



Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant

DATE: February 6, 2008

RE: G & S Metal Consultants, Inc. / 169-25872-00059

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

Notice of Decision – Approval

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 326 IAC 2, this approval was effective immediately upon submittal of the application.

If you wish to challenge this decision, IC 4-21.5-3-7 requires that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204, **within eighteen (18) calendar days from 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-AM.dot12/3/07



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live.

Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
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Paul Goyette, President
G & S Metal Consultants, Inc.
50 Dimension Avenue
Wabash, Indiana 46992

February 6, 2008

Re: 169-25872-00059
Notice-Only change to
MSOP 169-19145-00059

Dear Mr. Goyette:

G & S Metal Consultants, Inc., was issued a Minor Source Operating Permit Renewal (MSOP 169-19145-00059) on July 12, 2007, for an aluminum ingot and sow production source located at 50 Dimension Avenue, Wabash, Indiana, 46992. A letter requesting a modification to this permit was received on January 08, 2008, relating to the removal of four natural-gas fired holding furnaces HF-01, HF-03, HF-04, HF-05 and addition of a new one (1) natural-gas fired reverberatory furnace EU-06 that is of the same type as the other permitted natural-gas fired reverberatory furnace EU-5. The new natural-gas fired reverberatory furnace EU-06 will comply with the same applicable requirements and permit terms and conditions as the natural-gas fired reverberatory furnace EU-5, but will not cause the source's potential to emit to be greater than the threshold levels specified in 326 IAC 2-2 or 326 IAC 2-3. The uncontrolled/unlimited potential to emit of the entire source will continue to be less than the threshold levels specified in 326 IAC 2-7. Even though the PTE of the new EU-06 furnace is greater than twenty five (25) tons per year, the addition of the new natural-gas fired reverberatory furnace to the permit is considered a notice-only change pursuant to 326 IAC 2-6.1-6(d)(13). See Appendix A for the PTE of the new EU-06 furnace and the entire source.

In addition, the source requested that the MSOP Renewal permit term be extended to ten (10) years. On December 16, 2007, rule revisions to 326 IAC 2-1.1-9 and 326 IAC 2-6.1-7 were finalized allowing for ten (10) year permit terms on MSOP renewals. This change to the permit is considered a notice-only change pursuant to 326 IAC 2-6.1-6(d)(6), since it incorporates newly applicable requirements as a result of a change in applicability.

Pursuant to 326 IAC 2-6.1-6 the permit is hereby revised as follows, with deleted language as ~~strikeouts~~ and new language **bolded**:

- (a) Section A.2 has been revised to include the new unit description and remove four holding furnaces, and the subsequent units have been renumbered. Section D.1 have been revised to include the unit descriptions and requirements for unit EU-6 and to remove emission descriptions for units HF-1, HF-3, HF-4, and HF-5.
- (b) The expiration date on the cover page has been extended by five (5) years as follows:

Issuance Date: July 12, 2007
Expiration Date: July 12, ~~2012~~ **2017**
- (c) Condition B.2 has been revised to reflect the ten (10) year permit term.

A.2 Emission Units and Pollution Control Equipment Summary

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

...

~~(d) One (1) natural gas-fired holding furnace, identified as HF-1, constructed in 2001, exhausting to Stack S-5, rated at 5.6 million British thermal units per hour, capacity: 11.01 tons of aluminum per hour and 3.15 pounds of chlorine per hour. The aluminum is poured into cast iron molds.~~

(d) One (1) natural gas-fired reverberatory furnace, identified as EU-6, approved for construction in 2008, equipped with a bag house and exhausting to Stack S-4, rated at 15.0 million British thermal units per hour, capacity: 2.0 tons of clean aluminum or white dross per hour and 3.15 pounds of chlorine per hour. The aluminum is poured into cast iron molds or transferred to the holding furnace.

....

~~(f) One (1) natural gas-fired holding furnace, identified as HF-3, approved for construction in 2007, exhausting to Stack S-7, rated at 2.8 million British thermal units per hour, capacity: 11.01 tons of molten aluminum per hour. The aluminum is poured into cast iron molds.~~

~~(g) One (1) natural gas-fired holding furnace, identified as HF-4, approved for construction in 2007, exhausting to Stack S-8, rated at 2.8 million British thermal units per hour, capacity: 11.01 tons of molten aluminum per hour. The aluminum is poured into cast iron molds.~~

~~(h) One (1) natural gas-fired holding furnace, identified as HF-5, approved for construction in 2007, exhausting to Stack S-9, rated at 2.8 million British thermal units per hour, capacity: 11.01 tons of molten aluminum per hour. The aluminum is poured into cast iron molds.~~

(if) Dross handling/cooling operations, at a rate of 0.045 tons of dross per hour. Dross is skimmed from the furnaces and transferred to a cooling pan where the dross cools to room temperature. There are no stacks associated with this activity.

...

B.2 Permit Term [326 IAC 2-6.1-7(a)] [326 IAC 2-1.1-9.5] [IAC 13-15-3-6(a)]

This permit, MSOP M169-19145-00059, is issued for a fixed term of ~~five (5)~~ **ten (10)** years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.

...

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: Aluminum Processing Operations

...

- ~~(d) One (1) natural gas-fired holding furnace, identified as HF-1, constructed in 2001, exhausting to Stack S-5, rated at 5.6 million British thermal units per hour, capacity: 11.01 tons of molten aluminum per hour and 3.15 pounds of chlorine per hour. The aluminum is poured into cast iron molds.~~
- (d) One (1) natural gas-fired reverberatory furnace, identified as EU-6, approved for construction in 2008, equipped with a baghouse and exhausting to Stack S-4, rated at 15.0 million British thermal units per hour, capacity: 2.0 tons of clean aluminum or white dross per hour and 3.15 pounds of chlorine per hour. The aluminum is poured into cast iron molds or transferred to the holding furnace.**
- (e) One (1) natural gas-fired holding furnace, identified as HF-2, approved for construction in 2007, exhausting to Stack S-6, rated at 2.8 million British thermal units per hour, capacity: 11.01 tons of molten aluminum per hour. The aluminum is poured into cast iron molds.
- ~~(f) One (1) natural gas-fired holding furnace, identified as HF-3, approved for construction in 2007, exhausting to Stack S-7, rated at 2.8 million British thermal units per hour, capacity: 11.01 tons of molten aluminum per hour. The aluminum is poured into cast iron molds.~~
- ~~(g) One (1) natural gas-fired holding furnace, identified as HF-4, approved for construction in 2007, exhausting to Stack S-8, rated at 2.8 million British thermal units per hour, capacity: 11.01 tons of molten aluminum per hour. The aluminum is poured into cast iron molds.~~
- ~~(h) One (1) natural gas-fired holding furnace, identified as HF-5, approved for construction in 2007, exhausting to Stack S-9, rated at 2.8 million British thermal units per hour, capacity: 11.01 tons of molten aluminum per hour. The aluminum is poured into cast iron molds.~~

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

Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]

D.1.1 Particulate Emission Limitations for Manufacturing Processes [326 IAC 6-3-2]

...

- ~~(d) Pursuant to 326 IAC 6-3-2(e) (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the one (1) holding furnace (HF-1), shall not exceed twenty and forty-five hundredths (20.45) pounds per hour when operating at a process weight rate of eleven and one hundredth (11.01) tons per hour.~~
- (d) Pursuant to 326 IAC 6-3-2(e), the particulate emission rate from the one (1) reverberatory furnace (EU-6), shall not exceed six and fifty-two hundredths (6.52) pounds per hour when operating at a process weight rate of two (2.0) tons per hour.**

The pounds per hour limitations were calculated with the following equation:

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:

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

...

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

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the one (1) reverberatory furnace (EU-4), the one (1) reverberatory furnace (EU-5), **the one (1) reverberatory furnace (EU-6)** and their control device.

...

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

(a) In order to comply with Conditions D.1.1(b) ~~and~~ D.1.1(c), **and D.1.1(d)** the baghouse for particulate control shall be in operation and control emissions from the natural gas-fired reverberatory furnaces, identified as EU-4 ~~and~~ EU-5 **and EU-06**, at all times that either reverberatory furnace is in operation.

...

D.1.5 Baghouse Parametric Monitoring [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

(a) The Permittee shall record the pressure drop across the baghouse used in conjunction with the reverberatory furnaces (EU-4 ~~and~~ EU-5 **and EU-6**) at least once per day when either reverberatory furnace (EU-4 or EU-5 **or EU-6**) is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of one (1.0) and seven (7.0)

...

D.1.7 Record Keeping Requirements

...

(b) To document compliance with Condition D.1.5, the Permittee shall maintain a daily record of the pressure drop across the baghouse controlling the reverberatory furnaces (EU-4 ~~and~~ EU-5 **and EU-6**). The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g., the furnaces did not operate that day).

...

All other conditions of the permit shall remain unchanged and in effect. Please find the enclosed copy of the revised entire permit for G & S Metal Consultants, Inc., and Appendix A for revised emissions.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Swarna Prabha, of my staff, at 317-234-5376 or 1-800-451-6027, and ask for extension 4-5376.

Sincerely,

Original Signed By:
Iryn Calilung, Section Chief
Permits Branch
Office of Air Quality

Attachments: Updated Permit and emission calculations-Appendix A

IC/sp

cc: File - Wabash County
Wabash County Health Department
U.S. EPA, Region V
Air Compliance Section -
Compliance Data Section
Permits Administrative and Development



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Minor Source Operating Permit Renewal OFFICE OF AIR QUALITY

**G & S Metal Consultants, Inc.
50 Dimension Avenue
Wabash, Indiana 46992**

(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.

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 an MSOP under 326 IAC 2-6.1.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Operation Permit No.: MSOP 169-19145-00059	
Issued by: Nisha Sizemore, Chief Permits Branch Office of Air Quality	Issuance Date: July 12, 2007 Expiration Date: July 12, 2017

First Significant Permit Revision No. 169-24897-00059, issued August 24, 2007

Notice-Only Change No.: 169-25872-00059	Pages Affected: Entire Permit
Issued by: Original Signed By: Iryn Calilung, Section Chief Permits Branch Office of Air Quality	Issuance Date: February 6, 2008 Expiration Date: July 12, 2017

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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 and 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 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

The Permittee owns and operates an aluminum trading and processing source.

Source Address:	50 Dimension Avenue, Wabash, Indiana 46992
Mailing Address:	50 Dimension Avenue, Wabash, Indiana 46992
General Source Phone Number:	260 - 569 - 9184
SIC Code:	3341
County Location:	Wabash
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Minor Source Operating Permit Program Minor Source, under PSD Rules Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary

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

- (a) Three (3) electric induction furnaces, identified as EU-1 through EU-3, constructed in 1999, equipped with three (3) baghouses, identified as baghouse #1 through #3, respectively, exhausting to Stacks S-1, S-2, and S-3, respectively, capacity: 3.2 tons of clean aluminum chips per hour, each. The aluminum is poured into cast iron molds or transferred to the holding furnaces.
- (b) One (1) natural gas-fired reverberatory furnace, identified as EU-4, approved for construction in 2007, equipped with a baghouse and exhausting to Stack S-4, rated at 12.4 million British thermal units per hour, capacity: 2.0 tons of clean aluminum or white dross per hour and 3.15 pounds of chlorine per hour. The aluminum is poured into cast iron molds or transferred to the holding furnaces.
- (c) One (1) natural gas-fired reverberatory furnace, identified as EU-5, approved for construction in 2007, equipped with a baghouse and exhausting to Stack S-4, rated at 15.0 million British thermal units per hour, capacity: 2.0 tons of clean aluminum or white dross per hour and 3.15 pounds of chlorine per hour. The aluminum is poured into cast iron molds or transferred to the holding furnaces.
- (d) One (1) natural gas-fired reverberatory furnace, identified as EU-6, approved for construction in 2008, equipped with a baghouse and exhausting to Stack S-4, rated at 15.0 million British thermal units per hour, capacity: 2.0 tons of clean aluminum or white dross per hour and 3.15 pounds of chlorine per hour. The aluminum is poured into cast iron molds or transferred to the holding furnaces.
- (e) One (1) natural gas-fired holding furnace, identified as HF-2, approved for construction in 2007, exhausting to Stack S-6, rated at 2.8 million British thermal units per hour, capacity: 11.01 tons of molten aluminum per hour. The aluminum is poured into cast iron molds.

- (f) Dross handling/cooling operations, at a rate of 0.045 tons of dross per hour. Dross is skimmed from the furnaces and transferred to a cooling pan where the dross cools to room temperature. There are no stacks associated with this activity.

SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-1.1-1]

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 2-1.1-1) shall prevail.

B.2 Permit Term [326 IAC 2-6.1-7(a)] [326 IAC 2-1.1-9.5] [IC 13-15-3-6(a)]

- (a) This permit, MSOP 169-19145-00059, is issued for a fixed term of ten (10) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.
- (b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, until the renewal permit has been issued or denied.

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

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

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

B.4 Enforceability

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

B.5 Severability

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

B.6 Property Rights or Exclusive Privilege

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

B.7 Duty to Provide Information

- (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 an "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.8 Certification

- (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.9 Annual Notification [326 IAC 2-6.1-5(a)(5)]

- (a) An annual notification shall be submitted by an authorized individual to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.
- (b) The annual notice shall be submitted in the format attached no later than March 1 of each year to:

Compliance Branch, Office of Air Quality
Indiana Department of Environmental Management
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
- (c) The notification 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.

B.10 Preventive Maintenance Plan [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall maintain and implement Preventive Maintenance Plans (PMPs) including the following information on each facility:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.
- (b) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMPs do not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

B.11 Prior Permits Superseded [326 IAC 2-1.1-9.5]

- (a) All terms and conditions of permits established prior to 169-19145-00059 and issued pursuant to permitting programs approved into the state implementation plan have been either:
 - (1) incorporated as originally stated,
 - (2) revised, or
 - (3) deleted.
- (b) All previous registrations and permits are superseded by this permit.

B.12 Termination of Right to Operate [326 IAC 2-6.1-7(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least ninety (90) days prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-6.1-7.

B.13 Permit Renewal [326 IAC 2-6.1-7]

- (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 2-6.1-7. Such information shall be included in the application for each emission unit at this source. The renewal application does require the certification by an "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
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

- (b) A timely renewal application is one that is:
 - (1) Submitted at least ninety (90) days prior to the date of the expiration of this permit; and
 - (2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-6.1 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.14 Permit Amendment or Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]

- (a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-6.1-6

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

Any such application shall be certified by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) The Permittee shall notify the OAQ within thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

B.15 Source Modification Requirement

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

B.16 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)] [326 IAC 2-6.1-5(a)(4)] [IC 13-14-2-2] [IC 13-17-3-2] [IC 13-30-3-1]

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

- (a) Enter upon the Permittee's premises where a permitted 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.17 Transfer of Ownership or Operational Control [326 IAC 2-6.1-6]

- (a) The Permittee must comply with the requirements of 326 IAC 2-6.1-6 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
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

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

- (c) The Permittee may implement notice-only changes addressed in the request for a notice-only change immediately upon submittal of the request. [326 IAC 2-6.1-6(d)(3)]

B.18 Annual Fee Payment [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.
- (b) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

B.19 Credible Evidence [326 IAC 1-1-6]

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

SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]

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

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

C.2 Permit Revocation [326 IAC 2-1.1-9]

Pursuant to 326 IAC 2-1.1-9 (Revocation of Permits), this permit to operate may be revoked for any of the following causes:

- (a) Violation of any conditions of this permit.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.
- (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.
- (d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
- (e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

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]

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

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

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

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

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the

property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

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

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

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

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

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue
MC 61-52 IGCN 1003
Indianapolis, Indiana 46204-2251

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by an "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 2-6.1-5(a)(2)]

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

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

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

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

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by an "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 an "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.10 Compliance Requirements [326 IAC 2-1.1-11]

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

Compliance Monitoring Requirements [326 IAC 2-6.1-5(a)(2)]

C.11 Compliance Monitoring [326 IAC 2-1.1-11]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. All monitoring and record keeping requirements not already legally required shall be implemented when operation begins.

C.12 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

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

C.13 Instrument Specifications [326 IAC 2-1.1-11]

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

Corrective Actions and Response Steps

C.14 Response to Excursions or Exceedances

- (a) Upon detecting an excursion or exceedance, the Permittee shall restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.
- (b) The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Corrective actions may include, but are not limited to, the following:
 - (1) initial inspection and evaluation
 - (2) recording that operations returned to normal without operator action (such as through response by a computerized distribution control system); or
 - (3) any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
- (c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:
 - (1) monitoring results;
 - (2) review of operation and maintenance procedures and records;
 - (3) inspection of the control device, associated capture system, and the process.
- (d) Failure to take reasonable response steps shall be considered a deviation from the permit.

- (e) The Permittee shall maintain the following records:
 - (1) monitoring data;
 - (2) monitor performance data, if applicable; and
 - (3) corrective actions taken.

C.15 Actions Related to Noncompliance Demonstrated by a Stack Test

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

Record Keeping and Reporting Requirements [326 IAC 2-6.1-5(a)(2)]

C.16 Malfunctions Report [326 IAC 1-6-2]

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

- (a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) or appointed representative upon request.
- (b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAQ, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.
- (c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).
- (d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.17 General Record Keeping Requirements [326 IAC 2-6.1-5]

- (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 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

- (a) Reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
- (b) 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.
- (c) 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 an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

SECTION D.1

EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: Aluminum Processing Operations

- (a) Three (3) electric induction furnaces, identified as EU-1 through EU-3, constructed in 1999, equipped with three (3) baghouses, identified as baghouse #1 through #3, respectively, exhausting to Stacks S-1, S-2, and S-3, respectively, capacity: 3.2 tons of clean aluminum chips per hour, each. The aluminum is poured into cast iron molds or transferred to the holding furnace.
- (b) One (1) natural gas-fired reverberatory furnace, identified as EU-4, approved for construction in 2007, equipped with a baghouse and exhausting to Stack S-4, rated at 12.4 million British thermal units per hour, capacity: 2.0 tons of clean aluminum or white dross per hour and 3.15 pounds of chlorine per hour. The aluminum is poured into cast iron molds or transferred to the holding furnace.
- (c) One (1) natural gas-fired reverberatory furnace, identified as EU-5, approved for construction in 2007, equipped with a baghouse and exhausting to Stack S-4, rated at 15.0 million British thermal units per hour, capacity: 2.0 tons of clean aluminum or white dross per hour and 3.15 pounds of chlorine per hour. The aluminum is poured into cast iron molds or transferred to the holding furnace.
- (d) One (1) natural gas-fired reverberatory furnace, identified as EU-6, approved for construction in 2008, equipped with a baghouse and exhausting to Stack S-4, rated at 15.0 million British thermal units per hour, capacity: 2.0 tons of clean aluminum or white dross per hour and 3.15 pounds of chlorine per hour. The aluminum is poured into cast iron molds or transferred to the holding furnace.
- (e) One (1) natural gas-fired holding furnace, identified as HF-2, approved for construction in 2007, exhausting to Stack S-6, rated at 2.8 million British thermal units per hour, capacity: 11.01 tons of molten aluminum per hour. The aluminum is poured into cast iron molds.

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

Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]

D.1.1 Particulate Emission Limitations for Manufacturing Processes [326 IAC 6-3-2]

- (a) Pursuant to 326 IAC 6-3-2(e), the particulate emission rate from the three (3) electric induction furnaces (EU-1 through EU-3), shall not exceed eight and ninety-four hundredths (8.94) pounds per hour, each, when operating at a process weight rate of three and two tenths (3.2) tons per hour, each.
- (b) Pursuant to 326 IAC 6-3-2(e), the particulate emission rate from the one (1) reverberatory furnace (EU-4), shall not exceed six and fifty-two hundredths (6.52) pounds per hour when operating at a process weight rate of two (2.0) tons per hour.
- (c) Pursuant to 326 IAC 6-3-2(e), the particulate emission rate from the one (1) reverberatory furnace (EU-5), shall not exceed six and fifty-two hundredths (6.52) pounds per hour when operating at a process weight rate of two (2.0) tons per hour.
- (d) Pursuant to 326 IAC 6-3-2(e), the particulate emission rate from the one (1) reverberatory furnace (EU-6), shall not exceed six and fifty-two hundredths (6.52) pounds per hour when operating at a process weight rate of two (2.0) tons per hour.

The pounds per hour limitations were calculated with the following equation:

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:

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

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

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the one (1) reverberatory furnace (EU-4), the one (1) reverberatory furnace (EU-5), the one (1) reverberatory furnace (EU-6) and their control device.

Compliance Determination Requirements

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

- (a) In order to comply with Conditions D.1.1(b), D.1.1(c), and D.1.1(d) the baghouse for particulate control shall be in operation and control emissions from the natural gas-fired reverberatory furnaces, identified as EU-4, EU-5 and EU-06, at all times that either reverberatory furnace is in operation.
- (b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

Compliance Monitoring Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.1.4 Visible Emissions Notations

- (a) Visible emission notations of the reverberatory furnaces stack exhaust (Stack S-4) shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

D.1.5 Baghouse Parametric Monitoring [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- (a) The Permittee shall record the pressure drop across the baghouse used in conjunction with the reverberatory furnaces (EU-4, EU-5 and EU-6) at least once per day when either reverberatory furnace (EU-4 or EU-5 or EU-6) is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of one (1.0) and seven (7.0)

inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

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

D.1.6 Broken or Failed Bag Detection

- (a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced.
- (b) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the emissions unit.

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

Record Keeping and Reporting Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.1.7 Record Keeping Requirements

- (a) To document compliance with Condition D.1.4, the Permittee shall maintain a daily record of visible emission notations of the baghouse stack exhaust. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g., the furnaces did not operate that day).
- (b) To document compliance with Condition D.1.5, the Permittee shall maintain a daily record of the pressure drop across the baghouse controlling the reverberatory furnaces (EU-4, EU-5 and EU-6). The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g., the furnaces did not operate that day).
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

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

**MINOR SOURCE OPERATING PERMIT
CERTIFICATION**

Source Name: G & S Metal Consultants, Inc.
Source Address: 50 Dimension Avenue, Wabash, Indiana 46992
Mailing Address: 50 Dimension Avenue, Wabash, Indiana 46992
Permit No.: MSOP 169-19145-00059

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

Please check what document is being certified:

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

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

Signature:

Printed Name:

Title/Position:

Phone:

Date:

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

**MINOR SOURCE OPERATING PERMIT
ANNUAL NOTIFICATION**

This form should be used to comply with the notification requirements under 326 IAC 2-6.1-5(a)(5).

Source Name:	G & S Metal Consultants, Inc.
Address:	50 Dimension Avenue
City:	Wabash, Indiana 46992
Phone #:	260 - 569 - 9184
MSOP #:	169-19145-00059

I hereby certify that G & S Metal Consultants, Inc. is

- still in operation.
- no longer in operation.

I hereby certify that G & S Metal Consultants, Inc. is

- in compliance with the requirements of MSOP 169-19145-00059.
- not in compliance with the requirements of MSOP 169-19145-00059.

Authorized Individual (typed):
Title:
Signature:
Date:

If there are any conditions or requirements for which the source is not in compliance, provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be achieved.

Noncompliance:

MALFUNCTION REPORT

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
FAX NUMBER - 317-233-6865**

**This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6
and to qualify for the exemption under 326 IAC 1-6-4.**

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE IT HAS POTENTIAL TO EMIT 25 TONS/YEAR PARTICULATE MATTER ?_____, 25 TONS/YEAR SULFUR DIOXIDE ?_____, 25 TONS/YEAR NITROGEN OXIDES?_____, 25 TONS/YEAR VOC ?_____, 25 TONS/YEAR HYDROGEN SULFIDE ?_____, 25 TONS/YEAR TOTAL REDUCED SULFUR ?_____, 25 TONS/YEAR REDUCED SULFUR COMPOUNDS ?_____, 25 TONS/YEAR FLUORIDES ?_____, 100TONS/YEAR CARBON MONOXIDE ?_____, 10 TONS/YEAR ANY SINGLE HAZARDOUS AIR POLLUTANT ?_____, 25 TONS/YEAR ANY COMBINATION HAZARDOUS AIR POLLUTANT ?_____, 1 TON/YEAR LEAD OR LEAD COMPOUNDS MEASURED AS ELEMENTAL LEAD ?_____, OR IS A SOURCE LISTED UNDER 326 IAC 2-5.1-3(2) ?_____. EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION _____.

THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC _____ OR, PERMIT CONDITION # _____ AND/OR PERMIT LIMIT OF _____

THIS INCIDENT MEETS THE DEFINITION OF MALFUNCTION AS LISTED ON REVERSE SIDE ? Y N

THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT ? Y N

COMPANY: _____ PHONE NO. () _____
LOCATION: (CITY AND COUNTY) _____
PERMIT NO. _____ AFS PLANT ID: _____ AFS POINT ID: _____ INSP: _____
CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON: _____

DATE/TIME MALFUNCTION STARTED: ____/____/20____ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION: _____

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE ____/____/20____ AM/PM

TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO2, VOC, OTHER: _____

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: _____

MEASURES TAKEN TO MINIMIZE EMISSIONS: _____

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL* SERVICES: _____
CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS: _____
CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT: _____
INTERIM CONTROL MEASURES: (IF APPLICABLE) _____

MALFUNCTION REPORTED BY: _____ TITLE: _____
(SIGNATURE IF FAXED)

MALFUNCTION RECORDED BY: _____ DATE: _____ TIME: _____

*SEE PAGE 2

Please note - This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

326 IAC 1-6-1 Applicability of rule

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

326 IAC 1-2-39 "Malfunction" definition

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

***Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

**Appendix A: Potential Emission Calculations
Secondary Aluminum Operations**

**Company Name: G & S Metal Consultants, Inc.
Address City IN Zip: 50 Dimension Avenue, Wabash, Indiana 46992
Permit Number: MSOP 169-19145-00059
Notice Only change NO.: 169-25872-00059
Reviewer: Swarna Prabha**

Appendix A- page 1 of 4

EU-1 Electric Induction Furnace

Pollutant	Maximum Rate (tons/hr)	Emission Factor (lbs/ton)	Uncontrolled Emission Rate (lbs/hr)	Uncontrolled Emission Rate (tons/yr)	Control Efficiency (%)	Controlled Emission Rate (lbs/hr)	Controlled Emission Rate (tons/yr)
PM	3.200	0.900	2.880	12.614	99.90%	0.003	0.013
PM-10	3.200	0.625	2.000	8.760	99.90%	0.002	0.009
chromium	3.200	0.001	0.003	0.013	99.90%	0.000	0.000
nickel	3.200	0.001	0.003	0.013	99.90%	0.000	0.000
manganese	3.200	0.001	0.003	0.013	99.90%	0.000	0.000

Maximum Rate in the above table represents the amount of aluminum processed per hour.
Emission factors from FIRES 6.23 (SCC 3-04-003-03)

EU-2 Electric Induction Furnace

Pollutant	Maximum Rate (tons/hr)	Emission Factor (lbs/ton)	Uncontrolled Emission Rate (lbs/hr)	Uncontrolled Emission Rate (tons/yr)	Control Efficiency (%)	Controlled Emission Rate (lbs/hr)	Controlled Emission Rate (tons/yr)
PM	3.200	0.900	2.880	12.614	99.90%	0.003	0.013
PM-10	3.200	0.625	2.000	8.760	99.90%	0.002	0.009
chromium	3.200	0.001	0.003	0.013	99.90%	0.000	0.000
nickel	3.200	0.001	0.003	0.013	99.90%	0.000	0.000
manganese	3.200	0.001	0.003	0.013	99.90%	0.000	0.000

Maximum Rate in the above table represents the amount of aluminum processed per hour.
Emission factors from FIRES 6.23 (SCC 3-04-003-03)

EU-3 Electric Induction Furnace

Pollutant	Maximum Rate (tons/hr)	Emission Factor (lbs/ton)	Uncontrolled Emission Rate (lbs/hr)	Uncontrolled Emission Rate (tons/yr)	Control Efficiency (%)	Controlled Emission Rate (lbs/hr)	Controlled Emission Rate (tons/yr)
PM	3.200	0.900	2.880	12.614	99.90%	0.003	0.013
PM-10	3.200	0.625	2.000	8.760	99.90%	0.002	0.009
chromium	3.200	0.001	0.003	0.013	99.90%	0.000	0.000
nickel	3.200	0.001	0.003	0.013	99.90%	0.000	0.000
manganese	3.200	0.001	0.003	0.013	99.90%	0.000	0.000

Maximum Rate in the above table represents the amount of aluminum processed per hour.
Emission factors from FIRES 6.23 (SCC 3-04-003-03)

EU-4 Reverberatory Furnace (E-4 furnace with lower process rate)

Pollutant	Maximum Rate (tons/hr)	Emission Factor (lbs/ton)	Uncontrolled Emission Rate (lbs/hr)	Uncontrolled Emission Rate (tons/yr)	Control Efficiency (%)	Controlled Emission Rate (lbs/hr)	Controlled Emission Rate (tons/yr)
PM	2.000	4.300	8.600	37.668	99.90%	0.009	0.038
PM-10	2.000	1.000	2.000	8.760	99.90%	0.002	0.009
VOC	2.000	0.200	0.400	1.752	0.00%	0.400	1.752
manganese	2.000	0.004	0.009	0.038	99.90%	0.000	0.000
chromium	2.000	0.004	0.009	0.038	99.90%	0.000	0.000
nickel	2.000	0.004	0.009	0.038	99.90%	0.000	0.000
HCL from flux	0.002	13.97	0.022	0.096	99.90%	0.000	0.000
PM from flux	0.002	1000.00	1.574	6.896	99.90%	0.002	0.007
PM-10 from flux	0.002	532.00	0.838	3.669	99.90%	0.001	0.004

The Maximum Rate of 2.0 in the above table represents the amount of aluminum processed per hour and the Maximum Rate of 0.002 in the above table represents the amount of flux used per hour. Emission factors from FIRES 6.23 (SCC 3-04-001-03 and SCC 3-04-001-04) except HCl which is from an April 19, 2004 stack test. Not all of the PM-10 from fluxing is HCl.

EU-5 Reverberatory Furnace (EU-5 furnace)

Pollutant	Maximum Rate (tons/hr)	Emission Factor (lbs/ton)	Uncontrolled Emission Rate (lbs/hr)	Uncontrolled Emission Rate (tons/yr)	Control Efficiency (%)	Controlled Emission Rate (lbs/hr)	Controlled Emission Rate (tons/yr)
PM	2.000	4.300	8.600	37.668	99.90%	0.009	0.038
PM- from flux	0.002	1000.00	1.574	6.896	99.90%	0.002	0.007
PM-10	2.000	1.000	2.000	8.760	99.90%	0.002	0.009
PM-10 from flux	0.002	532.00	0.838	3.669	99.90%	0.001	0.004
VOC	2.000	0.200	0.400	1.752	0.00%	0.400	1.752
manganese	2.000	0.004	0.009	0.038	99.90%	0.000	0.000
chromium	2.000	0.004	0.009	0.038	99.90%	0.000	0.000
nickel	2.000	0.004	0.009	0.038	99.90%	0.000	0.000
HCL from flux	0.002	13.97	0.022	0.096	99.90%	0.000	0.000

The Maximum Rate of 2.0 in the above table represents the amount of aluminum processed per hour and the Maximum Rate of 0.002 in the above table represents the amount of flux used per hour. Emission factors from FIRES 6.23 (SCC 3-04-001-03 and SCC 3-04-001-04) except HCl which is from an April 19, 2004 stack test.

**Appendix A: Potential Emission Calculations
Secondary Aluminum Operations**

Company Name: G & S Metal Consultants, Inc.
Address City IN Zip: 50 Dimension Avenue, Wabash, Indiana 46992
Permit Number: MSOP 169-19145-00059
Notice Only change NO.: 169-25872-00059
Reviewer: Swarna Prabha

Not all of the PM-10 from fluxing is HCl.

**Appendix A: Potential Emission Calculations
Secondary Aluminum Operations**

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Reviewer: Swarna Prabha**

EU-6	Reverberatory Furnace	(New EU-6 furnace)					
		Maximum Rate (tons/hr)	Emission Factor (lbs/ton)	Uncontrolled Emission Rate (lbs/hr)	Uncontrolled Emission Rate (tons/yr)	Control Efficiency (%)	Controlled Emission Rate (lbs/hr)
Pollutant							
PM from flux	0.002	1000.00	2.000	8.760	99.90%	0.002	0.009
PM	2.000	4.300	8.600	37.668	99.90%	0.009	0.038
PM-10 from flux	0.002	532.00	1.064	4.660	99.90%	0.001	0.005
PM-10	2.000	1.000	2.000	8.760	99.90%	0.002	0.009
VOC	2.000	0.200	0.400	1.752	0.00%	0.400	1.752
manganese	2.000	0.004	0.009	0.038	99.90%	0.000	0.000
chromium	2.000	0.004	0.009	0.038	99.90%	0.000	0.000
nickel	2.000	0.004	0.009	0.038	99.90%	0.000	0.000
HCL from flux	0.002	13.97	0.028	0.122	99.90%	0.000	0.000

The Maximum Rate of 2.0 in the above table represents the amount of aluminum processed per hour and the Maximum Rate of 0.002 in the above table represents the amount of flux used per hour. Emission factors from FIRES 6.23 (SCC 3-04-001-03 and SCC 3-04-001-04) except HCl which is from an April 19, 2004 stack test. Not all of the PM-10 from fluxing is HCl.

PTE New Reverberatory Furnace EU-6			Pollutant				
Emission Factor in lb/MMCF	PM*	PM10*	SO2	NOx	VOC	CO	
	1.90	7.60	0.600	100	5.50	84.0	
				**see below			
Equipment	Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr	Potential Emission in tons/yr				
New Reverberatory Furnace EU-6	15.00	131.4	0.000	0.000	0.000	0.000	0.000
Total	15.00	131	0.000	0.00	0.000	0.0	0.0

*PM emission factor is filterable PM only. PM-10 emission factor is filterable and condensable PM-10 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 3 for HAPs emissions calculations.

HAPs - Organics					
Emission Factor in lb/MMcf	Benzene	e	Formaldehyde	Hexane	Toluene
	0.0021	0.0012	0.0750	1.8000	0.0034
EU 6 Potential Emission in tons/yr	0.0000	0.0000	0.000	0.000	0.0000

HAPs - Metals						
Emission Factor in lb/MMcf	Lead	Cadmium	Chromium	Manganese	Nickel	Total HAPs
	0.0005	0.0011	0.0014	0.0004	0.0021	
EU 6 Potential Emission in tons/yr	0.0000	0.0000	0.0000	0.0000	0.0000	0.000

Methodology is the same as page 2.

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

**Appendix A: Potential Emission Calculations
Secondary Aluminum Operations**

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Reviewer: Swarna Prabha**

Dross Handling and Cooling

Pollutant	Maximum Rate (tons/hr)	Emission Factor (lbs/ton)	Uncontrolled	Uncontrolled	Control Efficiency (%)	Controlled	Controlled
			Emission Rate (lbs/hr)	Emission Rate (tons/yr)		Emission Rate (lbs/hr)	Emission Rate (tons/yr)
PM	0.045	1.100	0.050	0.217	0.00%	0.050	0.217
PM-10	0.045	1.100	0.050	0.217	0.00%	0.050	0.217

There are no AP-42 emission factors for dross cooling at Secondary Aluminum Plants. Therefore, the handling emission factors from Table 12.5.1-3 for mini-steel mills is used. Emission factor is 0.11 lbs/ton after controls. With a control efficiency of 90%, the emission factor is 1.1 lbs/ton before controls.

HF-2 Holding Furnace

Pollutant	Maximum Rate (tons/hr)	Emission Factor (lbs/ton)	Uncontrolled	Uncontrolled	Control Efficiency (%)	Controlled	Controlled
			Emission Rate (lbs/hr)	Emission Rate (tons/yr)		Emission Rate (lbs/hr)	Emission Rate (tons/yr)
HCl from flux	0.002	13.97	0.028	0.122	0.00%	0.028	0.122
PM from flux	0.002	1000.00	2.000	8.760	0.00%	2.000	8.760
PM-10 from flux	0.002	532.00	1.064	4.660	0.00%	1.064	4.660

The Maximum Rate of 0.002 in the above table represents the amount of flux used per hour. Emission factors from FIRES 6.25 (SCC 3-04-001-03 and SCC 3-04-001-04), except HCl, which is from an April 19, 2004 stack test. The PM and PM-10 emission factors from fluxing represent emissions from chlorine demagging which was known to produce higher amounts of emissions than the powder flux used at G&S. Not all of the PM/PM-10 from fluxing is HCl.

Pouring and Casting

Pollutant	Maximum Rate (tons/hr)	Emission Factor (lbs/ton)	Uncontrolled	Uncontrolled	Control Efficiency (%)	Controlled	Controlled
			Emission Rate (lbs/hr)	Emission Rate (tons/yr)		Emission Rate (lbs/hr)	Emission Rate (tons/yr)
NOx	11.600	0.010	0.116	0.508	0.00%	0.116	0.508
SOx	11.010	0.020	0.220	0.964	0.00%	0.220	0.964
VOC	11.010	0.140	1.541	6.751	0.00%	1.541	6.751

*Emission factors from FIRES 6.23 (SCC 3-04-001-14)
Maximum Rate in the above table represents the amount of aluminum processed per hour.*

**Appendix A: Potential Emission Calculations
Secondary Aluminum Operations**

Company Name: **G & S Metal Consultants, Inc.**
 Address City IN Zip: **50 Dimension Avenue, Wabash, Indiana 46992**
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Uncontrolled Potential Emissions (Source)

Emission Summary -Entire source

	PM Emissions (tons/yr)	PM-10 Emissions (tons/yr)	VOC Emissions (tons/yr)	NOx Emissions (tons/yr)	SOx Emissions (tons/yr)	CO Emissions (tons/yr)	Chromium Emissions (tons/yr)	Nickel Emissions (tons/yr)	Manganese Emissions (tons/yr)	HCl Emissions (tons/yr)	Total HAP Emissions (tons/yr)
EU-1	12.614	8.760	0.000	0.000	0.000	0.000	0.013	0.013	0.013	0.000	0.038
EU-2	12.614	8.760	0.000	0.000	0.000	0.000	0.013	0.013	0.013	0.000	0.038
EU-3	12.614	8.760	0.000	0.000	0.000	0.000	0.013	0.013	0.013	0.000	0.038
EU-4	44.564	12.429	1.752	0.000	0.000	0.000	0.038	0.038	0.038	0.000	0.113
EU-4 Natural Gas	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
EU-5	44.564	12.429	1.752	0.038	0.000	0.000	0.038	0.038	0.038	0.000	0.113
EU-5 Natural Gas	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
EU-6	46.428	13.420	1.752	0.038	0.000	0.000	0.038	0.038	0.038	0.000	0.113
EU-6 Natural Gas	0.125	0.499	0.039	6.570	0.361	5.519	0.000	0.000	0.000	0.000	0.000
Dross Handling/Cooling	0.217	0.217	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
HF-2	8.760	4.660	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.122	0.122
HF-2 Natural Gas	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Pouring/Casting	0.000	0.000	6.751	0.508	0.964	0.000	0.000	0.000	0.000	0.000	0.000
Total (Source)	182.501	69.934	12.047	7.153	1.326	5.519	0.151	0.151	0.151	0.122	0.575

Controlled Potential Emissions (Source)

	PM Emissions (tons/yr)	PM-10 Emissions (tons/yr)	VOC Emissions (tons/yr)	NOx Emissions (tons/yr)	SOx Emissions (tons/yr)	CO Emissions (tons/yr)	Chromium Emissions (tons/yr)	Nickel Emissions (tons/yr)	Manganese Emissions (tons/yr)	HCl Emissions (tons/yr)	Total HAP Emissions (tons/yr)
EU-1	0.013	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.032
EU-2	0.013	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.032
EU-3	0.013	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.032
EU-4	0.038	0.009	1.752	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.113
EU-4 Natural Gas	0.103	0.413	0.033	5.431	0.299	4.562	0.000	0.000	0.000	0.000	0.001
EU-5	0.038	0.009	1.752	0.038	0.000	0.000	0.038	0.038	0.038	0.000	0.113
EU-5 Natural Gas	0.125	0.499	0.039	6.570	0.361	5.519	0.000	0.000	0.000	0.000	0.000
EU-6	0.038	0.009	1.752	6.570	0.361	5.519	0.000	0.000	0.000	0.000	0.000
EU-6 Natural Gas	0.125	0.499	0.039	6.570	0.361	5.519	0.000	0.000	0.000	0.000	0.000
Dross Handling/Cooling	0.217	0.217	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
HF-2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.096	0.096
HF-2 Natural Gas	0.023	0.093	0.007	1.226	0.067	1.030	0.000	0.000	0.000	0.000	0.000
Pouring/Casting	0.000	0.000	6.751	0.438	0.964	0.000	0.000	0.000	0.000	0.000	0.000
Total	0.744	1.774	12.126	26.844	2.415	22.149	0.038	0.038	0.038	0.289	0.610