



Indiana Department of Environmental Management

We Protect Hoosiers and Our Environment.

100 N. Senate Avenue • Indianapolis, IN 46204

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

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Governor

Carol S. Comer
Commissioner

NOTICE OF 30-DAY PERIOD FOR PUBLIC COMMENT

Preliminary Findings Regarding a
Significant Revision to a
Federally Enforceable State Operating Permit (FESOP)

for Harsco Minerals Briquetting, LLC in Lake County

Significant Permit Revision No.: 089-36924-00323

The Indiana Department of Environmental Management (IDEM) has received an application from Harsco Minerals Briquetting, LLC, located at 5222 Indianapolis Blvd, East Chicago, Indiana 46312, for a significant revision of its FESOP issued on June 3, 2008. If approved by IDEM's Office of Air Quality (OAQ), this proposed revision would allow Harsco Minerals Briquetting, LLC to make certain changes at its existing source. Harsco Minerals Briquetting, LLC has applied to install two (2) new baghouses. The first baghouse, identified as S20, exhausting to stack S20, will control existing conveyors, feed hopper, transfer screws, pug mill, and transfer points located at Plant 2, which are currently uncontrolled. The particulate matter emissions from these existing emissions units exhaust inside the building, and this dust collector is being installed to improve air quality for employees in the facility. The second baghouse, identified as S21, exhausting to stack S21, will control the truck loading station that is currently uncontrolled. PM, PM10, and PM2.5 pound per hour limits have been adjusted for some of the Plant 2 and Plant 3 emissions units as shown in the Proposed Changes section of the TSD.

This draft significant revision to a FESOP 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.

IDEM is aware that the truck loading station has been constructed and operated prior to receipt of the proper permit. IDEM is reviewing this matter and will take appropriate action. This draft FESOP contains provisions to bring unpermitted equipment into compliance with construction and operation permit rules.

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

East Chicago Public Library
1008 W. Chicago Ave.
East Chicago, IN 46312

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 SPR 089-36924-00323 in all correspondence.

Comments should be sent to:

Joshua Levering
IDEM, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
(800) 451-6027, ask for extension 4-6543
Or dial directly: (317) 234-6543
Fax: (317) 232-6749 attn: Joshua Levering
E-mail: JLeverin@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.

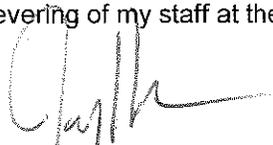
For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Permit Guide on the Internet at: <http://www.in.gov/idem/5881.htm>; and the Citizens' Guide to IDEM on the Internet at: <http://www.in.gov/idem/6900.htm>.

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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 Joshua Levering of my staff at the above address.



Jenny Acker, Section Chief
Permits Branch
Office of Air Quality



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Guy Kosmoski
Harsco Minerals Briquetting, LLC
5222 Indianapolis Blvd.
East Chicago, Indiana 46312

Re: 089-36924-00323
Significant Revision to
F089-23324-00323

Dear Guy Kosmoski:

Harsco Minerals Briquetting, LLC was issued a Federally Enforceable State Operating Permit (FESOP) Renewal No. F089-23324-00323 on June 3, 2008 for a stationary briquette manufacturing plant located at 5222 Indianapolis Blvd, East Chicago, Indiana 46312. On March 8, 2016, the Office of Air Quality (OAQ) received an application from the source requesting to install two (2) new baghouses on existing emissions units and adjust some of the current PSD Minor Limits. The attached Technical Support Document (TSD) provides additional explanation of the changes to the source/permit. Pursuant to the provisions of 326 IAC 2-8-11.1, these changes to the permit are required to be reviewed in accordance with the Significant Permit Revision (SPR) procedures of 326 IAC 2-8-11.1(f). Pursuant to the provisions of 326 IAC 2-8-11.1, a significant permit revision to this permit is hereby approved as described in the attached Technical Support Document (TSD).

Pursuant to 326 IAC 2-8-11.1, this permit shall be revised by incorporating the significant permit revision into the permit.

All other conditions of the permit shall remain unchanged and in effect. Please find attached the entire FESOP as revised. The permit references the below listed attachment. Since this attachment has been provided in previously issued approvals for this source, IDEM OAQ has not included a copy of this attachment with this revision:

Attachment A: Fugitive Dust Control Plan

Previously issued approvals for this source containing these attachments are available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>.

Federal rules under Title 40 of United States Code of Federal Regulations may also be found on the U.S. Government Printing Office's Electronic Code of Federal Regulations (eCFR) website, located on the Internet at: http://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title40/40tab_02.tpl.

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

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Joshua Levering of my staff at 317-234-6543 or 1-800-451-6027, and ask for extension 4-6543.

Sincerely,

Jenny Acker, Section Chief
Permits Branch
Office of Air Quality

Attachments: Technical Support Document and revised permit

JA/jl

cc: File - Lake County
Lake County Health Department
U.S. EPA, Region V
Compliance and Enforcement Branch



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Federally Enforceable State Operating Permit Renewal OFFICE OF AIR QUALITY

**Harsco Minerals Briquetting, LLC
5222 Indianapolis Blvd.
East Chicago, Indiana 46312**

(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. 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 2-8 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.

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a FESOP under 326 IAC 2-8.

Operation Permit No.: F089-23324-00323	
Issued by: Iryn Calilung, Section Chief Permits Branch Office of Air Quality	Issuance Date: June 3, 2008 Expiration Date: June 3, 2018
First Administrative Amendment No.: 089-26691-00323, issued on July 2, 2008 Minor Permit Revision No.: 089-30936-00323, issued on November 1, 2011 Significant Permit Revision No.: F089-34560-00323, issued on September 10, 2014	
Significant Permit Revision No.: F089-36924-00323	
Issued by: Jenny Acker, Section Chief Permits Branch Office of Air Quality	Issuance Date: Expiration Date: June 3, 2018



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SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 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 2-8-3(b)]

The Permittee owns and operates a stationary briquette manufacturing plant.

Source Address:	5222 Indianapolis Blvd., East Chicago, Indiana 46312
General Source Phone Number:	(219) 392-1403
SIC Code:	3399
County Location:	Lake
Source Location Status:	Nonattainment for 8-hour ozone standard Attainment for all other criteria pollutants
Source Status:	Federally Enforceable State Operating Permit Program Minor Source, under PSD and Emission Offset Rules Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

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

Plant 1

- (a) One (1) natural gas fired dryer and a cyclone dust collection system, identified as unit A, rated at 25 million British thermal units (Btu) per hour, with a maximum production capacity of 20 tons per hour, constructed November 1978 and relined in 2007, using a jetpulse baghouse system as the control, installed in June 2007, exhausting to stack S5.
- (b) One (1) raw material use silo, identified as Silo #1, with a maximum capacity of 60 tons, particulate dust from the natural gas fired dryer (unit A) (plant 1) baghouse and cyclone dust collection system are sent to the storage silo by bucket elevator, constructed April 1987, using a jetpulse baghouse system as the control, installed in June 2007, exhausting to stack S5.
- (c) One (1) north bulk powder blue silo, identified as Silo #2, with a maximum production capacity of 0.525 tons per hour, using bin vents as the control, constructed May 1973, exhausting to stack S1.
- (d) One (1) south bulk powder blue silo, identified as Silo #3, with a maximum production capacity of 0.35 tons per hour, using bin vents as the control, constructed May 1973, exhausting to stack S2.

Plant 2

- (e) One (1) Muller mixer and one (1) bucket elevator #1, collectively identified as Briquette Line #1, with a capacity of 15 tons per hour, using a reverse air baghouse dust collection system as the control, constructed April 1987, exhausting to stack S8.

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- (f) One (1) hopper, one (1) shaker, one (1) briquetter, three (3) screw discharges, one (1) discharge conveyer, one (1) feed belt conveyer, two (2) Muller belts, one (1) pug mill, one (1) bucket elevator #2, and one (1) briquette conveyor, using a dust collector as control, identified as S20, exhausting to stack S20, each with a maximum capacity of 12 tons per hour, each located on the large briquetting line, constructed April 1987, except the pug mill and bucket elevator #2 were constructed in 1996.
- (g) One (1) storage/processing tank, identified as Tank #1, located on the large briquetting line, with a maximum storage capacity of 30 tons, using bin vents as the control, constructed April 1987, exhausting at stack S6.
- (h) One (1) storage/processing tank, identified as Tank #2, located on the large briquetting line, with a maximum storage capacity of 20 tons, using bin vents as the control, constructed April 1987, exhausting at stack S7.
- (i) One (1) mixer, identified as Desulf Station # 1, located on the bagging line, with a maximum production capacity of 15 tons per hour, using a pulsing air baghouse as the control, constructed June 1982, exhausting at stack S12.
- (j) One (1) mixer, identified as Desulf Station #2, located on the bagging line, with a maximum production capacity of 15 tons per hour, using a pulsing air baghouse as the control, constructed in 2001, exhausting at stack S13.

Plant 3

- (k) One (1) bulk powder storage silo, identified as Portland Cement Silo #3, located on the small briquetting line, with a maximum storage capacity of 60 tons, using bin vents as the control, constructed April 1987, exhausting at stack S3.
- (l) One (1) feeder, pug mill and briquette press, located on the small briquetting line, identified as Briquetting Line Pug Mill, with a maximum production capacity of six (6) tons per hour, constructed in 1987, using a pulse jet baghouse as control, replaced in 2014, and exhausting to stack S11.
- (m) Three (3) high calcium lime storage silos, identified as Lime Silo #1, Lime Silo #2, and Lime Silo #4, located on the bagging line, each with a maximum storage capacity of 30 tons, each using bin vents as the control, constructed April 1987, exhausting at stacks S14, S15, and S16, respectively.
- (n) One (1) dolo lime storage silo, identified as Lime Silo #3, located on the bagging line, with a maximum storage capacity of 30 tons, using bin vents as the control, constructed April 1987, exhausting at stack S17.

Plant 4

- (o) One (1) ford station, identified as Ford Station #1, constructed September 1980, using a pulsing air baghouse as the control, exhausting at stack S9.

Plant 5

- (p) One (1) mixing and bagging system with a maximum capacity of 21 tons of limestone, fluorspar or alumina and slag per hr, constructed in 2011, equipped with a baghouse to control particulates, exhausting at stack S18, consisting of the following:
 - (1) One (1) front loader to transfer material into four (4) individual small bins, with maximum capacity of 21 tons/hr each.

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- (2) Four (4) small bin conveyors to transfer material into main product conveyor, with maximum capacity of 21 tons/hr each.
- (3) One (1) main product conveyor to bagging station equipped with hopper, maximum capacity of 21 tons/hr.
- (4) One (1) automated bagging hopper to fill bags, maximum capacity of 21 tons/hr.

Truck Loading Station

One (1) truck loading station, constructed in 1987, with a maximum capacity of twenty-five (25) tons per hour, using a dust collector as control, identified as S21, and exhausting to stack S21.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-8-3(c)(3)(I)]

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 one hundred forty-five (145) gallons per twelve (12) months, except if subject to 326 IAC 20-6. [326 IAC 8-3]
- (b) One (1) mixer/scale, identified as the Bagging Line Mixer/Scale, located on the Plant 2 bagging line, with a maximum capacity of 2.5 tons per batch, constructed June 1981. [326 IAC 6.8-1-2(a)]

A.4 Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-8-3(c)(3)(I)]

This stationary source also includes the following insignificant activities:

- (a) Paved and unpaved roads and parking lots with public access.
- (b) One (1) 9,000 gallon molasses storage tank.
- (c) Combustion source flame safety purging on startup.
- (d) A petroleum fuel, other than gasoline, dispensing facility, having a storage tank capacity less than or equal to ten thousand five hundred (10,500) gallons, and dispensing three thousand five hundred (3,500) gallons per day or less.
- (e) Storage tanks with capacity less than or equal to one thousand (1,000) gallons and annual throughputs less than twelve thousand (12,000) gallons.
- (f) Vessels storing lubricating oils, hydraulic oils, machining oils and machining fluids.
- (g) Filling drums, pails or other packaging containers with lubricating oils, waxes and greases.
- (h) Application of oils, greases, lubricants or other nonvolatile materials applied temporary protective coatings.
- (i) Closed loop heating and cooling systems.
- (j) Solvent recycling systems with batch capacity of less than or equal to one hundred (100) gallons.

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- (k) Replacement or repair of electrostatic precipitators, bags in baghouse and filters in other air filter equipment.
- (l) Blowdown for any of the following: sight glass, compressors, boiler, pumps and cooling towers.
- (m) Emergency gasoline generators not exceeding one hundred ten (110) horsepower.
- (n) A laboratory as defined in 326 IAC 2-7-1(21)(D).

A.5 FESOP Applicability [326 IAC 2-8-2]

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) to renew a Federally Enforceable State Operating Permit (FESOP).

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SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-8-1]

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 2-8-4(2)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)]

- (a) This permit, F089-23324-00323, is issued for a fixed term of ten (10) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.
- (b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, until the renewal permit has been issued or denied.

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

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

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

B.4 Enforceability [326 IAC 2-8-6][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 2-8-4(4)]

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 2-8-4(5)(D)]

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

B.7 Duty to Provide Information [326 IAC 2-8-4(5)(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 2-8-3(d)][326 IAC 2-8-4(3)(C)(i)][326 IAC 2-8-5(1)]

- (a) A certification required by this permit meets the requirements of 326 IAC 2-8-5(a)(1) if:

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- (1) it contains a certification by an "authorized individual", as defined by 326 IAC 2-1.1-1(1), 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) An "authorized individual" is defined at 326 IAC 2-1.1-1(1).

B.9 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

- (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

- (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 2-8-4(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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

B.10 Compliance Order Issuance [326 IAC 2-8-5(b)]

IDEM, OAQ may issue a compliance order to this Permittee upon discovery that this permit is in nonconformance with an applicable requirement. The order may require immediate compliance or contain a schedule for expeditious compliance with the applicable requirement.

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B.11 Preventive Maintenance Plan [326 IAC 1-6-3][326 IAC 2-8-4(9)]

- (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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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- (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.12 Emergency Provisions [326 IAC 2-8-12]

- (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 except as provided in 326 IAC 2-8-12.

- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or 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 2-8-4(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and

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(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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (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 2-8-3(c)(6) 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 2-8 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
- (1) 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.
 - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
 - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
 - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

Any operations shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

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

- (a) All terms and conditions of permits established prior to F089-23324-00323 and issued pursuant to permitting programs approved into the state implementation plan have been either:
- (1) incorporated as originally stated,
 - (2) revised, or

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(3) deleted.

(b) All previous registrations and permits are superseded by this permit.

B.14 Termination of Right to Operate [326 IAC 2-8-9][326 IAC 2-8-3(h)]

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 2-8-3(h) and 326 IAC 2-8-9.

**B.15 Permit Modification, Reopening, Revocation and Reissuance, or Termination
[326 IAC 2-8-4(5)(C)][326 IAC 2-8-7(a)][326 IAC 2-8-8]**

(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Federally Enforceable State 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 2-8-4(5)(C)] The notification by the Permittee does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(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 2-8-8(a)]

(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 2-8-8(b)]

(d) The reopening and revision of this permit, under 326 IAC 2-8-8(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 2-8-8(c)]

B.16 Permit Renewal [326 IAC 2-8-3(h)]

(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 2-8-3. 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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue

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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 2-8 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 2-8-3(g), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.17 Permit Amendment or Revision [326 IAC 2-8-10][326 IAC 2-8-11.1]

- (a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.18 Operational Flexibility [326 IAC 2-8-15][326 IAC 2-8-11.1]

- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-8-15(b) and (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 approval required by 326 IAC 2-8-11.1 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:

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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 2-8-15(b)(1) and (c). 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 2-8-15(b)(1) and (c).

- (b) **Emission Trades [326 IAC 2-8-15(b)]**
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 2-8-15(b).
- (c) **Alternative Operating Scenarios [326 IAC 2-8-15(c)]**
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 2-8-4(7). No prior notification of IDEM, OAQ or U.S. EPA is required.
- (d) 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.19 Source Modification Requirement [326 IAC 2-8-11.1]

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

B.20 Inspection and Entry [326 IAC 2-8-5(a)(2)][IC 13-14-2-2][IC 13-17-3-2][IC 13-30-3-1]

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

- (a) Enter upon the Permittee's premises where a FESOP source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

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- (b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.21 Transfer of Ownership or Operational Control [326 IAC 2-8-10]

- (a) The Permittee must comply with the requirements of 326 IAC 2-8-10 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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.22 Annual Fee Payment [326 IAC 2-7-19][326 IAC 2-8-4(6)][326 IAC 2-8-16][326 IAC 2-1.1-7]

- (a) The Permittee shall pay annual fees to IDEM, OAQ no later than 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) 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.23 Credible Evidence [326 IAC 2-8-4(3)][326 IAC 2-8-5][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

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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.

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SECTION C SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-8-4(1)]

C.1 Overall Source Limit [326 IAC 2-8]

The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

- (a) Pursuant to 326 IAC 2-8:
 - (1) The potential to emit any regulated pollutant, except particulate matter (PM), from the entire source shall be limited to less than one hundred (100) tons per twelve (12) consecutive month period.
 - (2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and
 - (3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.
- (b) Pursuant to 326 IAC 2-2 (PSD), potential to emit particulate matter (PM) from the entire source shall be limited to less than two hundred fifty (250) tons per twelve (12) consecutive month period.
- (c) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided that the source's potential to emit does not exceed the above specified limits.
- (d) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

C.2 Opacity [326 IAC 5-1]

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

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

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

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

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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).

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

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

- (a) The average instantaneous opacity of fugitive particulate emissions from a paved road shall not exceed ten percent (10%).
- (b) The average instantaneous opacity of fugitive particulate emissions from an unpaved road shall not exceed ten percent (10%).
- (c) The opacity of fugitive particulate emissions from exposed areas shall not exceed ten percent (10%) on a six (6) minute average.
- (d) The opacity of fugitive particulate emissions from continuous transfer of material onto and out of storage piles shall not exceed ten percent (10%) on a three (3) minute average.
- (e) The opacity of fugitive particulate emissions from storage piles shall not exceed ten percent (10%) on a six (6) minute average.
- (f) There shall be a zero (0) percent frequency of visible emission observations of a material during the inplant transportation of material by truck or rail at any time.
- (g) The opacity of fugitive particulate emissions from the inplant transportation of material by front end loaders and skip hoists shall not exceed ten percent (10%).
- (h) Material processing facilities shall include the following:
 - (1) There shall be a zero (0) percent frequency of visible emission observations from a building enclosing all or part of the material processing equipment, except from a vent in the building.
 - (2) The PM₁₀ emissions from building vents shall not exceed twenty-two thousandths (0.022) grains per dry standard cubic foot and ten percent (10%) opacity.
 - (3) The PM₁₀ stack emissions from a material processing facility shall not exceed twenty-two thousandths (0.022) grains per dry standard cubic foot and ten percent (10%) opacity.
 - (4) The opacity of fugitive particulate emissions from the material processing facilities, except a crusher at which a capture system is not used, shall not exceed ten percent (10%) opacity.
 - (5) The opacity of fugitive particulate emissions from a crusher at which a capture system is not used shall not exceed fifteen percent (15%).

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- (i) The opacity of particulate emissions from dust handling equipment shall not exceed ten percent (10%).
- (j) Material transfer limits shall be as follows:
 - (1) The average instantaneous opacity of fugitive particulate emissions from batch transfer shall not exceed ten percent (10%).
 - (2) Where adequate wetting of the material for fugitive particulate emissions control is prohibitive to further processing or reuse of the material, the opacity shall not exceed ten percent (10%), three (3) minute average.
 - (3) Slag and kish handling activities at integrated iron and steel plants shall comply with the following particulate emissions limits:
 - (A) The opacity of fugitive particulate emissions from transfer from pots and trucks into pits shall not exceed twenty percent (20%) on a six (6) minute average.
 - (B) The opacity of fugitive particulate emissions from transfer from pits into front end loaders and from transfer from front end loaders into trucks shall comply with the fugitive particulate emission limits in 326 IAC 6.8-10-3(9).
- (k) Any facility or operation not specified in 326 IAC 6.8-10-3 shall meet a twenty percent (20%), three (3) minute average opacity standard.

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

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

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

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

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

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- (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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (e) **Procedures for Asbestos Emission Control**
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Demolition and Renovation**
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).
- (g) **Indiana 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.

Testing Requirements [326 IAC 2-8-4(3)]

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

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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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the Permittee submits to IDEM, OAQ a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

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

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

Compliance Monitoring Requirements [326 IAC 2-8-4(1)][326 IAC 2-8-5(a)(1)]

C.11 Compliance Monitoring [326 IAC 2-8-4(3)][326 IAC 2-8-5(a)(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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

C.12 Continuous Compliance Plan [326 IAC 6.8-8-1][326 IAC 6.8-8-8]

- (a) Pursuant to 326 IAC 326 IAC 6.8-8-1, the Permittee shall submit to IDEM and maintain at source a copy of the Continuous Compliance Plan (CCP). The Permittee shall perform

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the inspections, monitoring and record keeping in accordance with the information in 326 IAC 6.8-8-5 through 326 IAC 6.8-8-7 or applicable procedures in the CCP.

- (b) Pursuant to 326 IAC 6.8-8-8, the Permittee shall update the CCP, as needed, retain a copy of any changes and updates to the CCP at the source and make the updated CCP available for inspection by the department. The Permittee shall submit the updated CCP, if required to IDEM, OAQ within thirty (30) days of the update.
- (c) Pursuant to 326 IAC 6.8-8, failure to submit a CCP, maintain all information required by the CCP at the source, or submit update to a CCP is a violation of 326 IAC 6.8-8.

C.13 Instrument Specifications [326 IAC 2-1.1-11][326 IAC 2-8-4(3)][326 IAC 2-8-5(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 2-8-4][326 IAC 2-8-5(a)(1)]

C.14 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.15 Risk Management Plan [326 IAC 2-8-4][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.16 Response to Excursions or Exceedances [326 IAC 2-8-4][326 IAC 2-8-5]

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;

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- (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.17 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4][326 IAC 2-8-5]

- (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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

C.18 General Record Keeping Requirements [326 IAC 2-8-4(3)][326 IAC 2-8-5]

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. 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 FESOP.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.

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- (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.19 General Reporting Requirements [326 IAC 2-8-4(3)(C)][326 IAC 2-1.1-11]

- (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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1). 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.

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.

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SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Plant 1

- (a) One (1) natural gas fired dryer and a cyclone dust collection system, identified as unit A, rated at 25 million British thermal units (Btu) per hour, with a maximum production capacity of 20 tons per hour, constructed November 1978 and relined in 2007, using a jetpulse baghouse system as the control, installed in June 2007, exhausting to stack S5.
- (b) One (1) raw material use silo, identified as Silo #1, with a maximum capacity of 60 tons, particulate dust from the natural gas fired dryer (unit A) (plant 1) baghouse and cyclone dust collection system are sent to the storage silo by bucket elevator, constructed April 1987, using a jetpulse baghouse system as the control, installed in June 2007, exhausting to stack S5.

(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 2-8-4(1)]

D.1.1 Particulate Matter (PM10) [326 IAC 6.8-2]

Pursuant to 326 IAC 6.8-2-25 (Lake County: PM10 and total suspended particulate emissions):

- (a) The PM10 emissions from the dryer, (Unit A), shall not exceed 4.060 pounds per hour and 0.203 pounds per ton of material processed.
- (b) The PM10 emissions from the raw material use (Silo #1) shall not exceed 0.68 pounds per hour and 0.034 pounds per ton of material processed.

D.1.2 PSD Minor Limit PM [326 IAC 2-2]

- (a) The PM emissions from the dryer, (Unit A) and raw material use silo (Silo #1), shall not exceed 5.0 pounds per hour.

Compliance with these limits, combined with the potential to emit PM from all other emission units, shall limit the PM from the entire source to less than two-hundred fifty (250) tons per twelve (12) consecutive month period and render 326 IAC 2-2 (PSD) not applicable.

D.1.3 FESOP and PSD Minor Limits PM10 and PM2.5 [326 IAC 2-8-4][326 IAC 2-2]

Pursuant to 326 IAC 2-8-4 (FESOP) and in order to render the requirements of 326 IAC 2-2 (PSD) not applicable, the Permittee shall comply with the following emission limits:

- (a) The total PM10 emissions from the dryer, (Unit A) and raw material use silo (Silo #1), shall not exceed 5.0 pounds per hour.
- (b) The total PM2.5 emissions from the dryer, (Unit A) and raw material use silo (Silo #1), shall not exceed 5.0 pounds per hour.

Compliance with these limits, combined with the potential to emit PM10 and PM2.5 from all other emission units, shall limit PM10 and PM2.5 emissions from the entire source to less than one-hundred (100) tons per twelve (12) consecutive month period, each, and renders the requirements of 326 IAC 2-7 (Part 70) and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

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D.1.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

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

Compliance Determination Requirements [326 IAC 2-8-4(1)]

D.1.5 Testing Requirements [326 IAC 2-1.1-11]

In order to demonstrate compliance with Condition D.1.1, the Permittee shall perform PM10 testing of the dryer (Unit A) utilizing methods as approved by the Commissioner at least once every five (5) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

D.1.6 Particulate Control

In order to ensure compliance with Conditions D.1.1, D.1.2, and D.1.3 the baghouse for particulate control shall be in operation and control emissions from the dryer facility at all times the dryer facility is in operation.

In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

Compliance Monitoring Requirements [326 IAC 2-8-4][326 IAC 2-8-5(a)(1)]

D.1.7 Visible Emissions Notations

- (a) Visible emission notations of the drying system stack exhausts (S5) 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 a reasonable response. Section C – Response to Excursions and 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.

D.1.8 Broken or Failed Bag Detection

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

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event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B- Emergency Provisions).

- (b) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B- Emergency Provisions).

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

Record Keeping and Reporting Requirement [326 IAC 2-8-4(3)]

D.1.9 Record Keeping Requirements

- (a) To document the compliance status with Condition D.1.7, the Permittee shall maintain records of daily visible emission notations of the baghouse(s) stack exhausts. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).
- (b) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required by this condition.

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SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Plant 1

- (c) One (1) north bulk powder blue silo, identified as Silo #2, with a maximum production capacity of 0.525 tons per hour, using bin vents as the control, constructed May 1973, exhausting to stack S1.
- (d) One (1) south bulk powder blue silo, identified as Silo #3, with a maximum production capacity of 0.35 tons per hour, using bin vents as the control, constructed May 1973, exhausting to stack S2.

Plant 2

- (e) One (1) Muller mixer and one (1) bucket elevator #1, collectively identified as Briquette Line #1, with a capacity of 15 tons per hour, using a reverse air baghouse dust collection system as the control, constructed April 1987, exhausting to stack S8.
- (f) One (1) hopper, one (1) shaker, one (1) briquetter, three (3) screw discharges, one (1) discharge conveyer, one (1) feed belt conveyor, two (2) Muller belts, one (1) pug mill, one (1) bucket elevator #2, and one (1) briquette conveyor, using a dust collector as control, identified as S20, exhausting to stack S20, each with a maximum capacity of 12 tons per hour, each located on the large briquetting line, constructed April 1987, except the pug mill and bucket elevator #2 were constructed in 1996.
- (g) One (1) storage/processing tank, identified as Tank #1, located on the large briquetting line, with a maximum storage capacity of 30 tons, using bin vents as the control, constructed April 1987, exhausting at stack S6.
- (h) One (1) storage/processing tank, identified as Tank #2, located on the large briquetting line, with a maximum storage capacity of 20 tons, using bin vents as the control, constructed April 1987, exhausting at stack S7.

(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 2-8-4(1)]

D.2.1 Particulate Matter (PM10) [326 IAC 6.8-2]

Pursuant to 326 IAC 6.8-2-25 (Lake County: PM-10 and total suspended particulate emissions):

- (a) The PM10 emissions from the north bulk powder blue silo (Silo #2) shall not exceed 0.012 pounds per hour and 0.001 pounds per ton of material processed.
- (b) The PM10 emissions from the south bulk powder blue silo (Silo #3) shall not exceed 0.012 pounds per hour and 0.001 pounds per ton of material processed.
- (c) The PM10 emissions from the mixer and bucket elevator (Briquette Line #1) shall not exceed 0.68 pounds per hour and 0.034 pounds per ton of material processed.
- (d) The PM10 emissions from the storage/processing tank (Tank #1) shall not exceed 0.68 pounds per hour and 0.034 pounds per ton of material processed.
- (e) The PM10 emissions from the storage/processing tank (Tank #2) shall not exceed 0.68 pounds per hour and 0.034 pounds per ton of material processed.

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D.2.2 PSD Minor Limit PM [326 IAC 2-2]

- (a) The PM emissions from the north bulk powder blue silo (Silo #2) shall not exceed 0.025 pounds per hour.
- (b) The PM emissions from the south bulk powder blue silo (Silo #3) shall not exceed 0.025 pounds per hour.
- (c) The PM emissions from the mixer and bucket elevator (Briquette Line #1) shall not exceed 0.50 pounds per hour.
- (d) The PM emissions from the one (1) hopper, one (1) shaker, one (1) briquetter, three (3) screw discharges, one (1) discharge conveyor, one (1) feed belt conveyor, two (2) Muller belts, one (1) pug mill, one (1) bucket elevator #2, and one (1) briquette conveyor, using a dust collector as control, identified as S20, exhausting to stack S20, shall not exceed 4.00 pounds per hour.
- (e) The PM emissions from the storage/processing tank (Tank #1) shall not exceed 0.30 pounds per hour.
- (f) The PM emissions from the storage/processing tank (Tank #2) shall not exceed 0.30 pounds per hour.

Compliance with these limits, combined with the potential to emit PM from all other emission units, shall limit the PM from the entire source to less than two-hundred fifty (250) tons per twelve (12) consecutive month period and render 326 IAC 2-2 (PSD) not applicable.

D.2.3 FESOP and PSD Minor Limits PM10 and PM2.5 [326 IAC 2-8-1][326 IAC 2-2]

Pursuant to 326 IAC 2-8-4 (FESOP) and in order to render the requirements of 326 IAC 2-2 (PSD) not applicable, the Permittee shall comply with the following emission limits:

- (a) The PM10 and PM2.5 emissions from the north bulk powder blue silo (Silo #2) shall not exceed 0.025 pounds per hour, each.
- (b) The PM10 and PM2.5 emissions from the south bulk powder blue silo (Silo #3) shall not exceed 0.025 pounds per hour, each.
- (c) The PM10 and PM2.5 emissions from the mixer and bucket elevator (Briquette Line #1) shall not exceed 0.50 pounds per hour, each.
- (d) The PM10 and PM2.5 emissions from the one (1) hopper, one (1) shaker, one (1) briquetter, three (3) screw discharges, one (1) discharge conveyor, one (1) feed belt conveyor, two (2) Muller belts, one (1) pug mill, one (1) bucket elevator #2, and one (1) briquette conveyor, using a dust collector as control, identified as S20, exhausting to stack S20, shall not exceed 4.00 pounds per hour.
- (e) The PM10 and PM2.5 emissions from the storage/processing tank (Tank #1) shall not exceed 0.30 pounds per hour, each.
- (f) The PM10 and PM2.5 emissions from the storage/processing tank (Tank #2) shall not exceed 0.30 pounds per hour, each.

Compliance with these limits, combined with the potential to emit PM10 and PM2.5 from all other emission units, shall limit PM10 and PM2.5 emissions from the entire source to less than one-hundred (100) tons per twelve (12) consecutive month period, each, and renders the

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requirements of 326 IAC 2-7 (Part 70) and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.2.4 Particulate Emission Limitations [326 IAC 6.8-1-2]

Pursuant to 326 IAC 6.8-1-2, the particulate emissions from each stack for the following emission units: one (1) hopper, one (1) shaker, one (1) briquetter, three (3) screw discharges, one (1) discharge conveyer, one (1) feed belt conveyor, two (2) Muller belts, one (1) pug mill, one (1) bucket elevator #2, and one (1) briquette conveyor, shall not exceed 0.03 gr/dscf.

D.2.5 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

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

Compliance Determination Requirements [326 IAC 2-8-4(1)]

D.2.6 Particulate Control

- (a) In order to ensure compliance with Conditions D.2.1, D.2.2, and D.2.3 the baghouses for particulate control shall be in operation and control emissions from the mixer and bucket elevator (Briquette Line #1) facilities, one (1) hopper, one (1) shaker, one (1) briquetter, three (3) screw discharges, one (1) discharge conveyer, one (1) feed belt conveyor, two (2) Muller belts, one (1) pug mill, one (1) bucket elevator #2, and one (1) briquette conveyor, at all times these emissions units are in operation.

In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

- (b) In order to ensure compliance with Conditions D.2.1, D.2.2, and D.2.3 the bin vents for particulate control shall be in operation and control emissions from the north and south bulk blue powder silos and the storage/processing tanks facilities at all times the north and south bulk blue powder silos and the storage/processing tanks facilities are in operation.

Compliance Monitoring Requirements [326 IAC 2-8-4(1)][326 IAC 2-8-5(a)(1)]

D.2.7 Visible Emissions Notations

- (a) Daily visible emission notations of the mixer and bucket elevator (Briquette Line #1) stack exhausts (S8 & S20) shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) Visible emission notations of the north and south bulk powder silos (S1 & S2) and storage/processing tanks (S6 & S7) stack exhausts shall be performed once per day during normal daylight operations when the associated facilities are being filled. A trained employee shall record whether emissions are normal or abnormal.
- (c) 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.
- (d) In the case of batch or discontinuous operations, readings shall be taken during that part

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of the operation that would normally be expected to cause the greatest emissions.

- (e) 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.
- (f) If abnormal emissions are observed, the Permittee shall take a reasonable response. Section C – Response to Excursions and 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.

D.2.8 Broken or Failed Bag Detection

- (a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B- Emergency Provisions).
- (b) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B- Emergency Provisions).

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

Record Keeping and Reporting Requirement [326 IAC 2-8-4(3)]

D.2.9 Record Keeping Requirements

- (a) To document the compliance status with Condition D.2.7, the Permittee shall maintain records of daily visible emission notations of the baghouse and bin vent stack exhausts. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).
- (b) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required by this condition.

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SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Plant 2

- (h) One (1) mixer, identified as Desulf Station # 1, located on the bagging line, with a maximum production capacity of 15 tons per hour, using a pulsing air baghouse as the control, constructed June 1982, exhausting at stack S12.
- (i) One (1) mixer, identified as Desulf Station #2, located on the bagging line, with a maximum production capacity of 15 tons per hour, using a pulsing air baghouse as the control, constructed in 2001, exhausting at stack S13.

Plant 3

- (j) One (1) bulk powder storage silo, identified as Portland Cement Silo #3, located on the small briquetting line, with a maximum storage capacity of 60 tons, using bin vents as the control, constructed April 1987, exhausting at stack S3.
- (k) One (1) feeder, pug mill and briquette press, located on the small briquetting line, identified as Briquetting Line Pug Mill, with a maximum production capacity of six (6) tons per hour, constructed in 1987, using a pulse jet baghouse as control, replaced in 2014, and exhausting to stack S11.
- (l) Three (3) high calcium lime storage silos, identified as Lime Silo #1, Lime Silo #2, and Lime Silo #4, located on the bagging line, each with a maximum storage capacity of 30 tons, each using bin vents as the control, constructed April 1987, exhausting at stacks S14, S15, and S16, respectively;
- (m) One (1) dolo lime storage silo, identified as Lime Silo #3, located on the bagging line, with a maximum storage capacity of 30 tons, using bin vents as the control, constructed April 1987, exhausting at stack S17.

Plant 4

- (n) One (1) ford station, identified as Ford Station #1, constructed September 1980, using a pulsing air baghouse as the control, exhausting at stack S9.

Plant 5

- (o) One (1) mixing and bagging system with a maximum capacity of 21 tons of limestone, fluorspar or alumina and slag per hr, constructed in 2011, equipped with a baghouse to control particulates, exhausting at stack S18, consisting of the following:
 - (1) One (1) front loader to transfer material into four (4) individual small bins, with maximum capacity of 21 tons/hr each.
 - (2) Four (4) small bin conveyors to transfer material into main product conveyor, with maximum capacity of 21 tons/hr each.
 - (3) One (1) main product conveyor to bagging station equipped with hopper, maximum capacity of 21 tons/hr.
 - (4) One (1) automated bagging hopper to fill bags, maximum capacity of 21 tons/hr.

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Truck Loading Station

One (1) truck loading station, constructed in 1987, with a maximum capacity of twenty-five (25) tons per hour, using a dust collector as control, identified as S21, and exhausting to stack S21.

(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 2-8-4(1)]

D.3.1 Particulate Matter (PM10) [326 IAC 6.8-2-2]

Pursuant to 326 IAC 6.8-2-25 (Lake County: PM-10 and total suspended particulate emissions):

- (a) The PM10 emissions from the bulk powder storage silo (Portland Cement Silo #3) shall not exceed 0.68 pounds per hour and 0.034 pounds per ton of material processed.
- (b) The PM10 emissions from the mixer (Desulf Station #1) shall not exceed 0.68 pounds per hour and 0.034 pounds per ton of material processed.
- (c) The PM10 emissions from the mixer (Desulf Station #2) shall not exceed 0.68 pounds per hour and 0.034 pounds per ton of material processed.
- (d) The PM10 emissions from the high calcium lime storage silos (Lime Silo #1, Lime Silo #2, and Lime Silo #4) shall not exceed 0.68 pounds per hour and 0.034 pounds per ton of material processed.
- (e) The PM10 emissions from the dolo lime storage silo (Lime Silo #3) shall not exceed 0.68 pounds per hour and 0.034 pounds per ton of material processed.
- (f) The PM10 emissions from Ford Station #1 shall not exceed 0.68 pounds per hour and 0.034 pounds per ton of material processed.

D.3.2 PSD Minor Limit PM [326 IAC 2-2]

- (a) The PM emissions from the bulk powder storage silo (Portland Cement Silo #3) shall not exceed 0.30 pounds per hour.
- (b) The PM emissions from the mixer (Desulf Station #1) shall not exceed 0.40 pounds per hour.
- (c) The PM emissions from the mixer (Desulf Station #2) shall not exceed 0.40 pounds per hour.
- (d) The PM emissions from the feeder, pug mill and briquette press, (Briquetting Line Pug Mill) shall not exceed 2.75 pounds per hour.
- (e) The PM emissions from the high calcium lime storage silo (Lime Silo #1, Lime Silo #2, and Lime Silo #4) shall not exceed 0.30 pounds per hour.
- (f) The PM emissions from the dolo lime storage silo (Lime Silo #3) shall not exceed 0.30 pounds per hour.
- (g) The PM emissions from Ford Station #1 shall not exceed 0.68 pounds per hour.
- (h) The PM emissions from the Plant 5 mixing and bagging operation shall not exceed

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0.025 pounds per hour.

- (i) The PM emissions from the Truck Loading Station shall not exceed 2.50 pounds per hour.

Compliance with these limits, combined with the potential to emit PM from all other emission units, shall limit the PM from the entire source to less than two-hundred fifty (250) tons per twelve (12) consecutive month period and render 326 IAC 2-2 (PSD) not applicable.

D.3.3 FESOP and PSD Minor Limits PM10 and PM2.5 [326 IAC 2-8-4][326 IAC 2-2]

Pursuant to 326 IAC 2-8-4 (FESOP) and in order to render the requirements of 326 IAC 2-2 (PSD) not applicable, the Permittee shall comply with the following emission limits:

- (a) The PM10 and PM2.5 emissions from the bulk powder storage silo (Portland Cement Silo #3) shall not exceed 0.30 pounds per hour, each.
- (b) The PM10 and PM2.5 emissions from the mixer (Desulf Station #1) shall not exceed 0.40 pounds per hour, each.
- (c) The PM10 and PM2.5 emissions from the mixer (Desulf Station #2) shall not exceed 0.40 pounds per hour, each.
- (d) The total PM10 and PM2.5 emissions from the feeder, pug mill and briquette press, (Briquetting Line Pug Mill) shall not exceed 2.75 pounds per hour, each.
- (e) The total PM10 and PM2.5 emissions from the high calcium lime storage silos (Lime Silo #1, Lime Silo #2, and Lime Silo #4) shall not exceed 0.30 pounds per hour, each.
- (f) The PM10 and PM2.5 emissions from the dolo lime storage silo (Lime Silo #3) shall not exceed 0.30 pounds per hour, each.
- (g) The PM10 and PM2.5 emissions from Ford Station #1 shall not exceed 0.68 pounds per hour, each.
- (h) The total PM10 and PM2.5 emissions from the Plant 5 mixing and bagging operation shall not exceed 0.025 pounds per hour, each.
- (i) The PM10 and PM2.5 emissions from the Truck Loading Station shall not exceed 2.50 pounds per hour, each.

Compliance with these limits, combined with the potential to emit PM10 and PM2.5 from all other emission units, shall limit PM10 and PM2.5 emissions from the entire source to less than one-hundred (100) tons per twelve (12) consecutive month period and renders the requirements of 326 IAC 2-7 (Part 70) and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.3.4 Particulate Emission Limitations [326 IAC 6.8-1-2]

Pursuant to 326 IAC 6.8-1-2, the particulate emissions from each stack for the following emission units; Plant 5 mixer, bin conveyors, and bagging hopper exhausting to stack S18 and Briquetting Line Pug Mill exhausting to stack S11, and the truck loading station exhausting to stack S21, shall not exceed 0.03 gr/dscf.

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D.3.5 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

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

Compliance Determination Requirements [326 IAC 2-8-4(1)]

D.3.6 Particulate Control

- (a) In order to ensure compliance with Conditions D.3.1, D.3.2, D.3.3, and D.3.4 the baghouses for particulate control shall be in operation and control emissions from the Ford Station #1, the Briquetting Line Pug Mill, Desulf Station #1, and Desulf Station #2 facilities at all times the Ford Station #1, the Briquetting Line Pug Mill, Desulf Station #1 and Desulf Station #2 facilities are in operation.

In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

- (b) In order to ensure compliance with Conditions D.3.1, D.3.2, and D.3.3 the bin vents for particulate control shall be in operation and control emissions from the four (4) lime storage silo facilities at all times the four (4) lime storage silo facilities are in operation.
- (c) In order to ensure compliance with Conditions D.3.1 and D.3.3 the dust collector for particulate control, identified as S21, shall be in operation and control emissions from the truck loading station at all times the truck loading station is in operation.

Compliance Monitoring Requirements [326 IAC 2-8-4(1)][326 IAC 2-8-5(a)(1)]

D.3.7 Visible Emissions Notations

- (a) Visible emission notations of the Ford Station #1 (S9), Briquetting Line Pug Mill (S11), Desulf Station #1 (S12), and Desulf Station #2 (S13) stack exhausts shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) Visible emission notations of the four (4) lime storage silos (S14, S15, S16, and S17) and Portland Cement Silo #3 (S3) exhaust vents shall be performed once per day during normal daylight operations when the associated facilities are being filled. A trained employee shall record whether emissions are normal or abnormal.
- (c) Visible emission notations of the Plant 5 exhaust stack (S18) and the truck loading station (S21) shall be performed once per day during normal daylight operations when the associated facilities are in operation. A trained employee shall record whether emissions are normal or abnormal.
- (d) 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.
- (e) 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.
- (f) A trained employee is an employee who has worked at the plant at least one (1) month

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and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

- (g) If abnormal emissions are observed, the Permittee shall take a reasonable response. Section C – Response to Excursions and 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.

D.3.8 Broken or Failed Bag Detection

- (a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
- (b) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

Record Keeping and Reporting Requirement [326 IAC 2-8-4(3)]

D.3.9 Record Keeping Requirements

- (a) To document the compliance status with Condition D.3.7, the Permittee shall maintain records of daily visible emission notations of the baghouse(s) stack exhausts. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).
- (b) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required by this condition.

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SECTION D.4 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Insignificant Activities

- (b) One (1) mixer/scale, identified as the Bagging Line Mixer/Scale, located on the Plant 2 bagging line, with a maximum capacity of 2.5 tons per batch, constructed June 1981. [326 IAC 6.8-1-2(a)]

(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 2-8-4(1)]

D.4.1 Particulate Matter Limitations for Lake County [326 IAC 6.8]

Pursuant to 326 IAC 6.8-1-2(a) particulate emissions from the mixer/scale shall not exceed 0.03 grains per dry standard cubic foot (dscf).

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SECTION D.5 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Insignificant Activities

- (a) Degreasing operations that do not exceed one hundred forty-five (145) gallons per twelve (12) months, except if subject to 326 IAC 20-6. [326 IAC 8-3]

(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 2-8-4(1)]

D.5.1 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Degreaser Control and Equipment 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 subdivisions (3), (4), (6), and (7).
 - (6) Store waste solvent only in covered containers.
 - (7) Prohibit the dispose 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 clauses (A) through (D) that is approved by the department. An alternative system shall be submitted to the U.S. EPA as a SIP revision.

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- (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.5.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-8]

Pursuant to 326 IAC 8-3-8 (Material Requirements for Cold Cleaner Degreasers), the Permittee shall not operate a cold cleaner degreaser with a solvent that has a VOC composite partial vapor pressure that exceeds one (1) millimeter 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 2-8-4(3)]

D.5.3 Record Keeping Requirements

- (a) To document the compliance status with Condition D.5.2, 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 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 date 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 obligations with regard to the records required by this condition.

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

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
CERTIFICATION**

Source Name: Harsco Minerals Briquetting, LLC
Source Address: 5222 Indianapolis Blvd., East Chicago, Indiana 46312
FESOP Permit No.: F089-23324-00323

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:

Date:

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**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**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
EMERGENCY OCCURRENCE REPORT**

Source Name: Harsco Minerals Briquetting, LLC
Source Address: 5222 Indianapolis Blvd., East Chicago, Indiana 46312
FESOP Permit No.: F089-23324-00323

This form consists of 2 pages

Page 1 of 2

<input type="checkbox"/> This is an emergency as defined in 326 IAC 2-7-1(12) <ul style="list-style-type: none">• 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 2-8-12

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:

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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 Describe:
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: _____

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**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: Harsco Minerals Briquetting, LLC
Source Address: 5222 Indianapolis Blvd., East Chicago, Indiana 46312
FESOP Permit No.: F089-23324-00323

Months: _____ to _____ Year: _____

Page 1 of 2

<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:	

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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: _____

**Indiana Department of Environmental Management
Office of Air Quality**

Technical Support Document (TSD) for a Significant Permit Revision to a
Federally Enforceable State Operating Permit (FESOP) Renewal

Source Description and Location

Source Name: Harsco Minerals Briquetting, LLC
Source Location: 5222 Indianapolis Blvd, East Chicago, Indiana 46312
County: Lake
SIC Code: 3399 (Primary Metal Products, Not Elsewhere Classified)
Operation Permit No.: F089-23324-00323
Operation Permit Issuance Date: June 3, 2008
Significant Permit Revision No.: 089-36924-00323
Permit Reviewer: Joshua Levering

On March 8, 2016, the Office of Air Quality (OAQ) received an application from Harsco Minerals Briquetting, LLC related to a modification to an existing stationary briquette manufacturing plant.

Existing Approvals

The source was issued FESOP Renewal No. F089-23324-00323 on June 3, 2008. The source has since received the following approvals:

Permit Number	Issuance Date
Administrative Amendment No. 089-26691-00323	July 2, 2008
Minor Permit Revision No. 089-30936-00323	November 1, 2011
Significant Permit Revision No. 089-34560-00323	September 10, 2014

County Attainment Status

The source is located in Lake County.

Pollutant	Designation
SO ₂	Better than national standards.
CO	Attainment effective February 18, 2000, for the part of the city of East Chicago bounded by Columbus Drive on the north; the Indiana Harbor Canal on the west; 148 th Street, if extended, on the south; and Euclid Avenue on the east. Unclassifiable or attainment effective November 15, 1990, for the remainder of East Chicago and Lake County.
O ₃	On June 11, 2012, the U.S. EPA designated Lake County nonattainment, for the 8-hour ozone standard. ¹²
PM _{2.5}	Unclassifiable or attainment effective February 6, 2012, for the annual PM _{2.5} standard.
PM _{2.5}	Unclassifiable or attainment effective December 13, 2009, for the 24-hour PM _{2.5} standard.
PM ₁₀	Attainment effective March 11, 2003, for the cities of East Chicago, Hammond, Whiting, and Gary. Unclassifiable effective November 15, 1990, for the remainder of Lake County.
NO ₂	Cannot be classified or better than national standards.
Pb	Unclassifiable or attainment effective December 31, 2011.

Pollutant	Designation
	<p>¹The U. S. EPA has acknowledged in both the proposed and final rulemaking for this redesignation that the anti-backsliding provisions for the 1-hour ozone standard no longer apply as a result of the redesignation under the 8-hour ozone standard. Therefore, permits in Lake County are no longer subject to review pursuant to Emission Offset, 326 IAC 2-3 for the 1-hour standard.</p> <p>²The department has filed a legal challenge to U.S. EPA's designation in 77 FR 34228.</p>

- (a) **Ozone Standards**
U.S. EPA, in the Federal Register Notice 77 FR 112 dated June 11, 2012, has designated Lake 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}**
Lake 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**
Lake County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Fugitive Emissions

Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2, 326 IAC 2-3, or 326 IAC 2-7, and there is no applicable New Source Performance Standard that was in effect on August 7, 1980, fugitive emissions are not counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

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Status of the Existing Source

The table below summarizes the potential to emit of the entire source, prior to the proposed revision, after consideration of all enforceable limits established in the effective permits:

This PTE table is from the TSD of Significant Permit Revision No. 089-34560-00323, issued on September 10, 2014.

Process/ Emission Unit	Potential To Emit of the Entire Source Prior to Revision (tons/year)								Total HAPs
	PM	PM10	PM2.5	SO ₂	NO _x	VOC	CO		
Plant 1									
Dryer				6.44x10 ⁻²	10.74	0.59	9.02		0.20
Raw Material Use Silo #1	21.90	21.90	21.90	--	--	--	--		--
North Bulk Powder Silo#2	5.26x10 ⁻²	5.26x10 ⁻²	5.26x10 ⁻²	--	--	--	--		--
South Bulk Powder Silo #3	5.26x10 ⁻²	5.26x10 ⁻²	5.26x10 ⁻²	--	--	--	--		--
Plant 2									
Mixer & Bucket Elevator Briquette Line #1	2.98	2.98	2.98	--	--	--	--		--
Storage/Process ing Tank #1	2.98	2.98	2.98	--	--	--	--		--
Storage/Process ing Tank #2	2.98	2.98	2.98	--	--	--	--		--
Mixer Desulf Station #1	2.98	2.98	2.98	--	--	--	--		--
Mixer Desulf Station #2	2.98	2.98	2.98	--	--	--	--		--
Plant 3									
Portland Cement Storage Silo #3	2.98	2.98	2.98	--	--	--	--		--
Feeder, Pug Mill and Briquette Press Briquetting Line Pug Mill	12.05	12.05	12.05	--	--	--	--		--
High Calcium Lime Storage Silo #1	2.98	2.98	2.98	--	--	--	--		--
High Calcium Lime Storage Silo #2	2.98	2.98	2.98	--	--	--	--		--
High Calcium Lime Storage Silo #4	2.98	2.98	2.98	--	--	--	--		--

Process/ Emission Unit	Potential To Emit of the Entire Source Prior to Revision (tons/year)								
	PM	PM10	PM2.5	SO ₂	NO _x	VOC	CO		Total HAPs
Dolo Lime Storage Silo #3	2.98	2.98	2.98	--	--	--	--		--
Plant 4									
Ford Station #1	2.98	2.98	2.98	--	--	--	--		--
Plant 5									
Mixing and Bagging System	0.11	0.11	0.11	--	--	--	--		--
Loader Traffic	2.75	0.55	0.13	--	--	--	--		--
Conveying & Handling	0.25	0.12	1.76x10 ⁻²	--	--	--	--		--
Insignificant Activities									
Degreaser	--	--	--	--	--	0.49	--		9.72x10 ⁻⁴
Total not including fugitives	69.91	67.59	67.07	6.44x10⁻²	10.74	1.08	9.02		0.20
Fugitive Emissions									
Conveying/ Handling	0.25	0.12	1.76x10 ⁻²	--	--	--	--		--
Paved and Unpaved Roads	69.77	17.65	1.83	--	--	--	--		--
Storage Piles	1.48x10 ⁻³	5.18x10 ⁻⁴	5.18x10 ⁻⁴	--	--	--	--		--
Total PTE of Entire Source	139.93	85.35	68.93	6.44x10⁻²	10.74	1.08	9.02		0.20
Title V Major Source Thresholds**	NA	100	100	100	100	100	100		25
PSD Major Source Thresholds**	250	250	250	250	250	--	250		--
Emission Offset/ Nonattainment NSR Major Source Thresholds	--	--	--	--	100	100	--		--
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} .									

- (a) This existing source is not a major stationary source under PSD (326 IAC 2-2), because no PSD regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not 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 63.41, because the unlimited potential to emit HAPs is 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).

Description of Proposed Revision

The Office of Air Quality (OAQ) has reviewed an application, submitted by Harsco Minerals Briquetting, LLC on March 8, 2016, relating to the installation of two (2) new baghouses. The first baghouse, identified as S20, exhausting to stack S20, will control existing conveyors, feed hopper, transfer screws, pug mill, and transfer points located at Plant 2, which are currently uncontrolled and previously unidentified in the permit. The particulate matter emissions from these existing emissions units exhaust inside the building, and this dust collector is being installed to improve air quality for employees in the facility. The second baghouse, identified as S21, exhausting to stack S21, will control the truck loading station that is currently uncontrolled. The truck loading station is not currently in the permit. This emissions unit was historically referenced in the original FESOP application, received January 22, 1996. PM10 and PM2.5 pound per hour limits have been adjusted for some of the Plant 2 and Plant 3 emissions units as shown in the Proposed Changes section below. Additionally, the applicability of 326 IAC 6.8-2-25 (Lake County: PM10 and total suspended particulate emissions) has been reviewed.

The following is a list of the existing emissions units and new pollution control devices:

Plant 2

- (f) One (1) hopper, one (1) shaker, one (1) briquetter, three (3) screw discharges, one (1) discharge conveyor, one (1) feed belt conveyor, two (2) Muller belts, one (1) pug mill, one (1) bucket elevator #2, and one (1) briquette conveyor, using a dust collector as control, identified as S20, exhausting to stack S20, each with a maximum capacity of 12 tons per hour, each located on the large briquetting line, constructed April 1987, except the pug mill and bucket elevator #2 were constructed in 1996.

Truck Loading Station

One (1) truck loading station, constructed in 1987, with a maximum capacity of twenty-five (25) tons per hour, using a dust collector as control, identified as S21, and exhausting to stack S21.

Enforcement Issues

IDEM is aware that equipment has been constructed and operated prior to receipt of the proper permit. IDEM is reviewing this matter and will take the appropriate action. This proposed approval is intended to satisfy the requirements of the construction and operating permit rules.

Emission Calculations

See Appendix A of this TSD for detailed emission calculations.

Permit Level Determination – FESOP Revision

The following table is used to determine the appropriate permit level under 326 IAC 2-8-11.1 (Permit Revisions). This table reflects the PTE before controls of the proposed revision. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Process/ Emission Unit	PTE of Proposed Revision (tons/year)								
	PM	PM10	PM2.5	SO ₂	NO _x	VOC	CO	Total HAPs	Worst Single HAP
Plant 2: Three (3) screw discharges, one (1) discharge conveyor, one (1) feed belt conveyor, two (2) Muller belts, one (1) pug mill, and one (1) briquette conveyor (Dust Collector S20)	24,027.43	24,027.43	24,027.43	--	--	--	--	--	--
Truck Loading Station (Dust Collector S21)	18,771.43	18,771.43	18,771.43	--	--	--	--	--	--
Total PTE of Proposed Revision	42,798.86	42,798.86	42,798.86	--	--	--	--	--	--
negl. = negligible									

- (a) Pursuant to 326 IAC 2-8-11.1(f)(1)(E), this FESOP is being revised through a FESOP Significant Permit Revision because the proposed revision is not an Administrative Amendment or Minor Permit revision and the proposed revision involves a change in operation with potential to emit greater than or equal to twenty-five (25) tons per year of the following pollutants:
 - (i) PM, PM10, and direct PM2.5.
- (b) Pursuant to 326 IAC 2-8-11.1(f), this FESOP is being revised through a FESOP Significant Permit Revision because the proposed revision is not an Administrative Amendment or Minor Permit revision and the proposed revision involves adjusting FESOP and PM PSD minor limits.

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PTE of the Entire Source After Issuance of the FESOP Revision

The table below summarizes the potential to emit of the entire source, reflecting adjustment of existing limits, with updated emissions shown as **bold** values and previous emissions shown as ~~strikethrough~~ values.

Process/ Emission Unit	Potential To Emit of the Entire Source to accommodate the Proposed Revision (tons/year)							
	PM	PM10*	PM2.5**	SO ₂	NO _x	VOC	CO	Total HAPs
Plant 1								
Dryer				6.44x 10 ⁻²	10.74	0.59	9.02	0.20
Raw Material Use Silo #1	21.90	21.90	21.90	--	--	--	--	--
North Bulk Powder Silo#2	5.26x 10⁻² 0.11	5.26x 10⁻² 0.11	5.26x 10⁻² 0.11	--	--	--	--	--
South Bulk Powder Silo #3	5.26x 10⁻² 0.11	5.26x 10⁻² 0.11	5.26x 10⁻² 0.11	--	--	--	--	--
Plant 2								
Mixer & Bucket Elevator Briquette Line #1	2.98 2.19	2.98 2.19	2.98 2.19	--	--	--	--	--
Three (3) screw discharges, one (1) discharge conveyor, one (1) feed belt conveyor, two (2) Muller belts, one (1) pug mill, and one (1) briquette conveyor (Dust Collector S20)	17.52	17.52	17.52	--	--	--	--	--
Storage/Processing Tank #1	2.98 1.31	2.98 1.31	2.98 1.31	--	--	--	--	--
Storage/Processing Tank #2	2.98 1.31	2.98 1.31	2.98 1.31	--	--	--	--	--
Mixer Desulf Station #1	2.98 1.75	2.98 1.75	2.98 1.75	--	--	--	--	--
Mixer Desulf Station #2	2.98 1.75	2.98 1.75	2.98 1.75	--	--	--	--	--
Plant 3								
Portland Cement Storage Silo #3	2.98 1.31	2.98 1.31	2.98 1.31	--	--	--	--	--
Feeder, Pug Mill and Briquette Press Briquetting Line Pug Mill	12.05	12.05	12.05	--	--	--	--	--
High Calcium Lime Storage Silo #1	2.98 1.31	2.98 1.31	2.98 1.31	--	--	--	--	--
High Calcium Lime Storage Silo #2	2.98 1.31	2.98 1.31	2.98 1.31	--	--	--	--	--

Process/ Emission Unit	Potential To Emit of the Entire Source to accommodate the Proposed Revision (tons/year)							
	PM	PM10*	PM2.5**	SO ₂	NOx	VOC	CO	Total HAPs
High Calcium Lime Storage Silo #4	2.98 1.31	2.98 1.31	2.98 1.31	--	--	--	--	--
Dolo Lime Storage Silo #3	2.98 1.31	2.98 1.31	2.98 1.31	--	--	--	--	--
Plant 4								
Ford Station #1	2.98	2.98	2.98	--	--	--	--	--
Plant 5								
Mixing and Bagging System	0.11	0.11	0.11	--	--	--	--	--
Loader Traffic	2.75	0.55	0.13	--	--	--	--	--
Conveying & Handling	0.25	0.12	0.02	--	--	--	--	--
Truck Loading Station								
Truck Loading Station (Dust Collector S21)	10.95	10.95	10.95	--	--	--	--	--
Insignificant Activities								
Degreaser	--	--	--	--	--	0.49	--	9.72x10 ⁻⁴
PTE of the Entire Source (not including fugitives)	69.94 83.60	67.59 81.28	67.07 80.77	6.44x10 ⁻²	10.74	1.08	9.02	0.20
Title V Major Source Thresholds**	NA	100	100	100	100	100	100	25
PSD Major Source Thresholds**	250	250	250	250	250	--	250	--
Emission Offset/ Nonattainment NSR Major Source Thresholds	--	--	--	--	100	100	--	--
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} .								

The table below summarizes the potential to emit of the entire source after issuance of this revision, reflecting all limits, of the emission units. (Note: the table below was generated from the above table, with bold text un-bolded and strikethrough text deleted).

Process/ Emission Unit	Potential To Emit of the Entire Source to accommodate the Proposed Revision (tons/year)							
	PM	PM10*	PM2.5**	SO ₂	NO _x	VOC	CO	Total HAPs
Plant 1								
Dryer	21.90	21.90	21.90	6.44x 10 ⁻²	10.74	0.59	9.02	0.20
Raw Material Use Silo #1				--	--	--	--	--
North Bulk Powder Silo#2	0.11	0.11	0.11	--	--	--	--	--
South Bulk Powder Silo #3	0.11	0.11	0.11	--	--	--	--	--
Plant 2								
Mixer & Bucket Elevator Briquette Line #1	2.19	2.19	2.19	--	--	--	--	--
Three (3) screw discharges, one (1) discharge conveyer, one (1) feed belt conveyor, two (2) Muller belts, one (1) pug mill, and one (1) briquette conveyor (Dust Collector S20)	17.52	17.52	17.52	--	--	--	--	--
Storage/Processing Tank #1	1.31	1.31	1.31	--	--	--	--	--
Storage/Processing Tank #2	1.31	1.31	1.31	--	--	--	--	--
Mixer Desulf Station #1	1.75	1.75	1.75	--	--	--	--	--
Mixer Desulf Station #2	1.75	1.75	1.75	--	--	--	--	--
Plant 3								
Portland Cement Storage Silo #3	1.31	1.31	1.31	--	--	--	--	--
Feeder, Pug Mill and Briquette Press Briquetting Line Pug Mill	12.05	12.05	12.05	--	--	--	--	--
High Calcium Lime Storage Silo #1	1.31	1.31	1.31	--	--	--	--	--
High Calcium Lime Storage Silo #2	1.31	1.31	1.31	--	--	--	--	--
High Calcium Lime Storage Silo #4	1.31	1.31	1.31	--	--	--	--	--
Dolo Lime Storage Silo #3	1.31	1.31	1.31	--	--	--	--	--
Plant 4								

Process/ Emission Unit	Potential To Emit of the Entire Source to accommodate the Proposed Revision (tons/year)							
	PM	PM10*	PM2.5**	SO ₂	NO _x	VOC	CO	Total HAPs
Ford Station #1	2.98	2.98	2.98	--	--	--	--	--
Plant 5								
Mixing and Bagging System	0.11	0.11	0.11	--	--	--	--	--
Loader Traffic	2.75	0.55	0.13	--	--	--	--	--
Conveying & Handling	0.25	0.12	0.02	--	--	--	--	--
Truck Loading Station								
Truck Loading Station (Dust Collector S21)	10.95	10.95	10.95	--	--	--	--	--
Insignificant Activities								
Degreaser	--	--	--	--	--	0.49	--	9.72x10 ⁻⁴
PTE of the Entire Source (not including fugitives)	83.60	81.28	80.77	6.44x10⁻²	10.74	1.08	9.02	0.20
Title V Major Source Thresholds**	NA	100	100	100	100	100	100	25
PSD Major Source Thresholds**	250	250	250	250	250	--	250	--
Emission Offset/ Nonattainment NSR Major Source Thresholds	--	--	--	--	100	100	--	--
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} .								

(a) FESOP Status

This revision to an existing Title V minor stationary source will not change the minor status, because the potential to emit criteria pollutants and HAPs from the entire source will still be limited to less than the Title V major source threshold levels. Therefore, the source will still be subject to the provisions of 326 IAC 2-8 (FESOP).

(1) Criteria Pollutants

In order to comply with the requirements of 326 IAC 2-8-4 (FESOP), the source shall comply with the following:

- (1) The total PM10 and PM2.5 emissions from the three (3) screw discharges, one (1) discharge conveyer, one (1) feed belt conveyor, two (2) Muller belts, one (1) pug mill, and one (1) briquette conveyor (Dust Collector S20) shall not exceed 4.00 pounds per hour.

- (2) The total PM10 and PM2.5 emissions from the truck loading station (Dust Collector S21) shall not exceed 2.50 pounds per hour.

In order to ensure compliance with the above requirements, the dust collectors for particulate control shall be in operation and control emissions from the three (3) screw discharges, one (1) discharge conveyer, one (1) feed belt conveyor, two (2) Muller belts, one (1) pug mill, and one (1) briquette conveyor (Dust Collector S20) and the truck loading station (Dust Collector S21).

Compliance with these limits, combined with the potential to emit PM10 and PM2.5 from all other emission units at this source, shall limit the source-wide total potential to emit of PM10 and PM2.5 to less than 100 tons per twelve (12) consecutive month period, each, and shall render the requirements of 326 IAC 2-7 (Part 70 Permits) and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

(b) PSD Minor Source – PM

This modification to an existing PSD minor stationary source will not change the PSD minor status, because the potential to emit PM from the entire source will continue to be less than the PSD major source threshold levels. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

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

- (1) The total PM emissions from the three (3) screw discharges, one (1) discharge conveyer, one (1) feed belt conveyor, two (2) Muller belts, one (1) pug mill, and one (1) briquette conveyor (Dust Collector S20) shall not exceed 4.00 pounds per hour.
- (2) The total PM emissions from the truck loading station (Dust Collector S21) shall not exceed 2.50 pounds per hour.

In order to ensure compliance with the above requirements, the dust collector for particulate control shall be in operation and control emissions from the three (3) screw discharges, one (1) discharge conveyer, one (1) feed belt conveyor, two (2) Muller belts, one (1) pug mill, and one (1) briquette conveyor (Dust Collector S20) and the truck loading station (Dust Collector S21).

Compliance with these limits, combined with the potential to emit PM from all other emission units at this source, shall limit the source-wide total potential to emit of PM to less than 250 tons per twelve (12) consecutive month period and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

(c) Emission Offset Minor Source

This modification to an existing Emission Offset minor stationary source will not change the Emission Offset minor status, because the potential to emit of all nonattainment regulated pollutants from the entire source will continue to be less than the Emission Offset major source threshold levels. Therefore, pursuant to 326 IAC 2-3, the Emission Offset requirements do not apply.

Federal Rule Applicability Determination

(a) There are no New Source Performance Standards (40 CFR Part 60) and 326 IAC 12, or National Emission Standards for Hazardous Air Pollutants (40 CFR Part 63), 326 IAC 14 and 326 IAC 20, included for this proposed revision.

(b) Compliance Assurance Monitoring (CAM)

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

State Rule Applicability Determination

(a) 326 IAC 2-8-4 (FESOP)

This revision to an existing Title V minor stationary source will not change the minor status, because the potential to emit criteria pollutants from the entire source will still be limited to less than the Title V major source threshold levels. Therefore, the source will still be subject to the provisions of 326 IAC 2-8 (FESOP). See PTE of the Entire Source After Issuance of the FESOP Revision Section above.

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

This modification to an existing PSD minor stationary source will not change the PSD minor status, because the potential to emit of all attainment regulated pollutants from the entire source will continue to be less than the PSD major source threshold levels. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply. See PTE of the Entire Source After Issuance of the FESOP Revision Section above.

(c) 326 IAC 2-3 (Emission Offset)

This modification to an existing Emission Offset minor stationary source will not change the Emission Offset minor status, because the potential to emit of all nonattainment regulated pollutants from the entire source will continue to be less than the Emission Offset major source threshold levels. Therefore, pursuant to 326 IAC 2-3, the Emission Offset requirements do not apply. See PTE of the Entire Source After Issuance of the FESOP Revision Section above.

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

The proposed revision is not subject to the requirements of 326 IAC 2-4.1, since the unlimited potential to emit of HAPs from the new and modified units is 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.

(e) 326 IAC 2-6 (Emission Reporting)

Pursuant to 326 IAC 2-6-1, this source is not subject to this rule, because it is not required to have an operating permit under 326 IAC 2-7 (Part 70), it is not located in Lake, Porter, or LaPorte County, and it does not emit lead into the ambient air at levels equal to or greater than 5 tons per year. Therefore, 326 IAC 2-6 does not apply.

(f) 326 IAC 5-1 (Opacity Limitations)

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

(1) Opacity shall not exceed an average of twenty percent (20%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(2) 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.

- (g) 326 IAC 6-4 (Fugitive Dust Emissions Limitations)
Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions Limitations), the source 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.
- (h) 326 IAC 6.8-1-2 (Lake County: Particulate Emission Limitations)
Pursuant to 326 IAC 6.8-1-2, particulate matter emissions from the emissions units listed below shall not exceed seven-hundredths (0.07) gram per dry standard cubic meter (g/dscm) (three-hundredths (0.03) grain per dry standard cubic foot(dscf)).

Plant 2

- (f) One (1) hopper, one (1) shaker, one (1) briquetter, three (3) screw discharges, one (1) discharge conveyer, one (1) feed belt conveyor, two (2) Muller belts, and one (1) briquette conveyor, using a dust collector as control, identified as S20, exhausting to stack S20, each with a maximum capacity of 12 tons per hour, each located on the large briquetting line, constructed April 1987.

Truck Loading Station

One (1) truck loading station, constructed in 1987, with a maximum capacity of twenty-five (25) tons per hour, using a dust collector as control, identified as S21, and exhausting to stack S21.

- (i) 326 IAC 6.8-2-25 (Lake County: PM-10 Emissions)
Limitations in 326 IAC 6.8-2-25 are not applicable to the emissions units that are now being controlled by dust collector S20 or the truck loading station because these units were not included in the modeling that determined the values in this rule section.
- Material storage handling emissions limitations in 326 IAC 6.8-2-25 (formerly 326 IAC 6-1-10.1) were based on modeling performed on the source. The only two emission points routed to the modeled stack (S8) from Plant 2 were the one (1) Muller mixer and the one (1) bucket elevator #1.
 - The modeling calculations did not include the one (1) hopper, one (1) shaker, one (1) briquetter, three (3) screw discharges, one (1) discharge conveyer, one (1) feed belt conveyor, two (2) Muller belts, and one (1) briquette conveyor because, at that time, the emissions from these units were exhausted inside the building and emissions through windows, doors, and other general ventilation routes were not considered point source emissions.
 - The pug mill and bucket elevator #2 were constructed in 1996 and routed to stack S8, these emission units were not included in the modeling that was performed on the source. These emission units will also now be controlled by baghouse S20.
 - In 2016, the source installed a new baghouse serving the existing emissions units from Plant 2 that were previously unidentified in the permit, exhausting to stack S20. On review, IDEM, OAQ finds that the material storage handling limitations in 326 IAC 6.8-2-25 (formerly 326 IAC 6-1-10.1) are not applicable to these emissions units because these units were not included in the modeling that established the limitations in 326 IAC 6.8-2-25.
- (j) 326 IAC 12 (New Source Performance Standards)
See Federal Rule Applicability Section of this TSD.

- (k) 326 IAC 20 (Hazardous Air Pollutants)
 See Federal Rule Applicability Section of this TSD.

Compliance Determination, Monitoring and Testing Requirements
--

- (a) The compliance determination and monitoring requirements applicable to this proposed revision are as follows:

Emission Unit/Control	Operating Parameters	Frequency
Plant 2: Three (3) screw discharges, one (1) discharge conveyer, one (1) feed belt conveyer, two (2) Muller belts, one (1) pug mill, and one (1) briquette conveyer (Dust Collector S20)	Visible Emissions	Once per day
Truck Loading Station (Dust Collector S21)	Visible Emissions	Once per day

These monitoring conditions are necessary because the dust collectors for the Plant 2 emissions units controlled by Dust Collector S20, and the truck loading station must operate properly to ensure compliance with 326 IAC 6.8-2 (Lake County: PM10 Emission Requirements), 326 IAC 2-2 (PSD Minor Limits PM, PM10, and PM2.5) and 326 IAC 2-8 (FESOP).

- (b) There are no testing requirements applicable to this proposed revision.

Proposed Changes

The changes listed below have been made to FESOP No. 089-23324-00323. Deleted language appears as ~~strikethroughs~~ and new language appears in **bold**. These corrections, changes, and removals may include Title I changes (ex changes that add or modify synthetic minor emission limits).

Revisions

1. The facility descriptions in sections A.2, D.2, and D.3 have been revised to add the proposed dust collectors to previously installed emissions units. Additionally, all letters used to identify emissions units have been updated in sections A and D to accommodate the newly identified emissions units' description.
2. Conditions D.2.2 and D.2.3 have been revised to reflect reduced pound per hour limits for some of the existing emissions units.
3. Conditions D.2.2 - PSD Minor Limit PM and D.2.3 FESOP and PSD Minor Limits PM10 and PM2.5 have been revised to add emissions limitations for the proposed dust collector (S20) in order to render 326 IAC 2-2 not applicable to SPR No. 089-36924-00323.
4. The Section D.2 Compliance Determinations and Monitoring Requirements have been revised to include the requirements applicable to the proposed dust collector (S20) and associated emissions units.
5. Conditions D.3.2 and D.3.3 have been revised to reflect reduced pound per hour limits for some of the existing emissions units.
6. Conditions D.3.2 - PSD Minor Limit PM and D.3.3 FESOP and PSD Minor Limits PM10 and PM2.5 have been revised to add emissions limitations for the proposed dust collector (S21) in order to render 326 IAC 2-2 not applicable to SPR No. 089-36924-00323.
7. The Section D.3 Compliance Determinations and Monitoring Requirements have been revised to include the requirements applicable to the proposed dust collector (S21) and associated

emissions units.

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

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

Plant 2

- (e) One (1) **Muller** mixer and **one (1) bucket elevator #1, collectively** identified as Briquette Line #1, with a capacity of 15 tons per hour, ~~one (1) pug mill with a capacity of 12 tons per hour, and one (1) bucket elevator with a capacity of 12 tons per hour,~~ using a reverse air baghouse dust collection system as the control, constructed April 1987, exhausting to stack S8.
- (f) ~~and one~~ One (1) hopper, one (1) shaker, ~~and one (1) briquetter,~~ **three (3) screw discharges, one (1) discharge conveyer, one (1) feed belt conveyor, two (2) Muller belts, one (1) pug mill, one (1) bucket elevator #2, and one (1) briquette conveyor, with no control equipment, using a dust collector as control, identified as S20, exhausting to stack S20,** each with a maximum capacity of 12 tons per hour, each located on the large briquetting line, constructed April 1987, **except the pug mill and bucket elevator #2 were constructed in 1996.**

Truck Loading Station

One (1) truck loading station, constructed in 1987, with a maximum capacity of twenty-five (25) tons per hour, using a dust collector as control, identified as S21, and exhausting to stack S21.

SECTION D.2

EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Plant 2

- (e) One (1) **Muller** mixer and **one (1) bucket elevator #1, collectively** identified as Briquette Line #1, with a capacity of 15 tons per hour, ~~one (1) pug mill with a capacity of 12 tons per hour, and one (1) bucket elevator with a capacity of 12 tons per hour,~~ using a reverse air baghouse dust collection system as the control, constructed April 1987, exhausting to stack S8.
- (f) ~~and one~~ One (1) hopper, one (1) shaker, ~~and one (1) briquetter,~~ **three (3) screw discharges, one (1) discharge conveyer, one (1) feed belt conveyor, two (2) Muller belts, one (1) pug mill, one (1) bucket elevator #2, and one (1) briquette conveyor, with no control equipment, using a dust collector as control, identified as S20, exhausting to stack S20,** each with a maximum capacity of 12 tons per hour, each located on the large briquetting line, constructed April 1987, **except the pug mill and bucket elevator #2 were constructed in 1996.**

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

D.2.2 PSD Minor Limit PM [326 IAC 2-2]

- (a) The PM emissions from the north bulk powder blue silo (Silo #2) shall not exceed ~~0.042~~ **0.025** pounds per hour.
- (b) The PM emissions from the south bulk powder blue silo (Silo #3) shall not exceed ~~0.042~~ **0.025** pounds per hour.
- (c) The PM emissions from the mixer and bucket elevator (Briquette Line #1) shall not

exceed ~~0.68~~ **0.50** pounds per hour.

- (d) **The PM emissions from the one (1) hopper, one (1) shaker, one (1) briquetter, three (3) screw discharges, one (1) discharge conveyer, one (1) feed belt conveyor, two (2) Muller belts, one (1) pug mill, one (1) bucket elevator #2, and one (1) briquette conveyor, using a dust collector as control, identified as S20, exhausting to stack S20, shall not exceed 4.00 pounds per hour.**
- (de) The PM emissions from the storage/processing tank (Tank #1) shall not exceed ~~0.68~~ **0.30** pounds per hour.
- (ef) The PM emissions from the storage/processing tank (Tank #2) shall not exceed ~~0.68~~ **0.30** pounds per hour.

D.2.3 FESOP and PSD Minor Limits PM10 and PM2.5 [326 IAC 2-8-1][326 IAC 2-2]

Pursuant to 326 IAC 2-8-4 (FESOP) and in order to render the requirements of 326 IAC 2-2 (PSD) not applicable, the Permittee shall comply with the following emission limits:

- (a) The PM10 and PM2.5 emissions from the north bulk powder blue silo (Silo #2) shall not exceed ~~0.042~~ **0.025** pounds per hour, each.
- (b) The PM10 and PM2.5 emissions from the south bulk powder blue silo (Silo #3) shall not exceed ~~0.042~~ **0.025** pounds per hour, each.
- (c) The PM10 and PM2.5 emissions from the mixer and bucket elevator (Briquette Line #1) shall not exceed ~~0.68~~ **0.50** pounds per hour, each.
- (d) **The PM10 and PM2.5 emissions from the one (1) hopper, one (1) shaker, one (1) briquetter, three (3) screw discharges, one (1) discharge conveyer, one (1) feed belt conveyor, two (2) Muller belts, one (1) pug mill, one (1) bucket elevator #2, and one (1) briquette conveyor, using a dust collector as control, identified as S20, exhausting to stack S20, shall not exceed 4.00 pounds per hour.**
- (de) The PM10 and PM2.5 emissions from the storage/processing tank (Tank #1) shall not exceed ~~0.68~~ **0.30** pounds per hour, each.
- (ef) The PM10 and PM2.5 emissions from the storage/processing tank (Tank #2) shall not exceed ~~0.68~~ **0.30** pounds per hour, each.

D.2.4 Particulate Emission Limitations [326 IAC 6.8-1-2]

Pursuant to 326 IAC 6.8-1-2, the particulate emissions from each stack for the following emission units: one (1) hopper, one (1) shaker, one (1) briquetter, three (3) screw discharges, one (1) discharge conveyer, one (1) feed belt conveyor, two (2) Muller belts, one (1) pug mill, one (1) bucket elevator #2, and one (1) briquette conveyor, shall not exceed 0.03 gr/dscf.

D.2.45 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

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

Compliance Determination Requirements [326 IAC 2-8-4(1)]

D.2.56 Particulate Control

- (a) In order to ensure compliance with Conditions D.2.1, D.2.2, and D.2.3 the baghouses for

particulate control **shall** be in operation and control emissions from the mixer and bucket elevator (Briquette Line #1) facilities, **one (1) hopper, one (1) shaker, one (1) briquetter, three (3) screw discharges, one (1) discharge conveyer, one (1) feed belt conveyer, two (2) Muller belts, one (1) pug mill, one (1) bucket elevator #2, and one (1) briquette conveyer**, at all times these **emissions units** ~~mixer and bucket elevator (Briquette Line #1)~~ are in operation.

Compliance Monitoring Requirements [326 IAC 2-8-4(1)][326 IAC 2-8-5(a)(1)]

D.2.67 Visible Emissions Notations

- (a) Daily visible emission notations of the mixer and bucket elevator (Briquette Line #1) stack exhausts (**S8 & S20**) shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

D.2.78 Broken or Failed Bag Detection

Record Keeping and Reporting Requirement [326 IAC 2-8-4(3)]

D.2.89 Record Keeping Requirements

- (a) To document the compliance status with Condition **D.2.67**, the Permittee shall maintain records of daily visible emission notations of the baghouse and bin vent stack exhausts. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Truck Loading Station

One (1) truck loading station, constructed in 1987, with a maximum capacity of twenty-five (25) tons per hour, using a dust collector as control, identified as S21, and exhausting to stack S21.

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

D.3.2 PSD Minor Limit PM [326 IAC 2-2]

- (a) The PM emissions from the bulk powder storage silo (Portland Cement Silo #3) shall not exceed ~~0.68~~ **0.30** pounds per hour.
- (b) The PM emissions from the mixer (Desulf Station #1) shall not exceed ~~0.68~~ **0.40** pounds per hour.
- (c) The PM emissions from the mixer (Desulf Station #2) shall not exceed ~~0.68~~ **0.40** pounds per hour.
- (d) The PM emissions from the feeder, pug mill and briquette press, (Briquetting Line Pug Mill) shall not exceed 2.75 pounds per hour.
- (e) The PM emissions from the high calcium lime storage silo (Lime Silo #1, Lime Silo #2, and Lime Silo #4) shall not exceed ~~0.68~~ **0.30** pounds per hour.

- (f) The PM emissions from the dolo lime storage silo (Lime Silo #3) shall not exceed ~~0.68~~ **0.30** pounds per hour.

- (i) The PM emissions from the Truck Loading Station shall not exceed 2.50 pounds per hour.**

D.3.3 FESOP and PSD Minor Limits PM10 and PM2.5 [326 IAC 2-8-4][326 IAC 2-2]

Pursuant to 326 IAC 2-8-4 (FESOP) and in order to render the requirements of 326 IAC 2-2 (PSD) not applicable, the Permittee shall comply with the following emission limits:

- (a) The PM10 and PM2.5 emissions from the bulk powder storage silo (Portland Cement Silo #3) shall not exceed ~~0.68~~ **0.30** pounds per hour, each.
- (b) The PM10 and PM2.5 emissions from the mixer (Desulf Station #1) shall not exceed ~~0.68~~ **0.40** pounds per hour, each.
- (c) The PM10 and PM2.5 emissions from the mixer (Desulf Station #2) shall not exceed ~~0.68~~ **0.40** pounds per hour, each.
- (d) The total PM10 and PM2.5 emissions from the feeder, pug mill and briquette press, (Briquetting Line Pug Mill) shall not exceed 2.75 pounds per hour, each.
- (e) The total PM10 and PM2.5 emissions from the high calcium lime storage silos (Lime Silo #1, Lime Silo #2, and Lime Silo #4) shall not exceed ~~0.68~~ **0.30** pounds per hour, each.
- (f) The PM10 and PM2.5 emissions from the dolo lime storage silo (Lime Silo #3) shall not exceed ~~0.68~~ **0.30** pounds per hour, each.
- (g) The PM10 and PM2.5 emissions from Ford Station #1 shall not exceed 0.68 pounds per hour, each.
- (h) The total PM10 and PM2.5 emissions from the Plant 5 mixing and bagging operation shall not exceed 0.025 pounds per hour, each.
- (i) The PM10 and PM2.5 emissions from the Truck Loading Station shall not exceed 2.50 pounds per hour.**

D.3.4 Particulate Emission Limitations [326 IAC 6.8-1-2]

Pursuant to 326 IAC 6.8-1-2, the particulate emissions from each stack for the following emission units; Plant 5 mixer, bin conveyors, and bagging hopper exhausting to stack S18 and Briquetting Line Pug Mill exhausting to stack S11, **and the truck loading station exhausting to stack S21**, shall not exceed 0.03 gr/dscf.

D.3.6 Particulate Control

- (c) In order to ensure compliance with Conditions D.3.1 and D.3.3 the dust collector for particulate control, identified as S21, shall be in operation and control emissions from the truck loading station at all times the truck loading station is in operation.**

Compliance Monitoring Requirements [326 IAC 2-8-4(1)][326 IAC 2-8-5(a)(1)]

D.3.7 Visible Emissions Notations

- (c) Visible emission notations of the Plant 5 exhaust stack (S18) **and the truck loading station (S21)** shall be performed once per day during normal daylight operations when

the associated facilities are in operation. A trained employee shall record whether emissions are normal or abnormal.

Conclusion and Recommendation

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 March 8, 2016.

The construction and operation of this proposed revision shall be subject to the conditions of the attached proposed FESOP Significant Permit Revision No. 089-36924-00323. The staff recommends to the Commissioner that this FESOP Significant Permit Revision be approved.

IDEM Contact

- (a) Questions regarding this proposed permit can be directed to Joshua Levering 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) 234-6543 or toll free at 1-800-451-6027 extension 4-6543.
- (b) A copy of the findings is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>
- (c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Permit Guide on the Internet at: <http://www.in.gov/idem/5881.htm>; and the Citizens' Guide to IDEM on the Internet at: <http://www.in.gov/idem/6900.htm>.

**Appendix A: Emission Calculations
#36924 SPR PTE Summary**

Company Name: Harsco Minerals Briquetting, LLC
Address City IN Zip: 5222 Indianapolis Boulevard, East Chicago, IN 46312
Significant Permit Revision No.: 089-36924-00323
FESOP No. F089-23324-00323
Reviewer: Joshua Levering
Date: April, 2016

Uncontrolled Potential to Emit (tons/yr)								
Emission Unit	PM	PM10	PM2.5 *	SO ₂	NO _x	VOC	CO	Total HAPs
Plant 2: Three (3) screw discharges, one (1) discharge conveyer, one (1) feed belt conveyor, two (2) Muller belts, one (1) pug mill, and one (1) briquette conveyor	24,027.43	24,027.43	24,027.43	--	--	--	--	--
Truck Loading Station (S21)	18,771.43	18,771.43	18,771.43	--	--	--	--	--
Total	42,798.86	42,798.86	18,771.43	0.00	0.00	0.00	0.00	0.00

* PM2.5 listed is direct PM2.5

Potential to Emit after Control (tons/yr)								
Emission Unit	PM	PM10	PM2.5 *	SO ₂	NO _x	VOC	CO	Total HAPs
Plant 2: Three (3) screw discharges, one (1) discharge conveyer, one (1) feed belt conveyor, two (2) Muller belts, one (1) pug mill, and one (1) briquette conveyor	12.01	12.01	12.01	--	--	--	--	--
Truck Loading Station (S21)	9.39	9.39	9.39	--	--	--	--	--
Total	21.40	21.40	21.40	0.00	0.00	0.00	0.00	0.00

* PM2.5 listed is direct PM2.5

Potential to Emit after Issuance (tons/yr)								
Emission Unit	PM	PM10	PM2.5 *	SO ₂	NO _x	VOC	CO	Total HAPs
Plant 2: Three (3) screw discharges, one (1) discharge conveyer, one (1) feed belt conveyor, two (2) Muller belts, one (1) pug mill, and one (1) briquette conveyor	17.52	17.52	17.52	--	--	--	--	--
Truck Loading Station (S21)	10.95	10.95	10.95	--	--	--	--	--
Total	28.47	28.47	28.47	0.00	0.00	0.00	0.00	0.00

* PM2.5 listed is direct PM2.5

Note: The shaded cells indicate where limits are included.

**Appendix A: Emission Calculations
Plant 2 - Dust Collector (S20)
Particulate Matter Emissions**

Company Name: Harsco Minerals Briquetting, LLC
Address City IN Zip: 5222 Indianapolis Boulevard, East Chicago, IN 46312
Significant Permit Revision No.: 089-36924-00323
FESOP No. F089-23324-00323
Reviewer: Joshua Levering
Date: April, 2016

Potential to Emit Prior to Baghouse Addition											
Operation	Stack ID	Air Flow Rate (dscfm)	Outlet Grain Loading (gr/dscf)	Control Efficiency	Handling Rate (tons/hr)	Uncontrolled PTE		Controlled PTE			
						PM (tons/yr)	PM10=PM2.5 (tons/yr)	PM (lb/hr)	PM10=PM2.5 (lb/hr)	PM (tons/yr)	PM10=PM2.5 (tons/yr)
Plant 2											
Three (3) screw discharges, one (1) discharge conveyer, one (1) feed belt conveyor, two (2) Muller belts, one (1) pug mill, and one (1) briquette conveyor	S20	32,000	0.010	99.95%	15	24027.43	24027.43	2.74	2.74	12.01	12.01

Methodology:

Potential to Emit (tons/yr) = Air Flow Rate (DCFM) x Outlet Grain Loading (gr/dscf) / 7,000 (gr/lb) x 8,760 (hr/yr) / 2,000 (lb/ton)

Uncontrolled Emissions (tons/yr) = Uncontrolled Emissions (tons/yr) * (100/(100-Control Efficiency))

**Appendix A: Emission Calculations
Truck Loading Station - Dust Collector (S21)
Particulate Matter Emissions**

Company Name: Harsco Minerals Briquetting, LLC
Address City IN Zip: 5222 Indianapolis Boulevard, East Chicago, IN 46312
Significant Permit Revision No.: 089-36924-00323
FESOP No. F089-23324-00323
Reviewer: Joshua Levering
Date: April, 2016

Potential to Emit Prior to Baghouse Addition											
Operation	Stack ID	Air Flow Rate (dscfm)	Outlet Grain Loading (gr/dscf)	Control Efficiency	Handling Rate (tons/hr)	Uncontrolled PTE		Controlled PTE			
						PM (tons/yr)	PM10=PM2.5 (tons/yr)	PM (lb/hr)	PM10=PM2.5 (lb/hr)	PM (tons/yr)	PM10=PM2.5 (tons/yr)
Plant 2											
Truck Loading Station	S21	25,000	0.010	99.95%	25	18771.43	18771.43	2.14	2.14	9.39	9.39

Methodology:

Potential to Emit (tons/yr) = Air Flow Rate (DCFM) x Outlet Grain Loading (gr/dscf) / 7,000 (gr/lb) x 8,760 (hr/yr) / 2,000 (lb/ton)

Uncontrolled Emissions (tons/yr) = Uncontrolled Emissions (tons/yr) * (100/(100-Control Efficiency))

**Appendix A: Emission Calculations
PTE Summary**

Company Name: Harsco Minerals Briquetting, LLC
Address City IN Zip: 5222 Indianapolis Boulevard, East Chicago, IN 46312
Significant Permit Revision No.: 089-36924-00323
FESOP No. F089-23324-00323
Reviewer: Joshua Levering
Date: April, 2016

Uncontrolled Potential to Emit (tons/yr)								
Emission Unit	PM	PM10	PM2.5 *	SO ₂	NOx	VOC	CO	Total HAPs
Plant 1								
Dryer - Unit A	3,942.20	535.18	535.18	6.44E-02	10.74	0.59	9.02	0.20
Raw Material Use Silo #1	82.59	82.59	82.59	--	--	--	--	--
North Bulk Powder Silo#2	11.26	11.26	11.26	--	--	--	--	--
South Bulk Powder Silo #3	11.26	11.26	11.26	--	--	--	--	--
Plant 2								
Mixer & Bucket Elevator Briquette Line #1	2,147.45	2,147.45	2,147.45	--	--	--	--	--
Three (3) screw discharges, one (1) discharge conveyor, one (1) feed belt conveyor, two (2) Muller belts, one (1) pug mill, and one (1) briquette conveyor	24,027.43	24,027.43	24,027.43	--	--	--	--	--
Storage/Processing Tank #1	8,259.43	8,259.43	8,259.43	--	--	--	--	--
Storage/Processing Tank #2	825.94	825.94	825.94	--	--	--	--	--
Mixer Desulf Station #1	214.75	214.75	214.75	--	--	--	--	--
Mixer Desulf Station #2	214.75	214.75	214.75	--	--	--	--	--
Plant 3								
Portland Cement Storage Silo #3	8,259.43	8,259.43	8,259.43	--	--	--	--	--
Feeder, Pug Mill and Briquette Press Briquetting Line Pug Mill	2,402.74	2,402.74	2,402.74	--	--	--	--	--
High Calcium Lime Storage Silo #1	165.19	165.19	165.19	--	--	--	--	--
High Calcium Lime Storage Silo #2	165.19	165.19	165.19	--	--	--	--	--
High Calcium Lime Storage Silo #4	165.19	165.19	165.19	--	--	--	--	--
Dolo Lime Storage Silo #3	165.19	165.19	165.19	--	--	--	--	--
Plant 4								
Ford Station #1	214.75	214.75	214.75	--	--	--	--	--
Plant 5								
Mixing and Bagging System	2.21	0.81	0.81	--	--	--	--	--
Loader traffic	2.75	0.55	0.13	--	--	--	--	--
Conveying & handling	0.25	0.12	1.76E-02	--	--	--	--	--
Truck Loading Station								
Truck Loading Station (S21)	18771.43	18771.43	18771.43	--	--	--	--	--
Insignificant Activities								
Degreaser	--	--	--	--	--	0.49	--	9.72E-04
Total not including fugitives	70051.36	66640.61	66640.09	6.44E-02	10.74	1.08	9.02	0.20
Fugitive Emissions								
Conveying and handling	0.25	0.12	1.76E-02	--	--	--	--	--
Paved and unpaved road traffic	69.77	17.65	1.83	--	--	--	--	--
Storage piles	1.48E-03	5.18E-04	5.18E-04	--	--	--	--	--
Total PTE of the entire source	70121.37	66658.37	66641.95	6.44E-02	10.74	1.08	9.02	0.20

* PM2.5 listed is direct PM2.5

**Appendix A: Emission Calculations
PTE Summary**

Company Name: Harsco Minerals Briquetting, LLC
Address City IN Zip: 5222 Indianapolis Boulevard, East Chicago, IN 46312
Significant Permit Revision No.: 089-36924-00323
FESOP No.: F089-23324-00323
Reviewer: Joshua Levering
Date: April, 2016

Potential to Emit after Control (tons/yr)								
Emission Unit	PM	PM10	PM2.5 *	SO ₂	NOx	VOC	CO	Total HAPs
Plant 1								
Dryer - Unit A	5.62	5.62	5.62	6.44E-02	10.74	0.59	9.02	0.20
Raw Material Use Silo #1	0.83	0.83	0.83	--	--	--	--	--
North Bulk Powder Silo#2	0.06	0.06	0.06	--	--	--	--	--
South Bulk Powder Silo #3	0.06	0.06	0.06	--	--	--	--	--
Plant 2								
Mixer & Bucket Elevator Briquette Line #1	1.07	1.07	1.07	--	--	--	--	--
Three (3) screw discharges, one (1) discharge conveyor, one (1) feed belt conveyor, two (2) Muller belts, one (1) pug mill, and one (1) briquette conveyor	12.01	12.01	12.01	--	--	--	--	--
Storage/Processing Tank #1	0.83	0.83	0.83	--	--	--	--	--
Storage/Processing Tank #2	0.83	0.83	0.83	--	--	--	--	--
Mixer Desulf Station #1	1.07	1.07	1.07	--	--	--	--	--
Mixer Desulf Station #2	1.07	1.07	1.07	--	--	--	--	--
Plant 3								
Portland Cement Storage Silo #3	0.83	0.83	0.83	--	--	--	--	--
Feeder, Pug Mill and Briquette Press Briquetting Line Pug Mill	12.01	12.01	12.01	--	--	--	--	--
High Calcium Lime Storage Silo #1	0.83	0.83	0.83	--	--	--	--	--
High Calcium Lime Storage Silo #2	0.83	0.83	0.83	--	--	--	--	--
High Calcium Lime Storage Silo #4	0.83	0.83	0.83	--	--	--	--	--
Dolo Lime Storage Silo #3	0.83	0.83	0.83	--	--	--	--	--
Plant 4								
Ford Station #1	1.07	1.07	1.07	--	--	--	--	--
Plant 5								
Mixing and Bagging System	1.10E-02	4.05E-03	4.05E-03	--	--	--	--	--
Loader traffic	2.75	0.55	0.13	--	--	--	--	--
Conveying & handling	0.25	0.12	1.76E-02	--	--	--	--	--
Truck Loading Station								
Truck Loading Station (S21)	9.39	9.39	9.39	--	--	--	--	--
Insignificant Activities								
Degreaser	--	--	--	--	--	0.49	--	9.72E-04
Total not including fugitives	53.05	50.72	50.21	6.44E-02	10.74	1.08	9.02	0.20
Fugitive Emissions								
Conveying and handling	0.25	0.12	1.76E-02	--	--	--	--	--
Paved and unpaved road traffic	34.88	8.82	0.92	--	--	--	--	--
Storage piles	1.48E-03	5.18E-04	5.18E-04	--	--	--	--	--
Total PTE of the entire source	88.18	59.66	51.14	6.44E-02	10.74	1.08	9.02	0.20

* PM2.5 listed is direct PM2.5

**Appendix A: Emission Calculations
PTE Summary**

Company Name: Harsco Minerals Briquetting, LLC
Address City IN Zip: 5222 Indianapolis Boulevard, East Chicago, IN 46312
Significant Permit Revision No.: 089-36924-00323
FESOP No. F089-23324-00323
Reviewer: Joshua Levering
Date: April, 2016

Potential to Emit after Issuance (tons/yr)								
Emission Unit	PM	PM10	PM2.5 *	SO ₂	NOx	VOC	CO	Total HAPs
Plant 1								
Dryer - Unit A	21.90	21.90	21.90	6.44E-02	10.74	0.59	9.02	0.20
Raw Material Use Silo #1				--	--	--	--	--
North Bulk Powder Silo#2	0.11	0.11	0.11	--	--	--	--	--
South Bulk Powder Silo #3	0.11	0.11	0.11	--	--	--	--	--
Plant 2								
Mixer & Bucket Elevator Briquette Line #1	2.19	2.19	2.19	--	--	--	--	--
Three (3) screw discharges, one (1) discharge conveyor, one (1) feed belt conveyor, two (2) Muller belts, one (1) pug mill, and one (1) briquette conveyor	17.52	17.52	17.52	--	--	--	--	--
Storage/Processing Tank #1	1.31	1.31	1.31	--	--	--	--	--
Storage/Processing Tank #2	1.31	1.31	1.31	--	--	--	--	--
Mixer Desulf Station #1	1.75	1.75	1.75	--	--	--	--	--
Mixer Desulf Station #2	1.75	1.75	1.75	--	--	--	--	--
Plant 3								
Portland Cement Storage Silo #3	1.31	1.31	1.31	--	--	--	--	--
Feeder, Pug Mill and Briquette Press Briquetting Line Pug Mill	12.05	12.05	12.05	--	--	--	--	--
High Calcium Lime Storage Silo #1	1.31	1.31	1.31	--	--	--	--	--
High Calcium Lime Storage Silo #2	1.31	1.31	1.31	--	--	--	--	--
High Calcium Lime Storage Silo #4	1.31	1.31	1.31	--	--	--	--	--
Dolo Lime Storage Silo #3	1.31	1.31	1.31	--	--	--	--	--
Plant 4								
Ford Station #1	2.98	2.98	2.98	--	--	--	--	--
Plant 5								
Mixing and Bagging System	0.11	0.11	0.11	--	--	--	--	--
Loader traffic	2.75	0.55	0.13	--	--	--	--	--
Conveying & handling	0.25	0.12	0.02	--	--	--	--	--
Truck Loading Station								
Truck Loading Station (S21)	10.95	10.95	10.95	--	--	--	--	--
Insignificant Activities								
Degreaser	--	--	--	--	--	0.49	--	9.72E-04
Total not including fugitives	83.60	81.28	80.77	6.44E-02	10.74	1.08	9.02	0.20
Fugitive Emissions								
Conveying and handling	0.25	0.12	0.02	--	--	--	--	--
Paved and unpaved road traffic	69.77	17.65	1.83	--	--	--	--	--
Storage piles	1.48E-03	5.18E-04	5.18E-04	--	--	--	--	--
Total PTE of the entire source	153.62	99.05	82.62	6.44E-02	10.74	1.08	9.02	0.20

* PM2.5 listed is direct PM2.5

Note: The shaded cells indicate where limits are included.

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

Company Name: Harsco Minerals Briquetting, LLC
Address City IN Zip: 5222 Indianapolis Boulevard, East Chicago, IN 46312
Significant Permit Revision No.: 089-36924-00323
FESOP No. F089-23324-00323
Reviewer: Joshua Levering
Date: April, 2016

includes: Unit Input Rating (MMBtu/hr)
 Dryer (Unit A) burner 25.0

Heat Input Capacity MMBtu/hr	HHV mmbtu mmscf	Potential Throughput MMCF/yr
25.0	1020	214.7

Emission Factor in lb/MMCF	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
	1.9	7.6	7.6	0.6	100 **see below	5.5	84
Potential Emission in tons/yr	0.20	0.82	0.82	6.44E-02	10.74	0.59	9.02

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
 PM2.5 emission factor is filterable and condensable PM2.5 combined.
 **Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.
 MMBtu = 1,000,000 Btu
 MMCF = 1,000,000 Cubic Feet of Gas
 Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03
 Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,020 MMBtu
 Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

HAPS Calculations

Emission Factor in lb/MMcf	HAPs - Organics					Total - Organics
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene	
	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03	
Potential Emission in tons/yr	2.25E-04	1.29E-04	8.05E-03	1.93E-01	3.65E-04	2.02E-01

Emission Factor in lb/MMcf	HAPs - Metals					Total - Metals
	Lead	Cadmium	Chromium	Manganese	Nickel	
	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03	
Potential Emission in tons/yr	5.37E-05	1.18E-04	1.50E-04	4.08E-05	2.25E-04	5.88E-04
						2.03E-01
						1.93E-01

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

Plant 1 Dryer System
Processing Emissions

Operation	Stack ID	Handling Rate (tons/hr)	Emission Factor		Uncontrolled PTE	
			PM ¹ (lb/ton)	PM10=PM2.5 ² (lb/ton)	PM (tons/yr)	PM10=PM2.5 (tons/yr)
Dryer - Unit A	S5	20	45.00	6.10	3942.00	534.36
Total					3942.00	534.36

Operation	Control Efficiency ³	Controlled PTE			
		PM (lb/hr)	PM10=PM2.5 (lb/hr)	PM (tons/yr)	PM10=PM2.5 (tons/yr)
Dryer - Unit A	99.9%	1.24	0.17	5.42	0.73
Total				5.42	0.73

- Notes:**
1. PM, PM10 emission factors from MPR No. F089-30936-00323, SCC 3-05-002-01
 2. PM2.5 assumed equal to PM10 because AP-42 does not have emission factors for PM2.5
 3. Control efficiency documented in calculations for MPR No. F089-30936-00323

Methodology

Uncontrolled PTE (tons/yr) = Handling Rate (tons/hr) x Emission Factor (lb/ton) x 8,760 (hr/yr) / 2,000 (lb/ton)
 Controlled PTE (tons/yr) = Uncontrolled PTE x [1 - Control Efficiency (%) / 100]
 Limited PTE (tons/yr) = Handling Rate (tons/hr) x Emissions Limit (lb/ton) x 8,760 (hr/yr) / 2,000 (lb/ton)

Combined Emissions

	Uncontrolled PTE		Controlled PTE	
	PM (tons/yr)	PM10=PM2.5 (tons/yr)	PM (tons/yr)	PM10=PM2.5 (tons/yr)
Combustion	0.20	0.82	0.20	0.82
Processing	3942.00	534.36	5.42	0.73
Total	3942.20	535.18	5.62	1.55

**Appendix A: Emission Calculations
Process Particulate Matter Emissions**

Company Name: **Harsco Minerals Briquetting, LLC**
 Address City IN Zip: **5222 Indianapolis Boulevard, East Chicago, IN 46312**
 Significant Permit Revision No.: **089-36924-00323**
 FESOP No. **F089-23324-00323**
 Reviewer: **Joshua Levering**
 Date: **April, 2016**

Operation	Stack ID	Air Flow Rate (dscfm)	Outlet Grain Loading (gr/dscft)	Control Efficiency	Handling Rate (tons/hr)	Uncontrolled PTE		Controlled PTE			
						PM (tons/yr)	PM10=PM2.5 (tons/yr)	PM (lb/hr)	PM10=PM2.5 (lb/hr)	PM (tons/yr)	PM10=PM2.5 (tons/yr)
Plant 1											
Raw Material Use Silo #1	S5 ¹	--	--	99.00%	20	82.59	82.59	0.19	0.19	0.83	0.83
North Bulk Powder Silo#2	S1	500	0.003	99.50%	0.525	11.26	11.26	0.013	0.013	0.06	0.06
South Bulk Powder Silo #3	S2	500	0.003	99.50%	0.35	11.26	11.26	0.013	0.013	0.06	0.06
Plant 2											
Mixer & Bucket Elevator Briquette Line #1	S8	1,300	0.022	99.95%	15	2147.45	2147.45	0.25	0.25	1.07	1.07
Three (3) screw discharges, one (1) discharge conveyor, one (1) feed belt conveyor, two (2) Muller belts, one (1) pug mill, and one (1) briquette conveyor	S20	32,000	0.010	99.95%	15	24027.43	24027.43	2.74	2.74	12.01	12.01
Storage/Processing Tank #1	S6	1,000	0.022	99.99%	--	8259.43	8259.43	0.19	0.19	0.83	0.83
Storage/Processing Tank #2	S7	1,000	0.022	99.90%	--	825.94	825.94	0.19	0.19	0.83	0.83
Mixer Desulf Station #1	S12	1,300	0.022	99.50%	15	214.75	214.75	0.25	0.25	1.07	1.07
Mixer Desulf Station #2	S13	1,300	0.022	99.50%	15	214.75	214.75	0.25	0.25	1.07	1.07
Plant 3											
Portland Cement Storage Silo #3	S3	1,000	0.022	99.99%	--	8259.43	8259.43	0.19	0.19	0.83	0.83
Feeder, Pug Mill and Briquette Press Briquetting Line Pug Mill	S11	32,000	0.010	99.50%	--	2402.74	2402.74	2.74	2.74	12.01	12.01
High Calcium Lime Storage Silo #1	S14	1,000	0.022	99.50%	--	165.19	165.19	0.19	0.19	0.83	0.83
High Calcium Lime Storage Silo #2	S15	1,000	0.022	99.50%	--	165.19	165.19	0.19	0.19	0.83	0.83
High Calcium Lime Storage Silo #4	S16	1,000	0.022	99.50%	--	165.19	165.19	0.19	0.19	0.83	0.83
Dolo Lime Storage Silo #3	S17	1,000	0.022	99.50%	--	165.19	165.19	0.19	0.19	0.83	0.83
Plant 4											
Ford Station #1	S9	1,300	0.022	99.50%	--	214.75	214.75	0.25	0.25	1.07	1.07
Truck Loading Station	S21	25,000	0.010	99.95%		18771.43	18771.43	2.14	2.14	9.39	9.39
Total						66103.96	66103.96			44.43	44.43

Notes

(From MPR 089-30936-00323, 11/1/2011) Actual grain loading rates for the processes S1- S17 were based on the maximum allowed by 326 IAC 6.8-2-25. S1 and S2 are specifically limited to 0.012 lb/hr PM-10, pursuant to 326 IAC 6.8-2-25. Equivalent grain loadings were determined using these limits and available control device information.

1. Baghouse and stack S5 shared with the dryer (Unit A)

Methodology:

Potential to Emit (tons/yr) = Air Flow Rate (DCFM) x Outlet Grain Loading (gr/dscft) / 7,000 (gr/lb) x 8,760 (hr/yr) / 2,000 (lb/ton)
 Uncontrolled Emissions (tons/yr) = Uncontrolled Emissions (tons/yr) * (100/(100-Control Efficiency))

Operation	Stack ID	Controlled PTE		Limited PTE	
		PM (lb/hr)	PM10=PM2.5 (lb/hr)	PM (lb/hr)	PM10=PM2.5 (lb/hr)
Plant 1					
Raw Material Use Silo #1	S5 ¹	0.189	0.189	--	--
North Bulk Powder Silo#2	S1	0.013	0.013	0.025	0.025
South Bulk Powder Silo #3	S2	0.013	0.013	0.025	0.025
Plant 2					
Mixer & Bucket Elevator Briquette Line #1	S8	0.245	0.245	0.500	0.500
Three (3) screw discharges, one (1) discharge conveyor, one (1) feed belt conveyor, two (2) Muller belts, one (1) pug mill, and one (1) briquette conveyor	S20	2.743	2.743	4.000	4.000
Storage/Processing Tank #1	S6	0.189	0.189	0.300	0.300
Storage/Processing Tank #2	S7	0.189	0.189	0.300	0.300
Mixer Desulf Station #1	S12	0.245	0.245	0.400	0.400
Mixer Desulf Station #2	S13	0.245	0.245	0.400	0.400
Plant 3					
Portland Cement Storage Silo #3	S3	0.189	0.189	0.300	0.300
Feeder, Pug Mill and Briquette Press Briquetting Line Pug Mill	S11	2.743	2.743	2.750	2.750
High Calcium Lime Storage Silo #1	S14	0.189	0.189	0.300	0.300
High Calcium Lime Storage Silo #2	S15	0.189	0.189	0.300	0.300
High Calcium Lime Storage Silo #4	S16	0.189	0.189	0.300	0.300
Dolo Lime Storage Silo #3	S17	0.189	0.189	0.300	0.300
Plant 4					
Ford Station #1	S9	0.245	0.245	0.680	0.680
Truck Loading Station	S21	2.143	2.143	2.500	2.500

**Appendix A: Emission Calculations
Plant 5 - Mixing and Bagging System**

Company Name: Harsco Minerals Briqueting, LLC
Address City IN Zip: 5222 Indianapolis Boulevard, East Chicago, IN 46312
Significant Permit Revision No.: 089-36924-00323
FESOP No. F089-23324-00323
Reviewer: Joshua Levering
Date: April, 2016

Emission Point	Description	Control Description	Stack ID	Hourly Capacity (tons/hour)	Emission Factor ¹		Control Efficiency ³	Uncontrolled PTE		PTE after Controls			
					PM (lbs/ton)	PM10=PM2.5 ² (lbs/ton)		PM (ton/yr)	PM10=PM2.5 (ton/yr)	PM (lb/hr)	PM10=PM2.5 (lb/hr)	PM (ton/yr)	PM10=PM2.5 (ton/yr)
Mixing and Bagging System	One (1) front end loaders	Hood/ baghouse	S18	21	0.003	0.0011	99.5%	0.28	0.10	3.15E-04	1.16E-04	1.38E-03	5.06E-04
	four (4) small bin conveyors	Hood/ baghouse	S18	84	0.003	0.0011	99.5%	1.10	0.40	1.26E-03	4.62E-04	5.52E-03	2.02E-03
	one (1) main conveyor	Hood/ baghouse	S18	21	0.003	0.0011	99.5%	0.28	0.10	3.15E-04	1.16E-04	1.38E-03	5.06E-04
	Supersack Hopper	Hood/ baghouse	S18	21	0.003	0.0011	99.5%	0.28	0.10	3.15E-04	1.16E-04	1.38E-03	5.06E-04
	Supersack Loader	Hood/ baghouse	S18	21	0.003	0.0011	99.5%	0.28	0.10	3.15E-04	1.16E-04	1.38E-03	5.06E-04
TOTAL								2.21	0.81	2.52E-03	9.24E-04	1.10E-02	4.05E-03

Notes

- Emissions from the front end loader, small bin conveyors and main conveyors are based on SCC 2-05-020-06 AP42 table 11.19.2-2 and are not subject to 326 IAC 6.3-2 (Crushed Stone Processing and Pulverized Mineral Processing).
- There are no uncontrolled emission factors in the AP 42 section for PM2.5, therefore PM10 assumed equal to PM2.5
- The below control efficiencies are consistent with values contained in Table 6-1 of EPA document "Stationary Source Control Techniques Document for Fine Particulate Matter, EPA-452/R-97-001" and Table 9.12.11 of EPA document "Control Techniques for Particulate Emissions from Stationary Sources, Volume 2, EPA-450/3-81-005b"

Control Efficiency :

Hood/Baghouse control efficiency = 99.5%

Methodology

Uncontrolled PTE (ton/yr) = Hourly Capacity (ton/hr) x Emission Factor (lb/ton) x 8760 (hr/yr) / 2000 (lb/ton)

PTE after Controls (ton/yr) = Uncontrolled PTE x (1 - control efficiency/100)

**Appendix A: Emission Calculations
Plant 5 Conveying & Handling**

Company Name: Harsco Minerals Briquetting, LLC
Address City IN Zip: 5222 Indianapolis Boulevard, East Chicago, IN 46312
Significant Permit Revision No.: 089-36924-00323
FESOP No. F089-23324-00323
Reviewer: Joshua Levering
Date: April, 2016

The following calculations determine the amount of emissions created by material handling, based on 8,760 hours of use and AP-42, Section 13.2.4-3(11/06), Equation 1. The emission factors for particulate emissions are calculated as follows:

$$E = k \cdot (0.0032) \cdot (U/5)^{1.3} / (M/2)^{1.4} \quad \text{Eqn 1 (English units), sec 13.2.4}$$

where k = particle size multiplier, table, page 13.2.4-4

U = 12 mph mean wind speed
M = 4 material moisture content (%)

Throughput = 20 tons/hr

	Unit	PM	PM10	PM2.5
k	lb/ton	0.74	0.35	0.053
E	lb/ton	2.80E-03	1.32E-03	2.01E-04
Potential to Emit	lb/hr	5.60E-02	2.65E-02	4.01E-03
Potential to Emit	tons/yr	0.25	0.12	1.76E-02

Methodology

PTE (lb/hr) = Throughput (tons/hr) x E (lb/ton)

PTE (tons/yr) = PTE (lb/hr) x 8,760 (hr/yr) / 2,000 (lb/ton)

**Appendix A: Emissions Calculations
Insignificant Degreaser**

Company Name: Harsco Minerals Briquetting, LLC
Address City IN Zip: 5222 Indianapolis Boulevard, East Chicago, IN 46312
Significant Permit Revision No.: 089-36924-00323
FESOP No. F089-23324-00323
Reviewer: Joshua Levering
Date: April, 2016

In order for the degreaser to qualify as an insignificant activity under the listing in 326 IAC 2-7-1(21)(J)(vi)(DD), the source shall use solvents "the use of which, for all cleaners and solvents combined, does not exceed one hundred forty-five (145) gallons per twelve (12) months".

Based on a review of the solvents most widely supplied for the industry by Crystal Clean and Safety-Kleen, the following PTE is based on the following conservative estimates:

The solvent has a maximum density of 6.7 lb/gal.

The solvent used in the degreaser contains 100% VOC and up to 0.2% HAP (tetrachloroethylene).

Utilized MSDS for Safety-Kleen 105 Recycled Solvent as worse case HAP content: <http://www.safety-kleen.com/msds/82310rev8-21-09.pdf>

Uncontrolled Potential Emissions (per each degreaser)

6.7	lb/gal x	100	% VOC x	145	gal/yr ÷	2000	lb/ton =	0.49	tons VOC per year
				0.49	tpy VOC x	0.2	% HAP =	0.001	tons HAP per year

**Appendix A: Emission Calculations
Conveying & Handling**

Company Name: Harsco Minerals Briquetting, LLC
Address City IN Zip: 5222 Indianapolis Boulevard, East Chicago, IN 46312
Significant Permit Revision No.: 089-36924-00323
FESOP No. F089-23324-00323
Reviewer: Joshua Levering
Date: April, 2016

The following calculations determine the amount of emissions created by material handling, based on 8,760 hours of use and AP-42, Section 13.2.4-3(11/06), Equation 1. The emission factors for particulate emissions are calculated as follows:

$E = k \cdot (0.0032) \cdot (U/5)^{1.3} / (M/2)^{1.4}$ <p>Eqn 1 (English units), sec 13.2.4</p> <p>where k = particle size multiplier, table, page 13.2.4-4</p> <p>U = 12 mph mean wind speed</p> <p>M = 4 material moisture content (%)</p>
--

Throughput = 20 tons/hr

	Unit	PM	PM10	PM2.5
k	lb/ton	0.74	0.35	0.053
E	lb/ton	2.80E-03	1.32E-03	2.01E-04
Potential to Emit	lb/hr	5.60E-02	2.65E-02	4.01E-03
Potential to Emit	tons/yr	0.25	0.12	1.76E-02

Methodology

PTE (lb/hr) = Throughput (tons/hr) x E (lb/ton)

PTE (tons/yr) = PTE (lb/hr) x 8,760 (hr/yr) / 2,000 (lb/ton)

**Appendix A: Emission Calculations
Plant 5 Loader Traffic**

Company Name: Harsco Minerals Briquetting, LLC
Address City IN Zip: 5222 Indianapolis Boulevard, East Chicago, IN 46312
Significant Permit Revision No.: 089-36924-00323
FESOP No. F089-23324-00323
Reviewer: Joshua Levering
Date: April, 2016

Paved Roads at Industrial Site

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

Vehicle Information (provided by source)

Type	Maximum number of vehicles per day	Number of one-way trips per day per vehicle	Maximum trips per day (trip/day)	Maximum Weight Loaded (tons/trip)	Total Weight driven per day (ton/day)	Maximum one-way distance (feet/trip)	Maximum one-way distance (mi/trip)	Maximum one-way miles (miles/day)	Maximum one-way miles (miles/yr)
front end loader (empty)	1.0	288.0	288.0	19.6	5656.3	60	0.011	3.3	1194.5
front end loader (loaded)	1.0	288.0	288.0	21.4	6151.7	60	0.011	3.3	1194.5
<i>according to the source, the loader moves 24 tons in 14 trips</i>			Totals	576.0	11808.0			6.5	2389.1

Average Vehicle Weight Per Trip =

20.5

 tons/trip
 Average Miles Per Trip =

0.01

 miles/trip

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

	PM	PM10	PM2.5	
where k =	0.011	0.0022	0.00054	lb/VMT = particle size multiplier (AP-42 Table 13.2.1-1)
W =	20.5	20.5	20.5	tons = average vehicle weight (provided by source)
sL =	12	12	12	g/m ² = silt loading value for paved roads at concrete batching facilities - Table 13.2.1-3)

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

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

125

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

365

 days per year

	PM	PM10	PM2.5	
Unmitigated Emission Factor, Ef =	2.30	0.46	0.11	lb/mile
Mitigated Emission Factor, Eext =	2.10	0.42	0.10	lb/mile
Dust Control Efficiency =	50%	50%	50%	(pursuant to control measures outlined in fugitive dust control plan)

Process	Unmitigated PTE of PM (tons/yr)	Unmitigated PTE of PM10 (tons/yr)	Unmitigated PTE of PM2.5 (tons/yr)	Mitigated PTE of PM (tons/yr)	Mitigated PTE of PM10 (tons/yr)	Mitigated PTE of PM2.5 (tons/yr)	Controlled PTE of PM (tons/yr)	Controlled PTE of PM10 (tons/yr)	Controlled PTE of PM2.5 (tons/yr)
Vehicle (entering plant) (one-way trip)	1.37	0.27	0.07	1.26	0.25	0.06	0.63	0.13	0.03
Vehicle (leaving plant) (one-way trip)	1.37	0.27	0.07	1.26	0.25	0.06	0.63	0.13	0.03
Totals	2.75	0.55	0.13	2.51	0.50	0.12	1.26	0.25	0.06

Methodology

Total Weight driven per day (ton/day) = [Maximum Weight Loaded (tons/trip)] * [Maximum trips per day (trip/day)]
 Maximum one-way distance (mi/trip) = [Maximum one-way distance (feet/trip) / [5280 ft/mile]]
 Maximum one-way miles (miles/day) = [Maximum trips per year (trip/day)] * [Maximum one-way distance (mi/trip)]
 Average Vehicle Weight Per Trip (ton/trip) = SUM[Total Weight driven per day (ton/day)] / SUM[Maximum trips per day (trip/day)]
 Average Miles Per Trip (miles/trip) = SUM[Maximum one-way miles (miles/day)] / SUM[Maximum trips per year (trip/day)]
 Unmitigated PTE (tons/yr) = [Maximum one-way miles (miles/yr)] * [Unmitigated Emission Factor (lb/mile)] * (ton/2000 lbs)
 Mitigated PTE (tons/yr) = [Maximum one-way miles (miles/yr)] * [Mitigated Emission Factor (lb/mile)] * (ton/2000 lbs)
 Controlled PTE (tons/yr) = [Mitigated PTE (tons/yr)] * [1 - Dust Control Efficiency]

Abbreviations

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

**Appendix A: Emission Calculations
Fugitive Dust Emissions - Unpaved Roads**

Company Name: Harsco Minerals Briquetting, LLC
Address City IN Zip: 5222 Indianapolis Boulevard, East Chicago, IN 46312
Significant Permit Revision No.: 089-36924-00323
FESOP No. F089-23324-00323
Reviewer: Joshua Levering
Date: April, 2016

Unpaved Roads at Industrial Site

The following calculations determine the amount of emissions created by unpaved roads, based on 8,760 hours of use and AP-42, Ch 13.2.2 (11/2006).

Vehicle Information (provided by source)

Type	Maximum number of vehicles	Number of one-way trips per day per vehicle	Maximum trips per day (trip/day)	Maximum Weight Loaded (tons/trip)	Total Weight driven per day (ton/day)	Maximum one way distance (feet/trip)	Maximum one way distance (mi/trip)	Maximum one-way miles (miles/day)	Maximum one-way miles (miles/yr)
Front end loader (empty)	1.0	480.0	480.0	15.0	7200.0	528	0.100	48.0	17520.0
Front end loader (loaded)	1.0	480.0	480.0	19.1	9168.0	528	0.100	48.0	17520.0
semi tractor-trailer (empty)	14.0	1.0	14.0	15.0	210.0	528	0.100	1.40	511.0
semi tractor-trailer (loaded)	14.0	1.0	14.0	40.0	560.0	528	0.100	1.40	511.0
Totals			988.0		17138.0			98.8	36062.0

Average Vehicle Weight Per Trip =

17.3	tons/trip
------	-----------

 Average Miles Per Trip =

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

	PM	PM10	PM2.5	
where k =	4.9	1.5	0.15	lb/mi = particle size multiplier (AP-42 Table 13.2.2-2 for Industrial Roads)
s =	4.8	4.8	4.8	% = mean % silt content of unpaved roads (AP-42 Table 13.2.2-1 Sand/Gravel Processing Plant)
a =	0.7	0.9	0.9	= constant (AP-42 Table 13.2.2-2 for Industrial Roads)
W =	17.3	17.3	17.3	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, $E_{ext} = E \cdot [(365 - P)/365]$ (Equation 2 from AP-42 13.2.2)

Mitigated Emission Factor, $E_{ext} = E \cdot [(365 - P)/365]$
 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, $E_f =$	5.68	1.45	0.14	lb/mile
Mitigated Emission Factor, $E_{ext} =$	3.74	0.95	0.10	lb/mile
Dust Control Efficiency =	50%	50%	50%	(pursuant to control measures outlined in fugitive dust control plan)

Process	Unmitigated PTE of PM (tons/yr)	Unmitigated PTE of PM10 (tons/yr)	Unmitigated PTE of PM2.5 (tons/yr)	Mitigated PTE of PM (tons/yr)	Mitigated PTE of PM10 (tons/yr)	Mitigated PTE of PM2.5 (tons/yr)	Controlled PTE of PM (tons/yr)	Controlled PTE of PM10 (tons/yr)	Controlled PTE of PM2.5 (tons/yr)
Front end loader (empty)	49.78	12.69	1.27	32.73	8.34	0.83	16.37	4.17	0.42
Front end loader (loaded)	49.78	12.69	1.27	32.73	8.34	0.83	16.37	4.17	0.42
semi tractor-trailer (empty)	1.45	0.37	0.04	0.95	0.24	0.02	0.48	0.12	0.01
semi tractor-trailer (loaded)	1.45	0.37	0.04	0.95	0.24	0.02	0.48	0.12	0.01
Totals	102.47	26.12	2.61	67.38	17.17	1.72	33.69	8.59	0.86

Methodology

Total Weight driven per day (ton/day) = [Maximum Weight Loaded (tons/trip)] * [Maximum trips per day (trip/day)]
 Maximum one-way distance (mi/trip) = [Maximum one-way distance (feet/trip)] / [5280 ft/mile]
 Maximum one-way miles (miles/day) = [Maximum trips per year (trip/day)] * [Maximum one-way distance (mi/trip)]
 Average Vehicle Weight Per Trip (ton/trip) = SUM[Total Weight driven per day (ton/day)] / SUM[Maximum trips per day (trip/day)]
 Average Miles Per Trip (miles/trip) = SUM[Maximum one-way miles (miles/day)] / SUM[Maximum trips per year (trip/day)]
 Unmitigated PTE (tons/yr) = (Maximum one-way miles (miles/yr)) * (Unmitigated Emission Factor (lb/mile)) * (ton/2000 lbs)
 Mitigated PTE (tons/yr) = (Maximum one-way miles (miles/yr)) * (Mitigated Emission Factor (lb/mile)) * (ton/2000 lbs)
 Controlled PTE (tons/yr) = (Mitigated PTE (tons/yr)) * (1 - Dust Control Efficiency)

Abbreviations

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

**Appendix A: Emission Calculations
Fugitive Dust Emissions - Paved Roads**

Company Name: Harsco Minerals Briquetting, LLC
Address City IN Zip: 5222 Indianapolis Boulevard, East Chicago, IN 46312
Significant Permit Revision No.: 089-36924-00323
FESOP No. F089-23324-00323
Reviewer: Joshua Levering
Date: April, 2016

Paved Roads at Industrial Site

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

Vehicle Information (provided by source)

Type	Maximum number of vehicles per day	Number of one-way trips per day per vehicle	Maximum trips per day (trip/day)	Maximum Weight Loaded (tons/trip)	Total Weight driven per day (ton/day)	Maximum one-way distance (feet/trip)	Maximum one-way distance (mi/trip)	Maximum one-way miles (miles/day)	Maximum one-way miles (miles/yr)
semi tractor-trailer (empty)	14.0	1.0	14.0	15.0	210.0	1056	0.200	2.8	1022.0
semi tractor-trailer (loaded)	14.0	1.0	14.0	40.0	560.0	1056	0.200	2.8	1022.0
Totals			28.0		770.0			5.6	2044.0

Average Vehicle Weight Per Trip = 27.5 tons/trip
 Average Miles Per Trip = 0.20 miles/trip

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

	PM	PM10	PM2.5	
where k =	0.011	0.0022	0.00054	lb/VMT = particle size multiplier (AP-42 Table 13.2.1-1)
W =	27.5	27.5	27.5	tons = average vehicle weight (provided by source)
sL =	9.7	9.7	9.7	g/m ² = silt loading value for paved roads at iron and steel production facilities - Table 13.2.1-3)

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

Mitigated Emission Factor, Eext = Ef * [1 - (p/4N)]
 where p = 125 days of rain greater than or equal to 0.01 inches (see Fig. 13.2.1-2)
 N = 365 days per year

	PM	PM10	PM2.5	
Unmitigated Emission Factor, Ef =	2.555	0.511	0.1255	lb/mile
Mitigated Emission Factor, Eext =	2.337	0.467	0.1147	lb/mile
Dust Control Efficiency =	50%	50%	50%	(pursuant to control measures outlined in fugitive dust control plan)

Process	Unmitigated PTE of PM (tons/yr)	Unmitigated PTE of PM10 (tons/yr)	Unmitigated PTE of PM2.5 (tons/yr)	Mitigated PTE of PM (tons/yr)	Mitigated PTE of PM10 (tons/yr)	Mitigated PTE of PM2.5 (tons/yr)	Controlled PTE of PM (tons/yr)	Controlled PTE of PM10 (tons/yr)	Controlled PTE of PM2.5 (tons/yr)
semi tractor-trailer (empty)	1.31	0.26	0.06	1.19	0.24	0.06	0.60	0.12	0.03
semi tractor-trailer (loaded)	1.31	0.26	0.06	1.19	0.24	0.06	0.60	0.12	0.03
Totals	2.61	0.52	0.13	2.39	0.48	0.12	1.19	0.24	0.06

Methodology

Total Weight driven per day (ton/day) = [Maximum Weight Loaded (tons/trip)] * [Maximum trips per day (trip/day)]
 Maximum one-way distance (mi/trip) = [Maximum one-way distance (feet/trip)] / [5280 ft/mile]
 Maximum one-way miles (miles/day) = [Maximum trips per year (trip/day)] * [Maximum one-way distance (mi/trip)]
 Average Vehicle Weight Per Trip (ton/trip) = SUM[Total Weight driven per day (ton/day)] / SUM[Maximum trips per day (trip/day)]
 Average Miles Per Trip (miles/trip) = SUM[Maximum one-way miles (miles/day)] / SUM[Maximum trips per year (trip/day)]
 Unmitigated PTE (tons/yr) = [Maximum one-way miles (miles/yr)] * [Unmitigated Emission Factor (lb/mile)] * (ton/2000 lbs)
 Mitigated PTE (tons/yr) = [Maximum one-way miles (miles/yr)] * [Mitigated Emission Factor (lb/mile)] * (ton/2000 lbs)
 Controlled PTE (tons/yr) = [Mitigated PTE (tons/yr)] * [1 - Dust Control Efficiency]

Abbreviations

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

**Appendix A: Emissions Calculations
Material Storage Piles**

Company Name: Harsco Minerals Briquetting, LLC
Address City IN Zip: 5222 Indianapolis Boulevard, East Chicago, IN 46312
Significant Permit Revision No.: 089-36924-00323
FESOP No. F089-23324-00323
Reviewer: Joshua Levering
Date: April, 2016

The following calculations determine the amount of emissions created by wind erosion of storage stockpiles, based on 8,760 hours of use and USEPA's AP-42 (Pre 1983 Edition), Section 11.2.3.

$$E_f = 1.7 \cdot (s/1.5) \cdot (365-p)/235 \cdot (f/15)$$

where E_f = emission factor (lb/acre/day)
 s = silt content (wt %)
 p = 125 days of rain greater than or equal to 0.01 inches
 f = 15 % of wind greater than or equal to 12 mph

Material	Silt Content ¹ (wt %)	Emission Factor (lb/acre/day)	Maximum Anticipated Pile Size (acres)	Uncontrolled PTE	
				PM (tons/yr)	PM10=PM2.5 ² (tons/yr)
Slopping Slag	1	1.16	0.007	1.48E-03	5.18E-04
Totals				1.48E-03	5.18E-04

Notes

- Silt content from MPR No. F089-30936-00323
- Source does not provide an emission factor for PM2.5, so PM2.5 assumed equal to PM10

Methodology

Limited PTE of PM (tons/yr) = [Emission Factor (lb/acre/day)] * [Maximum Pile Size (acres)] * (ton/2000 lbs) * (8760 hours/yr)
 Limited PTE of PM10 (tons/yr) = [Potential PM Emissions (tons/yr)] * 35%

Abbreviations

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



Indiana Department of Environmental Management

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Michael R. Pence
Governor

Carol S. Comer
Commissioner

June 9, 2016

Mr. Guy Kosmoski
Harsco Minerals Briquetting, LLC
5222 Indianapolis Boulevard
East Chicago, IN 46312

Re: Public Notice
Harsco Minerals Briquetting, LLC
Permit Level:
Federally Enforceable State Operating Permit
(FESOP) Significant Permit Revision
Permit Number: 089-36924-00323

Dear Mr. Kosmoski:

Enclosed is a copy of your draft Federally Enforceable State Operating Permit (FESOP) Significant Permit Revision, 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 Post Tribune in Merrillville, Indiana and The Times in Munster, Indiana publish the abbreviated version of the public notice no later than June 13, 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 East Chicago Public Library, 1008 West Chicago Avenue in East Chicago, 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 Joshua Levering, 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 4-6543 or dial (317) 234-6543.

Sincerely,

Vivian Haun

Vivian Haun
Permits Branch
Office of Air Quality

Enclosures
PN Applicant Cover letter 2/17/2016



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Carol S. Comer
Commissioner

ATTENTION: PUBLIC NOTICES, LEGAL ADVERTISING

June 8, 2016

The Post Tribune
1433 E. 83rd Avenue
Merrillville, IN 46410

Enclosed, please find one Indiana Department of Environmental Management Notice of Public Comment for Harsco Minerals Briquetting, LLC, Lake 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 June 13, 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 Vivian Haun at 800-451-6027 and ask for extension 3-6878 or dial 317-233-6878.

Sincerely,

Vivian Haun

Vivian Haun
Permit Branch
Office of Air Quality

Permit Level: Federally Enforceable State Operating Permit (FESOP)
Significant Permit Revision

Permit Number: 089-36924-00323

Enclosure
PN Newspaper.dot 8/27/2015



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Michael R. Pence
Governor

Carol S. Comer
Commissioner

ATTENTION: PUBLIC NOTICES, LEGAL ADVERTISING

June 8, 2016

The Times
601 West 45th Avenue
Munster, IN 46321

Enclosed, please find one Indiana Department of Environmental Management Notice of Public Comment for Harsco Minerals Briquetting, LLC, Lake 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 June 13, 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 Vivian Haun at 800-451-6027 and ask for extension 3-6878 or dial 317-233-6878.

Sincerely,

Vivian Haun

Vivian Haun
Permit Branch
Office of Air Quality

Permit Level: Federally Enforceable State Operating Permit (FESOP)
Significant Permit Revision

Permit Number: 089-36924-00323

Enclosure
PN Newspaper.dot 8/27/2015



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Michael R. Pence
Governor

Carol S. Comer
Commissioner

June 9, 2016

To: East Chicago 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: Harsco Minerals Briquetting, LLC
Permit Number: 089-36924-00323

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 2/16/2016



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

Michael R. Pence
Governor

Carol S. Comer
Commissioner

Notice of Public Comment

June 9, 2016
Harsco Minerals Briquetting, LLC
089-36924-00323

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	VHAUN 6/9/2016 Harsco Minerals Briquetting LLC 089-36924-00323 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		Guy Kosmoski Harsco Minerals Briquetting LLC 5222 Indianapolis Blvd East Chicago IN 46312 (Source CAATS)										
2		East Chicago City Council 4525 Indianapolis Blvd East Chicago IN 46312 (Local Official)										
3		East Chicago Public Library 1008 W. Chicago Ave. East Chicago IN 46312 (Library)										
4		Lake County Health Department-Gary 1145 W. 5th Ave Gary IN 46402-1795 (Health Department)										
5		WJOB / WZVN Radio 6405 Olcott Ave Hammond IN 46320 (Affected Party)										
6		Lowell Town Council and Town Manager PO Box 157, 501 East Main Street Lowell IN 46356 (Local Official)										
7		Shawn Sobocinski 1814 Laporte Street Portage IN 46368-1217 (Affected Party)										
8		Mr. Dennis Hahney Pipefitters Association, Local Union 597 1461 East Summit St Crown Point IN 46307 (Affected Party)										
9		Craig Hogarth 7901 West Morris Street Indianapolis IN 46231 (Affected Party)										
10		Lake County Commissioners 2293 N. Main St, Building A 3rd Floor Crown Point IN 46307 (Local Official)										
11		Anthony Copeland 2006 E. 140th Street East Chicago IN 46312 (Affected Party)										
12		Barbara G. Perez 506 Lilac Street East Chicago IN 46312 (Affected Party)										
13		Mr. Robert Garcia 3733 Parrish Avenue East Chicago IN 46312 (Affected Party)										
14		Ms. Karen Kroczek 8212 Madison Ave Munster IN 46321-1627 (Affected Party)										
15		Joseph Hero 11723 S Oakridge Drive St. John IN 46373 (Affected Party)										

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Mail Code 61-53

IDEM Staff	VHAUN 6/9/2016 Harsco Minerals Briquetting LLC 089-36924-00323 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		Gary City Council 401 Broadway # 209 Gary IN 46402 (Local Official)										
2		Ronald R. Weszely Valparaiso Safety & Environmental Consultants, Inc 653 West 23rd Street #302 Panama City FL 32405 (Consultant)										
3		Mr. Larry Davis 268 South, 600 West Hebron IN 46341 (Affected Party)										
4		Ryan Dave 939 Cornwallis Munster IN 46321 (Affected Party)										
5		Mark Coleman PO Box 85 Beverly Shores IN 46301-0085 (Affected Party)										
6												
7												
8												
9												
10												
11												
12												
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14												
15												

Total number of pieces Listed by Sender 5	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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