



Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant
DATE: July 12, 2007
RE: G & S Metal Consultants / 169-19145-00059
FROM: Nisha Sizemore
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted 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 03/23/06



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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: Matt Stuckey for Nisha Sizemore, Chief Permits Branch Office of Air Quality	Issuance Date: July 12, 2007 Expiration Date: July 12, 2007

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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 furnace.
- (b) One (1) natural gas-fired reverberatory furnace, identified as EU-4, constructed in 2002, equipped with a baghouse and exhausting to Stack S-4, rated at 30.0 million British thermal units per hour, capacity: 4.0 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 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) 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 five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-3-5-3. 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 require-

ments 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 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 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, constructed in 2002, equipped with a baghouse and exhausting to Stack S-4, rated at 30.0 million British thermal units per hour, capacity: 4.0 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 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.

(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 8.94 pounds per hour, each, when operating at a process weight rate of 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 10.38 pounds per hour when operating at a process weight rate of 4.0 tons per hour.
- (c) 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 20.45 pounds per hour when operating at a process weight rate of 11.01 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 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) and its control device.

Compliance Determination Requirements

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

- (a) In order to comply with Condition D.1.1(b), the baghouse for particulate control shall be in operation and control emissions from the natural gas-fired reverberatory furnace, identified as EU-4, at all times that the 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 furnace 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 furnace (EU-4) at least once per day when the reverberatory furnace (EU-4) is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 1.0 and 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 baghouse-s pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks 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 exhausts. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g., the process did not operate that day).
- (b) To document compliance with Condition D.1.5, the Permittee shall maintain a daily record of the pressure drop across the baghouse controlling the reverberatory furnace (EU-4). The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g., the process did not operate that day).
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

**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:

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a
Minor Source Operating Permit Renewal

Source Background and Description

Source Name:	G & S Metal Consultants, Inc.
Source Location:	50 Dimension Avenue, Wabash, Indiana 46992
County:	Wabash
SIC Code:	3341
Permit Renewal No.:	MSOP 169-19145-00059
Permit Reviewer:	Edward A. Longenberger

The Office of Air Quality (OAQ) has reviewed the operating permit renewal application from G & S Metal Consultants, Inc. relating to the operation of an aluminum trading and processing source.

History

On May 18, 2004, G & S Metal Consultants, Inc. submitted an application to the OAQ requesting to renew its operating permit. G & S Metal Consultants, Inc. was issued a Minor Source Operating Permit on September 8, 1999.

On October 17, 2005, G & S Metal Consultants, Inc. was issued a Significant Permit Revision (SPR 169-20925-00059), which permitted the construction and operation of a natural gas-fired reverberatory furnace, identified as EU-7, which was rated at 8.0 million British thermal units per hour and had a capacity of 4.0 tons per hour. This furnace was never constructed, and therefore is not included in this MSOP Renewal. Also, the natural gas-fired space heaters, EU-5 and EU-6 have been removed from the source.

Permitted Emission Units and Pollution Control Equipment

- (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, constructed in 2002, equipped with a baghouse and exhausting to Stack S-4, rated at 30.0 million British thermal units per hour, capacity: 4.0 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 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) 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.

Existing Approvals

Since the issuance of the MSOP 169-11037-00059, issued on September 8, 1999, the source has constructed or has been operating under the following approvals as well:

- (a) NOC 169-13791-00059, issued on March 12, 2001;
- (b) SPR 169-15718-00059, issued on September 12, 2002;
- (c) NOC 169-20186-00059, issued on December 29, 2004; and
- (d) SPR 169-20925-00059, issued on October 17, 2005.

All terms and conditions of previous permits issued pursuant to permitting programs approved into the State Implementation Plan have been either incorporated as originally stated, revised, or deleted by this permit. All previous registrations and permits are superseded by this permit.

The following terms and conditions from previous approvals have been determined no longer applicable; therefore, were not incorporated into this MSOP Renewal:

- (a) All conditions in SPR 169-20925-00059, which were related to the reverberatory furnace (EU-7).

Reason not incorporated: This furnace was never constructed.

- (b) Condition D.1.2 from MSOP NOC 169-20186-00059, which limited the HCl emissions from the holding furnace (HF-1) to 0.002 pounds per ton of aluminum processed.

Reason not incorporated: There is no underlying requirement for this limit.

Enforcement Issue

There are no enforcement actions pending.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
S-1	Electric Induction Furnace (EU-1)	35.0	3.0	21,278	154
S-2	Electric Induction Furnace (EU-2)	35.0	3.0	21,278	154
S-3	Electric Induction Furnace (EU-3)	35.0	3.0	21,278	154
S-4	Reverberatory Furnace (EU-4)	41.0	2.83	17,000	200
S-5	Holding Furnace (HF-1)	30.0	3.5	150	175

Emission Calculations

See pages 1 through 4 of Appendix A of this document for detailed emission calculations.

County Attainment Status

The source is located in Wabash County.

Pollutant	Status
PM ₁₀	Attainment
PM _{2.5}	Attainment
SO ₂	Attainment
NO _x	Attainment
8-hour Ozone	Attainment
CO	Attainment
Lead	Attainment

- (a) Wabash County has been classified as attainment for PM_{2.5}. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM 2.5 emissions. Therefore, until the U.S. EPA adopts specific provisions for PSD review for PM_{2.5} emissions, it has directed states to regulate PM₁₀ emissions as a surrogate for PM_{2.5} emissions. See the State Rule Applicability – Entire Source section.
- (b) Volatile organic compounds (VOC) and nitrogen oxides (NO_x) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC emissions and NO_x emissions are considered when evaluating the rule applicability relating to ozone. Wabash County has been designated as attainment for ozone. Therefore, VOC emissions and NO_x 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.
- (c) Wabash County has been classified as attainment or unclassifiable in Indiana for all remaining criteria pollutants. Therefore, these 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.
- (d) On October 25, 2006, the Indiana Air Pollution Control Board finalized a rule revision to 326 IAC 1-4-1 revoking the one-hour ozone standard in Indiana.
- (e) Even though secondary aluminum processing is considered one of the twenty-eight (28) listed source categories, based on the U.S. EPA memorandum dated December 4, 1998, this source is not one of the listed source categories because the facility uses clean aluminum chips as feedstock and this facility does not engage in smelting, refining, reduction or alloying. This source more closely resembles an aluminum die casting source. Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive emissions are not counted toward determination of PSD applicability.

Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source.

Pollutant	tons/year
PM	128
PM ₁₀	90.5
SO ₂	1.29
VOC	12.7
CO	13.1
NO _x	16.2

HAPs	tons/year
Chromium	0.113
Nickel	0.113
Manganese	0.113
Benzene	0.0003
Dichlorobenzene	0.0002
Formaldehyde	0.012
Hexane	0.281
Toluene	0.0005
Lead	0.0001
Cadmium	0.0002
HCl	0.131
Total	0.765

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of each criteria pollutant is less than one hundred (100) tons per year. The source is not subject to the provisions of 326 IAC 2-7. Therefore, the source will be issued an MSOP.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is less than twenty-five (25) tons per year.

Fugitive Emissions

Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-7, fugitive emissions are not counted toward the determination of Part 70 applicability.

Actual Emissions

No previous emission data has been received from the source.

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 MSOP 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 ₁₀	SO ₂	VOC	CO	NO _x	HAPs
EU-1	12.61	12.05	-	-	-	-	0.038
EU-2	12.61	12.05	-	-	-	-	0.038
EU-3	12.61	12.05	-	-	-	-	0.038
EU-4	45.46*	45.46*	0.079	4.23	11.04	13.14	0.509
Dross Handling/Cooling	0.289	0.289	-	-	-	-	-
HF-1	6.95	3.86	0.015	0.135	2.06	2.45	0.142
Pouring/Casting	-	-	1.19	8.34	-	0.596	-
Total Emissions	90.54	85.77	1.29	12.7	13.1	16.19	0.765

* Limited by 326 IAC 6-3-2

- (a) This existing stationary source is not major for PSD because the emissions of each criteria pollutant are less than two hundred fifty (<250) tons per year, and it is not one of the twenty-eight (28) listed source categories.
- (b) Fugitive Emissions
 Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 or 326 IAC 2-3, fugitive emissions are not counted toward the 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) included in the permit for this source.
- (b) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP), 40 CFR 63, Subpart RRR, are not included in this permit because this source is an area source of HAPs, and does not include the operation of a thermal chip dryer, a scrap dryer/delacquering kiln/decoating kiln, a sweat furnace, or a group 1 furnace emission unit processing other than clean charge.

State Rule Applicability - Entire Source

326 IAC 2-2 (PSD)

The potential to emit of each criteria pollutant is less than two hundred fifty (250) tons per year. Therefore, the requirements of 326 IAC 2-2 are not applicable.

326 IAC 2-6 (Emission Reporting)

This source is not located in Lake or Porter County, 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 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), 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 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

- (a) Pursuant to 326 IAC 6-3-2(e) (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the three (3) electric induction furnaces (EU-1 through EU-3), shall not exceed 8.94 pounds per hour, each, when operating at a process weight rate of 3.2 tons per hour, each.

According to Appendix A, the potential particulate emissions, before control, from each electric induction furnace is 2.88 pounds per hour. Therefore, each of the three (3) electric induction furnaces (EU-1 through EU-3) can comply with this rule, without operating the air pollution control devices.

- (b) Pursuant to 326 IAC 6-3-2(e) (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the one (1) reverberatory furnace (EU-4), shall not exceed 10.38 pounds per hour when operating at a process weight rate of 4.0 tons per hour.

According to Appendix A, the potential particulate emissions, after control, from the one (1) reverberatory furnace (EU-4) are 0.08 pounds per hour. Therefore, the one (1) reverberatory furnace (EU-4) can comply with this rule. The baghouse shall be in operation at all times that the one (1) reverberatory furnace (EU-4) is in operation.

- (c) Pursuant to 326 IAC 6-3-2(e) (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the one (1) holding furnace (HF-1), shall not exceed 20.45 pounds per hour when operating at a process weight rate of 11.01 tons per hour.

According to Appendix A, the potential particulate emissions from the one (1) holding furnace (HF-1) are 1.58 pounds per hour. Therefore, the one (1) holding furnace (HF-1) can comply with this rule.

- (d) The above 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:

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

- (e) The potential particulate emissions from the dross handling/cooling operations are less than 0.551 pounds per hour, therefore, the dross handling/cooling operations are exempt from the requirements of 326 IAC 6-3.

Compliance Determination and Monitoring Requirements

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

Control	Parameter	Frequency	Range	Excursions and Exceedances
Reverberatory Furnace (EU-4) Baghouse	Water Pressure Drop	Daily	1.0 to 7.0 inches	Response Steps
	Visible Emissions		Normal-Abnormal	

These monitoring conditions are necessary because the baghouse for the reverberatory furnace (EU-4) must operate properly to ensure compliance with 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes) and 326 IAC 2-6.1 (MSOP).

Recommendation

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

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

An application for the purposes of this review was received on May 18, 2004. Additional information was received on January 22, 2007 and April 23, 2007.

Conclusion

The operation of this aluminum trading and processing source shall be subject to the conditions of the attached MSOP Renewal No. 169-19145-00059.

**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
Reviewer: Edward A. Longenberger
Date: May 3, 2007**

EU-1 Electric Induction 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)
PM	3.2	0.900	2.880	12.614	99.90%	0.003	0.013
PM-10	3.2	0.860	2.752	12.054	99.90%	0.003	0.012
chromium	3.2	0.001	0.003	0.013	99.90%	0.000	0.000
nickel	3.2	0.001	0.003	0.013	99.90%	0.000	0.000
manganese	3.2	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 6.25 (SCC 3-04-003-03)

EU-2 Electric Induction 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)
PM	3.2	0.900	2.880	12.614	99.90%	0.003	0.013
PM-10	3.2	0.860	2.752	12.054	99.90%	0.003	0.012
chromium	3.2	0.001	0.003	0.013	99.90%	0.000	0.000
nickel	3.2	0.001	0.003	0.013	99.90%	0.000	0.000
manganese	3.2	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 6.25 (SCC 3-04-003-03)

EU-3 Electric Induction 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)
PM	3.2	0.900	2.880	12.614	99.90%	0.003	0.013
PM-10	3.2	0.860	2.752	12.054	99.90%	0.003	0.012
chromium	3.2	0.001	0.003	0.013	99.90%	0.000	0.000
nickel	3.2	0.001	0.003	0.013	99.90%	0.000	0.000
manganese	3.2	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 6.25 (SCC 3-04-003-03)

EU-4 Reverberatory 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)
PM	4.0	4.300	17.200	75.336	99.90%	0.017	0.075
PM-10	4.0	2.600	10.400	45.552	99.90%	0.010	0.046
VOC	4.0	0.200	0.800	3.504	0.00%	0.800	3.504
manganese	4.0	0.004	0.017	0.075	99.90%	0.000	0.000
chromium	4.0	0.004	0.017	0.075	99.90%	0.000	0.000
nickel	4.0	0.004	0.017	0.075	99.90%	0.000	0.000
HCl from flux	0.002	13.97	0.022	0.096	0.00%	0.022	0.096
PM from flux	0.002	1000	1.574	6.896	99.90%	0.002	0.007
PM-10 from flux	0.002	532	0.838	3.669	99.90%	0.001	0.004

The Maximum Rate of 4.0 in the above table represents the amount of aluminum processed per hour, 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.

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	0.06	1.100	0.066	0.289	0.00%	0.066	0.289
PM-10	0.06	1.100	0.066	0.289	0.00%	0.066	0.289

Maximum Rate in the above table represents the amount of dross handled per hour.
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.

**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
Reviewer: Edward A. Longenberger
Date: May 3, 2007**

HF-1 Holding 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)
HCl from flux	0.002	13.97	0.022	0.096	0.00%	0.022	0.096
PM from flux	0.002	1000	1.574	6.896	0.00%	1.574	6.896
PM-10 from flux	0.002	532	0.838	3.669	0.00%	0.838	3.669

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 Emission Rate (lbs/hr)	Uncontrolled Emission Rate (tons/yr)	Control Efficiency (%)	Controlled Emission Rate (lbs/hr)	Controlled Emission Rate (tons/yr)
NOx	13.6	0.010	0.136	0.596	0.00%	0.136	0.596
SOx	13.6	0.020	0.272	1.191	0.00%	0.272	1.191
VOC	13.6	0.140	1.904	8.340	0.00%	1.904	8.340

Maximum Rate in the above table represents the amount of aluminum processed per hour.

Emission factors from FIRES 6.25 (SCC 3-04-001-14)

Uncontrolled Potential Emissions

	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	12.054	0.000	0.000	0.000	0.000	0.013	0.013	0.013	0.000	0.038
EU-2	12.614	12.054	0.000	0.000	0.000	0.000	0.013	0.013	0.013	0.000	0.038
EU-3	12.614	12.054	0.000	0.000	0.000	0.000	0.013	0.013	0.013	0.000	0.038
EU-4	82.232	49.221	3.504	0.000	0.000	0.000	0.075	0.075	0.075	0.096	0.322
EU-4 Natural Gas	0.250	0.999	0.723	13.140	0.079	11.038	0.000	0.000	0.000	0.000	0.248
EU-4 Subtotal	82.482	50.219	4.227	13.140	0.079	11.038	0.076	0.076	0.075	0.096	0.570
Dross Handling/Cooling	0.289	0.289	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
HF-1	6.896	3.669	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.096	0.096
HF-1 Natural Gas	0.047	0.186	0.135	2.453	0.015	2.060	0.000	0.000	0.000	0.000	0.046
HF-1 Subtotal	6.943	3.855	0.135	2.453	0.015	2.060	0.000	0.000	0.000	0.096	0.142
Pouring/Casting	0.000	0.000	8.340	0.596	1.191	0.000	0.000	0.000	0.000	0.000	0.000
Total	127.56	90.52	12.70	16.19	1.29	13.10	0.113	0.113	0.113	0.193	0.826

Controlled Potential Emissions

	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	0.012	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
EU-2	0.013	0.012	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
EU-3	0.013	0.012	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
EU-4	0.082	0.049	3.504	0.000	0.000	0.000	0.000	0.000	0.000	0.096	0.000
EU-4 Natural Gas	0.250	0.999	0.723	13.140	0.079	11.038	0.000	0.000	0.000	0.000	0.248
EU-4 Subtotal	0.332	1.048	4.227	13.140	0.079	11.038	0.000	0.000	0.000	0.096	0.248
Dross Handling/Cooling	0.289	0.289	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
HF-1	6.896	3.669	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.096	0.000
HF-1 Natural Gas	0.047	0.186	0.135	2.453	0.015	2.060	0.000	0.000	0.000	0.000	0.046
HF-1 Subtotal	6.943	3.855	0.135	2.453	0.015	2.060	0.000	0.000	0.000	0.096	0.046
Pouring/Casting	0.000	0.000	8.340	0.596	1.191	0.000	0.000	0.000	0.000	0.000	0.000
Total	7.60	5.23	12.70	16.19	1.29	13.10	0.000	0.000	0.000	0.193	0.294

Limited Emissions

	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	12.054	0.000	0.000	0.000	0.000	0.013	0.013	0.013	0.000	0.038
EU-2	12.614	12.054	0.000	0.000	0.000	0.000	0.013	0.013	0.013	0.000	0.038
EU-3	12.614	12.054	0.000	0.000	0.000	0.000	0.013	0.013	0.013	0.000	0.038
EU-4	45.210	44.461	3.504	0.000	0.000	0.000	0.075	0.075	0.075	0.096	0.322
EU-4 Natural Gas	0.250	0.999	0.723	13.140	0.079	11.038	0.000	0.000	0.000	0.000	0.248
EU-4 Subtotal	45.460	45.460	4.227	13.140	0.079	11.038	0.076	0.076	0.075	0.096	0.570
Dross Handling/Cooling	0.289	0.289	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
HF-1	6.896	3.669	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.096	0.096
HF-1 Natural Gas	0.047	0.186	0.135	2.453	0.015	2.060	0.000	0.000	0.000	0.000	0.046
HF-1 Subtotal	6.943	3.855	0.135	2.453	0.015	2.060	0.000	0.000	0.000	0.096	0.142
Pouring/Casting	0.000	0.000	8.340	0.596	1.191	0.000	0.000	0.000	0.000	0.000	0.000
Total	90.54	85.77	12.70	16.19	1.29	13.10	0.113	0.113	0.113	0.193	0.826

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

**Company Name: G & S Metal Consultants, Inc.
Address City IN Zip: 50 Dimension Avenue, Wabash, Indiana 46992
Permit Number: MSOP 169-19145-00059
Reviewer: Edward A. Longenberger
Date: May 3, 2007**

	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		

*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

Equipment	Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr	Potential Emission in tons/yr					
			PM	PM10	SO2	NOx	VOC	CO
Reverberatory Furnace EU-4	30.00	262.8	0.250	0.999	0.079	13.140	0.723	11.038
Holding Furnace HF-1	5.60	49.056	0.047	0.186	0.015	2.453	0.135	2.060
Total	35.60	312	0.296	1.19	0.094	15.6	0.86	13.1

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 4 for HAPs emissions calculations.

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

**Company Name: G & S Metal Consultants, Inc.
 Address City IN Zip: 50 Dimension Avenue, Wabash, Indiana 46992
 Permit Number: MSOP 169-19145-00059
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HAPs - Organics

	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	0.0021	0.0012	0.0750	1.8000	0.0034
Potential Emission in tons/yr	0.0003	0.0002	0.012	0.281	0.0005

HAPs - Metals

	Lead	Cadmium	Chromium	Manganese	Nickel	Total HAPs
Emission Factor in lb/MMcf	0.0005	0.0011	0.0014	0.0004	0.0021	
Potential Emission in tons/yr	0.0001	0.0002	0.0002	0.0001	0.0003	0.294

Methodology is the same as page 3.

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