

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

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

Eric J. Holcomb

Governor

Bruno L. Pigott

Commissioner

To: Interested Parties

Date: December 22, 2017

From: Jenny Acker, Chief

Permits Branch Office of Air Quality

Source Name: Whiting Metals, LLC

Permit Level: MSOP Renewal

Permit Number: 089 38168 00262

Source Location: 2230 Indianapolis Boulevard, Hammond, Indiana

Type of Action Taken: Permit Renewal

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 matter referenced above.

The final decision is available on the IDEM website at: http://www.in.gov/apps/idem/caats/
To view the document, choose Search Option by Permit Number, then enter permit 38168.

The final decision is also available via IDEM's Virtual File Cabinet (VFC). Please go to: http://www.IN.idem/gov and enter VFC in the search box. You will then have the option to search for permit documents using a variety of criteria.

(continues on next page)





If you would like to request a paper copy of the permit document, please contact IDEM's Office of Records Management:

IDEM - Office of Records Management Indiana Government Center North, Room 1207 100 North Senate Avenue Indianapolis, IN 46204 Phone: (317) 232-8667

Fax: (317) 233-6647

Email: IDEMFILEROOM@idem.in.gov

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 N103, 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);
- 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.



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

100 N. Senate Avenue . Indianapolis, IN 46204

(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Eric J. Holcomb Governor

Bruno L. Pigott Commissioner

Minor Source Operating Permit Renewal OFFICE OF AIR QUALITY

Whiting Metals, LLC 2230 Indianapolis Boulevard Hammond, 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.

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.

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.

Operation Permit No.: M089-38168-00262		
Issued by:	Issuance Date:	December 22, 2017
Jason R. Krawczyk, Section Chief Permits Branch Office of Air Quality	Expiration Date:	December 22, 2027



TABLE OF CONTENTS

SECTIO	N A	SOURCE SUMMARY	. 4
	A.1 A.2	General Information [326 IAC 2-5.1-3(c)][326 IAC 2-6.1-4(a)] Emission Units and Pollution Control Equipment Summary	
SECTIO	N B	GENERAL CONDITIONS	. 6
	B.1 B.2 B.3 B.4 B.5 B.6 B.7 B.8 B.9 B.10 B.11 B.12 B.13 B.14 B.15	Definitions [326 IAC 2-1.1-1] Permit Term [326 IAC 2-6.1-7(a)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)] Term of Conditions [326 IAC 2-1.1-9.5] Enforceability Severability Property Rights or Exclusive Privilege Duty to Provide Information Annual Notification [326 IAC 2-6.1-5(a)(5)] Preventive Maintenance Plan [326 IAC 1-6-3] Prior Permits Superseded [326 IAC 2-1.1-9.5] Termination of Right to Operate [326 IAC 2-6.1-7(a)] Permit Renewal [326 IAC 2-6.1-7] Permit Amendment or Revision [326 IAC 2-5.1-3(e)(3)][326 IAC 2-6.1-6] Source Modification Requirement 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 13-3 0-3-1] Transfer of Ownership or Operational Control [326 IAC 2-6.1-6] Annual Fee Payment [326 IAC 2-1.1-7] Credible Evidence [326 IAC 1-1-6]	
SECTIO	N C	SOURCE OPERATION CONDITIONS	11
	Emissi C.1 C.2 C.3 C.4 C.5 C.6 C.7	Permit Revocation [326 IAC 2-1.1-9] Opacity [326 IAC 5-1] Open Burning [326 IAC 4-1] [IC 13-17-9] Incineration [326 IAC 4-2] [326 IAC 9-1-2] Fugitive Dust Emissions [326 IAC 6-4] Fugitive Particulate Matter Emissions [326 IAC 6.8-10-3] Stack Height [326 IAC 1-7] Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]	11
	Testing C.9	Performance Testing [326 IAC 3-6]	14
	Compli C.10	compliance Requirements [326 IAC 2-1.1-11]	15
	Compli C.11 C.12	Compliance Monitoring [326 IAC 2-6.1-5(a)(2)]	15
	Correc C.13 C.14	tive Actions and Response Steps	15
	Record C.15 C.16	Keeping and Reporting Requirements [326 IAC 2-6.1-5(a)(2)]	16

C.1	7 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]
SECTION I	0.1 EMISSIONS UNIT OPERATION CONDITIONS18
D.1 D.1	.2
D.1	
	mpliance Determination Requirements [326 IAC 2-6.1-5(a)(2)]
Co D.1 D.1	
Red D.1	cord Keeping and Reporting Requirements [326 IAC 2-6.1-5(a)(2)]20 .7 Record Keeping Requirements
SECTION I	0.2 EMISSIONS UNIT OPERATION CONDITIONS21
Em D.2 D.2	
	npliance Monitoring Requirements [326 IAC 2-6.1-5(a)(2)]
SECTION E	E.1 NESHAP21
Nat	ional Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements [326 IAC 2-6.1-5(a)(1)]Error! Bookmark not defined.
E.1	
E.1	.2 NESHAP Subpart TTTTTT Requirements [40 CFR Part 63, Subpart TTTTTT]
ANNUAL N	OTIFICATION22
MALFUNC	TION REPORT23

Whiting Metals, LLC Page 4 of 24
Hammond, Indiana M089-38168-00262

Permit Reviewer: Hannah Bays

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 a stationary secondary nonferrous metals operation.

Source Address: 2230 Indianapolis Boulevard, Hammond, Indiana 46394

General Source Phone Number: 219-659-6955

SIC Code: 3341 (Secondary Smelting and Refining of Nonferrous

Metals)

County Location: Lake

Source Location Status: Nonattainment for 8-hour ozone standard

Attainment for all other criteria pollutants

Source Status: Minor Source Operating Permit Program

Minor Source, under PSD and Emission Offset 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) The Solder and Lead Scrap Reclamation and Blending 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:
 - (1) Reverberatory Sweat Furnace, identified as F-3, with a maximum design rate of 0.2 T/hr, a maximum heat input rate of 3.0 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1998, and exhausting to stack S-BH.
 - (2) Sweat Kettle, identified as K6, with a maximum design rate of 1.8 T/hr, a maximum heat input rate of 2.5 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1990, and exhausting to stack S-BH.
 - (3) Sweat Kettle, identified as K10, with a maximum design rate of 0.05 T/hr, a maximum heat input rate of 0.25 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1990, and exhausting to stack S-BH.
 - (4) Sweat Kettle, identified as K11, with a maximum design rate of 0.05 T/hr, a maximum heat input rate of 0.25 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1990, and exhausting to stack S-BH.
 - (5) Sweat Kettle, identified as K15, with a maximum design rate of 0.05 T/hr, a maximum heat input rate of 0.25 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1990, and exhausting to stack S-BH.
 - (6) Cast Iron Melting Pot , identified as K12, with a maximum design rate of 0.3 T/hr,

Whiting Metals, LLC Page 5 of 24 Hammond, Indiana M089-38168-00262

Permit Reviewer: Hannah Bays

a maximum heat input rate of 0.5 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1985, and exhausting to stack S-BH.

- (7) Cast Iron Melting Pot , identified as K13, with a maximum design rate of 0.3 T/hr, a maximum heat input rate of 0.5 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1985, and exhausting to stack S-BH.
- (8) Cast Iron Melting Pot, identified as K14, with a maximum design rate of 0.4 T/hr, a maximum heat input rate of 1.25 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1985, and exhausting to stack S-BH.
- (b) The reclamations of tin-coated brass punchings through agitation in one (1) of five (5) rotary mixers containing heated caustic solution. Each mixer is equipped with a 0.4 MMBtu/hr. natural gas burner to heat the caustic solution. Particulate emissions generated while unloading detinned brass punchings from the mixers into shipping containers shall be controlled by one (1) of three (3) portable Dust Collectors with manufacturer's rated control efficiency of 99.9% each. The maximum design rate of the process is 12 tons per hour.

Whiting Metals, LLC Hammond, Indiana Permit Reviewer: Hannah Bays

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, M089-38168-00262, is issued for a fixed term of ten (10) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.
- (b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, until the renewal permit has been issued or denied.

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

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

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

B.4 Enforceability

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

B.5 Severability

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

B.6 Property Rights or Exclusive Privilege

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

B.7 Duty to Provide Information

- (a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. 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.

Whiting Metals, LLC Hammond, Indiana Permit Reviewer: Hannah Bays

B.8 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:

Indiana Department of Environmental Management Compliance and Enforcement Branch, Office of Air Quality 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.9 Preventive Maintenance Plan [326 IAC 1-6-3]

- (a) A Preventive Maintenance Plan meets the requirements of 326 IAC 1-6-3 if it includes, at a minimum:
 - (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.

The Permittee shall implement the PMPs.

- (b) If required by specific condition(s) in Section D of this permit where no PMP was previously required, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) no later than ninety (90) days after issuance of this permit or ninety (90) days after initial start-up, whichever is later, including the following information on each facility:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

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

Indiana Department of Environmental Management Compliance and Enforcement Branch, Office of Air Quality Whiting Metals, LLC Page 8 of 24 Hammond, Indiana M089-38168-00262

Permit Reviewer: Hannah Bays

100 North Senate Avenue MC 61-53 IGCN 1003 Indianapolis, Indiana 46204-2251

The Permittee shall implement the PMPs.

- (c) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions.
- (d) 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.10 Prior Permits Superseded [326 IAC 2-1.1-9.5]

- (a) All terms and conditions of permits established prior to M089-38168-00262 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.11 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 one hundred twenty (120) days prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-6.1-7.

B.12 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 an affirmation that the statements in the application are true and complete 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 Permit Administration and Support Section, 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 one hundred twenty (120) 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

Page 9 of 24 M089-38168-00262

Whiting Metals, LLC Hammond, Indiana Permit Reviewer: Hannah Bays

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, pursuant to 326 IAC 2-6.1-4(b), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.13 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 Permit Administration and Support Section, Office of Air Quality 100 North Senate Avenue MC 61-53 IGCN 1003 Indianapolis, Indiana 46204-2251

(c) The Permittee shall notify the OAQ no later than thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

B.14 Source Modification Requirement

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

B.15 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

Permit Reviewer: Hannah Bays

(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.16 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 Permit Administration and Support Section, 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 an affirmation that the statements in the application are true and complete 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.17 Annual Fee Payment [326 IAC 2-1.1-7]

- (a) The Permittee shall pay annual fees due no later than thirty (30) calendar days of receipt of a bill from IDEM, OAQ,.
- (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.18 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, 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 5-1-1 (Applicability) and 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 nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

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

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

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

The Permittee shall not operate an incinerator except as provided in 326 IAC 4-2 or in this permit. The Permittee shall not operate a refuse incinerator or refuse burning equipment except as provided in 326 IAC 9-1-2 or in this permit.

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).

Whiting Metals, LLC Page 12 of 24 Hammond, Indiana M089-38168-00262

Permit Reviewer: Hannah Bays

C.6 Fugitive Particulate Matter 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 opacity of fugitive particulate emissions from exposed areas shall not exceed ten percent (10%) on a six (6) minute average.
- (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) Material processing facilities shall include the following:
 - (1) 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.
 - (2) 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.
 - (3) The PM₁₀ stack emissions from a material processing facility shall not exceed twenty-two thousandths (0.022) grains per dry standard cubic foot and ten percent (10%) opacity.
 - (4) The opacity of fugitive particulate emissions from the material processing facilities, except a crusher at which a capture system is not used, shall not exceed ten percent (10%) opacity.
 - (5) The opacity of fugitive particulate emissions from a crusher at which a capture system is not used shall not exceed fifteen percent (15%).
- (i) The opacity of particulate emissions from dust handling equipment shall not exceed ten percent (10%).
- (j) Material transfer limits shall be as follows:
 - (1) The average instantaneous opacity of fugitive particulate emissions from batch transfer shall not exceed ten percent (10%).

Whiting Metals, LLC Page 13 of 24 Hammond, Indiana M089-38168-00262

Permit Reviewer: Hannah Bays

Where adequate wetting of the material for fugitive particulate emissions control is prohibitive to further processing or reuse of the material, the opacity shall not exceed ten percent (10%), three (3) minute average.

- (3) Slag and kish handling activities at integrated iron and steel plants shall comply with the following particulate emissions limits:
 - (A) The opacity of fugitive particulate emissions from transfer from pots and trucks into pits shall not exceed twenty percent (20%) on a six (6) minute average.
 - (B) The opacity of fugitive particulate emissions from transfer from pits into front end loaders and from transfer from front end loaders into trucks shall comply with the fugitive particulate emission limits in 326 IAC 6.8-10-3(9).
- (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.

The Permittee shall achieve these limits by controlling fugitive particulate matter emissions according to the attached Fugitive Dust Control Plan.

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).

Whiting Metals, LLC Hammond, Indiana Permit Reviewer: Hannah Bays

(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 Compliance and Enforcement Branch, Office of Air Quality 100 North Senate Avenue MC 61-53 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.

- (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 Licensed 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 Licensed Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Licensed 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) For performance testing required by this permit, a test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management Compliance and Enforcement Branch, 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.

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date.
- (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.

Page 15 of 24 M089-38168-00262

Whiting Metals, LLC Hammond, Indiana Permit Reviewer: Hannah Bays

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 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. The analog instrument shall be capable of measuring values outside of the normal range.
- (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.13 Response to Excursions or Exceedances

Upon detecting an excursion where a response step is required by the D Section or an exceedance of a limitation in this permit:

- (a) The Permittee shall take reasonable response steps to 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 excess emissions.
- (b) The response shall include minimizing the period of any startup, shutdown or malfunction. The response may include, but is not limited to, the following:
 - (1) initial inspection and evaluation;
 - (2) recording that operations returned or are returning 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 normal or usual manner of operation.
- (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:

Whiting Metals, LLC Page 16 of 24 Hammond, Indiana M089-38168-00262

Permit Reviewer: Hannah Bays

- (1) monitoring results;
- (2) review of operation and maintenance procedures and records; and/or
- (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 record the reasonable response steps taken.

C.14 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 submit a description of its response actions to IDEM, OAQ, no later than seventy-five (75) days after the date of the test.
- (b) A retest to demonstrate compliance shall be performed no later than one hundred eighty (180) days after the date of the test. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred eighty (180) 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.

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

C.15 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.16 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

Page 17 of 24 M089-38168-00262

Whiting Metals, LLC Hammond, Indiana Permit Reviewer: Hannah Bays

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, for all record keeping requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or the date of initial start-up, whichever is later, to begin such record keeping.

C.17 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 and Enforcement Branch, 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) 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.

Hammond, Indiana
Permit Reviewer: Hannah Bays

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (a) 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:
 - (1) Reverberatory Sweat Furnace, identified as F-3, with a maximum design rate of 0.2 T/hr, a maximum heat input rate of 3.0 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1998, and exhausting to stack S-BH.
 - (2) Sweat Kettle, identified as K6, with a maximum design rate of 1.8 T/hr, a maximum heat input rate of 2.5 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1990, and exhausting to stack S-BH.
 - (3) Sweat Kettle, identified as K10, with a maximum design rate of 0.05 T/hr, a maximum heat input rate of 0.25 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1990, and exhausting to stack S-BH.
 - (4) Sweat Kettle, identified as K11, with a maximum design rate of 0.05 T/hr, a maximum heat input rate of 0.25 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1990, and exhausting to stack S-BH.
 - (5) Sweat Kettle, identified as K15, with a maximum design rate of 0.05 T/hr, a maximum heat input rate of 0.25 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1990, and exhausting to stack S-BH.
 - (6) Cast Iron Melting Pot, identified as K12, with a maximum design rate of 0.3 T/hr, a maximum heat input rate of 0.5 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1985, and exhausting to stack S-BH.
 - (7) Cast Iron Melting Pot, identified as K13, with a maximum design rate of 0.3 T/hr, a maximum heat input rate of 0.5 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1985, and exhausting to stack S-BH.
 - (8) Cast Iron Melting Pot, identified as K14, with a maximum design rate of 0.4 T/hr, a maximum heat input rate of 1.25 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1985, and exhausting to stack S-BH.

(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 Limitations for Lake County [326 IAC 6.8-1-2(a)]

Pursuant to 326 IAC 6.8-1-2(a), particulate matter emissions shall not exceed seven-hundredths (0.07) gram per dry standard cubic meter (g/dscm) (three-hundredths (0.03) grain per dry standard cubic foot (dscf)) for the following emissions units:

The Solder and Lead Scrap Reclamation and Blending Process:

- (a) Reverberatory Sweat Furnace F-3
- (b) Sweat Kettle K6
- (c) Sweat Kettle K10

Page 19 of 24 M089-38168-00262

Whiting Metals, LLC Hammond, Indiana Permit Reviewer: Hannah Bays

- (d) Sweat Kettle K11
- (e) Sweat Kettle K15
- (f) Cast Iron Melting Pot K12
- (g) Cast Iron Melting Pot K13
- (h) Cast Iron Melting Pot K14

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

A Preventive Maintenance Plan is required for these facilities and their emission control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

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

D.1.3 Particulate Control

- (a) In order to assure compliance with the Condition D.1.1, the American Air Bag Filter Dust Collector System for particulate control shall be in operation and control emissions from the furnaces and melt kettles 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.1.4 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. Failure to take response steps shall be considered a deviation from this permit. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition.

D.1.5 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

Page 20 of 24 M089-38168-00262

Whiting Metals, LLC Hammond, Indiana Permit Reviewer: Hannah Bays

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

D.1.6 Record Keeping Requirements

- (a) To document the compliance status with Condition D.1.4, 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).
- (b) Section C General Record Keeping Requirements contains the Permittee's obligation with regard to the record keeping required by this condition.

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(c) The reclamation of tin-coated brass punchings through agitation in one (1) of five (5) rotary mixers containing heated caustic solution. Each mixer is equipped with a 0.4 MMBtu/hr natural gas burner to heat the caustic solution. Particulate emissions generated while unloading detinned brass punchings from the mixers into shipping containers shall be controlled by one (1) of three (3) portable Dust Collectors with manufacturer's rated control efficiency of 99.9% each. The maximum design rate of the process is 12 tons per hour.

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

Pursuant to 326 IAC 6.8-1-2(a), particulate matter emissions from each of the rotary mixers and their natural gas burners shall not exceed seven-hundredths (0.07) gram per dry standard cubic meter (g/dscm) (three-hundredths (0.03) grain per dry standard cubic foot (dscf)).

D.2.2 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan is required for these facilities and their emission control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements [326 IAC 2-6.1-5(a)(1)]

D.2.3 Particulate Control

In order to assure compliance with the Condition D.2.1, a portable dust collector for particulate control shall be in operation and control emissions from the rotary mixer unloading operations at all times while unloading is occurring.

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

D.2.4 Dust Collector Inspections

An inspection shall be performed each calendar quarter on each dust collector used to control the rotary mixer unloading operations. Inspections required by this condition shall not be performed in consecutive months. All defective bags shall be replaced.

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

D.2.5 Record Keeping Requirements

- (a) To document the compliance status with Condition D.2.4, the Permittee shall maintain records of the results of the inspections required under Condition D.2.4.
- (b) Section C General Record Keeping Requirements contains the Permittee's obligation with regard to the record keeping required by this condition.

Page 22 of 24 M089-38168-00262

Whiting Metals, LLC Hammond, Indiana Permit Reviewer: Hannah Bays

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE AND ENFORCEMENT 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).

Company Name:	Whiting Metals, LLC	
Address:	2230 Indianapolis Boulevar	d
City:	Hammond, Indiana 46394	
Phone #:	219-659-6955	
MSOP #:	M089-38168-00262	
I hereby certify that Wh	niting Metals, LLC is :	□ still in operation.□ no longer in operation.
I hereby certify that Wh	niting Metals, LLC is :	☐ in compliance with the requirements of MSOP M089-38168-00262. ☐ not in compliance with the requirements of MSOP M089-38168-00262.
Authorized Individua	al (typed):	
Title:		
Signature:		
Date:		
		the source is not in compliance, provide a narrative pliance and the date compliance was, or will be
Noncompliance:		
1		

Whiting Metals, LLC Hammond, Indiana Permit Reviewer: Hannah Bays

MALFUNCTION REPORT

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE AND ENFORCEMENT BRANCH FAX NUMBER: (317) 233-6865

This form should only be u and to qual	sed to report malfunc	tions applicable to R under 326 IAC 1-6-4.	ule 326 IAC 1-6	į	
THIS FACILITY MEETS THE APPLICABILITY REC PARTICULATE MATTER?, 25 TONS/YEAR 25 TONS/YEAR VOC?, 25 TONS/YEAR HY?, 25 TONS/YEAR REDUCED SULFUR CO CARBON MONOXIDE?, 10 TONS/YEAR AI COMBINATION HAZARDOUS AIR POLLUTANT? ELEMENTAL LEAD?, OR IS A SOURCE LISMALFUNCTIONING CONTROL EQUIPMENT OR LIMITATION	SULFUR DIOXIDE? DROGEN SULFIDE? MPOUNDS?, 29 NY SINGLE HAZARDO , 1 TON/YEAR L STED UNDER 326 IAC	, 25 TONS/YEAF , 25 TONS/YEAF 5 TONS/YEAR FLUOR US AIR POLLUTANT EAD OR LEAD COMP 2-5.1-3(2) ? E	R NITROGEN O R TOTAL REDU LIDES ?, ?, 25 TOI OUNDS MEAS MISSIONS FRO	XIDES?_ CED SUI 100 TON: NS/YEAR URED AS OM	FUR S/YEAR ANY
THIS MALFUNCTION RESULTED IN A VIOLATIO PERMIT LIMIT OF	N OF: 326 IAC	OR, PERMIT COND	ITION #	_ AND/C	R
THIS INCIDENT MEETS THE DEFINITION OF "MA	ALFUNCTION" AS LIS	TED ON REVERSE SI	DE? Y	N	
THIS MALFUNCTION IS OR WILL BE LONGER TO	HAN THE ONE (1) HO	JR REPORTING REQ	UIREMENT?	Υ	N
COMPANY:		PHONE NO.	()		
LOCATION: (CITY AND COUNTY)_ PERMIT NO AFS PLANT ID:	ΔFS	S POINT ID:	INSP		
CONTROL/PROCESS DEVICE WHICH MALFUNCT	TONED AND REASON	:			
DATE/TIME MALFUNCTION STARTED:/_ ESTIMATED HOURS OF OPERATION WITH MALF					
DATE/TIME CONTROL EQUIPMENT BACK-IN SE	RVICE/_	/ 20	AM/PM		
TYPE OF POLLUTANTS EMITTED: TSP, PM-10,	SO2, VOC, OTHER:_				_
ESTIMATED AMOUNT OF POLLUTANT EMITTED	DURING MALFUNCTION	DN:			
MEASURES TAKEN TO MINIMIZE EMISSIONS:					
REASONS WHY FACILITY CANNOT BE SHUTDOV	VN DURING REPAIRS				
CONTINUED OPERATION REQUIRED TO PROVIDE <u>ESSENTIAL</u> * 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:(SIGNATURE IF FAXED)		_TITLE:			
MALFUNCTION RECORDED BY:*SEE PAGE 2	DATE:	TIME	<u>:</u>		

Whiting Metals, LLC Hammond, Indiana Permit Reviewer: Hannah Bays

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

Addendum to the Technical Support Document (ATSD) for a Minor Source Operating Permit (MSOP) Renewal

Source Background and Description

Source Name: Whiting Metals, LLC

Source Location: 2230 Indianapolis Boulevard, Hammond, IN 46394

County: Lake

SIC Code: 3341 (Secondary Smelting and Refining of Nonferrous Metals)

Permit Renewal No.: M089-38168-00262 Permit Reviewer: Hannah Bays

On April 15, 2017 the Office of Air Quality (OAQ) had a notice published in the Post Tribune In Merrillville Indiana, and The Times in Munster, Indiana stating that Whiting Metals, LLC had applied for an MSOP Renewal relating to the operation of a secondary nonferrous metals operation The notice also stated that the OAQ proposed to issue a MSOP Renewal for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

Comments and Responses

During the Public Notice Period between April 15, 2017 and May 15, 2017, the IDEM OAQ received comments on the draft MSOP from the following parties:

- Gayle Tonkovich, May 8, 2017
- Elizabeth Sandoval, May 10, 2017
- Peter Beda, May 10, 2017
- Janet Venecz, President Hammond Common Council, May 11, 2017
- Marilou Tonkovich, May 11, 2017
- David Dabertin, May 14, 2017
- Ronald L. Novak, Director City of Hammond Environmental Department, May 15, 2017
- Michael Langman, Environmental Scientist US EPA Region 5, May 15, 2017
- Whiting Metals, November 27, 2017

The Technical Support Document (TSD) is used by IDEM, OAQ for historical purposes. IDEM, OAQ does not make any changes to the original TSD, but the Permit will have the updated changes. The comments and revised permit language are provided below with deleted language as strikeouts and new language bolded.

General Comments

General Comment 1 (Gayle Tonkovich):

I am writing in regards to the request by Whiting Metals to renew an air pollution permit for its facility at 2230 Indianapolis Blvd. in Hammond. I am deeply troubled that this request is even being considered in light of the fact that none of the area residents had any prior knowledge of this metal processing facility being in operation. It is my understanding that they were smelting recycled metals, including lead, without any municipal authority's knowledge. Once again, the residents of northwest Lake County have been

Whiting Metals, LLC Whiting, Indiana ATSD for MSOP Renewal No. M089-38168-00262

Permit Reviewer: Hannah Bays

taken advantage of while other people gain from damaging the environment.

I oppose the granting of any licenses to operate any industrial facility at this location and request a public hearing be scheduled prior to any further action. The U.S. E.P.A. mandated millions of dollars-worth of cleanup at this facility from prior decades of industrial waste. Why does anyone think it reasonable to now reopen a metal processing facility at the same location? Why should our neighborhood be subjected to more industrial waste than we already endure? Authorizing any additional air, water, or solid pollution permits to occur in the Whiting-Robersdale area is unacceptable.

I urge the Indiana Department of Environmental Management to schedule public hearings as well as oppose any new or renewed licensing for Whiting Metals.

Response to General Comment 1:

The following types of public notice were provided as part of this permit application and draft permit:

- (a) The applicant placed a copy of the permit application for public review at the Hammond Public Library located at 564 State Street, Hammond, IN 46320;
- (b) The commissioner provided notice of a permit application to the following local government officials:
 - (1) East Chicago City Council 4525 Indianapolis Blvd East Chicago IN 46312;
 - (2) Lake County Health Department-Gary 1145 W. 5th Ave Gary IN 46402-1795;
 - (3)Lowell Town Council and Town Manager PO Box 157, 501 East Main Street Lowell IN 46356: and
 - (4) Lake County Commissioners 2293 N. Main St, Building A 3rd Floor Crown Point IN 46307; and
 - Whiting City Council and Mayors Office 1143 119th St., Whiting, IN 46394; and
 - (6)Lake County Commissioners, 2293 N. Main St., Building A, 3rd Floor, Crown Point, IN 46307; and
 - Gary City Council, 401 Broadway #209, Gary, IN 46402. (7)
- The commissioner published a 30-day notice requesting comment on the proposed permit (c) approval on April 15, 2017, in the Post Tribune in Merrillville, Indiana;
- (d) The commissioner provided a document supporting the proposed permit for public inspection in the offices of the local air pollution control agency or the local health commissioner; and
- (e) The commissioner allowed a period of at least thirty (30) calendar days opportunity for public comment.

Federated Metals Corporation operated at the location from 1937 to 1983 and the property was sold in 1985. On November 8, 2000, Saxon Metals, Inc. was issued a Minor Source Operating Permit (M089-11411-00262) to operate a secondary nonferrous metals operation at 2230 Indianapolis Boulevard in Whiting. In 2007, ownership of the company was taken over by Northern Indiana Metals and the source operated as Northern Indiana Metals dba Saxon Metals, Inc. In 2009, the source name was changed to Whiting Metals, LLC. The source has been in continuous operation for the past seventeen years and has applied for their Minor Source Operating Permit Renewal for approval to continue to operate.

The Office of Air Quality issues air pollution control permits to facilities that emit regulated levels of pollutants to the air. Permits require sources to comply with all health-based and technology-based standards established by the U.S. EPA and the Indiana Environmental Rules Board. If an applicant demonstrates that they will be able to comply with all Federal and State laws regarding air pollution, IDEM is required by law to issue the air permit. For information on how to get involved in Indiana's Environmental Rulemaking Process, please go to http://www.in.gov/idem/rules/involved.html.

Whiting Metals, LLC Whiting, Indiana

Permit Reviewer: Hannah Bays

No changes were made as a result of this comment.

General Comment 2 (Elizabeth Sandoval):

I have a huge concern with the approval renewal for this company. Absolute safety needs to come first.

Response to General Comment 2:

The IDEM, OAQ issues permits to facilities that emit regulated levels of pollutants to the air. Permits require sources to comply with all health-based and technology-based standards established by the U.S. EPA and the Indiana Environmental Rules Board. If an applicant demonstrates that they will be able to comply with all Federal and State laws regarding air pollution, IDEM is required by law to issue the air permit.

No changes were made as a result of this comment.

General Comment 3 (Peter Beda):

I have some comments about the permit renewal for Whiting Metals. I first complained on 8/3/12 about emissions and noise levels from this facility. Here is a copy of the email response I received:

relstro@idem.in.gov 08/03/12 at 12:21 PM

My name is Robert Elstro and I am the Complaint Coordinator for the Indiana Department of Environmental Management (IDEM). I want to let you know your complaint has been received and will be reviewed. You may be contacted again by IDEM staff to obtain additional information and/or notify you of the investigation findings. Please note, IDEM's policy is to take the first action in response to a complaint within 30 days of receiving the complaint, and to address each complaint within 90 days. Your patience is appreciated. If you have additional information or questions, or would like an update on the status of the complaint investigation, please contact me at (800) 451-6027 ext.24464.

Sincerely,

Robert Elstro Complaint Coordinator IDEM, Office of External Affairs relstro@idem.in.gov

Select_Complaint: Individual

Reported_Elsewhere: No

Complainant_Name: Peter Beda Complaint_About: Pollution

Responsible_Party_Name: Whiting Metals,LLC

Responsible_Party_St_Address: 41.673573,-87.496427 (GPS coordinates)

2230 Indianapolis Boulevard, Whiting, IN

Responsible_Party_City: Whiting
Responsible_Party_County: Lake
Responsible_Party_State: IN
Responsible Party Zip: 46394

Responsible Party Phone: 219-659-6955

Directions_to_Site:

How Aware of Complaint: I walk on the Lake George Trail north of it.

Where the Activity Occurs: GPS coordinates 41.673573,-87.496427 or on northwest side of

building complex where ductwork and fans are.

Permit Reviewer: Hannah Bays

Nature_of_Complaint: High levels of emissions causing difficulty breathing Also noise

levels cause distress to residents

Date_of_complaint: Most recently August 2, 2012

Additional_Comments: The noise has been going on since I first walked on the trail over

a year ago. The emissions have increased recently to the point I

had difficulty breathing yesterday, 8/2/2012

Recently, from 3/4/17 to today 5/10/17 I have again noticed emissions causing difficulty breathing in another location; the Lake George trail between the north and south (Lost Marsh) sections of the lake. Also I have just become aware of the operation that this facility performs is to recover lead and zinc from scrap metal. This is of great concern since this is a densely populated area and publicity on the effects of lead. If there is any monitoring, both of the baghouse emissions and air monitoring stations, the results are not easy to find and I know of no testing for lead or zinc levels ever recommended to the surrounding residents.

I would like to request a public hearing be held so as many affected parties can find out and comment on the renewal. I also request the permit not be renewed unless the best available technology is used to reduce or eliminate emissions.

Response to General Comment 3:

The federal Clean Air Act requires the U.S. EPA to set National Ambient Air Quality Standards (NAAQS) for six criteria pollutants. These standards are set at levels that protect human health, including the health of sensitive persons, such as asthmatics, children and the elderly. The NAAQS are often referred to as the federal health standards for outdoor air. Particulate matter (PM) is the criteria pollutant to be emitted in the largest quantity at the source. Lake County is currently designated as attainment for PM. More information about criteria pollutants is available at https://www.epa.gov/criteria-air-pollutants on U.S. EPA's website. No violation of the National Ambient Air Quality Standard (NAAQS) for PM, or for any other any other criteria pollutant, is expected to occur as a result of the source's emissions.

IDEM conducts sampling of the ambient air at monitoring stations around Indiana. This air monitoring is conducted to measure whether the NAAQS are being met. Information about Indiana's air monitoring system and monitoring results are available at http://www.in.gov/idem/airquality/2346.htm on the Internet. Information about current and expected air pollution levels throughout Indiana is on IDEM's SmogWatch site at www.smogwatch.IN.gov on the Internet.

IDEM recognizes that quality of life issues such as noise are very important. IDEM does not have the legal authority to regulate noise; therefore, IDEM does not have the authority to issue or deny a permit based on this concern. For issues related to noise, citizens should contact their local government officials.

Pursuant to the Condition D.1.7(a), 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).

IDEM cannot require a company to install Best Available Control Technology (BACT) unless there is an underlying State or Federal requirement for the source to comply with BACT.

IDEM, OAQ considered the requests for a public hearing. After consideration of the few changes contained in the renewal permit, that the substantive permit changes will decrease actual emissions, and that extensive information was provided in the Technical Support Document and addition information was provided in the responses to public comments, IDEM, OAQ decided not to conduct a public hearing. No changes were made as a result of this comment.

Whiting Metals, LLC Whiting, Indiana

Permit Reviewer: Hannah Bays

General Comment 4 (Janet Venecz):

The Hammond Common Council upon Motion of Councilman Kalwinski, Second by Councilman Emerson, and a vote for passage, requests that a Public Hearing be held in Hammond, Indiana on the proposed Air Permit for Whiting Metals – Permit No. M089-38168-00262. The Hammond Common Council offers its Council Chambers for the Public Hearing provided a date and time can be agreed upon. There is significant local public interest in this Air Permit and a Public Hearing would afford local residents the opportunity to voice their opinion and concerns, prior to issuance.

Response to General Comment 4:

IDEM, OAQ considered the requests for a public hearing. After consideration of the few changes contained in the renewal permit, that the substantive permit changes will decrease actual emissions, and that extensive information was provided in the Technical Support Document and addition information was provided in the responses to public comments, IDEM, OAQ decided not to conduct a public hearing.

General Comment 5 (Marilou Tonkovich):

I would like to join those in Hammond's Robersdale section to request a public hearing on a permit request by a smelting company in our midst. I don't think anyone was aware that this company existed or was smelting at the old Federated Metals site since it was assumed that the plant was vacant after the EPA cleanup of the area. People here are shocked to find out what has been going on and sincerely believe someone was getting paid off because we only found out at our local Crime Watch Meeting. This area is right on George Lake, adjacent to a golf course, a bike path, and Calumet College of St. Joseph. There is also a medical clinic in front of it. Many people go past this area daily we want to be able to judge whether a plant such as this should be in our area again. Thank you and I hope we get a public hearing regarding this permit.

Response to General Comment 5:

Please see Response to General Comments 2 and 4.

General Comment 6 (David Dabertin):

No additional Source of lead should be allowed in the area surrounding Whiting Metals until the source(s) of localized lead contamination can be found. Whiting Metals is located adjacent to a park in a densely populated neighborhood. The company handles lead and other non-ferrous metals. The potential for environmental damage resulting from these activities is well-established and widely known. Further, lead contamination of nearby homes and public spaces is likely.

In relevant, part 326 IAC 2-1.1-9 holds that a permit may be denied for:

(6) Any other cause that establishes in the judgement of the commissioner the fact that continuance of the permit, permit revision approval, permit modification approval, or source modification approval is not consistent with the purposes of this article.

The United States Environmental Protection Agency has recently tested soil for lead contamination adjacent to the Whiting Metals facility. The Whiting Metals property is actually located upon the former Federated Metals property. The contamination of that property is well established. A Site Investigation/Remedial Work Plan submitted to IDEM by Whiting Metals on February 20, 2012 stated that the contamination at the property was "extensive". That study showed contamination of lead, arsenic and antimony. While steps have been taken to contain the contamination on the former Federated property, nothing has been done to address any potential contamination of property located outside of Federated's original boundaries. Because the former Federated Metals Facility was never properly remediated, there is a more than speculative concern that the neighborhood surrounding the former Federated Metals facility (and now Whiting Metals Facility subject to this permit) is contaminated with lead.

Whiting Metals, LLC Whiting, Indiana

Permit Reviewer: Hannah Bays

Early indications are that lead may be been found in recent samples taken by USEPA. See US EPA's Federated Metals Company site:

EPA began soil sampling at city-owned properties and right-of-ways in Hammond and Whiting, Indiana, the week of Nov. 28 [2016] to determine whether heavy metals from the former Federated Metals Corporation (FMC) facility may have contaminated surrounding residential areas. Weather permitting, EPA will collect soil samples through December. The results will determine whether additional sampling in residential yards I necessary next spring.

The source of this lead has not been found. Before any decision is made on the present permit, IDEM should determine the source of any neighborhood lead contamination. The folly of permitting a lead source in a neighborhood that may already be contaminated with lead is obvious. IDEM should delay the issuance of Whiting Metals' permit until the full extent of lead contamination is determined. Until it can be proved that any contamination is historical and not the result of any current source, IDEM should curtail any further lead emissions in this area.

If IDEM decides to allow Whiting Metals to continue to emit lead then the subject permit should require that monitors be installed near the source to sample the ambient air concentration of lead in the area.

Response to General Comment 6:

The Permittee is not proposing any new emission units for this permitting action to bring additional sources of lead to the operation.

IDEM does not have legal authority to regulate zoning; therefore, IDEM does not have the authority to issue or deny a permit based on zoning and property value concerns. For issues related to zoning, citizens should contact their local government officials.

IDEM's Office of Land Quality's (OLQ) Emergency Response Program responds to incidents involving spills to soil or waters of the state. Responders in the Indiana Department of Environmental Management's (IDEM) four regional offices work closely with local, federal, and other state responders to protect Indiana's environmental resources. To report a spill or other environmental emergency, call IDEM's 24-Hour Emergency Spill Line toll free at (888) 233-7745 or (317) 233-7745. OLQ's emergency responders are available any time to receive spill reports and provide response assistance.

IDEM operates eight non-continuous Lead monitoring sites that measure total particulate matter over a 24 hour period based on a six-day sampling schedule. The filters are then analyzed for Lead content. This non-continuous Lead data is available interactively on the map and the table located at the following website: https://secure.in.gov/idem/airquality/2651.htm. The closest non-continuous lead monitoring site is approximately three miles from the source address.

See Response to General Comment 2.

General Comment 7 (David Dabertin):

Whiting Metals should not be granted a permit because of its prior actions.

In relevant part 326 IAC 2-1.1-9 holds:

Any permit to construct or operate or operate or any permit revision approval, permit modification approval, or source modification approval granted by the commissioner may be revoked for any of the following reasons...

(2) Failure to disclose all the relevant facts or misrepresentation in obtaining the permit, permit revision approval, permit modification approval, or source modification approval.

Whiting Metals, LLC Whiting, Indiana Permit Reviewer: Hannah Bays

Relevant facts regarding the subject permit are as follows:

- Northern Indiana Metals, LLC dba Saxon Metals, Inc. was issued a permit renewal; on August 10, 2007 (please note that is it not legally possible for an "LLC" to "do business as" a corporation. These are two entirely separate business entities.).
- Sometime between October 2008 and March 2009, Northern Indiana Metals closed its operation (please note that Whiting Metals' permit application states that it closed in January 2009 and a Site Investigation/Remedial Work Plan submitted to IDEM by Whiting Metals on February 20, 2012 states that the facility closed in October 2008.)
- On April 21, 2009 Northern Indiana Metals, LLC auctioned off all of its equipment. I am attaching a copy of the auction notice for Northern Indiana Metals. Please note that the company's notice reads "Closure of Non Ferrous Remelting / Scrap Facility...." (Attachment D).
- By its own statements, there was no business operating at this location after October 2008.
- On May 14, 2009, some three weeks after the facility's assets were sold, Whiting Metals, LLC was formed as an Illinois limited liability company. There is no record of Whiting Metals LLC existing in Indiana. (Attachment E)
- On June 10, 2009, two months after Northern Indiana Metals closed and its assets were sold, IDEM's Office of Air Quality received an application "from the source" requesting a change in company name to Whiting Metals. By the date, Northern Indiana Metals was no longer functioning. It could not have changed its name.
- On June 19, 2009, IDEM received an application from Whiting Metals, LLC requesting that a registration issued on January 24, 2003 to Northern Indiana Metals be updated to change the company name.

The existing permit issued originally by the Hammond Department of Environmental Management and as amended by the Indiana Department of Environmental Management requires:

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
Permit Administration and Support Section, 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).

Whiting Metals, LLC Whiting, Indiana Permit Reviewer: Hannah Bays

(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)]

The undersigned submits that the current owner Whiting Metals, LLC has not properly followed the provisions of its permit with regard to transfer and that it is not the proper Permittee.

Whiting Metals' permit application should be treated as a new source of lead pollution. As set forth above, Whiting Metals started operating at its location in the summer of 2009. Prior to that time it did not exist and all other smelting operation at the former Federated Metals Corporation facility had ceased operations. As described above, Whiting Metals has also eliminated and then apparently added new sources to its facility since 2009. Therefore I am requesting that IDEM apply the more stringent standards required of a new source.

The federal definition of a new source is found at 42 USC §427411(a)(2):

Any stationary source, the construction or modification of which is commenced after the publication of regulations (or, if earlier, proposed regulations) prescribing a standard of performance under this section which will be applicable to such source.

I am also requesting a public hearing on this matter.

Response to General Comment 7:

Very similar comments were submitted to the IDEM pertaining to these matters in a letter from Mr. Dabertin to Commissioner Thomas Easterly on September 19, 2014. Commissioner Easterly responded to Mr. Dabertin's letter on October 22, 2014. In his response, Commissioner Easterly indicated that IDEM did not have any evidence that the information provided in the permit applications was deficient or did not reflect the units at the facility. IDEM's Northwest Regional Office conducts inspections to ensure compliance with air permits and had conducted five inspections at the facility since June 23, 2009. The company was issued two violation letters for submittal of a late annual notification and failure to calibrate monitoring equipment, but no evidence of constructing equipment without a permit had been observed. The most recent inspection was in September 2011 and no violations were found.

On October 29, 2014, Mr. Dabertin responded to Commissioner Easterly's October 22, 2014 letter and specifically requested

"How did Whiting Metals obtain permission to operate a lead smelter in a densely populated neighborhood without applying for a permit from the Indiana Department of Environmental Management".

Commissioner Thomas Easterly responded to Mr. Dabertin's October 29, 2014 letter on January 21, 2015. In his response letter, Commissioner Easterly stated the following:

"As stated previously, the Indiana Department of Environmental Management (IDEM) acted on the information we had at the time of the application and the result was a name change and the combined source determination.

Whiting Metals took over the existing permit as a transfer from the previous owner. Under that scenario, they would not need to apply for and obtain a new construction and operating permit for the lead smelter, as one already existed. They simply needed to take over operation of some or all of the existing operations under the effective permit and operate it under the requirements of that permit.

The local agency requirements were removed from the permit on July 16, 2009, since the Hammond Department of Environmental Management no longer had the authority to issue

Whiting Metals, LLC Page 9 of 27 Whiting, Indiana ATSD for MSOP Renewal No. M089-38168-00262

Permit Reviewer: Hannah Bays

permits on behalf of the State of Indiana. This did not preclude the City of Hammond from enforcing their own local ordinances.

IDEM will be following up on your allegations, but at this time we do not have sufficient evidence that the equipment operated under the previous permit is not the same equipment operated now.

IDEM continues to prioritize inspections of all air pollution sources and follow the U.S. Environmental Protections Agency's Compliance Monitoring Strategy for conducting inspections. IDEM's Northwest Regional Office will continue to inspect Whiting Metals, LLC to assure compliance with their permits and the air pollution control rules."

IDEM, OAQ believes that the Agency has previously provided an adequate response to Mr. Dabertin's comments related to the matter of whether proper permitting had been obtained by Whiting Metals, LLC. The purpose of the September 2011 inspection identified in Commissioner Easterly's letter dated October 22, 2014, was to determine if the equipment at the source was the equipment listed in the permit. IDEM found no evidence that the equipment operated by Whiting Metals, LLC was different than the equipment operated by Northern Indiana Metals, LLC dba Saxon Metals, Inc.

IDEM, OAQ considered the requests for a public hearing. After consideration of the few changes contained in the renewal permit, that the substantive permit changes will decrease actual emissions, and that extensive information was provided in the Technical Support Document and addition information was provided in the responses to public comments, IDEM, OAQ decided not to conduct a public hearing.

There are no changes as a result of this comment.

General Comment 8 (Carolyn Marsh):

I am a Whiting, Indiana resident, environmentalist and bird conservationist with concerns about the Whiting Metals ten-year air permit renewal. I request a public hearing on the air permit.

The history of Whiting Metals property is one to be concerned about, as it is a USEPA superfund site. The former owner ASARCO filed bankruptcy and abandoned the property forcing the public to pay for the cleanup.

- 1. Who are the owners of Whiting Metals, LLC?
- 2. Is this company financially solvent?
- 3. In the future, can the public expect no clean-up costs imposed on them because IDEM regulates Whiting Metals to the degree the property operates clean?
- 4. According to the permit, it appears IDEM intends to approve the renewal without the results of soil sample data taken by USEPA. Soil contamination can be caused by a combination of lead, sulfur dioxide, nitrogen oxide, hydrogen sulfide, sulfur carbon monoxide, and particular matter dropping from the air. Will IDEM and USEPA work together and will IDEM wait for the soil sample tests results from USEPA at the end of 2016 and early 2017 before issuing the permit?
- 5. I have noticed a decline in the waterfowl population in Lake George, both north and south basins. Will IDNR request water samples and fish samples to make sure lead and other pollutants aren't affecting Lake George and wildlife?
- 6. Unlike decades ago, there is a pedestrian bike trail around the north basin of Lake George where the former Federated Metals smelter was dismantled and landfilled on site. Are there air monitors anywhere to indicate the air quality?
- 7. According to the draft permit, Whiting Metals is self-reporting to IDEM. Did IDEM make any on-

Whiting Metals, LLC Whiting, Indiana

Permit Reviewer: Hannah Bays

site inspections of the company in the past ten years?

- 8. How can the public make sure Whiting Metals reporting is accurate?
- 9. Are there any air permit violations in the history of this company?
- I request that IDEM conduct a public hearing on the air permit renewal as air quality affects Lake Michigan, our drinking water, other area lakes, rivers and wetlands and the health of the public and wildlife.

Response to General Comment 8:

In response to the commenter's questions and comments:

- 1. According to the Illinois Secretary of State Business listing, George S. Bellas is listed as the owner of Whiting Metals, LLC.
- 2. IDEM does not review financial records before issuing permit approvals.
- 3. The Federated Metals-Whiting site is a former metal smelting and refining facility, encompassing approximately 36 acres, in Hammond, Indiana, on the shore of Lake George. The Federated Metals facility has been subject to a six-year, \$3.35 million federal Resource Conservation and Recovery Act (RCRA) Corrective Action/Indiana State RCRA closure project that is nearly complete. This work included demolition of an on-site baghouse; consolidation of debris, on-site hazardous wastes and slag dredged from Lake George into an existing on-site landfill; and construction of a phyto-cap on the landfill. The RCRA Corrective Action tasks remaining are the installation of off-site groundwater monitoring wells and sampling to assure that the phyto-cap is performing successfully. The \$1.2 million [no interest] allocated to the Federated Metals site in the ASARCO bankruptcy settlement is intended to fund the remaining RCRA Corrective Action and closure and post-closure activities at the site, as well as to provide a contingency to repair/replace the landfill phyto-cap should the cap fail. More info about ASARCO bankruptcy settlement used to fund cleanups at former ASARCO site:

https://www.epa.gov/enforcement/case-summary-epa-funded-sites-and-communities-asarco-bankruptcy-settlement

- 4. Specific info on this cleanup can be found at the following address: https://www.epa.gov/in/federated-metals-corporation-site
- 5. For waterfowl decline, I suggest asking them to contact the DNR Customer Service Center at (317) 232-4200 or (877) 463-6367, 8:30 a.m. 4 p.m. Monday through Friday, and ask to talk to a wildlife specialist.
- 6. Please see Response to General Comment 2. Here is a link to IDEM's air monitoring website along with a list of closest air monitors: http://www.in.gov/idem/airquality/2346.htm. Your closest air monitor is located at 1500 Center St., Whiting, IN.
- 7 & 9. Below is a list of General Inspections, Stack Tests, and Violations from the last 10 years for Whiting Metals, LLC:

Date	Compliance Activity	Inspector/Test Company	Violation
4/25/2007	Inspection	Hammond Local Agency	No
5/23/2007	Inspection	Hammond Local Agency	No
2/7/2008	Inspection	Hammond Local Agency	No
4/30/2008	Stack Test	Clean Air Engineering	No
6/23/2009	Inspection	Rick Massoels	No

Whiting Metals, LLC Whiting, Indiana Permit Reviewer: Hannah Bays

7/20/2009	Inspection	Rick Massoels	Yes
8/3/2009	Inspection	Rick Massoels	No
6/15/2010	Inspection	Rick Massoels	No
9/30/2011	Inspection	Rick Massoels	No
5/30/2014	Inspection	Amanda Hinkel	Yes
10/2/2015	Inspection	Kevin Davis	No
9/27/2016	Inspection	Kevin Davis	No

IDEM has an Environmental Performance Partnership Agreement (EnPPA) with the U.S. Environmental Protection Agency Region 5. This biennial agreement identifies program specific priorities and program specific joint priorities between the two agencies. One aspect of the EnPPA is to develop and implement a Compliance Monitoring Strategy (CMS) for Title V and Federally Enforceable State Operating Permits (FESOPs). The CMS requires full compliance evaluations (inspections) of all Part 70 (Title V) sources once every two years, unless otherwise specified, and full compliance evaluations of all FESOP sources once every five years, except as noted in the CMS. There are no full compliance evaluation requirements for Minor Source Operating Permit (MSOP) sources, and these facilities will be inspected on an asneeded basis.

- 8. The source is evaluated and is held to enforceable rules. There are no full compliance evaluation requirements for Minor Source Operating Permit (MSOP) sources, and these facilities will be inspected on an as-needed basis.
- 10. IDEM, OAQ considered the requests for a public hearing. After consideration of the few changes contained in the renewal permit, that the substantive permit changes will decrease actual emissions, and that extensive information was provided in the Technical Support Document and addition information was provided in the responses to public comments, IDEM, OAQ decided not to conduct a public hearing.

Technical Comments

Technical Comment 1 (David Dabertin):

The subject permit fails to address all potential pollutants. Inspection records from the Indiana Department of Environmental Management indicate that more than elemental metals are placed into the furnaces located at Whiting Metals. Evidence of these additional pollutants is found in IDEM's inspection report for 9-29-16. On that date, IDEM staff discovered that Whiting Metals was burning rubber and other contaminants in its melting apparatus. The presence of contaminant in secondary lead smelting is a serious concern. Whiting Metals purportedly operates its furnaces at a temperature slightly over the melting point of lead (621.5 degrees Fahrenheit). As such, the incineration of any waste is being done at a temperature too low for complete combustion. Consequently, the applicant should be specifically prohibited from incinerating any flammable contaminants in its melting apparatus. Moreover, if Whiting Metals is going to be allowed to incinerate such wastes, its air permit should specifically address the emission of these pollutants.

Response to Technical Comment 1:

The process at Whiting Metals is as follows: scrap is placed into sweat kettles to remove any foreign matter from the metal. After foreign matter has been removed, the clean charge is passed into a cast iron melting pot for the melting and casting into various rods. IDEM feels that the sweating process is the only part of the process at Whiting Metals that should receive a higher emission factor rating because of the use of the sweating process to remove foreign debris. After the sweating of the foreign debris, the metal is clean and is melted.

Permit Reviewer: Hannah Bays

Technical Comment 2 (David Dabertin):

An IDEM Office of Air Quality Field Inspection Report dated 9-30-11 notes that two furnaces (F-2 and F-1) "are no longer on-site." According to an IDEM report dated 6-4-14, Kettles K16, K17, and K21 have been removed from the source. That inspection report shows only ten kettles and two furnaces located at the facility. As written, the permit would allow emissions from sources that no longer exist. These removed sources should also be removed from the permit. Each furnace or kettle used in non-ferrous smelting is unique and cannot automatically be replaced with an identical source. Consequently, Whiting Metals should be required to amend its permit each time it proposes to add a new source at its facility. These changes/additions should not be allowed under the blanket approach set forth in the proposed permit.

Response to Technical Comment 2:

The IDEM, OAQ confirmed with the source that the identified emission units are not onsite. The permit has been revised to remove the emission unit descriptions and associated requirements for the units no longer located at the source. The furnace identified as F-2 still remains on site, however commenter is correct, F-2, K16, K17, and K21 are removed and the emission calculations have been updated in the ATSD App A.

Technical Comment 3 (David Dabertin):

The subject permit should contain clear standards regarding applicable emission standards. Citing 326 IAC 6.8-1-2(a) the proposed permit appears to set forth Particulate Matter standards of seven-hundredths (0.07) gram per dry standard cubic meter (g/dscm)(three-hundredths (0.03) grain per dry standard cubic foot (gr/dscf) (See permit page 20 "Particulate Matter Limitations for Lake County [326 IAC 6.8-1-2(a)]).

The emission standards of 40 CFR 63.11465, also cited in the permit, set forth stricter standards:

§63.11465 What are the standards for new and existing sources?

- (a) You must route the emissions from each existing affected source through a fabric filter or baghouse that achieves a particulate matter (PM) control efficiency of at least 99.0 percent or an outlet PM concentration limit of 0.034 grams per dry standard cubic meter (g.dscm)(0.015 grains per dry standard cubic foot (gr/dscf)).
- (b) You must route the emissions from each new affected source through a fabric filter or baghouse that achieves a PM control efficiency of at least 99.5 percent or an outlet PM concentration limit of 0.023 g/dscm (0.010 gr/dscf).

The undersigned is concerned that the permit may allow the lesser standard found at 326 IAC 6.8-1-2(a). The permit should be made clear that the more stringent federal standard applies. Further, the applicant should be held to the standards of a new source.

Response to Technical Comment 3:

This permit has been revised to remove the requirements of 40 CFR 63, Subpart TTTTTT in this ATSD. Pursuant to 40 CFR 63.11462 and Pursuant to 40 CFR 63.11472, since this plant has decommissioned its Zinc Die Cast Alloying Process operation, this operation is no longer subject to the requirements of 40 CFR 63, Subpart TTTTTT.

The Permittee is subject to the particulate matter emission limitation of seven-hundredths (0.07) gram per dry standard cubic meter (g/dscm)(three-hundredths (0.03) grain per dry standard cubic foot (dscf)) pursuant to 326 IAC 6.8-1-2(a) and this requirement is included the permit.

Technical Comment 4 (David Dabertin):

The permit appears to exclude the applicant's lead melting operation (Solder Lead Alloying Process) from the more stringent standards of 40 CFR 63, Subpart TTTTTT (p. 19 – 20 of the permit). All of the

Permit Reviewer: Hannah Bays

applicant's operation should be regulated under the federal regulations. §63.11463(b) regulates "...all furnace melting operations located at any secondary nonferrous metals processing facilities."

 $\S63.11472$ defines Furnace Melting Operation as "the collection of processes used to charge post-consumer nonferrous scrap material into a furnace, melt the material, and transfer the molten material to a forming medium." Lead is a non-ferrous metal and clearly the lead melting processes described in Whiting Metals' permit fit the description set forth in the federal regulation. Further, the source has been interchanging its melting apparatus for both lead and zinc. (See attachment B - 6-4-14 IDEM Inspection). All of Whiting Metals sources should be regulated under the federal standards of 40 CFR $\S63$.

Response to Technical Comment 4:

Due to the removal of the zinc operations, this facility is no longer considered a secondary nonferrous metals processing facility, therefore, the requirements of 40 CFR 63, Subpart TTTTTT no longer applies to the source.

Technical Comment 5 (Ronald L. Novak):

The Hammond Department of Environmental Management (HDEM) requests the following be included in the permit. Deleted language appears as strikethroughs and new language appears in **bold**:

- (1) Table of Contents
 - SECTION E.1 NSPS NESHAP24
 - E.1.42 NESHAP Subpart TTTTTT Requirements [40 CFR Part 63, Subpart TTTTTT]

Attachment A: National Emission Standards for Hazardous Air Pollutants for Secondary Nonferrous Metals Processing Area Sources [40 CFR Part 63, Subpart TTTTTT] is cutoff.

- (2) Although Whiting Metals, LLC's Renewal Application does not show any Emission Units as having been removed, within IDEM OAQ's commitment inspection dated 3-8-16, Sweat Kettles identified as K16 and K17 are no longer used and have been removed from the property. Please verify with the company if Sweat Kettles K16 and K17 should be removed from *Condition A.2 Emission Units and Pollution Control Equipment Summary (b)* in the permit.
 - (b) 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:

- (6) 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.
- (7) 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.
- (3) Although Whiting Metals, LLC's Renewal Application does not show any Emission Units as having been removed, within IDEM OAQ's commitment inspection dated 3-8-16, the Holding Kettle identified as K21 is no longer used and has been removed from the property. Please verify with the company if Holding Kettle K21 should be removed from Condition A.2 Emission Units and Pollution Control Equipment Summary (b) in the permit.

Whiting Metals, LLC Whiting, Indiana Permit Reviewer: Hannah Bays

- (11) 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.
- (4) Although Whiting Metals, LLC's Renewal Application does not show any Emission Units as having been removed, within IDEM OAQ's commitment inspection dated 3-8-16, Sweat Kettles identified as K16 and K17 are no longer used and have been removed from the property. Also, the Holding Kettle identified as K21 is no longer used and has been removed from the property. Please verify with the company if Sweat Kettles K16 and K17 and Holding Kettle K21 should be removed from the *Emissions Unit Description box* on page 20 of the permit.
 - (6) 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.
 - (7) 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.
 - (11) 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.
- (5) Although Whiting Metals, LLC's Renewal Application does not show any Emission Units as having been removed, within IDEM OAQ's commitment inspection dated 3-8-16, Sweat Kettles identified as K16 and K17 are no longer used and have been removed from the property. Also, the Holding Kettle identified as K21 is no longer used and has been removed from the property. Please verify with the company if Sweat Kettle K16 and K17 and Holding Kettle K21 should be removed from *Condition D.1.1 Particulate Matter Limitations for Lake County* in the permit.
 - D.1.1 Particulate Matter Limitations for Lake County [326 IAC 6.8-1-2(a)]

The Solder Lead Alloying Process:

(f) Sweat Kettle K16

(g) Sweat Kettle K17

(k) Holding Kettle K21

. . .

Response to Technical Comment 5:

Due to the removal of the zinc operations, this facility is no longer considered a secondary nonferrous metals processing facility, therefore, 40 CFR 63, Subpart TTTTTT no longer applies to the source.

Please see Response to Technical Comment 2.

Technical Comment 6 (Ronald L. Novak):

HDEM requests that the following be included in the permit as conditions and requirements:

1. Pursuant to 326 IAC 6.8-1-2(a) (Particulate Emission Limitations), the American Air Bag Filter Dust Collector System shall be in operation at all times when the furnaces and melt kettles are in operation in order to comply with the particulate matter (PM) emission limitation of 0.03 grain per dry standard cubic foot. All kettle 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

Whiting Metals, LLC Page 15 of 27 Whiting, Indiana ATSD for MSOP Renewal No. M089-38168-00262

Permit Reviewer: Hannah Bays

inspected daily to assure that all hoods are situated properly and maintaining sufficient draft to the baghouse. The doors of the kettle enclosures shall be kept shut when loading is not taking place.

- 2. The Permittee shall only melt clean scrap in the kettles and furnaces. Clean scrap is defined as scrap that contains no plastic, rubber or other non-metallic contaminants and is free from paints and coatings.
- 3. The Permittee shall monitor all furnace hoods, kettle hoods and associated ductwork while the furnaces and kettles are in operation. Any visible leaks from this equipment shall be recorded and charging of the associated furnace or kettle shall cease until corrective action is implemented. The type of corrective action shall also be recorded.
- 4. 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. 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). The Preventive Maintenance Plan for this baghouse shall contain troubleshooting contingency and corrective actions for when the pressure reading is outside of the normal operating range (1 to 2.5 inches of water) for any one reading or if visible emissions are present.

The instrument used for determining the pressure shall be subject to approval by IDEM and shall be calibrated at least once every six (6) months.

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.

5. The Permittee shall record the static pressure at each hood used in conjunction with the Zinc Die Cast and Solder Lead Alloying Processes, at least once per day when the associated kettle or furnace is in operation. The Permittee shall include in its daily record when a static pressure reading is not taken and the reason for the lack of a static pressure reading, (e.g. the associated furnace or kettle did not operate that day).

The instruments used for determining the static pressure shall be subject to approval by IDEM and shall be calibrated at least once every six (6) months.

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.

- 6. 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.
- 7. Whiting Metals, LLC shall be required to record and maintain the following information:
 - a. Daily production data of material processed (in tons) for the Zinc Die Cast and Solder Lead Alloying Processes.
 - b. Monthly fuel usage data for the Zinc Die Cast and Solder Lead Alloying Processes.
- 8. Thirty days following the end of each calendar quarter, the Permittee shall submit a Quarterly Report to IDEM containing the following information from the prior calendar guarter:
 - Weekly inspection and maintenance activities performed on the American Air Bag Filter Dust Collector System.
 - b. Daily visible emission notations of the stack exhaust S-BH.

Permit Reviewer: Hannah Bays

- c. Daily pressure drop readings across the American Air Bag Filter Dust Collector System controlling the Zinc Die Cast and Solder Lead Alloving Processes.
- d. Daily static pressure readings for the furnace and kettle hoods in the Zinc Die Cast and Solder Lead Alloying Processes.
- e. The dates and times of any visible emissions observations and corrective actions made pursuant to Condition 3 above.
- f. All readings, notations, and corrective actions contained in the Quarterly Report shall include the printed name of the individual taking the reading, making the notation or implementing the corrective action, along with the date and time it was made. All Quarterly Reports shall be kept in a bound journal.
- g. A certification by a responsible official that, "Based on information and belief formed after reasonable inquiry, the statements and information contained in this quarterly report are true, accurate and complete."

Response to Technical Comment 6:

- 1. IDEM agrees that the kettle doors shall remain closed when loading is not in process.
- 2. Clean scrap is obtained in the second step in the process after the foreign material has been sweat from the metal in a sweating kettle. To appropriately determine the potential to emit for this process, IDEM has utilized a higher emission factor rating for the sweat kettles.
- 3. The Permittee uses visible emission notations to monitor.
- 4. The Permittee uses visible emission notations to monitor.
- 5. IDEM cannot properly enforce using pressure drops when the source is already using visible emission notations.
- 6. The Permittee uses visible emission notations to monitor, and is only required to use one form of monitoring.
- 7. IDEM does not put limitations on throughput or fuel usage, therefore no record keeping is required. With no production limits, IDEM cannot properly enforce the use of recordkeeping.
- 8. Records of applicable requirements are kept onsite, available for review. Permittee is required to submit a malfunction report.

Technical Comment 7 (Ronald L. Novak):

Condition D.1.3 Particulate Control under (a) states that daily inspections shall be conducted on all hoods to assure they are situated properly and maintaining sufficient draft to the baghouse. The condition, however, provides no definition of "sufficient draft to the baghouse" or methodology for making a determination of sufficiency. Also, the permit contains no record keeping requirements to ensure that the daily inspections of the hoods are being performed. IDEM has observed fugitive emissions from these hoods and smoke has been observed emanating from the vents of the building, which encloses these furnaces and kettles. Photographic evidence has been shown to IDEM inspectors. A single baghouse is being utilized to control emissions from 15 different kettles and furnaces. What design information, engineering calculations, or empirical evidence has the Permittee provided that indicates their single baghouse can produce sufficient draft to simultaneously capture emissions from 15 sources?

Whiting Metals, LLC Page 17 of 27
Whiting, Indiana ATSD for MSOP Renewal No. M089-38168-00262

Permit Reviewer: Hannah Bays

Response to Technical Comment 7:

Recordkeeping requirements are included in section D.1.6 of the permit for the baghouse. Also included are broken and failed bag detection conditions for the baghouse in the event of a hole or tear. With the daily visible emission notations, the baghouse is monitored sufficiently.

Technical Comment 8 (Ronald L. Novak):

(1) The Part numbers and Article number need to be changed as follows:

E.1.1 General Provisions Relating to NESHAP Subpart TTTTTT [326 IAC 20-1] [40 CFR Part 63, Subpart A]

- (a) Pursuant to 40 CFR 603.1, the Permittee shall comply with the provisions of 40 CFR Part 603, Subpart A General Provisions, which are incorporated by reference as 326 IAC 1220-1-1, for the emission unit(s) listed above, except as otherwise specified in 40 CFR Part 6063, Subpart TTTTTT.
- (b) Pursuant to 40 CFR 60.4, 63.10, the Permittee shall submit all required notifications and reports to:
- (2) The condition number, Part number and Article number need to be changed as follows:

E.1.42 NESHAP Subpart TTTTTT Requirements [40 CFR Part 63, Subpart TTTTTT]

The Permittee shall comply with the following provisions of 40 CFR Part 6063, Subpart TTTTTT (included as Attachment A to the operating permit), which are incorporated by reference as 326 IAC 4220, for the emission unit(s) listed above:

. . .

Response to Technical Comment 8:

Since the zinc operation has been decommissioned from this plant, IDEM has removed the requirements of 40 CFR 63, Subpart TTTTTT from the permit.

Technical Comment 9 (Ronald L. Novak):

The emission calculations for the Solder Lead Alloying process assume the Permittee is melting clean or treated scrap. This is not always the case. Observations made by HDEM and IDEM inspectors noted plastic and other contaminants on the scrap. The Permittee has no equipment for treating the scrap and, therefore, can only attempt to remove the contaminants manually. Manual removal of contaminants is largely impractical so it is believed that much of these contaminants are being charged to the kettles and furnaces. Since the kettles and furnaces were not designed for VOC destruction and are not equipped with afterburners, VOC emissions are likely higher than noted in Appendix A of the Technical Support Document. The Permittee should either be required to melt only clean scrap or accurately characterize their VOC emissions via a stack test (installing control equipment for VOCs, if necessary).

Response to Technical Comment 9:

Emission calculations are performed using the uncontrolled emission factors in AP-42 and WebFire. Previous stack test is not being utilized as part of this information. The source is utilizing a higher emission factor, found in Table 12.11-4 for Fugitive Emission Factors for Secondary Lead Processing, for their sweating kettles. These kettles are used to remove any foreign objects from the metal before the metal is passed onto a refining kettle, in which only clean charge is being cast. IDEM feels as though this emission factor is appropriate for the process.

Permit Reviewer: Hannah Bays

Technical Comment 10 (Ronald L. Novak):

While the Permittee and previous owners of the facility have performed stack tests to determine particulate emissions from the facility's baghouse, no VOC stack tests have been conducted to measure emissions resulting from the melting of contaminated scrap.

Also, the previous emission tests failed to address particulate emissions resulting from insufficient capture at the hoods. It is therefore recommended that the Permittee be required to conduct a particulate and VOC emissions test utilizing representative scrap and that a capture demonstration also be conducted for each of the hoods at the facility. Speciation of the particulate emissions captured by the stack emission test should also take place for the pollutant lead. IDEM also needs to look into abandoned process units at the facility and for process operations that have not been included in this proposed permit so that an accurate emission inventory of plant emissions is generated, and upon which the public can rely.

Response to Technical Comment 10:

As stated in pervious responses: contaminated scrap is not melted. The scrap is only melted after the foreign debris has been sweat from the metal. There is no justification that the baghouses were insufficiently capturing as Whiting Metals has been performing visible emissions and keeping records of such. The abandoned process units have been removed from the source and parts used for other units for repair, they no longer have the potential to emit. The permit is up to date with the current units. The stack test performed in 2008 deemed Whiting Metal as compliant.

Technical Comment 11 (Ronald L. Novak):

On page 2 of 5 of the TSD Appendix A, the maximum design rate for Zinc Die Cast Alloy Casting is incorrect and does not match what is in the descriptive section of the permit.

Response to Technical Comment 11:

The Zine Process has been removed entirely from the permit. Please see the Changes to the Permit section for the strikethrough of that operation.

Technical Comment 12 (Ronald L. Novak):

If Sweat Kettles K16 and K17 and Holding Kettle K21 are removed from the permit the maximum design rates/capacities need to be modified accordingly within the TSD Appendix A.

Response to Comment 12:

The Technical Support Document (TSD) is used by IDEM, OAQ for historical purposes. IDEM, OAQ does not make any changes to the original TSD. The emission calculations have been revised appropriately and are included as Appendix A to the ATSD.

Please see Response to Technical Comment 2.

Technical Comment 13 (Ronald L. Novak):

There are no calculations for the five (5) Rotary Mixers, each equipped with a 0.4 MMBtu/hr natural gas burner, used in the reclamation of tin-coated brass punchings. It appears that IDEM never included the emissions calculations for Accurate Metal Detinning in the Second Notice-Only Change No. 089-28091-00262 for Whiting Metals, LLC when Accurate Metal Detinning's Registration No. 089-16715-00445 was revoked and its units were combined into Whiting Metals, LLC's permit.

Permit Reviewer: Hannah Bays

Response to Technical Comment 13:

The emission calculations for the five (5) rotary mixers have been performed and are included in Appendix A to the ATSD.

Technical Comment 14 (Ronald L. Novak):

The Hammond Department of Environmental Management requests IDEM require Whiting Metals LLC to utilize and then verify, it is melting only clean scrap, assure that all emissions generated by their melting operations are in fact captured by fume hoods and ductwork that conveys the fumes to a properly sized, operated and maintained baghouse. This involves documentation that clean scrap is in fact being melted. Fume capture demonstration tests should be conducted on individual melting pot hoods, as well as melting pot hoods that will be, or can be operated simultaneously. Such capture demonstrations must be observed and verified by IDEM personnel. In addition, and especially due to the fact that lead is being melted at this facility, a stack emission test is needed to determine the quantity of particulate emissions and VOC emissions from the facility, as well as the plant baghouse. The stack emission test must be performed under maximum operating conditions. Speciation of the particulate emissions captured by the stack emission test should also take place for the pollutant lead. IDEM also needs to look into abandoned process units at the facility and for process operations that have not been included in this proposed permit so that an accurate emission inventory of plant emissions is generated, and upon which the public can rely.

Response to Technical Comment 14:

Please see Response to Technical Comment 2.

Technical Comment 14 (Michael Langman):

Please verify whether reverberatory sweating furnaces F-1 or F-2, currently assigned to the zinc die cast process, are being used as part of the solder lead alloying process. Virtual File Cabinet (VFC) document number 70235407 summarizes IDEM's May 30, 2014 inspection of the source. On page 3 of the inspection report, IDEM's inspector reported observing furnace F-1 in operation and processing lead alloys despite being assigned to the zinc die cast process. If you determine that the source is using furnace F-1 or F-2 as part of the solder lead alloying process, then we request that you recalculate the potential to emit before controls using emission factors appropriate for estimating lead reverberatory sweating furnace emissions.

Response to Technical Comment 14:

Please see Response to Technical Comment 2.

Technical Comment 15 (Michael Langman):

Technical support document (TSD) page 3 lists the tin-coated brass punching reclamation process as an emission source. However, the TSD does not include the potential to emit for this process. In order to ensure that the sourcewide potential to emit calculation is accurate, we request that you include the emissions from this process as part of the sourcewide potential to emit. Registration permit 089-16715-00445, originally issued to another source at the same facility address and subsequently revoked, estimates emissions for similar emission units and may be helpful in responding to this request.

Response to Technical Comment 15:

Please see Response to Technical Comment 2.

Permit Reviewer: Hannah Bays

Technical Comment 16 (Michael Langman):

TSD Appendix A page 2 estimates emissions from kettles K2, K3, and K4 using particulate matter (PM) and PM10 emission factors corresponding to source classification code (SCC) 3-04-008-05. For this SCC, both FIRE 5.0 (as currently cited by the TSD) and AP-42 Table 12.14-2 list an emission factor that differs from the one used in the TSD. We request that you verify whether emissions from kettles K2, K3, and K4 are best estimated by SCC 3-04-008-05 and provide further justification supporting the emission factor used for kettles K2, K3, and K4.

Response to Technical Comment 16:

The current emission factor 3-04-004-26 is correct for the kettles K2, K3, and K4 because they are not galvanized. The kettles have since been removed from the permit due to the Zinc Process being eliminated from the source.

Technical Comment 17 (Michael Langman):

Please verify whether emission units being permitted are still installed at the source. VFC document number 80264913 summarizes IDEM's March 8, 2016 inspection of the source. In the report, IDEM's inspector states that sweat kettles K16 and K17 and holding kettle K21 have been removed from the source. If these or any other emission units at the source have been permanently removed, then the permit and source wide potential to emit should be updated to reflect the installed emission units.

Response to Technical Comment 17:

Please see Response to Technical Comment 2.

Technical Comment 18 (Whiting Metals):

Initially - please remove all reference to zinc as we are no longer engaged in that business.

Response to Technical Comment 18:

IDEM agrees with the recommended changes, the permit has been revised as follows in the Changes to Permit Section of this ATSD.

Technical Comment 19 (Whiting Metals):

Additionally, some of the language used to describe the processes, that are a holdover from historical permits, are no longer an accurate representation of our operations. It is our hope that today's conversation successfully relayed the fact that historical activities associated with refining and/or smelting at this site in no way represent the re-melting activities that occur here today.

As an example, our solder/lead process should be described throughout the permit as a solder & lead scrap reclamation and blending process - as we again do not engage in refining or smelting.

One common misconception that is apparently responsible for considerable confusion, is that the trade name such as 'refining kettle' used to describe the equipment is misinterpreted to describing our process . As we've stated - our operations do not involve any refining which would require the addition of chemicals to modify the chemistry to remove impurities. This particular piece of equipment would be better described as a cast iron melting pot.

Response to Technical Comment 19:

IDEM agrees with the recommended changes, the permit has been revised as follows in the Changes to Permit Section of this ATSD.

Whiting Metals, LLC Whiting, Indiana Permit Reviewer: Hannah Bays

Changes to Permit

The following changes have been made to the permit as a result of the comments received with deleted language as strikeouts and new language **bolded**.

Change 1: The plant has decommissioned their Zinc Die Cast Alloying Process operation.

Therefore, all references to the Zinc Die Cast Alloying Process operation has been removed from this permit.

A.2 Emission Units and Pollution Control Equipment Summary

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

- (a) The Zinc Die Cast Alloying Process, with a maximum design rate of 4.754.60 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:
 - (1) 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. Under 40 CFR 63, Subpart TTTTTT, this is considered an existing, affected facility.
 - (2)(1) Reverberatory Sweat Furnace, identified as F-2, with a maximum design rate of 0.2 T/hr, with a maximum heat input rate of 3.0 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1985, and exhausting to stack S-BH. Under 40 CFR 63, Subpart TTTTTT, this is considered an existing, affected facility.
 - (3)(2) Melting and/or Refining Kettle, identified as K2, with a maximum design rate of 1.5 T/hr, with a maximum heat input rate of 1.0 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1985, and exhausting to stack S-BH. Under 40 CFR 63, Subpart TTTTTT, this is considered an existing, affected facility.
 - (4)(3) Melting and/or Refining Kettle, identified as K3, with a maximum design rate of 1.45 T/hr, with a maximum heat input rate of 1.0 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1985, and exhausting to stack S-BH. Under 40 CFR 63, Subpart TTTTTT, this is considered an existing, affected facility.
 - (5)(4) Melting and/or Refining Kettle, identified as K4, with a maximum design rate of 1.45 T/hr, with a maximum heat input rate of 2.5 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1985, and exhausting to stack S-BH. Under 40 CFR 63, Subpart TTTTTT, this is considered an existing, affected facility.
 - (6) 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.
 - (7) 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.
- (b)(a) The Solder and Lead Alloying Scrap Reclamation and Blending 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:

Page 22 of 27 ATSD for MSOP Renewal No. M089-38168-00262

Whiting Metals, LLC Whiting, Indiana Permit Reviewer: Hannah Bays

- (1) Reverberatory Sweat Furnace, identified as F-3, with a maximum design rate of 0.2 T/hr, with a maximum heat input rate of 3.0 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1998, and exhausting to stack S-BH.
- (2) Sweat Kettle, identified as K6, with a maximum design rate of 1.8 T/hr, with a maximum heat input rate of 2.5 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1990, and exhausting to stack S-BH.
- (3) Sweat Kettle, identified as K10, with a maximum design rate of 0.05 T/hr, a maximum heat input rate of 0.25 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1990, and exhausting to stack S-BH.
- (4) Sweat Kettle, identified as K11, with a maximum design rate of 0.05 T/hr, a maximum heat input rate of 0.25 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1990, and exhausting to stack S-BH.
- (5) Sweat Kettle, identified as K15, with a maximum design rate of 0.05 T/hr, a maximum heat input rate of 0.25 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1990, and exhausting to stack S-BH.
- (6) 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.
- (7) 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.
- (8) (6) Cast Iron Melting Pot Melting and/or Refining Kettle, identified as K12, with a maximum design rate of 0.3 T/hr, with a maximum heat input rate of 0.5 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1985, and exhausting to stack S-BH.
- (9) (7) Cast Iron Melting Pot Melting and/or Refining Kettle, identified as K13, with a maximum design rate of 0.3 T/hr, with a maximum heat input rate of 0.5 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1985, and exhausting to stack S-BH.
- (10) (8) Cast Iron Melting Pot Melting and/or Refining Kettle, identified as K14, with a maximum design rate of 0.4 T/hr, with a maximum heat input rate of 1.25 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1985, and exhausting to stack S-BH.
- (11) 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.
- (e)(b) The reclamations of tin-coated brass punchings through agitation in one (1) of five (5) rotary mixers containing heated caustic solution. Each mixer is equipped with a 0.4 MMBtu/hr. natural gas burner to heat the caustic solution. Particulate emissions generated while unloading detinned brass punchings from the mixers into shipping containers shall be controlled by one (1) of three (3) portable Dust Collectors with manufacturer's rated

Permit Reviewer: Hannah Bays

control efficiency of 99.9% each. The maximum design rate of the process is 12 tons per hour.

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (a) The Zinc Die Cast Alloying Process, with a maximum design rate of 4.75**4.60** 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:
 - (1) 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.
 - (2)(1) Reverberatory Sweat Furnace, identified as F-2, with a maximum design rate of 0.2 T/hr, with a maximum heat input rate of 3.0 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1985, and exhausting to stack S-BH.
 - (3)(2) Melting and/or Refining Kettle, identified as K2, with a maximum design rate of 1.5 T/hr, with a maximum heat input rate of 1.0 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1985, and exhausting to stack S-BH.
 - (4)(3) Melting and/or Refining Kettle, identified as K3, with a maximum design rate of 1.45 T/hr, with a maximum heat input rate of 1.0 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1985, and exhausting to stack S-BH
 - (5)(4) Melting and/or Refining Kettle, identified as K4, with a maximum design rate of 1.45 T/hr, with a maximum heat input rate of 2.5 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1985, and exhausting to stack S-BH.
 - (6) 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.
 - (7) 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.
- (b)(a) The Solder and Lead Alloying Scrap Reclamation and Blending 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:
 - (1) Reverberatory Sweat Furnace, identified as F-3, with a maximum design rate of 0.2 T/hr, with a maximum heat input rate of 3.0 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1998, and exhausting to stack S-BH.
 - (2) Sweat Kettle, identified as K6, with a maximum design rate of 1.8 T/hr, with a maximum heat input rate of 2.5 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1990, and exhausting to stack S-BH.
 - (3) Sweat Kettle, identified as K10, with a maximum design rate of 0.05 T/hr, a maximum heat input rate of 0.25 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1990, and exhausting to stack S-BH.

Whiting Metals, LLC Whiting, Indiana Permit Reviewer: Hannah Bays

- (4) Sweat Kettle, identified as K11, with a maximum design rate of 0.05 T/hr, a maximum heat input rate of 0.25 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1990, and exhausting to stack S-BH.
- (5) Sweat Kettle, identified as K15, with a maximum design rate of 0.05 T/hr, a maximum heat input rate of 0.25 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1990, and exhausting to stack S-BH.
- (6) 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.
- (7) 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.
- (8) (6) Cast Iron Melting Pot Melting and/or Refining Kettle, identified as K12, with a maximum design rate of 0.3 T/hr, with a maximum heat input rate of 0.5 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1985, and exhausting to stack S-BH.
- (9) (7) Cast Iron Melting Pot Melting and/or Refining Kettle, identified as K13, with a maximum design rate of 0.3 T/hr, with a maximum heat input rate of 0.5 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1985, and exhausting to stack S-BH.
- (10) (8) Cast Iron Melting Pot Melting and/or Refining Kettle, identified as K14, with a maximum design rate of 0.4 T/hr, with a maximum heat input rate of 1.25 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1985, and exhausting to stack S-BH.
- (11) 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 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 Limitations for Lake County [326 IAC 6.8-1-2(a)]

Pursuant to 326 IAC 6.8-1-2(a), particulate matter emissions shall not exceed seven-hundredths (0.07) gram per dry standard cubic meter (g/dscm) (three-hundredths (0.03) grain per dry standard cubic foot (dscf)) for the following emissions units:

The Zinc Die Cast Alloying Process:

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

The Solder and Lead Alloying Scrap Reclamation and Blending Process:

(a) Reverberatory Sweat Furnace F-3

Permit Reviewer: Hannah Bays

- (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)(f) Cast Iron Melting Pot Melting and/or Refining Kettle K12
- (i)(g) Cast Iron Melting Pot Melting and/or Refining Kettle K13
- (i)(h) Cast Iron Melting Pot Melting and/or Refining Kettle K14
- (k) Holding Kettle K21

..

D.2.1 Particulate Matter (PM) [326 IAC 6.8-1-2(a)]

Pursuant to 326 IAC 6.8-1-2(a), particulate matter emissions **from each of the rotary mixers and their natural gas burners** shall not exceed seven-hundredths (0.07) gram per dry standard cubic meter (g/dscm) (three-hundredths (0.03) grain per dry standard cubic foot (dscf))-for the unloading process.

Compliance Determination Requirements [326 IAC 2-6.1-5(a)(1)]

D.2.3 Particulate Control

In order to assure compliance with the Condition D.2.1, a portable dust collector for particulate control shall be in operation and control emissions from the rotary mixer unloading operations at all times while unloading is occurring.

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

D.2.3 Particulate Control

In order to assure compliance with the Condition D.2.1, the portable Dust Collector for particulate control shall be in operation and control emissions from the unloading process at all times while the process is in operation.

D.2.4 Dust Collector Inspections

An inspection shall be performed each calendar quarter on each dust collector used to control the rotary mixer unloading operations. Inspections required by this condition shall not be performed in consecutive months. All defective bags shall be replaced.

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

D.2.5 Record Keeping Requirements

- (a) To document the compliance status with Condition D.2.4, the Permittee shall maintain records of the results of the inspections required under Condition D.2.4.
- (b) Section C General Record Keeping Requirements contains the Permittee's obligation with regard to the record keeping required by this condition.

Permit Reviewer: Hannah Bays

Change 2: The permit has been revised to remove the requirements of 40 CFR 63, Subpart TTTTTT in this ATSD. Pursuant to 40 CFR 63.11462 "You are subject to this subpart if you own or operate a secondary nonferrous metals processing facility (as defined in §63.11472) that is an area source of hazardous air pollutant (HAP) emissions."

Pursuant to 40 CFR 63.11472, "Secondary nonferrous metals processing facility means a brass and bronze ingot making, secondary magnesium processing, or secondary zinc processing plant that uses furnace melting operations to melt post-consumer nonferrous metal scrap to make products including bars, ingots, blocks, or metal powders."

Since this plant has decommissioned its Zinc Die Cast Alloying Process operation, this operation is no longer subject to the requirements of 40 CFR 63 TTTTTT. Therefore, Section E.1-NEHSAP has been removed from this Permit No. M089-38168-000262.

SECTION E.1 NESHAP

Emissions Unit Description:

- (a) The Zinc Die Cast Alloying Process, with a maximum design rate of 4.754.60 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:
 - (1) 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. Under 40 CFR 63, Subpart TTTTTT, this is considered an existing, affected facility.
 - (2)(1) Reverberatory Sweat Furnace, identified as F-2, with a maximum design rate of 0.2 T/hr, with a maximum heat input rate of 3.0 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1985, and exhausting to stack S-BH. Under 40 CFR 63, Subpart TTTTTT, this is considered an existing, affected facility.
 - (3)(2) Melting and/or Refining Kettle, identified as K2, with a maximum design rate of 1.5 T/hr, with a maximum heat input rate of 1.0 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1985, and exhausting to stack S-BH. Under 40 CFR 63, Subpart TTTTTT, this is considered an existing, affected facility.
 - (4)(3) Melting and/or Refining Kettle, identified as K3, with a maximum design rate of 1.45 T/hr, with a maximum heat input rate of 1.0 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1985, and exhausting to stack S-BH. Under 40 CFR 63, Subpart TTTTTT, this is considered an existing, affected facility.
 - (5)(4) Melting and/or Refining Kettle, identified as K4, with a maximum design rate of 1.45 T/hr, with a maximum heat input rate of 2.5 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1985, and exhausting to stack S-BH. Under 40 CFR 63, Subpart TTTTTT, this is considered an existing, affected facility.
 - (6) 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.
 - (7) 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.

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

...

E.1.1 General Provisions Relating to NESHAP Subpart TTTTTT [326 IAC 20-1] [40 CFR Part 63, Subpart A]

Whiting Metals, LLC Page 27 of 27 Whiting, Indiana ATSD for MSOP Renewal No. M089-38168-00262

Permit Reviewer: Hannah Bays

- (a) Pursuant to 40 CFR 603.1, the Permittee shall comply with the provisions of 40 CFR Part 603, Subpart A General Provisions, which are incorporated by reference as 326 IAC 1220-1-1, for the emission unit(s) listed above, except as otherwise specified in 40 CFR Part 6063, Subpart TTTTTT.
- (b) Pursuant to 40 CFR 60.4, 63.10, the Permittee shall submit all required notifications and reports to:
- E.1.2 Secondary Nonferrous Metals Processing Area Sources NESHAP Subpart TTTTTT [40 CFR Part 63, Subpart TTTTTT]

The Permittee shall comply with the following provisions of 40 CFR Part 6063, Subpart TTTTTT (included as Attachment A to the operating permit), which are incorporated by reference as 326 IAC 1220, for the emission unit(s) listed above:

IDEM Contact

- (a) Questions regarding this proposed MSOP Renewal can be directed to Hannah Bays at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 233-0868 or toll free at 1-800-451-6027 extension 3-0868.
- (b) A copy of the permit is available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/
- (c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Air Permits page on the Internet at: http://www.in.gov/idem/airquality/2356.htm; and the Citizens' Guide to IDEM on the Internet at: http://www.in.gov/idem/6900.htm.

Appendix A: Emissions Calculations Summary

Company Name: Whiting Metals LLC

Address City IN Zip: 2230 Indianapolis Boulevard, Hammond, IN 46394

Permit #: M089-38168-00262

Reviewer: Hannah Bays

Uncontrolled Potential to Emit (tons/yr)												
Emission Unit	PM	PM10	PM2.5	SO ₂	NOx	voc	СО	Total HAPs	Single HAP*			
	Lead Production											
Kettle K6, K10, K11, K15	13.67	13.67	13.67	0.00	0.00	0.00	0.00	3.42	3.42			
Reverberatory Furnace F3	1.40	1.40	1.40	0.00	0.00	0.00	0.00	0.35	0.35			
Solder Kettle Refining (K12, K13, K14)	0.01	0.01	0.01	0.00	0.00	0.00	0.00	2.63E-03	2.63E-03			
Solder & Lead Alloy Casting	0.03	0.03	0.03	0.00	0.00	0.00	0.00	9.66E-03	9.66E-03			
Detinning Process	14.72	14.72	14.72	0.00	0.00	0.00	0.00	0.00	0.00			
Natural Gas Combustion	0.09	0.34	0.34	0.03	4.51	0.25	3.79	0.09	-			
Paved Roads	0.06	0.01	3.08E-03	0.00	0.00	0.00	0.00	0.00	-			
Total	29.97	30.18	30.17	0.03	4.51	0.25	3.79	3.86	3.78			

^{*}Highest Single Source-wide HAP = Lead

Appendix A: Emissions Calculations Lead Alloy Production

Company Name: Whiting Metals LLC
Address City IN Zip: 2230 Indianapolis Boulevard, Hammond, IN 46394
Permit #: M089-38168-00262
Reviewer: Hannah Bays

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

MDR (T/hr): 1.95 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/vr

					POTENTIAL	EMISSIONS			
		BEF	ORE CONTRO	OLS			AFTER CONTROLS		
POLLUTANT	EF(LB/T produced)	CE (%)	(lbs/hr) (lbs/day) (TPY)			(lbs/hr)	(TPY)	(gr/dscf)	
PM	1.6	0.99	3.1200	74.8800	13.6656		9.00E-06	3.94E-05	4.83E-08
PM10	1.6	0.99	3.1200	74.8800	13.6656		9.00E-06	3.94E-05	4.83E-08
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	0.4	0.99	0.7800	18.7200	3.4164		2.70E-06	1.18E-05	1.45E-08

FFs from US EPA's AP-42, Chapter 12.11, Table 12.11-4.

*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 (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)

EF(LB/T charged)

1.6 1.6

PERMITTED OPERATING HRS: 8760 hr/yr

		POTENTIAL EMISSIONS										
	BEF	BEFORE CONTROLS AFTER CONTROLS										
CE (%)	(lbs/hr)	(lbs/day)	(TPY)		(lbs/hr)	(TPY)	(gr/dscf)					
0.99	0.3200	7.6800	1.4016		0.0032	0.0140	1.72E-05					
0.99	0.3200	7.6800	1.4016		0.0032	0.0140	1.72E-05					
0	0.0000	0.0000	0.0000		0.0000	0.0000	N/A					
0	0.0000	0.0000	0.0000		0.0000	0.0000	N/A					
0	0.0000	0.0000	0.0000		0.0000	0.0000	N/A					
0	0.0000	0.0000	0.0000		0.0000	0.0000	N/A					
0.99	0.0800	1.9200	0.3504		0.0008	0.0035	N/A					

0.0000
 LEAD
 0.4
 0.99
 0.0800
 1.9200

 EFs from US EPA's FIRE Version 5.0 Source Classification Codes and Emission Factor L

 Lead Emission Factor from AP-42, Chapter 12.11, Table 12.11-4 (Sweating SCC 3-04-004-12)

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

POLLUTANT

PM10 SOx NOx VOC

CO

MDR (T/hr): 1.00 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

			POTENTIAL EMISSIONS						
	SCC NO. 3-04-004-26		BEF	ORE CONTR	OLS			AFTER CONTROLS	
POLLUTANT	EF(LB/T produced)	CE (%)	(lbs/hr)	(lbs/hr) (lbs/day) (TPY)			(lbs/hr)	(TPY)	(gr/dscf)
PM	0.002	0.99	0.0020	0.0480	0.0088		0.0008	0.0034	4.18E-06
PM10	0.002	0.99	0.0020	0.0480	0.0088		0.0000	0.0001	1.07E-07
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	0.0006	0.0144	0.0026		0.0003	0.0011	1.39E-06

LEAD 0.0006 0.099 0.0006 0.0144 0.0006 0.008 Per N. Berg (3/15/03), 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

Appendix A: Emissions Calculations Lead Alloy Production

Company Name: Whiting Metals LLC
Address City IN Zip: 2230 Indianapolis Boulevard, Hammond, IN 46394
Permit #: M089-38168-00262
Reviewer: Hannah Bays

Solder & Lead Alloy Casting

MDR (T/hr): 3.15 YEARLY PROD (T/yr): 271

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

					YEARL	Y PROD (T/yr): 271		
NTRL DEV: American	Air Bag Filter Dust Colle	ector System (9	9% CE)					
		PER	MITTED OPER	ATING HRS:	8760	ır/yr		
					POTENTIAL E	MISSIONS		
	SCC NO. 3-04-004-09)	BEF	ORE CONTRO	DLS		AFTER CONTROLS	
POLLUTANT	EF(LB/T cast)	CE (%)	(lbs/hr)	(lbs/day)	(TPY)	(lbs/hr)	(TPY)	(gr/dscf)
PM	0.002	0.99	0.01	0.15	0.03	0.0013	0.0057	6.97E-06
PM10	0.002	0.99	0.01	0.15	0.03	0.0282	0.1237	1.52E-04
SOx	0	0	0.00	0.00	0.00	0.0000	0.0000	N/A
NOx	0	0	0.00	0.00	0.00	0.0000	0.0000	N/A
VOC	0	0	0.00	0.00	0.00	0.0000	0.0000	N/A
CO	0	0	0.00	0.00	0.00	0.0000	0.0000	N/A
LEAD	0.0007	0.99	0.00	0.05	0.01	0.0003	0.0014	1.74E-06

Appendix A: Emissions Calculations Scrap Metal Detinning Process

Company Name: Whiting Metals LLC

Address City IN Zip: 2230 Indianapolis Boulevard, Hammond, IN 46394
Permit #: M089-38168-00262
Reviewer: Hannah Bays

Reclamations of tin-coated brass punchings from (5) mixers

MDR (T/hr): 12.0 YEARLY PROD (T/yr): 2732.15

STACK ID (DIAM:HEIGHT): (2.4': 10') FLOWRATE (ACFM): 7600

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

8760 hr/yr

Ts(°F): 70

			POTENTIAL EMISSIONS								
			BEF	ORE CONTR	OLS		AF	LS			
POLLUTANT	EF(LB/T cast)	CE (%)	(lbs/hr)	(lbs/day)	(TPY)		(lbs/hr)	(TPY)	(gr/dscf)		
PM	0.28	0.99	3.3600	80.6400	14.7168		0.0336	0.1472	5.16E-04		
PM10	0.28	0.99	3.3600	80.6400	14.7168		0.0336	0.1472	5.16E-04		
PM2.5	0.28	0.99	3.3600	80.6400	14.7168		0.0336	0.1472	5.16E-04		
SOx	0	0	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		
NOx	0	0	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		
VOC	0	0	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		
CO	0	0	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		
LEAD	0	0	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		

Notes.

1. MDR limited by number of Dust Collectors (3). Typical load is 12,000 lbs; it takes 1.5 hrs to unload the mixer. DC's only used during unloading; 1 per mixer EF obtained through material mass balance. 5 lbs of dust were collected during the unloading of 36,000 lbs (18 tons) of brass punchings. (5 lbs / 18 tons = 0.28 lb/ton)

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

Company Name: Whiting Metals LLC

Address City IN Zip: 2230 Indianapolis Boulevard, Hammond, IN 46394

Permit #: M089-38168-00262 Reviewer: Hannah Bays

	HHV		
Heat Input Capacity	mmBtu	Potential Throughput	
MMBtu/hr	mmscf	MMCF/yr	Emission Units
3.00		25.8	Sweat Furnace F-3
2.50		21.5	Melting/Refining Kettle K6
0.50		4.3	Melting/Refining Kettle K12
0.50		4.3	Melting/Refining Kettle K13
1.25		10.7	Melting/Refining Kettle K14
0.25		2.1	Sweat Kettle K10
0.25		2.1	Sweat Kettle K11
0.25		2.1	Sweat Kettle K15
2.00		17.2	Five (5) Rotary Mixers @ 0.4 MMBtu/hr, each
10.5	1020	90.2	

		Pollutant							
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO		
Emission Factor in lb/MMCF	1.9	7.6	7.6	0.6	100	5.5	84		
					**see below				
Potential Emission in tons/yr	0.09	0.34	0.34	0.03	4.51	0.25	3.79		

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

PM2.5 emission factor is filterable and condensable PM2.5 combined.

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

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

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,020 MMBtu

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Hazardous Air Pollutants (HAPs)

_		HAPs - Organics								
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene	Total - Organics				
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03					
Potential Emission in tons/yr	9.5E-05	5.4E-05	3.4E-03	0.08	1.5E-04	0.08				

		HAPs - Metals									
	Lead	Cadmium	Chromium	Manganese	Nickel	Total - Metals					
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03						
Potential Emission in tons/yr	2.3E-05	5.0E-05	6.3E-05	1.7E-05	9.5E-05	2.5E-04					
Methodology is the same as above.					Total HAPs	0.09					

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

Hexane

0.08

Highest HAP

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

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

Appendix A: Emission Calculations Fugitive Dust Emissions - Paved Roads

Company Name: Whiting Metals, LLC
Source Address: 2230 Indianapolis Boulevard, Hammond, IN 46394
Permit Number: M089-38168-00262

Reviewer: Hannah Bays

Paved Roads at Industrial Site
The following calculations determine the amount of emissions created by paved roads, based on 8,760 hours of use and AP-42, Ch 13.2.1 (1/2011).

Vehicle Information (provided by source)

					Total				l
	Maximum		Maximum	Maximum	Weight	Maximum	Maximum	Maximum	Maximum
	number of	Number of one-	trips per	Weight	driven per	one-way	one-way	one-way	one-way
	vehicles	way trips per day	day	Loaded	day	distance	distance	miles	miles
Туре	per day	per vehicle	(trip/day)	(tons/trip)	(ton/day)	(feet/trip)	(mi/trip)	(miles/day)	(miles/yr)
Vehicle (entering plant) (one-way trip)	1.6	1.0	1.6	15.0	24.0	450	0.085	0.1	49.8
Vehicle (leaving plant) (one-way trip)	1.6	1.0	1.6	15.0	24.0	450	0.085	0.1	49.8
•		Totals	3.2		48.0			0.3	99.5

Average Vehicle Weight Per Trip = Average Miles Per Trip =

Unmitigated Emission Factor, Ef = [k * (sL)^0.91 * (W)^1.02] (Equation 1 from AP-42 13.2.1)

	PM	PM10	PM2.5	
where k =	0.011	0.0022	0.00054	lb/VMT = particle size multiplier (AP-42 Table 13.2.1-1)
W =	15.0	15.0	15.0	tons = average vehicle weight (provided by source)
sL =	9.7	9.7	9.7	g/m^2 = silt loading value for payed roads at iron and steel production facilities - Table 13.2.1-3)

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, Eext = E * [1 - (p/4N)] (Equation 2 from AP-42 13.2.1)

Mitigated Emission Factor, Eext = Ef * [1 - (p/4N)]where p = 125 day

days of rain greater than or equal to 0.01 inches (see Fig. 13.2.1-2) days per year

	PM	PM10	PM2.5	Ī
Unmitigated Emission Factor, Ef =	1.377	0.275	0.0676	lb/mile
Mitigated Emission Factor, Eext =	1.259	0.252	0.0618	lb/mile
Dust Control Efficiency =	0%	0%	0%	

	Unmitigate		Unmitigate		Mitigated	Mitigated		Controlled	Controlled
	d PTE of		d PTE of	Mitigated	PTE of	PTE of	Controlled	PTE of	PTE of
	PM	Unmitigated PTE	PM2.5	PTE of PM	PM10	PM2.5	PTE of PM	PM10	PM2.5
Process	(tons/yr)	of PM10 (tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)
Vehicle (entering plant) (one-way trip)	0.03	0.01	1.68E-03	0.03	0.01	1.54E-03	0.03	0.01	1.54E-03
Vehicle (leaving plant) (one-way trip)	0.03	0.01	1.68E-03	0.03	0.01	1.54E-03	0.03	0.01	1.54E-03
To	tals 0.07	0.01	3 36F-03	0.06	0.01	3 08F-03	0.06	0.01	3.08F-03

Methodology
Total Weight driven per day (ton/day) Maximum one-way distance (mi/trip)
Maximum one-way miles (miles/day) Average Vehicle Weight Per Trip (ton/trip)
Average Miles Per Trip (miles/trip) Unmitigated PTE (tons/yr) Mitigated PTE (tons/yr)
Controlled PTE (tons/yr)

PM = Particulate Matter PM10 = Particulate Matter (<10 um) PM2.5 = Particle Matter (<2.5 um) PTE = Potential to Emit

- = [Maximum Weight Loaded (tons/trip)] * [Maximum trips per day (trip/day)] = [Maximum one-way distance (feet/trip) / [5280 ft/mile] = [Maximum trips per year (trip/day)] * [Maximum one-way distance (mi/trip)]

- = [Maximum trips per year (trip/cay)] * [Maximum one-way cistance (m/trip)]
 = SUM[Total Weight driven per day (ton/day)] * (SUM[Maximum trips per day (trip/day)]
 = SUM[Maximum one-way miles (miles/day)] * (SUM[Maximum trips per year (trip/day)]
 = [Maximum one-way miles (miles/yn)] * (Unmitigated Emission Factor (lb/mile)] * (ton/2000 lbs)
 = [Maximum one-way miles (miles/yn)] * [Mitigated Emission Factor (lb/mile)] * (ton/2000 lbs)
 = [Mitigated PTE (tons/yr)] * [1 Dust Control Efficiency]

Indiana Department of Environmental Management Office of Air Quality

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

Source Background and Description

Source Name: Whiting Metals, LLC

Source Location: 2230 Indianapolis Boulevard, Hammond, IN 46394

County: Lake

SIC Code: 3341 (Secondary Smelting and Refining of Nonferrous Metals)

Permit Renewal No.: M089-38168-00262
Permit Reviewer: Hannah Bays

The Office of Air Quality (OAQ) has reviewed the operating permit renewal application from Whiting Metals, LLC relating to the operation of a secondary nonferrous metals operation. On February 6, 2017, Whiting Metals, LLC submitted an application to the OAQ requesting to renew its operating permit. Whiting Metals, LLC was issued its first MSOP Renewal (M089-21474-00262) on August 10, 2007.

On April 15, 2017 the Office of Air Quality (OAQ) had a notice published in the Post Tribune In Merrillville Indiana, and The Times in Munster, Indiana stating that Whiting Metals, LLC had applied for an MSOP Renewal relating to the operation of a secondary nonferrous metals operation The notice also stated that the OAQ proposed to issue a MSOP Renewal for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

During the Public Notice Period between April 15, 2017 and May 15, 2017, the IDEM OAQ received several comments. As a result of those comments, several changes to the permit have been made. The changes have been identified in the Proposed Changes section of the TSD.

Several commenters during the first Public Notice Period had requested a Public Hearing be held. The IDEM, OAQ has not scheduled a Public Hearing to be held at this time. The public may request that IDEM hold a public hearing about this draft permit during this new public comment period. If adverse comments concerning the **air pollution impact** of this draft permit are received, with a request for a public hearing, IDEM will decide whether or not to hold a public hearing. IDEM could also decide to hold a public meeting instead of, or in addition to, a public hearing. If a public hearing or meeting is held, IDEM will make a separate announcement of the date, time, and location of that hearing or meeting. At a hearing, you would have an opportunity to submit written comments and make verbal comments. At a meeting, you would have an opportunity to submit written comments, ask questions, and discuss any air pollution concerns with IDEM staff.

Permitted Emission Units and Pollution Control Equipment

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

- (a) The Solder and Lead Scrap Reclamation 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:
 - (1) Reverberatory Sweat Furnace, identified as F-3, with a maximum design rate of 0.2 T/hr, a maximum heat input rate of 3.0 MMBtu/hr, using an American Air Bag Filter Dust Collector

- System as control, constructed in 1998, and exhausting to stack S-BH. Under 40 CFR 63, Subpart TTTTTT, this is considered an existing, affected facility.
- (2) Sweat Kettle, identified as K6, with a maximum design rate of 1.8 T/hr, a maximum heat input rate of 2.5 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1990, and exhausting to stack S-BH.
- (3) Sweat Kettle, identified as K10, with a maximum design rate of 0.05 T/hr, a maximum heat input rate of 0.25 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1990, and exhausting to stack S-BH.
- (4) Sweat Kettle, identified as K11, with a maximum design rate of 0.05 T/hr, a maximum heat input rate of 0.25 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1990, and exhausting to stack S-BH.
- (5) Sweat Kettle, identified as K15, with a maximum design rate of 0.05 T/hr, a maximum heat input rate of 0.25 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1990, and exhausting to stack S-BH.
- (6) Cast Iron Melting Pot, identified as K12, with a maximum design rate of 0.3 T/hr, a maximum heat input rate of 0.5 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1985, and exhausting to stack S-BH.
- (7) Cast Iron Melting Pot, identified as K13, with a maximum design rate of 0.3 T/hr, a maximum heat input rate of 0.5 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1985, and exhausting to stack S-BH.
- (8) Cast Iron Melting Pot, identified as K14, with a maximum design rate of 0.4 T/hr, a maximum heat input rate of 1.25 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1985, and exhausting to stack S-BH.
- (b) The reclamations of tin-coated brass punchings through agitation in one (1) of five (5) rotary mixers containing heated caustic solution. Each mixer is equipped with a 0.4 MMBtu/hr natural gas burner to heat the caustic solution. Particulate emissions generated while unloading detinned brass punchings from the mixers into shipping containers shall be controlled by one (1) of three (3) portable Dust Collectors with manufacturer's rated control efficiency of 99.9% each. The maximum design rate of the process is 12 tons per hour.

Emission Units and Pollution Control Equipment Removed From the Source

The following emission units and pollution control devices are no longer at the source:

The Zinc operation has been permanently decommissioned by removal of burners, yet the units are still physically on-site.

- (a) The Zinc Die Cast Alloying Process, with a maximum design rate of 4.60 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:
 - (1) 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. Under 40 CFR 63, Subpart TTTTTT, this is considered an existing, affected facility.
 - (2) Reverberatory Sweat Furnace, identified as F-2, with a maximum design rate of 0.2 T/hr, with a maximum heat input rate of 3.0 MMBtu/hr, using an American Air Bag Filter Dust

- Collector System as control, constructed in 1985, and exhausting to stack S-BH. Under 40 CFR 63, Subpart TTTTTT, this is considered an existing, affected facility.
- (3) Melting and/or Refining Kettle, identified as K2, with a maximum design rate of 1.5 T/hr, with a maximum heat input rate of 1.0 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1985, and exhausting to stack S-BH. Under 40 CFR 63, Subpart TTTTTT, this is considered an existing, affected facility.
- (4) Melting and/or Refining Kettle, identified as K3, with a maximum design rate of 1.45 T/hr, with a maximum heat input rate of 1.0 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1985, and exhausting to stack S-BH. Under 40 CFR 63, Subpart TTTTTT, this is considered an existing, affected facility.
- (5) Melting and/or Refining Kettle, identified as K4, with a maximum design rate of 1.45 T/hr, with a maximum heat input rate of 2.5 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1985, and exhausting to stack S-BH. Under 40 CFR 63, Subpart TTTTTT, this is considered an existing, affected facility.
- (6) 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.
- (7) 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.
- (b) 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. Under 40 CFR 63, Subpart TTTTTT, this is considered an existing, affected facility.
- (c) 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.
- (d) 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.
- (e) 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.
- (f) 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.
- (g) 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.

Existing Approvals

Since the issuance of MSOP Renewal No. M089-21474-00262 on August 10, 2007, the source has constructed or has been operating under the following additional approvals:

- (a) Notice-only change No. 089-18985-00262, issued on March 17, 2008, and;
- (b) Notice-only change No. 089-28091-00262, issued on July 16, 2009.

Enforcement Issue

There are no enforcement actions pending.

Emission Calculations

See Appendix A of this document for detailed emission calculations.

County Attainment Status

The source is located in Lake County.

Pollutant	Designation
SO ₂	Better than national standards.
со	Attainment effective February 18, 2000, for the part of the city of East Chicago bounded by Columbus Drive on the north; the Indiana Harbor Canal on the west; 148 th Street, if extended, on the south; and Euclid Avenue on the east. Unclassifiable or attainment effective November 15, 1990, for the remainder of East Chicago and Lake County.
О3	On June 11, 2012, the U.S. EPA designated Lake County nonattainment, for the 8-hour ozone standard. 12
PM _{2.5}	Unclassifiable or attainment effective February 6, 2012, for the annual PM _{2.5} standard.
PM _{2.5}	Unclassifiable or attainment effective December 13, 2009, for the 24-hour PM _{2.5} standard.
PM ₁₀	Attainment effective March 11, 2003, for the cities of East Chicago, Hammond, Whiting, and Gary. Unclassifiable effective November 15, 1990, for the remainder of Lake County.
NO ₂	Cannot be classified or better than national standards.
Pb	Unclassifiable or attainment effective December 31, 2011.

¹The U. S. EPA has acknowledged in both the proposed and final rulemaking for this redesignation that the anti-backsliding provisions for the 1-hour ozone standard no longer apply as a result of the redesignation under the 8-hour ozone standard. Therefore, permits in Lake County are no longer subject to review pursuant to Emission Offset, 326 IAC 2-3 for the 1-hour standard.

(a) Ozone Standards

U.S. EPA, in the Federal Register Notice 77 FR 112 dated June 11, 2012, has designated Lake County North Township as nonattainment for ozone. On August 1, 2012, the air pollution control board issued an emergency rule adopting the U.S. EPA's designation. This rule became effective August 9, 2012. IDEM does not agree with U.S. EPA's designation of nonattainment. IDEM filed a suit against U.S. EPA in the U.S. Court of Appeals for the DC Circuit on July 19, 2012. However, in order to ensure that sources are not potentially liable for a violation of the Clean Air Act, the OAQ is following the U.S. EPA's designation. Volatile organic compounds (VOC) and Nitrogen Oxides (NO $_{\rm X}$) 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 and NO $_{\rm X}$ emissions are considered when evaluating the rule applicability relating to ozone. Therefore, VOC and NO $_{\rm X}$ emissions were evaluated pursuant to the requirements of Emission Offset, 326 IAC 2-3.

(b) $PM_{2.5}$

Lake County has been classified as attainment for PM_{2.5}. Therefore, direct PM_{2.5}, SO₂, and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(c) Other Criteria Pollutants

Lake County has been classified as attainment or unclassifiable in Indiana for all other pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Fugitive Emissions

- (a) The fugitive emissions of criteria pollutants and hazardous air pollutants are counted toward the determination of 326 IAC 2-6.1 (Minor Source Operating Permits) applicability.
- (b) Since this type of operation is not one (1) of the twenty-eight (28) listed source categories under 326 IAC 2-2-1(ff)(1), 326 IAC 2-3-2(g), or 326 IAC 2-7-1(22)(B), and there is no applicable New Source Performance Standard or National Emission Standard for Hazardous Air Pollutants that was in effect on August 7, 1980, fugitive emissions are not counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

Greenhouse Gas (GHG) Emissions

On June 23, 2014, in the case of *Utility Air Regulatory Group v. EPA*, cause no. 12-1146, (available at http://www.supremecourt.gov/opinions/13pdf/12-1146 4g18.pdf) the United States Supreme Court ruled that the U.S. EPA does not have the authority to treat greenhouse gases (GHGs) as an air pollutant for the purpose of determining operating permit applicability or PSD Major source status. On July 24, 2014, the U.S. EPA issued a memorandum to the Regional Administrators outlining next steps in permitting decisions in light of the Supreme Court's decision. U.S. EPA's guidance states that U.S. EPA will no longer require PSD or Title V permits for sources "previously classified as 'Major' based solely on greenhouse gas emissions."

The Indiana Environmental Rules Board adopted the GHG regulations required by U.S. EPA at 326 IAC 2-2-1(zz), pursuant to Ind. Code § 13-14-9-8(h) (Section 8 rulemaking). A rule, or part of a rule, adopted under Section 8 is automatically invalidated when the corresponding federal rule, or part of the rule, is invalidated. Due to the United States Supreme Court Ruling, IDEM, OAQ cannot consider GHGs emissions to determine operating permit applicability or PSD applicability to a source or modification.

Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source.

Unrestricted Potential Emissions							
Pollutant	Tons/year						
PM	29.97						
PM ₁₀	30.18						
PM _{2.5}	30.17						
SO ₂	0.03						
NO _x	4.51						
VOC	0.25						
CO	3.79						
Single HAP (Lead)	3.78						
Total HAP	3.86						

Appendix A of this TSD reflects the unrestricted potential emissions of the source.

- (a) The potential to emit (as defined in 326 IAC 2-7-1(30)) of all regulated pollutants is less than 100 tons per year. However, PM10 and PM2.5 are equal to or greater than twenty-five (25) tons per year. The source is not subject to the provisions of 326 IAC 2-7. Therefore, the source will be issued an MSOP Renewal.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(30)) 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(30)) of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, the source will be issued an MSOP Renewal.

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.

	Potential To Emit of the Entire Source After Issuance of Renewal (tons/year)								
Process/ Emission Unit	PM	PM ₁₀ *	PM _{2.5} **	SO ₂	NOx	VOC	СО	Total HAPs	Highest Single HAP***
Kettles K6, K10, K11, K15	13.67	13.67	13.67	0.00	0.00	0.00	0.00	3.62	3.62
Reverberatory Furnace F3	1.40	1.40	1.40	0.00	0.00	0.00	0.01	0.35	0.35
Solder Melting Pot (K12, K13 & K14)	0.01	0.01	0.01	0.00	0.00	0.00	0.00	negl.	negl.
Solder & Lead Scrap Reclamation Process	0.03	0.03	0.03	0.00	0.00	0.00	0.00	negl.	negl.
Detinning Process	14.72	14.72	14.72	0.00	0.00	0.00	0.00	0.00	0.00
Natural Gas Combustion	0.09	0.34	0.34	0.03	4.51	0.25	3.79	0.09	
Paved Roads	0.06	0.01	negl.	0.00	0.00	0.00	0.00	0.00	0.00
Total PTE of Entire Source	29.97	30.18	30.17	0.03	4.51	0.25	3.79	3.86	3.78
PSD Major Source Thresholds	250	250	250	250	250	250	250	NA	NA
Emission Offset Major Source Thresholds	NA	NA	NA	NA	100	100	NA	NA	NA

negl. = negligible

- (a) This existing source is not a major stationary source, under PSD (326 IAC 2-2), because no PSD regulated pollutant is emitted at a rate of two hundred fifty (250) tons per year or more and it is one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(ff)(1).
- (b) This existing source is not a major stationary source under Emission Offset (326 IAC 2-3) because no nonattainment regulated pollutant is emitted at a rate of 100 tons per year or more.
- (c) This existing source is not a major source of HAPs, as defined in 40 CFR 63.2, because HAPs emissions are less than ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year of a combination of HAPs. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA).

Federal Rule Applicability

New Source Performance Standards (NSPS)

(a) The requirements of the New Source Performance Standard for Secondary Lead Smelters, 40 CFR 60, Subpart L, are not included in the permit because the source does not meet the definition of a smelter under 40 CFR 60.121(b) since the source processes lead in furnaces less than 980 degrees Celsius.

^{*} Under the Part 70 Permit program (40 CFR 70), PM10 and PM2.5, not particulate matter (PM), are each considered as a "regulated air pollutant".

^{**}PM_{2.5} listed is direct PM_{2.5}.

^{***}Highest Single HAP = Lead

- (b) The requirements of the New Source Performance Standard for Primary Lead Smelters, 40 CFR 60, Subpart R, are not included in the permit because the source is not a primary lead smelter, as defined in 40 CFR 60.180.
- (c) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included for this proposed revision.
- (d) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Secondary Lead Smelting, Subpart X, are not included in the permit because the source does not meet the definition of a smelter under 40 CFR 63.542 since the source processes lead in furnaces less than 980 degrees Celsius.
- (e) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Primary Nonferrous Metals, Subpart GGGGGG, are not included in the permit because the source is not a primary zinc production facility, as defined in 40 CFR 63.11167.
- (f) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Nine Metal Fabrication and Finishing Source Categories, Subpart XXXXXX, are not included in the permit because the source is not primarily engaged in one of the nine source categories listed in 40 CFR 63.11514(a).
- (g) There are no other National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included for this proposed revision.

Compliance Assurance Monitoring (CAM)

(h) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is not included in the permit, because the unlimited potential to emit of the source is less than the Title V major source thresholds and the source is not required to obtain a Part 70 or Part 71 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).

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

Page 8 of 16 TSD for M089-38168-00262

Whiting Metals, LLC Hammond, Indiana Permit Reviewer: Hannah Bays

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

The operation of the Solder Lead Reclamation Process 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.

Pursuant to 326 IAC 6.8-1-2(a),

Pursuant to 326 IAC 6.8-1-2(a), particulate matter emissions shall not exceed seven-hundredths (0.07) gram per dry standard cubic meter (g/dscm) (three-hundredths (0.03) grain per dry standard cubic foot (dscf)) for the following emissions units:

The Solder Lead Reclamation Process:

- (a) Reverberatory Sweat Furnace F-3
- (b) Sweat Kettle K6
- (c) Sweat Kettle K10
- (d) Sweat Kettle K11
- (e) Sweat Kettle K15
- (f) Cast Iron Melting Pot K12
- (g) Cast Iron Melting Pot K13
- (h) Cast Iron Melting Pot K14

Each of the rotary mixers and their natural gas burners.

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.

Compliance Determination and Monitoring Requirements

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

- (a) The Permittee has applicable compliance determination conditions as specified below:
 - (1) In order to assure compliance with 326 IAC 6.8-1-2(a), 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.
 - (3) In order to assure compliance with 326 IAC 6.8-1-2(a), the portable Dust Collector for particulate control shall be in operation and control emissions from the unloading process at all times while the process is in operation.
- (b) The Permittee has applicable compliance monitoring conditions as specified below:

Control	Parameter	Frequency
American Air Bag Filter Dust Collector System	Visible Emissions	Daily
Portable Dust Collectors	Inspections	Quarterly

Proposed Changes

The following changes have been made to the permit as a result of the comments received during the first Public Notice period that ran between April 15 and May 15, 2017, and includes source comments received on November 11, 2017. Deleted language is shown as strikeouts and new language **bolded**.

A.2 Emission Units and Pollution Control Equipment Summary

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

- (a) The Zinc Die Cast Alloying Process, with a maximum design rate of 4.754.60 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:
 - (1) 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. Under 40 CFR 63, Subpart TTTTTT, this is considered an existing, affected facility.
 - (2)(1) Reverberatory Sweat Furnace, identified as F-2, with a maximum design rate of 0.2 T/hr, with a maximum heat input rate of 3.0 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1985, and exhausting to stack S-BH. Under 40 CFR 63, Subpart TTTTTT, this is considered an existing, affected facility.
 - (3)(2) Melting and/or Refining Kettle, identified as K2, with a maximum design rate of 1.5 T/hr, with a maximum heat input rate of 1.0 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1985, and exhausting to stack S-BH. Under 40 CFR 63, Subpart TTTTTT, this is considered an existing, affected facility.
 - (4)(3) Melting and/or Refining Kettle, identified as K3, with a maximum design rate of 1.45 T/hr, with a maximum heat input rate of 1.0 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1985, and exhausting to stack S-BH. Under 40 CFR 63, Subpart TTTTTT, this is considered an existing, affected facility.
 - (5)(4) Melting and/or Refining Kettle, identified as K4, with a maximum design rate of 1.45 T/hr, with a maximum heat input rate of 2.5 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1985, and exhausting to stack S-BH. Under 40 CFR 63, Subpart TTTTTT, this is considered an existing, affected facility.
 - (6) 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.
 - (7) 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.

- (b)(a) The Solder and Lead Alloying Scrap Reclamation and Blending 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:
 - (1) Reverberatory Sweat Furnace, identified as F-3, with a maximum design rate of 0.2 T/hr, with a maximum heat input rate of 3.0 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1998, and exhausting to stack S-BH.
 - (2) Sweat Kettle, identified as K6, with a maximum design rate of 1.8 T/hr, with a maximum heat input rate of 2.5 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1990, and exhausting to stack S-BH.
 - (3) Sweat Kettle, identified as K10, with a maximum design rate of 0.05 T/hr, a maximum heat input rate of 0.25 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1990, and exhausting to stack S-BH.
 - (4) Sweat Kettle, identified as K11, with a maximum design rate of 0.05 T/hr, a maximum heat input rate of 0.25 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1990, and exhausting to stack S-BH.
 - (5) Sweat Kettle, identified as K15, with a maximum design rate of 0.05 T/hr, a maximum heat input rate of 0.25 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1990, and exhausting to stack S-BH.
 - (6) 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.
 - (7) 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.
 - (8) (6) Cast Iron Melting Pot Melting and/or Refining Kettle, identified as K12, with a maximum design rate of 0.3 T/hr, with a maximum heat input rate of 0.5 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1985, and exhausting to stack S-BH.
 - (9) (7) Cast Iron Melting Pot Melting and/or Refining Kettle, identified as K13, with a maximum design rate of 0.3 T/hr, with a maximum heat input rate of 0.5 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1985, and exhausting to stack S-BH.
 - (10) (8) Cast Iron Melting Pot Melting and/or Refining Kettle, identified as K14, with a maximum design rate of 0.4 T/hr, with a maximum heat input rate of 1.25 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1985, and exhausting to stack S-BH.

Whiting Metals, LLC Hammond, Indiana Permit Reviewer: Hannah Bays

- (11) 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.
- (e)(b) The reclamations of tin-coated brass punchings through agitation in one (1) of five (5) rotary mixers containing heated caustic solution. Each mixer is equipped with a 0.4 MMBtu/hr. natural gas burner to heat the caustic solution. Particulate emissions generated while unloading detinned brass punchings from the mixers into shipping containers shall be controlled by one (1) of three (3) portable Dust Collectors with manufacturer's rated control efficiency of 99.9% each. The maximum design rate of the process is 12 tons per hour.

. . .

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (a) The Zinc Die Cast Alloying Process, with a maximum design rate of 4.75**4.60** 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:
 - (1) 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. Under 40 CFR 63, Subpart TTTTTT, this is considered an existing, affected facility.
 - (2)(1) Reverberatory Sweat Furnace, identified as F-2, with a maximum design rate of 0.2 T/hr, with a maximum heat input rate of 3.0 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1985, and exhausting to stack S-BH. Under 40 CFR 63, Subpart TTTTTT, this is considered an existing, affected facility.
 - (3)(2) Melting and/or Refining Kettle, identified as K2, with a maximum design rate of 1.5 T/hr, with a maximum heat input rate of 1.0 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1985, and exhausting to stack S-BH. Under 40 CFR 63, Subpart TTTTTT, this is considered an existing, affected facility.
 - (4)(3) Melting and/or Refining Kettle, identified as K3, with a maximum design rate of 1.45 T/hr, with a maximum heat input rate of 1.0 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1985, and exhausting to stack S-BH. Under 40 CFR 63, Subpart TTTTTT, this is considered an existing, affected facility.
 - (5)(4) Melting and/or Refining Kettle, identified as K4, with a maximum design rate of 1.45 T/hr, with a maximum heat input rate of 2.5 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1985, and exhausting to stack S-BH. Under 40 CFR 63, Subpart TTTTTT, this is considered an existing, affected facility.
 - (6) 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.

- (7) 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.
- (b)(a) The Solder and Lead Alloying Scrap Reclamation and Blending 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:
 - (1) Reverberatory Sweat Furnace, identified as F-3, with a maximum design rate of 0.2 T/hr, with a maximum heat input rate of 3.0 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1998, and exhausting to stack S-BH.
 - (2) Sweat Kettle, identified as K6, with a maximum design rate of 1.8 T/hr, with a maximum heat input rate of 2.5 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1990, and exhausting to stack S-BH.
 - (3) Sweat Kettle, identified as K10, with a maximum design rate of 0.05 T/hr, a maximum heat input rate of 0.25 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1990, and exhausting to stack S-BH.
 - (4) Sweat Kettle, identified as K11, with a maximum design rate of 0.05 T/hr, a maximum heat input rate of 0.25 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1990, and exhausting to stack S-BH.
 - (5) Sweat Kettle, identified as K15, with a maximum design rate of 0.05 T/hr, a maximum heat input rate of 0.25 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1990, and exhausting to stack S-BH.
 - (6) 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.
 - (7) 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.
 - (8) (6) Cast Iron Melting Pot Melting and/or Refining Kettle, identified as K12, with a maximum design rate of 0.3 T/hr, with a maximum heat input rate of 0.5 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1985, and exhausting to stack S-BH.
 - (9) (7) Cast Iron Melting Pot Melting and/or Refining Kettle, identified as K13, with a maximum design rate of 0.3 T/hr, with a maximum heat input rate of 0.5 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1985, and exhausting to stack S-BH.
 - (10) (8) Cast Iron Melting Pot Melting and/or Refining Kettle, identified as K14, with a maximum design rate of 0.4 T/hr, with a maximum heat input rate of 1.25 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1985, and exhausting to stack S-BH.
 - (11) 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,

Whiting Metals, LLC Hammond, Indiana Permit Reviewer: Hannah Bays

and exhausting to stack S-BH.

(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 Limitations for Lake County [326 IAC 6.8-1-2(a)]

Pursuant to 326 IAC 6.8-1-2(a), particulate matter emissions shall not exceed seven-hundredths (0.07) gram per dry standard cubic meter (g/dscm) (three-hundredths (0.03) grain per dry standard cubic foot (dscf)) for the following emissions units:

The Zinc Die Cast Alloying Process:

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

The Solder and Lead Alloying Scrap Reclamation and Blending 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)(f) Cast Iron Melting Pot Melting and/or Refining Kettle K12
- (i)(g) Cast Iron Melting Pot Melting and/or Refining Kettle K13
- (i)(h) Cast Iron Melting Pot Melting and/or Refining Kettle K14
- (k) Holding Kettle K21

. .

D.2.1 Particulate Matter (PM) [326 IAC 6.8-1-2(a)]

Pursuant to 326 IAC 6.8-1-2(a), particulate matter emissions from each of the rotary mixers and their natural gas burners shall not exceed seven-hundredths (0.07) gram per dry standard cubic meter (g/dscm) (three-hundredths (0.03) grain per dry standard cubic foot (dscf))-for the unloading process.

Compliance Determination Requirements [326 IAC 2-6.1-5(a)(1)]

D.2.3 Particulate Control

In order to assure compliance with the Condition D.2.1, a portable dust collector for particulate control shall be in operation and control emissions from the rotary mixer unloading operations at all times while unloading is occurring.

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

D.2.3 Particulate Control

In order to assure compliance with the Condition D.2.1, the portable Dust Collector for particulate control shall be in operation and control emissions from the unloading process at all times while the process is in operation.

Page 14 of 16 TSD for M089-38168-00262

Whiting Metals, LLC Hammond, Indiana Permit Reviewer: Hannah Bays

D.2.4 Dust Collector Inspections

An inspection shall be performed each calendar quarter on each dust collector used to control the rotary mixer unloading operations. Inspections required by this condition shall not be performed in consecutive months. All defective bags shall be replaced.

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

D.2.5 Record Keeping Requirements

- (a) To document the compliance status with Condition D.2.4, the Permittee shall maintain records of the results of the inspections required under Condition D.2.4.
- (b) Section C General Record Keeping Requirements contains the Permittee's obligation with regard to the record keeping required by this condition.

SECTION E.1 NESHAP

Emissions Unit Description:

- (b) The Solder and Lead Scrap Reclamation and Blending 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:
 - (1) Reverberatory Sweat Furnace, identified as F-3, with a maximum design rate of 0.2 T/hr, a maximum heat input rate of 3.0 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1998, and exhausting to stack S-BH. Under 40 CFR 63, Subpart TTTTTT, this is considered an existing, affected facility.
 - (2) Sweat Kettle, identified as K6, with a maximum design rate of 1.8 T/hr, a maximum heat input rate of 2.5 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1990, and exhausting to stack S-BH. Under 40 CFR 63, Subpart TTTTTT, this is considered an existing, affected facility.
 - (3) Sweat Kettle, identified as K10, with a maximum design rate of 0.05 T/hr, a maximum heat input rate of 0.25 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1990, and exhausting to stack S-BH. Under 40 CFR 63, Subpart TTTTTT, this is considered an existing, affected facility.
 - (4) Sweat Kettle, identified as K11, with a maximum design rate of 0.05 T/hr, a maximum heat input rate of 0.25 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1990, and exhausting to stack S-BH. Under 40 CFR 63, Subpart TTTTTT, this is considered an existing, affected facility.
 - (5) Sweat Kettle, identified as K15, with a maximum design rate of 0.05 T/hr, a maximum heat input rate of 0.25 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1990, and exhausting to stack S-BH. Under 40 CFR 63, Subpart TTTTTT, this is considered an existing, affected facility.
 - (6) Cast Iron Melting Pot, identified as K12, with a maximum design rate of 0.3 T/hr, a maximum heat input rate of 0.5 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1985, and exhausting to stack S-BH. Under 40 CFR 63, Subpart TTTTTT, this is considered an existing, affected facility.
 - (7) Cast Iron Melting Pot, identified as K13, with a maximum design rate of 0.3 T/hr, a

Whiting Metals, LLC Hammond, Indiana Permit Reviewer: Hannah Bays

maximum heat input rate of 0.5 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1985, and exhausting to stack S-BH. Under 40 CFR 63, Subpart TTTTTT, this is considered an existing, affected facility.

(8) Cast Iron Melting Pot, identified as K14, with a maximum design rate of 0.4 T/hr, a maximum heat input rate of 1.25 MMBtu/hr, using an American Air Bag Filter Dust Collector System as control, constructed in 1985, and exhausting to stack S-BH. Under 40 CFR 63, Subpart TTTTTT, this is considered an existing, affected facility.

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

National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements [326 IAC 2-6.1-5(a)(1)]

- E.1.1 General Provisions Relating to NESHAP Subpart TTTTTT [326 IAC 20-1] [40 CFR Part 63, Subpart A]
 - (a) Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart A General Provisions, which are incorporated by reference as 326 IAC 20-1-1, for the emission unit(s) listed above, except as otherwise specified in 40 CFR Part 63, Subpart TTTTTT.
 - (b) Pursuant to 40 CFR 63.10, the Permittee shall submit all required notifications and reports to:

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

and

(11)

United States Environmental Protection Agency, Region 5
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

E.1.2 Secondary Nonferrous Metals Processing Area Sources NESHAP [40 CFR Part 63, Subpart TTTTTT]

The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart TTTTTT (included as Attachment A to the operating permit), which are incorporated by reference as 326 IAC 20, for the emission unit(s) listed above:

40 CFR 63.11462(a), (b) 40 CFR 63.11463(a), (b), (c) (3)40 CFR 63.11464(a) (4)40 CFR 63.11465(a) 40 CFR 63.11466(a), (b), (c)(1)(i-v), (c)(2) (5) 40 CFR 63.11467(a-q) (6) 40 CFR 63.11468(a)(1)(i), (a)(1)(ii), (a)(2), (b) (7)(8)40 CFR 63.11469(a), (b)(1), (b)(2), (c) (9) 40 CFR 63.11470(a)(1), (a)(2), (b), (c), (d) (10)40 CFR 63.11471

40 CFR 63.11472

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 February 6, 2017.

Conclusion

The secondary nonferrous metals operation of metals shall be subject to the conditions of the attached MSOP Renewal No.: M089-38168-00262.

IDEM Contact

- (a) Questions regarding this proposed permit can be directed to Hannah Bays at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 233-0868 or toll free at 1-800-451-6027 extension 3-0868.
- (b) A copy of the findings is available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/
- (c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Permit Guide on the Internet at: http://www.in.gov/idem/5881.htm; and the Citizens' Guide to IDEM on the Internet at: http://www.in.gov/idem/6900.htm.

Appendix A: Emissions Calculations Summary

Company Name: Whiting Metals LLC
Address City IN Zip: 2230 Indianapolis Boulevard, Hammond, IN 46394
Permit #: M089-38168-00262

Reviewer: Hannah Bays

		Jncontrolle	ed Potential	to Emit (to	ons/yr)				
Emission Unit	PM	PM10	PM2.5	SO ₂	NOx	voc	СО	Total HAPs	Single HAP*
			Zinc Produ	ction					
Reverberatory Furnace F-2	11.39	11.39	11.39	0.00	0.00	2.10	0.00	0.01	0.00
Kettles K2, K3, K4	0.08	0.08	0.08	0.00	0.00	0.00	0.00	0.08	0.00
Zinc Die Cast Alloy Casting	0.31	0.31	0.31	0.00	0.00	0.00	0.00	2.01E-04	0.00
			Lead Produ	ıction					
Kettle K6, K10, K11, K15	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.01	0.01
Reverberatory Furnace F3	44.68	27.16	27.16	0.00	0.00	0.00	0.00	6.13	6.13
Solder Kettle Refining (K12, K13, K14)	0.13	0.13	0.13	0.00	0.00	0.00	0.00	0.04	0.04
Solder & Lead Alloy Casting	0.55	12.00	12.00	0.00	0.00	0.00	0.00	0.14	0.14
Detinning Process	14.72	14.72	14.72	0.00	0.00	0.00	0.00	0.00	0.00
Natural Gas Combustion	0.15	0.59	0.59	0.05	7.73	0.43	6.49	0.15	3.86E-05
Paved Roads	0.06	0.01	3.08E-03	0.00	0.00	0.00	0.00	0.00	0.00
Total	72.08	66.40	66.39	0.05	7.73	2.53	6.49	6.55	6.32

^{*}Highest Single Source-wide HAP = Lead

		Potential to	Emit after	Control (to	ns/yr)				
Emission Unit	PM	PM10	PM2.5	SO ₂	NOx	voc	СО	Total HAPs	Single HAP*
			Zinc Produ	ction					
Reverberatory Furnace F-2	0.11	0.11	0.11	-	-	2.10	-	8.76E-05	-
Kettles K2, K3, K4	7.71E-04	7.71E-04	7.71E-04	-	-	-	-	7.71E-04	-
Zinc Die Cast Alloy Casting	3.12E-03	3.12E-03	3.12E-03	-	-	-	-	2.01E-06	-
			Lead Produ	ction					
Kettle K6, K10, K11, K15	3.94E-05	3.94E-05	3.94E-05	-	-	-	-	1.18E-05	1.18E-05
Reverberatory Furnace F3	0.45	0.27	0.27	ı	-	1	-	-	-
Solder Kettle Refining (K12, K13, K14)	3.41E-03	1.31E-03	1.31E-03	-	-	-	-	1.14E-03	1.14E-03
Solder & Lead Alloy Casting	5.69E-03	0.12	0.12	-	-	-	-	1.42E-03	1.42E-03
Detinning Process	0.15	0.15	0.15	-	-	-	-	-	-
Natural Gas Combustion	0.15	0.59	0.59	0.05	7.73	0.43	6.49	0.15	3.86E-05
Paved Roads	0.06	0.01	3.08E-03		-	1	-	-	-
Total	0.93	1.26	1.25	0.05	7.73	2.53	6.49	0.15	2.61E-03

^{*}Highest Single Source-wide HAP = Lead

Appendix A: Emissions Calculations Zinc Production

Company Name: Whiting Metals LLC

Address City IN Zip: 2230 Indianapolis Boulevard, Hammond, IN 46394 Permit #: M089-38168-00262

Reviewer: Hannah Bays

Reverberatory Furnace F-2 (processing of general scrap)

MDR (T/hr): 0.20 YEARLY PROD (T/yr): 1222

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

					POTENTIAL I	EMISSIONS			
	SCC NO. 3-04-008-28		BEF	ORE CONTR	OLS		AFTER CONTROLS		
POLLUTANT	EF(LB/T produced)	CE (%)	(lbs/hr)	(lbs/day)	(TPY)		(lbs/hr)	(TPY)	(gr/dscf)
PM	13	0.99	2.6000	62.4000	11.3880		0.0260	0.1139	0.0001
PM10	13	0.99	2.6000	62.4000	11.3880		0.0260	0.1139	0.0001
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	2.4	0	0.4800	11.5200	2.1024		0.4800	2.1024	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
Cadmium	0.01	0.99	0.0020	0.0480	0.0088		0.0000	0.0001	1.07E-07

Cadmium 0.01 0.99 0.0020 0.0040 0.0088 0.0000 0.0000 0.0001

*Per Company, furnace throughputs approximately 50% of total zinc processed. Clean Scrap processed in Kettles K2, K3, K4.

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

Kettles K2, K3, K4 Melting of clean scrap (ingots) & Refining

MDR (T/hr): 4.4 YEARLY PROD (T/yr): 720

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

weiting of clean	scrap (mi	jois) a Reilling					WIDIX (1/III).	4.4		3	I ACK ID (DIA
						YEARLY	Y PROD (T/yr):	720			FLOWRA
CNTRL DEV: An	nerican Air	Bag Filter Dust Collector	,								
			PER	MITTED OPER	RATING HRS:	8760	hr/yr				
						POTENTIAL	EMISSIONS				
		SCC NO. 3-04-008-05		BEF	ORE CONTR	OLS		AFT	TER CONTR	OLS	
POLLUTA	.NT	EF(LB/T produced)	CE (%)	(lbs/hr)	(lbs/day)	(TPY)		(lbs/hr)	(TPY)	(gr/dscf)	
PM		0.004	0.99	0.0176	0.4224	0.0771		0.0002	0.0008	9.45E-07	7
PM10		0.004	0.99	0.0176	0.4224	0.0771		0.0002	0.0008	9.45E-07	7
SOx		0	0	0.0000	0.0000	0.0000		0.0000	0.0000	N/A	١
NOx		0	0	0.0000	0.0000	0.0000		0.0000	0.0000	N/A	Λ.
VOC		0	0	0.0000	0.0000	0.0000		0.0000	0.0000	N/A	١
CO		0	0	0.0000	0.0000	0.0000		0.0000	0.0000	N/A	Λ.
LEAD		0	0	0.0000	0.0000	0.0000		0.0000	0.0000	N/A	١
Cadmiur	m	0.004	0.99	0.0176	0.4224	0.0771		0.0002	0.0008	9.45E-07	,

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): 4.6 YEARLY PROD (T/yr): 1222 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:

SCC NO. 3-04-009-73

: 8760 hr/yr
POTENTIAL EMISSIONS

	3CC NO. 3-04-000-73			OKE CONTR	JLS		AFI	EK CONTRO	JLO
POLLUTANT	EF(LB/T produced)	CE (%)	(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	3.83E-06
PM10	0.015	0.99	0.0713	1.7100	0.3121		0.0007	0.0031	3.83E-06
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
Cadmium	0.00001	0.99	0.0000	0.0011	0.0002		0.0000	0.0000	2.47E-09
EEs from HC EDA's FIDE \	levelen E O Course Clas	oification Cor	lee and Emice	ion Footor Lie	ting for Crito	rio Air Dolluto	nto		

Appendix A: Emissions Calculations Lead Alloy Production

Company Name: Whiting Metals LLC Address City IN Zip: 2230 Indianapolis Boulevard, Hammond, IN 46394 Permit #: M089-38168-00262 Reviewer: Hannah Bays

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

MDR (T/hr): 1.95 YEARLY PROD (T/yr): 199

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

8760 hr/yr

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

			POTENTIAL EMISSIONS							ı
	SCC NO. 3-04-004-14	ı	BEFORE CONTROLS					AFTER CONTROLS		l
POLLUTANT	EF(LB/T produced)	CE (%)	(lbs/hr)	(lbs/day)	(TPY)		(lbs/hr)	(TPY)	(gr/dscf)	l
PM	0.002	0.99	0.0039	0.0936	0.0171		9.00E-06	3.94E-05	4.83E-08	l
PM10	0.002	0.99	0.0039	0.0936	0.0171		9.00E-06	3.94E-05	4.83E-08	l
SOx	0	0	0.0000	0.0000	0.0000		0.0000	0.0000	N/A	l
NOx	0	0	0.0000	0.0000	0.0000		0.0000	0.0000	N/A	l
VOC	0	0	0.0000	0.0000	0.0000		0.0000	0.0000	N/A	l
CO	0	0	0.0000	0.0000	0.0000		0.0000	0.0000	N/A	l
LEAD	0.0006	0.99	0.0012	0.0281	0.0051		2.70E-06	1.18E-05	1.45E-08	

EFs from US EPA's AP-42, Chapter 12.11, Table 12.11-4.

*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)

STACK ID (DIAM:HEIGHT): (2.4': 10') FLOWRATE (ACFM): 25000

MDR (T/hr): 0.2 YEARLY PROD (T/yr): 244

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

PERMITTED OPERATING HRS: 8760 hr/yr

Ts(°F): 150

			POTENTIAL EMISSIONS							
	SCC NO. 3-04-004-05	5	BEF	ORE CONTR	OLS			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	5.48E-04	
PM10	31	0.99	6.2000	148.8000	27.1560		0.0620	0.2716	3.33E-04	
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	7	0.99	1.4000	33.6000	6.1320		0.0140	0.0613	N/A	

EFs from US EPA's FIRE Version 5.0 Source Classification Codes and Emission Factor Listing for Criteria Air Pollutants Lead Emission Factor from AP-42, Chapter 12.11, Table 12.11-2 (Sweating SCC 3-04-004-04)

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

MDR (T/hr): 1.00 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

			POTENTIAL EMISSIONS							
	SCC NO. 3-04-004-26	5	BEF	ORE CONTR	OLS			AFTER CONTROLS		
POLLUTANT	EF(LB/T produced)	CE (%)	(lbs/hr)	(lbs/day)	(TPY)		(lbs/hr)	(TPY)	(gr/dscf)	
PM	0.03	0.99	0.0300	0.7200	0.1314		0.0008	0.0034	4.18E-06	
PM10	0.03	0.99	0.0300	0.7200	0.1314		0.0003	0.0013	1.61E-06	
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	0.0100	0.2400	0.0438		0.0003	0.0011	1.39E-06	

*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

Appendix A: Emissions Calculations Lead Alloy Production

Company Name: Whiting Metals LLC Address City IN Zip: 2230 Indianapolis Boulevard, Hammond, IN 46394 Permit #: M089-38168-00262 Reviewer: Hannah Bays

Solder & Lead Alloy Casting

MDR (T/hr): 3.15 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)

DEDMITTED OPERATING HRS: 8760 hr/yr

		PERIVII	I TED OPERA		8760	nr/yr				
					POTENTIAL	. EMISSIONS				
	SCC NO. 3-04-004-09	9	BEF	ORE CONTR	OLS			AFTER CONTROLS		
POLLUTANT	EF(LB/T cast)	CE (%)	(lbs/hr)	(lbs/day)	(TPY)		(lbs/hr)	(TPY)	(gr/dscf)	
PM	0.04	0.99	0.13	3.02	0.55		0.0013	0.0057	6.97E-06	
PM10	0.87	0.99	2.74	65.77	12.00		0.0282	0.1237	1.52E-04	
SOx	0	0	0.00	0.00	0.00		0.0000	0.0000	N/A	
NOx	0	0	0.00	0.00	0.00		0.0000	0.0000	N/A	
VOC	0	0	0.00	0.00	0.00		0.0000	0.0000	N/A	
co	0	0	0.00	0.00	0.00		0.0000	0.0000	N/A	
LEAD	0.01	0.99	0.03	0.76	0.14		0.0003	0.0014	1.74E-06	1

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

Page 5 of 7 TSD App A

Appendix A: Emissions Calculations Scrap Metal Detinning Process

Company Name: Whiting Metals LLC

Address City IN Zip: 2230 Indianapolis Boulevard, Hammond, IN 46394
Permit #: M089-38168-00262
Reviewer: Hannah Bays

Reclamations of tin-coated brass punchings from (5) mixers

MDR (T/hr): 12.0 YEARLY PROD (T/yr): 2732.15

STACK ID (DIAM:HEIGHT): (2.4': 10') FLOWRATE (ACFM): 7600

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

Ts(°F): 70

		PERMI	TTED OPERA	ATING HRS:	8760	hr/yr			
					POTENTIAL E	MISSIONS			
			BEF	ORE CONTR	OLS		AFT	TER CONTRO	OLS
POLLUTANT	EF(LB/T cast)	CE (%)	(lbs/hr)	(lbs/day)	(TPY)		(lbs/hr)	(TPY)	(gr/dscf)
PM	0.28	0.99	3.3600	80.6400	14.7168		0.0336	0.1472	5.16E-04
PM10	0.28	0.99	3.3600	80.6400	14.7168		0.0336	0.1472	5.16E-04
PM2.5	0.28	0.99	3.3600	80.6400	14.7168		0.0336	0.1472	5.16E-04
SOx	0	0	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000
NOx	0	0	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000
VOC	0	0	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000
CO	0	0	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000
LEAD	0	0	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000

Notes.

1. MDR limited by number of Dust Collectors (3). Typical load is 12,000 lbs; it takes 1.5 hrs to unload the mixer. DC's only used during unloading; 1 per mixer EF obtained through material mass balance. 5 lbs of dust were collected during the unloading of 36,000 lbs (18 tons) of brass punchings. (5 lbs / 18 tons = 0.28 lb/ton)

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

Company Name: Whiting Metals LLC

Address City IN Zip: 2230 Indianapolis Boulevard, Hammond, IN 46394

Permit #: M089-38168-00262 Reviewer: Hannah Bays

	HHV		
Heat Input Capacity	mmBtu	Potential Throughput	
MMBtu/hr	mmscf	MMCF/yr	Emission Units
3.00		25.8	Sweat Furnace F-2
3.00		25.8	Sweat Furnace F-3
1.00		8.6	Melting/Refining Kettle K2
1.00		8.6	Melting/Refining Kettle K3
2.50		21.5	Melting/Refining Kettle K4
2.50		21.5	Melting/Refining Kettle K6
0.50		4.3	Melting/Refining Kettle K12
0.50		4.3	Melting/Refining Kettle K13
1.25		10.7	Melting/Refining Kettle K14
0.25		2.1	Sweat Kettle K10
0.25		2.1	Sweat Kettle K11
0.25		2.1	Sweat Kettle K15
2.00		17.2	Five (5) Rotary Mixers @ 0.4 MMBtu/hr, each
18.0	1020	154.6	

				Pollutant			
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	7.6	0.6	100	5.5	84
					**see below		
Potential Emission in tons/yr	0.15	0.59	0.59	0.05	7.73	0.43	6.49

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

PM2.5 emission factor is filterable and condensable PM2.5 combined.

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

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

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,020 MMBtu

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Hazardous Air Pollutants (HAPs)

		HAPs - Organics								
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene	Total - Organics				
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03					
Potential Emission in tons/yr	1.6E-04	9.3E-05	5.8E-03	0.14	2.6E-04	0.15				

		HAPs - Metals								
	Lead	Cadmium	Chromium	Manganese	Nickel	Total - Metals				
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03					
Potential Emission in tons/yr	3.9E-05	8.5E-05	1.1E-04	2.9E-05	1.6E-04	4.2E-04				
Methodology is the same as above.	Methodology is the same as above. Total HAPs 0.15									
The five highest organic and metal HAPs emission factors are provided above. Highest HAP 0.14										

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

Hexane

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

Appendix A: Emission Calculations Fugitive Dust Emissions - Paved Roads

Company Name: Whiting Metals, LLC Source Address: 2230 Indianapolis Boulevard, Hammond, IN 46394

M089-38168-00262 Permit Number: Reviewer: Hannah Bays

Paved Roads at Industrial Site

The following calculations determine the amount of emissions created by paved roads, based on 8,760 hours of use and AP-42, Ch 13.2.1 (1/2011).

Vehicle Informtation (provided by source)

					Total			Maximum	
	Maximum		Maximum	Maximum	Weight	Maximum	Maximum	one-way	Maximum
	number of	Number of one-	trips per	Weight	driven per	one-way	one-way	miles	one-way
	vehicles	way trips per day	day	Loaded	day	distance	distance	(miles/day	miles
Туре	per day	per vehicle	(trip/day)	(tons/trip)	(ton/day)	(feet/trip)	(mi/trip))	(miles/yr)
Vehicle (entering plant) (one-way trip)	1.6	1.0	1.6	15.0	24.0	450	0.085	0.1	49.8
Vehicle (leaving plant) (one-way trip)	1.6	1.0	1.6	15.0	24.0	450	0.085	0.1	49.8
		Totals	2.2		40 N			0.2	00.5

Average Vehicle Weight Per Trip = 15.0 tons/trip
Average Miles Per Trip = 0.09 miles/trip

Unmitigated Emission Factor, Ef = [k * (sL)^0.91 * (W)^1.02] (Equation 1 from AP-42 13.2.1)

PM10 PM2.5 0.011 0.0022 0.00054 lb/VMT = particle size multiplier (AP-42 Table 13.2.1-1) W = 15.0 15.0 15.0 tons = average vehicle weight (provided by source) g/m^2 = silt loading value for paved roads at iron and steel production facilities - Table 13.2.1-3) sL = 9.7 9.7

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, Eext = E * [1 - (p/4N)] (Equation 2 from AP-42 13.2.1)

Mitigated Emission Factor, Eext = Ef * [1 - (p/4N)]

days of rain greater than or equal to 0.01 inches (see Fig. 13.2.1-2)

365 days per year

PM2.5 PM PM10 Unmitigated Emission Factor, Ef = 0.0676 lb/mile 1.377 0.275 Mitigated Emission Factor, Eext = lb/mile 1.259 0.0618 Dust Control Efficiency =

	Unmitigat		Unmitigat	Mitigated	Mitigated	Mitigated	Controlled	Controlled	Controlled
	ed PTE of		ed PTE of	PTE of	PTE of	PTE of	PTE of	PTE of	PTE of
	PM	Unmitigated PTE	PM2.5	PM	PM10	PM2.5	PM	PM10	PM2.5
Process	(tons/yr)	of PM10 (tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)
Vehicle (entering plant) (one-way trip)	0.03	0.01	1.68E-03	0.03	0.01	1.54E-03	0.03	0.01	1.54E-03
Vehicle (leaving plant) (one-way trip)	0.03	0.01	1.68E-03	0.03	0.01	1.54E-03	0.03	0.01	1.54E-03
Totals	0.07	0.01	3 36F-03	0.06	0.01	3 08F-03	0.06	0.01	3.08F-03

Methodology

Total Weight driven per day (ton/day) Maximum one-way distance (mi/trip) Maximum one-way miles (miles/day) Average Vehicle Weight Per Trip (ton/trip) Average Miles Per Trip (miles/trip) Unmitigated PTE (tons/yr) Mitigated PTE (tons/yr) Controlled PTE (tons/yr)

- = [Maximum Weight Loaded (tons/trip)] * [Maximum trips per day (trip/day)]
- = [Maximum one-way distance (feet/trip) / [5280 ft/mile]
- = [Maximum trips per year (trip/day)] * [Maximum one-way distance (mi/trip)]

- = [waximum trips per year (trip/day)] [waximum one-way distance (fil/trip)]
 = SUM[Total Weight driven per day (ton/day)] / SUM[Maximum trips per day (trip/day)]
 = SUM[Maximum one-way miles (miles/yr)] * [Unmitigated Emission Factor (lb/mile)] * (ton/2000 lbs)
 = [Maximum one-way miles (miles/yr)] * [Mitigated Emission Factor (lb/mile)] * (ton/2000 lbs)
- = [Mitigated PTE (tons/yr)] * [1 Dust Control Efficiency]

Abbreviations

PM = Particulate Matter PM10 = Particulate Matter (<10 um) PM2.5 = Particle Matter (<2.5 um) PTE = Potential to Emit



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

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

Eric J. Holcomb

Governor

Bruno L. Pigott

Commissioner

SENT VIA U.S. MAIL: CONFIRMED DELIVERY AND SIGNATURE REQUESTED

TO: Alex Gross

Whiting Metals LLC

PO Box 482

Whiting, IN 46394

DATE: December 22, 2017

FROM: Jenny Acker, Branch Chief

Permits Branch Office of Air Quality

SUBJECT: Final Decision

MSOP Renewal 089 38168 00262

Enclosed is the final decision and supporting materials for the air permit application referenced above. Please note that this packet contains the original, signed, permit documents.

The final decision is being sent to you because our records indicate that you are the contact person for this application. However, if you are not the appropriate person within your company to receive this document, please forward it to the correct person.

A copy of the final decision and supporting materials has also been sent via standard mail to: Mark Elliott

OAQ Permits Branch Interested Parties List

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178, or toll-free at 1-800-451-6027 (ext. 3-0178), and ask to speak to the permit reviewer who prepared the permit. If you think you have received this document in error, please contact Joanne Smiddie-Brush of my staff at 1-800-451-6027 (ext 3-0185), or via e-mail at ibrush@idem.IN.gov.

Final Applicant Cover letter.dot 1/9/2017





INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

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

Eric J. Holcomb

Governor

Bruno L. Pigott

Commissioner

December 22, 2017

TO: Hammond Public Library 564 State St Hammond IN

From: Jenny Acker, Branch Chief

Permits Branch
Office of Air Quality

Subject: Important Information for Display Regarding a Final Determination

Applicant Name: Whiting Metals, LLC Permit Number: 089 38168 00262

You previously received information to make available to the public during the public comment period of a draft permit. Enclosed is a copy of the final decision and supporting materials for the same project. Please place the enclosed information along with the information you previously received. To ensure that your patrons have ample opportunity to review the enclosed permit, we ask that you retain this document for at least 60 days.

The applicant is responsible for placing a copy of the application in your library. If the permit application is not on file, or if you have any questions concerning this public review process, please contact Joanne Smiddie-Brush, OAQ Permits Administration Section at 1-800-451-6027, extension 3-0185.

Enclosures Final Library.dot 1/9/2017



Mail Code 61-53

IDEM Staff	LPOGOST 12/22	2/2017		
	Whiting Metals L	LC 089 38168 00262 /final)	AFFIX STAMP	
Name and		Indiana Department of Environmental	Type of Mail:	HERE IF
address of		Management		USED AS
Sender		Office of Air Quality – Permits Branch	CERTIFICATE OF	CERTIFICATE
		100 N. Senate	MAILING ONLY	OF MAILING
		Indianapolis, IN 46204	MAILING GIVET	

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee
											Remarks
1		Alex Gross Whiting Metals LLC PO Box 482 Whiting IN 46394 (Source CAATS) Via El	MS								
2		East Chicago City Council 4525 Indianapolis Blvd East Chicago IN 46312 (Local Oi	fficial)								
3		Lake County Health Department-Gary 1145 W. 5th Ave Gary IN 46402-1795 (Health	n Departmen	t)							
4		WJOB / WZVN Radio 6405 Olcott Ave Hammond IN 46320 (Affected Party)									
5		Hammond Public Library 564 State St Hammond IN 46320-1532 (Library)									
6		Lowell Town Council and Town Manager PO Box 157, 501 East Main Street Lowell IN 46356 (Local Official)									
7		Shawn Sobocinski 1814 Laporte Street Portage IN 46368-1217 (Affected Party)									
8		Whiting City Council and Mayors Office 1143 119th St Whiting IN 46394 (Local Office	cial)								
9		Mr. Dennis Hahney Pipefitters Association, Local Union 597 1461 East Summit St Crov	vn Point IN 4	16307 (Affecte	ed Party)						
10		Craig Hogarth 7901 West Morris Street Indianapolis IN 46231 (Affected Party)									
11		Lake County Commissioners 2293 N. Main St, Building A 3rd Floor Crown Point IN 4	6307 (Local	l Official)							
12		Anthony Copeland 2006 E. 140th Street East Chicago IN 46312 (Affected Party)									
13		Barbara G. Perez 506 Lilac Street East Chicago IN 46312 (Affected Party)									
14		Mr. Robert Garcia 3733 Parrish Avenue East Chicago IN 46312 (Affected Party)									
15		Ms. Karen Kroczek 8212 Madison Ave Munster IN 46321-1627 (Affected Party)									

Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is \$50,000 per piece subject to a limit of \$50,000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is \$500. The maximum indemnity payable is \$25,000 for registered mail, sent with optional postal insurance. See <i>Domestic Mail Manual R900</i> , \$913, and \$921 for limitations of coverage on inured and COD mail. See <i>International Mail Manual</i> for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.
--	---	--	--

Mail Code 61-53

IDEM Staff	LPOGOST 12/22	2/2017		
	Whiting Metals L	LC 38168 (draft/final)	AFFIX STAMP	
Name and		Indiana Department of Environmental	Type of Mail:	HERE IF
address of		Management		USED AS
Sender		Office of Air Quality – Permits Branch	CERTIFICATE OF	CERTIFICATE
		100 N. Senate	MAILING ONLY	OF MAILING
		Indianapolis, IN 46204		

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee
											Remarks
1		Joseph 11723 S Oakridge Drive St. John IN 46373 (Affected Party)									
2		Gary City Council 401 Broadway # 209 Gary IN 46402 (Local Official)									
3		Mr. Larry Davis 268 South, 600 West Hebron IN 46341 (Affected Party)									
4		Ryan Dave 939 Cornwallis Munster IN 46321 (Affected Party)									
5		Mark Coleman PO Box 85 Beverly Shores IN 46301-0085 (Affected Party)									
6		Carolyn Marsh 1804 Oliver St Whiting IN 46394 (Affected Party)									
7		Michael Boos Association of Wolf Lake Initiative 2400 New York Avenue Whiting IN 4	6394 (Affect	ed Party)							
8		Janet Venecz Hammond Common Council 5925 Calumet Avenue Hammond IN 4632	0 (Affected F	Party)							
9		Gayle S. Tonkovich 1612 Warwick Avenue Whiting IN 46394 (Affected Party)									
10		Peter Beda 2610 White Oak Ave. Whiting IN 46394 (Affected Party)									
11		Marilou Tonkovich 1809 Brown Avenue Whiting IN 46394 (Affected Party)									
12		David Dabertin 5246 Hohman Avenue Hammond IN 46320 (Affected Party)									
13		Debra Malone Hammond Department of Environmental Management 5925 Calumet A	venue, Room	304 Hammor	nd IN 46320 (Affecte	ed Party)					
14		Mark Elliott 2016 N. Cleveland, 1S Chicago IL 60614 (Source – addl contact)									
15											

Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is \$50,000 per piece subject to a limit of \$50,000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is \$500. The maximum indemnity payable is \$25,000 for registered mail, sent with optional postal insurance. See <i>Domestic Mail Manual R900</i> , \$913, and \$921 for limitations of coverage on inured and COD mail. See <i>International Mail Manual</i> for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.
--	---	--	--