



Indiana Department of Environmental Management

We Protect Hoosiers and Our Environment.

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Michael R. Pence
Governor

Carol S. Comer
Commissioner

NOTICE OF 30-DAY PERIOD FOR PUBLIC COMMENT

Preliminary Findings Regarding the Renewal of a
Part 70 Operating Permit

for Metal Services LLC dba Phoenix Services LLC in Porter County

Part 70 Operating Permit Renewal No.: T127-36307-00026

The Indiana Department of Environmental Management (IDEM) has received an application from Metal Services LLC dba Phoenix Services LLC located at 250 W US Highway 12, Burns Harbor, Indiana 46304 for a renewal of its Part 70 Operating Permit issued on date. If approved by IDEM's Office of Air Quality (OAQ), this proposed renewal would allow Metal Services LLC dba Phoenix Services LLC to continue to operate its existing source.

This draft Part 70 Operating Permit Renewal does not contain any new equipment that would emit air pollutants; however, some conditions from previously issued permits/approvals have been corrected, changed, or removed. These corrections, changes, and removals may include Title I changes (e.g., changes that add or modify synthetic minor emission limits). This notice fulfills the public notice procedures to which those conditions are subject. IDEM has reviewed this application and has developed preliminary findings, consisting of a draft permit and several supporting documents, which would allow for these changes.

A copy of the permit application and IDEM's preliminary findings are available at:

Westchester Public Library
200 West Indiana Avenue
Chesterton, Indiana 46304

and

IDEM Northwest Regional Office
330 W. US Highway 30, Suites E & F
Valparaiso, IN 46385

A copy of the preliminary findings is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>.

How can you participate in this process?

The date that this notice is published in a newspaper marks the beginning of a 30-day public comment period. If the 30th day of the comment period falls on a day when IDEM offices are closed for business, all comments must be postmarked or delivered in person on the next business day that IDEM is open.

You may request that IDEM hold a public hearing about this draft permit. 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.

Comments and supporting documentation, or a request for a public hearing should be sent in writing to IDEM at the address below. If you comment via e-mail, please include your full U.S. mailing address so that you can be added to IDEM's mailing list to receive notice of future action related to this permit. If you do not want to comment at this time, but would like to receive notice of future action related to this permit application, please contact IDEM at the address below. Please refer to permit number T127-36307-00026 in all correspondence.

Comments should be sent to:

Phillip Joseph
IDEM, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
(800) 451-6027, ask for extension 3-4228
Or dial directly: (317) 233-4228
Fax: (317) 232-6749 attn: Phillip Joseph
E-mail: PJoseph@idem.IN.gov

All comments will be considered by IDEM when we make a decision to issue or deny the permit. Comments that are most likely to affect final permit decisions are those based on the rules and laws governing this permitting process (326 IAC 2), air quality issues, and technical issues. IDEM does not have legal authority to regulate zoning, odor, or noise. For such issues, please contact your local officials.

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>.

What will happen after IDEM makes a decision?

Following the end of the public comment period, IDEM will issue a Notice of Decision stating whether the permit has been issued or denied. If the permit is issued, it may be different than the draft permit because of comments that were received during the public comment period. If comments are received during the public notice period, the final decision will include a document that summarizes the comments and IDEM's response to those comments. If you have submitted comments or have asked to be added to the mailing list, you will receive a Notice of the Decision. The notice will provide details on how you may appeal IDEM's decision, if you disagree with that decision. The final decision will also be available on the Internet at the address indicated above, at the local library indicated above, at the IDEM Regional Office indicated above, and the IDEM public file room on the 12th floor of the Indiana Government Center North, 100 N. Senate Avenue, Indianapolis, Indiana 46204-2251.

If you have any questions, please contact Phillip Joseph of my staff at the above address.



Josiah K. Balogun, Section Chief
Permits Branch
Office of Air Quality



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DRAFT

**Part 70 Operating Permit Renewal
OFFICE OF AIR QUALITY**

**Metal Services LLC dba Phoenix Services LLC a contractor of
ArcelorMittal Burns Harbor, LLC
250 U.S. Highway 12
Burns Harbor, Indiana 46304**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. Noncompliance with any provision of this permit, except any provision specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act. It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T127-36307-00026	
Issued by: Josiah K. Balogun, Section Chief Permits Branch Office of Air Quality	Issuance Date: Expiration Date:

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Attachment A: Fugitive Dust Control Plan

SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 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 2-7-4(c)][326 IAC 2-7-5(14)][326 IAC 2-7-1(22)]

The Permittee owns and operates a stationary slag finishing operation.

Source Address:	250 U.S. Highway 12, Burns Harbor, Indiana 46304
General Source Phone Number:	219-246-0346
SIC Code:	3312 (Steel Works, Blast Furnaces, and Rolling Mills) 3295 (Minerals and Earths)
County Location:	Porter
Source Location Status:	Nonattainment for 8-hour ozone standard Attainment for all other criteria pollutants
Source Status:	Part 70 Operating Permit Program Major Source under PSD and Minor Source under Emission Offset Rules Major Source, Section 112 of the Clean Air Act 1 of 28 Source Categories

A.2 Part 70 Source Definition

This slag finishing operation consists of a source with on-site contractors:

- (a) ArcelorMittal Burns Harbor, LLC (127-00001), the primary operation, is located at, 250 U.S. Highway 12, Burns Harbor, Indiana 46304.
- (b) Indiana Flame (T127-00098), the on-site contractor, is located at 250 U.S. Highway 12, Burns Harbor, Indiana 46304.
- (c) Metal Services LLC dba Phoenix Services LLC (T127-00026), the on-site contractor, is located at 250 U.S. Highway 12, Burns Harbor, Indiana 46304.
- (d) Mid-Continent Coal and Coke (T127-00108), the on-site contractor, is located at U.S. Highway 12, Burns Harbor, Indiana 46304.
- (e) SMS Mill Services, LLC (T127-00076), the on-site contractor, is located at 250 U.S. Highway 12, Burns Harbor, Indiana 46304.
- (f) Beemsterboer Slag Corp (127-00116), the on-site contractor, is located at 250 U.S. Highway 12, Burns Harbor, Indiana 46304.
- (g) Mid-Continent Coal and Coke (127-00117), the on-site contractor, is located at 250 W US Hwy 12 Burns Harbor IN 46304.
- (h) PSC Metals Inc. (127-00118), the on-site contractor, is located at U.S. Highway 12, Burns Harbor, Indiana 46304.
- (i) Calumite Company (127-00024), the on-site contractor, is located at 915 Sun Drive, Portage, IN 46368.

- (j) Oil Technology (T127-00074), the on-site contractor, is located at U.S. Highway 12, Burns Harbor, Indiana 46304.

Separate Part 70 Administrative permits will be issued to ArcelorMittal Burns Harbor, LLC (127-00001) and each of its contractors, solely for administrative purposes. The companies may maintain separate reporting and compliance certification.

A.3 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)]
[326 IAC 2-7-5(14)]

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

Burns Harbor Site

- (a) An open air Slag Pot Dumping operation constructed in 1969 which receives slag pots by pot carrier from the BOF, identified as EU001-01, with collective fugitive emissions EP001-9011.
- (b) An open air Slag Pot Preparation operation constructed in 1969, identified as EU001-04, consisting of relining and conditioning of empty pots, with pot material additive, with collective fugitive emissions EP001-9001.
- (c) Stock piles and product storage piles located at Port of Indiana storage yard, Portage.
- (d) Main Plant, with a maximum material throughput capacity of 1,500 tons per hour (tph), approved in 2012 for construction, using wet suppressant for fugitive emissions control, consisting of the following equipment:
- (A) One (1) step deck feeder (F1), with a capacity of 1500 tph
- (B) Crushing
- (1) One (1) pan feeder (F2), with a capacity of 500 tons per hour
- (2) One (1) conveyor (C5), with a capacity of 500 tph
- (3) One (1) mag/pendulum head pulley (C5)
- (4) One (1) dual finger gate splitter at C5
- (5) One (1) dual finger gate splitter at Crusher/Impactor
- (6) One (1) pan feeder (F3), with a capacity of 510 tph
- (7) One (1) pan feeder (F4), with a capacity of 500 tph
- (8) One (1) jaw crusher, with a capacity of 500 tph
- (9) One (1) impactor, with a capacity of 500 tph
- (10) One (1) conveyor (C6A), with a capacity of 500 tph
- (11) One (1) conveyor (C6B), with a capacity of 500 tph
- (C) Screening
- (1) One (1) conveyor (C1), with a capacity of 1500 tph
- (2) One (1) 150-ton bin, with a capacity of 1500 tph
- (3) One (1) feeder (MF400) (F5), with a capacity of 1500 tph
- (4) One (1) conveyor (C2), with a capacity of 1500 tph
- (5) One (1) mag head pulley (C2)
- (6) One (1) dual finger gate splitter at C2
- (7) One (1) dual finger gate splitter at F6/F7
- (8) One (1) feeder (F6), with a capacity of 750 tph
- (9) One (1) feeder (F7), with a capacity of 750 tph

- (10) One (1) conveyor (C3A), with a capacity of 750 tph
- (11) One (1) conveyor (C3B), with a capacity of 750 tph
- (12) One (1) triple chute gate splitter at S1/S2/S3
- (13) One (1) screen (S1), with a capacity of 750 tph
- (14) One (1) dual finger gate splitter at S1
- (15) One (1) conveyor (C7A), with a capacity of 500 tph
- (16) One (1) screen (S2), with a capacity of 750 tph
- (17) One (1) dual finger gate splitter at S2
- (18) One (1) conveyor (C7B), with a capacity of 500 tph
- (19) One (1) screen (S3), with a capacity of 750 tph
- (20) One (1) dual finger gate splitter at S3
- (21) One (1) conveyor (C7C), with a capacity of 500 tph
- (22) One (1) conveyor (C11A), with a capacity of 1000 tph
- (23) One (1) stack conveyor (C15), with a capacity of 1000 tph
- (24) One (1) conveyor (C9), with a capacity of 700 tph
- (25) One (1) stack conveyor (C14), with a capacity of 700 tph
- (26) One (1) conveyor (C8), with a capacity of 400 tph
- (27) One (1) stack conveyor (C13), with a capacity of 178.2 tph
- (28) One (1) mag head pulley (C13), with a capacity of 400 tph
- (29) One (1) dual finger gate splitter at C13

(D) Scrap Processing

- (1) One (1) 50-ton scrap bin (F1), with a capacity of 700 tph
- (2) One (1) feeder (F8), with a capacity of 700 tph
- (3) One (1) conveyor (C4), with a capacity of 700 tph
- (4) One (1) dual finger gate splitter at C4
- (5) One (1) screen (S4), with a capacity of 350 tph
- (6) One (1) dual finger gate splitter at S4
- (7) One (1) conveyor (C10A), with a capacity of 200 tph
- (8) One (1) screen (S5), with a capacity of 350 tph
- (9) One (1) dual finger gate splitter at S5
- (10) One (1) conveyor (C10B), with a capacity of 200 tph
- (11) One (1) conveyor (C11B), with a capacity of 400 tph
- (12) One (1) stack conveyor (C17), with a capacity of 400 tph
- (13) One (1) conveyor (C12), with a capacity of 400 tph
- (14) One (1) stack conveyor (C16), with a capacity of 400 tph
- (15) One (1) conveyor (C18), with a capacity of 200 tph
- (16) One (1) stack conveyor (C19), with a capacity of 200 tph

(e) Chip Plant, with a maximum material throughput capacity of 500 tons per hour (tph), approved in 2012 for construction (unless noted otherwise), using wet suppressant for fugitive emissions control, consisting of the following equipment:

- (1) One (1) feed hopper (B1), with a capacity of 500 tph
- (2) One (1) feeder (F9), with a capacity of 500 tph
- (3) One (1) conveyor (C1), with a capacity of 500 tph
- (4) One (1) conveyor (C2), with a capacity of 800 tph
- (5) One (1) crusher, with a capacity of 500 tph
- (6) One (1) conveyor (C5), with a capacity of 500 tph
- (7) One (1) screen (S1), with a capacity of 400 tph
- (8) One (1) conveyor (C3), with a capacity of 150 tph
- (9) One (1) screen (S2), with a capacity of 400 tph
- (10) One (1) conveyor (C4), with a capacity of 150 tph
- (11) One (1) conveyor (C10), with a capacity of 300 tph

- (12) One (1) stack conveyor (C11), with a capacity of 55 tph
 - (13) One (1) conveyor (C8), with a capacity of 250 tph
 - (14) One (1) mag cross belt (M2)
 - (15) One (1) stack conveyor (C9), with a capacity of 78.375 tph
 - (16) One (1) conveyor (C6), with a capacity of 250 tph
 - (17) One (1) mag cross belt (M1)
 - (18) One (1) stack conveyor (C7), with a capacity of 250 tph
 - (19) One (1) conveyor (C12), approved in 2013 for construction, with a capacity of 300 tph
 - (20) One (1) conveyor (C13), approved in 2013 for construction, with a capacity of 300 tph
 - (21) One (1) crusher (crusher 2), approved in 2013 for construction, with a capacity of 400 tph
 - (22) One (1) screen (S3), approved in 2013 for construction, with a maximum capacity of 75 tph.
 - (23) One (1) conveyor (C14), approved in 2013 for construction, with a maximum capacity of 50 tph.
 - (24) One (1) conveyor (C15), approved in 2013 for construction, with a maximum capacity of 50 tph.
 - (25) One (1) portable wet screening plant, approved in 2014 for construction, with a maximum capacity of 450 tons per hour, including the following:
 - (A) One (1) feeding chute, identified as Feed Chute, with a maximum throughput capacity of 450 tons per hour;
 - (B) One (1) screen, identified as Wet Screen, with a maximum throughput capacity of 450 tons per hour;
 - (C) Three (3) output chutes, identified as Output Chutes 1, 2, and 3, each with a maximum throughput capacity of 135 tons per hour;
 - (D) One (1) oversize chute, identified as Oversize Chute, with a maximum throughput capacity of 45 tons per hour.
 - (26) One (1) dump plant, approved in 2015 for construction, identified as Dump Plant, with a maximum capacity of 500 tons per hour, using wet suppression for fugitive emissions control, consisting of the following equipment:
 - (A) One (1) grizzly feeder, with a capacity of 500 tph
 - (B) One (1) feed conveyor, with a capacity of 500 tph
 - (C) Two (2) splitter drops, each with a capacity of 500 tph
 - (D) One (1) scrap stacker/conveyor, with a capacity of 150 tph
 - (E) One (1) main conveyor, with a capacity of 500 tph
 - (F) One (1) magnet, with a capacity of 15 tph
 - (G) Two (2) crusher conveyors, each with a capacity of 300 tph
 - (H) One (1) crusher/impactor, with a capacity of 300 tph
 - (I) One (1) crusher output conveyor, with a capacity of 300 tph
 - (J) One (1) screen and five (5) screen conveyors, each with a capacity of 400 tph
 - (K) One (1) snub conveyor, with a capacity of 400 tph
 - (L) One (1) output stacker/conveyor, with a capacity of 400 tph
- (f) Portable/Auxiliary Equipment, with a maximum material throughput capacity of 600 tons per hour (tph), approved in 2012 for construction, using wet suppressant for fugitive emissions control, consisting of the following equipment:
- (A) Portable Plant 1
 - (1) One (1) conveyor, with a capacity of 600 tph

- (2) One (1) portable crusher, with a capacity of 600 tph
 - (3) One (1) conveyor, with a capacity of 600 tph
 - (4) One (1) portable screen, with a capacity of 600 tph
 - (5) Three (3) portable input conveyors (33%), with a capacity of 600 tph
 - (6) Three (3) portable output stacker/conveyors (33% ea), with a capacity of 600 tph
- (B) Portable boat loader
- (1) One (1) feed hopper, with a capacity of 1500 tph
 - (2) One (1) conveyor/stacker, with a capacity of 1500 tph
- (C) Portable stacker
- (1) One (1) feed hopper, with a capacity of 250 tph
 - (2) One (1) conveyor/stacker, with a capacity of 250 tph
- (D) Portable screener
- (1) One (1) screen, with a capacity of 250 tph
 - (2) Three (3) conveyor/stackers (33% each), with a capacity of 250 tph
- (E) Portable screener
- (1) One (1) feed hopper, with a capacity of 250 tph
 - (2) One (1) screen, with a capacity of 250 tph
 - (3) One (1) conveyor/stacker, with a capacity of 250 tph
- (F) Portable Plant 2
- (1) One (1) grizzly, with a capacity of 500 tph
 - (2) One (1) feeder, with a capacity of 500 tph
 - (3) One (1) screen, with a capacity of 500 tph
 - (4) Four (4) output conveyors (25% ea), with a capacity of 500 tph
 - (5) One (1) crusher or impactor, with a capacity of 500 tph
 - (6) One (1) magnet
- (g) One (1) portable upgrade plant, approved in 2015 for construction, identified as Portable Upgrade Plant, with a maximum capacity of 500 tons per hour, using wet suppression for fugitive emissions control, consisting of the following equipment:
- (1) One (1) grizzly, with a capacity of 500 tph
 - (2) One (1) feeder/conveyor combo unit, with a capacity of 500 tph
 - (3) One (1) screen and one (1) screen conveyor, each with a capacity of 500 tph
 - (4) Two (2) output conveyors, each with a capacity of 250 tph
 - (5) Two (2) stacker/conveyors, each with a capacity of 250 tph
 - (6) Two (2) magnets, each with a capacity of 15 tph
- (h) Four (4) portable diesel generator/engines, approved in 2012 for installation, each with a capacity of 559 Hp or less.
- (i) One (1) portable diesel generator/engine, approved in 2012 for installation, with a capacity between 600 Hp and 1500 Hp.

- (j) Three (3) portable diesel generator/engines, approved in 2012 for installation, each with a capacity of 100 Hp or less.

A.4 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)]
[326 IAC 2-7-5(14)]

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

- (a) Degreasing operations that do not exceed 145 gallons per 12 month, except if subject to 326 IAC 20-6. [326 IAC 8-3-2][326 IAC 8-3-8]
- (b) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment. [326 IAC 6-3-2]
- (c) Activities with emissions equal to or less than insignificant thresholds [326 IAC 2-7-1(21)]:
 - (1) 10,000 gallon diesel AST identified as EE001-9011 [326 IAC 8-9];
 - (2) 2,500 gallon diesel AST identified as EE001-9012 [326 IAC 8-9];
 - (3) Iron breakup processing identified as EE001-9014.

A.5 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

B.2 Permit Term [326 IAC 2-7-5(2)][326 IAC 2-1.1-9.5][326 IAC 2-7-4(a)(1)(D)][IC 13-15-3-6(a)]

- (a) This permit, T127-36307-00026, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.
- (b) If IDEM, OAQ, 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, including any permit shield provided in 326 IAC 2-7-15, 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 [326 IAC 2-7-7] [IC 13-17-12]

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 [326 IAC 2-7-5(5)]

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 [326 IAC 2-7-5(6)(D)]

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

B.7 Duty to Provide Information [326 IAC 2-7-5(6)(E)]

- (a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.
- (b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.8 Certification [326 IAC 2-7-4(f)][326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]

- (a) A certification required by this permit meets the requirements of 326 IAC 2-7-6(1) if:
- (1) it contains a certification by a "responsible official" as defined by 326 IAC 2-7-1(35), and
 - (2) the certification states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) The Permittee may use the attached Certification Form, or its equivalent with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.
- (c) A "responsible official" is defined at 326 IAC 2-7-1(35).

B.9 Annual Compliance Certification [326 IAC 2-7-6(5)]

- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. All certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted no later than April 15 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

and

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

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
- (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether compliance was continuous or intermittent;
 - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and

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

The submittal by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

B.10 Preventive Maintenance Plan [326 IAC 2-7-5(12)][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
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

The PMP extension notification does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

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. The PMPs and their submittal do not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

- (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.11 Emergency Provisions [326 IAC 2-7-16]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.

- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

- (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
- (2) The permitted facility was at the time being properly operated;
- (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
- (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ or Northwest Regional Office within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance and Enforcement Branch), or
Telephone Number: 317-233-0178 (ask for Office of Air Quality, Compliance and Enforcement Branch)
Facsimile Number: 317-233-6865
Northwest Regional Office phone: (219) 464-0233; fax: (219) 464-0553.

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

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

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;

- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(8) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

B.12 Permit Shield [326 IAC 2-7-15][326 IAC 2-7-20][326 IAC 2-7-12]

- (a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced 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 Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

This permit shield does not extend to applicable requirements which are promulgated after the date of issuance of this permit unless this permit has been modified to reflect such new requirements.

- (b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ shall immediately take steps to reopen and revise this permit and issue a

compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.

- (c) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.
- (d) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
 - (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
 - (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
 - (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
 - (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
- (e) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
- (f) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, has issued the modifications. [326 IAC 2-7-12(c)(7)]
- (g) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, has issued the modification. [326 IAC 2-7-12(b)(8)]

B.13 Prior Permits Superseded [326 IAC 2-1.1-9.5][326 IAC 2-7-10.5]

- (a) All terms and conditions of permits established prior to T127-36307-00026 and issued pursuant to permitting programs approved into the state implementation plan have been either:
 - (1) incorporated as originally stated,
 - (2) revised under 326 IAC 2-7-10.5, or
 - (3) deleted under 326 IAC 2-7-10.5.
- (b) Provided that all terms and conditions are accurately reflected in this permit, all previous registrations and permits are superseded by this Part 70 operating permit.

B.14 Termination of Right to Operate [326 IAC 2-7-10][326 IAC 2-7-4(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 nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

B.15 Permit Modification, Reopening, Revocation and Reissuance, or Termination
[326 IAC 2-7-5(6)(C)][326 IAC 2-7-8(a)][326 IAC 2-7-9]

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:
- (1) That this permit contains a material mistake.
 - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
 - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]
- (c) Proceedings by IDEM, OAQ to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.16 Permit Renewal [326 IAC 2-7-3][326 IAC 2-7-4][326 IAC 2-7-8(e)]

- (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 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(42). The renewal application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

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 nine (9) months prior to the date of the expiration of this permit; and
 - (2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the

document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

- (c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 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 2-7-4(a)(2)(D), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.17 Permit Amendment or Modification [326 IAC 2-7-11][326 IAC 2-7-12]

- (a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 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

Any such application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.18 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)][326 IAC 2-7-12(b)(2)]

- (a) No Part 70 permit revision or notice shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.
- (b) Notwithstanding 326 IAC 2-7-12(b)(1) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

B.19 Operational Flexibility [326 IAC 2-7-20][326 IAC 2-7-10.5]

- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b) or (c) without a prior permit revision, if each of the following conditions is met:
 - (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
 - (2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;

(3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

(4) The Permittee notifies the:

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

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

(5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-7-20(b)(1) and (c)(1). The Permittee shall make such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ in the notices specified in 326 IAC 2-7-20(b)(1) and (c)(1).

(b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(37)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

(1) A brief description of the change within the source;

(2) The date on which the change will occur;

(3) Any change in emissions; and

(4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

(c) Emission Trades [326 IAC 2-7-20(c)]

The Permittee may trade emissions increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).

- (d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ or U.S. EPA is required.
- (e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

B.20 Source Modification Requirement [326 IAC 2-7-10.5]

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

B.21 Inspection and Entry [326 IAC 2-7-6][IC 13-14-2-2][IC 13-30-3-1][IC 13-17-3-2]

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 Part 70 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 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 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 substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.22 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 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

Any such application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)][326 IAC 2-1.1-7]

- (a) The Permittee shall pay annual fees to IDEM, OAQ within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.
- (b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

B.24 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314] [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 2-7-5(1)]

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

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

C.2 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 forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.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). 326 IAC 6-4-2(4) is not federally enforceable.

C.6 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]

Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions shall be controlled according to the attached plan as in Attachment A. The provisions of 326 IAC 6-5 are not federally enforceable

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

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted by using ambient air quality modeling pursuant to 326 IAC 1-7-4. The provisions of 326 IAC 1-7-1(3), 326 IAC 1-7-2,

326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4, and 326 IAC 1-7-5(a), (b), and (d) are not federally enforceable.

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

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

All required notifications shall be submitted to:

Indiana Department of Environmental Management
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. The notifications do not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

- (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 2-7-6(1)]

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. The protocol submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the Permittee submits to IDEM, OAQ a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.10 Compliance Requirements [326 IAC 2-1.1-11]

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

Compliance Monitoring Requirements [326 IAC 2-7-5(1)][326 IAC 2-7-6(1)]

C.11 Compliance Monitoring [326 IAC 2-7-5(3)][326 IAC 2-7-6(1)]

- (a) For new units:
Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units shall be implemented on and after the date of initial start-up.

- (b) For existing units:
Unless otherwise specified in this permit, for all monitoring requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance to begin such monitoring. If, due to circumstances beyond the Permittee's control, any monitoring equipment required by this permit cannot be installed and operated no later than ninety (90) days after permit issuance, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

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

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

The notification which shall be submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

C.12 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

- (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 [326 IAC 2-7-5][326 IAC 2-7-6]

C.13 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

- (a) The Permittee shall maintain the most recently submitted written emergency reduction plans (ERPs) consistent with safe operating procedures.
- (b) Upon direct notification by IDEM, OAQ that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

C.14 Risk Management Plan [326 IAC 2-7-5(11)] [40 CFR 68]

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

C.15 Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]

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:
 - (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.16 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5][326 IAC 2-7-6]

- (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.

The response action documents submitted pursuant to this condition do require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.17 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]

(a) In accordance with the compliance schedule specified in 326 IAC 2-6-3(a)(1), the Permittee shall submit by July 1 an emission statement covering the previous calendar year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:

- (1) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);
- (2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1(33) ("Regulated pollutant, which is used only for purposes of Section 19 of this rule") from the source, for purpose of fee assessment.

The statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue
MC 61-50 IGCN 1003
Indianapolis, Indiana 46204-2251

The emission statement does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

**C.18 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]
[326 IAC 2-2][326 IAC 2-3]**

(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. Support information includes the following, where applicable:

- (AA) All calibration and maintenance records.
- (BB) All original strip chart recordings for continuous monitoring instrumentation.
- (CC) Copies of all reports required by the Part 70 permit.

Records of required monitoring information include the following, where applicable:

- (AA) The date, place, as defined in this permit, and time of sampling or measurements.
- (BB) The dates analyses were performed.
- (CC) The company or entity that performed the analyses.
- (DD) The analytical techniques or methods used.
- (EE) The results of such analyses.
- (FF) The operating conditions as existing at the time of sampling or measurement.

These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, 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) If there is a reasonable possibility (as defined in 326 IAC 2-2-8 (b)(6)(A), 326 IAC 2-2-8 (b)(6)(B), 326 IAC 2-3-2 (l)(6)(A), and/or 326 IAC 2-3-2 (l)(6)(B)) that a “project” (as defined in 326 IAC 2-2-1(oo) and/or 326 IAC 2-3-1(jj)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a “major modification” (as defined in 326 IAC 2-2-1(dd) and/or 326 IAC 2-3-1(y)) may result in significant emissions increase and the Permittee elects to utilize the “projected actual emissions” (as defined in 326 IAC 2-2-1(pp) and/or 326 IAC 2-3-1(kk)), the Permittee shall comply with following:
- (1) Before beginning actual construction of the “project” (as defined in 326 IAC 2-2-1(oo) and/or 326 IAC 2-3-1(jj)) at an existing emissions unit, document and maintain the following records:
 - (A) A description of the project.
 - (B) Identification of any emissions unit whose emissions of a regulated new source review pollutant could be affected by the project.
 - (C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:
 - (i) Baseline actual emissions;
 - (ii) Projected actual emissions;
 - (iii) Amount of emissions excluded under section 326 IAC 2-2-1(pp)(2)(A)(iii) and/or 326 IAC 2-3-1 (kk)(2)(A)(iii); and
 - (iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.
- (d) If there is a reasonable possibility (as defined in 326 IAC 2-2-8 (b)(6)(A) and/or 326 IAC 2-3-2 (l)(6)(A)) that a “project” (as defined in 326 IAC 2-2-1(oo) and/or 326 IAC 2-3-1(jj)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a “major modification” (as defined in 326 IAC 2-2-1(dd) and/or 326 IAC 2-3-1(y)) may result in significant emissions increase and the Permittee elects to utilize the “projected actual emissions” (as defined in 326 IAC 2-2-1(pp) and/or 326 IAC 2-3-1(kk)), the Permittee shall comply with following:
- (1) Monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any existing emissions unit identified in (1)(B) above; and
 - (2) Calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five (5) years following resumption of regular operations after the change, or for a period of ten (10) years following resumption of regular operations after the change if the project increases the design capacity of or the potential to emit that regulated NSR pollutant at the emissions unit.

C.19 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]
[326 IAC 2-2][326 IAC 2-3]

- (a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Proper notice submittal under Section B –Emergency Provisions satisfies the reporting requirements of this paragraph. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported except that a deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. This report shall be submitted not later than thirty (30) days after the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35). A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.
- (b) The address for report submittal is:
- 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) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (d) 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.
- (e) If the Permittee is required to comply with the recordkeeping provisions of (d) in Section C - General Record Keeping Requirements for any "project" (as defined in 326 IAC 2-2-1 (oo) and/or 326 IAC 2-3-1 (jj)) at an existing emissions unit, and the project meets the following criteria, then the Permittee shall submit a report to IDEM, OAQ:
- (1) The annual emissions, in tons per year, from the project identified in (c)(1) in Section C- General Record Keeping Requirements exceed the baseline actual emissions, as documented and maintained under Section C- General Record Keeping Requirements (c)(1)(C)(i), by a significant amount, as defined in 326 IAC 2-2-1 (ww) and/or 326 IAC 2-3-1 (pp), for that regulated NSR pollutant, and
- (2) The emissions differ from the preconstruction projection as documented and maintained under Section C - General Record Keeping Requirements (c)(1)(C)(ii).
- (f) The report for project at an existing emissions unit shall be submitted no later than sixty (60) days after the end of the year and contain the following:
- (1) The name, address, and telephone number of the major stationary source.

- (2) The annual emissions calculated in accordance with (d)(1) and (2) in Section C - General Record Keeping Requirements.
- (3) The emissions calculated under the actual-to-projected actual test stated in 326 IAC 2-2-2(d)(3) and/or 326 IAC 2-3-2(c)(3).
- (4) Any other information that the Permittee wishes to include in this report such as an explanation as to why the emissions differ from the preconstruction projection.

Reports required in this part 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

- (g) The Permittee shall make the information required to be documented and maintained in accordance with (c) in Section C- General Record Keeping Requirements available for review upon a request for inspection by IDEM, OAQ. The general public may request this information from the IDEM, OAQ under 326 IAC 17.1.

Stratospheric Ozone Protection

C.20 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with applicable standards for recycling and emissions reduction.

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: Burns Harbor Site

- (a) An open air Slag Pot Dumping operation constructed in 1969 which receives slag pots by pot carrier from the BOF, identified as EU001-01, with collective fugitive emissions EP001-9011.
- (b) An open air Slag Pot Preparation operation constructed in 1969, identified as EU001-04, consisting of relining and conditioning of empty pots, with pot material additive, with collective fugitive emissions EP001-9001.
- (c) Stock piles and product storage piles located at Port of Indiana storage yard, Portage.
- (d) Main Plant, with a maximum material throughput capacity of 1,500 tons per hour (tph), approved in 2012 for construction, using wet suppressant for fugitive emissions control, consisting of the following equipment:
 - (A) One (1) step deck feeder (F1), with a capacity of 1500 tph
 - (B) Crushing
 - (1) One (1) pan feeder (F2), with a capacity of 500 tons per hour
 - (2) One (1) conveyor (C5), with a capacity of 500 tph
 - (3) One (1) mag/pendulum head pulley (C5)
 - (4) One (1) dual finger gate splitter at C5
 - (5) One (1) dual finger gate splitter at Crusher/Impactor
 - (6) One (1) pan feeder (F3), with a capacity of 510 tph
 - (7) One (1) pan feeder (F4), with a capacity of 500 tph
 - (8) One (1) jaw crusher, with a capacity of 500 tph
 - (9) One (1) impactor, with a capacity of 500 tph
 - (10) One (1) conveyor (C6A), with a capacity of 500 tph
 - (11) One (1) conveyor (C6B), with a capacity of 500 tph
 - (C) Screening
 - (1) One (1) conveyor (C1), with a capacity of 1500 tph
 - (2) One (1) 150-ton bin, with a capacity of 1500 tph
 - (3) One (1) feeder (MF400) (F5), with a capacity of 1500 tph
 - (4) One (1) conveyor (C2), with a capacity of 1500 tph
 - (5) One (1) mag head pulley (C2)
 - (6) One (1) dual finger gate splitter at C2
 - (7) One (1) dual finger gate splitter at F6/F7
 - (8) One (1) feeder (F6), with a capacity of 750 tph
 - (9) One (1) feeder (F7), with a capacity of 750 tph
 - (10) One (1) conveyor (C3A), with a capacity of 750 tph
 - (11) One (1) conveyor (C3B), with a capacity of 750 tph
 - (12) One (1) triple chute gate splitter at S1/S2/S3
 - (13) One (1) screen (S1), with a capacity of 750 tph
 - (14) One (1) dual finger gate splitter at S1
 - (15) One (1) conveyor (C7A), with a capacity of 500 tph
 - (16) One (1) screen (S2), with a capacity of 750 tph
 - (17) One (1) dual finger gate splitter at S2
 - (18) One (1) conveyor (C7B), with a capacity of 500 tph

- (19) One (1) screen (S3), with a capacity of 750 tph
- (20) One (1) dual finger gate splitter at S3
- (21) One (1) conveyor (C7C), with a capacity of 500 tph
- (22) One (1) conveyor (C11A), with a capacity of 1000 tph
- (23) One (1) stack conveyor (C15), with a capacity of 1000 tph
- (24) One (1) conveyor (C9), with a capacity of 700 tph
- (25) One (1) stack conveyor (C14), with a capacity of 700 tph
- (26) One (1) conveyor (C8), with a capacity of 400 tph
- (27) One (1) stack conveyor (C13), with a capacity of 178.2 tph
- (28) One (1) mag head pulley (C13), with a capacity of 400 tph
- (29) One (1) dual finger gate splitter at C13

(D) Scrap Processing

- (1) One (1) 50-ton scrap bin (F1), with a capacity of 700 tph
- (2) One (1) feeder (F8), with a capacity of 700 tph
- (3) One (1) conveyor (C4), with a capacity of 700 tph
- (4) One (1) dual finger gate splitter at C4
- (5) One (1) screen (S4), with a capacity of 350 tph
- (6) One (1) dual finger gate splitter at S4
- (7) One (1) conveyor (C10A), with a capacity of 200 tph
- (8) One (1) screen (S5), with a capacity of 350 tph
- (9) One (1) dual finger gate splitter at S5
- (10) One (1) conveyor (C10B), with a capacity of 200 tph
- (11) One (1) conveyor (C11B), with a capacity of 400 tph
- (12) One (1) stack conveyor (C17), with a capacity of 400 tph
- (13) One (1) conveyor (C12), with a capacity of 400 tph
- (14) One (1) stack conveyor (C16), with a capacity of 400 tph
- (15) One (1) conveyor (C18), with a capacity of 200 tph
- (16) One (1) stack conveyor (C19), with a capacity of 200 tph

(e) Chip Plant, with a maximum material throughput capacity of 500 tons per hour (tph), approved in 2012 for construction (unless noted otherwise), using wet suppressant for fugitive emissions control, consisting of the following equipment:

- (1) One (1) feed hopper (B1), with a capacity of 500 tph
- (2) One (1) feeder (F9), with a capacity of 500 tph
- (3) One (1) conveyor (C1), with a capacity of 500 tph
- (4) One (1) conveyor (C2), with a capacity of 800 tph
- (5) One (1) crusher, with a capacity of 500 tph
- (6) One (1) conveyor (C5), with a capacity of 500 tph
- (7) One (1) screen (S1), with a capacity of 400 tph
- (8) One (1) conveyor (C3), with a capacity of 150 tph
- (9) One (1) screen (S2), with a capacity of 400 tph
- (10) One (1) conveyor (C4), with a capacity of 150 tph
- (11) One (1) conveyor (C10), with a capacity of 300 tph
- (12) One (1) stack conveyor (C11), with a capacity of 55 tph
- (13) One (1) conveyor (C8), with a capacity of 250 tph
- (14) One (1) mag cross belt (M2)
- (15) One (1) stack conveyor (C9), with a capacity of 78.375 tph
- (16) One (1) conveyor (C6), with a capacity of 250 tph
- (17) One (1) mag cross belt (M1)
- (18) One (1) stack conveyor (C7), with a capacity of 250 tph
- (19) One (1) conveyor (C12), approved in 2013 for construction, with a

- capacity of 300 tph
- (20) One (1) conveyor (C13), approved in 2013 for construction, with a capacity of 300 tph
- (21) One (1) crusher (crusher 2), approved in 2013 for construction, with a capacity of 400 tph
- (22) One (1) screen (S3), approved in 2013 for construction, with a maximum capacity of 75 tph.

- (23) One (1) conveyor (C14), approved in 2013 for construction, with a maximum capacity of 50 tph.
- (24) One (1) conveyor (C15), approved in 2013 for construction, with a maximum capacity of 50 tph.
- (25) One (1) portable wet screening plant, approved in 2014 for construction, with a maximum capacity of 450 tons per hour, including the following:
 - (A) One (1) feeding chute, identified as Feed Chute, with a maximum throughput capacity of 450 tons per hour;
 - (B) One (1) screen, identified as Wet Screen, with a maximum throughput capacity of 450 tons per hour;
 - (C) Three (3) output chutes, identified as Output Chutes 1, 2, and 3, each with a maximum throughput capacity of 135 tons per hour;
 - (D) One (1) oversize chute, identified as Oversize Chute, with a maximum throughput capacity of 45 tons per hour.

- (26) One (1) dump plant, approved in 2015 for construction, identified as Dump Plant, with a maximum capacity of 500 tons per hour, using wet suppression for fugitive emissions control, consisting of the following equipment:
 - (A) One (1) grizzly feeder, with a capacity of 500 tph
 - (B) One (1) feed conveyor, with a capacity of 500 tph
 - (C) Two (2) splitter drops, each with a capacity of 500 tph
 - (D) One (1) scrap stacker/conveyor, with a capacity of 150 tph
 - (E) One (1) main conveyor, with a capacity of 500 tph
 - (F) One (1) magnet, with a capacity of 15 tph
 - (G) Two (2) crusher conveyors, each with a capacity of 300 tph
 - (H) One (1) crusher/impactor, with a capacity of 300 tph
 - (I) One (1) crusher output conveyor, with a capacity of 300 tph
 - (J) One (1) screen and five (5) screen conveyors, each with a capacity of 400 tph
 - (K) One (1) snub conveyor, with a capacity of 400 tph
 - (L) One (1) output stacker/conveyor, with a capacity of 400 tph

- (f) Portable/Auxiliary Equipment, with a maximum material throughput capacity of 600 tons per hour (tph), approved in 2012 for construction, using wet suppressant for fugitive emissions control, consisting of the following equipment:
 - (A) Portable Plant 1
 - (1) One (1) conveyor, with a capacity of 600 tph
 - (2) One (1) portable crusher, with a capacity of 600 tph
 - (3) One (1) conveyor, with a capacity of 600 tph
 - (4) One (1) portable screen, with a capacity of 600 tph

	(5)	Three (3) portable input conveyors (33%), with a capacity of 600 tph
	(6)	Three (3) portable output stacker/conveyors (33% ea), with a capacity of 600 tph
(B)		Portable boat loader
	(1)	One (1) feed hopper, with a capacity of 1500 tph
	(2)	One (1) conveyor/stacker, with a capacity of 1500 tph
(C)		Portable stacker
	(1)	One (1) feed hopper, with a capacity of 250 tph
	(2)	One (1) conveyor/stacker, with a capacity of 250 tph
(D)		Portable screener
	(1)	One (1) screen, with a capacity of 250 tph
	(2)	Three (3) conveyor/stackers (33% each), with a capacity of 250 tph
(E)		Portable screener
	(1)	One (1) feed hopper, with a capacity of 250 tph
	(2)	One (1) screen, with a capacity of 250 tph
	(3)	One (1) conveyor/stacker, with a capacity of 250 tph
(F)		Portable Plant 2
	(1)	One (1) grizzly, with a capacity of 500 tph
	(2)	One (1) feeder, with a capacity of 500 tph
	(3)	One (1) screen, with a capacity of 500 tph
	(4)	Four (4) output conveyors (25% ea), with a capacity of 500 tph
	(5)	One (1) crusher or impactor, with a capacity of 500 tph
	(6)	One (1) magnet
(g)		One (1) portable upgrade plant, approved in 2015 for construction, identified as Portable Upgrade Plant, with a maximum capacity of 500 tons per hour, using wet suppression for fugitive emissions control, consisting of the following equipment:
	(1)	One (1) grizzly, with a capacity of 500 tph
	(2)	One (1) feeder/conveyor combo unit, with a capacity of 500 tph
	(3)	One (1) screen and one (1) screen conveyor, each with a capacity of 500 tph
	(4)	Two (2) output conveyors, each with a capacity of 250 tph
	(5)	Two (2) stacker/conveyors, each with a capacity of 250 tph
	(6)	Two (2) magnets, each with a capacity of 15 tph

(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 2-7-5(1)]

D.1.1 Prevention of Significant Deterioration (PSD) Minor Limit [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable, the Permittee shall comply with the following limits:

- (a) Only slag and metallic material shall be processed at Main Plant.
- (b) The total input of slag and metallic material at Main Plant shall not exceed 2,377,419 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

- (c) The Portable/Auxiliary Equipment shall not be operated at Metal Services LLC dba Phoenix Services LLC site.

Compliance with the above limits, in conjunction with Condition D.2.1, shall limit the PM, PM10 and PM2.5 emissions from the 2012 modification to less than 25, 15 and 10 tons per year, respectively, and render the requirements of 326 IAC 2-2 not applicable to the 2012 modification.

Compliance with the above limits shall limit the PM, PM10 and PM2.5 emissions from the 2013 modification in conjunction with the emissions from equipment processed in the 2012 modification to less than 25, 15 and 10 tons per year, respectively, and render the requirements of 326 IAC 2-2 (PSD) not applicable to the associated emission units.

D.1.2 Prevention of Significant Deterioration (PSD) Minor Limit [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable, the Permittee shall comply with the following limits:

- (a) The total input of material at the Chip Plant and portable wet screening unit permitted in 2014 shall not exceed 1,300,000 tons per twelve (12) consecutive month period each, with compliance determined at the end of each month.
- (b) The Wet Screening Unit (permitted in 2014) shall be used at the Chip Plant and process only those materials that have been previously processed at the Chip Plant.

Compliance with the above limit shall limit the PM, PM10 and PM2.5 emissions from the 2014 modification, in conjunction with the emissions from equipment processed under the 2012 modification and the 2013 modification to less than 25, 15 and 10 tons per year, respectively, and render the requirements of 326 IAC 2-2 not applicable to the associated emission units.

D.1.3 Prevention of Significant Deterioration (PSD) Minor Limit [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable, the Permittee shall comply with the following limits:

- (a) The Chip Plant shall process only those materials that have been previously processed at the Main Plant and/or material processed at the Dump Plant permitted in 2015.
- (b) The total input of material at each of the Portable/Auxiliary Equipment units, including the Portable Upgrade Plant (excluding the portable wet screening unit permitted in 2014) shall not exceed 800,000 tons per twelve consecutive month period with compliance determined at the end of each month.
- (c) The moisture content of slag material processed at the Main Plant, Chip Plant, dump plant (permitted in 2015), portable upgrade plant (permitted in 2015) and Portable/Auxiliary Equipment, including the portable wet screening unit permitted in 2014, shall not be less than 1.5%.

Compliance with the above limits shall limit the PM, PM10 and PM2.5 emissions from the 2015 modification to less than 25, 15 and 10 tons per year, respectively, and render the requirements of 326 IAC 2-2 not applicable to the 2015 modification.

D.1.4 Particulate Emission Limitations for Manufacturing Processes [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emissions from each of the following listed units shall not exceed the pound per hour limit listed below:

(a)

Emission Unit	Process weight rate (tons/hr)	326 IAC 6-3 limit lb/hr
Main Plant		
One (1) step deck feeder (F1)	1500	82.95
Crushing		
One (1) pan feeder (F2)	500	68.96
One (1) conveyor (C5)	500	68.96
One (1) mag/pendulum head pulley (C5)	184	57.61
One (1) dual finger gate splitter at C5	217	59.40
One (1) splitter (scrap) (C5)	184	57.61
One (1) dual finger gate splitter at C5	217	59.40
One (1) dual finger gate splitter at Crusher/Impactor	184	57.61
One (1) pan feeder (F3)	510	69.19
One (1) pan feeder (F4)	500	68.96
One (1) jaw crusher	500	68.96
One (1) impactor,	500	68.96
One (1) conveyor (C6A)	500	68.96
One (1) conveyor (C6B)	500	68.96
Screening		
One (1) conveyor (C1)	1500	82.95
One (1) 150-ton bin,	1500	82.95
One (1) feeder (MF400) (F5)	1500	82.95
One (1) conveyor (C2)	1500	82.95
One (1) mag head pulley (C2)	300	63.00
One (1) dual finger gate splitter at C2	271	61.86
One (1) dual finger gate splitter at F6/F7	217	59.40
One (1) feeder (F6)	750	73.93
One (1) feeder (F7)	750	73.93
One (1) conveyor (C3A)	750	73.93
One (1) conveyor (C3B)	750	73.93
One (1) triple chute gate splitter at S1/S2/S3	72	48.04
One (1) screen (S1)	750	73.93
One (1) dual finger gate splitter at S1	750	73.93
One (1) conveyor (C7A)	500	68.96
One (1) screen (S2)	750	73.93
One (1) dual finger gate splitter at S2	750	73.93
One (1) conveyor (C7B)	396	66.20
One (1) screen (S3)	750	73.93
One (1) dual finger gate splitter at S3	750	73.93
One (1) conveyor (C7C)	500	68.96
One (1) conveyor (C11A)	1000	77.59
One (1) stack conveyor (C15)	1000	77.59
One (1) conveyor (C9)	700	73.06
One (1) stack conveyor (C14)	700	73.06
One (1) conveyor (C8)	400	66.31

Emission Unit	Process weight rate (tons/hr)	326 IAC 6-3 limit lb/hr
One (1) stack conveyor (C13)	178.20	57.27
One (1) mag head pulley (C13)	400	66.31
One (1) dual finger gate splitter at C13	178.2	57.27
Scrap		
One (1) 50-ton scrap bin (F1)	700	73.06
One (1) feeder (F8) 700	700	73.06
One (1) conveyor (C4) 700	700	73.06
One (1) dual finger gate splitter at C4	56	45.64
One (1) screen (S4)	350	64.76
One (1) dual finger gate splitter at S4	350	64.76
One (1) conveyor (C10A)	200	58.51
One (1) screen (S5) 350	350	64.76
One (1) dual finger gate splitter at S5	350	67.76
One (1) conveyor (C10B)	200	58.51
One (1) conveyor (C11B)	400	66.31
One (1) stack conveyor (C17)	400	66.31
One (1) conveyor (C12)	400	66.31
One (1) stack conveyor (C16)	400	66.31
One (1) conveyor (C18)	200	58.51
One (1) stack conveyor (C19)	200	58.51
Chip Plant		
One (1) feed hopper (B1)	500	68.96
One (1) feeder (F9)	500	68.96
One (1) conveyor (C1)	500	68.96
One (1) conveyor (C2)	800	74.74
One (1) crusher, 500	500	68.96
One (1) conveyor (C5)	500	68.96
One (1) screen (S1)	400	66.31
One (1) conveyor (C3)	150	55.44
One (1) screen (S2)	400	66.31
One (1) conveyor (C4)	150	55.44
One (1) conveyor (C10)	300	63.00
One (1) stack conveyor (C11)	55	45.47
One (1) conveyor (C8)	250	60.96
One (1) mag cross belt (M2)	4.125	10.60
One (1) stack conveyor (C9)	78.375	48.86
One (1) conveyor (C6) 20	250	60.96
One (1) mag cross belt (M1)	18	28.43
One (1) stack conveyor (C7)	250	60.96
One (1) conveyor (C12)	300	63.0
One (1) conveyor (C13)	300	63.0
One (1) crusher (crusher 2)	400	66.3
One (1) screen (S3)	75	48.4
One (1) conveyor (C14)	50	44.6
One (1) conveyor (C15)	50	44.6

Emission Unit	Process weight rate (tons/hr)	326 IAC 6-3 limit lb/hr
Portable Wet Screening Plant		
Feed Chute	450	67.7
Wet Screen	450	67.7
Output Chutes 1, 2, 3	135 (each)	54.3 (each)
Oversize Chute	45	43.6
Dump Plant		
One (1) grizzly feeder	500	68.96
One (1) feed conveyor	500	68.96
Two (2) splitter drops (each)	150	55.44
One (1) scrap stacker/conveyor	500	68.96
One (1) main conveyor	15	25.16
One (1) magnet	300	63.0
Two (2) crusher conveyors (each)	300	63.0
One (1) crusher impactor	300	63.0
One (1) crusher output conveyor	300	63.0
One (1) screen and five (5) screen conveyors (each)	400	66.31
One (1) snub conveyor	400	66.31
One (1) output stacker/conveyor	400	66.31
Portable/Auxiliary Equipment		
Portable Plant 1		
One (1) conveyor	600	71.16
One (1) portable crusher	600	71.16
One (1) conveyor	600	71.16
One (1) portable screen	600	71.16
Three (3) portable input conveyors (33%)	600	71.16
Three (3) portable output stacker/conveyors (33% ea)	600	71.16
Portable boat loader		
One (1) feed hopper	1500	82.95
One (1) conveyor/stacker	1500	82.95
Portable stacker		
One (1) feed hopper	250	60.96
One (1) conveyor/stacker	250	60.96
Portable screener		
One (1) screen	250	60.96
Three (3) conveyor/stackers (33% each)	250	60.96
Portable screener		
One (1) feed hopper	250	60.96
One (1) screen	250	60.96
One (1) conveyor/stacker	250	60.96
Portable Plant 2		
One (1) grizzly	500	68.96
One (1) feeder	500	68.96
One (1) screen	500	68.96

Emission Unit	Process weight rate (tons/hr)	326 IAC 6-3 limit lb/hr
Four (4) output conveyors (25% ea)	500	68.96
One (1) crusher or impactor	500	68.96
One (1) magnet	15	25.16
Portable Upgrade Plant		
One (1) grizzly	500	68.96
One (1) feeder/conveyor	500	68.96
One (1) screen and one (1) screen conveyor (each)	500	68.96
Two (2) output conveyors (each)	250	60.96
Two (2) stacker/conveyors (each)	250	60.96
Two (2) magnets (each)	15	25.16

The pound per hour emission limitations listed above were calculated using the following equation:

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

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

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

$$E = 55.0 P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour.}$$

- (b) When the process weight rate exceeds two hundred (200) tons per hour, the allowable emission may exceed the 326 IAC 6-3 emission limit derived by the equation above, provided that the concentration of particulate matter in the discharge gases to the atmosphere is less than 0.10 pounds per one thousand (1,000) pounds of gases.

D.1.5 Preventative Maintenance Plan [326 IAC 2-7-5(12)]

A Preventative Maintenance Plan is required for these facilities. 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 2-7-5(1)]

D.1.6 Particulate Control [326 IAC 2-7-6(6)] [326 IAC 2-7-5(1)]

In order to comply with Conditions D.1.2(b) and D.1.3(c):

- (a) The Permittee shall use wet suppression to control particulate emissions from Main Plant, Chip Plant and Portable/Auxiliary Equipment, except for the following time periods:
 - (i) During precipitation
 - (ii) When ambient air temperature is at or below freezing temperature

- (b) The Permittee shall perform weekly moisture content analysis prior to feeding material to the Chip Plant, on the slag material processed at the Main Plant, Chip Plant, Portable Upgrade Plant and Portable/Auxiliary Equipment to ensure slag moisture content is not less than 1.5%.

Compliance Monitoring Requirements [326 IAC 2-7-5(1)][326 IAC 2-7-6(1)]

D.1.7 Visible Emission Notations [326 IAC 2-7-5(1)][326 IAC 2-7-6(1)]

- (a) Visible emission notations of all process emission points 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. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.8 Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

- (a) To document the compliance status with Condition D.1.1(b), D.1.2(a) , and D.1.3 (b) , the Permittee shall maintain monthly records of the input of material at Main Plant, Chip Plant and Portable/Auxiliary Equipment.
- (b) To document the compliance status with condition D.1.3(c), the Permittee shall maintain weekly records of the moisture content analysis.
- (c) To document the compliance status with condition D.1.7 - Visible Emission Notation, the Permittee shall maintain a daily record of visible emission notations of the process emission points. 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).
- (d) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required by this condition.

D.1.9 Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

A quarterly summary of the information required to document the compliance status with Conditions D.1.1(b), D.1.2(a) , and D.1.3 (b) shall be submitted using the reporting forms located at the end of this permit, or their equivalent, not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting Requirements contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the

Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official," as defined by 326 IAC 2-7-1(35).

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: Insignificant Activities

- (a) Degreasing operations that do not exceed 145 gallons per 12 month, except if subject to 326 IAC 20-6. [326 IAC 8-3-2][326 IAC 8-3-8]
- (b) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment. [326 IAC 6-3-2]
- (c) Activities with emissions equal to or less than insignificant thresholds [326 IAC 2-7-1(21)]:
 - (1) 10,000 gallon diesel AST identified as EE001-9011 [326 IAC 8-9];
 - (2) 2,500 gallon diesel AST identified as EE001-9012 [326 IAC 8-9]; and
 - (3) Iron breakup processing identified as EE001-9014.

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

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 Particulate Emission Limitations for Manufacturing Processes [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e)(2), the allowable particulate emissions from the brazing equipment, cutting torches, soldering equipment, and welding equipment shall not exceed 0.551 pounds per hour.

D.2.2 Volatile Organic Liquid Storage Vessels [326 IAC 8-9]

Pursuant to 326 IAC 8-9-1(b), stationary vessels with a capacity of less than thirty-nine thousand (39,000) gallons (EE001-9011 and 9012) are subject to the reporting and record keeping provisions of section 6(a) and 6(b) of this rule and are exempt from all other provisions of this rule.

D.2.3 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Degreaser Control Equipment and Operating Requirements), the Permittee shall:

- (a) Ensure the following control equipment and operating requirements are met:
 - (1) Equip the degreaser with a cover.
 - (2) Equip the degreaser with a device for draining cleaned parts.
 - (3) Close the degreaser cover whenever parts are not being handled in the degreaser.
 - (4) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases.
 - (5) Provide a permanent, conspicuous label that lists the operating requirements in (a)(3), (a)(4), (a)(6), and (a)(7) of this condition.
 - (6) Store waste solvent only in closed containers.

- (7) Prohibit the disposal or transfer of waste solvent in such a manner that could allow greater than twenty percent (20%) of the waste solvent (by weight) to evaporate into the atmosphere.
- (b) Ensure the following additional control equipment and operating requirements are met:
 - (1) Equip the degreaser with one (1) of the following control devices if the solvent is heated to a temperature of greater than forty-eight and nine-tenths (48.9) degrees Celsius (one hundred twenty (120) degrees Fahrenheit):
 - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
 - (B) A water cover when solvent used is insoluble in, and heavier than, water.
 - (C) A refrigerated chiller.
 - (D) Carbon adsorption.
 - (E) An alternative system of demonstrated equivalent or better control as those outlined in (b)(1)(A) through (D) of this condition that is approved by the department. An alternative system shall be submitted to the U.S. EPA as a SIP revision.
 - (2) Ensure the degreaser cover is designed so that it can be easily operated with one (1) hand if the solvent is agitated or heated.
 - (3) If used, solvent spray:
 - (A) must be a solid, fluid stream; and
 - (B) shall be applied at a pressure that does not cause excessive splashing.

D.2.4 Material Requirements for Cold Cleaner Degreasers [326 IAC 8-3-8]

Pursuant to 326 IAC 8-3-8 (Material Requirements for Cold Cleaner Degreasers), before January 1, 2015, the Permittee shall not operate a cold cleaner degreaser with a solvent that has a VOC composite partial vapor pressure that exceeds one (1) milliliter of mercury (nineteen-thousandths (0.019) pound per square inch) measured at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.2.5 Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

- (a) To document the compliance status with Condition D.2.2, and pursuant to 326 IAC 8-9, the Permittee must keep records of the following:
 - (1) The vessel identification number;
 - (2) The vessel dimensions; and
 - (3) The vessel capacity.

Records shall be maintained for the life of the vessel.

- (b) To document the compliance status with Condition D.2.4, the Permittee shall maintain the following records for each purchase of solvent used in the cold cleaner degreasing operations. These records shall be retained on-site or accessible electronically for the two most recent three (3) year period and shall be reasonably accessible for an additional two (2) year period.
- (1) The name and address of the solvent supplier
 - (2) The date of purchase (or invoice/bill dates of contract servicer indicating service date)
 - (3) The type of solvent purchased.
 - (4) The total volume of the solvent purchased.
 - (5) The true vapor pressure of the solvent measured in millimeters of mercury at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).
- (b) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required by this condition.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
PART 70 OPERATING PERMIT
CERTIFICATION**

Source Name: Metal Service LLC dba Phoenix Services LLC
Source Address: 250 U.S. Highway 12, Burns Harbor, Indiana 46304
Part 70 Permit No.: T127-36307-00026

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

Please check what document is being certified:

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

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

Signature:

Printed Name:

Title/Position:

Phone:

Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
Phone: (317) 233-0178
Fax: (317) 233-6865

PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT

Source Name: Metal Service LLC dba Phoenix Services LLC
Source Address: 250 U.S. Highway 12, Burns Harbor, Indiana 46304
Part 70 Permit No.: T127-36307-00026

This form consists of 2 pages

Page 1 of 2

- This is an emergency as defined in 326 IAC 2-7-1(12)
- The Permittee must notify the Office of Air Quality (OAQ), within four (4) daytime business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and
 - The Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16.

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency:
Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A

Page 2 of 2

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N
Type of Pollutants Emitted: TSP, PM-10, SO ₂ , VOC, NO _x , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: Metal Service LLC dba Phoenix Services LLC
Source Address: 250 U.S. Highway 12, Burns Harbor, Indiana 46304
Part 70 Permit No.: T127-36307-00026
Facility: Main Plant
Parameter: Total input slag and metallic material at the Main Plant
Limit: Less than 2,377,419 tons per twelve (12) consecutive month period with compliance determined at the end of each month

QUARTER : _____ YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total

- No deviation occurred in this quarter.
- Deviation/s occurred in this quarter.
Deviation has been reported on:

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

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: Metal Service LLC dba Phoenix Services LLC
Source Address: 250 U.S. Highway 12, Burns Harbor, Indiana 46304
Part 70 Permit No.: T127-36307-00026
Facility: Portable/Auxiliary Equipment
Parameter: The total input of material at the Portable/Auxiliary Equipment
Limit: Less than 800,000 tons per twelve consecutive month period with compliance at
the end of each month.

QUARTER : _____ YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total

- No deviation occurred in this quarter.
- Deviation/s occurred in this quarter.
Deviation has been reported on:

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

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: Metal Service LLC dba Phoenix Services LLC
Source Address: 250 U.S. Highway 12, Burns Harbor, Indiana 46304
Part 70 Permit No.: T127-36307-00026
Facility: Chip Plant
Parameter: Total input of slag and metallic material at the Chip Plant
Limit: Less than 1,300,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

QUARTER : _____ YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total

- No deviation occurred in this quarter.
- Deviation/s occurred in this quarter.
Deviation has been reported on:

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

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: Metal Service LLC dba Phoenix Services LLC
Source Address: 250 U.S. Highway 12, Burns Harbor, Indiana 46304
Part 70 Permit No.: T127-36307-00026
Facility: diesel generators/engines listed in Section D.2 of this permit
Parameter: total diesel fuel usage
Limit: Less than 60,000 gallons per twelve (12) consecutive month period with compliance determined at the end of each month

QUARTER : _____ YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total

- No deviation occurred in this quarter.
- Deviation/s occurred in this quarter.
Deviation has been reported on:

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

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
PART 70 OPERATING PERMIT
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: Metal Service LLC dba Phoenix Services LLC
Source Address: 250 U.S. Highway 12, Burns Harbor, Indiana 46304
Part 70 Permit No.: T127-36307-00026

Months: _____ **to** _____ **Year:** _____

<p>This report shall be submitted quarterly based on a calendar year. Proper notice submittal under Section B –Emergency Provisions satisfies the reporting requirements of paragraph (a) of Section C- General Reporting. Any deviation from the requirements of this permit, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".</p>	
<input type="checkbox"/> NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.	
<input type="checkbox"/> THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

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

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____



Phoenix Services LLC
World Class Service. World Class Experience.

**Metal Services LLC, dba,
Phoenix Services LLC
Burns Harbor Facility**

**Fugitive Dust Control Plan
(FDCP)
326 IAC 6-5-5**

**October 18, 2012
Revision 4**

Prepared by:
ST Environmental LLC
209 S Calumet Rd, Suite 5
Chesterton, IN 46304
(219) 728-6312

Fugitive Dust Control Plan

Phoenix Services LLC, a contractor of ArcelorMittal Burns Harbor
Part 70 Source No. T127-00026

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Fugitive Dust Control Plan

Phoenix Services LLC, a contractor of ArcelorMittal Burns Harbor
Part 70 Source No. T127-00026

Introduction and Facility Description [326 IAC 6-5-5 (a)(1)&(2)]

This Fugitive Dust Control Plan is written in accordance with 326 IAC 6-5-5. This source is located in Porter County, Indiana. Metal Services LLC, dba, Phoenix Services LLC (Phoenix) owns and operates material processing operations located within the ArcelorMittal Burns Harbor Works facility in Burns Harbor, Indiana. ArcelorMittal Burns Harbor Works is a fully integrated steelmaking and finishing facility. Phoenix also has a storage pile location that is part of the Burns Harbor source but is physically separated from the Burns Harbor operation by approximately 2.7 miles. This pile storage location is in the Port of Indiana. ArcelorMittal Burns Harbor Works and Phoenix are considered to be one source due to contractual control; therefore, Phoenix operates under an Administrative Part 70 Operating Permit.

Roadways and Parking Lots [326 IAC 6-5-5 (a)(3)&(5)]

All roadways at the Burns Harbor site which are under control of the Phoenix facility are up to 30 feet wide with varying lengths. Phoenix only has control for the roadways within the boundaries of their immediate stationary operations. ArcelorMittal is responsible for all other roadways in the steel mill. Figure 1 in Appendix A shows the general property layout and approximate designation of the main roadways. Road paths within the processing area change frequently because of the nature of the operation with pile stacking. Trucks and front-end loaders are utilized for transportation of materials throughout the facility. Employee passenger vehicles and passenger trucks are parked in makeshift unpaved parking areas. AP-42 13.2.2 provides the method of the potential PM₁₀ emission calculations and can be found in the permit renewal technical support document. There are no designated roadways within the Port of Indiana pile storage location which runs adjacent to a paved public roadway.

Storage Piles [326 IAC 6-5-5 (a)(3)&(7)]

The bulk of the feed materials are stored in the blast furnace ore yards which is owned and operated by ArcelorMittal. Feed materials are brought to the Phoenix site as needed and are stored in various locations onsite and will move within a general area throughout the year. Product materials are

Fugitive Dust Control Plan

Phoenix Services LLC, a contractor of ArcelorMittal Burns Harbor
Part 70 Source No. T127-00026

stored in various locations on the facility site and product pile locations will move within a general area throughout the year at Burns Harbor. Phoenix also loads trucks directly from stackers and transports them to their offsite storage pile facility located in the Port of Indiana. Front-end loaders and stacking conveyors are used to load onto and load out of the storage piles. The moisture content of all materials stored on site averages 1.5% moisture or higher and can be further impacted by atmospheric precipitation throughout the year. The average slag moisture content is 2-4%. Phoenix targets and tracks average moisture values at a minimum of 1.5% to maintain continuous compliance.

Material Process Flow [326 IAC 6-5-5 (a)(3)&(6)]

Materials are moved through a series of crushers and screens via conveyor system in various configurations depending upon the type of product desired. Materials are size-reduced into final products for sale to outside customers. Water application is utilized in the plant which provides up to 90% control efficiency. Water application is used to cool slag before entering the processing plant which provides primary moisture content. Additional water sprays may be used in the process facility if needed, however, average moistures in the raw materials range 2-4% and are tracked to maintain a targeted moisture of 1.5% to demonstrate continuous compliance.

Control Measures and Practices [326 IAC 6-5-5 (a)(8), (9) & (10)]

Moisture content and water application to raw materials is the primary control measure for processing materials through plant equipment at this facility. Various water spray nozzle applications may be suspended based on weather events as follows:

- during periods of precipitation
- when temperatures are at or below freezing
- when ice or snow cover is present.

If chemical application is utilized at some future date, the same weather restrictions may apply. The phrase "weather permitting" used in the following paragraphs herein designates the suspension of control application during the weather events listed above. Additionally, daily visible emission notations will be conducted to monitor fugitive emissions. The average slag moisture content range

Fugitive Dust Control Plan

Phoenix Services LLC, a contractor of ArcelorMittal Burns Harbor
Part 70 Source No. T127-00026

at this facility is 2-4%. Phoenix targets and tracks average moisture values at a minimum of 1.5% to maintain continuous compliance.

I. Site Roadways / Plant Yard

Dust on unpaved roads will be controlled by applications of water (an acceptable chemical compound may be used in the future) during operating hours, weather permitting. There are no paved roadways in the immediate stationary operating facility. Applications of dust control material will be done as often as necessary to meet applicable limits.

II. Process Operations

The average slag moisture content range at this facility is 2-4%. Phoenix targets and tracks average moisture values at a minimum of 1.5% to maintain continuous compliance. To help minimize dust emissions, the drop distance at each conveyor transfer point in the plant will be set at the minimum distance in which the equipment can operate effectively. Water spray application can be utilized, if needed and weather permitting, at strategic locations throughout the plant to control dust emissions. During water spray application, caution must be taken to avoid saturating the material which results in blinding the process equipment.

III. Storage Piles

The average slag moisture content range at this facility is 2-4%. Phoenix targets and tracks average moisture values at a minimum of 1.5% to maintain continuous compliance. To reduce potential dust emissions, stockpiling will be performed at minimum drop distances, to the extent practicable. Product storage piles are watered on an as needed basis during operating hours, weather permitting.

IV. Loading and Transfer; Trucks and Front-End Loaders

The average slag moisture content range at this facility is 2-4%. Phoenix targets and tracks average moisture values at a minimum of 1.5% to maintain continuous compliance. Trucks will be loaded in a manner to reduce or prevent materials from blowing or otherwise escaping. This may be

Fugitive Dust Control Plan

Phoenix Services LLC, a contractor of ArcelorMittal Burns Harbor
Part 70 Source No. T127-00026

accomplished by loading the vehicle with the center of gravity for the load at a safe distance below the top of the sideboard. Drop heights for front-end loader buckets will be held within a few feet above the sideboard of the truck during loading.

Schedule of Compliance [326 IAC 6-5-5 (a)(11)]

Phoenix has and will implement the provisions of this control plan upon startup of the operation. This plan will be revised when significant changes occur to the facility. Any revision to this plan requires an administrative amendment to the Part 70 Permit.

Documentation and Record Keeping [326 IAC 6-5-5 (b)]

Records will be maintained to document control measures and activities in accordance with this plan. These records may be kept as part of the facility's daily operation or maintenance logs. These records will be available upon the request of the commissioner and shall be retained for five (5) years.

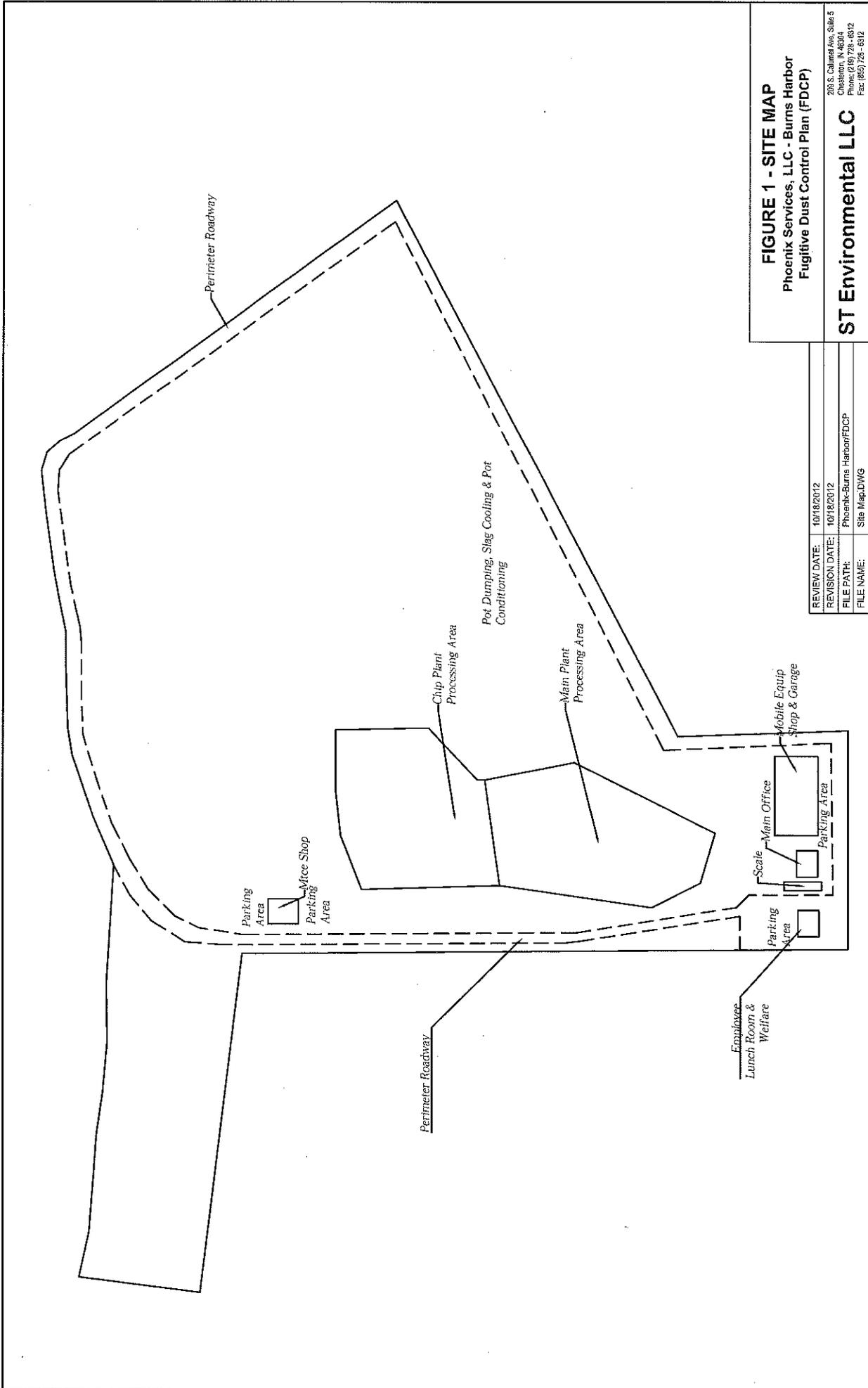


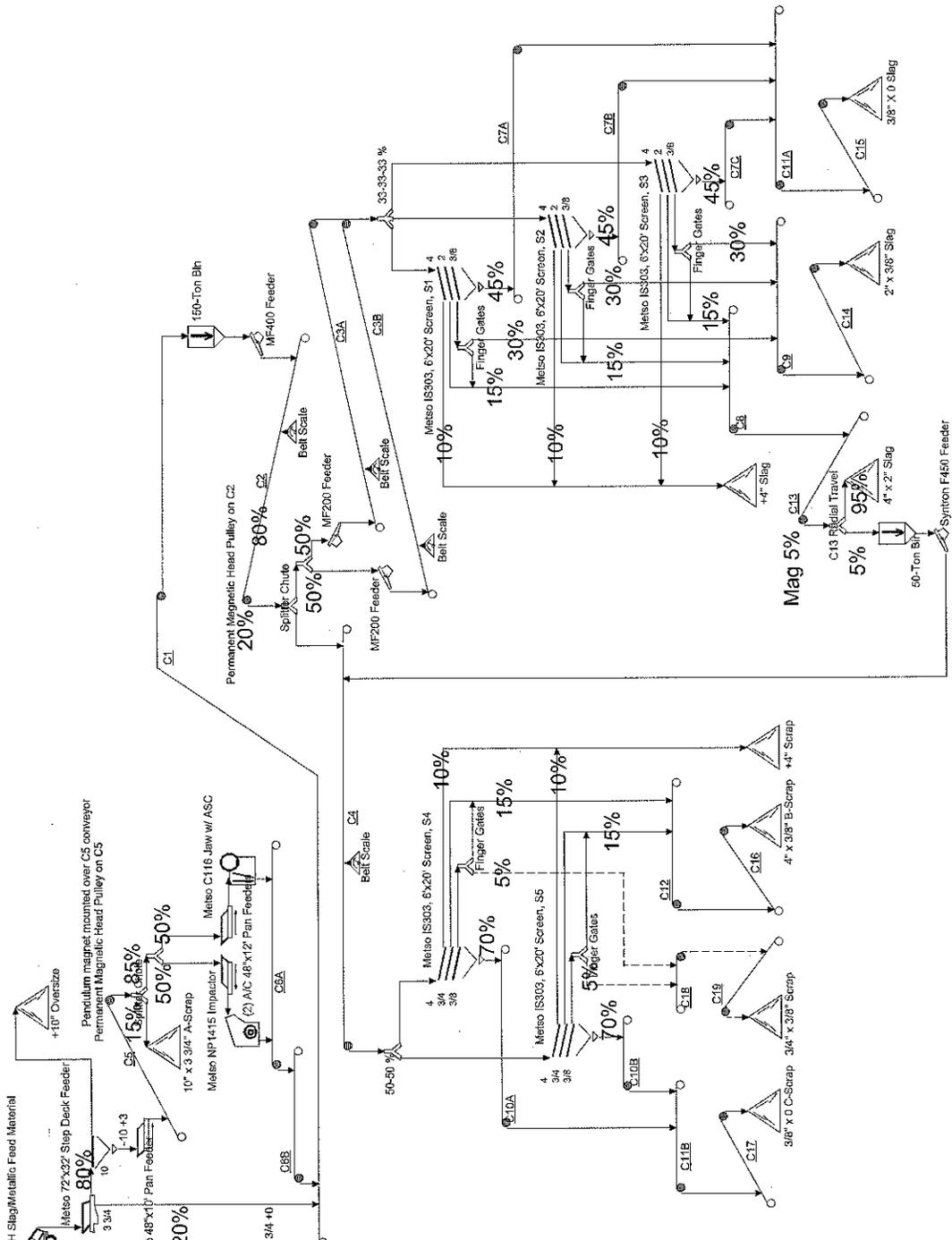
FIGURE 1 - SITE MAP
 Phoenix Services, LLC - Burns Harbor
 Fugitive Dust Control Plan (FDCP)

REVISION DATE:	10/18/2012
REVISION DATE:	10/18/2012
FILE PATH:	Phoenix-Burns Harbor\FDCP
FILE NAME:	Site Map.DWG

200 S. Calumet Ave., Suite 5
 Chesterton, IN 46304
 Phone: (219) 728-6312
 Fax: (219) 728-6312

ST Environmental LLC

Phoenix flow diagram for separation operation



Run: 5/4/12 11:38:14

Mellott Company
Phoenix Services, LLC, Burns Harbor Plant
Larry A. Weaverling
Flow Diagram

Calculation results may differ due to variations in operating conditions and application of crushing and screening equipment. This information does not constitute an express or implied warranty, but shows results of calculations based on information provided by customers or equipment manufacturers. Use this information for estimating purposes only.

All calculations performed by AggFlow. <http://www.AggFlow.com>

Date: May#2012

**FUGITIVE DUST CONTROL PLAN
APPENDIX A
ROADWAY CALCULATIONS**

Company Name: The Levy Company - Burns Harbor Facility
a contractor of ArcelorMittal Burns Harbor, LLC
Address, City IN Zip: US Highway 12, Burns Harbor, IN 46304
SSM No.: 127-30302
Part 70 Operating Permit Renewal No.: 127-29719
Pit ID: 127-00026
Reviewer: Aida De Guzman
Date Part 70 Operating Permit Renewal Application Received: Sept. 23, 2010
Date SSM Application Received: March 3, 2011

Potential to Emit - FROM UNPAVED ROADWAYS

5,460,000 Slag production is limited by ArcelorMittal Blast Furnace operations which has a permit limit of 5,460,000 tons molten iron.
1,638,000 Slag production can be up to 30% of molten iron production. (USG Minerals Yearbook 2002, Slag-iron and Steel Section)

Vehicle	Production (tons/yr)	Product Weight (tons/RT)	Round Trips/yr	Avg miles per round trip	VMT/yr
Pot Haulers	1,638,000	55	29,782	0.8	23,825
Trucks and haulers	1,638,000	50	32,760	0.50	16,380
Front-end loaders	1,638,000	15	109,200	0.10	10,920

Vehicle	Mean Weight (W) (tons)	UNCONTROLLED PTE			CONTROLLED PTE				
		PM Emission Factor ² (lb/VMT)	PM2.5 Emission Factor ² (lb/VMT)	PM10 Emission Factor ² (lb/VMT)	PM Emissions (TPY)	PM2.5 Emissions (TPY)	PM10 Emissions (TPY)		
Pot Haulers	180	19.04	0.51	5.07	60.44	0.05754	34.0209	9.0664	0.00863
Trucks and haulers	64	11.96	0.32	3.19	26.09	0.01560	14.6888	3.9140	0.00234
Front-end loaders	31	8.63	0.23	2.30	12.55	0.00542	7.0659	1.8830	0.00081
					371.82	0.08	55.77	14.86	0.01

85% control efficiency

*Based on a control efficiency in the AP-42 from the periodic application of water and/or other dust suppressants.

Reference AP-42, 13.2.2, 11/2006

$$E = k(s/12)^a \times (W/3)^b$$

Variable	PM10 Value	Units
k (lb/VMT)	1.5	Table 13.2.2-2
a	0.9	Table 13.2.2-2
b	0.45	Table 13.2.2-2
W	see above	tons
M	-	% (default)
s	6	% (Table 13.2.2-1)(iron/steel mills)

Variable	PM2.5 Value	Units
k (lb/VMT)	0.15	Table 13.2.2-2
a	0.9	Table 13.2.2-2
b	0.45	Table 13.2.2-2
W	see above	tons
M	-	% (default)
s	6	% (Table 13.2.2-1)(iron/steel mills)

Variable	PM Value	Units
k (lb/VMT)	4.9	Table 13.2.2-2
a	0.7	Table 13.2.2-2
b	0.45	Table 13.2.2-2
W	see above	tons
M	-	% (default)
s	6	% (Table 13.2.2-1)(iron/steel mills)

FUGITIVE DUST CONTROL PLAN
 APPENDIX B
 SAMPLE WATERING LOG FORM

Phoenix Services LLC - Fugitive Dust Control Plan
 Road Watering Documentation Log

Fill in data for each road dust control application event (as multiple application events may occur in a day).

Date: _____

Weather Conditions (check all that apply): Temperature $\geq 32^{\circ}\text{F}$ Rainfall ≥ 0.1 inches Ice and/or Snow Cover Present

Application may be suspended if any of these weather events are present. However, this documentation must be retained.

List the roadways that were treated:	
Application Rate(s):	
Time(s) of each application:	
Width(s) of each application:	
Type of application(s):	<input type="checkbox"/> Water Spray <input type="checkbox"/> Chemical
Quantity(s) of each application:	
If chemical used, conc of each application:	

APPENDIX C - EQUIPMENT LIST

Main Plant	Capacity (tph)	% Process Flow	
F1 step deck feeder	1500	100%	of baseline
CRUSHING			
F2 pan feeder	feed control	80%	of F1 feeder
C5 conveyor	feed control	100%	of F2 feeder
C5 mag/pendulum head pulley	feed control	15%	of C5 conv
C5 splitter (scrap)	feed control	100%	of C5 mag
C5 splitter (slag)	feed control	85%	of C5 conv
crush splitter (impactor)	feed control	50%	of C5 splitter (slag)
crush splitter (jaw)	feed control	50%	of C5 splitter (slag)
F3 pan feeder	feed control	100%	of crush splitter (jaw)
F4 pan feeder	feed control	100%	of crush splitter (impactor)
jaw crusher	feed control	100%	of crush splitter (jaw)
impactor	feed control	100%	of crush splitter (impactor)
C6A conveyor	feed control	100%	of jaw+impact crushers
C6B conveyor	feed control	100%	of C6A conv
SCREENING			
C1 conveyor	feed control	100%	of F1 step feeder
150-ton bin	feed control	100%	of C1 conveyor
F5 feeder (MF400)	feed control	100%	of 150-ton bin
C2 conveyor	feed control	100%	of F5 feeder
C2 mag head pulley	feed control	20%	of C2 conv
C2 splitter (slag)	feed control	80%	of C2 conv
C2 splitter (scrap)	feed control	20%	of C2 conv
F6/F7 splitter (count all in one 50/50)	feed control	100%	of C2 splitter (slag)
F6 feeder	feed control	50%	of F6/F7 splitter
F7 feeder	feed control	50%	of F6/F7 splitter
C3A conveyor	feed control	100%	of F7 feeder
C3B conveyor	feed control	100%	of F6 feeder
triple split chute	feed control	100%	of C3A+C3B conv
S1 screen	feed control	33%	triple split chute
C7A conveyor	feed control	45%	of S1 screen
S2 screen	feed control	33%	triple split chute
C7B conveyor	feed control	45%	of S2 screen
S3 screen	feed control	33%	triple split chute
C7C conveyor	feed control	45%	of S3 screen
C11A conveyor	feed control	100%	of C7A+C7B+C7C conv
C15 stk conveyor	feed control	100%	of C11A conv
C9 conveyor	feed control	30%	of S1+S2+S3 screens
C14 stk conveyor	feed control	100%	of C9 conv
C8 conveyor	feed control	15%	of S1+S2+S3 screens
C13 stk conveyor	feed control	100%	of C8 conv
C13 mag head pulley	feed control	5%	of C13 conv
C13 splitter (slag)	feed control	95%	of C13 conv
C13 splitter (scrap)	feed control	100%	of C13 mag

APPENDIX C - EQUIPMENT LIST

Main Plant	Capacity (tph)	% Process Flow	
SCRAP			
50-ton scrap bin	feed control	100%	of C13 mag
F8 feeder	feed control	100%	of 50-ton scrap bin
C4 conveyor	feed control	100%	of C2 split(scrap)+F8 feeder
C4 splitter (S4)	feed control	50%	of C4 conv
C4 splitter (S5)	feed control	50%	of C4 conv
S4 screen	feed control	100%	of C4 splitter (S4)
C10A conveyor	feed control	70%	of S4 screen
S5 screen	feed control	100%	of C4 splitter (S5)
C10B conveyor	feed control	70%	of S5 screen
C11B conveyor	feed control	100%	of C10A+C10B conv
C17 stk conveyor	feed control	100%	of C11B conv
C12 conveyor	feed control	15%	of S4+S5 screens
C16 stk conveyor	feed control	100%	of C12 conv
C18 conveyor	feed control	5%	of S4+S5 screens
C19 stk conveyor	feed control	100%	of C18 conv

Chip Plant	Capacity (tph)	% Process Flow	
40-ton feed hopper (B1)	500	100%	of feed
F9 feeder	feed control	100%	of 40-ton feed hopper
C1 conveyor	feed control	100%	of F9 feeder
C2 conveyor	feed control	100%	of crusher+C1 conv
crusher	feed control	10%	of F9 feeder
C5 conveyor	feed control	100%	of crusher
S1 screen	feed control	50%	of C2 conv
C3 conveyor	feed control	10%	of S1 screen
S2 screen	feed control	50%	of C2 conv
C4 conveyor	feed control	10%	of S2 screen
C10 conveyor	feed control	100%	of C3+C4 conv
C11 stk conveyor	feed control	100%	of C10 conv
C8 conveyor	feed control	15%	of S1+S2
M2 mag cross belt	feed control	5%	of C8 conv
C9 stk conveyor	feed control	95%	of C8 conv
C6 conveyor	feed control	65%	of S1+S2
M1 mag cross belt	feed control	5%	of C6 conv
C7 stk conveyor	feed control	95%	of C6 conv

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Part 70 Operating Permit Renewal

Source Background and Description

Source Name:	Metal Services LLC dba Phoenix Services LLC a contractor of ArcelorMittal Burns Harbor, LLC
Source Location:	250 U.S. Highway 12, Burns Harbor, Indiana 46304
County:	Porter
SIC Code:	3312 (Steel Works, Blast Furnaces, and Rolling Mills) 3295 (Minerals and Earths, Ground or Otherwise Treated)
Permit Renewal No.:	T127-36307-00026
Permit Reviewer:	Phillip Joseph

The Office of Air Quality (OAQ) has reviewed the operating permit renewal application from Metal Services, LLC dba Phoenix Services, LLC relating to the operation of a stationary slag finishing operation. On September 24, 2015, Metal Services, LLC dba Phoenix Services, LLC submitted an application to the OAQ requesting to renew its operating permit. Metal Services, LLC dba Phoenix Services, LLC was issued its first Part 70 Operating Permit Renewal T127-36307-00026 on July 1, 2011 and is a contractor of ArcelorMittal Burns Harbor, LLC.

Source Definition

This slag finishing operation consists of a source with on-site contractors:

- (a) ArcelorMittal Burns Harbor, LLC (127-00001), the primary operation, is located at, 250 U.S. Highway 12, Burns Harbor, Indiana 46304.
- (b) Indiana Flame (T127-00098), the on-site contractor, is located at 250 U.S. Highway 12, Burns Harbor, Indiana 46304.
- (c) Metal Services LLC dba Phoenix Services LLC (T127-00026), the on-site contractor, is located at 250 U.S. Highway 12, Burns Harbor, Indiana 46304.
- (d) Mid-Continent Coal and Coke (T127-00108), the on-site contractor, is located at U.S. Highway 12, Burns Harbor, Indiana 46304.
- (e) SMS Mill Services, LLC (T127-00076), the on-site contractor, is located at 250 U.S. Highway 12, Burns Harbor, Indiana 46304.
- (f) Beemsterboer Slag Corp (127-00116), the on-site contractor, is located at 250 U.S. Highway 12, Burns Harbor, Indiana 46304.
- (g) Mid-Continent Coal and Coke (127-00117), the on-site contractor, is located at 250 W US Hwy 12 Burns Harbor IN 46304.
- (h) PSC Metals Inc. (127-00118), the on-site contractor, is located at U.S. Highway 12, Burns Harbor, Indiana 46304.
- (i) Calumite Company (127-00024), the on-site contractor, is located at 915 Sun Drive, Portage, IN 46368.

- (j) Oil Technology (T127-00074), the on-site contractor, is located at U.S. Highway 12, Burns Harbor, Indiana 46304.

ArcelorMittal Burns Harbor, LLC and Metal Services LLC dba Phoenix Services LLC are still under the common control of ArcelorMittal Burns Harbor, LLC. These plants are considered one major source, as defined by 326 IAC 2-7-1(22), based on this contractual control. Therefore, the term "source" in the Part 70 documents refers to both ArcelorMittal Burns Harbor, LLC and Metal Services LLC dba Phoenix Services LLC as one major source. This conclusion was initially determined under Part 70 Operating Permit No. T127-3601-00001.

Separate Part 70 Administrative permits will be issued to ArcelorMittal Burns Harbor, LLC (127-00001) and each of its contractors, solely for administrative purposes. The companies may maintain separate reporting and compliance certification.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units:

- (a) An open air Slag Pot Dumping operation constructed in 1969 which receives slag pots by pot carrier from the BOF, identified as EU001-01, with collective fugitive emissions EP001-9011.
- (b) An open air Slag Pot Preparation operation constructed in 1969, identified as EU001-04, consisting of relining and conditioning of empty pots, with pot material additive, with collective fugitive emissions EP001-9001.
- (c) Stock piles and product storage piles located at Port of Indiana storage yard, Portage.
- (d) Main Plant, with a maximum material throughput capacity of 1,500 tons per hour (tph), approved in 2012 for construction, using wet suppressant for fugitive emissions control, consisting of the following equipment:
- (A) One (1) step deck feeder (F1), with a capacity of 1500 tons per hour
- (B) Crushing
- (1) One (1) pan feeder (F2), with a capacity of 500 tons per hour
- (2) One (1) conveyor (C5), with a capacity of 500 tons per hour
- (3) One (1) mag/pendulum head pulley (C5)
- (4) One (1) dual finger gate splitter at C5
- (5) One (1) dual finger gate splitter at Crusher/Impactor
- (6) One (1) pan feeder (F3), with a capacity of 510 tons per hour
- (7) One (1) pan feeder (F4), with a capacity of 500 tons per hour
- (8) One (1) jaw crusher, with a capacity of 500 tons per hour
- (9) One (1) impactor, with a capacity of 500 tons per hour
- (10) One (1) conveyor (C6A), with a capacity of 500 tph
- (11) One (1) conveyor (C6B), with a capacity of 500 tons per hour
- (C) Screening
- (1) One (1) conveyor (C1), with a capacity of 1500 tph
- (2) One (1) 150-ton bin, with a capacity of 1500 tph
- (3) One (1) feeder (MF400) (F5), with a capacity of 1500 tph
- (4) One (1) conveyor (C2), with a capacity of 1500 tph
- (5) One (1) mag head pulley (C2)
- (6) One (1) dual finger gate splitter at C2

- (7) One (1) dual finger gate splitter at F6/F7
- (8) One (1) feeder (F6), with a capacity of 750 tph
- (9) One (1) feeder (F7), with a capacity of 750 tph
- (10) One (1) conveyor (C3A), with a capacity of 750 tph
- (11) One (1) conveyor (C3B), with a capacity of 750 tph
- (12) One (1) triple chute gate splitter at S1/S2/S3
- (13) One (1) screen (S1), with a capacity of 750 tph
- (14) One (1) dual finger gate splitter at S1
- (15) One (1) conveyor (C7A), with a capacity of 500 tph
- (16) One (1) screen (S2), with a capacity of 750 tph
- (17) One (1) dual finger gate splitter at S2
- (18) One (1) conveyor (C7B), with a capacity of 500 tph
- (19) One (1) screen (S3), with a capacity of 750 tph
- (20) One (1) dual finger gate splitter at S3
- (21) One (1) conveyor (C7C), with a capacity of 500 tph
- (22) One (1) conveyor (C11A), with a capacity of 1000 tph
- (23) One (1) stack conveyor (C15), with a capacity of 1000 tph
- (24) One (1) conveyor (C9), with a capacity of 700 tph
- (25) One (1) stack conveyor (C14), with a capacity of 700 tph
- (26) One (1) conveyor (C8), with a capacity of 400 tph
- (27) One (1) stack conveyor (C13), with a capacity of 178.2 tph
- (28) One (1) mag head pulley (C13), with a capacity of 400 tph
- (29) One (1) dual finger gate splitter at C13

(D) Scrap Processing

- (1) One (1) 50-ton scrap bin (F1), with a capacity of 700 tph
- (2) One (1) feeder (F8), with a capacity of 700 tph
- (3) One (1) conveyor (C4), with a capacity of 700 tph
- (4) One (1) dual finger gate splitter at C4
- (5) One (1) screen (S4), with a capacity of 350 tph
- (6) One (1) dual finger gate splitter at S4
- (7) One (1) conveyor (C10A), with a capacity of 200 tph
- (8) One (1) screen (S5), with a capacity of 350 tph
- (9) One (1) dual finger gate splitter at S5
- (10) One (1) conveyor (C10B), with a capacity of 200 tph
- (11) One (1) conveyor (C11B), with a capacity of 400 tph
- (12) One (1) stack conveyor (C17), with a capacity of 400 tph
- (13) One (1) conveyor (C12), with a capacity of 400 tph
- (14) One (1) stack conveyor (C16), with a capacity of 400 tph
- (15) One (1) conveyor (C18), with a capacity of 200 tph
- (16) One (1) stack conveyor (C19), with a capacity of 200 tph

(e) Chip Plant, with a maximum material throughput capacity of 500 tons per hour (tph), approved in 2012 for construction (unless noted otherwise), using wet suppressant for fugitive emissions control, consisting of the following equipment:

- (1) One (1) feed hopper (B1), with a capacity of 500 tph
- (2) One (1) feeder (F9), with a capacity of 500 tph
- (3) One (1) conveyor (C1), with a capacity of 500 tph
- (4) One (1) conveyor (C2), with a capacity of 800 tph
- (5) One (1) crusher, with a capacity of 500 tph
- (6) One (1) conveyor (C5), with a capacity of 500 tph
- (7) One (1) screen (S1), with a capacity of 400 tph
- (8) One (1) conveyor (C3), with a capacity of 150 tph
- (9) One (1) screen (S2), with a capacity of 400 tph

- (10) One (1) conveyor (C4), with a capacity of 150 tph
 - (11) One (1) conveyor (C10), with a capacity of 300 tph
 - (12) One (1) stack conveyor (C11), with a capacity of 55 tph
 - (13) One (1) conveyor (C8), with a capacity of 250 tph
 - (14) One (1) mag cross belt (M2)
 - (15) One (1) stack conveyor (C9), with a capacity of 78.375 tph
 - (16) One (1) conveyor (C6), with a capacity of 250 tph
 - (17) One (1) mag cross belt (M1)
 - (18) One (1) stack conveyor (C7), with a capacity of 250 tph
 - (19) One (1) conveyor (C12), approved in 2013 for construction, with a capacity of 300 tph
 - (20) One (1) conveyor (C13), approved in 2013 for construction, with a capacity of 300 tph
 - (21) One (1) crusher (crusher 2), approved in 2013 for construction, with a capacity of 400 tph
 - (22) One (1) screen (S3), approved in 2013 for construction, with a maximum capacity of 75 tph.
 - (23) One (1) conveyor (C14), approved in 2013 for construction, with a maximum capacity of 50 tph.
 - (24) One (1) conveyor (C15), approved in 2013 for construction, with a maximum capacity of 50 tph.
 - (25) One (1) portable wet screening plant, approved in 2014 for construction, with a maximum capacity of 450 tons per hour, including the following:
 - (A) One (1) feeding chute, identified as Feed Chute, with a maximum throughput capacity of 450 tons per hour;
 - (B) One (1) screen, identified as Wet Screen, with a maximum throughput capacity of 450 tons per hour;
 - (C) Three (3) output chutes, identified as Output Chutes 1, 2, and 3, each with a maximum throughput capacity of 135 tons per hour;
 - (D) One (1) oversize chute, identified as Oversize Chute, with a maximum throughput capacity of 45 tons per hour.
 - (26) One (1) dump plant, approved in 2015 for construction, identified as Dump Plant, with a maximum capacity of 500 tons per hour, using wet suppression for fugitive emissions control, consisting of the following equipment:
 - (A) One (1) grizzly feeder, with a capacity of 500 tph
 - (B) One (1) feed conveyor, with a capacity of 500 tph
 - (C) Two (2) splitter drops, each with a capacity of 500 tph
 - (D) One (1) scrap stacker/conveyor, with a capacity of 150 tph
 - (E) One (1) main conveyor, with a capacity of 500 tph
 - (F) One (1) magnet, with a capacity of 15 tph
 - (G) Two (2) crusher conveyors, each with a capacity of 300 tph
 - (H) One (1) crusher/impactor, with a capacity of 300 tph
 - (I) One (1) crusher output conveyor, with a capacity of 300 tph
 - (J) One (1) screen and five (5) screen conveyors, each with a capacity of 400 tph
 - (K) One (1) snub conveyor, with a capacity of 400 tph
 - (L) One (1) output stacker/conveyor, with a capacity of 400 tph
- (f) Portable/Auxiliary Equipment, with a maximum material throughput capacity of 600 tons per hour (tph), approved in 2012 for construction, using wet suppressant for fugitive emissions control, consisting of the following equipment:
- (A) Portable Plant 1

- (1) One (1) conveyor, with a maximum capacity of 600 tph
 - (2) One (1) portable crusher, with a maximum capacity of 600 tph
 - (3) One (1) conveyor, with a capacity of 600 tph
 - (4) One (1) portable screen, with a capacity of 600 tph
 - (5) Three (3) portable input conveyors (33%), with a capacity of 600 tph
 - (6) Three (3) portable output stacker/conveyors (33% ea), with a capacity of 600 tph
- (B) Portable boat loader
- (1) One (1) feed hopper, with a capacity of 1500 tph
 - (2) One (1) conveyor/stacker, with a capacity of 1500 tph
- (C) Portable stacker
- (1) One (1) feed hopper, with a capacity of 250 tph
 - (2) One (1) conveyor/stacker, with a capacity of 250 tph
- (D) Portable screener
- (1) One (1) screen, with a capacity of 250 tph
 - (2) Three (3) conveyor/stackers (33% each), with a capacity of 250 tph
- (E) Portable screener
- (1) One (1) feed hopper, with a capacity of 250 tph
 - (2) One (1) screen, with a capacity of 250 tph
 - (3) One (1) conveyor/stacker, with a capacity of 250 tph
- (F) Portable Plant 2
- (1) One (1) grizzly, with a capacity of 500 tph
 - (2) One (1) feeder, with a capacity of 500 tph
 - (3) One (1) screen, with a capacity of 500 tph
 - (4) Four (4) output conveyors (25% ea), with a capacity of 500 tph
 - (5) One (1) crusher or impactor, with a capacity of 500 tph
 - (6) One (1) magnet
- (g) One (1) portable upgrade plant, approved in 2015 for construction, identified as Portable Upgrade Plant, with a maximum capacity of 500 tons per hour, using wet suppression for fugitive emissions control, consisting of the following equipment:
- (1) One (1) grizzly, with a capacity of 500 tph
 - (2) One (1) feeder/conveyor combo unit, with a capacity of 500 tph
 - (3) One (1) screen and one (1) screen conveyor, each with a capacity of 500 tph
 - (4) Two (2) output conveyors, each with a capacity of 250 tph
 - (5) Two (2) stacker/conveyors, each with a capacity of 250 tph
 - (6) Two (2) magnets, each with a capacity of 15 tph
- (h) Four (4) portable diesel generator/engines, approved in 2012 for installation, each with a capacity of 559 Hp or less.
- (i) One (1) portable diesel generator/engine, approved in 2012 for installation, with a capacity between 600 Hp and 1500 Hp.

- (j) Three (3) portable diesel generator/engines, approved in 2012 for installation, each with a capacity of 100 Hp or less.

Insignificant Activities

The source also consists of the following insignificant activities:

- (a) Degreasing operations that do not exceed 145 gallons per 12 month, except if subject to 326 IAC 20-6. [326 IAC 8-3-2][326 IAC 8-3-8]
- (b) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment. [326 IAC 6-3-2]
- (c) Activities with emissions equal to or less than insignificant thresholds [326 IAC 2-7-1(21)]:
 - (1) 10,000 gallon diesel AST identified as EE001-9011 [326 IAC 8-9];
 - (2) 2,500 gallon diesel AST identified as EE001-9012 [326 IAC 8-9];
 - (3) Iron breakup processing identified as EE001-9014.

Existing Approvals

Since the issuance of the Part 70 Operating Permit Renewal No. T127-29719-00026 on July 1, 2011, the source has constructed or has been operating under the following additional approvals:

- (a) Administrative Amendment No. 127-31251-00026, issued on December 27, 2011;
- (b) Minor Permit Modification No. 127-31268-00026, issued on April 16, 2012;
- (c) Significant Source Modification No. 127-32132-00026, issued on December 28, 2012;
- (d) Significant Permit Modification No. 127-32224-00026, issued December 28, 2012;
- (e) Administrative Amendment No. 127-33192-00026, issued June 21, 2013;
- (f) Significant Source Modification No. 127-33544-00026, issued November 15, 2013;
- (g) Significant Permit Modification No. 127-33602-00026, issued December 2, 2013;
- (h) Significant Source Modification No. 127-34120-00026, issued April 23, 2014;
- (i) Significant Permit Modification No. 127-34181-00026, issued on May 13, 2014;
- (j) Administrative Amendment No. 127-34514-00026, issued on June 9, 2014.

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

Enforcement Issue

There are no enforcement actions pending.

Emission Calculations

See Appendix A of this document for detailed emission calculations.

County Attainment Status

The source is located in Porter County.

Pollutant	Designation
SO ₂	Cannot be classified for the area bounded on the north by Lake Michigan; on the west by the Lake County and Porter County line; on the south by I-80 and I-90; and on the east by the LaPorte County and Porter County line. The remainder of Porter County is better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O ₃	On June 11, 2012, the U.S. EPA designated Porter County nonattainment, for the 8-hour ozone standard.
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	Unclassifiable effective November 15, 1990.
NO ₂	Cannot be classified or better than national standards.
Pb	Unclassifiable or attainment effective December 31, 2011.
¹ Nonattainment Severe 17 effective November 15, 1990, for the Chicago-Gary-Lake County area, including Porter County, for the 1-hour standard which was revoked effective June 15, 2005. The 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 Porter County are no longer subject to review pursuant to Emission Offset, 326 IAC 2-3 for the 1-hour standard. ² The department has filed a legal challenge to U.S. EPA's designation in 77 FR 34228.	

- (a) **Ozone Standards**
U.S. EPA, in the Federal Register Notice 77 FR 112 dated June 11, 2012, has designated Porter County 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_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_x emissions are considered when evaluating the rule applicability relating to ozone. Therefore, VOC and NO_x emissions were evaluated pursuant to the requirements of Emission Offset, 326 IAC 2-3.
- (b) **PM_{2.5}**
Porter County has been classified as attainment for PM_{2.5}. Therefore, direct PM_{2.5}, SO₂, and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (c) **Other Criteria Pollutants**
Porter County has been classified as attainment or unclassifiable in Indiana for PM_{2.5}, PM₁₀, CO, NO₂, SO₂, and Pb. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Fugitive Emissions

Since this source is classified as an integrated iron and steel plant, it is considered one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2, 326 IAC 2-3, or 326 IAC 2-7. Therefore, fugitive emissions are counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source.

Unrestricted Potential Emissions	
Pollutant	Tons/year
PM	1658.9
PM ₁₀	720.5
PM _{2.5}	635.5
SO ₂	0.00
NO _x	0.00
VOC	0.00
CO	0.00
Single HAP	0.00
Total HAP	0.00

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

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.

The potential to emit (as defined in 326 IAC 2-7-1(30)) of PM₁₀ and PM_{2.5} are each equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7 and will be issued a Part 70 Operating Permit Renewal.

Part 70 Permit Conditions

This source is subject to the requirements of 326 IAC 2-7, because the source met the following:

- (a) Emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of issuance of Part 70 permits.
- (b) Monitoring and related record keeping requirements which assume that all reasonable information is provided to evaluate continuous compliance with the applicable requirements.

Potential to Emit After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the emission units. Any new control equipment is considered federally enforceable only after issuance of this Part 70 permit renewal, and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

Process/ Emission Unit	Potential To Emit of the Entire Source After Issuance of Renewal (tons/year)								
	PM	PM ₁₀ *	PM _{2.5} **	SO ₂	NO _x	VOC	CO	Total HAPs	Worst Single HAP
Main Plant	9.78	3.56	3.56	-	-	-	-	-	-
Chip Plant	3.18	1.13	1.13	-	-	-	-	-	-
Portable/Auxiliary Equipment	6.32	2.31	2.31	-	-	-	-	-	-
Dump Plant	2.04	0.73	0.73	-	-	-	-	-	-
Portable Upgrade Plant	1.09	0.38	0.38	-	-	-	-	-	-
Slag Pot Operations	155.61	155.61	155.61	-	-	-	-	-	-
Wet Screening Plant	0.91	0.32	0.32	-	-	-	-	-	-
Roadways	6.73	1.79	0.18	-	-	-	-	-	-
Storage Pile Ops	6.30	2.98	0.94	-	-	-	-	-	-
Wind Erosion	1.81	0.90	0.14	-	-	-	-	-	-
Total PTE of Entire Source	193.8	169.7	165.3	0.0	0.0	0.0	0.0	0.0	0.0
Title V Major Source Thresholds	NA	100	100	100	100	100	100	25	10
PSD Major Source Thresholds	100	100	100	100	--	--	100	NA	NA
Emission Offset/ Nonattainment NSR Major Source Thresholds	--	--	--	--	100	100	-	NA	NA
negl. = negligible * 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} .									

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.

- (a) This existing source is a major stationary source, under PSD (326 IAC 2-2), because a PSD regulated pollutant is emitted at a rate of 100 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

- (a) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to each existing pollutant-specific emission unit that meets the following criteria:
 - (1) has a potential to emit before controls equal to or greater than the major source threshold for the pollutant involved;
 - (2) is subject to an emission limitation or standard for that pollutant; and
 - (3) uses a control device, as defined in 40 CFR 64.1, to comply with that emission limitation or standard.

No emission unit at the Metal Services LLC dba Phoenix Services LLC plant uses a control device. Therefore, the requirements of 40 CFR Part 64, CAM are not applicable to any of the existing units as part of this Part 70 permit renewal.

New Source Performance Standards (NSPS):

- (a) **40 CFR 60, Subpart IIII - New Source Performance Standard for Stationary Compression Ignition Internal Combustion Engines**

The requirements of the New Source Performance Standard for Stationary Compression Ignition Internal Combustion Engines, 40 CFR 60, Subpart IIII are not included in the permit for the eight (8) portable diesel generator/engines.

Pursuant to 40 CFR 60.4219, stationary internal combustion engines (ICE) differ from mobile ICE in that a stationary internal combustion engine is not a nonroad engine as defined at 40 CFR 1068.30 (excluding paragraph (2)(ii) of that definition). 40 CFR 1068.30 defines a non-road engine as any internal combustion engine that, by itself or in or on a piece of equipment, is portable or transportable, meaning designed to be and capable of being carried or moved from one location to another. Indicia of transportability include, but are not limited to, wheels, skids, carrying handles, dolly, trailer, or platform.

However, 40 CFR 1068.30 also requires that a non-road engine, as defined in the previous paragraph, not remain at a site for more than twelve (12) consecutive months. Any engine (or engines) that replace the engine at a location and that is intended to perform the same or similar function as the engine replaced will be included in calculating the consecutive time period. Additionally, 40 CFR 1068.30 defines a location as any single site at a building, structure, facility, or installation.

Therefore, provided that the eight (8) portable diesel generator/engines do not remain at one site for a period greater than twelve (12) months, each shall meet the definition of nonroad engines and not be subject to the requirements of 40 CFR 60, Subpart IIII.

(b) **40 CFR 60, Subpart OOO - New Source Performance Standard for Nonmetallic Mineral Processing Plants**

This rule applies to the following affected facilities in fixed or portable nonmetallic mineral processing plants: each crusher, grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, enclosed truck or railcar loading station.

The requirements of the New Source Performance Standard for Nonmetallic Mineral Processing Plants (40 CFR 60, Subpart OOO), are still not included in this permit to the slag processing operations because the original ore is expanded and vitrified in a furnace which alters the physical and chemical makeup of the ore, producing a slag by-product that does not meet the definition of a nonmetallic mineral in 40 CFR 60.671.

(c) **40 CFR 60, Subpart LL - New Source Performance Standard for Metallic Mineral Processing Plants**

This rule applies to the following affected facilities in metallic mineral processing plants: Each crusher and screen in open-pit mines; each crusher, screen, bucket elevator, conveyor belt transfer point, thermal dryer, product packaging station, storage bin, enclosed storage area, truck loading station, truck unloading station, railcar loading station, and railcar unloading station at the mill or concentrator

The requirements of the New Source Performance Standard for Metallic Mineral Processing Plants (40 CFR 60, Subpart LL) are still not included in the permit for the source because the source does not produce metallic mineral concentrates from ore and does not mine ore. In addition, the slag crushing and/or screening operations are not performed in a mine or pit.

(d) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in the permit for this source.

National Emission Standards for Hazardous Air Pollutants (NESHAP):

(f) **40 CFR 63, Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants: Stationary Reciprocating Internal Combustion Engines**

The requirements of the National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, 40 CFR 63, Subpart ZZZZ, are not included in the permit for the eight (8) portable diesel generator/engines.

Pursuant to 40 CFR 63.6585(a), stationary reciprocating internal combustion engines (RICE) differ from mobile RICE in that a stationary RICE is not a non-road engine as

defined at 40 CFR 1068.30. 40 CFR 1068.30 defines a non-road engine as any internal combustion engine that, by itself or in or on a piece of equipment, is portable or transportable, meaning designed to be and capable of being carried or moved from one location to another. Indicia of transportability include, but are not limited to, wheels, skids, carrying handles, dolly, trailer, or platform.

However, 40 CFR 1068.30 also requires that a nonroad engine, as defined in the previous paragraph, not remain at a site for more than twelve (12) consecutive months. Any engine (or engines) that replace the engine at a location and that is intended to perform the same or similar function as the engine replaced will be included in calculating the consecutive time period. Additionally, 40 CFR 1068.30 defines a location as any single site at a building, structure, facility, or installation.

Therefore, provided that either of the eight (8) portable diesel generator/engines do not remain at one site for a period greater than twelve (12) months, each shall meet the definition of a nonroad engine and not be subject to the requirements of 40 CFR 63, Subpart ZZZZ.

- (g) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in this permit renewal.

State Rule Applicability - Entire Source

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

The source is one of twenty-eight (28) listed source categories under 326 IAC 2-2 (Prevention of Significant Deterioration). The source has the potential to emit in excess of 100 tons per year of PM, PM10 and PM2.5 emissions. Therefore, pursuant to 326 IAC 2-2, this source is a major source for PSD purposes.

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

The source is subject to 326 IAC 1-6-3.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting) because it is located in Porter County and its emissions of NOx are greater than 25 tons per year. Therefore, pursuant to 326 IAC 2-6-3(a)(1), annual reporting is required. An emission statement shall be submitted by July 1, 2017 and every year thereafter. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4.

326 IAC 5-1 (Opacity Limitations)

This source is subject to the opacity limitations specified in 326 IAC 5-1-2.

326 IAC 6.5 (PM Limitations Except Lake County)

This source is not subject to 326 IAC 6.5 because it is not located in one of the following counties: Clark, Dearborn, Dubois, Howard, Marion, St. Joseph, Vanderburgh, Vigo or Wayne.

326 IAC 2-7-6(5) (Annual Compliance Certification)

The U.S. EPA Federal Register 79 FR 54978 notice does not exempt Title V Permittees from the requirements of 40 CFR 70.6(c)(5)(iv) or 326 IAC 2-7-6(5)(D), but the submittal of the Title V annual compliance certification to IDEM satisfies the requirement to submit the Title V annual compliance certifications to EPA. IDEM does not intend to revise any permits since the requirements of 40 CFR 70.6(c)(5)(iv) or 326 IAC 2-7-6(5)(D) still apply, but Permittees can note on their Title V annual compliance certification that submission to

IDEM has satisfied reporting to EPA per Federal Register 79 FR 54978. This only applies to Title V Permittees and Title V compliance certifications.

326 IAC 6-4 (Fugitive Dust Emissions)

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).

326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)

Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions shall be controlled according to the Fugitive Dust Control Plan submitted on October 18, 2012.

State Rule Applicability – Burns Harbor Site

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

Pursuant to 6-3-2, (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate matter (PM) emissions from the following listed units shall not exceed the pound per hour limit listed below when operating at the corresponding process weight rate:

Emission Unit	Process Weight Rate (tons/hr)	326 IAC 6-3 Emission Limit (lb/hr)
Main Plant		
One (1) step deck feeder (F1)	1500	82.95
Crushing		
One (1) pan feeder (F2)	500	68.96
One (1) conveyor (C5)	500	68.96
One (1) mag/pendulum head pulley (C5)	184	57.61
One (1) dual finger gate splitter at C5	217	59.40
One (1) splitter (scrap) (C5)	184	57.61
One (1) dual finger gate splitter at C5	217	59.40
One (1) dual finger gate splitter at Crusher/Impactor	184	57.61
One (1) pan feeder (F3)	510	69.19
One (1) pan feeder (F4)	500	68.96
One (1) jaw crusher	500	68.96
One (1) impactor,	500	68.96
One (1) conveyor (C6A)	500	68.96
One (1) conveyor (C6B)	500	68.96
Screening		
One (1) conveyor (C1)	1500	82.95
One (1) 150-ton bin,	1500	82.95
One (1) feeder (MF400) (F5)	1500	82.95
One (1) conveyor (C2)	1500	82.95
One (1) mag head pulley (C2)	300	63.00
One (1) dual finger gate splitter at C2	271	61.86
One (1) dual finger gate splitter at F6/F7	217	59.40
One (1) feeder (F6)	750	73.93
One (1) feeder (F7)	750	73.93
One (1) conveyor (C3A)	750	73.93

Emission Unit	Process Weight Rate (tons/hr)	326 IAC 6-3 Emission Limit (lb/hr)
One (1) conveyor (C3B)	750	73.93
One (1) triple chute gate splitter at S1/S2/S3	72	48.04
One (1) screen (S1)	750	73.93
One (1) dual finger gate splitter at S1	750	73.93
One (1) conveyor (C7A)	500	68.96
One (1) screen (S2)	750	73.93
One (1) dual finger gate splitter at S2	750	73.93
One (1) conveyor (C7B)	396	66.20
One (1) screen (S3)	750	73.93
One (1) dual finger gate splitter at S3	750	73.93
One (1) conveyor (C7C)	500	68.96
One (1) conveyor (C11A)	1000	77.59
One (1) stack conveyor (C15)	1000	77.59
One (1) conveyor (C9)	700	73.06
One (1) stack conveyor (C14)	700	73.06
One (1) conveyor (C8)	400	66.31
One (1) stack conveyor (C13)	178.20	57.27
One (1) mag head pulley (C13)	400	66.31
One (1) dual finger gate splitter at C13	178.2	57.27
Scrap		
One (1) 50-ton scrap bin (F1)	700	73.06
One (1) feeder (F8) 700	700	73.06
One (1) conveyor (C4) 700	700	73.06
One (1) dual finger gate splitter at C4	56	45.64
One (1) screen (S4)	350	64.76
One (1) dual finger gate splitter at S4	350	64.76
One (1) conveyor (C10A)	200	58.51
One (1) screen (S5) 350	350	64.76
One (1) dual finger gate splitter at S5	350	67.76
One (1) conveyor (C10B)	200	58.51
One (1) conveyor (C11B)	400	66.31
One (1) stack conveyor (C17)	400	66.31
One (1) conveyor (C12)	400	66.31
One (1) stack conveyor (C16)	400	66.31
One (1) conveyor (C18)	200	58.51
One (1) stack conveyor (C19)	200	58.51
Chip Plant		
One (1) feed hopper (B1)	500	68.96
One (1) feeder (F9)	500	68.96
One (1) conveyor (C1)	500	68.96
One (1) conveyor (C2)	800	74.74
One (1) crusher, 500	500	68.96
One (1) conveyor (C5)	500	68.96
One (1) screen (S1)	400	66.31
One (1) conveyor (C3)	150	55.44
One (1) screen (S2)	400	66.31

Emission Unit	Process Weight Rate (tons/hr)	326 IAC 6-3 Emission Limit (lb/hr)
One (1) conveyor (C4)	150	55.44
One (1) conveyor (C10)	300	63.00
One (1) stack conveyor (C11)	55	45.47
One (1) conveyor (C8)	250	60.96
One (1) mag cross belt (M2)	4.125	10.60
One (1) stack conveyor (C9)	78.375	48.86
One (1) conveyor (C6) 20	250	60.96
One (1) mag cross belt (M1)	18	28.43
One (1) stack conveyor (C7)	250	60.96
One (1) conveyor (C12)	300	63.0
One (1) conveyor (C13)	300	63.0
One (1) crusher (crusher 2)	400	66.3
One (1) screen (S3)	75	48.4
One (1) conveyor (C14)	50	44.6
One (1) conveyor (C15)	50	44.6
Portable Wet Screening Plant		
Feed Chute	450	67.7
Wet Screen	450	67.7
Output Chutes 1, 2, 3	135 (each)	54.3 (each)
Oversize Chute	45	43.6
Dump Plant	500	68.96
One (1) grizzly feeder	500	68.96
One (1) feed conveyor	500	68.96
Two (2) splitter drops (each)	150	55.44
One (1) scrap stacker/conveyor	500	68.96
One (1) main conveyor	15	25.16
One (1) magnet	300	63.0
Two (2) crusher conveyors (each)	300	63.0
One (1) crusher impactor	300	63.0
One (1) crusher output conveyor	300	63.0
One (1) screen and five (5) screen conveyors (each)	400	66.31
One (1) snub conveyor	400	66.31
One (1) output stacker/conveyor	400	66.31
Portable/Auxiliary Equipment		
Portable Plant 1		
One (1) conveyor	600	71.16
One (1) portable crusher	600	71.16
One (1) conveyor	600	71.16
One (1) portable screen	600	71.16
Three (3) portable input conveyors (33%)	600	71.16
Three (3) portable output stacker/conveyors (33% ea)	600	71.16
Portable boat loader		
One (1) feed hopper	1500	82.95
One (1) conveyor/stacker	1500	82.95

Emission Unit	Process Weight Rate (tons/hr)	326 IAC 6-3 Emission Limit (lb/hr)
Portable stacker		
One (1) feed hopper	250	60.96
One (1) conveyor/stacker	250	60.96
Portable screener		
One (1) screen	250	60.96
Three (3) conveyor/stackers (33% each)	250	60.96
Portable screener		
One (1) feed hopper	250	60.96
One (1) screen	250	60.96
One (1) conveyor/stacker	250	60.96
Portable Plant 2		
One (1) grizzly	500	68.96
One (1) feeder	500	68.96
One (1) screen	500	68.96
Four (4) output conveyors (25% ea)	500	68.96
One (1) crusher or impactor	500	68.96
One (1) magnet	15	25.16
Portable Upgrade Plant		
One (1) grizzly	500	68.96
One (1) feeder/conveyor	500	68.96
One (1) screen and one (1) screen conveyor (each)	500	68.96
Two (2) output conveyors (each)	250	60.96
Two (2) stacker/conveyors (each)	250	60.96
Two (2) magnets (each)	15	25.16

The pound per hour limitations above were calculated using the following equation:

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

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

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

$$E = 55.0 P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour;} \\ \text{and} \quad P = \text{process weight rate in tons per hour.}$$

When the process weight rate exceeds two hundred (200) tons per hour, the allowable emission may exceed the 326 IAC 6-3 emission limit derived by the equation above, provided that the concentration of particulate matter in the discharge gases to the atmosphere is less than 0.10 pounds per one thousand (1,000) pounds of gases.

State Rule Applicability – Insignificant Activities

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

Pursuant to 326 IAC 6-3-2(e), the allowable particulate emission from the brazing equipment, cutting torches, soldering equipment, and welding equipment shall not exceed five hundred fifty-one thousandths (0.551) pound per hour because the process weight rate is less than one hundred (100) pound per hour.

326 IAC 8-3 (Organic Solvent Degreasing Operations)

Pursuant to 326 IAC 8-3 (Organic Solvent Degreasing Operations), the source is subject to 326 IAC 8-3-2 and 326 IAC 8-3-8 because the cold cleaner degreaser is located in Porter County.

326 IAC 8-9 (Volatile Organic Liquid Storage Vessels)

Pursuant to 326 IAC 8-9, the two (2) diesel storage tanks, identified as EE001-9011 and EE001-9012, are subject to the reporting and record keeping provision of section 6(a) and 6(b) because the tanks are located in Porter County and each has a capacity of less than thirty-nine thousand (39,000) gallons.

Compliance Determination and Monitoring Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with all applicable state and federal rules on a continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a continuous demonstration. When this occurs, IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, Compliance Determination Requirements are included in the permit. The Compliance Determination Requirements in Section D of the permit are those conditions that are found directly within state and federal rules and the violation of which serves as grounds for enforcement action.

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

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

Emission Unit	Control Device	Timeframe for Testing	Pollutant	Frequency of Testing
Main Plant, Chip Plant, Portable/Auxiliary Equipment	Wet Suppression	Prior to feeding material to the Chip Plant	Particulate Matter	Weekly

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

Control	Parameter	Frequency	Range	Excursions and Exceedances
Wet Suppression	Visible Emissions	Daily	Normal-Abnormal	Response Steps

These monitoring conditions are necessary because the Wet Suppressant for Main Plant, Chip Plant, and Portable/Auxiliary Equipment must operate properly to ensure compliance with 326 IAC 6-3 (Process Operations) and 326 IAC 2-7 (Part 70).

Proposed Changes

The changes listed below have been made to Administrative Part 70 Operating Permit No. T127-36307-00026. Deleted language appears as ~~strikethroughs~~ and new language appears in **bold**:

Change 1: Section D.2 is modified to remove PSD Minor Limits for Non-road engines. The seven (7) portable diesel generator/engines meet the definition of a nonroad engine, as defined in 40 CFR 1068.30 (excluding paragraph (2)(ii) of that definition) and are therefore not considered a stationary internal combustion engine as defined in 40 CFR 60.4219.

~~SECTION D.2~~ **EMISSIONS UNIT OPERATION CONDITIONS**

Emissions Unit Description: Diesel Generators/Engines

~~(g) Four (4) portable diesel generator/engines, approved in 2012 for installation, each with a capacity of 559 Hp or less.~~

~~(h) One (1) portable diesel generator/engine, approved in 2012 for installation, with a capacity between 600 Hp and 1500 Hp.~~

~~(i) Three (3) portable diesel generator/engines, approved in 2012 for installation, each with a capacity of 100 Hp or less.~~

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

Emission Limitations and Standards [326 IAC 2-7-5(1)]

~~D.2.1 Prevention of Significant Deterioration (PSD) and Emission Offset Minor Limit [326 IAC 2-2] [326 IAC 2-3]~~

~~The total diesel fuel usage at the generator/engines shall not exceed 60,000 gallons per twelve (12) consecutive month period with compliance determined at the end of each month.~~

~~Compliance with the above limit, in conjunction with the Condition D.1.1, shall limit the PM, PM10 and PM2.5 emissions from the modification approved under SSM No. 127-32132-00026 to less 25, 15 and 10 tons per year, respectively, and render the requirements of 326 IAC 2-2 not applicable to the SSM No. 127-32132-00026.~~

~~Compliance with this limit will limit the SO₂, NO_x and CO emissions from the modification approved under SSM No. 127-32132-00026 to less than 40, 40 and 100 tons per twelve (12) consecutive month period, respectively, and render the requirements of 326 IAC 2-2 not applicable to the SSM No. 127-32132-00026.~~

~~Compliance with this limit will limit the NO_x emissions from the modification approved under SSM No. 127-32132-00026 to less than 40 tons per twelve (12) consecutive month period, and render the requirements of 326 IAC 2-3 for ozone not applicable to the SSM No. 127-32132-00026.~~

~~D.2.2 Preventative Maintenance Plan [326 IAC 2-7-5(12)]~~

~~A Preventative Maintenance Plan is required for these diesel generators/engines. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.~~

~~Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]~~

~~D.2.3 Record Keeping Requirements~~

- ~~(a) To document the compliance status with Condition D.2.1, the Permittee shall maintain monthly records of the total diesel fuel usage for the diesel generator/engines.~~
- ~~(b) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required by this condition.~~

~~D.2.4 Reporting Requirements~~

~~A quarterly summary of the information required to document the compliance status with Condition D.2.1 shall be submitted using the reporting forms located at the end of this permit, or their equivalent, not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting Requirements contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official," as defined by 326 IAC 2-7-1(35).~~

Recommendation

The staff recommends to the Commissioner that the Part 70 Operating Permit 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 September 24, 2015.

Conclusion

The operation of this stationary slag finishing operation shall be subject to the conditions of the attached Part 70 Operating Permit Renewal No. F127-36307-00026

IDEM Contact

- (a) Questions regarding this proposed permit can be directed to Phillip Joseph 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) 233-4228 or toll free at 1-800-451-6027 extension 3-4228.
- (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>.

TSD Appendix A - Emission Summary

Company Name: Metal Services LLC dba Phoenix Services LLC
 Address City IN Zip: 250 W. US Hwy 12, Burns Harbor, IN 46304
 Part 70 Permit Renewal No. T127-36307-00026
 Reviewer: Phillip Joseph
 Date: Jan. 2016

UNCONTROLLED/ UNLIMITED POTENTIAL-TO-EMIT (tons/year)									
Process/Equip	PM (tpy)	PM10 (tpy)	PM2.5 (tpy)	SO2	NOx	VOC	CO	Total HAPs	Single HAPs
Main Plant	540.51	197.00	197.00	-	-	-	-	-	-
Chip Plant	111.45	39.72	39.72	-	-	-	-	-	-
Portable/Auxiliary Equipment	308.51	111.87	111.87	-	-	-	-	-	-
Dump Plant	134.53	49.06	49.06	-	-	-	-	-	-
Portable Upgrade Plant	87.99	31.24	31.24	-	-	-	-	-	-
Slag Pot Operations	155.61	155.61	155.61	-	-	-	-	-	-
Wet Screening Plant	61.10	21.48	21.48	-	-	-	-	-	-
Roadways	45.37	12.09	1.21	-	-	-	-	-	-
Storage Pile Ops	166.21	78.61	24.71	-	-	-	-	-	-
Wind Erosion	47.65	23.83	3.57	-	-	-	-	-	-
Totals	1658.9	720.5	635.5	0.0	0.0	0.0	0.0	0.00	0.00

LIMITED POTENTIAL-TO-EMIT (tons/year)									
Process/Equip	PM (tpy)	PM10 (tpy)	PM2.5 (tpy)	SO2	NOx	VOC	CO	Total HAPs	Single HAPs
Main Plant	9.78	3.56	3.56	-	-	-	-	-	-
Chip Plant	3.18	1.13	1.13	-	-	-	-	-	-
Portable/Auxiliary Equipment	6.32	2.31	2.31	-	-	-	-	-	-
Dump Plant	2.04	0.73	0.73	-	-	-	-	-	-
Portable Upgrade Plant	1.09	0.38	0.38	-	-	-	-	-	-
Slag Pot Operations	155.61	155.61	155.61	-	-	-	-	-	-
Wet Screening Plant	0.91	0.32	0.32	-	-	-	-	-	-
Roadways	6.73	1.79	0.18	-	-	-	-	-	-
Storage Pile Ops	6.30	2.98	0.94	-	-	-	-	-	-
Wind Erosion	1.81	0.90	0.14	-	-	-	-	-	-
Totals	193.8	169.7	165.3	0.0	0.0	0.0	0.0	0.00	0.000

TSD Appendix A
Main Plant & Chip Plant Equipment and Throughput List

Company Name: Metal Services LLC dba Phoenix Services LLC
Address City IN Zip: 250 W. US Hwy 12, Burns Harbor, IN 46304
Part 70 Permit Renewal No. T127-36307-00026
Reviewer Phillip Joseph
Date Jan. 2016

Slag Main Plant (separation) Capacity: 1,500 tons per hour
Slag Main Plant Throughput Maximum: 13,140,000 tons per year
Slag Main Plant Throughput Limited: 2,377,419 tons per year

Main Plant (replaced the Separation Plant)	Capacity (tph)	% Process Flow		Maximum Throughput (tpy)	Limited Throughput (tpy)
F1 step deck feeder	1500	100%	of baseline	13,140,000	2,377,419
CRUSHING					
F2 pan feeder	feed control	80%	of F1 feeder	10,512,000	1,901,935
C5 conveyor	feed control	100%	of F2 feeder	10,512,000	1,901,935
C5 mag/pendulum head pulley	feed control	15%	of C5 conv	1,576,800	285,290
C5 splitter (scrap)	feed control	100%	of C5 mag	1,576,800	285,290
C5 splitter (slag)	feed control	85%	of C5 conv	8,935,200	1,616,645
crush splitter (impactor)	feed control	50%	of C5 splitter (slag)	4,467,600	808,322
crush splitter (jaw)	feed control	50%	of C5 splitter (slag)	4,467,600	808,322
F3 pan feeder	feed control	100%	of crush splitter (jaw)	4,467,600	808,322
F4 pan feeder	feed control	100%	of crush splitter (impactor)	4,467,600	808,322
jaw crusher	feed control	100%	of crush splitter (jaw)	4,467,600	808,322
impactor	feed control	100%	of crush splitter (impactor)	4,467,600	808,322
C6A conveyor	feed control	100%	of jaw+impact crushers	8,935,200	1,616,645
C6B conveyor	feed control	100%	of C6A conv	8,935,200	1,616,645
SCREENING					
C1 conveyor	feed control	100%	of F1 step feeder	13,140,000	2,377,419
150-ton bin	feed control	100%	of C1 conveyor	13,140,000	2,377,419
F5 feeder (MF400)	feed control	100%	of 150-ton bin	13,140,000	2,377,419
C2 conveyor	feed control	100%	of F5 feeder	13,140,000	2,377,419
C2 mag head pulley	feed control	20%	of C2 conv	2,628,000	475,484
C2 splitter (slag)	feed control	80%	of C2 conv	10,512,000	1,901,935
C2 splitter (scrap)	feed control	20%	of C2 conv	2,628,000	475,484
F6/F7 splitter (count all in one 50/50)	feed control	100%	of C2 splitter (slag)	10,512,000	1,901,935
F6 feeder	feed control	50%	of F6/F7 splitter	5,256,000	950,968
F7 feeder	feed control	50%	of F6/F7 splitter	5,256,000	950,968
C3A conveyor	feed control	100%	of F7 feeder	5,256,000	950,968
C3B conveyor	feed control	100%	of F6 feeder	5,256,000	950,968
triple split chute	feed control	100%	of C3A+C3B conv	10,512,000	1,901,935
S1 screen	feed control	33%	triple split chute	3,468,960	627,639
S1 splitter C8 side	feed control	15%	of S1 screen	520,344	94,146
S1 splitter C9 side	feed control	30%	of S1 screen	1,040,688	188,292
C7A conveyor	feed control	45%	of S1 screen	1,561,032	282,437
S2 screen	feed control	33%	triple split chute	3,468,960	627,639
S2 splitter C8 side	feed control	15%	of S2 screen	520,344	94,146
S2 splitter C9 side	feed control	30%	of S2 screen	1,040,688	188,292
C7B conveyor	feed control	45%	of S2 screen	1,561,032	282,437
S3 screen	feed control	33%	triple split chute	3,468,960	627,639
S3 splitter C8 side	feed control	15%	of S3 screen	520,344	94,146
S3 splitter C9 side	feed control	30%	of S3 screen	1,040,688	188,292
C7C conveyor	feed control	45%	of S3 screen	1,561,032	282,437
C11A conveyor	feed control	100%	of C7A+C7B+C7C conv	4,683,096	847,312
C15 stk conveyor	feed control	100%	of C11A conv	4,683,096	847,312
C9 conveyor	feed control	30%	of S1+S2+S3 screens	3,122,064	564,875
C14 stk conveyor	feed control	100%	of C9 conv	3,122,064	564,875
C8 conveyor	feed control	15%	of S1+S2+S3 screens	1,561,032	282,437
C13 stk conveyor	feed control	100%	of C8 conv	1,561,032	282,437
C13 mag head pulley	feed control	5%	of C13 conv	78,052	14,122
C13 splitter (slag)	feed control	95%	of C13 conv	1,482,980	268,316
C13 splitter (scrap)	feed control	100%	of C13 mag	78,052	14,122
SCRAP					
50-ton scrap bin	feed control	100%	of C13 mag	78,052	14,122
F8 feeder	feed control	100%	of 50-ton scrap bin	78,052	14,122
C4 conveyor	feed control	100%	of C2 split(scrap)+F8 feeder	2,706,052	489,606
C4 splitter to (S4)	feed control	50%	of C4 conv	1,353,026	244,803
C4 splitter to (S5)	feed control	50%	of C4 conv	1,353,026	244,803
S4 screen	feed control	100%	of C4 splitter (S4)	1,353,026	244,803
S4 splitter C18 side	feed control	5%	of S4 screen	67,651	12,240
S4 splitter C12 side	feed control	15%	of S4 screen	202,954	36,720
C10A conveyor	feed control	70%	of S4 screen	947,118	171,362
S5 screen	feed control	100%	of C4 splitter (S5)	1,353,026	244,803
S5 splitter C18 side	feed control	5%	of S5 screen	67,651	12,240
S5 splitter C12 side	feed control	15%	of S5 screen	202,954	36,720
C10B conveyor	feed control	70%	of S5 screen	947,118	171,362
C11B conveyor	feed control	100%	of C10A+C10B conv	1,894,236	342,724
C17 stk conveyor	feed control	100%	of C11B conv	1,894,236	342,724
C12 conveyor	feed control	15%	of S4+S5 screens	405,908	73,441
C16 stk conveyor	feed control	100%	of C12 conv	405,908	73,441
C18 conveyor	feed control	5%	of S4+S5 screens	135,303	24,480
C19 stk conveyor	feed control	100%	of C18 conv	135,303	24,480

 Chip Plant (finishing) Capacity: 500 tons per hour
 Throughput Maximum: 4,380,000 tons per year
 Throughput Limited: 1,300,000 tons per year

Chip Plant (replaced the Finishing Plant)	Capacity (tph)	% Process Flow		Maximum Throughput (tpy)	Limited Throughput (tpy)
40-ton feed hopper (B1)	500	100%	of feed	4,380,000	1,300,000
F9 feeder	feed control	100%	of 40-ton feed hopper	4,380,000	1,300,000
C1 conveyor	feed control	100%	of F9 feeder	4,380,000	1,300,000
C2 conveyor	feed control	100%	of crusher+C1 conv	4,818,000	1,430,000
crusher	feed control	10%	of F9 feeder	438,000	130,000
C5 conveyor	feed control	100%	of crusher	438,000	130,000
C12 conveyor	feed control	100%	of conveyor C5	438,000	130,000
Crusher 2 (alternate)	feed control	100%	of conveyor C5	438,000	130,000
C13 conveyor	feed control	100%	of conveyor C5	438,000	130,000
S1 screen	feed control	50%	of C2 conv	2,409,000	715,000
C3 conveyor	feed control	10%	of S1 screen	240,900	71,500
S2 screen	feed control	50%	of C2 conv	2,409,000	715,000
C4 conveyor	feed control	10%	of S2 screen	240,900	71,500
C10 conveyor	feed control	100%	of C3+C4 conv	481,800	143,000
C11 stk conveyor	feed control	100%	of C10 conv	481,800	143,000
S3 screen	feed control	100%	of C11 conv	481,800	143,000
C14 conveyor	feed control	50%	of S3	240,900	71,500
C15 conveyor	feed control	50%	of S3	240,900	71,500
C8 conveyor	feed control	15%	of S1+S2	722,700	214,500
M2 mag cross belt	feed control	5%	of C8 conv	36,135	10,725
C9 stk conveyor	feed control	95%	of C8 conv	686,565	203,775
C6 conveyor	feed control	65%	of S1+S2	3,131,700	929,500
M1 mag cross belt	feed control	5%	of C6 conv	156,585	46,475
C7 stk conveyor	feed control	95%	of C6 conv	2,975,115	883,025

 Portable/Aux Equip Capacity: -Varies- tons per hour (see below)
 Throughput Maximum: -Varies- tons per hour (see below)
 Combined Throughput Limited: 800,000 tons per year

Portable/Aux Equipment	Capacity (tph)	Maximum Throughput (tpy)	Limited Throughput (tpy)
Portable Plant 1:			
1 conveyor	600	5,256,000	800,000
1 portable crusher	600	5,256,000	800,000
1 conveyor	600	5,256,000	800,000
1 portable screen	600	5,256,000	800,000
3 portable input conveyors (33%)	600	5,256,000	800,000
3 portable output stacker/conveyors (33% ea)	600	5,256,000	800,000
Portable boat loader:			
1 feed hopper	1500	13,140,000	800,000
1 conveyor/stacker	1500	13,140,000	800,000
Portable stacker:			
1 feed hopper	250	2,190,000	800,000
1 conveyor/stacker	250	2,190,000	800,000
Portable screener:			
1 screen	250	2,190,000	800,000
3 conveyor/stackers (33% each)	250	2,190,000	800,000
Portable screener:			
1 feed hopper	250	2,190,000	800,000
1 screen	250	2,190,000	800,000
1 conveyor/stacker	250	2,190,000	800,000
Portable Plant 2:			
1 grizzly	500	4,380,000	800,000
1 feeder	500	4,380,000	800,000
1 screen	500	4,380,000	800,000
4 output conveyors (25% ea)	500	4,380,000	800,000
1 crusher or impactor	500	4,380,000	800,000
1 magnet	15	131,400	131,400

TSD Appendix A
Main Plant & Chip Plant Equipment Emissions

Company Name: Metal Services LLC dba Phoenix Services LLC
Address City IN Zip: 250 W. US Hwy 12, Burns Harbor, IN 46304
Part 70 Permit Renewal No. T127-36307-00026
Reviewer: Phillip Joseph
Date: Jan. 2016

POTENTIAL TO EMIT – MAIN PLANT (SEPARATION) OPERATIONS

Main Plant (separation)	Throughput (tons/yr)	Emission Factors (lb/n)			Uncontrolled Emissions (tpy)			Control Efficiency	Controlled Emissions (tpy)					
		PM	PM ₁₀	PM _{2.5}	PM	PM ₁₀	PM _{2.5}		PM	PM ₁₀	PM _{2.5}			
F1 step deck feeder	13,140,000	0.003	0.0011	0.0011	19,7100	7,2270	7,2270	90.0%	1,9710	0,7227	0,7227			
CRUSHING														
F2 pan feeder	10,512,000	0.003	0.0011	0.0011	15,7680	5,7816	5,7816	90.0%	1,5768	0,5782	0,5782			
C5 conveyor	10,512,000	0.003	0.0011	0.0011	15,7680	5,7816	5,7816	90.0%	1,5768	0,5782	0,5782			
C6 mag/pendulum head pulley	1,576,800	0.003	0.0011	0.0011	2,3652	0,8672	0,8672	90.0%	0,2365	0,0867	0,0867			
C5 splitter (scrap)	1,576,800	0.003	0.0011	0.0011	2,3652	0,8672	0,8672	90.0%	0,2365	0,0867	0,0867			
C5 splitter (slag)	8,935,200	0.003	0.0011	0.0011	13,4028	4,9144	4,9144	90.0%	1,3403	0,4914	0,4914			
crush splitter (impactor)	4,467,600	0.003	0.0011	0.0011	6,7014	2,4572	2,4572	90.0%	0,6701	0,2457	0,2457			
crush splitter (jaw)	4,467,600	0.003	0.0011	0.0011	6,7014	2,4572	2,4572	90.0%	0,6701	0,2457	0,2457			
F3 pan feeder	4,467,600	0.003	0.0011	0.0011	6,7014	2,4572	2,4572	90.0%	0,6701	0,2457	0,2457			
F4 pan feeder	4,467,600	0.003	0.0011	0.0011	6,7014	2,4572	2,4572	90.0%	0,6701	0,2457	0,2457			
jaw crusher	4,467,600	0.0054	0.0024	0.0024	12,0625	5,3611	5,3611	90.0%	1,2063	0,5361	0,5361			
impactor	4,467,600	0.0054	0.0024	0.0024	12,0625	5,3611	5,3611	90.0%	1,2063	0,5361	0,5361			
C6A conveyor	8,935,200	0.003	0.0011	0.0011	13,4028	4,9144	4,9144	90.0%	1,3403	0,4914	0,4914			
C6B conveyor	8,935,200	0.003	0.0011	0.0011	13,4028	4,9144	4,9144	90.0%	1,3403	0,4914	0,4914			
SCREENING														
C1 conveyor	13,140,000	0.003	0.0011	0.0011	19,7100	7,2270	7,2270	90.0%	1,9710	0,7227	0,7227			
150-ton bin	13,140,000	0.003	0.0011	0.0011	19,7100	7,2270	7,2270	90.0%	1,9710	0,7227	0,7227			
F5 feeder (MF400)	13,140,000	0.003	0.0011	0.0011	19,7100	7,2270	7,2270	90.0%	1,9710	0,7227	0,7227			
C2 conveyor	13,140,000	0.003	0.0011	0.0011	19,7100	7,2270	7,2270	90.0%	1,9710	0,7227	0,7227			
C2 mag head pulley	2,628,000	0.003	0.0011	0.0011	3,9420	1,4454	1,4454	90.0%	0,3942	0,1445	0,1445			
C2 splitter (slag)	10,512,000	0.003	0.0011	0.0011	15,7680	5,7816	5,7816	90.0%	1,5768	0,5782	0,5782			
C2 splitter (scrap)	2,628,000	0.003	0.0011	0.0011	3,9420	1,4454	1,4454	90.0%	0,3942	0,1445	0,1445			
F6/F7 splitter (count all in one 50/50)	10,512,000	0.003	0.0011	0.0011	15,7680	5,7816	5,7816	90.0%	1,5768	0,5782	0,5782			
F6 feeder	5,256,000	0.003	0.0011	0.0011	7,8840	2,8908	2,8908	90.0%	0,7884	0,2891	0,2891			
F7 feeder	5,256,000	0.003	0.0011	0.0011	7,8840	2,8908	2,8908	90.0%	0,7884	0,2891	0,2891			
C3A conveyor	5,256,000	0.003	0.0011	0.0011	7,8840	2,8908	2,8908	90.0%	0,7884	0,2891	0,2891			
C3B conveyor	5,256,000	0.003	0.0011	0.0011	7,8840	2,8908	2,8908	90.0%	0,7884	0,2891	0,2891			
triple split chute	10,512,000	0.003	0.0011	0.0011	15,7680	5,7816	5,7816	90.0%	1,5768	0,5782	0,5782			
S1 screen	3,468,960	0.025	0.0087	0.0087	43,3620	15,0900	15,0900	90.0%	4,3362	1,5090	1,5090			
S1 splitter C8 side	520,344	0.003	0.0011	0.0011	0,7805	0,2862	0,2862	90.0%	0,0781	0,0286	0,0286			
S1 splitter C9 side	1,040,688	0.003	0.0011	0.0011	1,5610	0,5724	0,5724	90.0%	0,1561	0,0572	0,0572			
C7A conveyor	1,561,032	0.003	0.0011	0.0011	2,3415	0,8586	0,8586	90.0%	0,2342	0,0859	0,0859			
S2 screen	3,468,960	0.025	0.0087	0.0087	43,3620	15,0900	15,0900	90.0%	4,3362	1,5090	1,5090			
S2 splitter C8 side	520,344	0.003	0.0011	0.0011	0,7805	0,2862	0,2862	90.0%	0,0781	0,0286	0,0286			
S2 splitter C9 side	1,040,688	0.003	0.0011	0.0011	1,5610	0,5724	0,5724	90.0%	0,1561	0,0572	0,0572			
C7B conveyor	1,561,032	0.003	0.0011	0.0011	2,3415	0,8586	0,8586	90.0%	0,2342	0,0859	0,0859			
S3 screen	3,468,960	0.025	0.0087	0.0087	43,3620	15,0900	15,0900	90.0%	4,3362	1,5090	1,5090			
S3 splitter C8 side	520,344	0.003	0.0011	0.0011	0,7805	0,2862	0,2862	90.0%	0,0781	0,0286	0,0286			
S3 splitter C9 side	1,040,688	0.003	0.0011	0.0011	1,5610	0,5724	0,5724	90.0%	0,1561	0,0572	0,0572			
C7C conveyor	1,561,032	0.003	0.0011	0.0011	2,3415	0,8586	0,8586	90.0%	0,2342	0,0859	0,0859			
C11A conveyor	4,683,096	0.003	0.0011	0.0011	7,0246	2,5757	2,5757	90.0%	0,7025	0,2576	0,2576			
C15 stik conveyor	4,683,096	0.003	0.0011	0.0011	7,0246	2,5757	2,5757	90.0%	0,7025	0,2576	0,2576			
C9 conveyor	3,122,064	0.003	0.0011	0.0011	4,6831	1,7171	1,7171	90.0%	0,4683	0,1717	0,1717			
C14 stik conveyor	3,122,064	0.003	0.0011	0.0011	4,6831	1,7171	1,7171	90.0%	0,4683	0,1717	0,1717			
C8 conveyor	1,561,032	0.003	0.0011	0.0011	2,3415	0,8586	0,8586	90.0%	0,2342	0,0859	0,0859			
C13 stik conveyor	1,561,032	0.003	0.0011	0.0011	2,3415	0,8586	0,8586	90.0%	0,2342	0,0859	0,0859			
C13 mag head pulley	78,052	0.003	0.0011	0.0011	0,1171	0,0429	0,0429	90.0%	0,0117	0,0043	0,0043			
C13 splitter (slag)	1,482,960	0.003	0.0011	0.0011	2,2245	0,8156	0,8156	90.0%	0,2224	0,0816	0,0816			
C13 splitter (scrap)	78,052	0.003	0.0011	0.0011	0,1171	0,0429	0,0429	90.0%	0,0117	0,0043	0,0043			
SCRAP														
50-ton scrap bin	78,052	0.003	0.0011	0.0011	0,1171	0,0429	0,0429	90.0%	0,0117	0,0043	0,0043			
F8 feeder	78,052	0.003	0.0011	0.0011	0,1171	0,0429	0,0429	90.0%	0,0117	0,0043	0,0043			
C4 conveyor	2,706,052	0.003	0.0011	0.0011	4,0591	1,4883	1,4883	90.0%	0,4059	1,4883	1,4883			
C4 splitter to (S4)	1,353,026	0.003	0.0011	0.0011	2,0295	0,7442	0,7442	90.0%	0,2030	0,0744	0,0744			
C4 splitter to (S5)	1,353,026	0.003	0.0011	0.0011	2,0295	0,7442	0,7442	90.0%	0,2030	0,0744	0,0744			
S4 screen	1,353,026	0.025	0.0087	0.0087	16,9128	5,8857	5,8857	90.0%	1,6913	0,5886	0,5886			
S4 splitter C18 side	67,651	0.003	0.0011	0.0011	0,1015	0,0372	0,0372	90.0%	0,0101	0,0037	0,0037			
S4 splitter C12 side	202,954	0.003	0.0011	0.0011	0,3044	0,1116	0,1116	90.0%	0,0304	0,0112	0,0112			
C10A conveyor	947,118	0.003	0.0011	0.0011	1,4207	0,5209	0,5209	90.0%	0,1421	0,0521	0,0521			
S5 screen	1,353,026	0.025	0.0087	0.0087	16,9128	5,8857	5,8857	90.0%	1,6913	0,5886	0,5886			
S5 splitter C18 side	67,651	0.003	0.0011	0.0011	0,1015	0,0372	0,0372	90.0%	0,0101	0,0037	0,0037			
S5 splitter C12 side	202,954	0.003	0.0011	0.0011	0,3044	0,1116	0,1116	90.0%	0,0304	0,0112	0,0112			
C10B conveyor	947,118	0.003	0.0011	0.0011	1,4207	0,5209	0,5209	90.0%	0,1421	0,0521	0,0521			
C11B conveyor	1,894,236	0.003	0.0011	0.0011	2,8414	1,0418	1,0418	90.0%	0,2841	0,1042	0,1042			
C17 stik conveyor	1,894,236	0.003	0.0011	0.0011	2,8414	1,0418	1,0418	90.0%	0,2841	0,1042	0,1042			
C12 conveyor	405,908	0.003	0.0011	0.0011	0,6089	0,2232	0,2232	90.0%	0,0609	0,0223	0,0223			
C16 stik conveyor	405,908	0.003	0.0011	0.0011	0,6089	0,2232	0,2232	90.0%	0,0609	0,0223	0,0223			
C18 conveyor	135,303	0.003	0.0011	0.0011	0,2030	0,0744	0,0744	90.0%	0,0203	0,0074	0,0074			
C19 stik conveyor	135,303	0.003	0.0011	0.0011	0,2030	0,0744	0,0744	90.0%	0,0203	0,0074	0,0074			
Control Efficiency (wet suppression/moisture): varies, see below				PTE Totals:				540.5	197.0	197.0	Totals:	54.1	19.7	19.7

LIMITED THROUGHPUT EMISSIONS – MAIN PLANT (SEPARATION) OPERATIONS											
Limited Throughput Emissions Main Plant (separation)	Throughput (tons/yr)	Emission Factors (lb/tn)			Uncontrolled Emissions (tpy)			Control Efficiency	Controlled Emissions (tpy)		
		PM	PM ₁₀	PM _{2.5}	PM	PM ₁₀	PM _{2.5}		PM	PM ₁₀	PM _{2.5}
F1 step deck feeder	2,377,419	0.003	0.0011	0.0011	3.5661	1.3076	1.3076	90.0%	0.3566	0.1308	0.1308
CRUSHING											
F2 pan feeder	1,901,935	0.003	0.0011	0.0011	2.8529	1.0461	1.0461	90.0%	0.2853	0.1046	0.1046
C5 conveyor	1,901,935	0.003	0.0011	0.0011	2.8529	1.0461	1.0461	90.0%	0.2853	0.1046	0.1046
C5 mac/pendulum head pulley	285,290	0.003	0.0011	0.0011	0.4279	0.1569	0.1569	90.0%	0.0428	0.0157	0.0157
C5 splitter (scrap)	285,290	0.003	0.0011	0.0011	0.4279	0.1569	0.1569	90.0%	0.0428	0.0157	0.0157
C5 splitter (slag)	1,616,645	0.003	0.0011	0.0011	2.4250	0.8892	0.8892	90.0%	0.2425	0.0889	0.0889
crush splitter (impactor)	808,322	0.003	0.0011	0.0011	1.2125	0.4446	0.4446	90.0%	0.1212	0.0445	0.0445
crush splitter (jaw)	808,322	0.003	0.0011	0.0011	1.2125	0.4446	0.4446	90.0%	0.1212	0.0445	0.0445
F3 pan feeder	808,322	0.003	0.0011	0.0011	1.2125	0.4446	0.4446	90.0%	0.1212	0.0445	0.0445
F4 pan feeder	808,322	0.003	0.0011	0.0011	1.2125	0.4446	0.4446	90.0%	0.1212	0.0445	0.0445
jaw crusher	808,322	0.0054	0.0024	0.0024	2.1825	0.9700	0.9700	90.0%	0.2182	0.0970	0.0970
impactor	808,322	0.0054	0.0024	0.0024	2.1825	0.9700	0.9700	90.0%	0.2182	0.0970	0.0970
C6A conveyor	1,616,645	0.003	0.0011	0.0011	2.4250	0.8892	0.8892	90.0%	0.2425	0.0889	0.0889
C6B conveyor	1,616,645	0.003	0.0011	0.0011	2.4250	0.8892	0.8892	90.0%	0.2425	0.0889	0.0889
SCREENING											
C1 conveyor	2,377,419	0.003	0.0011	0.0011	3.5661	1.3076	1.3076	90.0%	0.3566	0.1308	0.1308
150-ton bin	2,377,419	0.003	0.0011	0.0011	3.5661	1.3076	1.3076	90.0%	0.3566	0.1308	0.1308
F5 feeder (MF400)	2,377,419	0.003	0.0011	0.0011	3.5661	1.3076	1.3076	90.0%	0.3566	0.1308	0.1308
C2 conveyor	2,377,419	0.003	0.0011	0.0011	3.5661	1.3076	1.3076	90.0%	0.3566	0.1308	0.1308
C2 mag head pulley	475,484	0.003	0.0011	0.0011	0.7132	0.2615	0.2615	90.0%	0.0713	0.0262	0.0262
C2 splitter (slag)	1,901,935	0.003	0.0011	0.0011	2.8529	1.0461	1.0461	90.0%	0.2853	0.1046	0.1046
C2 splitter (scrap)	475,484	0.003	0.0011	0.0011	0.7132	0.2615	0.2615	90.0%	0.0713	0.0262	0.0262
F6/F7 splitter (count all in one 50/50)	1,901,935	0.003	0.0011	0.0011	2.8529	1.0461	1.0461	90.0%	0.2853	0.1046	0.1046
F6 feeder	950,968	0.003	0.0011	0.0011	1.4265	0.5230	0.5230	90.0%	0.1426	0.0523	0.0523
F7 feeder	950,968	0.003	0.0011	0.0011	1.4265	0.5230	0.5230	90.0%	0.1426	0.0523	0.0523
C3A conveyor	950,968	0.003	0.0011	0.0011	1.4265	0.5230	0.5230	90.0%	0.1426	0.0523	0.0523
C3B conveyor	950,968	0.003	0.0011	0.0011	1.4265	0.5230	0.5230	90.0%	0.1426	0.0523	0.0523
triple split chute	1,901,935	0.003	0.0011	0.0011	2.8529	1.0461	1.0461	90.0%	0.2853	0.1046	0.1046
S1 screen	627,639	0.025	0.0087	0.0087	7.8455	2.7302	2.7302	90.0%	0.7845	0.2730	0.2730
S1 splitter C8 side	94,146	0.003	0.0011	0.0011	0.1412	0.0518	0.0518	90.0%	0.0141	0.0052	0.0052
S1 splitter C9 side	188,292	0.003	0.0011	0.0011	0.2824	0.1036	0.1036	90.0%	0.0282	0.0104	0.0104
C7A conveyor	282,437	0.003	0.0011	0.0011	0.4237	0.1553	0.1553	90.0%	0.0424	0.0155	0.0155
S2 screen	627,639	0.025	0.0087	0.0087	7.8455	2.7302	2.7302	90.0%	0.7845	0.2730	0.2730
S2 splitter C8 side	94,146	0.003	0.0011	0.0011	0.1412	0.0518	0.0518	90.0%	0.0141	0.0052	0.0052
S2 splitter C9 side	188,292	0.003	0.0011	0.0011	0.2824	0.1036	0.1036	90.0%	0.0282	0.0104	0.0104
C7B conveyor	282,437	0.003	0.0011	0.0011	0.4237	0.1553	0.1553	90.0%	0.0424	0.0155	0.0155
S3 screen	627,639	0.025	0.0087	0.0087	7.8455	2.7302	2.7302	90.0%	0.7845	0.2730	0.2730
S3 splitter C8 side	94,146	0.003	0.0011	0.0011	0.1412	0.0518	0.0518	90.0%	0.0141	0.0052	0.0052
S3 splitter C9 side	188,292	0.003	0.0011	0.0011	0.2824	0.1036	0.1036	90.0%	0.0282	0.0104	0.0104
C7C conveyor	282,437	0.003	0.0011	0.0011	0.4237	0.1553	0.1553	90.0%	0.0424	0.0155	0.0155
C11A conveyor	847,312	0.003	0.0011	0.0011	1.2710	0.4660	0.4660	90.0%	0.1271	0.0466	0.0466
C15 stk conveyor	847,312	0.003	0.0011	0.0011	1.2710	0.4660	0.4660	90.0%	0.1271	0.0466	0.0466
C9 conveyor	564,875	0.003	0.0011	0.0011	0.8473	0.3107	0.3107	90.0%	0.0847	0.0311	0.0311
C14 stk conveyor	564,875	0.003	0.0011	0.0011	0.8473	0.3107	0.3107	90.0%	0.0847	0.0311	0.0311
C8 conveyor	282,437	0.003	0.0011	0.0011	0.4237	0.1553	0.1553	90.0%	0.0424	0.0155	0.0155
C13 stk conveyor	282,437	0.003	0.0011	0.0011	0.4237	0.1553	0.1553	90.0%	0.0424	0.0155	0.0155
C13 mag head pulley	14,122	0.003	0.0011	0.0011	0.0212	0.0078	0.0078	90.0%	0.0021	0.0008	0.0008
C13 splitter (slag)	268,316	0.003	0.0011	0.0011	0.4025	0.1476	0.1476	90.0%	0.0402	0.0148	0.0148
C13 splitter (scrap)	14,122	0.003	0.0011	0.0011	0.0212	0.0078	0.0078	90.0%	0.0021	0.0008	0.0008
SCRAP											
50-ton scrap bin	14,122	0.003	0.0011	0.0011	0.0212	0.0078	0.0078	90.0%	0.0021	0.0008	0.0008
F8 feeder	14,122	0.003	0.0011	0.0011	0.0212	0.0078	0.0078	90.0%	0.0021	0.0008	0.0008
C4 conveyor	489,606	0.003	0.0011	0.0011	0.7344	0.2693	0.2693	90.0%	0.0734	0.0269	0.0269
C4 splitter to (S4)	244,803	0.003	0.0011	0.0011	0.3672	0.1346	0.1346	90.0%	0.0367	0.0135	0.0135
C4 splitter to (S5)	244,803	0.003	0.0011	0.0011	0.3672	0.1346	0.1346	90.0%	0.0367	0.0135	0.0135
S4 screen	244,803	0.025	0.0087	0.0087	3.0600	1.0649	1.0649	90.0%	0.3060	0.1065	0.1065
S4 splitter C18 side	12,240	0.003	0.0011	0.0011	0.0184	0.0067	0.0067	90.0%	0.0018	0.0007	0.0007
S4 splitter C12 side	36,720	0.003	0.0011	0.0011	0.0551	0.0202	0.0202	90.0%	0.0055	0.0020	0.0020
C10A conveyor	171,362	0.003	0.0011	0.0011	0.2570	0.0942	0.0942	90.0%	0.0257	0.0094	0.0094
S5 screen	244,803	0.025	0.0087	0.0087	3.0600	1.0649	1.0649	90.0%	0.3060	0.1065	0.1065
S5 splitter C18 side	12,240	0.003	0.0011	0.0011	0.0184	0.0067	0.0067	90.0%	0.0018	0.0007	0.0007
S5 splitter C12 side	36,720	0.003	0.0011	0.0011	0.0551	0.0202	0.0202	90.0%	0.0055	0.0020	0.0020
C10B conveyor	171,362	0.003	0.0011	0.0011	0.2570	0.0942	0.0942	90.0%	0.0257	0.0094	0.0094
C11B conveyor	342,724	0.003	0.0011	0.0011	0.5141	0.1885	0.1885	90.0%	0.0514	0.0188	0.0188
C17 stk conveyor	342,724	0.003	0.0011	0.0011	0.5141	0.1885	0.1885	90.0%	0.0514	0.0188	0.0188
C12 conveyor	73,441	0.003	0.0011	0.0011	0.1102	0.0404	0.0404	90.0%	0.0110	0.0040	0.0040
C16 stk conveyor	73,441	0.003	0.0011	0.0011	0.1102	0.0404	0.0404	90.0%	0.0110	0.0040	0.0040
C18 conveyor	24,480	0.003	0.0011	0.0011	0.0367	0.0135	0.0135	90.0%	0.0037	0.0013	0.0013
C19 stk conveyor	24,480	0.003	0.0011	0.0011	0.0367	0.0135	0.0135	90.0%	0.0037	0.0013	0.0013
Control Efficiency (wet suppression/moisture): varies, see below								Totals:	9.8	3.6	3.6

POTENTIAL TO EMIT -- CHIP PLANT (FINISHING) OPERATIONS

PTE Chip Plant (finishing)	Throughput (tons/yr)	Emission Factors (lb/n)			Uncontrolled Emissions (tpy)			Control Efficiency	Controlled Emissions (tpy)				
		PM	PM ₁₀	PM _{2.5}	PM	PM ₁₀	PM _{2.5}		PM	PM ₁₀	PM _{2.5}		
40-ton feed hopper (B1)	4,380,000	0.003	0.0011	0.0011	6,5700	2,4090	2,4090	90.0%	0.6570	0.2409	0.2409		
F8 feeder	4,380,000	0.003	0.0011	0.0011	6,5700	2,4090	2,4090	90.0%	0.6570	0.2409	0.2409		
C1 conveyor	4,380,000	0.003	0.0011	0.0011	6,5700	2,4090	2,4090	90.0%	0.6570	0.2409	0.2409		
C2 conveyor	4,818,000	0.003	0.0011	0.0011	7,2270	2,6499	2,6499	90.0%	0.7227	0.2650	0.2650		
crusher	438,000	0.0054	0.0024	0.0024	1,1826	0.5256	0.5256	90.0%	0.1183	0.0526	0.0526		
C5 conveyor	438,000	0.003	0.0011	0.0011	0.6570	0.2409	0.2409	90.0%	0.0657	0.0241	0.0241		
C12 conveyor	438,000	0.003	0.0011	0.0011	0.6570	0.2409	0.2409	90.0%	0.0657	0.0241	0.0241		
Crusher 2 (alternate)	438,000	0.003	0.0011	0.0011	0.6570	0.2409	0.2409	90.0%	0.0657	0.0241	0.0241		
C13 conveyor	438,000	0.003	0.0011	0.0011	0.6570	0.2409	0.2409	90.0%	0.0657	0.0241	0.0241		
S1 screen	2,409,000	0.025	0.0087	0.0087	30,1125	10,4792	10,4792	90.0%	3.0113	1.0479	1.0479		
C3 conveyor	240,900	0.003	0.0011	0.0011	0.3614	0.1325	0.1325	90.0%	0.0361	0.0132	0.0132		
S2 screen	2,409,000	0.025	0.0087	0.0087	30,1125	10,4792	10,4792	90.0%	3.0113	1.0479	1.0479		
C4 conveyor	240,900	0.003	0.0011	0.0011	0.3614	0.1325	0.1325	90.0%	0.0361	0.0132	0.0132		
C10 conveyor	481,800	0.003	0.0011	0.0011	0.7227	0.2650	0.2650	90.0%	0.0723	0.0265	0.0265		
C11 stk conveyor	481,800	0.003	0.0011	0.0011	0.7227	0.2650	0.2650	90.0%	0.0723	0.0265	0.0265		
S3 screen	481,800	0.025	0.0087	0.0087	6,0225	2,0958	2,0958	90.0%	0.6023	0.2096	0.2096		
C14 conveyor	240,900	0.003	0.0011	0.0011	0.3614	0.1325	0.1325	90.0%	0.0361	0.0132	0.0132		
C15 conveyor	240,900	0.003	0.0011	0.0011	0.3614	0.1325	0.1325	90.0%	0.0361	0.0132	0.0132		
C8 conveyor	722,700	0.003	0.0011	0.0011	1,0841	0.3975	0.3975	90.0%	0.1084	0.0397	0.0397		
M2 mag cross belt	36,135	0.003	0.0011	0.0011	0.0542	0.0199	0.0199	90.0%	0.0054	0.0020	0.0020		
C9 stk conveyor	686,565	0.003	0.0011	0.0011	1,0298	0.3776	0.3776	90.0%	0.1030	0.0378	0.0378		
C6 conveyor	3,131,700	0.003	0.0011	0.0011	4,6976	1,7224	1,7224	90.0%	0.4698	0.1722	0.1722		
M1 mag cross belt	156,585	0.003	0.0011	0.0011	0.2349	0.0861	0.0861	90.0%	0.0235	0.0086	0.0086		
C7 stk conveyor	2,975,115	0.003	0.0011	0.0011	4,4627	1,6363	1,6363	90.0%	0.4463	0.1636	0.1636		
Control Efficiency (wet suppression/moisture): varies, see below				PTE Totals:			111.4	39.7	39.7	Totals:	11.1	4.0	4.0

LIMITED THROUGHPUT EMISSIONS -- CHIP PLANT (FINISHING) OPERATIONS

Limited Throughput Emissions Chip Plant (finishing)	Throughput (tons/yr)	Emission Factors (lb/n)			Uncontrolled Emissions (tpy)			Control Efficiency	Controlled Emissions (tpy)			
		PM	PM ₁₀	PM _{2.5}	PM	PM ₁₀	PM _{2.5}		PM	PM ₁₀	PM _{2.5}	
40-ton feed hopper (B1)	1,300,000	0.003	0.0011	0.0011	1,9500	0.7150	0.7150	90.0%	0.1950	0.0715	0.0715	
F8 feeder	1,300,000	0.003	0.0011	0.0011	1,9500	0.7150	0.7150	90.0%	0.1950	0.0715	0.0715	
C1 conveyor	1,300,000	0.003	0.0011	0.0011	1,9500	0.7150	0.7150	90.0%	0.1950	0.0715	0.0715	
C2 conveyor	1,430,000	0.003	0.0011	0.0011	2,1450	0.7865	0.7865	90.0%	0.2145	0.0787	0.0787	
crusher	130,000	0.0054	0.0024	0.0024	0.3510	0.1560	0.1560	90.0%	0.0351	0.0156	0.0156	
C5 conveyor	130,000	0.003	0.0011	0.0011	0.1950	0.0715	0.0715	90.0%	0.0195	0.0072	0.0072	
C12 conveyor	130,000	0.003	0.0011	0.0011	0.1950	0.0715	0.0715	90.0%	0.0195	0.0072	0.0072	
Crusher 2 (alternate)	130,000	0.003	0.0011	0.0011	0.1950	0.0715	0.0715	90.0%	0.0195	0.0072	0.0072	
C13 conveyor	130,000	0.003	0.0011	0.0011	0.1950	0.0715	0.0715	90.0%	0.0195	0.0072	0.0072	
S1 screen	715,000	0.025	0.0087	0.0087	8,9375	3,1103	3,1103	90.0%	0.8938	0.3110	0.3110	
C3 conveyor	71,500	0.003	0.0011	0.0011	0.1073	0.0393	0.0393	90.0%	0.0107	0.0039	0.0039	
S2 screen	715,000	0.025	0.0087	0.0087	8,9375	3,1103	3,1103	90.0%	0.8938	0.3110	0.3110	
C4 conveyor	71,500	0.003	0.0011	0.0011	0.1073	0.0393	0.0393	90.0%	0.0107	0.0039	0.0039	
C10 conveyor	143,000	0.003	0.0011	0.0011	0.2145	0.0787	0.0787	90.0%	0.0215	0.0079	0.0079	
C11 stk conveyor	143,000	0.003	0.0011	0.0011	0.2145	0.0787	0.0787	90.0%	0.0215	0.0079	0.0079	
S3 screen	143,000	0.025	0.0087	0.0087	1,7875	0.6221	0.6221	90.0%	0.1788	0.0622	0.0622	
C14 conveyor	71,500	0.003	0.0011	0.0011	0.1073	0.0393	0.0393	90.0%	0.0107	0.0039	0.0039	
C15 conveyor	71,500	0.003	0.0011	0.0011	0.1073	0.0393	0.0393	90.0%	0.0107	0.0039	0.0039	
C8 conveyor	214,500	0.003	0.0011	0.0011	0.3218	0.1180	0.1180	90.0%	0.0322	0.0118	0.0118	
M2 mag cross belt	10,725	0.003	0.0011	0.0011	0.0161	0.0059	0.0059	90.0%	0.0016	0.0006	0.0006	
C9 stk conveyor	203,775	0.003	0.0011	0.0011	0.3067	0.1121	0.1121	90.0%	0.0306	0.0112	0.0112	
C6 conveyor	929,500	0.003	0.0011	0.0011	1,3943	0.5112	0.5112	90.0%	0.1394	0.0511	0.0511	
M1 mag cross belt	46,475	0.003	0.0011	0.0011	0.0697	0.0256	0.0256	90.0%	0.0070	0.0026	0.0026	
C7 stk conveyor	883,025	0.003	0.0011	0.0011	1,3245	0.4857	0.4857	90.0%	0.1325	0.0486	0.0486	
Control Efficiency (wet suppression/moisture): varies, see below				Totals:			3.2	1.1	1.1			

POTENTIAL TO EMIT -- PORTABLE/AUX EQUIPMENT

PTE Portable/Aux Equipment	Throughput (tons/yr)	Emission Factors (lb/n)			Uncontrolled Emissions (tpy)			Control Efficiency	Controlled Emissions (tpy)				
		PM	PM ₁₀	PM _{2.5}	PM	PM ₁₀	PM _{2.5}		PM	PM ₁₀	PM _{2.5}		
<i>Portable Plant 1:</i>													
1 conveyor	5256000	0.003	0.0011	0.0011	7,8840	2,8908	2,8908	90.0%	0.7884	0.2891	0.2891		
1 portable crusher	5256000	0.0054	0.0024	0.0024	14,1912	6,3072	6,3072	90.0%	1.4191	0.6307	0.6307		
1 conveyor	5256000	0.003	0.0011	0.0011	7,8840	2,8908	2,8908	90.0%	0.7884	0.2891	0.2891		
1 portable screen	5256000	0.025	0.0087	0.0087	65,7000	22,8636	22,8636	90.0%	6.5700	2.2864	2.2864		
3 portable input conveyors (33%)	5256000	0.003	0.0011	0.0011	7,8840	2,8908	2,8908	90.0%	0.7884	0.2891	0.2891		
3 portable output stacker/conveyors (33% ea)	5256000	0.003	0.0011	0.0011	7,8840	2,8908	2,8908	90.0%	0.7884	0.2891	0.2891		
<i>Portable boat loader:</i>													
1 feed hopper	13140000	0.003	0.0011	0.0011	19,7100	7,2270	7,2270	90.0%	1.9710	0.7227	0.7227		
1 conveyor/stacker	13140000	0.003	0.0011	0.0011	19,7100	7,2270	7,2270	90.0%	1.9710	0.7227	0.7227		
<i>Portable stacker:</i>													
1 feed hopper	2190000	0.003	0.0011	0.0011	3,2850	1,2045	1,2045	90.0%	0.3285	0.1205	0.1205		
1 conveyor/stacker	2190000	0.003	0.0011	0.0011	3,2850	1,2045	1,2045	90.0%	0.3285	0.1205	0.1205		
<i>Portable screener:</i>													
1 screen	2190000	0.025	0.0087	0.0087	27,3750	9,5265	9,5265	90.0%	2.7375	0.9527	0.9527		
3 conveyor/stackers (33% each)	2190000	0.003	0.0011	0.0011	3,2850	1,2045	1,2045	90.0%	0.3285	0.1205	0.1205		
<i>Portable screener:</i>													
1 feed hopper	2190000	0.003	0.0011	0.0011	3,2850	1,2045	1,2045	90.0%	0.3285	0.1205	0.1205		
1 screen	2190000	0.025	0.0087	0.0087	27,3750	9,5265	9,5265	90.0%	2.7375	0.9527	0.9527		
1 conveyor/stacker	2190000	0.003	0.0011	0.0011	3,2850	1,2045	1,2045	90.0%	0.3285	0.1205	0.1205		
<i>Portable Plant 2:</i>													
1 grizzly	4380000	0.003	0.0011	0.0011	6,5700	2,4090	2,4090	90.0%	0.6570	0.2409	0.2409		
1 feeder	4380000	0.003	0.0011	0.0011	6,5700	2,4090	2,4090	90.0%	0.6570	0.2409	0.2409		
1 screen	4380000	0.025	0.0087	0.0087	54,7500	19,0530	19,0530	90.0%	5.4750	1.9053	1.9053		
4 output conveyors (25% ea)	4380000	0.003	0.0011	0.0011	6,5700	2,4090	2,4090	90.0%	0.6570	0.2409	0.2409		
1 crusher or impactor	4380000	0.0054	0.0024	0.0024	11,8260	5,2560	5,2560	90.0%	1.1826	0.5256	0.5256		
1 magnet	131400	0.003	0.0011	0.0011	0.1971	0.0723	0.0723	90.0%	0.0197	0.0072	0.0072		
Control Efficiency (wet suppression/moisture): varies, see below				PTE Totals:			308.5	111.9	111.9	Totals:	30.9	11.2	11.2

LIMITED THROUGHPUT EMISSIONS -- PORTABLE/AUX EQUIPMENT

Limited Throughput Emissions Portable/Aux Equipment	Throughput (tons/yr)	Emission Factors (lb/n)			Uncontrolled Emissions (tpy)			Control Efficiency	Controlled Emissions (tpy)		
		PM	PM ₁₀	PM _{2.5}	PM	PM ₁₀	PM _{2.5}		PM	PM ₁₀	PM _{2.5}
<i>Portable Plant 1:</i>											
1 conveyor	800000	0.0054	0.0024	0.0024	2,1600	0.9600	0.9600	90.0%	0.2160	0.0960	0.0960
1 portable crusher	800000	0.0054	0.0024	0.0024	2,1600	0.9600	0.9600	90.0%	0.2160	0.0960	0.0960
1 conveyor	800000	0.0054	0.0024	0.0024	2,1600	0.9600	0.9600	90.0%	0.2160</		

TSD Appendix A - Equipment Lists and Throughputs

Company Name: Metal Services LLC dba Phoenix Services LLC
 Address City IN Zip: 250 W. US Hwy 12, Burns Harbor, IN 46304
 Part 70 Permit Renewal No. T127-36307-00026
 Reviewer Phillip Joseph
 Date Jan. 2016

New Dump Plant	Capacity (tph)	% Process Flow		Maximum Throughput (tpy)	Limited Throughput (tpy)
Grizzly feeder	500	100%	of grizzly feeder	4,380,000	1,300,000
Feed conveyor	500	100%	of grizzly feeder	4,380,000	1,300,000
Splitter drop 1	500	10%	of grizzly feeder	4,380,000	130,000
Splitter drop 2	500	90%	of grizzly feeder	4,380,000	1,170,000
Scrap stacker/conveyor	150	10%	of grizzly feeder	1,314,000	130,000
Main conveyor	500	100%	of grizzly feeder	4,380,000	1,300,000
Magnet	15	15%	of grizzly feeder	131,400	195,000
Crusher conveyor 1	300	15%	of grizzly feeder	2,628,000	195,000
Crusher conveyor 2	300	15%	of grizzly feeder	2,628,000	195,000
Crusher/impactor	300	15%	of grizzly feeder	2,628,000	195,000
Crusher output conveyor	300	15%	of grizzly feeder	2,628,000	195,000
Screen	400	100%	of grizzly feeder	3,504,000	1,300,000
Screen under conveyor 1	400	33%	of screen input	3,504,000	432,900
Screen output stacker/conveyor 1	400	33%	of screen input	3,504,000	432,900
Screen under conveyor 2	400	33%	of screen input	3,504,000	432,900
Screen output stacker/conveyor 2	400	33%	of screen input	3,504,000	432,900
Screen under conveyor 3	400	33%	of screen input	3,504,000	432,900
Snub conveyor	400	33%	of screen input	3,504,000	432,900
Screen output stacker/conveyor	400	33%	of screen input	3,504,000	432,900

Portable Upgrade Plant	Capacity (tph)			Maximum Throughput (tpy)	Limited Throughput (tpy)
1 grizzly	500	100%		4,380,000	800,000
1 feeder/conveyor combo unit	500	100%		4,380,000	800,000
1 screen	500	100%		4,380,000	800,000
1 screen under conveyor (100%)	500	100%		4,380,000	800,000
2 output conveyors (50% ea)	500	100%		4,380,000	800,000
2 stacker/conveyors (50% ea)	500	100%		4,380,000	800,000
1 magnet	15	3.0%		131,400	24,000
1 magnet	15	3.0%		131,400	24,000

TSD Appendix A - New Equipment Emissions

Company Name: Metal Services LLC dba Phoenix Services LLC
 Address City IN Zip: 250 W. US Hwy 12, Burns Harbor, IN 46304
 Part 70 Permit Renewal No. T127-36307-00026
 Reviewer Phillip Joseph
 Date Jan. 2016

POTENTIAL TO EMIT -- NEW DUMP PLANT

PTE New Dump Plant	Throughput (tons/yr)	Emission Factors (lb/tn)			Uncontrolled Emissions (tpy)			Control	Controlled Emissions (tpy)		
		PM	PM ₁₀	PM _{2.5}	PM	PM ₁₀	PM _{2.5}	Efficiency	PM	PM ₁₀	PM _{2.5}
Grizzly feeder	4,380,000	0.003	0.0011	0.0011	6.5700	2.4090	2.4090	95.9%	0.2694	0.0988	0.0988
Feed conveyor	4,380,000	0.003	0.0011	0.0011	6.5700	2.4090	2.4090	95.9%	0.2694	0.0988	0.0988
Splitter drop 1	4,380,000	0.003	0.0011	0.0011	6.5700	2.4090	2.4090	95.9%	0.2694	0.0988	0.0988
Splitter drop 2	4,380,000	0.003	0.0011	0.0011	6.5700	2.4090	2.4090	95.9%	0.2694	0.0988	0.0988
Scrap stacker/conveyor	1,314,000	0.003	0.0011	0.0011	1.9710	0.7227	0.7227	95.9%	0.0808	0.0296	0.0296
Main conveyor	4,380,000	0.003	0.0011	0.0011	6.5700	2.4090	2.4090	95.9%	0.2694	0.0988	0.0988
Magnet	131,400	0.003	0.0011	0.0011	0.1971	0.0723	0.0723	95.9%	0.0081	0.0030	0.0030
Crusher conveyor 1	2,628,000	0.003	0.0011	0.0011	3.9420	1.4454	1.4454	95.9%	0.1616	0.0593	0.0593
Crusher conveyor 2	2,628,000	0.003	0.0011	0.0011	3.9420	1.4454	1.4454	95.9%	0.1616	0.0593	0.0593
Crusher/impactor	2,628,000	0.0054	0.0024	0.0024	7.0956	3.1536	3.1536	77.7%	1.5823	0.7033	0.7033
Crusher output conveyor	2,628,000	0.003	0.0011	0.0011	3.9420	1.4454	1.4454	95.9%	0.1616	0.0593	0.0593
Screen	3,504,000	0.025	0.0087	0.0087	43.8000	15.2424	15.2424	91.6%	3.6792	1.2804	1.2804
Screen under conveyor 1	3,504,000	0.003	0.0011	0.0011	5.2560	1.9272	1.9272	95.9%	0.2155	0.0790	0.0790
Screen output stacker/conveyor 1	3,504,000	0.003	0.0011	0.0011	5.2560	1.9272	1.9272	95.9%	0.2155	0.0790	0.0790
Screen under conveyor 2	3,504,000	0.003	0.0011	0.0011	5.2560	1.9272	1.9272	95.9%	0.2155	0.0790	0.0790
Screen output stacker/conveyor 2	3,504,000	0.003	0.0011	0.0011	5.2560	1.9272	1.9272	95.9%	0.2155	0.0790	0.0790
Screen under conveyor 3	3,504,000	0.003	0.0011	0.0011	5.2560	1.9272	1.9272	95.9%	0.2155	0.0790	0.0790
Snub conveyor	3,504,000	0.003	0.0011	0.0011	5.2560	1.9272	1.9272	95.9%	0.2155	0.0790	0.0790
Screen output stacker/conveyor	3,504,000	0.003	0.0011	0.0011	5.2560	1.9272	1.9272	95.9%	0.2155	0.0790	0.0790
Control Efficiency (wet suppression/moisture): see below		PTE Totals:			134.5	49.1	49.1	Totals:	8.69	3.24	3.24

LIMITED THROUGHPUT EMISSIONS -- NEW DUMP PLANT

Limited Throughput Emissions New Dump Plant	Throughput (tons/yr)	Emission Factors (lb/tn)			Uncontrolled Emissions (tpy)			Control	Controlled Emissions (tpy)		
		PM	PM ₁₀	PM _{2.5}	PM	PM ₁₀	PM _{2.5}	Efficiency	PM	PM ₁₀	PM _{2.5}
Grizzly feeder	1,300,000	0.003	0.0011	0.0011	1.9500	0.7150	0.7150	95.9%	0.0800	0.0293	0.0293
Feed conveyor	1,300,000	0.003	0.0011	0.0011	1.9500	0.7150	0.7150	95.9%	0.0800	0.0293	0.0293
Splitter drop 1	130,000	0.003	0.0011	0.0011	0.1950	0.0715	0.0715	95.9%	0.0080	0.0029	0.0029
Splitter drop 2	1,170,000	0.003	0.0011	0.0011	1.7550	0.6435	0.6435	95.9%	0.0720	0.0264	0.0264
Scrap stacker/conveyor	130,000	0.003	0.0011	0.0011	0.1950	0.0715	0.0715	95.9%	0.0080	0.0029	0.0029
Main conveyor	1,300,000	0.003	0.0011	0.0011	1.9500	0.7150	0.7150	95.9%	0.0800	0.0293	0.0293
Magnet	195,000	0.003	0.0011	0.0011	0.2925	0.1073	0.1073	95.9%	0.0120	0.0044	0.0044
Crusher conveyor 1	195,000	0.003	0.0011	0.0011	0.2925	0.1073	0.1073	95.9%	0.0120	0.0044	0.0044
Crusher conveyor 2	195,000	0.003	0.0011	0.0011	0.2925	0.1073	0.1073	95.9%	0.0120	0.0044	0.0044
Crusher/impactor	195,000	0.005	0.0024	0.0024	0.5265	0.2340	0.2340	77.7%	0.1174	0.0522	0.0522
Crusher output conveyor	195,000	0.003	0.0011	0.0011	0.2925	0.1073	0.1073	95.9%	0.0120	0.0044	0.0044
Screen	1,300,000	0.025	0.0087	0.0087	16.2500	5.6550	5.6550	91.6%	1.3650	0.4750	0.4750
Screen under conveyor 1	432,900	0.003	0.0011	0.0011	0.6494	0.2381	0.2381	95.9%	0.0266	0.0098	0.0098
Screen output stacker/conveyor 1	432,900	0.003	0.0011	0.0011	0.6494	0.2381	0.2381	95.9%	0.0266	0.0098	0.0098
Screen under conveyor 2	432,900	0.003	0.0011	0.0011	0.6494	0.2381	0.2381	95.9%	0.0266	0.0098	0.0098
Screen output stacker/conveyor 2	432,900	0.003	0.0011	0.0011	0.6494	0.2381	0.2381	95.9%	0.0266	0.0098	0.0098
Screen under conveyor 3	432,900	0.003	0.0011	0.0011	0.6494	0.2381	0.2381	95.9%	0.0266	0.0098	0.0098
Snub conveyor	432,900	0.003	0.0011	0.0011	0.6494	0.2381	0.2381	95.9%	0.0266	0.0098	0.0098
Screen output stacker/conveyor	432,900	0.003	0.0011	0.0011	0.6494	0.2381	0.2381	95.9%	0.0266	0.0098	0.0098
Control Efficiency (wet suppression/moisture): see below					Totals:				2.04	0.73	0.73

TSD Appendix A - New Equipment Emissions

Company Name: Metal Services LLC dba Phoenix Services LLC
 Address City IN Zip: 250 W. US Hwy 12, Burns Harbor, IN 46304
 Part 70 Permit Renewal No. T127-36307-00026
 Reviewer Phillip Joseph
 Date Jan. 2016

POTENTIAL TO EMIT -- PORTABLE UPGRADE PLANT

PTE Upgrade Plant	Throughput (tons/yr)	Emission Factors (lb/tn)			Uncontrolled Emissions (tpy)			Control	Controlled Emissions (tpy)		
		PM	PM ₁₀	PM _{2.5}	PM	PM ₁₀	PM _{2.5}	Efficiency	PM	PM ₁₀	PM _{2.5}
1 grizzly	4,380,000	0.003	0.0011	0.0011	6.5700	2.4090	2.4090	95.9%	0.2694	0.0988	0.0988
1 feeder/conveyor combo unit	4,380,000	0.003	0.0011	0.0011	6.5700	2.4090	2.4090	95.9%	0.2694	0.0988	0.0988
1 screen	4,380,000	0.025	0.0087	0.0087	54.7500	19.0530	19.0530	91.6%	4.5990	1.6005	1.6005
1 screen under conveyor (100%)	4,380,000	0.003	0.0011	0.0011	6.5700	2.4090	2.4090	95.9%	0.2694	0.0988	0.0988
2 output conveyors (50% ea)	4,380,000	0.003	0.0011	0.0011	6.5700	2.4090	2.4090	95.9%	0.2694	0.0988	0.0988
2 stacker/conveyors (50% ea)	4,380,000	0.003	0.0011	0.0011	6.5700	2.4090	2.4090	95.9%	0.2694	0.0988	0.0988
1 magnet	131,400	0.003	0.0011	0.0011	0.1971	0.0723	0.0723	95.9%	0.0081	0.0030	0.0030
1 magnet	131,400	0.003	0.0011	0.0011	0.1971	0.0723	0.0723	95.9%	0.0081	0.0030	0.0030
Control Efficiency (wet suppression/moisture): see below		PTE Totals:			88.0	31.2	31.2	Totals:	5.96	2.10	2.10

LIMITED THROUGHPUT EMISSIONS -- PORTABLE UPGRADE PLANT

Lited Throughput Emissions Upgrade Plant	Throughput (tons/yr)	Emission Factors (lb/tn)			Uncontrolled Emissions (tpy)			Control	Controlled Emissions (tpy)		
		PM	PM ₁₀	PM _{2.5}	PM	PM ₁₀	PM _{2.5}	Efficiency	PM	PM ₁₀	PM _{2.5}
1 grizzly	800,000	0.003	0.0011	0.0011	1.2000	0.4400	0.4400	95.9%	0.0492	0.0180	0.0180
1 feeder/conveyor combo unit	800,000	0.003	0.0011	0.0011	1.2000	0.4400	0.4400	95.9%	0.0492	0.0180	0.0180
1 screen	800,000	0.025	0.0087	0.0087	10.0000	3.4800	3.4800	91.6%	0.8400	0.2923	0.2923
1 screen under conveyor (100%)	800,000	0.003	0.0011	0.0011	1.2000	0.4400	0.4400	95.9%	0.0492	0.0180	0.0180
2 output conveyors (50% ea)	800,000	0.003	0.0011	0.0011	1.2000	0.4400	0.4400	95.9%	0.0492	0.0180	0.0180
2 stacker/conveyors (50% ea)	800,000	0.003	0.0011	0.0011	1.2000	0.4400	0.4400	95.9%	0.0492	0.0180	0.0180
1 magnet	24,000	0.003	0.0011	0.0011	0.0360	0.0132	0.0132	95.9%	0.0015	0.0005	0.0005
1 magnet	24,000	0.003	0.0011	0.0011	0.0360	0.0132	0.0132	95.9%	0.0015	0.0005	0.0005
Control Efficiency (wet suppression/moisture): see below								Totals:	1.09	0.38	0.38

Methodology

Emission Factors are from AP-42 Table 11.19.2-2, 8/2004 version (all units in lb/ton).

AP-42, 11.19.2 Emission Factors

	PM	PM-10
Tertiary Crushing (SCC 3-050030-03)	0.0054	0.0024
Screening (SCC 3-05-020-02, 03)	0.025	0.0087
Conveyor Transfer Point (SCC 3-05-020-06)	0.003	0.0011

Uncontrolled Emissions (tpy) = Capacity (tpy) * Uncontrolled Emission Factor (lb/ton) * 8760 (day/yr) / 2000 (lb/ton)

Controlled Emissions (tpy) = Throughput (tpy) * Controlled Emission Factor (lb/ton) * 8760 (day/yr) / 2000 (lb/ton)

AP-42, 11.19.2 Background Document, Control Efficiencies, Pg 15.

Screening	91.6%
Crushing	77.7%
Conveyor Transfer Points	95.9%

TSD Appendix A - Slag Pot Operation Emissions

Company Name: Metal Services LLC dba Phoenix Services LLC
 Address City IN Zip: 250 W. US Hwy 12, Burns Harbor, IN 46304
 Part 70 Permit Renewal No. T127-36307-00026
 Reviewer Phillip Joseph
 Date Jan. 2016

Potential to Emit - Slag Pot Dumping & Prep Operation (constructed in 1969)

Slag production is limited by ArcelorMittal Blast Furnace operations which has a permit limit of ArcelorMittal Iron Production (tons): 5,460,000 5,460,000 tons molten iron.

Slag production can be up to 30% of molten iron production. (*USGS Minerals Yearbook 2002, Slag-PTE slag throughput (tons): 1,638,000 Iron and Steel Section*)

Slag Pots/Prep Equipment	Throughput (tons/yr)	Emission Factors (lb/tn)**			Uncontrolled Emissions (tpy)			Control	Controlled Emissions (tpy)		
		PM	PM ₁₀	PM _{2.5}	PM	PM ₁₀	PM _{2.5}	Efficiency	PM	PM ₁₀	PM _{2.5}
Slag pots/prep	1,638,000	0.19	0.19	0.19	155.6	155.6	155.6	0%	155.6	155.6	155.6
Totals:					155.6	155.6	155.6	Totals:	155.6	155.6	155.6

TSD Appendix A

Company Name: Metal Services LLC dba Phoenix Services LLC
 Address City IN Zip: 250 W. US Hwy 12, Burns Harbor, IN 46304
 Part 70 Permit Renewal No. T127-36307-00026
 Reviewer Phillip Joseph
 Date Jan. 2016

POTENTIAL TO EMIT -- WET SCREENING PLANT

PTE Wet screening operation	Throughput* (tons/yr)	Emission Factors (lb/tn)			Uncontrolled Emissions (tpy)			Control Efficiency	Controlled Emissions (tpy)		
		PM	PM ₁₀	PM _{2.5}	PM	PM ₁₀	PM _{2.5}		PM	PM ₁₀	PM _{2.5}
Feed Chute (100% of feed)	3,942,000	0.003	0.0011	0.0011	5.9130	2.1681	2.1681	91.6%	0.4967	0.1821	0.1821
Screen (100% of feed)	3,942,000	0.025	0.0087	0.0087	49.2750	17.1477	17.1477	95.9%	2.0203	0.7031	0.7031
Output Chute 1 (30% of feed)	1,182,600	0.003	0.0011	0.0011	1.7739	0.6504	0.6504	95.9%	0.0727	0.0267	0.0267
Output Chute 2 (30% of feed)	1,182,600	0.003	0.0011	0.0011	1.7739	0.6504	0.6504	95.9%	0.0727	0.0267	0.0267
Output Chute 3 (30% of feed)	1,182,600	0.003	0.0011	0.0011	1.7739	0.6504	0.6504	95.9%	0.0727	0.0267	0.0267
Output Chute - Oversize (10% of feed)	394,200	0.003	0.0011	0.0011	0.5913	0.2168	0.2168	95.9%	0.0242	0.0089	0.0089
Project Totals (tons/yr) =					61.10	21.48	21.48		2.76	0.97	0.97

POTENTIAL TO EMIT -- LIMITED WET SCREENING PLANT

PTE Wet screening operation	Throughput* (tons/yr)	Emission Factors (lb/tn)			Uncontrolled Emissions (tpy)			Control Efficiency	Controlled Emissions (tpy)		
		PM	PM ₁₀	PM _{2.5}	PM	PM ₁₀	PM _{2.5}		PM	PM ₁₀	PM _{2.5}
Feed Chute (100% of feed)	1,300,000	0.003	0.0011	0.0011	1.9500	0.7150	0.7150	91.6%	0.1638	0.0601	0.0601
Screen (100% of feed)	1,300,000	0.025	0.0087	0.0087	16.2500	5.6550	5.6550	95.9%	0.6663	0.2319	0.2319
Output Chute 1 (30% of feed)	390,000	0.003	0.0011	0.0011	0.5850	0.2145	0.2145	95.9%	0.0240	0.0088	0.0088
Output Chute 2 (30% of feed)	390,000	0.003	0.0011	0.0011	0.5850	0.2145	0.2145	95.9%	0.0240	0.0088	0.0088
Output Chute 3 (30% of feed)	390,000	0.003	0.0011	0.0011	0.5850	0.2145	0.2145	95.9%	0.0240	0.0088	0.0088
Output Chute - Oversize (10% of feed)	130,000	0.003	0.0011	0.0011	0.1950	0.0715	0.0715	95.9%	0.0080	0.0029	0.0029
Project Totals (tons/yr) =					20.15	7.09	7.09		0.91	0.32	0.32

*Throughput (unlimited) = design capacity (tons/hr) x 8760 hr/yr

Screen capacity = 450 tons/hr

Limited Capacity = 1,300,000 tons per year (only material processed at chip plant will be processed)

Methodology

Emission Factors are from AP-42 Table 11.19.2-2, 8/2004 version (all units in lb/ton).

Source	PM	PM-10
Screening (SCC 3-05-020-02, 03)	0.025	0.0087
Conveyor Transfer Point (SCC 3-05-020-06)	0.003	0.0011

Control Efficiencies for screen and conveying transfer points are taken from AP-42 11.19.2 Background Document

Uncontrolled Emissions (tpy) = Capacity (tpy) * Uncontrolled Emission Factor (lb/ton) * 8760 (day/yr) / 2000 (lb/ton)

Controlled Emissions (tpy) = Throughput (tpy) * Controlled Emission Factor (lb/ton) * 8760 (day/yr) / 2000 (lb/ton)

TSD Appendix A - Roadway Emissions

Company Name: Metal Services LLC dba Phoenix Services LLC
 Address City IN Zip: 250 W. US Hwy 12, Burns Harbor, IN 46304
 Part 70 Permit Renewal No. T127-36307-00026
 Reviewer Phillip Joseph
 Date Jan. 2016

Unpaved Road Emissions - PTE
 AP-42, Ch 13.2.2 (11/2006)

Type and Activity (one-way each)	Thruput (tons/yr)	Maximum trips per day (trip/day)	Maximum Weight Empty/Loaded (tons/trip)	Total Weight driven per day (ton/day)	Maximum one-way distance (mi/trip)	Maximum one-way miles (miles/day)	Maximum one-way miles (miles/yr)
Loader (empty),	0	600.0	38.0	22800.0	0.030	18.00	6570.0
Loader (full)	4,380,000	600.0	58.0	34800.0	0.030	18.00	6570.0
Totals		1200.0		57600.0		36.0	13140.0

Average Vehicle Weight Per Trip = 48.0 tons/trip
 Average Miles Per Trip = 0.030 miles/trip

Unmitigated Emission Factor, Ef = $k * [(s/12)^a] * [(W/3)^b]$ (Equation 1a from AP-42 13.2.2)

	PM	PM10	PM2.5	
where k =	4.9	1.5	0.15	lb/mi = particle size multiplier (AP-42 Table 13.2.2-2 for Industrial Roads)
s =	6	6	6	% = mean silt content of unpaved roads AP-42 Table 13.2.2-1
a =	0.7	0.9	0.9	= constant (AP-42 Table 13.2.2-2 for Industrial Roads)
W =	48.0	48.0	48.0	tons = average vehicle weight (provided by source)
b =	0.45	0.45	0.45	= constant (AP-42 Table 13.2.2-2 for Industrial Roads)

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, Eext = $E * [(365 - P)/365]$ (Equation 2 from AP-42 13.2.2)

Mitigated Emission Factor, Eext = $E * [(365 - P)/365]$
 where P = 125 days of rain greater than or equal to 0.01 inches (see Fig. 13.2.2-1)

	PM	PM10	PM2.5	
Unmitigated Emission Factor, Ef =	10.50	2.80	0.28	lb/mile
Mitigated Emission Factor, Eext =	6.91	1.84	0.18	lb/mile
Dust Control Efficiency =	50%	50%	50%	Watering Roadways

Type and Activity (one-way each)	Unmitigated PTE for PM (tons/yr)	Unmitigated PTE for PM10 (tons/yr)	Unmitigated PTE for PM2.5 (tons/yr)	Mitigated PTE for PM (tons/yr)	Mitigated PTE for PM10 (tons/yr)	Mitigated PTE for PM2.5 (tons/yr)	Controlled PTE for PM (tons/yr)	Controlled PTE for PM10 (tons/yr)	Controlled PTE for PM2.5 (tons/yr)
Loader (empty),	34.50	9.20	0.92	22.69	6.05	0.60	11.34	3.02	0.30
Loader (full)	34.50	9.20	0.92	22.69	6.05	0.60	11.34	3.02	0.30
				Mitigated Emissions			Controlled Emissions		
				45.37	12.09	1.21	22.69	6.05	0.60

mobile equipment weight units
 loader tare weight 38 tons
 loader bucket load weight 20 tons

Date Jan. 2016

Unpaved Road Emissions - Limited

AP-42, Ch 13.2.2 (11/2006)

Type and Activity (one-way each)	Thruput (tons/yr)	Maximum trips per day (trip/day)	Maximum Weight Empty/Loaded (tons/trip)	Total Weight driven per day (ton/day)	Maximum one-way distance (mi/trip)	Maximum one-way miles (miles/day)	Maximum one-way miles (miles/yr)
Loader (empty),	0	178.1	38.0	6767.1	0.030	5.34	1950.0
Loader (full)	1,300,000	178.1	58.0	10328.8	0.030	5.34	1950.0
Totals		356.2		17095.9		10.7	3900.0

Average Vehicle Weight Per Trip = 48.0 tons/trip
 Average Miles Per Trip = 0.030 miles/trip

Unmitigated Emission Factor, Ef = $k \cdot (s/12)^a \cdot [(W/3)^b]$ (Equation 1a from AP-42 13.2.2)

	PM	PM10	PM2.5
where k =	4.9	1.5	0.15
s =	6	6	6
a =	0.7	0.9	0.9
W =	48.0	48.0	48.0
b =	0.45	0.45	0.45

lb/mi = particle size multiplier (AP-42 Table 13.2.2-2 for Industrial Roads)
 % = mean silt content of unpaved roads AP-42 Table 13.2.2-1
 = constant (AP-42 Table 13.2.2-2 for Industrial Roads)
 tons = average vehicle weight (provided by source)
 = constant (AP-42 Table 13.2.2-2 for Industrial Roads)

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, Eext = $E \cdot [(365 - P)/365]$ (Equation 2 from AP-42 13.2.2)

Mitigated Emission Factor, Eext = $E \cdot [(365 - P)/365]$

where P = 125 days of rain greater than or equal to 0.01 inches (see Fig. 13.2.2-1)

	PM	PM10	PM2.5
Unmitigated Emission Factor, Ef =	10.50	2.80	0.28
Mitigated Emission Factor, Eext =	6.91	1.84	0.18
Dust Control Efficiency =	50%	50%	50%

lb/mile
 lb/mile
 Watering Roadways

Type and Activity (one-way each)	Unmitigated PTE for PM (tons/yr)	Unmitigated PTE for PM10 (tons/yr)	Unmitigated PTE for PM2.5 (tons/yr)	Mitigated PTE for PM (tons/yr)	Mitigated PTE for PM10 (tons/yr)	Mitigated PTE for PM2.5 (tons/yr)	Controlled PTE for PM (tons/yr)	Controlled PTE for PM10 (tons/yr)	Controlled PTE for PM2.5 (tons/yr)
Loader (empty),	10.24	2.73	0.27	6.73	1.79	0.18	3.37	0.90	0.09
Loader (full)	10.24	2.73	0.27	6.73	1.79	0.18	3.37	0.90	0.09
Mitigated Emissions							Controlled Emissions		
13.47							6.73		
3.59							1.79		
0.36							0.18		

mobile equipment weight units
 loader tare weight 38 tons
 loader bucket load weight 20 tons

TSD Appendix A - Wind Erosion Emissions

Company Name: Metal Services LLC dba Phoenix Services LLC
 Address City IN Zip: 250 W. US Hwy 12, Burns Harbor, IN 46304
 Part 70 Permit Renewal No. T127-36307-00026
 Reviewer Phillip Joseph
 Date Jan. 2016

AP-42, 13.2.5, Date 11/2006

Wind Erosion Industrial Piles

The small area at the base of each pile where daily activity can occur is negligible and does not need to be calculated.

(see sample calculation, AP-42 12.2.5-9, Step 2)

Disturbance via topping off of piles by stackers creates the fresh surface by which these calculations represent.

N = 365, assuming pile disturbances are once per day, conservative (plant does not operate daily)

The following equations are used to calculate wind erosion emission factors and velocity friction:

$$\text{Eqn 2: } EF = k \sum_{i=1}^N P_i$$

EF = emission factor (g/m^2)

k = particle size multiplier

N = number of disturbances

P_i = erosion potential corresponding to obs or prob fastest mile
 of wind for the ith period between disturbances, g/m^2

k = 1 particle size multiplier for PM

k = 0.5 particle size multiplier for PM10

k = 0.075 particle size multiplier for PM2.5

$$\text{Eqn 3: } P = 58 (u^* - u^*_t)$$

u^* = friction velocity (m/s)

u^*_t = threshold friction velocity (m/s)

$$P = 0 \text{ for } u^* \leq u^*_t$$

$u^*_t = 1.33$ m/s, using AP-42 value, Table 13.2.5-2 for Scoria (roadbed material)

$$\text{Eqn 5: } \frac{u^* + 10}{(10/0.005)} = \frac{u^* + \ln(z/0.005)}{\ln(z/0.005)}$$

$u^* + 10$ = fastest mile of reference anemometer ht, 10, for period between disturbances (m/s)

u^* = fastest mile of reference anemometer ht, z, for period between disturbances (m/s)

0.005 = assumed roughness height (m)

(Note: anemometer height not available for O'Hare weather station, assume 7 meters)

$$u^* + 10 = 1.05 u^*$$

$$\text{Eqn 6: } \frac{u^* + s}{u^* + 10} = \frac{u_s}{u_r}$$

$u^* + s$ = surface wind speed distribution (m/s)

$u^* + 10$ = fastest mile of reference anemometer ht, 10, for period between disturbances (m/s)

u_s = surface wind speed (m/s)

u_r = approach wind speed (m/s)

$$\text{Eqn 7: } u^* = 0.10 u^* + s$$

u^* = friction velocity (m/s)

TSD Appendix A - Wind Erosion Emissions

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 Date Jan. 2016

CALCULATE AREAS OF A TYPICAL PILE, BROKEN INTO SUBAREAS

Calculate estimated average area of each storage pile:
 oblong piles, not conical, see B2, AP-42 Figure 13.2.5-2
 calculate as a rectangular box shape for surface area, conservatively
 4 sides and 1 top

Area top = length x width
 Area each side = length x height
 Area top = 648 m²
 Area four sides = 720 m²
 Total Surface Area of Each Pile = 1368 m²

length (m): 36 typical size of piles at slag plant, based on pile inventories at Levy ECL 2006.
 width (m): 18 typical size of piles at slag plant, based on pile inventories at Levy ECL 2006.
 height (m): 5 typical size of piles at slag plant, based on pile inventories at Levy ECL 2006.

Using B2 Type Pile, see Figure 13.2.5-2, AP-42

Pile Subarea	u _s /u _r	% of Surface Area	Area (m ₂)
1	0.2	3%	41
2	0.2	28%	383
3	0.6	29%	397
4	0.6	22%	301
5	0.9	15%	205
6	1.1	3%	41
Total Area:			1368

(see integrated wind erosion calculation spreadsheet)

TSD Appendix A - Wind Erosion Emissions

Company Name: Metal Services LLC dba Phoenix Services LLC
 Address City IN Zip: 250 W. US Hwy 12, Burns Harbor, IN 46304
 Part 70 Permit Renewal No. T127-36307-00026
 Reviewer Phillip Joseph
 Date Jan. 2016

**PHOENIX SERVICES LLC -- MAXIMUM POTENTIAL TO EMIT
 CALCULATE ESTIMATED NUMBER OF PILES**

Maximum throughput is equal to maximum amount of slag in storage piles, whether raw material or product material.

Maximum throughput = 13,140,000 tpy, pile storage capacity
 Bulk Density of Slag = 1,762 kg/m³
 Volume of the calculated pile above = 12,960 m³
 Weight of slag per pile = 22,835,520 kg of slag per pile
 25,172 tons of slag per pile
 Estimated number of piles = 522 piles based on max plant equipment capacity

CALCULATE TOTAL PTE

Total emissions from one pile: 0.09 tons PM (see integrated wind erosion calculation spreadsheet)
 0.05 tons PM₁₀
 0.01 tons PM_{2.5}

Emissions for all potential piles: 47.65 tons PM uncontrolled
 23.83 tons PM₁₀ uncontrolled
 3.57 tons PM_{2.5} uncontrolled

 90% estimated control efficiency, wet suppression
 4.77 tons PM controlled
 2.38 tons PM₁₀ controlled
 0.36 tons PM_{2.5} controlled

TSD Appendix A - Wind Erosion Emissions

Company Name: Metal Services LLC dba Phoenix Services LLC
 Address City IN Zip: 250 W. US Hwy 12, Burns Harbor, IN 46304
 Part 70 Permit Renewal No. T127-36307-00026
 Reviewer Phillip Joseph
 Date Jan. 2016

**PHOENIX SERVICES LLC -- LIMITED THROUGHPUT EMISSIONS
 CALCULATE ESTIMATED NUMBER OF PILES**

Maximum throughput is equal to maximum amount of slag in storage piles, whether raw material or product material.

Throughput =	4,977,419	tpy
Bulk Density of Slag =	1,762	kg/m ³
Volume of the calculated pile above =	12,960	m ³
Weight of slag per pile =	22,835,520	kg of slag per pile
	25172	tons of slag per pile
Estimated number of piles =	198	piles based on max plant equipment capacity

CALCULATE TOTAL LIMITED EMISSIONS

Total emissions from one pile:	0.09	tons PM	(see integrated wind erosion calculation spreadsheet)
	0.05	tons PM ₁₀	
	0.01	tons PM _{2.5}	
Emissions for all potential piles:	18.05	tons PM	uncontrolled
	9.03	tons PM ₁₀	uncontrolled
	1.35	tons PM _{2.5}	uncontrolled
	90%	estimated control efficiency, wet suppression	
	1.81	tons PM	controlled
	0.90	tons PM ₁₀	controlled
	0.14	tons PM _{2.5}	controlled

TSD Appendix A - Wind Erosion Emissions

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AP-42, 13.2.5, Date 11/2006
Wind Erosion Industrial Piles

INTEGRATED WIND EROSION CALCULATION OF ONE PILE

Wind data, u*, purchased from NOAA local climatic data website, ORD weather station 2010 monthly charts, maximum speed 2-min.

EF_PM10/EF_PM10/EF_PM2.5 = emission factor (g/m^2)

PM/PM10/PM2.5 = particulate matter emissions (tpy), uncontrolled

P1-6 = erosion potential (g/m^2)

Table with columns for Period, u* (m/s), u*/u*0.2, u*/u*0.6, u*/u*0.9, u*/u*1.1, u*/u*1.4, u*/u*1.7, u*/u*2.0, Pile Subarea 1-6, and PM, PM10, PM2.5. The table contains 48 rows of data for various dates from 1/1/2010 to 4/18/2010.

AP-42, 13.2.5, Date 11/2006
Wind Erosion Industrial Piles

INTEGRATED WIND EROSION CALCULATION OF ONE PILE

Wind data, u*, purchased from NOAA local climatic data website, ORD weather station 2010 monthly charts, maximum speed 2-min.

EF_{PM}/EF_{PM10}/EF_{PM2.5} = emission factor (g/m²)

PM/PM₁₀/PM_{2.5} = particulate matter emissions (tpy), uncontrolled

P₁₋₆ = erosion potential (g/m³)

Period	u*		u* (m/s) = (u ₁₀ /u* ^{0.10})						u* (m/s) = 0.10 u*						Pile Subarea 1						Pile Subarea 2						Pile Subarea 3						Pile Subarea 4						Pile Subarea 5						Pile Subarea 6																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
	mph	m/s	m/s	u ₁₀ /0.2	u ₁₀ /0.4	u ₁₀ /0.6	u ₁₀ /0.9	u ₁₀ /1.1	u ₁₀ /1.4	u ₁₀ /1.7	u ₁₀ /2.1	u ₁₀ /2.6	u ₁₀ /3.1	u ₁₀ /3.7	u ₁₀ /4.3	u ₁₀ /5.0	u ₁₀ /5.8	u ₁₀ /6.7	u ₁₀ /7.7	u ₁₀ /8.8	u ₁₀ /10.0	u ₁₀ /11.3	u ₁₀ /12.7	u ₁₀ /14.2	u ₁₀ /15.8	u ₁₀ /17.5	u ₁₀ /19.3	u ₁₀ /21.1	u ₁₀ /23.0	u ₁₀ /25.0	u ₁₀ /27.1	u ₁₀ /29.3	u ₁₀ /31.6	u ₁₀ /34.0	u ₁₀ /36.5	u ₁₀ /39.1	u ₁₀ /41.7	u ₁₀ /44.4	u ₁₀ /47.1	u ₁₀ /49.9	u ₁₀ /52.7	u ₁₀ /55.6	u ₁₀ /58.5	u ₁₀ /61.4	u ₁₀ /64.3	u ₁₀ /67.3	u ₁₀ /70.3	u ₁₀ /73.3	u ₁₀ /76.3	u ₁₀ /79.3	u ₁₀ /82.3	u ₁₀ /85.3	u ₁₀ /88.3	u ₁₀ /91.3	u ₁₀ /94.3	u ₁₀ /97.3	u ₁₀ /100.3	u ₁₀ /103.3	u ₁₀ /106.3	u ₁₀ /109.3	u ₁₀ /112.3	u ₁₀ /115.3	u ₁₀ /118.3	u ₁₀ /121.3	u ₁₀ /124.3	u ₁₀ /127.3	u ₁₀ /130.3	u ₁₀ /133.3	u ₁₀ /136.3	u ₁₀ /139.3	u ₁₀ /142.3	u ₁₀ /145.3	u ₁₀ /148.3	u ₁₀ /151.3	u ₁₀ /154.3	u ₁₀ /157.3	u ₁₀ /160.3	u ₁₀ /163.3	u ₁₀ /166.3	u ₁₀ /169.3	u ₁₀ /172.3	u ₁₀ /175.3	u ₁₀ /178.3	u ₁₀ /181.3	u ₁₀ /184.3	u ₁₀ /187.3	u ₁₀ /190.3	u ₁₀ /193.3	u ₁₀ /196.3	u ₁₀ /199.3	u ₁₀ /202.3	u ₁₀ /205.3	u ₁₀ /208.3	u ₁₀ /211.3	u ₁₀ /214.3	u ₁₀ /217.3	u ₁₀ /220.3	u ₁₀ /223.3	u ₁₀ /226.3	u ₁₀ /229.3	u ₁₀ /232.3	u ₁₀ /235.3	u ₁₀ /238.3	u ₁₀ /241.3	u ₁₀ /244.3	u ₁₀ /247.3	u ₁₀ /250.3	u ₁₀ /253.3	u ₁₀ /256.3	u ₁₀ /259.3	u ₁₀ /262.3	u ₁₀ /265.3	u ₁₀ /268.3	u ₁₀ /271.3	u ₁₀ /274.3	u ₁₀ /277.3	u ₁₀ /280.3	u ₁₀ /283.3	u ₁₀ /286.3	u ₁₀ /289.3	u ₁₀ /292.3	u ₁₀ /295.3	u ₁₀ /298.3	u ₁₀ /301.3	u ₁₀ /304.3	u ₁₀ /307.3	u ₁₀ /310.3	u ₁₀ /313.3	u ₁₀ /316.3	u ₁₀ /319.3	u ₁₀ /322.3	u ₁₀ /325.3	u ₁₀ /328.3	u ₁₀ /331.3	u ₁₀ /334.3	u ₁₀ /337.3	u ₁₀ /340.3	u ₁₀ /343.3	u ₁₀ /346.3	u ₁₀ /349.3	u ₁₀ /352.3	u ₁₀ /355.3	u ₁₀ /358.3	u ₁₀ /361.3	u ₁₀ /364.3	u ₁₀ /367.3	u ₁₀ /370.3	u ₁₀ /373.3	u ₁₀ /376.3	u ₁₀ /379.3	u ₁₀ /382.3	u ₁₀ /385.3	u ₁₀ /388.3	u ₁₀ /391.3	u ₁₀ /394.3	u ₁₀ /397.3	u ₁₀ /400.3	u ₁₀ /403.3	u ₁₀ /406.3	u ₁₀ /409.3	u ₁₀ /412.3	u ₁₀ /415.3	u ₁₀ /418.3	u ₁₀ /421.3	u ₁₀ /424.3	u ₁₀ /427.3	u ₁₀ /430.3	u ₁₀ /433.3	u ₁₀ /436.3	u ₁₀ /439.3	u ₁₀ /442.3	u ₁₀ /445.3	u ₁₀ /448.3	u ₁₀ /451.3	u ₁₀ /454.3	u ₁₀ /457.3	u ₁₀ /460.3	u ₁₀ /463.3	u ₁₀ /466.3	u ₁₀ /469.3	u ₁₀ /472.3	u ₁₀ /475.3	u ₁₀ /478.3	u ₁₀ /481.3	u ₁₀ /484.3	u ₁₀ /487.3	u ₁₀ /490.3	u ₁₀ /493.3	u ₁₀ /496.3	u ₁₀ /499.3	u ₁₀ /502.3	u ₁₀ /505.3	u ₁₀ /508.3	u ₁₀ /511.3	u ₁₀ /514.3	u ₁₀ /517.3	u ₁₀ /520.3	u ₁₀ /523.3	u ₁₀ /526.3	u ₁₀ /529.3	u ₁₀ /532.3	u ₁₀ /535.3	u ₁₀ /538.3	u ₁₀ /541.3	u ₁₀ /544.3	u ₁₀ /547.3	u ₁₀ /550.3	u ₁₀ /553.3	u ₁₀ /556.3	u ₁₀ /559.3	u ₁₀ /562.3	u ₁₀ /565.3	u ₁₀ /568.3	u ₁₀ /571.3	u ₁₀ /574.3	u ₁₀ /577.3	u ₁₀ /580.3	u ₁₀ /583.3	u ₁₀ /586.3	u ₁₀ /589.3	u ₁₀ /592.3	u ₁₀ /595.3	u ₁₀ /598.3	u ₁₀ /601.3	u ₁₀ /604.3	u ₁₀ /607.3	u ₁₀ /610.3	u ₁₀ /613.3	u ₁₀ /616.3	u ₁₀ /619.3	u ₁₀ /622.3	u ₁₀ /625.3	u ₁₀ /628.3	u ₁₀ /631.3	u ₁₀ /634.3	u ₁₀ /637.3	u ₁₀ /640.3	u ₁₀ /643.3	u ₁₀ /646.3	u ₁₀ /649.3	u ₁₀ /652.3	u ₁₀ /655.3	u ₁₀ /658.3	u ₁₀ /661.3	u ₁₀ /664.3	u ₁₀ /667.3	u ₁₀ /670.3	u ₁₀ /673.3	u ₁₀ /676.3	u ₁₀ /679.3	u ₁₀ /682.3	u ₁₀ /685.3	u ₁₀ /688.3	u ₁₀ /691.3	u ₁₀ /694.3	u ₁₀ /697.3	u ₁₀ /700.3	u ₁₀ /703.3	u ₁₀ /706.3	u ₁₀ /709.3	u ₁₀ /712.3	u ₁₀ /715.3	u ₁₀ /718.3	u ₁₀ /721.3	u ₁₀ /724.3	u ₁₀ /727.3	u ₁₀ /730.3	u ₁₀ /733.3	u ₁₀ /736.3	u ₁₀ /739.3	u ₁₀ /742.3	u ₁₀ /745.3	u ₁₀ /748.3	u ₁₀ /751.3	u ₁₀ /754.3	u ₁₀ /757.3	u ₁₀ /760.3	u ₁₀ /763.3	u ₁₀ /766.3	u ₁₀ /769.3	u ₁₀ /772.3	u ₁₀ /775.3	u ₁₀ /778.3	u ₁₀ /781.3	u ₁₀ /784.3	u ₁₀ /787.3	u ₁₀ /790.3	u ₁₀ /793.3	u ₁₀ /796.3	u ₁₀ /799.3	u ₁₀ /802.3	u ₁₀ /805.3	u ₁₀ /808.3	u ₁₀ /811.3	u ₁₀ /814.3	u ₁₀ /817.3	u ₁₀ /820.3	u ₁₀ /823.3	u ₁₀ /826.3	u ₁₀ /829.3	u ₁₀ /832.3	u ₁₀ /835.3	u ₁₀ /838.3	u ₁₀ /841.3	u ₁₀ /844.3	u ₁₀ /847.3	u ₁₀ /850.3	u ₁₀ /853.3	u ₁₀ /856.3	u ₁₀ /859.3	u ₁₀ /862.3	u ₁₀ /865.3	u ₁₀ /868.3	u ₁₀ /871.3	u ₁₀ /874.3	u ₁₀ /877.3	u ₁₀ /880.3	u ₁₀ /883.3	u ₁₀ /886.3	u ₁₀ /889.3	u ₁₀ /892.3	u ₁₀ /895.3	u ₁₀ /898.3	u ₁₀ /901.3	u ₁₀ /904.3	u ₁₀ /907.3	u ₁₀ /910.3	u ₁₀ /913.3	u ₁₀ /916.3	u ₁₀ /919.3	u ₁₀ /922.3	u ₁₀ /925.3	u ₁₀ /928.3	u ₁₀ /931.3	u ₁₀ /934.3	u ₁₀ /937.3	u ₁₀ /940.3	u ₁₀ /943.3	u ₁₀ /946.3	u ₁₀ /949.3	u ₁₀ /952.3	u ₁₀ /955.3	u ₁₀ /958.3	u ₁₀ /961.3	u ₁₀ /964.3	u ₁₀ /967.3	u ₁₀ /970.3	u ₁₀ /973.3	u ₁₀ /976.3	u ₁₀ /979.3	u ₁₀ /982.3	u ₁₀ /985.3	u ₁₀ /988.3	u ₁₀ /991.3	u ₁₀ /994.3	u ₁₀ /997.3	u ₁₀ /1000.3	u ₁₀ /1003.3	u ₁₀ /1006.3	u ₁₀ /1009.3	u ₁₀ /1012.3	u ₁₀ /1015.3	u ₁₀ /1018.3	u ₁₀ /1021.3	u ₁₀ /1024.3	u ₁₀ /1027.3	u ₁₀ /1030.3	u ₁₀ /1033.3	u ₁₀ /1036.3	u ₁₀ /1039.3	u ₁₀ /1042.3	u ₁₀ /1045.3	u ₁₀ /1048.3	u ₁₀ /1051.3	u ₁₀ /1054.3	u ₁₀ /1057.3	u ₁₀ /1060.3	u ₁₀ /1063.3	u ₁₀ /1066.3	u ₁₀ /1069.3	u ₁₀ /1072.3	u ₁₀ /1075.3	u ₁₀ /1078.3	u ₁₀ /1081.3	u ₁₀ /1084.3	u ₁₀ /1087.3	u ₁₀ /1090.3	u ₁₀ /1093.3	u ₁₀ /1096.3	u ₁₀ /1099.3	u ₁₀ /1102.3	u ₁₀ /1105.3	u ₁₀ /1108.3	u ₁₀ /1111.3	u ₁₀ /1114.3	u ₁₀ /1117.3	u ₁₀ /1120.3	u ₁₀ /1123.3	u ₁₀ /1126.3	u ₁₀ /1129.3	u ₁₀ /1132.3	u ₁₀ /1135.3	u ₁₀ /1138.3	u ₁₀ /1141.3	u ₁₀ /1144.3	u ₁₀ /1147.3	u ₁₀ /1150.3	u ₁₀ /1153.3	u ₁₀ /1156.3	u ₁₀ /1159.3	u ₁₀ /1162.3	u ₁₀ /1165.3	u ₁₀ /1168.3	u ₁₀ /1171.3	u ₁₀ /1174.3	u ₁₀ /1177.3	u ₁₀ /1180.3	u ₁₀ /1183.3	u ₁₀ /1186.3	u ₁₀ /1189.3	u ₁₀ /1192.3	u ₁₀ /1195.3	u ₁₀ /1198.3	u ₁₀ /1201.3	u ₁₀ /1204.3	u ₁₀ /1207.3	u ₁₀ /1210.3	u ₁₀ /1213.3	u ₁₀ /1216.3	u ₁₀ /1219.3	u ₁₀ /1222.3	u ₁₀ /1225.3	u ₁₀ /1228.3	u ₁₀ /1231.3	u ₁₀ /1234.3	u ₁₀ /1237.3	u ₁₀ /1240.3	u ₁₀ /1243.3	u ₁₀ /1246.3	u ₁₀ /1249.3	u ₁₀ /1252.3	u ₁₀ /1255.3	u ₁₀ /1258.3	u ₁₀ /1261.3	u ₁₀ /1264.3	u ₁₀ /1267.3	u ₁₀ /1270.3	u ₁₀ /1273.3	u ₁₀ /1276.3	u ₁₀ /1279.3	u ₁₀ /1282.3	u ₁₀ /1285.3	u ₁₀ /1288.3	u ₁₀ /1291.3	u ₁₀ /1294.3	u ₁₀ /1297.3	u ₁₀ /1300.3	u ₁₀ /1303.3	u ₁₀ /1306.3	u ₁₀ /1309.3	u ₁₀ /1312.3	u ₁₀ /1315.3	u ₁₀ /1318.3	u ₁₀ /1321.3	u ₁₀ /1324.3	u ₁₀ /1327.3	u ₁₀ /1330.3	u ₁₀ /1333.3	u ₁₀ /1336.3	u ₁₀ /1339.3	u ₁₀ /1342.3	u ₁₀ /1345.3	u ₁₀ /1348.3	u ₁₀ /1351.3	u ₁₀ /1354.3	u ₁₀ /1357.3	u ₁₀ /1360.3	u ₁₀ /1363.3	u ₁₀ /1366.3	u ₁₀ /1369.3	u ₁₀ /1372.3	u ₁₀ /1375.3	u ₁₀ /1378.3	u ₁₀ /1381.3	u ₁₀ /1384.3	u ₁₀ /1387.3	u ₁₀ /1390.3	u ₁₀ /1393.3	u ₁₀ /1396.3	u ₁₀ /1399.3	u ₁₀ /1402.3	u ₁₀ /1405.3	u ₁₀ /1408.3	u ₁₀ /1411.3	u ₁₀ /1414.3	u ₁₀ /1417.3	u ₁₀ /1420.3	u ₁₀ /1423.3	u ₁₀ /1426.3	u ₁₀ /1429.3	u ₁₀ /1432.3	u ₁₀ /1435.3	u ₁₀ /1438.3	u ₁₀ /1441.3	u ₁₀ /1444.3	u ₁₀ /1447.3	u ₁₀ /1450.3	u ₁₀ /1453.3	u ₁₀ /1456.3	u ₁₀ /1459.3	u ₁₀ /1462.3	u ₁₀ /1465.3	u ₁₀ /1468.3	u ₁₀ /1471.3	u ₁₀ /1474.3	u ₁₀ /1477.3	u ₁₀ /1480.3	u ₁₀ /1483.3	u ₁₀ /1486.3	u ₁₀ /1489.3	u ₁₀ /1492.3	u ₁₀ /1495.3	u ₁₀ /1498.3	u ₁₀ /1501.3	u ₁₀ /1504.3	u ₁₀ /1507.3	u ₁₀ /1510.3	u ₁₀ /1513.3	u ₁₀ /1516.3	u ₁₀ /1519.3	u ₁₀ /1522.3	u ₁₀ /1525.3	u ₁₀ /1528.3	u ₁₀ /1531.3	u ₁₀ /1534.3	u ₁₀ /1537.3	u ₁₀ /1540.3	u ₁₀ /1543.3	u ₁₀ /1546.3	u ₁₀ /1549.3	u ₁₀ /1552.3	u ₁₀ /1555.3	u ₁₀ /1558.3	u ₁₀ /1561.3	u ₁₀ /1564.3	u ₁₀ /1567.3	u ₁₀ /1570.3	u ₁₀ /1573.3	u ₁₀ /1576.3	u ₁₀ /1579.3	u ₁₀ /1582.3	u ₁₀ /1585.3	u ₁₀ /1588.3	u ₁₀ /1591.3	u ₁₀ /1594.3	u ₁₀ /1597.3	u ₁₀ /1600.3	u ₁₀ /1603.3	u ₁₀ /1606.3	u ₁₀ /1609.3	u ₁₀ /1612.3	u ₁₀ /1615.3	u ₁₀ /1618.3	u ₁₀ /1621.3	u ₁₀ /1624.3	u ₁₀ /1627.3	u ₁₀ /1630.3	u ₁₀ /1633.3	u ₁₀ /1636.3	u ₁₀ /1639.3	u ₁₀ /1642.3	u ₁₀ /1645.3	u ₁₀ /1648.3	u ₁₀ /1651.3	u ₁₀ /1654.3	u ₁₀ /1657.3	u ₁₀ /1660.3	u ₁₀ /1663.3	u ₁₀ /1666.3	u ₁₀ /1669.3

AP-42, 13.2.5, Date 11/2006
Wind Erosion Industrial Piles

INTEGRATED WIND EROSION CALCULATION OF ONE PILE

Wind data, u*, purchased from NOAA local climatic data website, ORD weather station 2010 monthly charts, maximum speed 2-min.

EF_{PM10}/EF_{PM10}/EF_{PM2.5} = emission factor (g/m²)

PM₁₀/PM₁₀/PM_{2.5} = particulate matter emissions (tpy), uncontrolled

P₁₋₆ = erosion potential (g/m²)

Period	u*		u* (m/s) = (u ₁₀ /u* 10						u* (m/s) = 0.10 u* s						Pile Subarea 1		Pile Subarea 2		Pile Subarea 3		Pile Subarea 4		Pile Subarea 5						Pile Subarea 6																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	mph	m/s	m/s	u ₁₀ /0.2	u ₁₀ /0.4	u ₁₀ /0.6	u ₁₀ /0.8	u ₁₀ /1.0	u ₁₀ /1.1	u ₁₀ /1.2	u ₁₀ /1.3	u ₁₀ /1.4	u ₁₀ /1.5	u ₁₀ /1.6	u ₁₀ /1.7	u ₁₀ /1.8	u ₁₀ /1.9	u ₁₀ /2.0	u ₁₀ /2.1	u ₁₀ /2.2	u ₁₀ /2.3	u ₁₀ /2.4	u ₁₀ /2.5	u ₁₀ /2.6	u ₁₀ /2.7	u ₁₀ /2.8	u ₁₀ /2.9	u ₁₀ /3.0	u ₁₀ /3.1	u ₁₀ /3.2	u ₁₀ /3.3	u ₁₀ /3.4	u ₁₀ /3.5	u ₁₀ /3.6	u ₁₀ /3.7	u ₁₀ /3.8	u ₁₀ /3.9	u ₁₀ /4.0	u ₁₀ /4.1	u ₁₀ /4.2	u ₁₀ /4.3	u ₁₀ /4.4	u ₁₀ /4.5	u ₁₀ /4.6	u ₁₀ /4.7	u ₁₀ /4.8	u ₁₀ /4.9	u ₁₀ /5.0	u ₁₀ /5.1	u ₁₀ /5.2	u ₁₀ /5.3	u ₁₀ /5.4	u ₁₀ /5.5	u ₁₀ /5.6	u ₁₀ /5.7	u ₁₀ /5.8	u ₁₀ /5.9	u ₁₀ /6.0	u ₁₀ /6.1	u ₁₀ /6.2	u ₁₀ /6.3	u ₁₀ /6.4	u ₁₀ /6.5	u ₁₀ /6.6	u ₁₀ /6.7	u ₁₀ /6.8	u ₁₀ /6.9	u ₁₀ /7.0	u ₁₀ /7.1	u ₁₀ /7.2	u ₁₀ /7.3	u ₁₀ /7.4	u ₁₀ /7.5	u ₁₀ /7.6	u ₁₀ /7.7	u ₁₀ /7.8	u ₁₀ /7.9	u ₁₀ /8.0	u ₁₀ /8.1	u ₁₀ /8.2	u ₁₀ /8.3	u ₁₀ /8.4	u ₁₀ /8.5	u ₁₀ /8.6	u ₁₀ /8.7	u ₁₀ /8.8	u ₁₀ /8.9	u ₁₀ /9.0	u ₁₀ /9.1	u ₁₀ /9.2	u ₁₀ /9.3	u ₁₀ /9.4	u ₁₀ /9.5	u ₁₀ /9.6	u ₁₀ /9.7	u ₁₀ /9.8	u ₁₀ /9.9	u ₁₀ /10.0	u ₁₀ /10.1	u ₁₀ /10.2	u ₁₀ /10.3	u ₁₀ /10.4	u ₁₀ /10.5	u ₁₀ /10.6	u ₁₀ /10.7	u ₁₀ /10.8	u ₁₀ /10.9	u ₁₀ /11.0	u ₁₀ /11.1	u ₁₀ /11.2	u ₁₀ /11.3	u ₁₀ /11.4	u ₁₀ /11.5	u ₁₀ /11.6	u ₁₀ /11.7	u ₁₀ /11.8	u ₁₀ /11.9	u ₁₀ /12.0	u ₁₀ /12.1	u ₁₀ /12.2	u ₁₀ /12.3	u ₁₀ /12.4	u ₁₀ /12.5	u ₁₀ /12.6	u ₁₀ /12.7	u ₁₀ /12.8	u ₁₀ /12.9	u ₁₀ /13.0	u ₁₀ /13.1	u ₁₀ /13.2	u ₁₀ /13.3	u ₁₀ /13.4	u ₁₀ /13.5	u ₁₀ /13.6	u ₁₀ /13.7	u ₁₀ /13.8	u ₁₀ /13.9	u ₁₀ /14.0	u ₁₀ /14.1	u ₁₀ /14.2	u ₁₀ /14.3	u ₁₀ /14.4	u ₁₀ /14.5	u ₁₀ /14.6	u ₁₀ /14.7	u ₁₀ /14.8	u ₁₀ /14.9	u ₁₀ /15.0	u ₁₀ /15.1	u ₁₀ /15.2	u ₁₀ /15.3	u ₁₀ /15.4	u ₁₀ /15.5	u ₁₀ /15.6	u ₁₀ /15.7	u ₁₀ /15.8	u ₁₀ /15.9	u ₁₀ /16.0	u ₁₀ /16.1	u ₁₀ /16.2	u ₁₀ /16.3	u ₁₀ /16.4	u ₁₀ /16.5	u ₁₀ /16.6	u ₁₀ /16.7	u ₁₀ /16.8	u ₁₀ /16.9	u ₁₀ /17.0	u ₁₀ /17.1	u ₁₀ /17.2	u ₁₀ /17.3	u ₁₀ /17.4	u ₁₀ /17.5	u ₁₀ /17.6	u ₁₀ /17.7	u ₁₀ /17.8	u ₁₀ /17.9	u ₁₀ /18.0	u ₁₀ /18.1	u ₁₀ /18.2	u ₁₀ /18.3	u ₁₀ /18.4	u ₁₀ /18.5	u ₁₀ /18.6	u ₁₀ /18.7	u ₁₀ /18.8	u ₁₀ /18.9	u ₁₀ /19.0	u ₁₀ /19.1	u ₁₀ /19.2	u ₁₀ /19.3	u ₁₀ /19.4	u ₁₀ /19.5	u ₁₀ /19.6	u ₁₀ /19.7	u ₁₀ /19.8	u ₁₀ /19.9	u ₁₀ /20.0	u ₁₀ /20.1	u ₁₀ /20.2	u ₁₀ /20.3	u ₁₀ /20.4	u ₁₀ /20.5	u ₁₀ /20.6	u ₁₀ /20.7	u ₁₀ /20.8	u ₁₀ /20.9	u ₁₀ /21.0	u ₁₀ /21.1	u ₁₀ /21.2	u ₁₀ /21.3	u ₁₀ /21.4	u ₁₀ /21.5	u ₁₀ /21.6	u ₁₀ /21.7	u ₁₀ /21.8	u ₁₀ /21.9	u ₁₀ /22.0	u ₁₀ /22.1	u ₁₀ /22.2	u ₁₀ /22.3	u ₁₀ /22.4	u ₁₀ /22.5	u ₁₀ /22.6	u ₁₀ /22.7	u ₁₀ /22.8	u ₁₀ /22.9	u ₁₀ /23.0	u ₁₀ /23.1	u ₁₀ /23.2	u ₁₀ /23.3	u ₁₀ /23.4	u ₁₀ /23.5	u ₁₀ /23.6	u ₁₀ /23.7	u ₁₀ /23.8	u ₁₀ /23.9	u ₁₀ /24.0	u ₁₀ /24.1	u ₁₀ /24.2	u ₁₀ /24.3	u ₁₀ /24.4	u ₁₀ /24.5	u ₁₀ /24.6	u ₁₀ /24.7	u ₁₀ /24.8	u ₁₀ /24.9	u ₁₀ /25.0	u ₁₀ /25.1	u ₁₀ /25.2	u ₁₀ /25.3	u ₁₀ /25.4	u ₁₀ /25.5	u ₁₀ /25.6	u ₁₀ /25.7	u ₁₀ /25.8	u ₁₀ /25.9	u ₁₀ /26.0	u ₁₀ /26.1	u ₁₀ /26.2	u ₁₀ /26.3	u ₁₀ /26.4	u ₁₀ /26.5	u ₁₀ /26.6	u ₁₀ /26.7	u ₁₀ /26.8	u ₁₀ /26.9	u ₁₀ /27.0	u ₁₀ /27.1	u ₁₀ /27.2	u ₁₀ /27.3	u ₁₀ /27.4	u ₁₀ /27.5	u ₁₀ /27.6	u ₁₀ /27.7	u ₁₀ /27.8	u ₁₀ /27.9	u ₁₀ /28.0	u ₁₀ /28.1	u ₁₀ /28.2	u ₁₀ /28.3	u ₁₀ /28.4	u ₁₀ /28.5	u ₁₀ /28.6	u ₁₀ /28.7	u ₁₀ /28.8	u ₁₀ /28.9	u ₁₀ /29.0	u ₁₀ /29.1	u ₁₀ /29.2	u ₁₀ /29.3	u ₁₀ /29.4	u ₁₀ /29.5	u ₁₀ /29.6	u ₁₀ /29.7	u ₁₀ /29.8	u ₁₀ /29.9	u ₁₀ /30.0	u ₁₀ /30.1	u ₁₀ /30.2	u ₁₀ /30.3	u ₁₀ /30.4	u ₁₀ /30.5	u ₁₀ /30.6	u ₁₀ /30.7	u ₁₀ /30.8	u ₁₀ /30.9	u ₁₀ /31.0	u ₁₀ /31.1	u ₁₀ /31.2	u ₁₀ /31.3	u ₁₀ /31.4	u ₁₀ /31.5	u ₁₀ /31.6	u ₁₀ /31.7	u ₁₀ /31.8	u ₁₀ /31.9	u ₁₀ /32.0	u ₁₀ /32.1	u ₁₀ /32.2	u ₁₀ /32.3	u ₁₀ /32.4	u ₁₀ /32.5	u ₁₀ /32.6	u ₁₀ /32.7	u ₁₀ /32.8	u ₁₀ /32.9	u ₁₀ /33.0	u ₁₀ /33.1	u ₁₀ /33.2	u ₁₀ /33.3	u ₁₀ /33.4	u ₁₀ /33.5	u ₁₀ /33.6	u ₁₀ /33.7	u ₁₀ /33.8	u ₁₀ /33.9	u ₁₀ /34.0	u ₁₀ /34.1	u ₁₀ /34.2	u ₁₀ /34.3	u ₁₀ /34.4	u ₁₀ /34.5	u ₁₀ /34.6	u ₁₀ /34.7	u ₁₀ /34.8	u ₁₀ /34.9	u ₁₀ /35.0	u ₁₀ /35.1	u ₁₀ /35.2	u ₁₀ /35.3	u ₁₀ /35.4	u ₁₀ /35.5	u ₁₀ /35.6	u ₁₀ /35.7	u ₁₀ /35.8	u ₁₀ /35.9	u ₁₀ /36.0	u ₁₀ /36.1	u ₁₀ /36.2	u ₁₀ /36.3	u ₁₀ /36.4	u ₁₀ /36.5	u ₁₀ /36.6	u ₁₀ /36.7	u ₁₀ /36.8	u ₁₀ /36.9	u ₁₀ /37.0	u ₁₀ /37.1	u ₁₀ /37.2	u ₁₀ /37.3	u ₁₀ /37.4	u ₁₀ /37.5	u ₁₀ /37.6	u ₁₀ /37.7	u ₁₀ /37.8	u ₁₀ /37.9	u ₁₀ /38.0	u ₁₀ /38.1	u ₁₀ /38.2	u ₁₀ /38.3	u ₁₀ /38.4	u ₁₀ /38.5	u ₁₀ /38.6	u ₁₀ /38.7	u ₁₀ /38.8	u ₁₀ /38.9	u ₁₀ /39.0	u ₁₀ /39.1	u ₁₀ /39.2	u ₁₀ /39.3	u ₁₀ /39.4	u ₁₀ /39.5	u ₁₀ /39.6	u ₁₀ /39.7	u ₁₀ /39.8	u ₁₀ /39.9	u ₁₀ /40.0	u ₁₀ /40.1	u ₁₀ /40.2	u ₁₀ /40.3	u ₁₀ /40.4	u ₁₀ /40.5	u ₁₀ /40.6	u ₁₀ /40.7	u ₁₀ /40.8	u ₁₀ /40.9	u ₁₀ /41.0	u ₁₀ /41.1	u ₁₀ /41.2	u ₁₀ /41.3	u ₁₀ /41.4	u ₁₀ /41.5	u ₁₀ /41.6	u ₁₀ /41.7	u ₁₀ /41.8	u ₁₀ /41.9	u ₁₀ /42.0	u ₁₀ /42.1	u ₁₀ /42.2	u ₁₀ /42.3	u ₁₀ /42.4	u ₁₀ /42.5	u ₁₀ /42.6	u ₁₀ /42.7	u ₁₀ /42.8	u ₁₀ /42.9	u ₁₀ /43.0	u ₁₀ /43.1	u ₁₀ /43.2	u ₁₀ /43.3	u ₁₀ /43.4	u ₁₀ /43.5	u ₁₀ /43.6	u ₁₀ /43.7	u ₁₀ /43.8	u ₁₀ /43.9	u ₁₀ /44.0	u ₁₀ /44.1	u ₁₀ /44.2	u ₁₀ /44.3	u ₁₀ /44.4	u ₁₀ /44.5	u ₁₀ /44.6	u ₁₀ /44.7	u ₁₀ /44.8	u ₁₀ /44.9	u ₁₀ /45.0	u ₁₀ /45.1	u ₁₀ /45.2	u ₁₀ /45.3	u ₁₀ /45.4	u ₁₀ /45.5	u ₁₀ /45.6	u ₁₀ /45.7	u ₁₀ /45.8	u ₁₀ /45.9	u ₁₀ /46.0	u ₁₀ /46.1	u ₁₀ /46.2	u ₁₀ /46.3	u ₁₀ /46.4	u ₁₀ /46.5	u ₁₀ /46.6	u ₁₀ /46.7	u ₁₀ /46.8	u ₁₀ /46.9	u ₁₀ /47.0	u ₁₀ /47.1	u ₁₀ /47.2	u ₁₀ /47.3	u ₁₀ /47.4	u ₁₀ /47.5	u ₁₀ /47.6	u ₁₀ /47.7	u ₁₀ /47.8	u ₁₀ /47.9	u ₁₀ /48.0	u ₁₀ /48.1	u ₁₀ /48.2	u ₁₀ /48.3	u ₁₀ /48.4	u ₁₀ /48.5	u ₁₀ /48.6	u ₁₀ /48.7	u ₁₀ /48.8	u ₁₀ /48.9	u ₁₀ /49.0	u ₁₀ /49.1	u ₁₀ /49.2	u ₁₀ /49.3	u ₁₀ /49.4	u ₁₀ /49.5	u ₁₀ /49.6	u ₁₀ /49.7	u ₁₀ /49.8	u ₁₀ /49.9	u ₁₀ /50.0	u ₁₀ /50.1	u ₁₀ /50.2	u ₁₀ /50.3	u ₁₀ /50.4	u ₁₀ /50.5	u ₁₀ /50.6	u ₁₀ /50.7	u ₁₀ /50.8	u ₁₀ /50.9	u ₁₀ /51.0	u ₁₀ /51.1	u ₁₀ /51.2	u ₁₀ /51.3	u ₁₀ /51.4	u ₁₀ /51.5	u ₁₀ /51.6	u ₁₀ /51.7	u ₁₀ /51.8	u ₁₀ /51.9	u ₁₀ /52.0	u ₁₀ /52.1	u ₁₀ /52.2	u ₁₀ /52.3	u ₁₀ /52.4	u ₁₀ /52.5	u ₁₀ /52.6	u ₁₀ /52.7	u ₁₀ /52.8	u ₁₀ /52.9	u ₁₀ /53.0	u ₁₀ /53.1	u ₁₀ /53.2	u ₁₀ /53.3	u ₁₀ /53.4	u ₁₀ /53.5	u ₁₀ /53.6	u ₁₀ /53.7	u ₁₀ /53.8	u ₁₀ /53.9	u ₁₀ /54.0	u ₁₀ /54.1	u ₁₀ /54.2	u ₁₀ /54.3	u ₁₀ /54.4	u ₁₀ /54.5	u ₁₀ /54.6	u ₁₀ /54.7	u ₁₀ /54.8	u ₁₀ /54.9	u ₁₀ /55.0	u ₁₀ /55.1	u ₁₀ /55.2	u ₁₀ /55.3	u ₁₀ /55.4	u ₁₀ /55.5	u ₁₀ /55.6	u ₁₀ /55.7	u ₁₀ /55.8	u ₁₀ /55.9	u ₁₀ /56.0	u ₁₀ /56.1	u ₁₀ /56.2	u ₁₀ /56.3	u ₁₀ /56.4	u ₁₀ /56.5	u ₁₀ /56.6	u ₁₀ /56.7	u ₁₀ /56.8	u ₁₀ /56.9	u ₁₀ /57.0	u ₁₀ /57.1	u ₁₀ /57.2	u ₁₀ /57.3	u ₁₀ /57.4	u ₁₀ /57.5	u ₁₀ /57.6	u ₁₀ /57.7	u ₁₀ /57.8	u ₁₀ /57.9	u ₁₀ /58.0	u ₁₀ /58.1	u ₁₀ /58.2	u ₁₀ /58.3	u ₁₀ /58.4	u ₁₀ /58.5	u ₁₀ /58.6	u ₁₀ /58.7	u ₁₀ /58.8	u ₁₀ /58.9	u ₁₀ /59.0	u ₁₀ /59.1	u ₁₀ /59.2	u ₁₀ /59.3	u ₁₀ /59.4	u ₁₀ /59.5	u ₁₀ /59.6	u ₁₀ /59.7	u ₁₀ /59.8	u ₁₀ /59.9	u ₁₀ /60.0	u ₁₀ /60.1	u ₁₀ /60.2	u ₁₀ /60.3	u ₁₀ /60.4	u ₁₀ /60.5	u ₁₀ /60.6	u ₁₀ /60.7	u ₁₀ /60.8	u ₁₀ /60.9	u ₁₀ /61.0	u ₁₀ /61.1	u ₁₀ /61.2	u ₁₀ /61.3	u ₁₀ /61.4	u ₁₀ /61.5	u ₁₀ /61.6	u ₁₀ /61.7	u ₁₀ /61.8	u ₁₀ /61.9	u ₁₀ /62.0	u ₁₀ /62.1	u ₁₀ /62.2	u ₁₀ /62.3	u ₁₀ /62.4	u ₁₀ /62.5	u ₁₀ /62.6



Indiana Department of Environmental Management

We Protect Hoosiers and Our Environment.

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Michael R. Pence
Governor

Carol S. Comer
Commissioner

March 30, 2016

Mr. Clint McGinty
Metal Services LLC dba Phoenix Services LLC
148 West State Street # 301
Kennett Square, Pennsylvania 19348

Re: Public Notice
Metal Services LLC dba Phoenix Services LLC
Permit Level: Title V- Renewal Administrative Permit
Permit Number: 127-36307-00026

Dear Mr. McGinty:

Enclosed is a copy of your draft Title V- Renewal Administrative Permit, Technical Support Document, emission calculations, and the Public Notice which will be printed in your local newspaper.

The Office of Air Quality (OAQ) has prepared two versions of the Public Notice Document. The abbreviated version will be published in the newspaper, and the more detailed version will be made available on the IDEM's website and provided to interested parties. Both versions are included for your reference. The OAQ has requested that the Chesterton Tribune in Chesterton, Indiana publish the abbreviated version of the public notice no later than April 4, 2016. You will not be responsible for collecting any comments, nor are you responsible for having the notice published in the newspaper.

OAQ has submitted the draft permit package to the Westchester Public Library, 200 W. Indiana Avenue in Chesterton, Indiana. As a reminder, you are obligated by 326 IAC 2-1.1-6(c) to place a copy of the complete permit application at this library no later than ten (10) days after submittal of the application or additional information to our department. We highly recommend that even if you have already placed these materials at the library, that you confirm with the library that these materials are available for review and request that the library keep the materials available for review during the entire permitting process.

Please review the enclosed documents carefully. This is your opportunity to comment on the draft permit and notify the OAQ of any corrections that are needed before the final decision. Questions or comments about the enclosed documents should be directed to Phillip Joseph, Indiana Department of Environmental Management, Office of Air Quality, 100 N. Senate Avenue, Indianapolis, Indiana, 46204 or call (800) 451-6027, and ask for extension 3-4228 or dial (317) 233-4228.

Sincerely,

Vicki Biddle

Vicki Biddle
Permits Branch
Office of Air Quality

Enclosures
PN Applicant Cover letter 2/17/2016



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ATTENTION: PUBLIC NOTICES, LEGAL ADVERTISING

March 30, 2016

Chesterton Tribune
P. O. BOX 919
Chesterton, Indiana 46307

Enclosed, please find one Indiana Department of Environmental Management Notice of Public Comment for Metal Services LLC dba Phoenix Services LLC, Porter County, Indiana.

Since our agency must comply with requirements which call for a Notice of Public Comment, we request that you print this notice one time, no later than April 4, 2016.

Please send a notarized form, clippings showing the date of publication, and the billing to the Indiana Department of Environmental Management, Accounting, Room N1345, 100 North Senate Avenue, Indianapolis, Indiana, 46204.

To ensure proper payment, please reference account # 100174737.

We are required by the Auditor's Office to request that you place the Federal ID Number on all claims. If you have any conflicts, questions, or problems with the publishing of this notice or if you do not receive complete public notice information for this notice, please call Phillip Joseph at 800-451-6027 and ask for extension 3-4228 or dial 317-233-4228.

Sincerely,

Vicki Biddle

Vicki Biddle
Permit Branch
Office of Air Quality

Permit Level: Title V- Renewal Administrative Permit
Permit Number: 127-36307-00026

Enclosure

PN Newspaper.dot 2/17/2016



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Michael R. Pence
Governor

Carol S. Comer
Commissioner

March 30, 2016

To: Westchester Public Library

From: Matthew Stuckey, Branch Chief
Permits Branch
Office of Air Quality

Subject: **Important Information to Display Regarding a Public Notice for an Air Permit**

**Applicant Name: Metal Services LLC dba Phoenix Services LLC,
Permit Number: 127-36307-00026**

Enclosed is a copy of important information to make available to the public. This proposed project is regarding a source that may have the potential to significantly impact air quality. Librarians are encouraged to educate the public to make them aware of the availability of this information. The following information is enclosed for public reference at your library:

- Notice of a 30-day Period for Public Comment
- Request to publish the Notice of 30-day Period for Public Comment
- Draft Permit and Technical Support Document

You will not be responsible for collecting any comments from the citizens. Please refer all questions and request for the copies of any pertinent information to the person named below.

Members of your community could be very concerned in how these projects might affect them and their families. **Please make this information readily available until you receive a copy of the final package.**

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. Questions pertaining to the permit itself should be directed to the contact listed on the notice.

Enclosures
PN Library.dot 2/17/2016



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Michael R. Pence
Governor

Carol S. Comer
Commissioner

Notice of Public Comment

March 30, 2016
Metal Services LLC dba Phoenix Services LLC,
127-36307-00026

Dear Concerned Citizen(s):

You have been identified as someone who could potentially be affected by this proposed air permit. The Indiana Department of Environmental Management, in our ongoing efforts to better communicate with concerned citizens, invites your comment on the draft permit.

Enclosed is a Notice of Public Comment, which has been placed in the Legal Advertising section of your local newspaper. The application and supporting documentation for this proposed permit have been placed at the library indicated in the Notice. These documents more fully describe the project, the applicable air pollution control requirements and how the applicant will comply with these requirements.

If you would like to comment on this draft permit, please contact the person named in the enclosed Public Notice. Thank you for your interest in the Indiana's Air Permitting Program.

Please Note: *If you feel you have received this Notice in error, or would like to be removed from the Air Permits mailing list, please contact Patricia Pear with the Air Permits Administration Section at 1-800-451-6027, ext. 3-6875 or via e-mail at PPEAR@IDEM.IN.GOV. If you have recently moved and this Notice has been forwarded to you, please notify us of your new address and if you wish to remain on the mailing list. Mail that is returned to IDEM by the Post Office with a forwarding address in a different county will be removed from our list unless otherwise requested.*

Enclosure
PN AAA Cover.dot 2/17/2016

Mail Code 61-53

IDEM Staff	VBIDDLE 3/30/2016 Metal Services LLC dba Phoenix Services LLC 127- 36307-00026 DRAFT		AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING	
Name and address of Sender		Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204	Type of Mail: CERTIFICATE OF MAILING ONLY	

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		Clint McGinty Metal Services LLC dba Phoenix Services LLC -contr 148 W State St #301 Kennett Square PA 19348 (Source CAATS)										
2		Keith Flynn GM Metal Services LLC dba Phoenix Services LLC -contr PO Box 619 Chesterton IN 46304-0619 (RO CAATS)										
3		Westchester Public Library 200 W Indiana Ave Chesterton IN 46304-3122 (Library)										
4		Porter County Board of Commissioners 155 Indiana Ave, Ste 205 Valparaiso IN 46383 (Local Official)										
5		Porter County Health Department 155 Indiana Ave, Suite 104 Valparaiso IN 46383-5502 (Health Department)										
6		Shawn Sobocinski 5950 Old Porter Rd Aprt 306 Portage IN 46368-1558 (Affected Party)										
7		Mr. Ed Dybel 2440 Schrage Avenue Whiting IN 46394 (Affected Party)										
8		Mr. Joseph Virgil 128 Kinsale Avenue Valparaiso IN 46385 (Affected Party)										
9		Mark Coleman 8 Turret Rd. Portage IN 46368-1072 (Affected Party)										
10		Mr. Dennis Hahney Pipefitters Association, Local Union 597 1461 East Summit St Crown Point IN 46307 (Affected Party)										
11		Ms. Kathy Luther Northern Regional Planning Commission 6100 Southport Rd Portage IN 46368 (Affected Party)										
12		Burns Harbor Town Council 1240 N. Boo Rd Burns Harbor IN 46304 (Local Official)										
13		Eric & Sharon Haussman 57 Shore Drive Ogden Dunes IN 46368 (Affected Party)										
14		Vice President and General Manager ISG Burns Harbor 260 W US Hwy 12 Burns Harbor IN 46304 (Source ? addl contact)										
15		Susan Grenzebach ST Environmental, LLC PO Box 2557 Chesterton IN 46034-2557 (Consultant)										

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 Domestic Mail Manual R900, S913, and S921 for limitations of coverage on inured and COD mail. See International Mail Manual for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.
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Mail Code 61-53

IDEM Staff	VBIDDLE 3/30/2016 Metal Services LLC dba Phoenix Services LLC - 127- 36307-00026 DRAFT			AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender	▶	Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204	Type of Mail: CERTIFICATE OF MAILING ONLY	

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 Hero 11723 S Oakridge Drive St. John IN 46373 (Affected Party)									
2		Responsible Official Arcelor Mittal 250 W. Highway 12 Burns Harbor IN 46304 (Source – addl contact)									
3											
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Total number of pieces Listed by Sender 2	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 Domestic Mail Manual R900, S913, and S921 for limitations of coverage on inured and COD mail. See International Mail Manual for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.
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