOX 110 containing flourides

The use of AMLOX 110 solid flux will produce HF. This flux will be applied at a rate of 25% of the rate that A-130 F flux is applied. The maximum usage rate of 0.25 pounds per hour per furnace has been assumed. For conservatism to check if the HF would exceed the major source level of a potential to emit of ten (10) tons per year of a single HAP, it is assumed that all of the flux applied was emitted as HF. Thus, the potential to emit HF for both furnaces is:

$$2 * 0.25 \text{ lbs of flux/hr} \times 8,760 \text{ hr/yr} \times 1 \text{ ton}/2,000 \text{ lbs} = 2.19 \text{ tons/year}$$

Thus, the potential to emit a single and combination of HAPs is less than the major source levels of 10/25 tons per year, respectively. Therefore, this secondary aluminum production source utilizing scrap aluminum is an area source of HAPs pursuant to NESHAP, Subpart RRR.

### Potential to Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant,

including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U.S. EPA, the department, or the appropriate local air pollution control agency.”

<b>Pollutant</b>	<b>Potential to Emit (tons/yr)</b>
PM	323
PM <sub>10</sub>	297
SO <sub>2</sub>	77.4
VOC	55.5
CO	5.76
NO <sub>x</sub>	17.3

<b>HAPs</b>	<b>Potential to Emit (tons/yr)</b>
HCl	8.76
HF	2.19
Benzene	0.00013
Dichlorobenzene	0.00008
Formaldehyde	0.00469
Hexane	0.112
Toluene	0.0002
Lead Components	0.00003
Cadmium Compounds	0.00007
Chromium Compounds	0.00009
Manganese Compounds	0.00002
Nickel Compounds	0.00013
Insignifianct Activity HAPs	0.5
<b>Total</b>	<b>11.6</b>

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of PM<sub>10</sub> are equal to or greater than one hundred (100) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7. The source will be issued a FESOP because the source will limit its emissions below the Title V levels.

- (b) Fugitive Emissions  
Since this type of operation is one of the twenty-eight (28) listed source categories under 326 IAC 2-2, the fugitive particulate matter (PM) and volatile organic compounds (VOC) emissions are counted toward determination of PSD and Emission Offset applicability.

**Potential to Emit After Issuance**

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

Process/Emission Unit	Potential To Emit (tons/year)						
	PM	PM <sub>10</sub>	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	HAPs
Sweat Furnace (SF1) Process	33.2	33.2	36.2	24.8	-	6.21	5.48
Sweat Furnace (SF1) Combustion	0.054	0.216	0.017	0.157	2.39	1.42	0.054
Sweat Furnace (SF2) Process	33.2	33.2	36.2	24.8	-	6.21	5.48
Sweat Furnace (SF2) Combustion	0.054	0.216	0.017	0.157	2.39	1.42	0.054
Electric Crusher (CR1)	0.015	0.007	-	-	-	-	-
Pouring Casting	-	-	0.219	1.53	-	0.110	-
Conveying	0.064	0.031	-	-	-	-	-
Insignificant Activities Natural Gas Combustion	0.011	0.043	0.003	0.031	0.475	0.565	0.111
Other Insignificant Activities	5.0	5.0	0.5	1.0	0.5	0.5	0.5
Total Emissions	71.6	71.9	73.2	52.5	16.4	5.76	11.6

The throughput of scrap aluminum to each sweat furnace has been limited to 20702.5 tons per year, equivalent to 24.8 tons of VOC per year per furnace to render the requirements of 326 IAC 8-1-6 not applicable to each furnace.

The PM emission rates from the two (2) sweat furnaces have been set equal to the equivalent of the hourly allowable PM emission rate of 7.58 pounds per hour pursuant of 326 IAC 6-3-2. PM<sub>10</sub> has assigned the same emission rate.

This existing source is **not** a major stationary source because even though it is one of the 28 listed source categories, it does not emit one hundred (100) tons per year or greater of any regulated pollutant.

### County Attainment Status

The source is located in Huntington County.

Pollutant	Status
PM <sub>10</sub>	Attainment
SO <sub>2</sub>	Attainment
NO <sub>2</sub>	Attainment
1-Hour Ozone	Attainment
8-Hour Ozone	Attainment
CO	Attainment
Lead	Attainment

- (a) Volatile organic compounds (VOC) and nitrogen oxides (NO<sub>x</sub>) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NO<sub>x</sub> emissions are considered when evaluating the rule applicability relating to ozone. Huntington County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO<sub>x</sub> emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability for the source section.
- (b) Fugitive Emissions  
Since this type of operation is one of the twenty-eight (28) listed source categories under 326 IAC 2-2, the fugitive particulate matter (PM) and volatile organic compounds (VOC) emissions are counted toward determination of PSD and Emission Offset applicability.

### Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (b) Transmetco, Inc. is subject to the National Emission Standards for Hazardous Air Pollutants for secondary aluminum production, 326 IAC 14, (40 CFR 63.1500, Subpart RRR).

The two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, are considered Group 1 furnaces. These two (2) sweat furnaces are therefore subject to the "area source" requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs), 40 CFR 63, Subpart RRR Secondary Aluminum Production pertaining to dioxins and furans (D/F) because the potential to emit HAPs is limited to less than ten (10) tons per year for the worst case single HAP and to less than twenty five (25) tons per year for the combination of HAPs. Therefore, this source is a minor source for HAPs. The source is a new secondary aluminum process containing Group 1 furnaces since it includes two (2) natural gas-fired sweat furnaces processing other than clean charge. The Permittee shall comply with the following requirements upon start-up:

A summary of the requirements is as follows:

- (1) The provisions of 40 CFR 63 Subpart A – General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the two (2) natural gas-fired sweat furnaces except when otherwise specified in 40 CFR 63 Subpart RRR.
- (2) The two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, shall be controlled by a baghouse with continuous lime injection system.
- (3) The Permittee shall install, operate, and maintain a capture/collection system for the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, equipped with a baghouse; and inspect each capture/collection and closed vent system at least once each calendar year to ensure that each system is operating in accordance with the operating requirements in 40 CFR 63.1506(c) and record the results of each inspection.
- (4) The Permittee of the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, using a fabric filter or lime-injected fabric filter to comply with the requirements of this subpart shall install, calibrate, maintain, and continuously operate a bag leak detection system.
  - (A) The Permittee shall install and operate a bag leak detection system for each exhaust stack of a fabric filter.
  - (B) Each triboelectric bag leak detection system shall be installed, calibrated, operated, and maintained according to the "Fabric Filter Bag Leak Detection Guidance," (September 1997). This document is available from the U.S. Environmental Protection Agency; Office of Air Quality Planning and Standards; Emissions, Monitoring and Analysis Division; Emission Measurement Center (MD-19), Research Triangle Park, NC 27711. This document also is available on the Technology Transfer Network (TTN) under Emission Measurement Technical Information (EMTIC), Continuous Emission Monitoring. Other bag leak detection systems shall be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations.
  - (C) The bag leak detection system shall be certified by the manufacturer to be capable of detecting PM emissions at concentrations of ten (10) milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.
  - (D) The bag leak detection system sensor shall provide output of relative or absolute PM loadings.
  - (E) The bag leak detection system shall be equipped with a device to continuously record the output signal from the sensor.
  - (F) The bag leak detection system shall be equipped with an alarm system that will sound automatically when an increase in relative PM emissions over a preset level is detected. The alarm shall be located where it is easily heard by plant operating personnel.

- (G) For negative pressure or induced air fabric filters, the bag leak detector shall be installed downstream of the fabric filter.
  - (H) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.
  - (I) The baseline output shall be established by adjusting the range and the averaging period of the device and establishing the alarm set points and the alarm delay time.
  - (J) Operate each fabric filter system such that the bag leak detection system alarm does not sound more than five (5%) percent of the operating time during a six (6) month block reporting period. In calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required, each alarm shall be counted as a minimum of one (1) hour. If the Permittee takes longer than one (1) hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the Permittee to initiate corrective action.
  - (K) Maintain the three (3) hour block average inlet temperature for each fabric filter at or below the average temperature established during the performance test plus fourteen (14) degrees Celsius (plus twenty-five (25) degrees Fahrenheit).
  - (L) Following initial adjustment of the system, the Permittee shall not adjust the sensitivity or range, averaging period, alarm set points, or alarm delay time except as detailed in the OM&M plan. In no case may the sensitivity be increased by more than one hundred (100%) percent or decreased more than fifty (50%) percent over a 365-day period unless such adjustment follows a complete fabric filter inspection which demonstrates that the fabric filter is in good operating condition.
- (5) The Permittee shall install, calibrate, operate, and maintain a device to continuously measure and record the weight of gaseous or liquid reactive flux injected to each sweat furnace.
- (A) The monitoring system shall record the weight for each fifteen- (15-) minute block period, during which reactive fluxing occurs, over the same operating cycle or time period used in the performance test.
  - (B) The accuracy of the weight measurement device shall be +1 percent of the weight of the reactive component of the flux being measured.
  - (C) The Permittee shall verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every six (6) months.
  - (D) Calculate and record the gaseous or liquid reactive flux injection rate (kilograms per megagram or pounds per ton) for each operating cycle or

- time period used in the performance test using the procedure in 40 CFR 63.1512(o).
- (E) Record, for each fifteen- (15-) minute block period during each operating cycle or time period used in the performance test during which reactive fluxing occurs, the time, weight, and type of flux for each addition of:
    - (i) Gaseous or liquid reactive flux other than chlorine; and
    - (ii) Solid reactive flux.
  - (6) Calculate and record the total reactive flux injection rate for each operating cycle or time period used in the performance test using the procedure in 40 CFR 63.1512(o).
  - (7) The Permittee shall install, calibrate, maintain, and operate a device to continuously monitor and record the temperature of the fabric filter inlet gases consistent with the requirements for continuous monitoring systems in Subpart A of this part. The temperature monitoring device shall meet each of these performance and equipment specifications:
    - (A) The monitoring system shall record the temperature in fifteen- (15-) minute block averages and calculate and record the average temperature for each three- (3-) hour block period.
    - (B) The recorder response range shall include zero (0) and one and half (1.5) times the average temperature established according to the requirements in 40 CFR 63.1512(n).
    - (C) The reference method shall be a National Institute of Standards and Technology calibrated reference thermocouple-potentiometer system, subject to approval by the Administrator.
  - (8) The Permittee of a continuous lime injection system shall verify that lime is always free-flowing by either:
    - (A) Inspecting each feed hopper or silo at least once each eight- (8-) hour period and recording the results of each inspection. If lime is found not to be free-flowing during any of the eight- (8-) hour periods, the owner or operator shall increase the frequency of inspections to at least once every four- (4-) hour period for the next three (3) days. The Permittee may return to inspections at least once every eight (8) hour period if corrective action results in no further blockages of lime during the three- (3-) day period; or
    - (B) Subject to the approval of the IDEM, OAQ, installing, operating and maintaining a load cell, carrier gas/lime flow indicator, carrier gas pressure drop measurement system or other system to confirm that lime is free-flowing. If lime is found not to be free-flowing, the Permittee shall promptly initiate and complete corrective action, or

- (C) Subject to the approval of the IDEM, OAQ, installing, operating and maintaining a device to monitor the concentration of HCl at the outlet of the fabric filter. If an increase in the concentration of HCl indicates that the lime is not free-flowing, the Permittee shall promptly initiate and complete corrective action.
- (9) The Permittee of a continuous lime injection system shall record the lime feeder setting once each day of operation.
  - (10) A Permittee who intermittently adds lime to a lime coated fabric filter shall obtain approval from the permitting authority for a lime addition monitoring procedure. The IDEM, OAQ will not approve a monitoring procedure unless data and information are submitted establishing that the procedure is adequate to ensure that relevant emission standards will be met on a continuous basis.
  - (11) The Permittee of the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, subject to an emission limit in kilogram per megagram (pounds per ton) or micrograms per megagram (grams per ton) of feed/charge shall install, calibrate, operate, and maintain a device to measure and record the total weight of feed/ charge to, or the aluminum production from the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, over the same operating cycle or time period used in the performance test. Feed/charge or aluminum production within SAPUs shall be measured and recorded on an emission unit-by-emission unit basis. The accuracy of the weight measurement device or procedure shall be +1 percent of the weight being measured.
  - (12) Pursuant to 40 CFR Part 63.1510 the Permittee shall inspect the labels for each of the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, at least once per calendar month to confirm that posted labels as required by the operational standard in 40CFR 63.1506(b) are intact and legible.
  - (13) The Permittee shall calculate and record the three- (3-) day, twenty-four (24-) hour rolling average emissions of D/F for two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, on a daily basis. To calculate the three- (3-) day, twenty-four (24-) hour rolling average, the Permittee shall:
    - (A) Calculate and record the total weight of material charged to the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, for each twenty-four (24-) hour day of operation using the feed/charge weight data collected as required under Subpart RRR. If the Permittee chooses to comply on the basis of weight of aluminum produced by the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, rather than weight of material charged to the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, all performance test emissions results and all calculations shall be conducted on the aluminum production weight basis.
    - (B) Multiply the total feed/charge weight to the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, or the weight to the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, or the weight of aluminum produced by the two (2) natural gas-fired sweat

furnaces, identified as SF1 and SF2, for the twenty-four (24-) hour period by the emission rate (in lb/ton of feed/charge) for that the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, (as determined during the emission test) to provide emissions for the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, for the twenty-four (24-) hour period, in pounds.

- (C) Divide the total emissions for the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, for the twenty-four (24-) hour period by the total material charged to the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, or the total weight of aluminum produced by the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, over the twenty-four (24-) hour period to provide the daily emission rate for the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2.
- (D) Compute the twenty-four (24-) hour daily emission rate using the equation:

$$E_{\text{day}} = \frac{\sum_{i=1}^n (T_i \times ER_i)}{\sum_{i=1}^n T_i}$$

where,

E<sub>day</sub> = The daily respective D/F emission rate for the secondary aluminum processing unit for the twenty-four (24-) hour period;

T<sub>i</sub> = The total amount of feed, or aluminum produced, for emission unit i for the twenty-four (24-) hour period in tons;

ER<sub>i</sub> = The measured emission rate for emission unit i as determined in the performance test (lb/ton or µg/m<sup>3</sup>/Mg or feed/charge); and

n = The number of emission units in the secondary aluminum processing unit.

- (E) Calculate and record the three- (3-) day, twenty-four (24-) hour rolling average for each pollutant each day by summing the daily emission rates for DF over the three (3) most recent consecutive days and dividing by three (3).

- (14) The Permittee shall prepare and implement for the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, a written operation, maintenance, and monitoring (OM&M) plan. The Permittee shall submit the plan to the applicable permitting authority for review and approval as part of the application for a Part 70 or Part 71 permit. Any subsequent changes to the plan shall be sub-

mitted to the IDEM, OAQ for review and approval. Pending approval by the IDEM, OAQ of an initial or amended plan, the Permittee shall comply with the provisions of the submitted plan. Each plan shall contain the following information:

- (A) Process and baghouse parameters to be monitored to determine compliance, along with established operating levels or ranges, as applicable, for each process and baghouse.
- (B) A monitoring schedule for each affected source and emission unit.
- (C) Procedures for the proper operation and maintenance of each process unit and add-on control device used to meet the applicable emission limits or standards in 40 CFR 63.1505.
- (D) Procedures for the proper operation and maintenance of monitoring devices or systems used to determine compliance, including:
  - (i) Calibration and certification of accuracy of each monitoring device, at least once every six (6) months, according to the manufacturer's instructions; and
  - (ii) Procedures for the quality control and quality assurance of continuous emission monitoring systems as required by the general provisions in Subpart A of this part.
- (E) Procedures for monitoring process and baghouse parameters, including the procedure to be used for determining charge/feed (or throughput) weight if a measurement device is not used.
- (F) Corrective actions to be taken when process or operating parameters or add-on control device parameters deviate from the value or range established in paragraph (b)(1) of this section, including:
  - (i) Procedures to determine and record the cause of an deviation or excursion, and the time the deviation or excursion began and ended; and
  - (ii) Procedures for recording the corrective action taken, the time corrective action was initiated, and the time/date corrective action was completed.
- (G) A maintenance schedule for each process and baghouse that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.

### **State Rule Applicability – Entire Source**

#### 326 IAC 2-2 (Prevention of Significant Deterioration)

This source is one of the twenty eight (28) major PSD source categories. Since the potential to emit each of the criteria pollutants, including particulate matter (PM), shall be limited to less than one hundred (100) tons per year, this source is a minor source pursuant to this rule.

#### 326 IAC 2-6 (Emission Reporting)

This source is not located in Lake or Porter County with the potential to emit greater than twenty-five (25) tons per year of NO<sub>x</sub>, does not emit five (5) tons per year or more of lead and does not require a Part 70 Operating Permit. Therefore, the requirements of 326 IAC 2-6 do not apply.

#### 326 IAC 2-8-4 (FESOP)

Pursuant to this rule, the amount of PM<sub>10</sub> shall be limited to less than one hundred (100) tons per year. In addition, the amount of a single HAP and combination of HAPs shall be limited to less than ten (10) tons per year and twenty-five (25) tons per year, respectively. Therefore, the requirements of 326 IAC 2-7, do not apply.

The PM<sub>10</sub> emissions will be limited by the proper operation of the baghouses.

#### 326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity limitations), except as provided in 326 IAC 5-1-3 (Temporary alternative opacity limitations), opacity shall meet the following, unless otherwise stated in the 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.

### **State Rule Applicability – Individual Facilities**

#### 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

The operation of this stationary secondary aluminum source utilizing scrap aluminum will emit less than ten (10) tons per year of a single HAP or twenty-five (25) tons per year of a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

#### 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

- (a) The particulate from each of the sweat furnaces, SF1 and SF2, shall not exceed 7.58 pounds per hour each when operating at a process weight rate of 2.5 tons per hour for each sweat furnace.

The baghouses shall be in operation at all times sweat furnaces SF1 and SF2 are in operation, in order to comply with these limits.

- (b) The particulate from the electric scrap aluminum crusher shall not exceed 12.1 pounds per hour when operating at a process weight rate of 5.0 tons per hour.
- (c) These limitations are based upon the following:

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

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

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

The potential to emit VOC is 26.3 tons per year from each of the two (2) sweat furnaces, identified as SF1 and SF2, to be constructed. The potential VOC emission from each furnace exceeds the rule threshold applicability of twenty-five (25) tons per year. Therefore, each sweat furnace could be subject to the requirements of this rule. Since Transmetco has agreed to limit the amount of scrap aluminum melted in each furnace to no more than 20,702 tons of aluminum per twelve (12) consecutive month period with compliance to be determined at the end of each month, the requirements of 326 IAC 8-1-6 do not apply to each of the two (2) sweat furnaces.

#### Testing Requirements

- (a) To demonstrate compliance with 326 IAC 6-3-2, 326 IAC 2-8-4 and 326 IAC 2-2, a compliance stack test of PM and PM<sub>10</sub> for one (1) of the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, shall be performed within 180 days of startup.
- (a) To demonstrate compliance with 326 IAC 2-8-4, a compliance stack test of HCl and HF for one (1) of the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, shall be performed within 180 days of startup.
- (b) To demonstrate compliance with the requirements of 40 CFR Part 63, Subpart RRR, stack testing of D/F emissions shall be performed within 180 days of startup.

Pursuant to 40 CFR 63.1510 and 40 CFR 63.1515, the Permittee shall provide notification of the anticipated date for conducting performance tests. The Permittee shall notify the IDEM, OAQ of the intent to conduct a performance test at least sixty (60) days before the performance test is scheduled. (40 C.F.R. 63.1515(a)(6))

#### Compliance Requirements

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-8-4. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

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

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

- (a) The two (2) sweat furnaces, SF1 and SF2, have applicable compliance monitoring conditions as specified below:
  - (1) The two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, shall be controlled by a baghouse with continuous lime injection system.
  - (2) The Permittee shall install, operate, and maintain a capture/collection system for the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, equipped with a baghouse; and inspect each capture/collection and closed vent system at least once each calendar year to ensure that each system is operating in accordance with the operating requirements in 40 CFR 63.1506(c) and record the results of each inspection.
  - (3) The Permittee of the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, using a fabric filter or lime-injected fabric filter to comply with the requirements of this subpart shall install, calibrate, maintain, and continuously operate a bag leak detection system.
    - (A) The Permittee shall install and operate a bag leak detection system for each exhaust stack of a fabric filter.
    - (B) Each triboelectric bag leak detection system shall be installed, calibrated, operated, and maintained according to the "Fabric Filter Bag Leak Detection Guidance," (September 1997). This document is available from the U.S. Environmental Protection Agency; Office of Air Quality Planning and Standards; Emissions, Monitoring and Analysis Division; Emission Measurement Center (MD-19), Research Triangle Park, NC 27711. This document also is available on the Technology Transfer Network (TTN) under Emission Measurement Technical Information (EMTIC), Continuous Emission Monitoring. Other bag leak detection systems shall be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations.
    - (C) The bag leak detection system shall be certified by the manufacturer to be capable of detecting PM emissions at concentrations of ten (10) milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.
    - (D) The bag leak detection system sensor shall provide output of relative or absolute PM loadings.

- (E) The bag leak detection system shall be equipped with a device to continuously record the output signal from the sensor.
  - (F) The bag leak detection system shall be equipped with an alarm system that will sound automatically when an increase in relative PM emissions over a preset level is detected. The alarm shall be located where it is easily heard by plant operating personnel.
  - (G) For negative pressure or induced air fabric filters, the bag leak detector shall be installed downstream of the fabric filter.
  - (H) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.
  - (I) The baseline output shall be established by adjusting the range and the averaging period of the device and establishing the alarm set points and the alarm delay time.
  - (J) Operate each fabric filter system such that the bag leak detection system alarm does not sound more than five (5%) percent of the operating time during a six (6) month reporting period. In calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required, each alarm shall be counted as a minimum of one (1) hour. If the Permittee takes longer than one (1) hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the Permittee to initiate corrective action.
  - (K) Maintain the three (3) hour average inlet temperature for each fabric filter at or below the average temperature established during the performance test plus twenty-five (25) degrees Fahrenheit.
  - (L) Following initial adjustment of the system, the Permittee shall not adjust the sensitivity or range, averaging period, alarm set points, or alarm delay time except as detailed in the OM&M plan. In no case may the sensitivity be increased by more than one hundred (100%) percent or decreased more than fifty (50%) percent over a 365-day period unless such adjustment follows a complete fabric filter inspection which demonstrates that the fabric filter is in good operating condition.
- (4) The Permittee shall install, calibrate, operate, and maintain a device to continuously measure and record the weight of gaseous or liquid reactive flux injected to each sweat furnace.
- (A) The monitoring system shall record the weight for each fifteen- (15-) minute block period, during which reactive fluxing occurs, over the same operating cycle or time period used in the performance test.
  - (B) The accuracy of the weight measurement device shall be +1 percent of the weight of the reactive component of the flux being measured.

- (C) The Permittee shall verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every six (6) months.
  - (D) Calculate and record the gaseous or liquid reactive flux injection rate (kilograms per megagram or pounds per ton) for each operating cycle or time period used in the performance test using the procedure in 40 CFR 63.1512(o).
  - (E) Record, for each fifteen- (15-) minute block period during each operating cycle or time period used in the performance test during which reactive fluxing occurs, the time, weight, and type of flux for each addition of:
    - (i) Gaseous or liquid reactive flux other than chlorine; and
    - (ii) Solid reactive flux.
  - (F) Calculate and record the total reactive flux injection rate for each operating cycle or time period used in the performance test using the procedure in 40 CFR 63.1512(o).
- (5) The Permittee shall install, calibrate, maintain, and operate a device to continuously monitor and record the temperature of the fabric filter inlet gases consistent with the requirements for continuous monitoring systems in Subpart A of this part. The temperature monitoring device shall meet each of these performance and equipment specifications:
- (A) The monitoring system shall record the temperature in fifteen- (15-) minute block averages and calculate and record the average temperature for each three- (3-) hour block period.
  - (B) The recorder response range shall include zero (0) and one and half (1.5) times the average temperature established according to the requirements in 40 CFR 63.1512(n).
  - (C) The reference method shall be a National Institute of Standards and Technology calibrated reference thermocouple-potentiometer system, subject to approval by the Administrator.
- (6) The Permittee of a continuous lime injection system shall verify that lime is always free-flowing by either:
- (A) Inspecting each feed hopper or silo at least once each eight- (8-) hour period and recording the results of each inspection. If lime is found not to be free-flowing during any of the eight- (8-) hour periods, the owner or operator shall increase the frequency of inspections to at least once every four- (4-) hour period for the next three (3) days. The Permittee may return to inspections at least once every eight (8) hour period if corrective action results in no further blockages of lime or other alkaline agent during the three- (3-) day period; or

- (B) Installing, operating and maintaining a load cell, carrier gas/lime flow indicator, carrier gas pressure drop measurement system or other system to confirm that line is free-flowing. If lime is found not to be free-flowing, the Permittee shall promptly initiate and complete corrective action; or
  - (C) Installing, operating and maintaining a device to monitor the concentration of HCl at the outlet of the fabric filter. If an increase in the concentration of HCl indicates that the lime is not free flowing, the Permittee shall promptly initiate and complete corrective action.
  - (D) The Permittee of a continuous lime injection system shall record the lime feeder setting once each day of operation.
  - (E) Subject to the approval of the IDEM, OAQ, installing, operating and maintaining a load cell, carrier gas/lime flow indicator, carrier gas pressure drop measurement system or other system to confirm that lime is free-flowing. If lime is found not to be free-flowing, the Permittee shall promptly initiate and complete corrective action, or
  - (F) Subject to the approval of the IDEM, OAQ, installing, operating and maintaining a device to monitor the concentration of HCl at the outlet of the fabric filter. If an increase in the concentration of HCl indicates that the lime is not free-flowing, the Permittee shall promptly initiate and complete corrective action.
- (7) A Permittee who intermittently adds lime to a lime coated fabric filter shall obtain approval from the permitting authority for a lime addition monitoring procedure. The IDEM, OAQ will not approve a monitoring procedure unless data and information are submitted establishing that the procedure is adequate to ensure that relevant emission standards will be met on a continuous basis.
- (8) The Permittee of the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, subject to an emission limit in kilogram per megagram (pounds per ton) or micrograms per megagram (grams per ton) of feed/charge shall install, calibrate, operate, and maintain a device to measure and record the total weight of feed/ charge to, or the aluminum production from the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, over the same operating cycle or time period used in the performance test. Feed/charge or aluminum production within SAPUs shall be measured and recorded on an emission unit-by-emission unit basis. The accuracy of the weight measurement device or procedure shall be +1 percent of the weight being measured.
- (9) Pursuant to 40 CFR Part 63.1510 the Permittee shall inspect the labels for each of the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, at least once per calendar month to confirm that posted labels as required by the operational standard in 40CFR 63.1506(b) are intact and legible.
- (10) The Permittee shall calculate and record the three- (3-) day, twenty-four (24-) hour rolling average emissions of D/F for two (2) natural gas-fired sweat

furnaces, identified as SF1 and SF2, on a daily basis. To calculate the three- (3-) day, twenty-four (24-) hour rolling average, the Permittee shall:

- (A) Calculate and record the total weight of material charged to the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, for each twenty-four (24-) hour day of operation using the feed/charge weight data collected as required under Subpart RRR. If the Permittee chooses to comply on the basis of weight of aluminum produced by the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, rather than weight of material charged to the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, all performance test emissions results and all calculations shall be conducted on the aluminum production weight basis.
- (B) Multiply the total feed/charge weight to the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, or the weight to the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, or the weight of aluminum produced by the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, for the twenty-four (24-) hour period by the emission rate (in lb/ton of feed/charge) for that the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, (as determined during the performance test) to provide emissions for the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, for the twenty-four (24-) hour period, in pounds.
- (C) Divide the total emissions for the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, for the twenty-four (24-) hour period by the total material charged to the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, or the total weight of aluminum produced by the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, over the twenty-four (24-) hour period to provide the daily emission rate for the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2.
- (D) Compute the twenty-four (24-) hour daily emission rate using the equation:

$$E_{\text{day}} = \frac{\sum_{i=1}^n (T_i \times ER_i)}{\sum_{i=1}^n T_i}$$

Where,

E<sub>day</sub> = The daily respective D/F emission rate for the secondary aluminum processing unit for the twenty-four (24-) hour period;

T<sub>i</sub> = The total amount of feed, or aluminum produced, for emission unit i for the twenty-four (24-) hour period in tons;

- ER<sub>i</sub> = The measured emission rate for emission unit *i* as determined in the performance test (lb/ton or µg/m<sup>3</sup>/Mg or feed/charge); and
- n* = The number of emission units in the secondary aluminum processing unit.
- (E) Calculate and record the three- (3-) day, twenty-four (24-) hour rolling average for each pollutant each day by summing the daily emission rates for DF over the three (3) most recent consecutive days and dividing by three (3).
- (11) The Permittee shall prepare and implement for the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, a written operation, maintenance, and monitoring (OM&M) plan. The Permittee shall submit the plan to the applicable permitting authority for review and approval as part of the application for a Part 70 or Part 71 permit. Any subsequent changes to the plan shall be submitted to the IDEM, OAQ for review and approval. Pending approval by the IDEM, OAQ of an initial or amended plan, the Permittee shall comply with the provisions of the submitted plan. Each plan shall contain the following information:
- (A) Process and control device parameters to be monitored to determine compliance, along with established operating levels or ranges, as applicable, for each process and control device.
- (B) A monitoring schedule for each affected source and emission unit.
- (C) Procedures for the proper operation and maintenance of each process unit and add-on control device used to meet the applicable emission limits or standards in 40 CFR 63.1505.
- (D) Procedures for the proper operation and maintenance of monitoring devices or systems used to determine compliance, including:
- (i) Calibration and certification of accuracy of each monitoring device, at least once every six (6) months, according to the manufacturer's instructions; and
- (ii) Procedures for the quality control and quality assurance of continuous emission systems as required by the general provisions in Subpart A of this part.
- (E) Procedures for monitoring process and control device parameters, including procedures for annual inspections of afterburners, and if applicable, the procedure to be used for determining charge/feed (or throughput) weight if a measurement device is not used.
- (F) Corrective actions to be taken when process or operating parameters or add-on control device parameters deviate from the value or range established in paragraph (b)(1) of this section, including:

- (i) Procedures to determine and record the cause of an deviation or excursion, and the time the deviation or excursion began and ended; and
  - (ii) Procedures for recording the corrective action taken, the time corrective action was initiated, and the time/date corrective action was completed.
- (G) A maintenance schedule for each process and baghouse that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.
- (12) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

These compliance monitoring conditions are necessary because the baghouses for the natural gas-fired sweat furnaces, identified as SF1 and SF2, must operate properly to ensure compliance with NESHAP Subpart RRR, 326 IAC 6-3-2 and 326 IAC 2-8-4.

- (b) The electric aluminum scrap crusher, identified as CR1, has no applicable compliance monitoring conditions.

### **Conclusion**

The operation of this stationary secondary aluminum production source utilizing scrap aluminum shall be subject to the conditions of the FESOP 069-19488-00067.

## Indiana Department of Environmental Management Office of Air Quality

### Addendum to the Technical Support Document for Federally Enforceable State Operating Permit (FESOP)

**Source Name:** Transmetco, Inc.  
**Source Location:** 1750 East Riverfork Drive, Huntington, Indiana 46750  
**County:** Huntington  
**FESOP:** F 069-19488-00067  
**SIC Code:** 3341  
**Permit Reviewer:** Mark L. Kramer/Frank P. Castelli

On August 5, 2004, the Office of Air Quality (OAQ) had a notice published in the Herald Press, Huntington, Indiana, stating that Transmetco, Inc. had applied for a Federally Enforceable State Operating Permit (FESOP) to operate a stationary secondary aluminum production source utilizing scrap aluminum with baghouses for particulate control. The notice also stated that OAQ proposed to issue a FESOP for this operation and provided information on how the public could review the proposed FESOP 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 FESOP should be issued as proposed.

On August 24, 2004, Andy Wright of Transmetco, Inc. submitted comments on the proposed FESOP. On September 15, 2004, Ed Crouse of Transmetco provided additional information clarifying their comments submitted on August 24. In addition, Bruce Johns on behalf of Transmetco, Inc. provided additional comments on September 22 and 23, 2004. The permit language, if changed, has deleted language as ~~strikeouts~~ and new language **bolded**. The comments are as follows:

#### Comment 1:

##### Sections throughout permit

The permit draft makes repeated statements regarding the use of lime injection to control emissions. It is Transmetco's understanding that the proposed lime use is to aid in controlling HAP emissions, specifically HCl and HF. Additionally, it is Transmetco's understanding that the use of lime powder does little to curtail the emissions of D/F. As the emissions of HCl and HF are predicted to be substantially under the 10 ton per individual HAP and 25 ton combined HAP limits, Transmetco is more concerned with the emission of D/F. In light of this Transmetco proposes the use of activated carbon powder be an approved substitute to lime powder. It is Transmetco's understanding that activated carbon powder is currently used in industry to control the emission of D/F.

Our environmental consultant, Mr. Bruce Johns of IET, contacted the EPA to discuss the use of activated carbon versus the use of lime. He was told that lime is generically included in the regulations and that emission generators can use other products to help in the abatement of emissions as long as the product is used during stack testing.

As a result of clarification of their comments, Transmetco requests that the permit be changed to use activated carbon where lime is currently indicated. This change would affect the following conditions in this permit draft: A.2 (a) & (b), D.1 Facility Description, D.1.16 (d) & (e)(4), D.1.17, D.1.21 (a) & (b), D.1.29 (d), and D.1.30 (b) (4) & (d) (2) --Please note that it is possible that Transmetco did not catch all sections where lime was used.

In addition, the September 22, 2004 comments requested revised wording in the permit conditions to clarify that activated carbon be used at a specified rate based on the IDEM, OAQ approved performance stack tests rather than when the stack test results are "available".

### Response 1:

IDEM, OAQ agrees that as long as the source can remain an area source with respect to HAPs and Subpart RRR, use of activated carbon to control D/F emissions is permitted provided that the usage rate is specified and incorporated into the permit as a requirement. U.S. EPA, OAQPS has confirmed that the use of activated carbon is permissible and that stack performance tests should be conducted using the permit specified rate of the addition of activated carbon. Therefore, the use of activated carbon to control D/F emissions has been added to the Conditions A.2(a) and (b), Section D.1, Conditions D.1.16(d) (now D.1.18(d)) and (e)(4) (now D.1.18(e)(3)), D.1.17 (now D.1.19), D.1.21 (now D.1.23)(a)(3), (b), (b)(1), D.1.27 (now D.1.29) and (2), D.1.29 (now D.1.31)(d), (d)(2) and (3), (d)(3)(i) (now (d)(3)(A)) and (d)(3)(ii) (now (d)(3)(B)), as well as D.1.30 (now D.1.32)(b)(4) and (d)(2).

The activated carbon shall be added at a rate of at least 0.5 pounds per hour per furnace as specified by Transmetco when the melting process is in operation. Transmetco shall use this rate until the approved stack test results are available. Transmetco shall determine the rate that activated carbon shall be added from the most recent valid stack test that demonstrates compliance with D/F limit approved by IDEM, OAQ. On and after the date the approved stack test results are available, Transmetco shall add activated carbon at or above the rate as observed during the compliant stack test. This usage rate requirement has been added to the proposed permit as a new Condition D.1.11 that references the approved performance stack test results.

In addition, the cross-reference cited in Condition D.1.27 (now D.1.29) has been changed from Condition D.1.14 to Condition D.1.12 as well as referencing the IDEM, OAQ approved performance stack tests as follows:

All subsequent conditions have been re-numbered and internal cites have been appropriately adjusted:

#### A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This stationary secondary aluminum production source utilizing scrap aluminum consists of the following emission units and pollution control devices:

- (a) One (1) natural gas-fired sweat furnace (**group 1 furnace**), equipped with low NO<sub>x</sub> burners, identified as SF1, equipped with a baghouse with **activated** carbon pre-coat **to control D/F emissions**, identified as BH1, capacity: 2.5 tons of aluminum scrap per hour (maximum capacity of ~~34.00~~ **34.00** pounds of solid **cover and wall cleaner** fluxes per **application hour each**) with a holding burner rated at 1.5 million British thermal units per hour and a melting burner rated at 5.0 million British thermal units per hour. The sweat furnace, SF1, exhausts to duct work, which tees to Stack S1 and ductwork leading to the baghouse, BH1. The baghouse, BH1, exhausts through Stack S2. Automated dampers control the ductwork at the tee. When under normal operating conditions and melting scrap aluminum, the sweat furnace, SF1, will exhaust to the baghouse, BH1, which in turn exhausts to Stack, S2. During periods when the furnace is idle (i.e., holding molten aluminum over the weekend) with no melting occurring the sweat furnace, SF1, will exhaust to Stack S1.
- (b) One (1) natural gas-fired sweat furnace (**group 1 furnace**), equipped with low NO<sub>x</sub> burners, identified as SF2, equipped with a baghouse with **activated** carbon pre-coat **to control D/F emissions**, identified as BH2, capacity: 2.5 tons of aluminum scrap per hour (maximum capacity of ~~34.00~~ **34.00** pounds of solid **cover and wall cleaner** fluxes per **application hour each**) with a holding burner rated at 1.5 million British thermal units per hour and a melting burner rated at 5.0 million British thermal units per hour. The sweat furnace, SF2, exhausts to duct work, which tees to Stack S3 and ductwork leading to the baghouse, BH2. The baghouse, BH2, exhausts through Stack S4. Automated dampers control the ductwork at the tee. When under normal operating conditions and melting scrap aluminum, the sweat furnace,

SF2, will exhaust to the baghouse, BH2, which in turn exhausts to Stack, S4. During periods when the furnace is idle (i.e., holding molten aluminum over the weekend) with no melting occurring the sweat furnace, SF2, will exhaust to Stack S3.

#### SECTION D.1

#### FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]: Sweat Furnaces, SF1 and SF2

- (a) One (1) natural gas-fired sweat furnace (**group 1 furnace**), equipped with low NOX burners, identified as SF1, equipped with a baghouse with **activated carbon pre-coat to control D/F emissions**, identified as BH1, capacity: 2.5 tons of aluminum scrap per hour (maximum capacity of **34.00 pounds of solid cover and wall cleaner fluxes per application hour each**) with a holding burner rated at 1.5 million British thermal units per hour and a melting burner rated at 5.0 million British thermal units per hour. The sweat furnace, SF1, exhausts to duct work, which tees to Stack S1 and ductwork leading to the baghouse, BH1. The baghouse, BH1, exhausts through Stack S2. Automated dampers control the ductwork at the tee. When under normal operating conditions and melting scrap aluminum, the sweat furnace, SF1, will exhaust to the baghouse, BH1, which in turn exhausts to Stack, S2. During periods when the furnace is idle (i.e., holding molten aluminum over the weekend) with no melting occurring the sweat furnace, SF1, will exhaust to Stack S1.
- (b) One (1) natural gas-fired sweat furnace (**group 1 furnace**), equipped with low NOX burners, identified as SF2, equipped with a baghouse with **activated carbon pre-coat to control D/F emissions**, identified as BH2, capacity: 2.5 tons of aluminum scrap per hour (maximum capacity of **34.00 pounds of solid cover and wall cleaner fluxes per application hour each**) with a holding burner rated at 1.5 million British thermal units per hour and a melting burner rated at 5.0 million British thermal units per hour. The sweat furnace, SF2, exhausts to duct work, which tees to Stack S3 and ductwork leading to the baghouse, BH2. The baghouse, BH2, exhausts through Stack S4. Automated dampers control the ductwork at the tee. When under normal operating conditions and melting scrap aluminum, the sweat furnace, SF2, will exhaust to the baghouse, BH2, which in turn exhausts to Stack, S4. During periods when the furnace is idle (i.e., holding molten aluminum over the weekend) with no melting occurring the sweat furnace, SF2, will exhaust to Stack S3.

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

#### D.1.11 Activated Carbon Usage Rate

**Activated carbon shall be utilized to control D/F emissions from both sweat furnaces, identified as SF1 or SF2. Until IDEM, OAQ approves the performance stack test results, activated carbon shall be added at a rate of at least 0.5 pounds per hour per furnace when the melting process is in operation.**

- (a) **The Permittee shall determine the rate that activated carbon shall be added from the most recent valid performance stack test that demonstrates compliance with the D/F limit in Condition D.1.12, as approved by IDEM, OAQ.**
- (b) **On and after the date IDEM, OAQ approves the performance stack test results, the Permittee shall add activated carbon at or above the rate as observed during the compliant stack test.**

## Compliance Determination Requirements

### D.1.4618 Testing Requirements [326 IAC 2-8-5(a)(1), (4)] [326 IAC 2-1.1-11] [40 CFR 63.1511, 63.1512, and 63.1513]

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- (d) Pursuant to 40 CFR 63.1512(d)(1), the Permittee shall conduct performance tests to measure emissions of D/F at the outlet of the ~~lime~~ **activated carbon** injected baghouses, identified as BH1 and BH2, controlling sweat furnaces, identified as SF1 and SF2. Pursuant to 40 CFR 63.1512(j), the results of the performance tests for the natural gas-fired sweat furnaces, identified as SF1 and SF2, are used to establish emission rates in ug TEQ/Mg of ~~feed/charge~~ **aluminum produced** for D/F emissions from each emission unit. These emission rates are used for compliance monitoring in the calculation of the 3-day, 24-hour rolling average emission rates using the equation in 40 CFR 63.1510(t).
- (e) Pursuant to Paragraphs (k), (n), (o), and (p) respectively of 40 CFR 63.1512, during the performance tests the Permittee shall comply with the requirements and use the procedures in these sections of the NESHAP for:
  - (34) Establishing an operating parameter value for the ~~lime~~ **activated carbon** injection system feeder setting for each operating cycle or time period used in the performance test.

### D.1.4719 HAPs Emissions

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In order to comply with Condition D.1.512, an ~~continuous lime~~ **activated carbon** injection system shall be in operation and control ~~HCl~~ **D/F** emissions from the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, at all times that the furnaces are in operation **and melting aluminum or adding flux to the furnaces.**

### D.1.2423 Secondary Aluminum Production Compliance Determination [40 CFR Part 63, Subpart RRR]

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Pursuant to 40 CFR Part 63.1510, the following conditions shall apply to the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2:

- (a) Pursuant to 40 CFR 63.1506(m), for each furnace, the Permittee shall:
  - (3) For an ~~continuous lime~~ **activated carbon** injection system, the Permittee shall maintain free-flowing ~~lime~~ **activated carbon** in the hopper to the feed device at all times and maintain the ~~lime~~ **activated carbon** feeder setting at the same level established during the performance test. Pursuant to 40 CFR 63.1503 ~~lime means calcium oxide or other alkaline reagent; and lime-~~ **activated carbon** injection means the ~~contin-~~ **ous** addition of ~~lime~~ **activated carbon** upstream of the fabric filter.
- (b) The Permittee shall use an ~~continuous lime-~~ **activated carbon** injected fabric filter to comply with the requirements of 40 CFR 63, Subpart RRR; and therefore pursuant to 40 CFR 63.1510(i), the Permittee shall:
  - (1) Verify that the ~~lime~~ **activated carbon** is always free-flowing by inspecting the feed hopper or silo at least once each eight (8) hour period and recording the results of each inspection. If the ~~lime or other alkaline agent~~ **activated carbon** is found not to be free-flowing during any of the eight (8) hour periods, the Permittee shall increase the frequency of inspections to at least once every four (4) hour period for the next three (3) days. The Permittee may return to inspections at least once every eight (8) hour period if corrective action results in no further blockages of ~~lime or other alkaline agent~~ **activated carbon** during the three (3) day period, or

- (2) Installing, operating and maintaining a load cell, carrier gas/~~lime~~ **activated carbon** flow indicator, carrier gas pressure drop measurement system or other system to confirm that ~~lime~~ **activated carbon** is free-flowing. If ~~lime~~ **activated carbon** is found not to be free-flowing, the Permittee shall promptly initiate and complete corrective action. ~~or~~
- ~~(3) Installing, operating and maintaining a device to monitor the concentration of HCl at the outlet of the fabric filter. If an increase in the concentration of HCl indicates that the lime is not free flowing, the Permittee shall promptly initiate and complete corrective action.~~
- (34) The Permittee shall also record the feeder setting once each day of operation.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

~~D.1.297~~ Compliance Monitoring Requirements [40 CFR 63.1510(t)] [40 CFR 63.1510(u)]

Pursuant to 40 CFR 63, Subpart RRR, on and after the date the **results of the** initial performance **stack** test to show compliance with Condition D.1. ~~1244 is are approved by IDEM, OAQ required to be completed,~~ the Permittee shall monitor the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, and the baghouses, identified as BH1 and BH2, according to the following requirements:

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

~~D.1.2931~~ Secondary Aluminum Production Record Keeping Requirements [40 CFR Part 63, Subpart RRR]

Pursuant to 40 CFR Part 63.1517, the Permittee shall:

- (d) In addition to the general records required by 40 CFR 63.10(b), the Permittee of a furnace with an ~~lime~~ **activated carbon** injected fabric filter shall maintain records of:
  - (1) For a bag leak detection system, the number of total operating hours for the affected source or emission unit during each six- (6-) month reporting period, records of each alarm, the time of the alarm, the time corrective action was initiated and completed, and a brief description of the cause of the alarm and the corrective action(s) taken. (40 CFR 63.1517(b)(1)(i))
  - (2) For each of the natural gas-fired sweat furnaces, identified as SF1 and SF2, records of fifteen- (15-) minute block average inlet temperatures for each ~~lime~~ **activated carbon** injected baghouse, including any period when the three- (3-) hour block average temperature exceeds the compliant operating parameter value +14EC (+25EF), with a brief explanation of the cause of the excursion and the corrective action taken. (40 CFR 63.1517(b)(3))
  - (3) The following regarding ~~lime~~ **activated carbon** injection:
    - (A) Records of inspections at least once every eight- (8-) hour period verifying that ~~lime~~ **activated carbon** is present in the feeder hopper or silo and flowing, including any inspection where blockage is found, with a brief explanation of the cause of the blockage and the corrective action taken, and records of inspections at least once every four- (4-) hour period for the subsequent three (3) days. If flow monitors, pressure drop sensors or load cells are used to verify that ~~lime~~ **activated carbon** is present in the hopper and

flowing, records of all monitor or sensor output including any event where blockage was found, with a brief explanation of the cause of the blockage and the corrective action taken; (40 CFR 63.1517(b)(4)(i))

- (Bii) If ~~lime~~ **activated carbon** feeder setting is monitored, records of daily inspections of feeder setting, including records of any deviation of the feeder setting from the setting used in the performance test, with a brief explanation of the cause of the deviation and the corrective action taken. (40 CFR 63.1517(b)(4)(ii))

D.1.3032 Secondary Aluminum Production Reporting Requirements [40 CFR Part 63, Subpart RRR]

- (b) Pursuant to 40 CFR 63.1515(b), the Permittee shall submit a notification of compliance status report within ninety (90) days after conducting the initial performance test required by 40 CFR 63.1511(b). The notification shall be signed by the responsible official who shall certify its accuracy. A complete notification of compliance status report shall include the information specified in paragraphs (1) through (8) below. The required information may be submitted in an operating permit application, in an amendment to an operating permit application, in a separate submittal, or in any combination. If a Permittee submits the information specified in this section at different times or in different submittals, later submittals may refer to earlier submittals instead of duplicating and resubmitting the information previously submitted. A complete notification of compliance status report shall include:
- (4) The compliant operating parameter value or range established for the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, with supporting documentation and a description of the procedure used to establish the value (e.g., **lime activated carbon** injection rate, ~~total reactive chlorine flux injection rate~~, fabric filter inlet temperature), including the operating cycle or time period used in the performance test. (40 CFR 63.15(b)(4))
- (d) Excess emissions/summary report. Pursuant to 40 CFR 63.1516(b), the Permittee shall submit semiannual reports within sixty (60) days after the end of each six- (6-) month period. Each report shall contain the information specified in 40 CFR 63.10 (c). When no deviations of parameters have occurred, the Permittee shall submit a report stating that no excess emissions occurred during the reporting period.

A report shall be submitted if any of these conditions occur during a six- (6-) month reporting period:

- (2) An excursion of a compliant process or operating parameter value or range (e.g., **lime activated carbon** injection rate or screw feeder setting, ~~total reactive chlorine flux injection rate~~, fabric filter inlet temperature, definition of acceptable scrap, or other approved operating parameter).

**Comment 2:**

Page 5 & 24 of 49 - Section A.2 & D.1 Facility Description (a) & (b)

Transmetco would like to request that the descriptive term, Group 1 Furnace, be added to the facility description for the furnaces, SF1 and SF2. This has been requested because Transmetco believes including this in the facility description and throughout the permit clarifies the proper classification for the furnaces, SF1 and SF2.

Parts (a) and (b) of the facility description in Section D.1 and A.2 contain the limiting clause

“(maximum capacity of 1.00 pound of solid flux per hour).” While this limit should not be difficult to meet on average, Transmetco would prefer to have the maximum flux per hour limit removed from the permit because of variability in the amount of flux necessary for cleaning the walls of the furnace.

The amount of cover flux spread over the bath will typically be a standard amount. However, the amount of wall flux can vary based on the amount of oxides that build up on the furnace walls. Transmetco wishes to avoid a situation where the company is out of compliance because it needed to use additional wall flux to keep the furnace operating properly.

Additionally, wall flux is typically applied once per shift and can be used in quantities of two to three pounds per application. Averaged out over the course of a shift or day this amount of flux would equate to less than a half pound per hour, but as the permit stands now Transmetco would violate the permit once a shift when cleaning the furnace.

It is Transmetco’s understanding that the reason for limiting the amount of flux used is to control the amount of HAPs in the form of HCL and HF emitted. As noted in Condition D.1.5, the emission limits of HCL and HF are ten (10) tons per year or 2.28 pounds per hour. If the flux used was all HCL or HF and 100% of it escaped to the atmosphere Transmetco could still use more than one pound per hour of flux and remain in compliance. As the flux is not completely made up of HCL, HF, or their constituents, nor will all of the flux escape to the atmosphere, Transmetco feels that an hourly limit on the amount of flux used is unnecessary and emissions of HAPs will be controlled with the prescribed emission limits found in Condition D.1.5 of the permit Draft. In light of this information and the necessity for operational flexibility in applying flux Transmetco requests that consideration be given to removing the hourly limit of solid flux capacity for each furnace and, thus change parts (a) and (b) of the Facility Description in Section D.1 to read as follows:

- (a) One (1) natural gas-fired sweat furnace, equipped with low NO<sub>x</sub> burners, identified as SF1, equipped with a baghouse with activated carbon pre-coat, identified as BH1. This Group 1 Furnace has a melting capacity: 2.5 tons of aluminum scrap per hour with a holding burner rated at 1.5 million British thermal units per hour and a melting burner rated.....

And

- (b) One (1) natural gas-fired sweat furnace, equipped with low NO<sub>x</sub> burners, identified as SF2, equipped with a baghouse with activated carbon pre-coat, identified as BH. This Group 1 Furnace has a melting capacity: 2.5 tons of aluminum scrap per hour with a holding burner rated at 1.5 million British thermal units per hour and a melting burner rated.....

**Response 2:**

IDEM, OAQ has incorporated the phrase Group 1 Furnace into the equipment list of Conditions A.2(a) and (b) as well as in Section D.1. The maximum capacity for adding flux has been increased from 1 pound per hour to 3 pounds per hour for each flux. The potential to emit HF from the cover flux and HCl from the wall cleaner flux using 3 pounds per hour each, assuming 100% of the fluxes are converted to a single HAP (HF and HCl) is 13.1 tons of HF per year and 13.1 tons of HCl per year. Since the potential to emit a single HAP would exceed ten (10) tons per year, the amount of fluxes added needs to be limited to less than 20,000 pounds each per year such that each single HAP remains less than ten (10) tons per year (less than 20,000 pounds per year x 100% HAP x 1 ton/2,000 pounds = less than 10.0 tons per year). Since the amount of fluxes are limited to less than 20,000 tons per year there is no need for the pound per hour HAPs limitations in Conditions D.1.5(a) and D.1.5(b). If each of these two (2) single HAPs is limited to less than ten (10) tons per year, then the combination of HAPs from the entire source will be limited to less than twenty-five (25) tons per year. Therefore, Conditions D.1.5(a) and D.1.5(b) have been deleted.

As a result, Condition D.1.5 (now D.1.6) has incorporated throughput limits for the cover and wall cleaner fluxes. Conditions D.1.28 (now D.1.30) and D.1.31 (now D.1.34) have been revised to require record keeping for each flux and also require quarterly reporting of the amount of fluxes used. The record keeping for Condition D.1.9 (now D.1.10) has also been added to Condition D.1.28 (now D.1.30). In addition, a Quarterly Report Form has been added to report the actual flux throughputs as follows:

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This stationary secondary aluminum production source utilizing scrap aluminum consists of the following emission units and pollution control devices:

- (a) One (1) natural gas-fired sweat furnace (**group 1 furnace**), equipped with low NO<sub>x</sub> burners, identified as SF1, equipped with a baghouse with **activated** carbon pre-coat **to control D/F emissions**, identified as BH1, capacity: 2.5 tons of aluminum scrap per hour (maximum capacity of **34.00 pounds** of solid **cover and wall cleaner fluxes per application hour each**) with a holding burner rated at 1.5 million British thermal units per hour and a melting burner rated at 5.0 million British thermal units per hour. The sweat furnace, SF1, exhausts to duct work, which tees to Stack S1 and ductwork leading to the baghouse, BH1. The baghouse, BH1, exhausts through Stack S2. Automated dampers control the ductwork at the tee. When under normal operating conditions and melting scrap aluminum, the sweat furnace, SF1, will exhaust to the baghouse, BH1, which in turn exhausts to Stack, S2. During periods when the furnace is idle (i.e., holding molten aluminum over the weekend) with no melting occurring the sweat furnace, SF1, will exhaust to Stack S1.
- (b) One (1) natural gas-fired sweat furnace (**group 1 furnace**), equipped with low NO<sub>x</sub> burners, identified as SF2, equipped with a baghouse with **activated** carbon pre-coat **to control D/F emissions**, identified as BH2, capacity: 2.5 tons of aluminum scrap per hour (maximum capacity of **34.00 pounds** of solid **cover and wall cleaner fluxes per application hour each**) with a holding burner rated at 1.5 million British thermal units per hour and a melting burner rated at 5.0 million British thermal units per hour. The sweat furnace, SF2, exhausts to duct work, which tees to Stack S3 and ductwork leading to the baghouse, BH2. The baghouse, BH2, exhausts through Stack S4. Automated dampers control the ductwork at the tee. When under normal operating conditions and melting scrap aluminum, the sweat furnace, SF2, will exhaust to the baghouse, BH2, which in turn exhausts to Stack, S4. During periods when the furnace is idle (i.e., holding molten aluminum over the weekend) with no melting occurring the sweat furnace, SF2, will exhaust to Stack S3.

D.1.56 HCl and HF (HAP) Limitations [326 IAC 2-8-4]

- (a) **The addition of cover and wall cleaner fluxes to sweat furnaces, identified as SF1 and SF2, shall be limited to less than a total of 20,000 pounds of each flux per twelve (12) consecutive month period with compliance determined at the end of each month.**
- (a) ~~The hydrogen chloride (HCl) emissions from the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, including fluxing exhausting through Stacks S1 through S4, shall be less than a total of 2.28 pounds per hour, equivalent to less than 10.0 tons per year.~~
- (b) ~~The hydrogen fluoride (HF) emissions from the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, including fluxing exhausting through Stacks S1 through S4, shall be less than a total of 2.28 pounds per hour, equivalent to less than 10.0 tons per year.~~
- (be) Compliance with these limits shall satisfy the requirements of 326 IAC 2-8-4 and the area source definition of 40 CFR 63, Subpart A **as well as renders the requirements of 326 IAC 2-7 not applicable.**

- (c) **The Permittee shall not use chlorine injection in the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2.**

**D.1.2830** Record Keeping Requirements

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- (a) To document compliance with Conditions ~~D.1.56(a) and (b)~~, the Permittee shall maintain monthly records of the amount of **cover and wall cleaner** fluxes added to the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2.
- (b) **To document compliance with Condition D.1.10, the Permittee shall maintain monthly records of the amount of scrap aluminum melted in the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2.**
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

**D.1.344** Reporting Requirements

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A quarterly summary of the information to document compliance with Conditions **D.1.6** and **D.1.104** 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 an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

**FESOP Quarterly Report**

**Source Name:** Transmetco, Inc.  
**Source Address:** 1750 East Riverfork Drive, Huntington, Indiana 46750  
**Mailing Address:** 1750 East Riverfork Drive, Huntington, Indiana 46750  
**FESOP No.:** F 069-19488-00067  
**Facilities:** Two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2  
**Parameter:** Amount of cover and wall cleaner fluxes added  
**Limit:** Less than a total of 20,000 pounds of each flux per twelve (12) consecutive month period with compliance determined at the end of each month.  
**YEAR:** \_\_\_\_\_

Month	Amount of Flux Added (pounds)		Amount of Flux Added (pounds)		Amount of Flux Added (pounds)	
	This Month		Previous 11 Months		12 Month Total	
	Cover	Wall Cleaner	Cover	Wall Cleaner	Cover	Wall Cleaner

- 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.

**Comment 3:**

Page 15 of 49 - B.23 (b)

Transmetco requests that a clause allowing an extension for construction and suspended work pending a written notification be added to this section of the permit. Construction delays are possible for a variety of reasons and Transmetco wishes to avoid a situation where the permit would need to be revised should a piece of equipment be constructed after the deadline. The potential addition of an extension clause could make B.23 (b) to read as follows:

Condition B.23 (b): Pursuant to 326 IAC 2-1.1-9 any permit authorizing construction may be revoked if construction of the emission unit has not commenced within eighteen (18) months from the date of issuance of the permit, or if during the construction work is suspended for a continuous period of one (1) year or more. An extension of the construction or suspension deadline may be requested in writing and shall include reasons for the delay.

**Response 3:**

Condition B.23 has been revised as follows to specifically cite that the source may request in writing an extension of the construction or suspension period incorporating the reasons for the delay. The commissioner will review the request and will either grant or deny the extension.

B.23 Advanced Source Modification Approval [326 IAC 2-8-4(11)] [326 IAC 2-1.1-9]

- (a) The requirements to obtain a permit revision under 326 IAC 2-8-11.1 are satisfied by this permit for the proposed emission units, control equipment or insignificant activities in Conditions A.2 and A.3.
- (b) Pursuant to 326 IAC 2-1.1-9 any permit authorizing construction may be revoked if construction of the emission unit has not commenced within eighteen (18) months from the date of issuance of the permit, or if during the construction work is suspended for a continuous period of one (1) year or more.
- (c) **The Permittee may request an extension of the construction or suspension deadlines in writing to IDEM, OAQ. The request shall include the reasons for the delay(s).**

**Comment 4:**

Page 21 of 49 - C.15 (c) (3)

Transmetco requests that consideration be given to changing this section allowing for clarification rendering C.15 (c) (3) to read as follows:

C.15 (c) (3): An automatic measurement was taken when the process was not operating, or an operating parameter was measured during an idle state or non-melt conditions.

**Comment 5:**

Page 21 of 49 - C.15 (f)

Similar to the previous item, Transmetco requests that consideration be given to adding language to C.15 (f), which would add clarification to the requirement. This additional language could change C.15 (f) to read as follows:

C.15 (f): Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities or when the system is under an idle state or non-melt conditions.

#### **Responses 4 and 5:**

Condition C.15(c)(3) (Compliance Response Plan - Preparation, Implementation, Records, and Reports) does not require the Permittee to take any further response steps when "An automatic measurement was taken when the process was not operating." Transmetco, Inc. has requested that additional wording be added that would include times when the furnaces are acting as "holding" furnaces or idling in a non-melt condition. IDEM, OAQ has determined that emissions are possible during idle, non-melt conditions in the furnaces as opposed to when the furnaces are not operating at all. Therefore, response steps are required for the two (2) furnaces when they are operating as "holding" furnaces or in an idling, non-melt condition. Thus, no change has been made to Condition C.15(c)(3).

Similarly, the suggested wording for Condition C.15(f) has not been incorporated since monitoring is required when the furnaces are operating, including idling, in a non-melting operation, i.e., acting as a holding furnace.

#### **Comment 6:**

##### Pages 25 & 26 of 49 - D.1.9 (a), (b) & (c)

Conditions D.1.19 and D.1.25, among others, allow the Permittee to choose between measuring and recording the feed/charge into the furnaces or the product produced through the furnaces. Transmetco believes that consistency should exist between the different sections of the permit and therefore requests that the option that exists in Conditions D.1.19 and D.1.25 should also be present in Condition D.1.9. With this consistency in mind Transmetco requests that consideration be given to amending Conditions D.1.9 (a), (b) and (c) to read as follows:

Condition D.1.9(a): The amount of scrap aluminum melted in or aluminum produced by each of the two (2) sweat furnace, identified as SF1 and SF2, shall not exceed 20,702.5 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

Condition D.1.9(b): The VOC emission rate shall not exceed a total of 2.40 pounds per ton of scrap aluminum charged to, or aluminum produced by, sweat furnace, SF1, exhausting through Stacks S1 and S2.

Condition D.1.9(c): The VOC emission rate shall not exceed a total of 2.40 pounds per ton of scrap aluminum charged to, or aluminum produced by, sweat furnace, SF2, exhausting through Stacks S3 and S4.

#### **Response 6:**

The addition of the phrase, " or aluminum produced by" in Condition D.1.9(a) (now D.1.10(a)) is because the emissions are produced by the melting of the charge, regardless of the amount of aluminum produced. At present, the specific relationship at Transmetco, Inc. between the amount of emissions based on the amount of aluminum charged versus the emissions based on the amount of aluminum produced is not known. Furthermore, the relationship may vary by the input of different types of scrap aluminum charged. The proposed throughput limit is not being imposed by the requirements of federal rule, 40 CFR 63, Subpart RRR, but rather to render the requirement of the state rule 326 IAC 8-1-6 not applicable. Therefore, Condition D.1.9(a) (now D.1.10(a)) has not been changed to

add this phrase.

In Condition D.1.9(b) (now D.1.10(b)) for furnace SF1 and Condition D.1.9(c) (now D.1.10(c)) for furnace SF2, the phrase, "(melted and/or held) can not be deleted as suggested since the limits are based on the total sweat furnace emissions from melting and holding.

Similarly, the suggestion to add the phrase, "or aluminum produced" to Conditions D.1.9(b) (now D.1.10(b)) and D.1.9(c) (now D.1.10(c)) has not been implemented.

However, 326 IAC 8-1-6 has been added as a cite to the title of Condition D.1.9 (now D.1.10) as follows:

**D.1.109 VOC Limitation [326 IAC 8-1-6]**

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**Comment 7:**

Page 26 of 49 - D.1.10 (a)

In the given equation what does  $T_{ti}$  stand for? Transmetco assumes that it stands for tons of feed/charge per furnace over a time period, but we found no reference to  $T_{ti}$  in this section of the permit or in the referenced code, 40 CFR Part 63.1505(k)(3). Please provide clarification on the definition of the variable in question, so that Transmetco can have full understanding of the equation in Condition D.1.10 (a).

**Response 7:**

Pursuant to 40 CFR 63.1505(k)(1),  $T_{ti}$  is defined as the feed/charge rate for individual emission unit  $i$ . This definition has been incorporated into Condition D.1.10(a) (now D.1.12(a)). In addition since Transmetco has chosen to calculate compliance with the D/F emission limit on the basis of the aluminum produced, Condition D.1.10(b) (now D.1.12(b)) has been revised as follows:

**D.1.120 Secondary Aluminum Production Limits [40 CFR Part 63.1500 (Subpart RRR)]**

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(a) Pursuant to 40 CFR Part 63.1505(k)(3), the Permittee shall comply with the emission limit calculated using the following equation for dioxins and furans (D/F, which means tetra-, penta-, hexa-, and octachlorinated dibenzo dioxins and furans) for each of the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2. The Permittee shall not discharge or allow to be discharged to the atmosphere any 3-day, 24-hour rolling average emissions of D/F in excess of:

$$L_{C_{D/F}} = \frac{\sum_{i=1}^n \left( L_{ti_{D/F}} \times T_{ti} \right)}{\sum_{i=1}^n T_{ti}}$$

where  $L_{tiD/F}$  = The D/F emission limit for individual emission unit in the secondary aluminum processing unit; and

$L_{CD/F}$  = The D/F emission limit for the secondary aluminum processing unit.

$T_{ti}$  = **The feed/charge rate for individual emission unit i**

- (b) Pursuant to 40 CFR 63.1505(k)(5), the Permittee **shall may** demonstrate compliance with the emission limits of 40 CFR 63.1505(k)(3) by demonstrating that each of the natural gas-fired sweat furnaces, identified as SF1 and SF2, is in compliance with the following emission limit of 40 CFR 63.1505(i)(3):

15 ug of D/F TEQ per Mg (2.1 x 10<sup>-4</sup> gr of D/F TEQ per ton) of feed/charge from a group 1 furnace.

- (1) TEQ means the international method of expressing toxicity equivalents for D/F as defined in "Interim Procedures for Estimating Risks Associated with Exposures to Mixtures of Chlorinated Dibenzo-p-Dioxins and -Dibenzofurans (CDDs and CDFs) and 1989 Update" (EPA-625/3-89-016), available from the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, Virginia 22161, NTIS no. PB 90-145756.
- (2) The Permittee **shall may** determine the emission standards for each of the natural gas-fired sweat furnaces, identified as SF1 and SF2, by applying the Group 1 furnace limits on the basis of the aluminum production weight in each Group 1 furnace, rather than on the basis of feed/charge.

**Comment 8:**

Page 27 of 49 - D.1.12 (b)

The capture/collection system to be installed at Transmetco's facility is not definable as a closed system. In light of this, some adjustment to Condition D.1.12 must be made in order to fulfill the intent of the regulations and allow for the proper operation of Transmetco's capture/collection system. Thus, Transmetco proposes to modify Condition D.1.12 (b) and add additional sections to Condition D.1.12. Transmetco requests that consideration be given to changing Condition D.1.12 to read as follows:

Condition D.1.12 (b): Vent melt and fluxing emissions through separate baghouse systems, BH1 and BH2, except that dilution air may be added to emission streams for the purpose of controlling temperature at the inlet to the fabric filters;

Condition D.1.12(c) (New Section): Have group 1 sweat furnaces, SF1 and SF2, exhaust directly through stacks S1 and S3, respectively, during idle times when no melting is occurring and flux is not being added to the systems;

Condition D.1.12(d) (New Section): Have group 1 sweat furnaces, SF1 and SF2, transition exhaust from stacks S2 and S4 to stacks S1 and S3, respectively, once the melting and fluxing operations have been completed.

Note: the current Condition D.1.12 (c) would stay in the permit and change to Condition D.1.12 (e)

**Response 8:**

The emissions from melting and fluxing controlled by baghouses must be captured by a closed system pursuant to Subpart RRR, 40 CFR 63.1506(c)(2). The exhausting of the sweat furnaces' emissions directly to baghouses and subsequently through stack exhausts meets the definition of a closed system. However, the venting of emissions from the sweat furnaces when functioning as "holding" furnaces will require that Transmetco specify the time period that the baghouses shall be in operation after the melting process is curtailed, but prior to the switch over to the holding furnaces' stack exhausts. This time period and procedure should be detailed in the OM&M plan.

Condition D.1.12(b) (now D.1.14(b)) has therefore been revised and the two (2) additional conditions have been incorporated as suggested.

**D.1.142 Capture/Collection Systems [40 CFR Part 63.1506(c)]**

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Pursuant to 40 CFR 63.1506(c), the Permittee shall:

- (a) Design and install a system for the capture and collection of emissions to meet the engineering standards for minimum exhaust rates as published by the American Conference of Governmental Industrial Hygienists in chapters 3 and 5 of "Industrial Ventilation: A Manual of Recommended Practice" (incorporated by reference: 40 CFR 63.1502)
- (b) Vent **melting and fluxing** captured emissions through **separate baghouse systems, BH1 and BH2**, a closed system, ~~except that~~ Dilution air may be added to emission streams for the purpose of controlling temperature at the inlet to ~~the~~ a fabric filters; ~~and~~
- (c) **Exhaust group 1 sweat furnaces, SF1 and SF2, directly through Stacks S1 and S3, respectively, during hold times when no melting is occurring and flux is not being added to the furnaces;**
- (d) **Transition the group 1 sweat furnaces, SF1 and SF2, exhausts from Stacks S2 and S4 to Stacks S1 and S3, respectively, once the melting and fluxing operations have been completed. Once the transition has begun, flux shall not be added to either furnace; and**
- (ee) Operate each capture/collection system according to the procedures and requirements in the OM&M plan. **The Permittee shall specify the time period that the baghouses shall be in operation after the melting process is curtailed, but prior to the switch over to the holding furnaces' stack exhausts. This time period and procedure shall be detailed in the OM&M plan.**

**Comment #9:**

Page 27 of 49 - D.1.13

Condition D.1.13 requires that the Permittee shall submit the OM&M plan for the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, to the IDEM, OAQ.

The plan shall be accompanied by a written certification by the Permittee that the OM&M plan satisfies all requirements of 40 CFR 63.1510(b) and is otherwise consistent with the requirements of Subpart RRR. The Permittee shall comply with all of the provisions of the OM&M plan as submitted to the IDEM, OAQ unless and until the plan is revised in accordance with the following procedures. If the IDEM, OAQ determines at any time after receipt of the OM&M plan that any revisions of the plan are necessary to satisfy the requirements of 40 CFR 63.1510(b) or Subpart RRR, the Permittee shall promptly make all necessary revisions and resubmit the revised plan. If the Permittee determines that

any other revisions of the OM&M plan are necessary, such revisions will not become effective until the Permittee submits a description of the changes and a revised plan incorporating them to the IDEM, OAQ.

Transmetco feels that some clarity needs to be provided in the chain of events that could occur should the IDEM, OAQ determine Transmetco's OM & M plan needs revisions. As such, Transmetco requests that consideration be given to changing Condition D.1.13 to read as follows:

Condition D.1.13: The Permittee shall submit the OM&M plan for the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, to the IDEM, OAQ.

The plan shall be accompanied by a written certification by the Permittee that the OM&M plan satisfies all requirements of 40 CFR 63.1510(b) and is otherwise consistent with the requirements of Subpart RRR. The Permittee shall comply with all of the provisions of the OM&M plan as submitted to the IDEM, OAQ unless and until the plan is revised in accordance with the following procedures. If the IDEM, OAQ determines at any time after receipt of the OM&M plan that any revisions of the plan are necessary to satisfy the requirements of 40 CFR 63.1510(b) or Subpart RRR, the IDEM, OAQ shall inform the Permittee in writing, as to the changes they feel are necessary. The Permittee shall promptly make all necessary directed revisions, or any revisions the Permittee deems necessary, and resubmit the revised plan. If the Permittee does make any of their own revisions to the OM&M plan, such revisions will not become effective until the Permittee submits a description of the changes along with the revised plan incorporating them to the IDEM, OAQ.

#### Response 9:

IDEM, OAQ will notify the Permittee of the necessary revisions, but not necessarily in writing. Therefore, Condition D.1.13 (now D.1.15) has been revised to indicate that IDEM, OAQ notifies the Permittee and that the Permittee can make additional revisions at the same time. Therefore, Condition D.1.13 has been revised as follows:

#### D.1.153 Operation, Maintenance, and Monitoring (OM&M) Plan [40 CFR Part 63.1510(b)]

The Permittee shall submit the OM&M plan for the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, to the IDEM, OAQ.

The plan shall be accompanied by a written certification by the Permittee that the OM&M plan satisfies all requirements of 40 CFR 63.1510(b) and is otherwise consistent with the requirements of Subpart RRR. The Permittee shall comply with all of the provisions of the OM&M plan as submitted to the IDEM, OAQ unless and until the plan is revised in accordance with the following procedures. If the IDEM, OAQ **notifies the Permittee** determines at any time after receipt of the OM&M plan that any revisions of the plan are necessary to satisfy the requirements of 40 CFR 63.1510(b) or Subpart RRR, the Permittee shall promptly make all necessary revisions **or additional revisions the Permittee deems necessary** and resubmit the revised plan. If the Permittee determines that any other revisions of the OM&M plan are necessary, such revisions will not become effective until the Permittee submits a description of the changes and a revised plan incorporating them to the IDEM, OAQ.

#### Comment 10:

Page 28 of 49 - D.1.15 (a), (b) and (c)

Condition D.1.15(a) states that the stack tests must be completed within 180 days of startup of the sweat furnaces; while Conditions D.1.15(b & c) state that the stack tests must be completed within 180 days of issuance of the permit. Transmetco seeks clarification on whether the 180-day grace period is to be taken from startup of the furnaces or from issuance of the permit, as they may not coincide. As such, Transmetco requests that consideration be given to changing the language

regarding the 180 day period before the stack test is required in Condition D.1.15(a) or Conditions D.1.15(b & c), so that all of the paragraphs in Condition D.1.15 are consistent.

On September 23, 2004, Transmetco supplemented their comments and requested that all performance stack testing requirements in Condition D.1.15 be removed from the permit.

**Response 10:**

As stated in the Technical Support Document, performance stack testing to demonstrate compliance with Conditions D.1.6, D.1.7 and D.1.8 (now D.1.7, D.1.8 and D.1.9) should be performed within 180 days of start-up of the sweat furnaces.

The PM and PM<sub>10</sub> performance stack test requirements for one (1) of the two (1) furnaces can not be deleted from Condition D.1.15(a) (now D.1.17). PM<sub>10</sub> performance stack testing is required to show compliance with the PM<sub>10</sub> FESOP limit in Condition D.1.6 (now D.1.7). PM performance stack testing is also required to show compliance with the PM emission limit in Condition D.1.7 (now D.1.8). In addition, PM performance stack testing is required to show compliance with the allowable particulate emission rate pursuant to 326 IAC 6-3-2 in Condition D.1.8 (now D.1.9).

The potential to emit PM and PM<sub>10</sub> calculated in Appendix A of the Technical Support Document were based on emission factors from Fires V.6.23 coupled with stated, but untested, control efficiencies. The performance stack tests are required to verify compliance with the cited emission limits under actual operations. It should be noted that the bag leak detection system required which will have a PM concentration set point does not measure PM<sub>10</sub> or condensibles. The stack test will verify the PM<sub>10</sub> emission rate from one (1) of the furnaces. Therefore, the PM and PM<sub>10</sub> performance testing requirements have been retained in Condition D.1.15(a) (now D.1.17).

Transmetco has agreed to use only solid fluxes, rather than liquid or gaseous fluxes. The solid flux usage has been limited to less than 20,000 pounds of each flux per twelve (12) consecutive month period in Condition D.1.5 (now D.1.6). See Responses 2 and 15. Conservatively assuming that all of each flux is converted to HAPs, this 20,000 pound limit of each flux is equivalent to less than ten (10) tons each of HCl and HF per year and less than a total combined HAPs of less than twenty-five (25) tons per year. Therefore, the HCl and HF performance stack testing requirements have been deleted in Conditions D.1.15(b) and (c) (now D.1.17 (b) and (c)) as follows:

**D.1.17~~5~~ Testing Requirements [326 IAC 2-8-5(a)(1), (4)] [326 IAC 2-1.1-11]**

- (a) Within 180 days of start-up of the sweat furnaces, identified as SF1 and SF2, in order to demonstrate compliance with Conditions D.1.7~~6~~, D.1.8~~7~~ and D.1.9~~8~~, the Permittee shall perform PM and PM<sub>10</sub> testing of one (1) of the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, 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<sub>10</sub> includes filterable and condensible PM<sub>10</sub>. Testing shall be conducted in accordance with Section C - Performance Testing.
- ~~(b) Within 180 days of issuance of this permit in order to demonstrate compliance with Conditions D.1.5 the Permittee shall perform HCl and HF testing of one of the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, while fluxing and exhausting to Stacks S2 and S4 utilizing methods as approved by the Commissioner. Testing shall be conducted in accordance with Section C - Performance Testing.~~
- ~~(c) Within 180 days of issuance of this permit in order to demonstrate compliance with Conditions D.1.5 the Permittee shall perform HCl and HF testing of one (1) of the two (2) natural gas-fired sweat furnace, identified as SF1 and SF2, while holding and exhausting to Stacks S1 and S3 utilizing methods as approved by the Commissioner. Testing shall be~~

~~conducted in accordance with Section C – Performance Testing.~~

**Comment 11:**

Page 29 of 49 - D.1.15 (c)

Condition D.1.15(c) READS: Within 180 days of issuance of this permit, in order to demonstrate compliance with Condition D.1.5, the Permittee shall perform HCl and HF testing of one (1) of the two (2) natural gas-fired sweat furnace, identified as SF1 and SF2, while holding and exhausting to Stacks S1 and S3 utilizing methods as approved by the Commissioner. Testing shall be conducted in accordance with Section C - Performance Testing.

Transmetco recognizes the need for stack testing to verify compliance with certain sections of the permit such as Condition D.1.5. However, Transmetco views the performance testing required in Condition D.1.15(c) unnecessary.

The stack testing required in Condition D.1.15(c) is to verify compliance with the emission limits established in Condition D.1.5 while the furnace is idle (holding molten aluminum at temperature, but not melting and/or charging scrap). As previously discussed in this letter, Condition D.1.5 creates limits on the amount of HAPs emitted, specifically HCL and HF.

The emissions of HCL and HF are directly attributed to the application of flux. When the furnace is idle, typically only on the weekend, flux will not be applied to the furnace or the bath. This is because flux is not necessary during the holding period. It would, thus seem to be unnecessary to test for HCL and HF when the furnace is idle, as the HAPs would not be present because fluxing was not occurring.

As such, Transmetco requests that consideration be given to removing Condition D.1.15 (c) from the permit.

This comment was subsequently revised on September 23, 2004 to request the deletion of Conditions D.1.15(b) and (c).

**Response 11:**

See Response 10.

**Comment 12:**

Page 29 of 49 - D.1.16 (b)

Condition D.1.16(b) contains a statement that says Transmetco would be responsible for completing the required initial performance test by September 23, 2004 because that is 180 days after the March 23, 2004 compliance date. This would cause a problem, as Transmetco may not begin operations until shortly before if not after September 23, 2004. Transmetco is unclear where this seemingly arbitrary date came from and believes that it may be a misapplication.

Condition D.1.16(b) refers to 40 CFR 63.1511(b) and 40 CFR 63.1515(b), among others. These regulations make no specific mention of the dates March 23 or September 23, 2004. 40 CFR 63.1511 (b) refers to 40 CFR 63.1504 (b), which states that a new source constructed after February 11, 1999 has to comply with this particular subpart (RRR) by March 24, 2000 or upon startup, whichever is later. Certainly, Transmetco must comply with the regulations in 40 CFR Part 63 Subpart RRR upon startup, but the regulations allow for a grace period after startup before the performance testing is required.

Additionally, the stated September 23, 2004 deadline to complete the initial performance test in Condition D.1.16(b) conflicts with other sections of this FESOP Permit Draft. Condition D.1.15 clearly states that Transmetco has 180 days within startup of the sweat furnaces/issuance of the permit to complete the initial stack tests. Transmetco believes the 180 day period before the required stack testing is necessary to get operations up and running at full capacity so as to have a true representation of the emission during a stack test. Furthermore, Condition D.1.30(a) requires Transmetco to give IDEM, OAQ sixty (60) days notice before the stack test is scheduled. As the permit is currently in public comment until September 5, 2004 neither of these requirements would be attainable if Transmetco were required to complete the performance testing by September 23, 2004.

In light of the information provided above Transmetco requests that consideration be given to removing Condition D.1.16(b) or if required to remain in the permit change Condition D.1.16(b) to read as follows:

Condition D.1.16(b): Pursuant to 40 CFR 63.1511(b), following approval of the site-specific test plan, the Permittee shall demonstrate initial compliance with each applicable emission, equipment, work practice, or operational standard for each of the natural gas-fired sweat furnaces, identified as SF1 and SF2, and report the results in the notification of compliance status report as described in 40 CFR 63.1515(b). The Permittee shall conduct this initial performance test within 180 days of issuance of this permit\*\*\* in order to demonstrate compliance with Condition D.1.6 and 40 CFR Part 63 Subpart RRR. The Permittee shall conduct each performance test in accordance with the requirements and procedures set forth in 40CFR 63.7(c) and 63.1511(b), (c), and (d) (Performance test/compliance demonstration general requirements). The Permittee is subject only to those performance testing requirements pertaining to D/F.

Change to read within 180 days of startup of the sweat furnaces, identified as SF1 and SF2 pending the decision on Item #3.

#### Response 12:

Condition D.1.16(b) (now D.1.18(b)) has been changed from September 23, 2004, to 180 days after start-up for this new source. Therefore, Condition D.1.16(b) (now D.1.18(b)) has been revised as follows:

#### D.1.186 Testing Requirements [326 IAC 2-8-5(a)(1), (4)] [326 IAC 2-1.1-11] [40 CFR 63.1511, 63.1512, and 63.1513]

- 
- (a) Pursuant to 40 CFR 63.1511(a), prior to conducting any performance test required by 40 CFR Part 63, Subpart RRR, the Permittee shall prepare a site-specific test plan which satisfies all of the requirements, and shall obtain approval of the plan pursuant to the procedures, set forth in 40 CFR 63.7(c) (General Provisions).
  - (b) Pursuant to 40 CFR 63.1511(b), following approval of the site-specific test plan, the Permittee shall demonstrate initial compliance with each applicable emission, equipment, work practice, or operational standard for each of the natural gas-fired sweat furnaces, identified as SF1 and SF2, and report the results in the notification of compliance status report as described in 40 CFR 63.1515(b). The Permittee shall conduct this initial performance test **within 180 days of start-up of the sweat furnaces, identified as SF1 and SF2, no later than September 23, 2004, which is 180 days after the March 23, 2004 compliance date** in order to demonstrate compliance with Condition D.1.126 and 40 CFR Part 63 Subpart RRR. The Permittee shall conduct each performance test in accordance with the requirements and procedures set forth in 40 CFR 63.7(c) and 63.1511(b), (c), and (d) (Performance test/ compliance demonstration general requirements). The Permittee is subject only to those performance testing requirements pertaining to D/F.

**Comment 13:**

Page 29 of 49 - D.1.16 (d)

Transmetco acknowledges the need for a stack test to determine the D/F emission rate. However, Transmetco is unclear of the reasoning for why the stack testing must be completed on both of the outlet stacks for the baghouses that control furnaces, SF1 and SF2 and why there would be separate D/F emission factors for each furnace.

The furnaces, SF1 and SF2, are designed to be similar, if not identical, and will operate in the same fashion. The material being melted will be the same and the emissions will be controlled in the same manner. As this is the case, it would seem reasonable to expect the D/F emissions for both furnaces to be similar, rendering a second stack test unnecessary.

Additionally, the testing requirements in Condition D.1.15 of this permit draft specify that PM/PM<sub>10</sub> and HCL/HF testing must be completed on one of the two furnaces. It would seem to make sense that if compliance with emission limits for PM/PM<sub>10</sub> and HCL/HF can be determined with a stack test on one of the two furnaces then testing one of the furnaces for D/F would be adequate when determining D/F emission factors. As such, Transmetco asks that consideration be given to changing Condition D.1.16(d) to read as follows:

Condition D.1.16(d): Pursuant to 40 CFR 63.1512(d)(1), the Permittee shall conduct performance testing to measure emissions of D/F at the outlet of one of the carbon-injected baghouses, identified as BH1 or BH2, controlling one of the group 1 sweat furnaces, identified as SF1 or SF2. Pursuant to 40 CFR 63.1512(j), the results of the performance test for the natural gas-fired sweat furnace, identified as SF1 or SF2, is used to establish the emission rates in ug TEQ/Mg of aluminum produced for D/F emissions for each emission unit. The emission factor is used for compliance monitoring in the calculation of the 3-day, 24-hour rolling average emission rates using the equation in 40 CFR 63.1510(t).

**Response 13:**

Pursuant to 40 CFR 63.1511(f)(6) (Testing of representative emission units), all add-on controls devices are tested to show compliance with Subpart RRR. It should be noted that the permitting authority can require testing of a representative or similar group 1 furnace which is not controlled by an add-on controls. Since each sweat furnace is controlled by a baghouse and activated carbon, these are considered add-on controls and as such both furnaces will need to be tested for D/F to comply with the requirements of Subpart RRR. Therefore, the testing requirements to show compliance with the NESHAP, Subpart RRR have not been relaxed.

However, pursuant to 40 CFR 63.1510(t), since the Permittee chooses to comply on the basis of weight aluminum produced rather than by the weight of material charged, all performance test emissions results and all calculations must be conducted on the aluminum production weight basis. Therefore, Condition D.1.16(d) (now D.1.18(d)) has been revised as follows:

**D.1.186** Testing Requirements [326 IAC 2-8-5(a)(1), (4)] [326 IAC 2-1.1-11] [40 CFR 63.1511, 63.1512, and 63.1513]

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(d) Pursuant to 40 CFR 63.1512(d)(1), the Permittee shall conduct performance tests to measure emissions of D/F at the outlet of the ~~lime-~~ **activated carbon** injected baghouses, identified as BH1 and BH2, controlling sweat furnaces, identified as SF1 and SF2. Pursuant to 40 CFR 63.1512(j), the results of the performance tests for the natural gas-fired sweat furnaces, identified as SF1 and SF2, are used to establish emission rates in ug TEQ/Mg of ~~feed/charge~~

**aluminum produced** for D/F emissions from each emission unit. These emission rates are used for compliance monitoring in the calculation of the 3-day, 24-hour rolling average emission rates using the equation in 40 CFR 63.1510(t).

**Comment 14:**

Page 29 of 49 - D.1.16 (e) (1)

In order to remain consistent with the rest of the permit draft Transmetco requests that aluminum produced be substituted for the feed/charge weight. This change for your consideration would leave Condition D.1.16(e)(1) to read as follows:

Condition D.1.16(e)(1): Measuring or otherwise determining the aluminum produced by the natural gas-fired sweat furnaces, identified as SF1 or SF2;

Note: As requested in the previous item, it is Transmetco's opinion that the stack testing for D/F should be required on only one of the two furnaces. In this manner Transmetco requests that in Conditions D.1.16 (e)(1,2, & 3) the and used with either SF1 and SF2 or BH1 and BH2 be replaced with or.

**Response 14:**

See Response 13. Pursuant to 40 CFR 63.1512(k), since the Permittee has chosen to demonstrate compliance on the basis of the aluminum production weight instead of the feed/charge rate, the Permittee must measure the weight of aluminum produced by the emission unit. Therefore, Condition D.1.16(e)(1) (now D.1.18(e)(1)) has revised as follows.

~~D.1.186~~ Testing Requirements [326 IAC 2-8-5(a)(1), (4)] [326 IAC 2-1.1-11] [40 CFR 63.1511, 63.1512, and 63.1513]

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- (e) Pursuant to Paragraphs (k), (n), (o), and (p) respectively of 40 CFR 63.1512, during the performance tests the Permittee shall comply with the requirements and use the procedures in these sections of the NESHAP for:
- (1) Measuring or otherwise determining ~~feed/charge weight~~ **the aluminum produced** by the natural gas-fired sweat furnaces, identified as SF1 and SF2;

**Comment 15:**

Page 30 of 49 - D.1.16 (e) (3)

With regards the regulation governing the use of reactive chlorine flux injection Transmetco makes the following statement:

Transmetco does not intend to use chlorine injection. The fluxes shall be inorganic salts and will be added as needed.

**Response 15:**

Condition D.1.16(e)(3) (now D.1.18(e)(3)) has been deleted and Condition D.1.5(e) (now D.1.6(c)) has been added to prohibit the use of chlorine injection as follows. Note that Condition D.1.29(d)(4) (now D.1.31(d)(4)) requires the Permittee to record the identity, composition and total weight of each additional solid reactive flux.

~~D.1.65~~ HCl and HF (HAP) Limitations [326 IAC 2-8-4]

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- (a) **The addition of cover and wall cleaner fluxes to sweat furnaces, identified as SF1 and SF2, shall be limited to less than a total of 20,000 pounds of each flux per twelve (12) consecutive month period with compliance determined at the end of each month.**
- (a) ~~The hydrogen chloride (HCl) emissions from the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, including fluxing exhausting through Stacks S1 through S4, shall be less than a total of 2.28 pounds per hour, equivalent to less than 10.0 tons per year.~~
- (b) ~~The hydrogen fluoride (HF) emissions from the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, including fluxing exhausting through Stacks S1 through S4, shall be less than a total of 2.28 pounds per hour, equivalent to less than 10.0 tons per year.~~
- (be) Compliance with these limits shall satisfy the requirements of 326 IAC 2-8-4 and the area source definition of 40 CFR 63, Subpart A **as well as renders the requirements of 326 IAC 2-7 not applicable.**
- (c) **The Permittee shall not use chlorine injection in the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2.**

D.1.186 Testing Requirements [326 IAC 2-8-5(a)(1), (4)] [326 IAC 2-1.1-11] [40 CFR 63.1511, 63.1512, and 63.1513]

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- (e) Pursuant to Paragraphs (k), (n), (o), and (p) respectively of 40 CFR 63.1512, during the performance tests the Permittee shall comply with the requirements and use the procedures in these sections of the NESHAP for:
  - (1) Measuring or otherwise determining feed/charge weight to the natural gas-fired sweat furnaces, identified as SF1 and SF2;
  - (2) Establishing an operating parameter value or range for the inlet gas temperature at the inlet to the baghouses, identified as BH1 and BH2, controlling the natural gas-fired sweat furnaces, identified as SF1 and SF2; **and**
  - (3) ~~Establishing an operating parameter value or range for the total reactive chlorine flux injection rate; and~~
  - (34) Establishing an operating parameter value for the ~~lime~~ **activated carbon** injection system feeder setting for each operating cycle or time period used in the performance test.

**Comment 16:**

Page 30 of 49 - D.1.17

Transmetco would like to add clarification to the definition of operation in regards to when the activated carbon injection system is required to run. Adding the statement, and melting aluminum or adding flux to the furnaces, to the end the regulation would complete the requested clarification. With this addition, Transmetco requests that consideration be given to changing Condition D.1.17 to read as follows:

Condition D.1.17: In order to comply with Condition D.1.5, an activated carbon injection system shall be in operation and control DF emissions from the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, at all times that the furnaces are in operation and melting aluminum or adding flux to the furnaces.

**Response 16:**

Condition D.1.17 (now D.1.19) has been revised to clarify that an activated carbon injection system shall be in operation and control D/F emissions from the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, at all times that the furnaces are in operation and melting aluminum or adding flux to the furnaces as oppose to when the sweat furnaces are acting as "holding" furnaces as follows:

**D.1.19** HAPs Emissions

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In order to comply with Condition D.1.512, ~~an continuous lime~~ **activated carbon** injection system shall be in operation and control ~~HCl~~ **D/F** emissions from the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, at all times that the furnaces are in operation **and melting aluminum or adding flux to the furnaces.**

**Comment 17:**

Page 30 of 49 - D.1.18

Transmetco would like to add clarification to the definition of operation in regards to when the baghouses, BH1 and BH2, are required to run. In a similar manner to Item #7 adding the statement, and melting aluminum or adding flux to the furnaces, to the end of the regulation would complete the required clarification. With this addition Transmetco requests that consideration be given to changing Condition D.1.18 to read as follows:

D.1.18: In order to comply with Conditions D.1.6 and D.1.8, the baghouses, identified as BH1 and BH2, for particulate control shall be in operation and control emissions from the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, at all times that the furnaces are in operation and melting aluminum or adding flux to the furnaces.

**Response 17:**

Condition D.1.18 (now D.1.20) has been revised to clarify that the baghouses, identified as BH1 and BH2, shall be in operation and control particulate emissions from the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, at all times that the furnaces are in operation and melting aluminum or adding flux to the furnaces as oppose to when the sweat furnaces are acting as "holding" furnaces as follows:

**D.1.20** Particulate Control and Capture/Collection Systems [326 IAC 2-8-4]

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In order to comply with Conditions D.1.76, **D.1.8** and D.1.98, the baghouses, identified as BH1 and BH2, for particulate control shall be in operation and control emissions from the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, at all times that the furnaces are in operation **and melting aluminum or adding flux to the furnaces.**

**Comment 18:**

Page 31 of 49 - D.1.20 (d), (f), and (i)

In D.1.20(d), (f), and (i) what do the terms relative, absolute, preset level, and baseline output mean and how do they relate to each other and their context with PM loadings? Please provide clarification on this matter, so that Transmetco can have a full understanding of the regulations.

**Response 18:**

Conditions D.1.20 (now D.1.22)(d), (f) and (i) have been abstracted from the permit as follows:

D.1.220 Fabric Filter Monitoring Requirements [40 CFR 63.1510(f)]

Pursuant to 40 CFR 63.1510, the following requirements apply to the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2:

- (d) The bag leak detection system sensor shall provide output of relative or absolute PM loadings.
- (f) The bag leak detection system shall be equipped with an alarm system that will sound automatically when an increase in relative PM emissions over a preset level is detected. The alarm shall be located where it is easily heard by plant operating personnel.
- (i) The baseline output shall be established by adjusting the range and the averaging period of the device and establishing the alarm set points and the alarm delay time.

The phrase "absolute" PM loading in Condition D.1.20(d) (now D.1.22(d)) refers to the measurement of the PM loading by the bag leak detection system sensor directly as a concentration which does not need to be converted or adjusted. The phrase "relative" PM loading in Condition D.1.20(d) (now D.1.22(d)) refers to the measurement of a surrogate parameter, such as voltage, which is then converted to a PM loading by the bag leak detection system sensor. A relative PM loading is not a direct output of the PM loading.

The preset level is set to reflect the concentration of PM that should be emitted by the baghouse during normal operations if the bags are in good operating condition. Concentrations higher than this preset level may indicate that a bag leak is occurring. The preset level is established through stack testing.

The baseline output represents the level of the sensor that indicates normal operating conditions based on the averaging time of the device as well as the normal range of concentrations for that averaging time.

**Comment 19:**

Page 31 & 32 of 49 - D.1.21 (a) (1&2)

Please define the word, block, in reference to a six (6) month block reporting period and the three (3) hour block average inlet temperature in D.1.21(a)(1) and D.1.21(a)(2), respectively. Does the word block refer to a rolling time period or is it a set time period such as the first six (6) months of the year and then the second six (6) months of the year?

**Response 19:**

Block refers to a set time period or consecutive periods, rather than "running or rolling" periods. For example, in a day or 24-hour period, there are 8-three (3-) hour blocked periods (1 - 3, 4 - 6, 7 - 9, etc.) versus 21 3-hour running periods (1 - 3, 2 - 4, 3 - 5, etc.). Likewise, a 6-month blocked period is first six (6) months of the year and then the second six (6) months of the year.

**Comment 20:**

Page 32 of 49 - D.1.21 (a) (4)

In regards to this section of the permit Transmetco wishes to state that there is no intention to use chlorine flux injection and that the flux will be hand fed.

**Response 20:**

See Response 15. Since chlorine injection is not allowed by the revised Condition D.1.5 (now D.1.6), Condition D.1.21(a)(4) has been deleted as follows:

D.1.234 Secondary Aluminum Production Compliance Determination [40 CFR Part 63, Subpart RRR]

Pursuant to 40 CFR Part 63.1510, the following conditions shall apply to the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2:

(a) Pursuant to 40 CFR 63.1506(m), for each furnace, the Permittee shall:

- ~~(4) — Maintain the total reactive chlorine flux injection rate for each operating cycle or time period used in the performance test at or below the average rate established during the performance test.~~

**Comment 21:**

Page 32 of 49 - D.1.21 (c) (1)

Transmetco is of the belief that this regulation is specifically intended for smelting operations that use gaseous or liquid reactive flux in their furnace. However, this regulation could be interpreted to mean that the Permittee would need to install and maintain a measuring device even if the gaseous or liquid flux usage was zero. As Transmetco is not planning on injecting gaseous or liquid flux into our furnace, this regulation would seemingly not apply. Thus, Transmetco would like IDEM, OAQ to consider adding language to Condition D.1.21(c)(1), so as to provide clarity on what Transmetco believes is the intended requirements of the regulation. Therefore, Transmetco requests that consideration be given to amend Condition D.1.21(c)(1) as follows:

D.1.21 (c) (1): When intending to use gaseous or liquid reactive flux in their furnace the Permittee shall install, calibrate, operate, and maintain a device to continuously measure and record the weight of gaseous or liquid reactive flux injected into each furnace. The monitoring system shall record the weight...

**Response 21:**

As substantiated by the September 15, 2004 Transmetco clarifications, neither gaseous nor liquid flux will be used. Therefore, Condition D.1.21(c)(1) has been deleted as follows:

D.1.234 Secondary Aluminum Production Compliance Determination [40 CFR Part 63, Subpart RRR]

(c) Pursuant to 40 CFR 63.1510(j), for the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, the Permittee shall:

- ~~(1) — Install, calibrate, operate, and maintain a device to continuously measure and record the weight of gaseous or liquid reactive flux injected into each furnace. The monitoring system shall record the weight for each fifteen (15) minute block period, during which reactive fluxing occurs, over the same operating cycle or time period used in~~

~~the performance test. The accuracy of the weight measurement shall be plus or minus one (1%) percent of the weight of the reactive component of the flux being measured. The Permittee may apply to IDEM, OAG to use a weight measurement device of alternative accuracy in cases where the reactive flux flow rates are so low as to make the use of a weight measurement device of plus or minus one (1%) percent accuracy impracticable. The Permittee shall verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every six (6) months.~~

**Comment 22:**

Page 33 of 49 - D.1.21 (c) (2)

As in Item #21, Transmetco feels that it should not be necessary to record the gaseous or liquid flux injection rate if liquid or gaseous flux is not used. Having to record a value of zero for the injection rate each recording period seems like a frivolous task. Therefore, Transmetco requests that consideration be given to change Condition D.1.21(c)(2) to read as follows:

Condition D.1.21 (c) (2): When using gaseous or liquid reactive flux the Permittee shall calculate and record the gaseous or liquid reactive flux injection rate (kilogram per megagram or pound per ton) for each operating cycle or time period used in the performance test using the procedure in 40 CFR 63.1512(o).

**Response 22:**

See Response 21. Similarly, Condition D.1.21(c)(2) has been deleted as follows:

D.1.234 Secondary Aluminum Production Compliance Determination [40 CFR Part 63, Subpart RRR]

(c) Pursuant to 40 CFR 63.1510(j), for the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, the Permittee shall:

~~(2) Calculate and record the gaseous or liquid reactive flux injection rate (kilogram per megagram or pound per ton) for each operating cycle or time period used in the performance test using the procedure in 40 CFR 63.1512(o).~~

**Comment 23:**

Page 33 of 49 - D.1.21 (c) (3)

Condition D.1.21(c)(3) states that the Permittee shall record, for each fifteen (15) minute time period during each operating cycle or time period used in the performance test during which reactive fluxing occurs, the time, weight, and type of flux for each addition of reactive flux:

Transmetco is concerned with how this part of the permit could be interpreted. Does this section of the permit mean that every fifteen (15) minutes Transmetco would be responsible for recording the amount of flux used? If the amount of flux used in a given fifteen (15) minute period is zero would Transmetco still be responsible for recording the flux used? The operation of the furnace does not require the continuous injection of flux, but rather the periodic application of flux. This application of flux should occur roughly, once per hour. It would seem unnecessary to record the flux used every fifteen (15) minutes if there will not be any flux used in three of every four fifteen (15) minute periods.

Additionally, Condition D.1.28(a) requires that Transmetco keep monthly records of the amount of flux added to the furnaces. It would seem to be over kill to have the monthly records broken into fifteen (15) minute blocks, particularly when the majority of the recordings would show zero flux was added to the furnaces. Transmetco proposes to keep track of the flux applied to the furnaces by recording the amount of flux used as it is applied instead of recording the amount used per time period. As such, Transmetco requests that consideration be given to changing Condition D.1.21(c)(3) to read as follows:

Condition D.1.21(c)(3): Record the time, weight, and type of flux for each addition of reactive flux:

**Response 23:**

Pursuant to 40 CFR 63.1510(j)(3), during each operating cycle or time period used in the performance test during which reactive fluxing occurs, the Permittee is responsible for recording the time, weight, and type of flux for each addition of reactive flux for each fifteen (15) minute time period. The addition of solid flux needs to be recorded during each fifteen (15) minute period in order to comply with the requirements of the rule.

The total amount of flux added monthly is required in order to show compliance with the single HAP limit of ten (10) tons per year in order to render the requirements of 326 IAC 2-7 not applicable and keep the source and area source with regard to Subpart RRR. The fifteen- (15-) minute data are required to show compliance with Subpart RRR. In order to comply with Subpart RRR, Transmetco can not just record the just the amount of flux used as it is applied instead of recording the amount used per fifteen (15) minute time period.

See Response 21. Therefore, Condition D.1.21(c)(3) (now D.1.23(c)(1)) can not be revised as requested. See Response 24.

**Comment 24:**

Page 33 of 49 - D.1.21 (c) (3) (a)

Transmetco feels that the "and" at the end of this regulation should be removed to fit better with the intention of this section of the permit. The inclusion of "and" would result in recording both the gaseous/liquid flux and solid reactive flux even if one or the other was not used. With the omission of "and" Transmetco would be required to record data on the flux used whether it is gaseous/liquid flux, solid reactive flux, or both. As such, Transmetco requests that consideration be give to changing Condition D.1.21(c)(3)(a) to read as follows:

Condition D.1.21(c)(3)(a): gaseous or liquid reactive flux other than chlorine;

Subsequently, Transmetco has confirmed that only solid flux will be used.

**Response 24:**

Therefore, Condition D.1.21(c)(3)(a) has been deleted and Condition D.1.21(c)(3)(b) has been incorporated into Condition D.1.21(c)(3) (now D.1.23(c)(1)) to indicate that only solid flux will be used at this source as follows:

D.1.234 Secondary Aluminum Production Compliance Determination [40 CFR Part 63, Subpart RRR]

Pursuant to 40 CFR Part 63.1510, the following conditions shall apply to the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2:

- (c) Pursuant to 40 CFR 63.1510(j), for the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, the Permittee shall:
- (13) Record, for each fifteen (15) minute time period during each operating cycle or time period used in the performance test during which reactive fluxing occurs, the time, weight, and type of flux for each addition of **solid** reactive flux.:
- (a) ~~gaseous or liquid reactive flux other than chlorine, and~~
- (b) ~~solid reactive flux.~~
- (24) Calculate and record the total **solid** reactive flux injection rate for each operating cycle or time period used in the performance test using the procedure in 40 CFR 63.1512(o).

**Comment 25:**

Page 34 of 49 - D.1.24

Condition D.1.24 stated that the Permittee shall inspect each capture/collection and closed vent system for the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, at least once each calendar year to ensure that each system is operating in accordance with the operating requirements pursuant to 40 CFR 63.1506(c) and record the results of each inspection.

The capture/collection system Transmetco intends to use is not definable as a closed vent system. Therefore Transmetco requests that the closed vent terminology be removed from D.1.24 and consideration be giving to changing this section to read as follows:

Condition D.1.24: The Permittee shall inspect each capture/collection system for the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, at least once each calendar year to ensure that each system is operating in accordance with the operating requirements pursuant to 40 CFR 63.1506(c) and record the results of each inspection.

**Response 25:**

Condition D.1.24 (now D.1.26) does not need to be modified to be consistent with the revised Condition D.1.12 (now D.1.14) (see Response 8) since the sweat furnaces and baghouses are considered a closed system when melting aluminum.

**Comment 26:**

Page 37 of 49 - D.1.29 (d) (4)

Please reference items # 19 and 23 with regards to the definition of block and the need for fifteen (15) minute recording periods.

Additionally, Transmetco feels that the word injection should be substituted with the word addition to make it applicable to Transmetco's use of flux. As mentioned previously within this document, Transmetco will not be continuously injecting flux into the furnaces, but rather applying the flux intermittently. Transmetco feels that using the word addition provides a more applicable connotation to Transmetco's situation and, thus requests that consideration be given to changing Condition D.1.29(d)(4) to read as follows:

Condition D.1.29 (d) (4): For the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, records of fifteen- (15-) minute block average weights of total reactive flux addition and calculations (including records of the identity, composition, and weight of each addition of solid reactive flux), including records of any period the rate exceeds the compliant operating parameter value and corrective action taken. (40 CFR 63.1517(b)(5))

**Response 26:**

Condition D.1.29(d)(4) (now D.1.31(d)(4)) has replaced the word "injection" with the word "addition" as follows:

D.1.2931 Secondary Aluminum Production Record Keeping Requirements [40 CFR Part 63, Subpart RRR]

Pursuant to 40 CFR Part 63.1517, the Permittee shall:

- (d) In addition to the general records required by 40 CFR 63.10(b), the Permittee of a furnace with an ~~injection~~ **activated carbon** injected fabric filter shall maintain records of:
  - (4) For the two (2) natural gas-fired sweat furnaces, identified as SF1 and SF2, records of fifteen- (15-) minute block average weights of total reactive flux ~~injection~~ **addition** rate and calculations (including records of the identity, composition, and weight of each addition of solid reactive flux), including records of any period the rate exceeds the compliant operating parameter value and corrective action taken. (40 CFR 63.1517(b)(5))

**Comment 27:**

Page 37 of 49 - D.1.29 (d) (8)

Condition D.1.29(d)(8) states that the Permittee shall keep records of annual inspections of emission capture/collection and closed vent systems. (40 CFR 63.1517(b)(14))

As mentioned previously, Transmetco's emission capture/collection system is not definable as a closed vent system. Therefore, Transmetco requests that consideration be given to changing Condition D.1.29 (d) (8) to read as follows:

Condition D.1.29(d)(8): Records of annual inspections of emission capture/collection systems. (40 CFR 63.1517(b)(14))

**Response 27:**

Condition D.1.29(d)(8) (now D.1.31(d)(8)) has not been revised since it is consistent with the revised Conditions D.1.12 (now D.1.14) and D.1.24 (now D.1.26) (see Responses 8 and 25).

**Comment 28:**

Page 41 of 49 - D.2.5 (b)

CR1 is the designation for the electric scrap aluminum crusher not the conveyors. As such, Transmetco requests that the clause "identified as CR1" be removed from D.2.5 (b) and read as follows.

D.2.5 (b): The PM emissions from the conveyors shall not exceed 0.015 pounds per hour.

**Response 28:**

Condition A.2 and Section D.2 have been revised to identify the five (5) conveyors as CO1 through CO5 and Condition D.2.5 has also replaced the identification for the conveyors as follows:

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This stationary secondary aluminum production source utilizing scrap aluminum consists of the following emission units and pollution control devices:

- (d) Five (5) conveyors, **identified as CO1 through CO5**, capacity: 5 tons aluminum scrap per hour.

D.2.5 PM Limitations [326 IAC 2-2]

- (a) The PM emissions from the electric scrap aluminum crusher, including feed hopper, identified as CR1, shall not exceed 0.003 pounds per hour.
- (b) The PM emissions from the **five (5)** conveyors, identified as ~~CR4~~ **CO1 through CO5**, shall not exceed **a total of** 0.015 pounds per hour.
- (c) Compliance with this limit shall make the requirements of 326 IAC 2-2 not applicable.

**Comment 29:**

Page 41 & 42 of 49 - D.2.4, D.2.5, & D.2.6

How do the emission limits in Conditions D.2.4 and D.2.5 relate to the limit established in Condition D.2.6? From the spreadsheets provided in Appendix A Transmetco understands that the emissions limits in Conditions D.2.4 and D.2.5 were calculated using an emission standard from FIRES v6.23. However, Transmetco is not clear on why this methodology for determining the emission limits for PM and PM-10 for the crusher and conveyors seem to differ from the method used to determine the limits for the furnaces in Conditions D.1.6 and D.1.7. The emission limits, as stated in Conditions D.1.6 and D.1.7, appear to be derived using the equation in Condition D.1.8. Why then would the emission limits in Conditions D.2.4 and D.2.5 not be determined using the formula in Condition D.2.6? Transmetco requests that clarification be provided on this subject.

**Response 29:**

Condition D.1.8 (now D.1.9) requires that each of the two (2) sweat furnaces limit their PM emissions to 7.58 pounds per hour to comply with requirements of 326 IAC 6-3-2. This pound per hour emission rate is equivalent to 33.2 tons of PM per year per furnace assuming that each furnace operates at full capacity every hour of the year.

In order to make the requirements of 326 IAC 2-2 and 326 IAC 2-7 not applicable for PM<sub>10</sub>, the PM<sub>10</sub> emissions from the entire source must be limited to less than one hundred (100) tons per year. The PM<sub>10</sub> emission limit for each furnace was increased from the calculated after control potential to emit rate of 0.0333 pounds per hour (page 1 of 8 of Appendix A to the TSD) to 7.58 pounds per hour in Condition D.1.6 (now D.1.7). That is, the PM<sub>10</sub> emission rate was set equal to the allowable PM rate pursuant to 326 IAC 6-3-2.

In Condition D.1.7 (now D.1.8), the PM emission rate of 7.58 pounds per hour also makes the requirements of 326 IAC 2-2 not applicable for the entire source.

The equivalent potential to emit annual PM and PM<sub>10</sub> emissions stated in Conditions D.1.6 and D.1.7 (now D.1.7 and D.1.8) plus the other emission units and insignificant activities at the source are

shown in the following table from page 6 of the Technical Support Document based on the above hourly emission limits:

Process/Emission Unit	Potential to Emit (tons per year)	
	PM	PM <sub>10</sub>
Sweat Furnace (SF1) Process	33.2	33.2
Sweat Furnace (SF1) Combustion	0.054	0.216
Sweat Furnace (SF2) Process	33.2	33.2
Sweat Furnace (SF2) Combustion	0.054	0.216
Electric Crusher (CR1)	0.015	0.007
Pouring Casting	-	-
Conveying	0.064	0.031
Insignificant Activities Natural Gas Combustion	0.011	0.043
Other Insignificant Activities	5.0	5.0
Total Emissions	71.6	71.9

If the conveying and electric crusher were each assigned their allowable PM emission rate of 12.1 pounds per hour pursuant to 326 IAC 6-3-2 in Condition D.2.6, then the PM emissions from the entire source would not be limited to less than one hundred (100) tons per year.

The sum of the allowable PM emissions from the conveying and crushing processes (12.1 + 12.1 pounds per hour) when added to allowable PM emissions from just the two (2) sweat furnaces alone (7.58 + 7.58 pounds per hour) equals 39.3 pounds per hour, equivalent to 172 tons of PM per year.

The PM and PM<sub>10</sub> emission rates for conveying and crushing were set equal to the potential to emit based on emission factors rather than by the allowable PM emission rate pursuant to 326 IAC 6-3-2. It should be noted that the allowable PM emission rate pursuant to 326 IAC 6-3-2 is significantly larger than the potential to emit PM from the conveying and crushing operations.

**Comment 30:**

Page 47 of 49 - FESOP Quarterly Report

The columns in the quarterly report require the recording of the amount of scrap melted in tons. This is not entirely consistent with the permit as Conditions D.1.19 and D.1.25, among others, allow for the recording of aluminum produced by the group 1 sweat furnaces, SF1 and SF2, instead of recording the amount of scrap charged. Therefore, Transmetco requests that consideration be given to changing the columns to read as follows:

Amount of Scrap Melted/Aluminum Produced (Circle One)  
(Tons)

**Response 30:**

See Response 6. The Quarterly Report Form is required to document the throughput limit of 20,702.5 tons of aluminum melted per twelve (12) consecutive month period with compliance determined at the end of each month stated in Condition D.1.9 (now D.1.10). This throughput limit renders the requirements of 326 IAC 8-1-6 not applicable. This throughput limit is not required to meet the Federal rule, NESHAP, Subpart RRR. The throughput limit was determined based upon a VOC emission factor of 2.40 pounds of VOC per ton of aluminum melted, not produced.

Condition D.1.31 (now D.1.34) has had the cite corrected from Condition D.1.4 to Condition D.1.10. The cite to Condition D.1.6 has been added as follows:

#### D.1.34 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions **D.1.6** and **D.1.104** 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 an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

#### **Comment 31:**

Condition D.1.29(d)(10)(C) (now D.1.31(d)(10)(C)) cites a site-specific secondary aluminum processing unit emission plan. Is this plan necessary if Transmetco uses the averaging equations for complying with the D/F standard for both furnaces?

The only apparent benefit to using D/F averaging is to average an EU under the emission limit with an EU that is over the emission limit to make a SAPU that is operating at less than a weighted average emission limit. If both units test below the limits set by 40 CFR 63.1505(i)(3), then the calculations are moot since they will always be under the prescribed emission standard whether they are averaged or stand alone. If one uses averaging, then feed (or production) of the two units, one above and one below individual emission limits, must be balanced so that the higher emission unit will not alias the average above the limit by weighted average. A final obvious point would relate to the possibility that the second unit could be so high that the average emission is above the weighted emission limit. In this case the second unit could not be operated until the unit is modified to reduce emissions. If this scenario is in fact the reasoned basis for using weighted averaging, then Transmetco would be willing to use the means of 40 CFR 63.1505(k)(3) and 40 CFR 63.1510(t) to calculate the 3-day, 24-hour rolling averages for D/F emission limits and D/F actual emissions, respectively, if, and only if;

- (a) The EUs can qualify as a SAPU once both are constructed.
- (b) Assuming that both EUs have individual unit emissions below the individual D/F limits, 40 CFR 63.1505(k)(5) and 40 CFR 63.1510(u) can be invoked such that the D/F emission criteria are met and no daily or rolling averages are required as specified in 40 CFR 63.1505(k)(3) and 40 CFR 63.1510(t).
- (c) The existence of one EU with emissions that are higher than the calculated allowable single EU emission limit, that can be averaged thru a SAPU to be in compliance, does not invoke violations or financial penalties.

If the above requirements can be met, there is a definition provided for the contents of the site-specific SAPU Emission Plan mentioned in Condition D.1.31(10)(c) of the draft permit, and there are no additional currently unwritten requirements, then Transmetco would be willing to irrevocably unite the units into a SAPU.

#### **Response 31:**

Since Transmetco, Inc. on October 20, 2004 decided to utilize the SAPU requirements which allows averaging emission rates among similar emission units (the two (2) sweat furnaces), the requirement to prepare an SAPU plan applicable and Condition D.1.29(d)(10)(C) can not be deleted.

The two (2) natural gas fired sweat furnaces, identified as SF1 and SF2, will have the same capacity and thus will be considered similar emission units. As such, these two (2) furnaces will qualify as a SAPU once both are constructed as proposed.

Upon consultation with U.S. EPA, IDEM, OAQ has determined that if both sweat furnaces have demonstrated that the individual sweat furnace emissions are below the individual D/F limits, 40 CFR 63.1505(k)(5) and 40 CFR 63.1510(u) can be invoked such that the D/F emission criteria are met. If this is the case, then no daily or rolling averages are required as specified in 40 CFR 63.1505(k)(3) and 40 CFR 63.1510(t). The OM&M plan will need to be revised to accommodate the change after the initial performance stack test is approved by IDEM, OAQ to account for the change in procedures.

The existence of one (1) sweat furnace with D/F emissions higher than the calculated allowable D/F emission limit that can be averaged through an SAPU to demonstrate compliance does not invoke violations or financial penalties since the sweat furnace will be complying with the federal rule, Subpart RRR, via allowable SAPU averaging calculations.

Therefore, no changes to the proposed permit are necessary.

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

**Change 1:**

A statement was added to Condition B.10 (Certification) in order to clarify that the certification form may cover more than one (1) document that is submitted.

B.10 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)]

- (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 an authorized individual 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) An authorized individual is defined at 326 IAC 2-1.1-1(1).

**Change 2:**

Condition B.18 (Operational Flexibility) has added paragraph (d) that concerns backup fuel switches.

B.18 Operational Flexibility [326 IAC 2-8-15] [326 IAC 2-8-11.1]

- (d) **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.**

**Change 3:**

In accordance with the credible evidence rule (62 Fed. Reg. 8314, Feb 24, 1997); Section 113(a) of the Clean Air Act, 42 U.S.C. Section 7413 (a); and a letter from the United States Environmental Protection Agency (USEPA) to IDEM, OAQ dated May, 18 2004, all permits must address the use of credible evidence; otherwise, USEPA will object to the permits. The following language will be incorporated into the permit as Condition B.24 to address credible evidence as follows:

**B.24 Credible Evidence [326 IAC 2-8-4(3)] [326 IAC 2-8-5] [62 FR 8314]**

**Notwithstanding the conditions of this permit that state specific methods that may be used to demonstrate compliance with, or a violation of, applicable requirements, any person (including the Permittee) may also use other credible evidence to demonstrate compliance with, or a violation of, any term or condition of this permit.**

**Change 4:**

The first letter in Pounds and Hour were capitalized in Condition C.1 as follows:

**C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [40 CFR 52 Subpart P] [326 IAC 6-3-2]**

**Change 5:**

A clarification has been added to paragraph (e) of Condition C.18 (General Reporting Requirements).

**C.18 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]**

(e) The first report covered the period commencing on the date of issuance of the original FESOP and ended on the last day of the reporting period. All subsequent reporting periods shall be based on calendar years.

**For the purpose of this permit “calendar year” means the twelve (12) month period from January 1 to December 31 inclusive.**

**Change 6:**

Pursuant to 40 CFR 63.6(e)(1)(iii), operation and maintenance requirements established pursuant to Section 112 of the Clean Air Act are enforceable independent of emissions limitations or other requirements in relevant standards (specifically NESHAP, Subpart RRR).

Pursuant to 40 CFR 63.6(e)(3)(i), 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, and malfunction, and a program of corrective action for malfunctioning process and air pollution control and monitoring equipment used to comply with the relevant standard (specifically NESHAP, Subpart RRR).

Therefore, a new Condition D.1.5 will be added to the proposed permit as follows:

**D.1.5 Operation and Maintenance [326 IAC 20-1-1] [40 CFR 63.6(e)(1)(iii)] [40 CFR 63.6(e)(3)(i)]**

**Pursuant to 40 CFR 63.6(e)(1)(iii), the Permittee shall submit to IDEM, OAQ a startup shutdown, and malfunction (SSM) plan in accordance with 40 CFR 63.6(e)(3)(i) for the new affected source as defined by 40 CFR 63, Subpart RRR prior to the startup of the source.**

**Change 7:**

Pursuant to 40 CFR 63.5, preconstruction review and notification requirements are applicable to this source.

Transmetco will not be a major-emitting affected source. Thus, Transmetco will not be required to obtain approval in advance from the Administrator in accordance with 40 CFR 63.5(d) and (e).

Pursuant to 40 CFR 63.5(b)(4), after the effective date of any relevant standard promulgated by the Administrator under this part, a Permittee who constructs a new affected source that is not major-emitting that is subject to such standard, shall notify the Administrator of the intended construction. The notification must be submitted in accordance with the procedures in 40 CFR 63.9(b).

The source has notified the IDEM, OAQ of the intended construction through their permit application. However, the application did not and could not include the notification requirement of 40 CFR 63.9(b)(5)(ii).

Pursuant to 40 CFR 63.9(b)(5), the Permittee of a new affected source for which an application for approval of construction is not required under Section 63.5(d) must provide the following information in writing to the IDEM, OAQ:

- (i) A notification of intention to construct a new affected source, reconstruct an affected source, or reconstruct a source such that the source becomes an affected source, and
- (ii) A notification of the actual date of startup of the source, delivered or postmarked within 15 calendar days after that date.
- (iii) Unless the Permittee has requested and received prior permission from the IDEM, OAQ to submit less than the information in Section 63.5(d), the notification must include the information required on the application for approval of construction as specified in Section 63.5(d)(1)(i).

The source did submit their application in accordance with the information provided in 40 CFR 63.5(d).

Thus, the source shall be required to submit a notification of the actual date of startup of the source, delivered or postmarked within fifteen (15) calendar days after the actual startup date pursuant to 40 CFR 63.5(b)(4) and 40 CFR 63.9(b)(5)(ii).

Therefore, a new Condition D.1.33 will be added to the proposed permit as follows:

**D.1.33 Notification of Actual Startup [40 CFR 63.5(b)(4) [40CFR 63.5(b)(5)(ii)]**

**Pursuant to 40 CFR 63.5(b)(4), the Permittee shall submit a notification of the actual date of startup of the new affected source, delivered or postmarked within fifteen (15) days after the actual startup date in accordance with 40 CFR 63.5(b)(5)(ii).**

**Appendix A: Secondary Metal Production Aluminum**

**Company Name: Transmetco, Inc.**  
**Address City IN Zip: 1750 East Riverfork Drive, Huntington, Indiana 46750**  
**Permit Number: F 069-19488**  
**Pit ID: 069-00067**  
**Reviewers: Mark L. Kramer & Frank Castelli**  
**Application Date: June 18, 2004**

**Sweat Furnaces SF1 and SF2**

SCC# 3-04-001-01	Throughput				Baghouse Control	
TYPE OF MATERIAL	LBS/HR	1 TON/2000 lbs	TON/HR	Efficiency (%)	99.9%	
Aluminum	Each			Limited Throughput (tons/yr)	20702.5	
	PM	PM10	SOx	NOx	Each Furnace	CO
	lbs/ton Produced	lbs/ton Produced	lbs/ton Produced	lbs/ton Produced	VOC	lbs/tons Produced
	14.5	13.3	3.5	0.6	2.4	--
Potential Emissions (lbs/hr)	36.3	33.3	8.75	1.50	6.00	--
Potential Emissions (lbs/day)	870.0	798.0	210.0	36.0	144.0	--
Potential Emissions (tons/yr)	158.8	145.6	38.3	6.57	26.3	--
<b>Total Potential Emissions Both Furnaces (tons/yr)</b>	<b>317.6</b>	<b>291.3</b>	<b>76.7</b>	<b>13.1</b>	<b>52.6</b>	<b>--</b>
Potential Emissions After Controls (lbs/hr)	0.0363	0.0333	8.75	1.50	6.00	--
Potential Emissions After Controls (tons/yr)	0.1588	0.1456	38.3	6.57	26.3	--
Total Potential Emissions After Controls Both Furnaces (tons/yr)	0.3176	0.2913	76.6500	13.1	52.6	--
<b>Potential Emissions After Controls &amp; Limit (tons/yr)</b>	<b>0.150</b>	<b>0.138</b>	<b>36.2</b>	<b>6.21</b>	<b>24.8</b>	<b>--</b>
<b>Total Potential Emissions After Controls &amp; Limit Both Furnaces (tons/yr)</b>	<b>0.300</b>	<b>0.275</b>	<b>72.5</b>	<b>12.4</b>	<b>49.7</b>	<b>--</b>

Limited throughput equivalent to VOC emission including combustion to less than 25 TPY = PTE / (25-0.157) \* Potential Throughput

\* Note: Emission factors are from FIRES version 6.23 for the sweat furnaces and AIRS EPA 450/4-90-003 for VOC

Transmetco, Inc.  
1750 East Riverfork Drive, Huntington, Indiana 46750

Reviewer:  
Date:

Mark L. Kramer & Frank Castelli  
June 18, 2004

SCC# 3-04-001-14						
<b>Pouring/Casting</b>						
TYPE OF MATERIAL	Each Throughput LBS/HR		1 TON/2000 lbs	TON/HR		
Aluminum	5000		2000	2.5		
	<b>PM</b> lbs/ton metal charged	<b>PM-10</b> lbs/ton metal charged	<b>Sox</b> lbs/ton metal charged	<b>NOx</b> lbs/ton metal charged	<b>VOC</b> lbs/ton metal charged	<b>CO</b> lbs/tons metal charged
	--	--	0.02	0.01	0.14	--
Potential Emissions lbs/hr	0	0	0.05	0.025	0.350	--
Potential Emissions lbs/day	0	0	1.2	0.600	8.400	--
Potential Emissions tons/year	0	0	0.219	0.110	1.533	--
<b>Total Potential Emissions Both Furnaces (tons/yr)</b>	0.0	0.0	0.438	0.219	3.066	--

\* Note: Emission factors are from FIRES version 6.23 for pouring/casting

**Electric Scrap Aluminum Crusher CR1**

SCC# 3-05-020-01						
TYPE OF MATERIAL	Throughput LBS/HR		1 TON/2000 lbs	TON/HR		
Aluminum	10000		2000	5.0		
	<b>PM</b> lbs/ton metal produced	<b>PM-10</b> lbs/ton metal produced	<b>SOx</b> lbs/ton metal produced	<b>NOx</b> lbs/ton metal produced	<b>VOC</b> lbs/ton metal produced	<b>CO</b> lbs/tons metal produced
	0.0007	0.00033	--	--	--	--
Potential Emissions lbs/hr	0.0035	0.0017	--	--	--	--
Potential Emissions lbs/day	0.084	0.040	--	--	--	--
Potential Emissions tons/year	0.01533	0.0073	--	--	--	--

PM emission factor is from Fires version 6.23 for primary crushing and PM-10 emission factor is obtained by dividing the PM emission factor by 2.1

Transmetco, Inc.  
 1750 East Riverfork Drive, Huntington, Indiana 46750

Reviewer:  
 Date:

Mark L. Kramer & Frank Castelli  
 June 18, 2004

<b>Conveying</b>						
SCC# 3-05-020-06	Throughput		1 TON/2000 lbs	TON/HR		
TYPE OF MATERIAL	LBS/HR					
Aluminum	10000	2000	5.0			
	<b>PM</b>	<b>PM-10</b>	<b>SOx</b>	<b>NOx</b>	<b>VOC</b>	<b>CO</b>
	<b>lbs/ton metal produced</b>	<b>lbs/tons metal produced</b>				
	0.00294	0.0014	--	--	--	--
Potential Emissions lbs/hr	0.0147	0.0070	--	--	--	--
Potential Emissions lbs/day	0.3528	0.168	--	--	--	--
Potential Emissions tons/year	0.064	0.031	--	--	--	--

PM-10 emission factor is from Fires version 6.23 for conveying and PM is obtained by multiplying PM-10 emission factor by 2.1

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

**Company Name: Transmetco, Inc.**  
**Address City IN Zip: 1750 East Riverfork Drive**  
**Permit Number: F 069-19488**  
**Pit ID: 069-00067**  
**Reviewers: Mark L. Kramer & Frank P. Castelli**  
**Application Date: June 18, 2004**

Sweat Furnaces SF1 and SF2 rated at 6.5 mmBtu/hr each  
Heat Input Capacity                      Potential Throughput  
MMBtu/hr                                      MMCF/yr

13.00

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Emission Factor in lb/MMCF	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	1.90	7.60	0.600	50	5.50	84.0
				**see below		
Potential Emission in tons/yr	0.108	0.433	0.034	2.85	0.313	4.78

\*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

**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 5 for HAPs emissions calculations.

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

**HAPs Emissions**

**Company Name: Transmetco, Inc.**  
**Address City IN Zip: 1750 East Riverfork Drive**  
**Permit Number: F 069-19488**  
**Pit ID: 069-00067**  
**Reviewer: Mark L. Kramer & Frank P. Castelli**  
**Date: June 18, 2004**

HAPs - Organics					
Emission Factor in lb/MMcf	Benzene 0.002100	Dichlorobenzene 0.001200	Formaldehyde 0.075000	Hexane 1.800000	Toluene 0.003400
Potential Emission in tons/yr	0.00012	0.00007	0.00427	0.10249	0.00019

HAPs - Metals						
Emission Factor in lb/MMcf	Lead 0.000500	Cadmium 0.001100	Chromium 0.001400	Manganese 0.000380	Nickel 0.002100	<b>Total</b>
Potential Emission in tons/yr	0.00003	0.00006	0.00008	0.00002	0.00012	<b>0.107</b>

Methodology is the same as page 4.  
The five highest organic and metal HAPs emission factors are provided above.  
Additional HAPs emission factors are available in AP-42, Chapter 1.4.

**Summary of Emissions Potential Before Controls**

Emission Unit	Pollutant (tons/yr)						
	PM	PM-10	SO2	NOx	VOC	CO	HAPs
Sweat Furnace SF1 Process	158.8	145.6	38.3	6.65	26.3	0.000	5.480
Sweat Furnace SF2 Process	158.8	145.6	38.3	6.65	26.3	0.000	5.480
Sweat Furnace SF1 Combustion	0.054093	0.216372	0.017082	1.4235	0.156585	2.39148	0.053728015
Sweat Furnace SF2 Combustion	0.054093	0.216372	0.017082	1.4235	0.156585	2.39148	0.053728015
Pouring Casting	0.000	0.000	0.219	0.110	1.53	0.000	0.000
Electric Scrap Aluminum Crusher	0.015	0.007	0.000	0.000	0.000	0.000	0.000
Conveying	0.064	0.031	0.000	0.000	0.000	0.000	0.000
Insig Activities Natural Gas Combustion	0.011	0.043	0.003	0.565	0.031	0.475	0.011
Insignificant Activities	5	5	0.500	0.500	1.000	0.500	0.500
<b>Total Before Controls</b>	<b>322.8</b>	<b>296.7</b>	<b>77.4</b>	<b>17.3</b>	<b>55.5</b>	<b>5.76</b>	<b>11.578</b>

**Summary of Emissions Potential After Controls**

Emission Unit	Pollutant (tons/yr)						
	PM	PM-10	SO2	NOx	VOC	CO	HAPs
Sweat Furnace SF1 Process	0.159	0.146	38.3	6.65	26.3	0.000	5.480
Sweat Furnace SF2 Process	0.159	0.146	38.3	6.65	26.3	0.000	5.480
Sweat Furnace SF1 Combustion	0.054093	0.216372	0.017082	1.4235	0.156585	2.39148	0.053728015
Sweat Furnace SF2 Combustion	0.054093	0.216372	0.017082	1.4235	0.156585	2.39148	0.053728015
Pouring Casting	0.000	0.000	0.219	0.110	1.530	0.000	0.000
Electric Scrap Aluminum Crusher	0.015	0.007	0.000	0.000	0.000	0.000	0.000
Conveying	0.064	0.031	0.000	0.000	0.000	0.000	0.000
Insig Activities Natural Gas Combustion	0.011	0.043	0.003	0.565	0.031	0.475	0.011
Insignificant Activities	5.000	5.000	0.500	0.500	1.000	0.500	0.500
<b>Total After Controls</b>	<b>5.516</b>	<b>5.806</b>	<b>77.4</b>	<b>17.3</b>	<b>55.5</b>	<b>5.76</b>	<b>11.578</b>

**Summary of Emissions Potential After Controls & Limit**

Emission Unit	Pollutant (tons/yr)						
	PM	PM-10	SO2	NOx	VOC	CO	HAPs
Sweat Furnace SF1 Process	0.150	0.138	36.2	6.21	24.8	0.000	5.480
Sweat Furnace SF2 Process	0.150	0.138	36.2	6.21	24.8	0.000	5.480
Sweat Furnace SF1 Combustion	0.054093	0.216372	0.017082	1.4235	0.156585	2.39148	0.053728015
Sweat Furnace SF2 Combustion	0.054093	0.216372	0.017082	1.4235	0.156585	2.39148	0.053728015
Pouring Casting	0.000	0.000	0.219	0.110	1.530	0.000	0.000
Electric Scrap Aluminum Crusher	0.015	0.007	0.000	0.000	0.000	0.000	0.000
Conveying	0.064	0.031	0.000	0.000	0.000	0.000	0.000
Insig Activities Natural Gas Combustion	0.011	0.043	0.003	0.565	0.031	0.475	0.011
Insignificant Activities	5.000	5.000	0.500	0.500	1.000	0.500	0.500
<b>Total After Controls &amp; Limit</b>	<b>5.498</b>	<b>5.790</b>	<b>73.2</b>	<b>16.4</b>	<b>52.5</b>	<b>5.76</b>	<b>11.578</b>

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

**Company Name: Transmetco, Inc.**  
**Address City IN Zip: 1750 East Riverfork Drive**  
**Permit Number: F 069-19488**  
**Pit ID: 069-00067**  
**Reviewers: Mark L. Kramer & Frank P. Castelli**  
**Application Date: June 18, 2004**

Insignificant Activities: 2 @ 45,000 Btu/hr each and 4 @ 300,000 Btu/hr each - Heaters  
Heat Input Capacity                      Potential Throughput  
MMBtu/hr                                      MMCF/yr

1.29

11

Emission Factor in lb/MMCF	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	1.90	7.60	0.600	100	5.50	84.0
				**see below		
Potential Emission in tons/yr	0.011	0.043	0.003	0.565	0.031	0.475

\*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

**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 8 for HAPs emissions calculations.

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

**HAPs Emissions**

**Company Name: Transmetco, Inc.**  
**Address City IN Zip: 1750 East Riverfork Drive**  
**Permit Number: F 069-19488**  
**Pit ID: 069-00067**  
**Reviewer: Mark L. Kramer & Frank P. Castelli**  
**Date: June 18, 2004**

Insignificant Activities: 2 @ 45,000 Btu/hr each and 4 @ 300,000 Btu/hr each - Heaters

HAPs - Organics					
Emission Factor in lb/MMcf	Benzene 0.002100	Dichlorobenzene 0.001200	Formaldehyde 0.075000	Hexane 1.800000	Toluene 0.003400
Potential Emission in tons/yr	0.00001	0.00001	0.00042	0.01017	0.00002

HAPs - Metals						
Emission Factor in lb/MMcf	Lead 0.000500	Cadmium 0.001100	Chromium 0.001400	Manganese 0.000380	Nickel 0.002100	<b>Total</b>
Potential Emission in tons/yr	0.00000	0.00001	0.00001	0.00000	0.00001	<b>0.011</b>

Methodology is the same as page 7.

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

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



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
NONRULE POLICY DOCUMENT

Title: Guidelines for Submittal and Review of Annual Compliance Certifications under the Federally Enforceable State Operating Permit (FESOP) and Part 70 Permit Programs

Identification Number: AIR 007 NPD

Date Originally Effective: March 6, 1997

Dates Revised: September 6, 2002

Other Policies Repealed or Amended: None

Brief Description of Subject Matter: Guidelines for IDEM and FESOP and Part 70 permittees for the annual compliance certification submittal and review requirements under 326 IAC 2-7-6(5)(C) and 326 IAC 2-8-5(a)(1)(C).

Citations Affected: 326 IAC 2-7-6(5)(C) and 326 IAC 2-8-5(a)(1)(C)

This nonrule policy document is intended solely as guidance and does not have the effect of law or represent formal Indiana Department of Environmental Management (IDEM) decisions or final actions. This nonrule policy document shall be used in conjunction with applicable laws. It does not replace applicable laws, and if it conflicts with these laws, the laws shall control. This nonrule policy document may be put into effect by IDEM thirty (30) days after presentation to the appropriate board and after it is made available for public inspection and comment, pursuant to IC 13-14-1-11.5. If the nonrule policy document is presented to more than one board, it will be effective thirty (30) days after presentation to the last. IDEM will submit the policy to the Indiana Register for publication. Revisions to the policy will follow the same procedure of presentation to the board and publication.

IDEM will begin using this nonrule policy document in reviewing annual compliance certifications submitted in 2003 and thereafter until such time as the nonrule policy document is revised.

General Requirements

1. The Annual Compliance Certification (ACC) must be submitted by the date identified in the permit as follows:
  - Part 70 (Title V) sources must submit the ACC to IDEM, U.S. EPA, Region 5, and the local air pollution control agency, where appropriate.
  - FESOP sources must submit the ACC to IDEM and the local air pollution control agency, where appropriate.

The submittal dates are April 15 or July 1 and the ACC must be postmarked, have a shipping date on a sender's receipt from a common carrier or be hand delivered as of these dates.

Refer to the permit to determine the specific submittal date and addresses.

2. The Annual Compliance Certification must cover the period from January 1 through December 31 of the year being reported, except for the first year of the permit. For the first year of the

permit, the certification is to cover the period from the date of permit issuance until December 31 of the year that the permit was issued. The time period the ACC covers should be noted on the certification.

3. The Annual Compliance Certification must include the Part 70 or FESOP certification form signed by a responsible official as defined in 326 IAC 2-7-1(34) for Part 70 sources or authorized individual as defined in 326 IAC 2-1.1-1 for FESOP sources. See pages 11 and 12 for definitions. The certification form that accompanies the ACC submitted to IDEM must contain an original signature and date.
4. The Annual Compliance Certification report is to include the following:
  - The identification of each term or condition of the permit for which compliance must be certified. This includes the permit terms or conditions under sections B, C and the various D sections.
  - The identification of the method(s) or other means used by the owner or operator for determining the compliance status with each term and condition during the certification period.
  - Whether compliance during the period was continuous or intermittent
  - Such other facts as the permitting authority may require to determine the compliance status of the source. This includes:
    - S Identification of deviations, including deviations occurring during emergencies.
    - S Verification of source summary information in Section A of the permit (optional).

Included with this nonrule policy document is a sample ACC form followed by guidelines for completion. Sources may create their own equivalent form for submittal as long as the required information outlined in this nonrule policy document and in applicable state and federal rules is included.

#### Permit amendments/modifications

Sources should be sure to use the most recent permit in effect during the reporting period as a starting point. All terms and conditions from permit amendments or modifications issued during the reporting period should be included as part of the annual compliance certification report. The source should also review requirements replaced by amendments or modifications to determine if some requirements that require certification were in effect for a portion of the reporting period. In some cases, this may be addressed by the submission of separate ACCs, although the source should be very clear in identifying the reporting period covered by the separate ACCs. If the only change has been a modification that adds a new Section D, it may be possible to submit a modified ACC that includes a separate certification for the new Section D with a different reporting period for the new requirements.

#### Permit renewals

Separate ACCs may also be needed to address permit renewals where the new permit is issued at some point during the year. This would be especially true if the permit terms and conditions changed significantly from one permit to the other. Once again, the source has the option of submitting separate ACCs or a modified ACC. As with permit modifications, a modified ACC would be most appropriate where the majority of the permit has remained the same, such as Sections A, B and C remaining the same, but a change or addition has occurred in Section D. In this situation, the source may be able to simply include a separate Section D certification for the changes or additions. Because the new permit will have a different permit number, the source should be sure to include the proper permit numbers and reporting periods in the ACC. In some cases, the source may wish to consult with IDEM about the proper way to address source specific situations.

If a source has to submit separate ACCs or a modified ACC for situations involving permit amendments, modifications or renewals, the source does not have to provide separate responsible official/authorized individual certifications. The ACCs can be included in one submittal with one responsible official/authorized individual certification.

#### Transfer of ownership and ACCs

In a situation where an owner transfers ownership or sells a source after December 31<sup>st</sup>, but prior to the ACC submittal deadline, IDEM would expect the seller to complete and submit the ACC prior to the sale. However, if the seller does not submit the ACC, the new owner would need to make the submission. IDEM suggests that the company buying the source make sure that the seller has done so or, at least, make sure the necessary information is available so the buyer can submit the ACC by the ACC submittal deadline.

If a sale takes place after the submittal deadline or later in the year, the new owner will be responsible for submitting the ACC the following year. It is recommended that the new owner makes sure the necessary information is available so that the ACC can be completed after the end of the year.

A completed example is attached at the end of the nonrule policy document. The example is included to show how the required information can be provided on the ACC form to satisfy the annual compliance certification requirements. The example does not address situations where a source submits separate or modified ACCs. It is an ACC for a source that has not renewed a permit or had modifications during the reporting period. In completing the example, IDEM has chosen options that it believes appropriate. Others may have a different interpretation and would complete the certification differently. Each permit is different and each certification will be different because of the unique terms and conditions of the various permits.

**PART 70 / FESOP PERMIT- ANNUAL COMPLIANCE CERTIFICATION**

This form should be used to satisfy the annual certification requirements for Part 70 sources under 326 IAC 2-7-6(5) and FESOP sources under 326 IAC 2-8-5(a)(1)(C). Attach a signed certification from the permit to complete the annual compliance certification.

SOURCE INFORMATION				
Source name:				
Source address:				
City:		State:		Zip code:
Mailing address: (if different)				
City:		State:		Zip code:
Permit number:				
Contact person:				
Phone number:				
Fax number:				
Reporting period:				

Section A - Information Verification (Optional)
Is the information in Section A correct?
If not, what information has changed:

Attach a signed certification form from the permit to complete this report.







### Source information

When completing this section, provide the name, phone number, etc. for the source contact person. This person should be someone that is familiar with the plant and the Part 70 or FESOP permit. This may be an environmental manager or a consultant, but does not have to be the same person signing the certification.

### Section A

There are no permit terms or conditions in Section A that require compliance. As part of the compliance certification, IDEM is asking that the source indicate whether or not the information in Section A is accurate. The verification of information is optional and IDEM will not reject an ACC if the information is not supplied. If the information is not accurate and there have been changes that have not been addressed with an administrative amendment or permit modification, IDEM requests that the source identify these changes. It should be noted that the verification does not relieve the source from complying with administrative amendment or permit modification requirements. If the owner or operator has submitted an administrative amendment or minor permit modification, but IDEM has not acted on the application, it is suggested that the date the application was submitted be included.

Examples of information that may have changed include a change in the name of the company, the addition of a new type of insignificant activity (a specifically regulated insignificant activity for Part 70 sources) not previously on-site, or the addition or removal of equipment.

### Sections B, C and D

The sample form provides tables that can be used to identify the appropriate terms and conditions in Sections B, C and D. The Part 70 or FESOP permit table of contents can be used as a guide to include the condition number and description into the forms. It is not necessary to include the complete term or condition (see example).

There are some permit terms and conditions in Sections B and C that may be interdependent on terms and conditions in Sections C and D. For instance, a deviation from an emission limit or record keeping requirement in Section D would require that a deviation would also have to be identified for permit condition B.8, Compliance with Permit Conditions. If a source would like to make it clear that a deviation is associated with more than one permit term or condition, the associated permit term or condition could be cross referenced in the "Report date / Comments" column, although this is not required.

In order to streamline the certification process for Section B, IDEM will allow a general statement of compliance for this section. At the top of the table for Section B, the source can indicate whether the source was in continuous compliance with all of the terms and conditions for Section B by checking one of the boxes. If the source was in continuous compliance (see discussion of continuous vs. intermittent below) with all of the terms and conditions in Section B with no deviations, check the first line and no additional information is needed. If the source was not in continuous compliance with all of the Section

B terms and conditions, then check the second line and identify any deviations in the table. This would include any deviations that result during an emergency. If the deviation or emergency has not been reported during the year in a deviation, emergency occurrence, quarterly or other compliance report, additional information should be attached to describe the deviation, how long the deviation lasted, estimates of excess emissions, whether or not the deviation was corrected, and the actions taken to correct the deviation. If the deviation or emergency was reported previously, all that needs to be included is the date of the report in the “Report date / Comments” column.

A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit, including exceedances during an emergency. Deviations would include not taking a required action, such as the failure to conduct specified compliance monitoring, to take a response step or to maintain proper records, or exceeding a permit limitation for a specified pollutant.

Because not all of the terms and conditions under Section B require compliance, an alternative would be to list out all of the terms and conditions. Then the source could indicate that the conditions that do not impose a work practice or emission standard or require testing, monitoring, record keeping or reporting are not applicable (N/A). Or the source could only list those conditions that impose a work practice or emission standard or require testing, monitoring, record keeping or reporting.

The tables for Sections C and D should be completed by filling in the table with the terms and conditions in these sections of the Part 70 or FESOP permit. Unlike Section B, the source should provide the requested information for each term and condition in Section C and various Section Ds. If a source has multiple Section Ds, the source should include all of the terms and conditions in each Section D in the table. For each of the terms and conditions, the source should provide the information called for in the table. As with Section B, if the source was not in continuous compliance with the listed terms and conditions, then any deviations (including exceedances during an emergency) should be identified in the table. If this information has been submitted to IDEM previously in a Quarterly Deviation and Compliance Monitoring Report, Emergency Occurrence Report or other required report, then the source should provide the date of that report in the column, “Report date / Comments”. If the deviation has not been reported previously, additional information should be attached to describe the deviation, how long the deviation lasted, estimates of excess emissions, whether or not the deviation was corrected, and the actions taken to correct the deviation.

There may be some situations where a permit term or condition may not require a specific action (does not impose a work practice or emissions standard) or the action is dependent on something else (actions related to stack testing would only occur or be required if a stack test was actually performed). In these instances, a source may also use the designation of “N/A” for not applicable.

In some cases, a condition in Section D may include several monitoring requirements. In the attached example, condition D.1.10 and D.1.11 requires daily checks of dry filters or water baffles and a weekly overspray observation and associated record keeping. In this case, the certification lists each

of the requirements separately, conditions D.1.10(a) and D.1.10(b) and conditions D.1.11(a) and D.1.11(b). Review the permit terms and conditions carefully to determine if more than one requirement is included under a particular term or condition.

In other cases, some rules allow for several compliance options with a future compliance date and the source may choose the compliance option most appropriate for the source. In these cases, the source should identify the permit term(s) and condition(s) associated with the compliance option the source has chosen and provide the required information. The other permit terms and conditions would not be applicable and “N/A” would be used if these terms and conditions are listed.

In any case, the source should review the permit terms and conditions carefully when completing the annual compliance certification to make sure the certification is accurate and addresses each relevant permit term and condition.

**Compliance status (CC/ IC):**

The annual compliance certification must indicate whether compliance with the permit terms and conditions was continuous or intermittent. U.S. EPA has not defined what is considered continuous or intermittent compliance, although the issue has been the subject of much debate. If U.S. EPA issues guidance that differs from this nonrule policy document, IDEM will revise this document. In order to assist permit holders with the completion of the required certification, IDEM is providing the following guidance.

**Continuous compliance (CC):**

In order to certify continuous compliance, a source must have no deviations, irrespective of the monitoring frequency, for the relevant permit term or condition during the reporting period. If a source has identified a deviation during the reporting period, a source cannot certify continuous compliance for the relevant permit term or condition.

**Intermittent compliance (IC):**

If a deviation has occurred during the reporting period, the source must certify intermittent compliance for the particular permit term or condition. As noted previously, the source must provide information about the deviation, including what the deviation was, how long the deviation lasted, estimates of excess emissions, whether or not the deviation was corrected, and the actions taken to correct the deviation.

- S** If this information **has been submitted** to IDEM previously in a Quarterly Deviation and Compliance Monitoring Report, Emergency Occurrence Report or other required report, then the source should provide the date of that report in the column, “Report date / Comments”.
- S** If this information **has not been submitted** previously, then the source should attach the information to the certification and the date included in the “Report date / Comments” column would be the date of the certification.

It should be noted that the identification of a deviation does not mean an enforcement action will be initiated. A determination of whether an enforcement action will be initiated can only be made after review and analysis of the data collected from the required monitoring, reports of deviations and any other credible evidence.

Methods:

One of the items that is required as part of an annual compliance certification is the identification of the “methods or means” used to determine the compliance status with each permit term or condition. The following is a list of standard monitoring methods and abbreviations that may be used to complete the annual compliance certification.

Continuous emission monitoring system = CEMS

Continuous opacity monitoring system = COMS

Stack test = ST

Visible emissions = VE

Record keeping = RK

Review of records = RR

Mass balance = MB

Emission factors = EF

Inspections = Insp

Fuel analysis = FA

Work practice = WP

Parametric monitoring = PM

Calculations = Calc

Other = O (specify in the Comments column)

Responsible official/Authorized individual definitions:

Part 70 requirements

“Responsible official” means the following:

A) For a corporation:

(i) a president;

(ii) a secretary;

(iii) a treasurer;

(iv) a vice president of the corporation in charge of a principal business function;

(v) any other person who performs similar policy or decision making functions for the corporation; or

(vi) a duly authorized representative of any person listed in this clause if the representative is responsible for the overall operation of one (1) or more manufacturing, production, or operating facilities applying for or subject to a Part 70 permit and either:

(AA) the facilities employ more than two hundred fifty (250) persons or have gross annual sales or expenditures exceeding twenty-five million dollars (\$25,000,000) (in second quarter 1980 dollars); or

(BB) the delegation of authority to such representative is approved in advance by the commissioner.

(B) For a partnership or sole proprietorship, a general partner or the proprietor, respectively.

(C) For a municipality, state, federal, or other public agency, either a principal executive officer or ranking elected official. As used in this clause, “principal executive officer of a federal agency” includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency, for example, a regional administrator of the U.S. EPA.

(D) For affected sources:

- (i) the designated representative for actions, standards, requirements, or prohibitions under Title IV of the CAA or the regulations promulgated thereunder; and
- (ii) the designated representative for any other purposes under a Part 70 permit.

A duly authorized representative may be delegated authority to sign a compliance certification, but only if the following occur:

- The representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities and either:
  - the facilities employ more than 250 persons; or
  - have gross annual sales or expenditures exceeding \$25,000,000 (in second quarter 1980 dollars)\*; or
  - the delegation is approved in advance by the commissioner.

An example of a responsible official or duly authorized representative would be a plant or site manager that is responsible for the overall operation of a manufacturing plant. Examples of individuals that do not meet the criteria include environmental consultants or environmental managers, human resource directors and safety coordinators that are not responsible for the overall operation of a plant.

\* IDEM can provide a conversion of the dollar figure into current dollars upon request.

#### FESOP requirements

“Authorized individual” means an individual responsible for the overall operation of one (1) or more manufacturing, production, or operating plants or a duly authorized representative of such person. For any public agency, the term means either a ranking elected official, the chief executive officer, or a designated representative of such person having responsibility for the overall operations of a principal geographic unit of the agency.

The definition of an “authorized individual” is similar to that of a “responsible official”, except that the definition of authorized individual is not as narrow. IDEM expects that the authorized individual would have a similar level of control as a responsible official, but the definition could include health and safety managers and others.

**PART 70 / FESOP PERMIT- ANNUAL COMPLIANCE CERTIFICATION**

This form should be used to satisfy the annual certification requirements for Part 70 sources under 326 IAC 2-7-6(5) and FESOP sources under 326 IAC 2-8-5(a)(1)(C). Attach a signed certification from the permit to complete the annual compliance certification.

SOURCE INFORMATION				
Source name:	Blue Ox Woodworks, Inc.			
Source address:	1234 N. Main St.			
City:	Greentown	State:	IN	Zip code: 47345
Mailing address: (if different)				
City:		State:		Zip code:
Permit number:	T000-0000-0000			
Contact person:	John Smith			
Phone number:	317/989-1234			
Fax number:	317/989-5678			
Reporting period:	1/1/00 to 12/31/00			

Section A - Information Verification (Optional)
Is the information in Section A correct? No
If not, what information has changed: Degreasing operation that does not exceed 145 gallons per 12 months and not subject to 326 IAC 20-6 has been added. Administrative amendment submitted 3/15/01. Removed paint booth, PB-1. Administrative amendment submitted 4/10/01.

Attach a signed certification form from the permit to complete this report.



Permit term/condition		Comp. status CC / IC	Methods	Report date / Comments
<b>SECTION C - SOURCE OPERATION CONDITIONS</b>				
C.1	Particulate Matter Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour	CC	RK	
C.2	Opacity	IC	VE	8/17/00, Emergency Occurrence Report
C.3	Open Burning	CC	WP	
C.4	Incineration	CC	RK	
C.5	Fugitive Dust Emissions	CC	WP	
C.7	Operation of Equipment	IC	RR	9/25/00
C.8	Stack Height	CC	RK	
C.9	Asbestos Abatement Projects	CC	RK	
C.10	Performance Testing	CC	RK	
C.11	Compliance Requirements	CC	RK	
C.12	Compliance Monitoring	CC	RK	
C.13	Maintenance of Emission Monitoring Equipment	CC	RK	
C.14	Monitoring Methods	CC	PM, RK, VE	
C.15	Pressure Gauge and Other Instrument Specifications	CC	RK	
C.16	Emergency Reduction Plans	CC	RK	
C.17	Risk Management Plan	CC	RK	
C.18	Compliance Monitoring Plan - Failure to Take Response Steps	CC	RK, RR	
C.19	Actions Related to Noncompliance Demonstrated by a Stack Test	CC	RK	
C.20	Emission Statement	CC	RK	
C.21	General Record Keeping Requirements	IC	RK	10/5/00
C.22	General Reporting Requirements	CC	RR	
C.23	Compliance with 40 CFR 82 and 326 IAC 22-1; Stratospheric Ozone Protection	CC	WP	

CC = continuous compliance ; IC = intermittent compliance; RK = record keeping ; RR = records review; PM = parametric monitoring ; VE = visible emissions ; WP = work practice

Permit term/condition		Comp. status CC / IC	Methods	Report date / Comments
<b>SECTION D - FACILITY OPERATION CONDITIONS</b>				
D.1.1	Volatile Organic Compounds (VOC)	IC	WP	4/15/01, Deviation report attached
D.1.2	PSD Minor Limit	CC	RK	
D.1.4	Particulate Matter (PM)	CC	RK	
D.1.5	Preventive Maintenance Plan	CC	RK	
D.1.6	Testing Requirements	CC	ST	
D.1.8	VOC Emissions	IC	RK	4/15/01, Deviation report attached
D.1.9	Particulate Matter (PM)	CC	WP	
D.1.10(a)	Monitoring	CC	Insp	
D.1.10(b)	Monitoring	CC	Insp	
D.1.11(a)	Record Keeping Requirements	CC	RK	
D.1.11(b)	Record Keeping Requirements	CC	RK	
D.1.12	Reporting Requirements	IC	RR	8/15/00
D.2.1	Particulate Matter (PM)	CC	RK	
D.2.2	Preventive Maintenance Plan	CC	RK	
D.2.3	Particulate Matter (PM)	IC	RK	8/17/00, Emergency Occurrence Report
D.2.4	Visible Emissions Notations	CC	VE, RK	
D.2.5	Parametric Monitoring	CC	RK	
D.2.6	Broken or Failed Bag Detection	CC	Insp	
D.2.7(a)	Record Keeping Requirements	CC	RK	
D.2.7(b)	Record Keeping Requirements	CC	RK	
D.2.8	Reporting Requirements	CC	RR	

CC = continuous compliance ; IC = intermittent compliance ; RK = record keeping ; RR = records review ; VE = visible emissions ; Insp = inspection ; ST = stack test ; WP = work practice

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE DATA SECTION  
(and include local agency if applicable)**

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

Source Name: Blue Ox Woodworks, Inc.  
Source Address: 1234 N. Main St., Greentown, IN 47345  
Mailing Address: Same  
Part 70 Permit No.: T000-0000-0000

Months: September to December Year: 2000

Page 1 of 2

This report is an affirmation that the source has met all the requirements stated in this permit. 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. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do 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 #) B.8, D.1.1 and D.1.8

**Date of Deviation:** 12/2/00 to 12/7/00

**Duration of Deviation:** 5 days

**Number of Deviations:** 1

**Probable Cause of Deviation:** A non-compliant coating was used to paint metal parts because a vendor supplied a non-compliant coating.

**Response Steps Taken:** Upon discovery, the company immediately resumed using a compliant coating and the non-compliant coating was returned to the vendor. The company used 100 gallons of non-compliant coating with a VOC content of 4.0 lbs./gal. and an extra 50 pounds of VOC were emitted above allowable VOC emissions.

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

**Date of Deviation:**

**Duration of Deviation:**

**Number of Deviations:**

**Probable Cause of Deviation:**

**Response Steps Taken:**

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

Form Completed By: Joe Smith

Title/Position: Environmental Manager

Date: 4/15/01

Phone: 317/989-1234

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY**

**PART 70 OPERATING PERMIT  
CERTIFICATION**

Source Name: Blue Ox Woodworks, Inc.  
Source Address: 1234 N. Main St., Greentown, IN 47345  
Mailing Address: same  
Part 70 Permit No.: T000-0000-0000

**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) Deviation report \_\_\_\_\_
- 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: Sam R. Jones

Title/Position: Vice President

Phone: 317/888-9999

Date: 4/13/01