



Thomas M. McDermott, Jr.
Mayor

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

CITY OF HAMMOND

RONALD L. NOVAK
Director

MINOR SOURCE OPERATING PERMIT RENEWAL

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

and

**HAMMOND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
AIR POLLUTION CONTROL DIVISION**

**Northern Indiana Metals, LLC dba Saxon Metals, Inc.
2230 Indianapolis Boulevard
Whiting, Indiana 46394**

(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 a 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 089-21474-00262	
Issued by: Hammond Department of Environmental Management	Original signed by: Ronald L. Novak, Director
	Issuance Date: <u>August 10, 2007</u> Expiration Date: <u>August 10, 2012</u>

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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) and the Hammond Department of Environmental Management (HDEM). 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 a stationary, secondary nonferrous metals plant.

Source Address: 2230 Indianapolis Boulevard, Whiting, Indiana 46394
Mailing Address: P.O. Box 9
2230 Indianapolis Boulevard, Hammond, Indiana 46325
General Source Phone: (219) 659-2600
SIC Code: 3341 – Secondary Nonferrous Metals
County Location: Lake
Source Location Status: Attainment/Unclassifiable for PM10, SO₂, CO, NO₂ and Lead,
Nonattainment for PM2.5 and 8-hour ozone,
Source Status: Minor Source Operating Permit Program
Minor Source, under PSD, Nonattainment NSR, and Emission Offset Rules;
Minor Source, Section 112 of the Clean Air Act; and
Not 1 of 28 Source Categories

A.2 Emissions Units and Pollution Control Equipment Summary

The stationary source consists of the following emissions units and pollution control device:

1. The Zinc Die Cast Alloying Process, with a maximum design rate of 4.75 T/hr, is used to reclaim zinc from scrap. Natural gas-fired furnaces and kettles are used to reclaim zinc. After melting they are cast into bars. The process is a batch-type operation consisting of the following:
 - (a) Reverberatory Sweat Furnace, identified as F-1, with a maximum design rate of 0.15 T/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1985, and exhausting to stack S-BH.
 - (b) Reverberatory Sweat Furnace, identified as F-2, with a maximum design rate of 0.2 T/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1985, and exhausting to stack S-BH.
 - (c) Melting and/or Refining Kettle, identified as K2, with a maximum design rate of 1.5 T/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1985, and exhausting to stack S-BH.
 - (d) Melting and/or Refining Kettle, identified as K3, with a maximum design rate of 1.45 T/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1985, and exhausting to stack S-BH.
 - (e) Melting and/or Refining Kettle, identified as K4, with a maximum design rate of 1.45 T/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1985, and exhausting to stack S-BH.
 - (f) Holding Kettle, identified as K19, used with Furnaces F-1 and F-2, respectively, with a maximum design capacity of 0.2 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1996, and exhausting to stack S-BH.

- (g) Holding Kettle, identified as K20, used with Furnaces F-1 and F-2, respectively, with a maximum design capacity of 0.2 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1996, and exhausting to stack S-BH.
2. The Solder Lead Alloying Process, with a maximum design rate of 3.25 T/hr, is used to reclaim lead from scrap. Natural gas-fired furnaces and kettles are used to reclaim lead. After melting they are cast into bars. The process is a batch-type operation consisting of the following:
- (a) Reverberatory Sweat Furnace, identified as F-3, with a maximum design rate of 0.2 T/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1998, and exhausting to stack S-BH.
 - (b) Sweat Kettle, identified as K6, with a maximum design rate of 0.2 T/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1990, and exhausting to stack S-BH.
 - (c) Sweat Kettle, identified as K10, with a maximum design rate of 0.05 T/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1990, and exhausting to stack S-BH.
 - (d) Sweat Kettle, identified as K11, with a maximum design rate of 0.05 T/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1990, and exhausting to stack S-BH.
 - (e) Sweat Kettle, identified as K15, with a maximum design rate of 0.05 T/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1990, and exhausting to stack S-BH.
 - (f) Sweat Kettle, identified as K16, with a maximum design rate of 0.05 T/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1990, and exhausting to stack S-BH.
 - (g) Sweat Kettle, identified as K17, with a maximum design rate of 0.05 T/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1990, and exhausting to stack S-BH.
 - (h) Melting and/or Refining Kettle, identified as K12, with a maximum design rate of 0.87 T/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1985, and exhausting to stack S-BH.
 - (i) Melting and/or Refining Kettle, identified as K13, with a maximum design rate of 0.91 T/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1985, and exhausting to stack S-BH.
 - (j) Melting and/or Refining Kettle, identified as K14, with a maximum design rate of 0.82 T/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1985, and exhausting to stack S-BH.
 - (k) Holding Kettle, identified as K21, with a maximum design capacity of 0.2 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1998, and exhausting to stack S-BH.

The furnaces and kettles use natural gas only and have a combined maximum design capacity of 18.6 MMBTU/hr. Particulate emissions from the furnaces and melt kettles are drafted to an American Air Bag Filter Dust Collector System.

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 089-21474-00262, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.
- (b) If IDEM, OAQ and HDEM, 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 and HDEM, 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 and HDEM, within a reasonable time, any information that IDEM, OAQ and HDEM 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 and HDEM 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 and HDEM 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:

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

and

Hammond Department of Environmental Management
Air Pollution Control Division
5925 Calumet Avenue – Room 304
Hammond, Indiana 46320

- (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 and HDEM 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 and HDEM upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ and HDEM. IDEM, OAQ and HDEM 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 MSOP 089-21474-00262 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 HDEM 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

and

Hammond Department of Environmental Management
Air Pollution Control Division
5925 Calumet Avenue – Room 304
Hammond, Indiana 46320

- (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 is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ and HDEM 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 and HDEM 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 and HDEM, 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

and

Hammond Department of Environmental Management
Air Pollution Control Division
5925 Calumet Avenue – Room 304
Hammond, Indiana 46320

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 and HDEM 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] [IC13-17-3-2] [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, and HDEM 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

and

Hammond Department of Environmental Management
Air Pollution Control Division
5925 Calumet Avenue – Room 304
Hammond, Indiana 46320

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 HDEM within thirty (30) calendar days of receipt of a billing.
- (b) The Permittee may call the following telephone number: 219-853-6306 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 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 and HDEM, the fact that continuance of this permit is not consistent with purposes of this article.

C.2 Opacity [326 IAC 5-1]

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

- (a) Opacity shall not exceed an average of twenty percent (20%) 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 non-overlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

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

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

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

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

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

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

C.6 Fugitive Dust Emissions [326 IAC 6.8-10-3]

Pursuant to 326 IAC 6.8-10-3 (formerly 326 IAC 6-1-11.1) (Lake County Fugitive Particulate Matter Control Requirements), the particulate matter emissions from source wide activities shall meet the following requirements:

- (a) The average instantaneous opacity of fugitive particulate emissions from a paved road shall not exceed ten percent (10%).
- (b) The average instantaneous opacity of fugitive particulate emissions from an unpaved road shall not exceed ten percent (10%).
- (c) The average instantaneous opacity of fugitive particulate emissions from batch transfer shall not exceed ten percent (10%).
- (d) The opacity of fugitive particulate emissions from continuous transfer of material onto and out of storage piles shall not exceed ten percent (10%) on a three (3) minute average.
- (e) The opacity of fugitive particulate emissions from storage piles shall not exceed ten percent (10%) on a six (6) minute average.
- (f) There shall be a zero (0) percent frequency of visible emission observations of a material during the inplant transportation of material by truck or rail at any time.
- (g) The opacity of fugitive particulate emissions from the inplant transportation of material by front end loaders and skip hoists shall not exceed ten percent (10%).
- (h) There shall be a zero (0) percent frequency of visible emission observations from a building enclosing all or part of the material processing equipment, except from a vent in the building.
- (i) The PM10 emissions from building vents shall not exceed twenty-two thousandths (0.022) grains per dry standard cubic foot and ten percent (10%) opacity.
- (j) The opacity of particulate emissions from dust handling equipment shall not exceed ten percent (10%).
- (k) Any facility or operation not specified in 326 IAC 6.8-10-3 shall meet a twenty percent (20%), three (3) minute average opacity standard.

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 by using good engineering practices (GEP) pursuant to 326 IAC 1-7-3.

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

and

Hammond Department of Environmental Management
Air Pollution Control Division
5925 Calumet Avenue – Room 304
Hammond, Indiana 46320

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

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

and

Hammond Department of Environmental Management
Air Pollution Control Division
5925 Calumet Avenue – Room 304
Hammond, Indiana 46320

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 and HDEM 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 and HDEM not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ and HDEM if the Permittee submits to IDEM, OAQ and HDEM, 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 and HDEM 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 non-compliant 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 and HDEM, 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 Annual Emission Inventory [Hammond Ordinance No. 7102]

- (a) The Permittee shall submit an annual emission inventory containing production information and/or fuel usage for each permitted unit. The emission inventory must be received by April 15th of each year. The submittal should cover the twelve (12) consecutive month time period starting January 1 and ending December 31. This is a local requirement only. The emission inventory must be submitted to:

Hammond Department of Environmental Management
Air Pollution Control Division
5925 Calumet Avenue - Room 304
Hammond, Indiana 46320

This inventory does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The emission inventory 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 HDEM on or before the date it is due.

C.18 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 or HDEM makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner or HDEM 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.19 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

and

Hammond Department of Environmental Management
Air Pollution Control Division
5925 Calumet Avenue – Room 304
Hammond, Indiana 46320

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

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

1. The Zinc Die Cast Alloying Process, with a maximum design rate of 4.75 T/hr, is used to reclaim zinc from scrap. Natural gas-fired furnaces and kettles are used to reclaim zinc. After melting they are cast into bars. The process is a batch-type operation consisting of the following:
 - (a) Reverberatory Sweat Furnace, identified as F-1, with a maximum design rate of 0.15 T/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1985, and exhausting to stack S-BH.
 - (b) Reverberatory Sweat Furnace, identified as F-2, with a maximum design rate of 0.2 T/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1985, and exhausting to stack S-BH.
 - (c) Melting and/or Refining Kettle, identified as K2, with a maximum design rate of 1.5 T/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1985, and exhausting to stack S-BH.
 - (d) Melting and/or Refining Kettle, identified as K3, with a maximum design rate of 1.45 T/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1985, and exhausting to stack S-BH.
 - (e) Melting and/or Refining Kettle, identified as K4, with a maximum design rate of 1.45 T/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1985, and exhausting to stack S-BH.
 - (f) Holding Kettle, identified as K19, used with Furnaces F-1 and F-2, respectively, with a maximum design capacity of 0.2 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1996, and exhausting to stack S-BH.
 - (g) Holding Kettle, identified as K20, used with Furnaces F-1 and F-2, respectively, with a maximum design capacity of 0.2 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1996, and exhausting to stack S-BH.
2. The Solder Lead Alloying Process, with a maximum design rate of 3.25 T/hr, is used to reclaim lead from scrap. Natural gas-fired furnaces and kettles are used to reclaim lead. After melting they are cast into bars. The process is a batch-type operation consisting of the following:
 - (a) Reverberatory Sweat Furnace, identified as F-3, with a maximum design rate of 0.2 T/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1998, and exhausting to stack S-BH.
 - (b) Sweat Kettle, identified as K6, with a maximum design rate of 0.2 T/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1990, and exhausting to stack S-BH.
 - (c) Sweat Kettle, identified as K10, with a maximum design rate of 0.05 T/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1990, and exhausting to stack S-BH.
 - (d) Sweat Kettle, identified as K11, with a maximum design rate of 0.05 T/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1990, and exhausting to stack S-BH.
 - (e) Sweat Kettle, identified as K15, with a maximum design rate of 0.05 T/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1990, and exhausting to stack S-BH.
 - (f) Sweat Kettle, identified as K16, with a maximum design rate of 0.05 T/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1990, and exhausting to stack S-BH.
 - (g) Sweat Kettle, identified as K17, with a maximum design rate of 0.05 T/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1990, and exhausting to stack S-BH.

- (h) Melting and/or Refining Kettle, identified as K12, with a maximum design rate of 0.87 T/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1985, and exhausting to stack S-BH.
- (i) Melting and/or Refining Kettle, identified as K13, with a maximum design rate of 0.91 T/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1985, and exhausting to stack S-BH.
- (j) Melting and/or Refining Kettle, identified as K14, with a maximum design rate of 0.82 T/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1985, and exhausting to stack S-BH.
- (k) Holding Kettle, identified as K21, with a maximum design capacity of 0.2 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1998, and exhausting to stack S-BH.

The furnaces and kettles use natural gas only and have a combined maximum design capacity of 18.6 MMBTU/hr. Particulate emissions from the furnaces and melt kettles are drafted to an American Air Bag Filter Dust Collector System.

(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 Matter (PM) [326 IAC 6.8-1-2(a)]

Pursuant to 326 IAC 6.8-1-2(a) (formerly 326 IAC 6-1-2(a)) (Nonattainment Area Particulate Limitations), particulate matter (PM) emissions shall be limited to 0.03 grain per dry standard cubic foot of exhaust air for the following emissions units:

The Zinc Die Cast Alloying Process:

- (a) Reverberatory Sweat Furnace F-1
- (b) Reverberatory Sweat Furnace F-2
- (c) Melting and/or Refining Kettle K2
- (d) Melting and/or Refining Kettle K3
- (e) Melting and/or Refining Kettle K4
- (f) Holding Kettle K19
- (g) Holding Kettle K20

The Solder Lead Alloying Process:

- (a) Reverberatory Sweat Furnace F-3
- (b) Sweat Kettle K6
- (c) Sweat Kettle K10
- (d) Sweat Kettle K11
- (e) Sweat Kettle K15
- (f) Sweat Kettle K16
- (g) Sweat Kettle K17
- (h) Melting and/or Refining Kettle K12
- (i) Melting and/or Refining Kettle K13
- (j) Melting and/or Refining Kettle K14
- (k) Holding Kettle K21

D.1.2 Lead (Pb) [Hammond Air Quality Control Ordinance No. 3522 (as amended)]

Pursuant to the Hammond Air Quality Control Ordinance No. 3522 (as amended), the Pb emissions limit for this facility shall not exceed 0.001 lbs/hr and 0.003 tons per year. This is local agency enforceable only.

D.1.3 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 these facilities and their emission control device.

Compliance Determination Requirements

D.1.4 Particulate Control

- (a) Pursuant to OP# 01601, issued on February 11, 2000, the American Air Bag Filter Dust Collector System for PM control shall be in operation at all times when the furnaces and melt kettles are in operation. All pot and furnace hoods and ductwork to the baghouse shall be considered part of the American Air Bag Filter Dust Collector emission control system and shall be inspected daily to assure that all hoods are situated properly and maintaining sufficient draft to the baghouse.
- (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 2-6.1-5(a)(2)]

D.1.5 Visible Emissions Notations

- (a) Visible emission notations of the stack exhaust S-BH 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.1.6 Parametric Monitoring

- (a) The Permittee shall record the pressure drop across the American Air Bag Filter Dust Collector System used in conjunction with the Zinc Die Cast and Solder Lead Alloying Processes, at least once per day when the Zinc Die Cast and Solder Lead Alloying Processes are in operation. When for any one reading, the pressure drop across the collector is outside the normal range of 1 to 2.5 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 HDEM and shall be calibrated at least once every six (6) months.

D.1.7 Baghouse Inspections

An inspection shall be performed each week of all bags controlling the Zinc Die Cast and Solder Lead Alloying Processes. All defective bags shall be replaced. This is a local requirement only.

D.1.8 Broken or Failed Bag Detection

- (a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as a malfunction.
- (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. Operations may continue only if the event qualifies as a malfunction.

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

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

D.1.9 Record Keeping Requirements

- (a) To document compliance with Conditions D.1.1 and D.1.2, the Permittee shall record and maintain the following information:
 - (1) Daily production data of material processed (in tons) for the Sweat Furnaces (F-1, F-2, and F-3) and the Melt Kettles.
 - (2) Monthly fuel usage data for Sweat Furnaces (F-1, F-2, and F-3), the Holding Kettles, and Melt Kettles.
 - (3) Weekly inspection and maintenance activities performed on the American Air Bag Filter Dust Collector System.

These are local requirements only.

- (b) To document compliance with Condition D.1.5, the Permittee shall maintain records of daily visible emission notations of the stack exhaust S-BH. 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).
- (c) To document compliance with Condition D.1.6, the Permittee shall maintain a daily record of the pressure drop across the American Air Bag Filter Dust Collector System controlling the Zinc Die Cast and Solder Lead Alloying Processes. 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).
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.10 Reporting Requirements

A summary of the information to document compliance with Conditions D.1.1 and D.1.2 shall be submitted to the HDEM listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, upon request. This is a local requirement only.

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

and

**HAMMOND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
-AIR POLLUTION CONTROL DIVISION-**

**MINOR SOURCE OPERATING PERMIT
CERTIFICATION**

Source Name: **Northern Indiana Metals, LLC dba Saxon Metals, Inc.**
Source Address: 2230 Indianapolis Blvd., Whiting, IN 46394
Mailing Address: 2230 Indianapolis Blvd., Whiting, IN 46394
Permit No.: **M089-21474-00262**

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 Notification
- 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:

Hammond Department of Environmental Management Air Pollution Control Division

Daily Production Data

Company Name: **Northern Indiana Metals, LLC dba Saxon Metals, Inc.**
 Location: 2230 Indianapolis Blvd., Whiting, IN 46394
 Permit No.: MSOP 089-21474-00262

Month: _____ Year: _____

	Solder and Lead Alloys			Zinc Die Cast Alloys		
	Sweat Furnace F-3	Kettle Refining K6, K10, K11 & K15 - K17	Casting	Sweat Furnaces F-1 & F-2	Kettle Refining K2, K3, & K4	Casting
Date						
Production (Tons)						
Hours of Operation						
Date						
Production (Tons)						
Hours of Operation						
Date						
Production (Tons)						
Hours of Operation						
Date						
Production (Tons)						
Hours of Operation						
Date						
Production (Tons)						
Hours of Operation						

Submitted by: _____
 Title/Position: _____
 Signature: _____
 Date: _____

**Hammond Department of Environmental Management
Air Pollution Control Division**

Baghouse Inspection and Maintenance Records

Company Name: **Northern Indiana Metals, LLC dba Saxon Metals, Inc.**
Location: 2230 Indianapolis Blvd., Whiting, IN 46394
Permit No.: MSOP 089-21474-00262

Month: _____ Year: _____

Date	Employee Name	Summary of Inspection

Submitted by: _____
Title/Position: _____
Signature: _____
Date: _____

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

**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).

Company Name:	Northern Indiana Metals, LLC dba Saxon Metals, Inc.
Address:	2230 Indianapolis Boulevard
City:	Whiting, Indiana 46394
Phone #:	(219) 659-2600
MSOP #:	089-21474-00262

I hereby certify that **Northern Indiana Metals, LLC dba Saxon Metals, Inc.** is still in operation.
 no longer in operation.

I hereby certify that **Northern Indiana Metals, LLC dba Saxon Metals, Inc.** is
 in compliance with the requirements of MSOP **089-21474-00262**.
 not in compliance with the requirements of MSOP **089-21474-00262**.

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
and
HAMMOND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
FAX NUMBER - 219 853-6343**

**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 PERM 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
and
Hammond Department of Environmental Management
-Air Pollution Control Division-**

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

Source Background and Description

Source Name:	Northern Indiana Metals, LLC dba Saxon Metals, Inc.
Source Location:	2230 Indianapolis Boulevard, Whiting, Indiana 46394
County:	Lake
SIC Code:	3341 – Secondary Nonferrous Metals
Permit Renewal No.:	M089-21474-00262
Permit Reviewer:	Debra Malone

The Hammond Department of Environmental Management (HDEM) has reviewed the operating permit renewal application from Saxon Metal, Inc. relating to the operation of a secondary nonferrous metals operation.

History

On July 28, 2005, Saxon Metal, Inc. submitted applications to the OAQ and HDEM requesting to renew its operating permit. Saxon Metal, Inc. was issued a Minor Source Operating Permit on November 8, 2000. On February 20, 2007, Saxon Metal, Inc. was taken over by Northern Indiana Metals, LLC and became Northern Indiana Metals, LLC dba Saxon Metals, Inc.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control device:

1. The Zinc Die Cast Alloying Process, with a maximum design rate of 4.75 T/hr, is used to reclaim zinc from scrap. Natural gas-fired furnaces and kettles are used to reclaim zinc. After melting they are cast into bars. The process is a batch-type operation consisting of the following:
 - (a) Reverberatory Sweat Furnace, identified as F-1, with a maximum design rate of 0.15 T/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1985, and exhausting to stack S-BH.
 - (b) Reverberatory Sweat Furnace, identified as F-2, with a maximum design rate of 0.2 T/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1985, and exhausting to stack S-BH.
 - (c) Melting and/or Refining Kettle, identified as K2, with a maximum design rate of 1.5 T/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1985, and exhausting to stack S-BH.

- (d) Melting and/or Refining Kettle, identified as K3, with a maximum design rate of 1.45 T/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1985, and exhausting to stack S-BH.
 - (e) Melting and/or Refining Kettle, identified as K4, with a maximum design rate of 1.45 T/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1985, and exhausting to stack S-BH.
 - (f) Holding Kettle, identified as K19, used with Furnaces F-1 and F-2, respectively, with a maximum design capacity of 0.2 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1996, and exhausting to stack S-BH.
 - (g) Holding Kettle, identified as K20, used with Furnaces F-1 and F-2, respectively, with a maximum design capacity of 0.2 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1996, and exhausting to stack S-BH.
2. The Solder Lead Alloying Process, with a maximum design rate of 3.25 T/hr, is used to reclaim lead from scrap. Natural gas-fired furnaces and kettles are used to reclaim lead. After melting they are cast into bars. The process is a batch-type operation consisting of the following:
- (a) Reverberatory Sweat Furnace, identified as F-3, with a maximum design rate of 0.2 T/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1998, and exhausting to stack S-BH.
 - (b) Sweat Kettle, identified as K6, with a maximum design rate of 0.2 T/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1990, and exhausting to stack S-BH.
 - (c) Sweat Kettle, identified as K10, with a maximum design rate of 0.05 T/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1990, and exhausting to stack S-BH.
 - (d) Sweat Kettle, identified as K11, with a maximum design rate of 0.05 T/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1990, and exhausting to stack S-BH.
 - (e) Sweat Kettle, identified as K15, with a maximum design rate of 0.05 T/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1990, and exhausting to stack S-BH.
 - (f) Sweat Kettle, identified as K16, with a maximum design rate of 0.05 T/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1990, and exhausting to stack S-BH.
 - (g) Sweat Kettle, identified as K17, with a maximum design rate of 0.05 T/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1990, and exhausting to stack S-BH.
 - (h) Melting and/or Refining Kettle, identified as K12, with a maximum design rate of 0.87 T/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1985, and exhausting to stack S-BH.

- (i) Melting and/or Refining Kettle, identified as K13, with a maximum design rate of 0.91 T/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1985, and exhausting to stack S-BH.
- (j) Melting and/or Refining Kettle, identified as K14, with a maximum design rate of 0.82 T/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1985, and exhausting to stack S-BH.
- (k) Holding Kettle, identified as K21, with a maximum design capacity of 0.2 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1998, and exhausting to stack S-BH.

The furnaces and kettles use natural gas only and have a combined maximum design capacity of 18.6 MMBTU/hr. Particulate emissions from the furnaces and melt kettles are drafted to an American Air Bag Filter Dust Collector System.

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

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

Existing Approvals

Since the issuance of the MSOP (089-11411-00262) on November 8, 2000, the source has been operating under the following approvals as well:

- (a) Notice-only change (089-18985-00262), issued on May 17, 2004.

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.

Enforcement Issue

There are no enforcement actions pending.

Stack Summary

Stack ID	Operation	Height (ft)	Diameter (ft)	Flow Rate (acfm)	Temperature (°F)
S-BH	Baghouse	45	2.83	25,000	150

Emission Calculations

See Appendix A of this document for detailed emission calculations (four (4) pages).

County Attainment Status

The source is located in Lake County.

Pollutant	Status
PM10	Attainment
PM2.5	Nonattainment
SO ₂	Attainment
NOx	Unclassifiable/Attainment
8-hour Ozone	Moderate Nonattainment
CO	Unclassifiable/Attainment
Lead	Attainment

- (a) U.S.EPA in Federal Register Notice 70 FR 943 dated January 5, 2005 has designated Lake County as nonattainment for PM2.5. On March 7, 2005 the Indiana Attorney General's Office on behalf of IDEM filed a lawsuit with the Court of Appeals for the District of Columbia Circuit challenging U.S. EPA's designation of nonattainment areas without sufficient data. However, in order to ensure that sources are not potentially liable for violation of the Clean Air Act, the OAQ is following the U.S. EPA's guidance to regulate PM10 emissions as surrogate for PM2.5 emissions pursuant to the Nonattainment New Source Review requirements. See the State Rule Applicability – Entire Source section.
- (b) Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to the ozone standards. Lake County has been designated as moderate nonattainment for the 8-hour ozone standard. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3. See the State Rule Applicability – Entire Source section.
- (c) Lake County has been classified as attainment or unclassifiable in Indiana for particulates less than ten (10) microns in diameter (PM10), sulfur dioxides (SO₂), nitrogen oxides (NO_x), carbon monoxide (CO), and Lead (Pb). Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability – Entire Source section.
- (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) 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 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 or Emission Offset applicability.

Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source.

Pollutant	Potential to Emit (tons/yr)
PM	66.85
PM-10	60.78
SO ₂	0.05
VOC	4.13
CO	1.71
NO _x	8.15

HAPs	Potential to Emit (tons/yr)
Lead	0.26
Total	0.26

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of PM, PM-10, SO₂, VOC, CO and NO_x are less than 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 PM is equal to or greater than 25 tons per year. This existing source is subject to the provisions of 326 IAC 2-6.1 Minor Source Operating Permit.
- (c) 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/or 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.
- (d) 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

The following table shows the actual emissions from the source. This information reflects the 2005 OAQ emission data.

Pollutant	Actual Emissions (tons/year)
PM	0.143
PM-10	0.120
SO ₂	0.008
VOC	1.536
CO	0.263
NO _x	1.254
Lead	negligible

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
Reverberatory Furnaces F1 & F2	*24.46	*24.46	-	3.68	-	-	-
Kettles K2, K3, K4			-	-	-	-	-
Zinc Die Cast Alloy Casting			-	-	-	-	-
Kettles K6, K10, K11, K15-K17			-	-	-	-	negligible
Reverberatory Furnace F3			-	-	-	-	-
Solder Kettle Refining (K12, K13 & K14)			-	-	-	-	negligible
Solder & Lead Alloy Casting			-	-	-	-	negligible
Process Fuel Usage including Holding Kettles (K19, K20 & K21)			negligible	0.45	1.71	8.15	negligible
Total Emissions	24.46	24.46	negligible	4.13	1.71	8.15	negligible

This table shows the allowable emissions for each pollutant for the entire source.

*This source, which consists of two (2) batch type processes sharing an American Air Bag Filter Dust Collector System as control, has an overall PM source limit of 0.03 grain per dry standard cubic foot of exhaust air which is equivalent to 24.46 tons/yr. Remaining allowable emissions are governed by the Hammond Air Quality Control Ordinance No. 3522 (as amended).

- (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) This existing stationary source is not major for Emission Offset because the emissions of the nonattainment pollutants, VOC and NO_x, are less than one hundred (<100) tons per year.
- (c) 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) This facility is not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60.120, Subpart L – Standards of Performance for Secondary Lead Smelters. A *Secondary lead smelter*, by definition means any facility producing lead from a leadbearing scrap material by smelting to the metallic form. *Lead* being elemental lead or alloys in which the predominant component is lead. The affected facility, Furnace F-3, which was constructed after June 11, 1973 is not used to produce leadbearing products which the predominant component is lead; therefore the affected facility is not applicable to Subpart L.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP)(326 IAC 14, 20 and 40 CFR Part 61, 63) included in this permit.

State Rule Applicability – Entire Source

326 IAC 1-6-3 (Preventive Maintenance Plan)

The source has submitted a Preventive Maintenance Plan (PMP) on October 1, 1998. This PMP has been verified to fulfill the requirements of 326 IAC 1-6-3 (Preventive Maintenance Plan).

326 IAC 2-6 (Emission Reporting)

This source, located in Lake County, is not required to have a Part 70 operation permit and it does not emit volatile organic compounds (VOC) or oxides of nitrogen (NOx) at levels equal to or greater than twenty-five (25) tons per year; therefore, it is not subject to 326 IAC 2-6 (Emission Reporting).

Per Hammond Ordinance No. 7102, the source will be required to submit an annual emission inventory containing production information and/or fuel usage for each permitted unit. The emission inventory must be received by April 15th of each year. The submittal shall cover the twelve (12) consecutive month time period starting January 1 and ending December 31. This is a local requirement only.

326 IAC 5-1 (Opacity Limitations)

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

- (a) Opacity shall not exceed an average of twenty percent (20%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability – Individual Facilities

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

The operation of the Zinc Die Cast and Solder Lead Alloying Processes will emit less than 10 tons per year of a single HAP and less than 25 tons per year of a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

326 IAC 6.8-1-2 (Particulate emission limitations; fuel combustion steam generators, asphalt concrete plant, grain elevators, foundries, mineral aggregate operations; modification by commissioner)

Pursuant to 326 IAC 6.8-1-2(a), General sources: Facilities not limited by subsections (b) through (g) of this section, namely, the Zinc Die Cast and Solder Lead Alloying Processes, shall not allow or permit discharge to the atmosphere of any gases which contain particulate matter in excess of 0.07 gram per dry standard cubic meter (g/dscm) (0.03 grain per dry standard cubic foot (dscf)).

The American Air Bag Filter Dust Collector System shall be in operation at all times the Zinc Die Cast and Solder Lead Alloying Processes are in operation, in order to comply with this limit.

326 IAC 8-1-6 (VOC rules: General Reduction Requirements for New Facilities)

The requirements of 326 IAC 8-1-6 are not applicable to any facility at this source, since they each do not have the potential to emit greater than twenty-five (25) tons of VOCs per year.

Local Rule Applicability

Hammond Air Quality Control Ordinance No. 3522 (as amended)

Emissions from the combustion of natural gas are governed by the Hammond Air Quality Control Ordinance No. 3522 (as amended) for the following pollutants: Particulate Matter (PM), Sulfur Dioxide (SO₂), Volatile Organic Compound (VOC), Carbon Monoxide (CO), and Nitrogen Oxide (NO_x).

Compliance Determination and Monitoring Requirements

The Compliance Determination Requirements applicable to this source are as follows:

- (a) The Zinc Die Cast Alloying Process and Solder Lead Alloying Process have applicable compliance determination conditions as specified below:
 - (1) Pursuant to OP# 01601, issued on February 11, 2000, the American Air Bag Filter Dust Collector System for PM control shall be in operation at all times when the furnaces and melt kettles are in operation. All pot and furnace hoods and ductwork to the baghouse shall be considered part of the American Air Bag Filter Dust Collector emission control system and shall be inspected daily to assure that all hoods are situated properly and maintaining sufficient draft to the baghouse.
 - (2) 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.

The Compliance Monitoring Requirements applicable to this source are as follows:

- (b) The Zinc Die Cast Alloying Process and Solder Lead Alloying Process has applicable compliance monitoring conditions as specified below:
- (1) Visible emission notations of the Zinc Die Cast and Solder Lead Alloying Processes stack exhaust shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- 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.
- 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.
- 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.
- 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.
- (2) The Permittee shall record the pressure drop across the collector used in conjunction with the Zinc Die Cast and Solder Lead Alloying Processes, at least once per day when the Zinc Die Cast and Solder Lead Alloying Processes are in operation. When for any one reading, the pressure drop across the collector is outside the normal range of 1 to 2.5 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.
- 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 HDEM and shall be calibrated at least once every six (6) months.
- (3) An inspection shall be performed each week of all bags controlling the Zinc Die Cast and Solder Lead Alloying Processes. All defective bags shall be replaced. This is a local requirement only.
- (4) In the event that bag failure has been observed:
- (a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process

shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as a malfunction.

- (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. Operations may continue only if the event qualifies as a malfunction.

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

These monitoring conditions are necessary because the American Air Bag Filter Dust Collector System for the Zinc Die Cast Alloying Process and the Solder Lead Alloying Process must operate properly to ensure compliance with 326 IAC 6.8-1-2(a), Hammond Air Quality Control Ordinance No. 3522 (as amended) and 326 IAC 2-6.1 Minor Source Operating Permit Program.

Recommendation

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

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

An application for the purposes of this review was received on July 28, 2005.

Conclusion

The operation of this secondary nonferrous metals operation shall be subject to the conditions of the attached MSOP Renewal No. **M089-21474-00262**.

EFs from US EPA's FIRE Version 5.0 Source Classification Codes and Emission Factor Listing for Criteria Air Pollutants

Zinc Die Cast Alloy Casting

MDR (T/hr): 4.75
YEARLY PROD (T/yr): 1942

STACK ID (DIAM:HEIGHT): (2.4': 10')
FLOWRATE (ACFM): 25000
Ts(°F): 150

CNTRL DEV: American Air Bag Filter Dust Collector System

PERMITTED OPERATING HRS: 8760 hr/yr

SCC NO. 3-04-008-73			POTENTIAL EMISSIONS					
POLLUTANT	EF(LB/T produced)	CE (%)	BEFORE CONTROLS			AFTER CONTROLS		
			(lbs/hr)	(lbs/day)	(TPY)	(lbs/hr)	(TPY)	(gr/dscf)
PM	0.015	0.99	0.0713	1.7100	0.3121	0.0007	0.0031	0.0000
PM10	0.015	0.99	0.0713	1.7100	0.3121	0.0007	0.0031	0.0000
SOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A
NOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A
VOC	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A
CO	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A
LEAD	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A

EFs from US EPA's FIRE Version 5.0 Source Classification Codes and Emission Factor Listing for Criteria Air Pollutants

LEAD ALLOY PRODUCTION PROCESS

Kettle K6, K10, K11, K15-K17
(kettle sweating)

(MDR from MSOP application 9/29/99)

MDR (T/hr): 0.45
YEARLY PROD (T/yr): 199

STACK ID (DIAM:HEIGHT): (2.4': 10')
FLOWRATE (ACFM): 25000
Ts(°F): 150

CNTRL DEV: American Air Bag Filter Dust Collector System (99% CE)

PERMITTED OPERATING HRS: 8760 hr/yr

SCC NO. 3-04-004-014			POTENTIAL EMISSIONS					
POLLUTANT	EF(LB/T charged)	CE (%)	BEFORE CONTROLS			AFTER CONTROLS		
			(lbs/hr)	(lbs/day)	(TPY)	(lbs/hr)	(TPY)	(gr/dscf)
PM	0.002	0.99	0.0009	0.0216	0.0039	0.0000	0.0000	0.0000
PM10	0.002	0.99	0.0009	0.0216	0.0039	0.0000	0.0000	0.0000
SOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A
NOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A
VOC	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A
CO	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A
LEAD	0.0006	0.99	0.0003	0.0065	0.0012	0.0000	0.0000	N/A

EFs from US EPA's FIRE Version 5.0 Source Classification Codes and Emission Factor Listing for Criteria Air Pollutants

*Per N. Berg (9/15/03), K6 throughput approximately 70% of total lead processed. Furnace F3 is used to process the other 30%.

**Reverberatory Furnace F3
(Sweating Furnace)**

(MDR from MSOP application 9/29/99)

MDR (T/hr): 0.2

YEARLY PROD (T/yr): 244

STACK ID (DIAM:HEIGHT): (2.4': 10')

FLOWRATE (ACFM): 25000

Ts(°F): 150

CNTRL DEV: American Air Bag Filter Dust Collector System (99% CE)

PERMITTED OPERATING HRS: **8760** hr/yr

SCC NO. 3-04-004-05			POTENTIAL EMISSIONS					
			BEFORE CONTROLS			AFTER CONTROLS		
POLLUTANT	EF(LB/T charged)	CE (%)	(lbs/hr)	(lbs/day)	(TPY)	(lbs/hr)	(TPY)	(gr/dscf)
PM	51	0.99	10.2000	244.8000	44.6760	0.1020	0.4468	0.0005
PM10	31	0.99	6.2000	148.8000	27.1560	0.0620	0.2716	0.0003
SOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A
NOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A
VOC	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A
CO	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A
LEAD	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A

EFs from US EPA's FIRE Version 5.0 Source Classification Codes and Emission Factor Listing for Criteria Air Pollutants

**Solder Kettle Refining (K12, K13, K14)
(melting of lead sows)**

(MDRs from MSOP application 9/29/99)

MDR (T/hr): 2.60

YEARLY PROD (T/yr): 271

STACK ID (DIAM:HEIGHT): (2.4': 10')

FLOWRATE (ACFM): 25000

Ts(°F): 150

CNTRL DEV: American Air Bag Filter Dust Collector System (99% CE)

PERMITTED OPERATING HRS: **8760** hr/yr

SCC NO. 3-04-004-26			POTENTIAL EMISSIONS					
			BEFORE CONTROLS			AFTER CONTROLS		
POLLUTANT	EF(LB/T produced)	CE (%)	(lbs/hr)	(lbs/day)	(TPY)	(lbs/hr)	(TPY)	(gr/dscf)
PM	0.03	0.99	0.0779	1.8684	0.3410	0.0008	0.0034	0.0000
PM10	0	0.99	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A
NOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A
VOC	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A
CO	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A
LEAD	0.01	0.99	0.0260	0.6228	0.1137	0.0003	0.0011	N/A

*Per N. Berg (9/15/03), K14 is the only kettle used for lead processing, K12 & K13 are used for tin melting.

EFs from US EPA's FIRE Version 5.0 Source Classification Codes and Emission Factor Listing for Criteria Air Pollutants

Solder & Lead Alloy Casting

MDR (T/hr): 3.25
 YEARLY PROD (T/yr): 271

STACK ID (DIAM:HEIGHT): (2.4': 10')
 FLOWRATE (ACFM): 25000
 Ts(°F): 150

CNTRL DEV: American Air Bag Filter Dust Collector System (99% CE)

PERMITTED OPERATING HRS: **8760** hr/yr

SCC NO. 3-04-004-09			POTENTIAL EMISSIONS					
POLLUTANT	EF(LB/T cast)	CE (%)	BEFORE CONTROLS			AFTER CONTROL		
			(lbs/hr)	(lbs/day)	(TPY)	(lbs/hr)	(TPY)	(gr/dscf)
PM	0.04	0.99	0.1298	3.1152	0.5685	0.0013	0.0057	0.0000
PM10	0.87	0.99	2.8232	67.7556	12.3654	0.0282	0.1237	0.0002
SOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A
NOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A
VOC	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A
CO	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A
LEAD	0.01	0.99	0.0325	0.7788	0.1421	0.0003	0.0014	N/A

EFs from US EPA's FIRE Version 5.0 Source Classification Codes and Emission Factor Listing for Criteria Air Pollutants

**All Process Fuel Use (Natural Gas Only)
 Including Holding Kettles (K-19, K-20, and K-21)**

(MDCs from MSOP application 9/29/99)

MDC (MMBtu/hr): 18.6
 MDR (MMcft/hr): 0.019

HEAT CONTENT (Btu/cft): 1000
 QTY BURNED (MMcft/yr): 25.08

STACK ID (DIAM:HEIGHT): (2.4': 10')
 FLOWRATE (ACFM): 25000
 Ts(°F): 150

CNTRL DEV: American Air Bag Filter Dust Collector System (99% CE)

PERMITTED OPERATING HRS: **8760** hr/yr

EFs from AP 42 section 1.4 SCC NO. 1-02-006-03			POTENTIAL EMISSIONS					
POLLUTANT	EF(lbs/mmcf)	CE (%)	BEFORE CONTROLS			AFTER CONTROLS		
			(lbs/hr)	(lbs/day)	(TPY)	(lbs/hr)	(TPY)	(gr/dscf)
PM	12	0.99	0.2232	5.3568	0.9776	0.0022	0.0098	N/A
PM10	12	0.99	0.2232	5.3568	0.9776	0.0022	0.0098	N/A
SOx	0.6	0	0.0112	0.2678	0.0489	0.0112	0.0489	N/A
NOx	100	0	1.8600	44.6400	8.1468	1.8600	8.1468	N/A
VOC	5.5	0	0.1023	2.4552	0.4481	0.1023	0.4481	N/A
CO	21	0	0.3906	9.3744	1.7108	0.3906	1.7108	N/A
LEAD	0.0005	0	0.0000	0.0002	0.0000	0.0000	0.0000	N/A

Saxon Metals, Inc. - Totals

POLLUTANT	BEFORE CONTROLS			AFTER CONTROLS			ALLOWABLE	
	(lbs/hr)	(lbs/day)	(TPY)	(lbs/hr)	(TPY)	(gr/dscf)	(lbs/hr)	(TPY)
PM	15.262	366.283	66.847	0.153	0.668	N/A	5.585	24.464
PM10	13.877	333.055	60.783	0.139	0.608	N/A	5.585	24.464
SOx	0.011	0.268	0.049	0.011	0.049	N/A	0.044	0.000
NOx	1.860	44.640	8.147	1.860	8.147	N/A	0.000	0.000
VOC	0.942	22.615	4.127	0.942	4.127	N/A	0.000	0.000
CO	0.391	9.374	1.711	0.391	1.711	N/A	0.000	0.000
LEAD	0.059	1.408	0.257	0.001	0.003	N/A	0.000	0.000

326 IAC 6.8-1-2(a)
 0.03 gr/dscf
 Combined total source limit