



DATE: February 19, 2008

TO: Interested Parties / Applicant

RE: Hanson Aggregates Midwest – Harding Street Quarry / SPR097-25362-00104

FROM: Patrick N. Carroll, Deputy Director  
Department of Public Works

## Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 501, Indianapolis, IN 46204, **within fifteen (15) calendar days of the receipt of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Indianapolis Office of Environmental Services, Air Permits at (317) 327-2234.

Enclosures



Air Quality Hotline: 317-327-4AIR | knozone.com

Department of Public Works  
Office of Environmental Services

2700 Belmont Avenue  
Indianapolis, IN 46221

317-327-2234  
Fax 327-2274  
TDD 327-5186  
indygov.org/dpw



February 19, 2008

Mr. James Smith  
Environmental Manager  
Hanson Aggregates Midwest – Harding Street Quarry  
209 Old Harrods Creek Road, P.O. Box 436329  
Louisville, Kentucky 40253-6329

CERTIFIED MAIL 7007 0710 0005 3965 7395

Re: First Significant Permit Revision No. SPR097-25362-00104  
to FESOP F097-19718-00104

Dear Mr. Smith:

Hanson Aggregates Midwest – Harding Street Quarry was issued a Federally Enforceable State Operating Permit (FESOP), F097-19718-00104, on May 11, 2007, for a mining and quarrying operation located at 4200 South Harding Street, Indianapolis, Indiana 46217. The Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) and the City of Indianapolis, Office of Environmental Services (OES) received an application on October 1, 2007, relating to the construction and operation of additional, modified and replacement crushers, screens and conveyors at this nonmetallic mineral processing source. Pursuant to the provisions of 326 IAC 2-8-11.1(f), the FESOP, F097-19718-00104, is hereby revised as described in the enclosed Technical Support Document. Please find attached a copy of the revised permit.

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 Mark Caraher at (317) 327-2272 or mcaraher@indygov.org.

Sincerely,

ORIGINAL SIGNED BY AMANDA HENNESSY FOR

Patrick N. Carroll, Deputy Director  
Department of Public Works

Enclosure: Revised Permit  
Technical Support Document  
Notice of Decision

mbc

cc: Files  
Compliance - Matt Mosier  
U.S. EPA, Region V  
Mindy Hahn, IDEM OAQ  
Marion County Health Department



Air Quality Hotline: 317-327-4AIR | [knozone.com](http://knozone.com)

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

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
and  
CITY of INDIANAPOLIS  
OFFICE OF ENVIRONMENTAL SERVICES**

**Hanson Aggregates Midwest, Inc. – Harding Street Quarry  
4200 South Harding Street  
Indianapolis, Indiana 46217**

(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 provision of this permit is grounds for enforcement action; permit termination, revocation and reissuance, or modification; and 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.**

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.

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. This permit also addresses new source review requirements and is intended to fulfill the new source review procedures and permit revision requirements pursuant to 326 IAC 2-8-11.1, applicable to those conditions.

Operation Permit No.: F097-19718-00104	
Issued by: ORIGINAL SIGNED BY: Felicia A. Robinson, Administrator Indianapolis Office of Environmental Services	Issuance Date: May 11, 2007  Expiration Date: May 11, 2012
First Significant Permit Revision No.: SPR097-25362-00104	Conditions Affected: Entire Permit
Issued by: ORIGINAL SIGNED BY AMANDA HENNESSY FOR  Patrick N. Carroll, Deputy Director Department of Public Works	Issuance Date: February 19, 2008  Expiration Date: May 11, 2012



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**Department of Public Works  
Office of Environmental Services**

2700 Belmont Avenue  
Indianapolis, IN 46221

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## SECTION A

## SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ), and Indianapolis Office of Environmental Services (OES). 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)]

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The Permittee owns and operates a stationary mining and quarrying operation and a stationary sand and gravel operation.

Source Address:	4200 South Harding Street, Indianapolis, Indiana 46217
Mailing Address:	209 Old Harrods Creek Road, P.O. Box 436329, Louisville, Kentucky 40253-6329
General Source Phone:	(317) 788-4086
SIC Code:	1422 and 1442
County Location:	Marion County
Source Location Status:	Nonattainment for PM2.5 Attainment for all other criteria pollutants
Source Status:	Federally Enforceable State Operating Permit (FESOP) Minor Source, under PSD and Nonattainment New Source Review Minor Source, Section 112 of the Clean Air Act

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

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

- (a) One (1) Limestone Crushing Plant # 522, identified as Plant # 522, with a maximum primary crushing capacity of 1500 tons per hour, using a NESCO Systems water suppression system as control. Plant # 522 consists of:
- (1) Two (2) receiving hoppers (F1 and F2). F2 was installed in 1974 and F1 was installed in 2003. Each receiving hopper capacity is 1500 tons.
  - (2) Two (2) primary crushers, a 5348 Cedar Rapids impact crusher (CR#2) installed in 1974, and a 4248 jaw crusher (CR#1) installed in 2003.
  - (3) Two (2) secondary crushers, a Symons cone crusher (CR#3) and a Stedman impactor crusher (CR#7). CR#3 has a maximum crushing capacity of 650 tons per hour and CR#7 has a maximum crushing capacity of 300 tons per hour. CR#3 and CR#7 were each approved to construct in 2008.
  - (4) Three (3) tertiary crushers, a Symons cone crusher (CR#4), a ISC VSI crusher (CR#5) and a Symons cone crusher (CR#6). CR#4 has a maximum crushing capacity of 225 tons per hour. CR#5 has a maximum crushing capacity of 500 tons per hour and CR#6 has a maximum crushing capacity of 325 tons per hour. CR#4, CR#5 and CR#6 were each approved to construct in 2008.
  - (5) Nine (9) screens (Scr#1, Scr#2, Scr#3, Scr#4, Scr#5, Scr#6, Scr#7, Scr#8 and DW Screen). Scr#1 has a maximum screening capacity of 1500 tons per hour.

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Modified by: M. Caraher

Scr#2 and Scr#3 each have a maximum screening capacity of 275 tons per hour. Scr#4, Scr#5 and Scr#8 each have a maximum screening capacity of 600 tons per hour. Scr#6 and Scr#7 each have a maximum screening capacity of 400 tons per hour. DW Screen has a maximum screening capacity of 40 tons per hour. The use and presence of water in order to wash the products in Scr#6, Scr#7 and DW Screen is deemed an integral part of the process in Scr#6, Scr#7 and DW Screen. Scr#1, Scr#2, Scr#3, Scr#4, Scr#5, Scr#6, Scr#7, Scr#8 and DW Screen were each approved to construct in 2008.

- (6) Fifty (50) conveyors (C-1, C-2, C-3, C1A, C2A, C3A, C-4, C-5, C-6, C-7, C-8, C-9, C-10, C-11, C-12, C-13, C-14, C-15, C-16, C-17, C-18, C-19, C-20, C-21, C-22, C-23, C-24, C-25, C-26, C-27, C-28, C-29, C-30, C-31, C-32, C-33, C-34, C-35, C-36, C-37, C-38, C-39, C-40, C-41, C-42, C-43, C-44, C-45, Belt Fdr#1 and Belt Fdr#2). C-1, C-2, C-3, C1A, C2A, C3A, C-4 and C-5 each have a maximum capacity of 1500 tons per hour. C-6 has a maximum capacity of 925 tons per hour. C-7, C-9 and C-10 each have a maximum capacity of 650 tons per hour. C-8 has a maximum capacity of 675 tons per hour. C-11 has a maximum capacity of 130 tons per hour. C-12 and C-13 each have a maximum capacity of 300 tons per hour. C-14, C-15, C-16 and C-17 each have a maximum capacity of 225 tons per hour. C-18, C-22, C-23, C-43 and C-44 each have a maximum capacity of 60 tons per hour. C-19 has a maximum capacity of 330 tons per hour. C-20 has a maximum capacity of 550 tons per hour. C-21 and C-29 each have a maximum capacity of 75 tons per hour. C-24, C-41 and C-42 each have a maximum capacity of 20 tons per hour. C-25 and C-28 each have a maximum capacity of 500 tons per hour. C-26 has a maximum capacity of 900 tons per hour. C-27 has a maximum capacity of 1150 tons per hour. C-30 has a maximum capacity of 750 tons per hour. C-31, C-32, C-33, C-34, C-35, C-36 each have a maximum capacity of 250 tons per hour. C-37 and C-38 each have a maximum capacity of 425 tons per hour. C-39 and C-40 each have a maximum capacity of 175 tons per hour. C-45 has a maximum capacity of 40 tons per hour. Belt Fdr#1 and Belt Fdr#2 each have a maximum capacity of 30 tons per hour. The use and presence of water in C-31 through C-41 and in C-45 is deemed an integral part of the process in C-31 through C-41 and in C-45. C-1, C-2 and C-3 were each installed prior to 1983. C1A and C2A and C3A were installed in 2003. C-4, C-5, C-6, C-7, C-8, C-9, C-10, C-11, C-12, C-13, C-14, C-15, C-16, C-17, C-18, C-19, C-20, C-21, C-22, C-23, C-24, C-25, C-26, C-27, C-28, C-29, C-30, C-31, C-32, C-33, C-34, C-35, C-36, C-37, C-38, C-39, C-40, C-41, C-42, C-43, C-44, C-45, Belt Fdr#1 and Belt Fdr#2 were each approved to construct in 2008.
- (7) One (1) wet sand screw identified as Screw. Screened fines come out the bottom of the screens and then go to the bottom of the wet sand screw where they are totally immersed in water. The screw separates coarse fines to make manufactured sand. Screw has a maximum capacity of 175 tons per hour. The use and presence of water Screw is deemed an integral part of the process. Screw was approved to construct in 2008.

Under 40 CFR 60.670, Subpart OOO, Cr#1, Cr#2, Cr#3, Cr#4, Cr#5, Cr#6, Cr#7, Scr#1, Scr#2, Scr#3, Scr#4, Scr#5, Scr#6, Scr#7, Scr#8, DW Screen, C-1, C-2, C-3, C1A, C2A, C3A, C-4, C-5, C-6, C-7, C-8, C-9, C-10, C-11, C-12, C-13, C-14, C-15, C-16, C-17, C-18, C-19, C-20, C-21, C-22, C-23, C-24, C-25, C-26, C-27, C-28, C-29, C-30, C-31, C-32, C-33, C-34, C-35, C-36, C-37, C-38, C-39, C-40, C-41, C-42, C-43, C-44, C-45, Belt Fdr#1, Belt Fdr#2 and Screw are each considered an affected facility.

- (b) One (1) dredging and screening of sand and gravel operation, identified as Plant # 510, with a maximum capacity of 450 tons per hour, using a NESCO Systems water suppression system for washing and screening and as additional control. Plant # 510 was installed in 1991 and consists of one (1) receiving hopper, (SR1), three (3) screens (SS1, SSC1 and SSC2) and seven (7) conveyors (SC1 through SC7).
- (c) Drilling and blasting of nonmetallic minerals in a mining and quarrying operation. Installed prior to 1974.

A.3 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, as defined in 326 IAC 2-7-1(21):

- (a) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons.
- (b) A petroleum fuel, other than gasoline, dispensing facility, having a storage capacity of less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month.
- (c) Application of oils, greases, lubricants or other nonvolatile materials applied as temporary protective coatings.
- (d) Paved and unpaved roads and parking lots with public access. [326 IAC 6-5]
- (e) On-site fire and emergency response training approved by the department.
- (f) Emergency Generators as follows:
  - (1) Gasoline generators not exceeding 110 horsepower. [326 IAC 6.5-1-2(a)]

A.4 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), and OES for a Federally Enforceable State Operating Permit (FESOP).

## **SECTION B GENERAL CONDITIONS**

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

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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)]**

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- (a) This permit, F097-19718-00104, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.
- (b) If IDEM, OAQ and OES, 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]**

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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]**

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

### **B.5 Severability [326 IAC 2-8-4(4)]**

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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)]**

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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)]**

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- (a) The Permittee shall furnish to IDEM, OAQ, and OES within a reasonable time, any information that IDEM, OAQ, and OES may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1). Upon request, the Permittee shall also furnish to IDEM, OAQ, and OES copies of records required to be kept by this permit.

- (b) For information furnished by the Permittee to IDEM, OAQ, and OES, 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 Compliance Order Issuance [326 IAC 2-8-5(b)]**

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IDEM, OAQ and OES 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.

**B.9 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)]**

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- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by an authorized individual of truth, accuracy, and completeness. This certification, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.
- (c) An authorized individual is defined at 326 IAC 2-1.1-1(1).

**B.10 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]**

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- (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. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent 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 Branch, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

and

Indianapolis Office of Environmental Services  
Air Compliance  
2700 South Belmont Avenue  
Indianapolis, IN 46221-2009

- (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, and OES 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, IDEM, OAQ, and OES may require to determine the compliance status of the source.

The notification which shall be submitted by the Permittee does require the certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1).

B.11 Preventive Maintenance Plan [326 IAC 1-6-3] [326 IAC 2-8-4(9)] [326 IAC 2-8-5(a)(1)]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, 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 Branch, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

and

Indianapolis Office of Environmental Services  
Air Compliance  
2700 South Belmont Avenue  
Indianapolis, IN 46221-2009

The PMP extension notification does not require the certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1).

(b) A copy of the PMPs shall be submitted to IDEM, OAQ, and OES upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ, and OES. IDEM, OAQ, and OES may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMPs do not require the certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1).

- (c) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation, Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

**B.12 Emergency Provisions [326 IAC 2-8-12]**

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- (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 describes 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, and OES, 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 No.: 1-800-451-6027 (ask for IDEM, OAQ, Compliance Section) or,  
Telephone No.: 317-233-0178 (ask for IDEM, OAQ, Compliance Section)  
Facsimile No.: 317-233-6865

and

Telephone No.: 317-327-2234 (ask for OES Air Compliance Section)  
Facsimile No.: 317-327-2274

- (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 Branch, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

and

Indianapolis Office of Environmental Services  
Air Compliance  
2700 South Belmont Avenue  
Indianapolis, IN 46221-2009

First Significant Permit Revision  
097-25362-00104  
Modified by: M. Caraher

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
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "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, and OES, 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, and OES, 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.

- (h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

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

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- (a) All terms and conditions of permits established prior to F097-19718-00104 and issued pursuant to permitting programs approved into the state implementation plan have been either:
- (1) incorporated as originally stated,
  - (2) revised
  - (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)]**

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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 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]**

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- (a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provision), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

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

and

Indianapolis Office of Environmental Services  
Air Compliance  
2700 South Belmont Avenue  
Indianapolis, IN 46221-2009

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. 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.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

**B.16 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 FESOP 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 the certification by the “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 OES 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 OES 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 OES at least thirty (30) days in advance of the date this permit is to be reopened, except that OES may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

**B.17 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 OES 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(40). The renewal application does require the certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

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

and

Indianapolis Office of Environmental Services  
Air Permits  
2700 South Belmont Avenue  
Indianapolis, IN 46221-2009

- (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, and OES 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, and OES takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ, and OES, any additional information identified as needed to process the application.

**B.18 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  
Permits Branch, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

and

Indianapolis Office of Environmental Services  
Air Permits  
2700 South Belmont Avenue  
Indianapolis, IN 46221-2009

Any such application shall be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) The Permittee may implement the 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.19 Operational Flexibility [326 IAC 2-8-15][326 IAC 2-8-11.1]**

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- (a) The Permittee may make any change or changes at this source that are described in 326 IAC 2-8-15(b) through (d), without 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:

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

and

Indianapolis Office of Environmental Services  
Air Permits  
2700 South Belmont Avenue  
Indianapolis, IN 46221-2009

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 emissions trades that are subject to 326 IAC 2-8-15(b) through (d). The Permittee shall make such records available, upon reasonable request, to public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ, and OES, in the notices specified in 326 IAC 2-8-15(b)(2), (c)(1), and (d).

- (b) Emission Trades [326 IAC 2-8-15(c)]  
The Permittee may trade emissions increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(c).
- (c) Alternative Operating Scenarios [326 IAC 2-8-15(d)]  
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(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.20 Source Modification Requirement [326 IAC 2-8-11.1]**

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A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-8-11.1.

B.21 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, OES, 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;
- (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.22 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  
Permits Branch, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

and

Indianapolis Office of Environmental Services  
Air Permits  
2700 South Belmont Avenue  
Indianapolis, IN 46221-2009

The application which shall be submitted by the Permittee does require the certification by the "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.23 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, within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.
- (b) Failure to pay may result in administrative enforcement action, or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

B.24 Credible Evidence [326 IAC 2-8-4(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 whether the Permittee would have been in compliance with the condition of this permit if the appropriate performance or compliance test or procedure had been performed.

**SECTION C SOURCE OPERATION CONDITIONS**

Entire Source

**Emissions 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. This limitation shall also make the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) and 326 IAC 2-3 (Emission Offset) not applicable.
- (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) The 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. This limitation shall make the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

(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 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

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

---

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

**C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2(3)]**

---

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

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

---

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

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

---

Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions shall be controlled according to the plan submitted on July 15, 2004. The plan is included as Attachment A.

**C.7 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]**

---

The Permittee shall comply with the applicable requirements of 326 IAC 14-10, 326 IAC 18, and 40 CFR 61.140.

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

**C.8 Performance Testing [326 IAC 3-6]**

---

- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ, and OES.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

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

and

Indianapolis Office of Environmental Services  
Air Compliance  
2700 South Belmont Avenue  
Indianapolis, IN 46221-2009

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall notify IDEM, OAQ, and OES of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1).

- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ, and OES not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, and OES, if the Permittee submits to IDEM, OAQ, and OES 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.9 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] [326 IAC 2-8-5(a)(1)]**

#### **C.10 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]**

---

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, 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 Branch, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

and

Indianapolis Office of Environmental Services  
Air Compliance  
2700 South Belmont Avenue  
Indianapolis, IN 46221-2009

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

The notification that shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Unless otherwise specified in the approval for the new emissions unit, compliance monitoring for new emission units or emission units added through a permit revision shall be implemented when operation begins.

#### **C.11 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]**

---

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63 or other approved methods as specified in this permit.

**C.12 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-8-4(3)] [326 IAC 2-8-5(1)]**

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- (a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale.
- (b) The Permittee may request that the IDEM, OAQ, and OES 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.13 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]**

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

- (a) The Permittee prepared and submitted written emergency reduction plans (ERPs) consistent with safe operating procedures on December 8, 1988.
- (b) Upon direct notification by IDEM, OAQ, and OES, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

**C.14 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68]**

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

**C.15 Response to Excursions or Exceedances [326 IAC 2-8-4] [326 IAC 2-8-5]**

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- (a) Upon detecting an excursion or exceedance, the Permittee shall restore operation of the emissions unit(s) (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.
- (b) The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Corrective actions may include, but are not limited to, the following:
  - (1) initial inspection and evaluation;
  - (2) recording that operations returned to normal without operator action (such as through response by a computerized distribution control system); or
  - (3) any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
- (c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:
  - (1) monitoring results;

- (2) review of operation and maintenance procedures and records;
- (3) inspection of the control device, associated capture system, and the process.
- (d) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (e) The Permittee shall maintain the following records:
  - (1) monitoring data;
  - (2) monitor performance data, if applicable; and
  - (3) corrective actions taken.

**C.16 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 take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, and OES within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ, and OES that retesting in one hundred twenty (120) days is not practicable, IDEM, OAQ, and OES may extend the retesting deadline.
- (c) IDEM, OAQ, and OES reserve the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

**C.17 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. 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 OES Administrator makes a request for records to the Permittee, the Permittee shall furnish the records to the OES Administrator within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

**C.18 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]**

- (a) The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period.

The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the “authorized individual” as defined by 326 IAC2-1.1-1(1).

- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

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

and

Indianapolis Office of Environmental Services  
Air Compliance  
2700 South Belmont Avenue  
Indianapolis, IN 46221-2009

- (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, and OES on or before the date it is due.
- (d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1).
- (e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit “calendar year” means the twelve (12) month period from January 1 to December 31 inclusive.
- (f) 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.19 Compliance with 40 CFR 82 and 326 IAC 22-1**

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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 the standards for recycling and emissions reduction:

- (a) Persons opening appliances for maintenance, service, repair or disposal must comply with the required practices pursuant to 40 CFR 82.156
- (b) Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

**SECTION D.1**

**FACILITY OPERATION CONDITIONS**

**Facility Description [326 IAC 2-8-4(10)]:**

- (a) One (1) Limestone Crushing Plant, identified as Plant # 522, with a maximum primary crushing capacity of 1500 tons per hour, using a NESCO Systems water suppression system as control. Plant # 522 was installed in 1974 and consists of:
- (1) Two (2) receiving hoppers (F1 and F2). F2 was installed in 1974 and F1 was installed in 2003. Each receiving hopper capacity is 1500 tons.
  - (2) Two (2) primary crushers, a 5348 Cedar Rapids impact crusher (CR#2) installed in 1974 and a 4248 jaw crusher (CR#1) installed in 2003.
  - (3) Two (2) secondary crushers, a Symons cone crusher (CR#3) and a Stedman impactor crusher (CR#7). CR#3 has a maximum crushing capacity of 650 tons per hour and CR#7 has a maximum crushing capacity of 300 tons per hour. CR#3 and CR#7 were each approved to construct in 2008.
  - (4) Three (3) tertiary crushers, a Symons cone crusher (CR#4), a ISC VSI crusher (CR#5) and a Symons cone crusher (CR#6). CR#4 has a maximum crushing capacity of 225 tons per hour. CR#5 has a maximum crushing capacity of 500 tons per hour and CR#6 has a maximum crushing capacity of 325 tons per hour. CR#4, CR#5 and CR#6 were each approved to construct in 2008.
  - (5) Nine (9) screens (Scr#1, Scr#2, Scr#3, Scr#4, Scr#5, Scr#6, Scr#7, Scr#8 and DW Screen). Scr#1 has a maximum screening capacity of 1500 tons per hour. Scr#2 and Scr#3 each have a maximum screening capacity of 275 tons per hour. Scr#4, Scr#5 and Scr#8 each have a maximum screening capacity of 600 tons per hour. Scr#6 and Scr#7 each have a maximum screening capacity of 400 tons per hour. DW Screen has a maximum screening capacity of 40 tons per hour. The use and presence of water in order to wash the products in Scr#6, Scr#7 and DW Screen is deemed an integral part of the process in Scr#6, Scr#7 and DW Screen. Scr#1, Scr#2, Scr#3, Scr#4, Scr#5, Scr#6, Scr#7, Scr#8 and DW Screen were each approved to construct in 2008.
  - (6) Fifty (50) conveyors (C-1, C-2, C-3, C1A, C2A, C3A, C-4, C-5, C-6, C-7, C-8, C-9, C-10, C-11, C-12, C-13, C-14, C-15, C-16, C-17, C-18, C-19, C-20, C-21, C-22, C-23, C-24, C-25, C-26, C-27, C-28, C-29, C-30, C-31, C-32, C-33, C-34, C-35, C-36, C-37, C-38, C-39, C-40, C-41, C-42, C-43, C-44, C-45, Belt Fdr#1 and Belt Fdr#2). C-1, C-2, C-3, C1A, C2A, C3A, C-4 and C-5 each have a maximum capacity of 1500 tons per hour. C-6 has a maximum capacity of 925 tons per hour. C-7, C-9 and C-10 each have a maximum capacity of 650 tons per hour. C-8 has a maximum capacity of 675 tons per hour. C-11 has a maximum capacity of 130 tons per hour. C-12 and C-13 each have a maximum capacity of 300 tons per hour. C-14, C-15, C-16 and C-17 each have a maximum capacity of 225 tons per hour. C-18, C-22, C-23, C-43 and C-44 each have a maximum capacity of 60 tons per hour. C-19 has a maximum capacity of 330 tons per hour. C-20 has a maximum capacity of 550 tons per hour. C-21 and C-29 each have a maximum capacity of 75 tons per hour. C-24, C-41 and C-42 each have a maximum capacity of 20 tons per hour. C-25 and C-28 each have a maximum capacity of 500 tons per hour. C-26 has a maximum capacity of 900 tons per hour. C-27 has a maximum capacity of 1150 tons per hour. C-30 has a maximum capacity of 750 tons per hour.

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

**Facility Description [326 IAC 2-8-4(10)] (continued):**

C-31, C-32, C-33, C-34, C-35, C-36 each have a maximum capacity of 250 tons per hour. C-37 and C-38 each have a maximum capacity of 425 tons per hour. C-39 and C-40 each have a maximum capacity of 175 tons per hour. C-45 has a maximum capacity of 40 tons per hour. Belt Fdr#1 and Belt Fdr#2 each have a maximum capacity of 30 tons per hour. The use and presence of water in C-31 through C-41 and in C-45 is deemed an integral part of the process in C-31 through C-41 and in C-45. C-1, C-2 and C-3 were each installed prior to 1983. C1A and C2A and C3A were installed in 2003. C-4, C-5, C-6, C-7, C-8, C-9, C-10, C-11, C-12, C-13, C-14, C-15, C-16, C-17, C-18, C-19, C-20, C-21, C-22, C-23, C-24, C-25, C-26, C-27, C-28, C-29, C-30, C-31, C-32, C-33, C-34, C-35, C-36, C-37, C-38, C-39, C-40, C-41, C-42, C-43, C-44, C-45, Belt Fdr#1 and Belt Fdr#2 were each approved to construct in 2008.

- (7) One (1) wet sand screw identified as Screw. Screened fines come out the bottom of the screens and then go to the bottom of the wet sand screw where they are totally immersed in water. The use and presence of water in Screw is deemed an integral part of the process. Screw was approved to construct in 2008.

Under 40 CFR 60.670, Subpart OOO, Cr#1, Cr#2, Cr#3, Cr#4, Cr#5, Cr#6, Cr#7, Scr#1, Scr#2, Scr#3, Scr#4, Scr#5, Scr#6, Scr#7, Scr#8, DW Screen, C-1, C-2, C-3, C1A, C2A, C3A, C-4, C-5, C-6, C-7, C-8, C-9, C-10, C-11, C-12, C-13, C-14, C-15, C-16, C-17, C-18, C-19, C-20, C-21, C-22, C-23, C-24, C-25, C-26, C-27, C-28, C-29, C-30, C-31, C-32, C-33, C-34, C-35, C-36, C-37, C-38, C-39, C-40, C-41, C-42, C-43, C-44, C-45, Belt Fdr#1, Belt Fdr#2 and Screw are each considered an affected facility.

- (b) One (1) dredging and screening of sand and gravel operation, identified as Plant # 510, with a maximum capacity of 450 tons per hour, using a NESCO Systems water suppression system for washing and screening and as additional control. Plant # 510 was installed in 1991 and consists of one (1) receiving hopper (SR1), three (3) screens (SS1, SSC1 and SSC2) and seven (7) conveyors (SC1 through SC7).
- (c) Drilling and blasting of nonmetallic minerals in a mining and quarrying operation. Installed prior to 1974.

(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.1.1 Particulate Emission Limitations; Mineral Aggregate Operations [326 IAC 6.5-1-2(g)]**

Pursuant to 326 IAC 6.5-1-2(g) (Particulate Emission Limitations; Mineral Aggregate Operations), the requirements of 326 IAC 2 (Permit Review Rules), 326 IAC 5-1 (Opacity Limitations) and 326 IAC 6-4 (Fugitive Dust Emissions) shall apply to all mineral aggregate operations (mining, blasting, crushing, sizing, storing and transporting of mineral materials) at Hanson Aggregates Midwest, Inc. - Harding Street Quarry.

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

PM emissions from the following operations in Plant # 522 shall not exceed the following:

**Plant # 522**

Process	Allowable PM emissions (pounds per hour)
CR#1, CR#2, CR#3, CR#4, CR#5, CR#6, CR#7	2.00 (each)
Scr#1, Scr#2, Scr#3, Scr#4, Scr#5, Scr#6, Scr#7, Scr#8, DW Screen	3.30 (each)
C-1 through C-45, C1A, C2A, C3A, Belt Fdr#1, Belt Fdr#2, Screw	0.21 (each)

Compliance with these limits for these emission units combined with the potential emissions from Plant # 510, and the potential emissions from Insignificant Activities shall render 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable to this source.

**D.1.3 PSD Minor Limit and FESOP Limit [326 IAC 2-2] [326 IAC 2-8-4]**

PM emissions from the following operations in Plant # 522 shall not exceed the following:

**Plant # 522**

Process	Allowable PM10 emissions (pounds per hour)
CR#1, CR#2, CR#3, CR#4, CR#5, CR#6, CR#7	0.85 (each)
Scr#1, Scr#2, Scr#3, Scr#4, Scr#5, Scr#6, Scr#7, Scr#8, DW Screen	1.20 (each)
C-1 through C-45, C1A, C2A, C3A, Belt Fdr#1, Belt Fdr#2, Screw	0.08 (each)

Compliance with these limits for these emission units, combined with the potential emissions from Plant # 510, and the potential emissions from Insignificant Activities shall render 326 IAC 2-2 (Prevention of Significant Deterioration (PSD) Requirements) and 326 IAC 2-7 (Part 70 Permit Program) not applicable to this source.

**D.1.4 Particulate [326 IAC 6-3-2]**

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from individual processes comprising the one (1) Limestone Crushing Plant, identified as Plant # 522 and the one (1) dredging and screening of sand and gravel operation, identified as Plant # 510, shall each not exceed the values shown in the following tables when operating at the process weight shown:

**Plant # 522**

Process	Process Weight (tons per hour)	326 IAC 6-3-2 Allowable Emissions (pounds per hour)
CR#1, CR#2, C-1, C-2, C-3, C1A, C2A, C3A C-4, C-5, Scr#1	1500	82.9 (each)
Cr#3, C-7, C-9, C-10	650	72.15 (each)
Cr#4, C-14, C-15, C-16, C-17	225	59.79 (each)
Cr#5, C25, C-28	500	68.96 (each)
Cr#6	325	63.91
Scr#2, Scr#3	275	62.02 (each)
Scr#4, Scr#5, Scr#8	600	71.16 (each)
Scr#6, Scr#7	400	66.31 (each)
C-6	925	76.58

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Process	Process Weight (tons per hour)	326 IAC 6-3-2 Allowable Emissions (pounds per hour)
C-8	675	72.61
C-11	130	53.95
C-12, C-13, Cr#7	300	63.00 (each)
C-18, C-22, C-23, C-43, C-44	60	46.29 (each)
C-19	330	64.09
C-20	550	45.47
C-21, C-29	75	48.43 (each)
C-24, C-41, C-42	20	30.51 (each)
C-26	900	76.23
C-27	1150	79.41
C-30	750	73.93
C-31, C-32, C-33, C-34, C-35, C-36	250	60.96 (each)
C-37, C-38	425	67.02 (each)
Screw, C-39, C-40	175	57.07 (each)
Belt Fdr#1, Belt Fdr#2	30	40.04 (each)
DW Screen, C-45	40	42.53 (each)

**PLANT # 510**

Process	Process Weight (tons per hour)	326 IAC 6-3-2 Allowable Emissions (pounds per hour)
SR1	450	67.7
SS1	450	67.7
SSC1	100	51.3
SSC2	200	58.5
SC1	450	67.7
SC2	50	44.6
SC3, SC4, SC5	100	51.3 (each)
SC6, SC7	200	58.5 (each)

The allowable particulate emission rate was calculated using the following equations:

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

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

When the process rate weight rate exceeds two hundred (200) tons per hour, the allowable emissions may exceed that calculated from the above equation provided the concentration of particulate in the discharge gases to the atmosphere is less than one-tenth (0.10) pound per thousand (1,000) pounds of gases.

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

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

#### D.1.5 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

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A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for crushers Cr#1, Cr#2, Cr#3, Cr#4, Cr#5, Cr#6 and Cr#7, screens Scr#1, Scr#2, Scr#3, Scr#4, Scr#5, Scr#6, Scr#7, Scr#8 and DW Screen, and conveyors C1A, C2A, C3A, C-1 through C-45, Belt Fdr#1 and Belt Fdr#2 and the NESCO Systems water suppression control device.

### Compliance Determination Requirements

#### D.1.6 Particulate Control

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In order to comply with Conditions D.1.1, D.1.2 and D.1.3, the NESCO Systems water suppression systems for particulate control shall be in operation and control emissions from Plant # 522 and Plant # 510 at all times that Plant # 522 and Plant # 510 are in operation. Washing operations in screens Scr#6, Scr#7, DW Screen and in Screw shall be a totally wet process at all times Scr#6, Scr#7, DW Screen and Screw are in operation.

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

#### D.1.7 Visible Emissions Notations

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- (a) Visible emission notations of Cr#1, Cr#2, Cr#3, Cr#4, Cr#5, Cr#6 and Cr#7, screens Scr#1, Scr#2, Scr#3, Scr#4, Scr#5, Scr#6, Scr#7, Scr#8 and DW Screen, and conveyors C1A, C2A, C3A, C-1 through C-45, Belt Fdr#1 and Belt Fdr#2 shall be performed once per day during normal daylight operations when in operation. 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 visible emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C – Response to Excursions or Exceedances. Observation of abnormal emissions that do not violate 326 IAC 6-4 (Fugitive Dust Emissions) or an applicable opacity limit is not a deviation from this permit.

#### D.1.8 Parametric Monitoring

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The Permittee shall record the water flow rate of the NESCO Systems water suppression system in Plant # 522 and in Plant # 510 at least once per day when in operation. When for any one reading, the water flow rate is below 3.0 gallons per minute, or a minimum established during the latest 40 CFR Part 60, Appendix A, Method 9 evaluation, the Permittee shall take reasonable response steps in accordance with Section C – Response to Excursions or Exceedances of this FESOP. A reading that is below 3.0 gallons per minute is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances of this FESOP shall be considered a deviation from this permit.

## **Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]**

### **D.1.9 Record Keeping Requirements**

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- (a) To document compliance with Conditions D.1.1, D.1.2, D.1.3, D.1.5, D.1.6, D.1.7 and D.1.8, the Permittee shall maintain records of once per day visible emission notations and once per day NESCO System water flow rate checks. The Permittee shall include in its daily record when a visible emission notation is not taken, when a water flow rate check is not taken and the reason for the lack of the visible emission notation or water flow rate check (e.g. the process did not operate that day). Records necessary to demonstrate compliance shall be available within thirty (30) days of the end of each compliance period.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

## **New Source Performance Standards (NSPS) Requirements [326 IAC 2-7-5(1)]**

### **D.1.10 General Provisions Relating to NSPS [40 CFR Part 60, Subpart A][326 IAC 12-1]**

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- (a) The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, apply to Plant # 522 as described in this section except when otherwise specified in 40 CFR Part 60, Subpart OOO.
- (b) Pursuant to 40 CFR 60.7, the Permittee shall submit all required notifications and reports to:

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

and

City of Indianapolis  
Office of Environmental Services  
Air Quality Management Section  
2700 South Belmont Avenue  
Indianapolis Indiana 46221-2097

### **D.1.11 New Source Performance Standards for Nonmetallic Mineral Processing Plants [40 CFR 60.670, Subpart OOO][326 IAC 12]**

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Pursuant to 40 CFR 60.670, Subpart OOO (New Source Performance Standards for Nonmetallic Mineral Processing Plants), crushing operations in Plant # 522 identified as CR#1, CR#3, CR#4, CR#5, and CR #6, screening operations in Plant # 522 identified as Scr#1, Scr#2, Scr#3, Scr#4, Scr#5, Scr#6, Scr#7, Scr#8, DW Screen, and conveying operations in Plant # 522 identified as C1A, C2A, C3A, C-4 through C-45, Belt Fdr#1 and Belt Fdr#2, and the wet sand screw identified as Screw, shall each comply with the following:

#### **§ 60.670 Applicability and designation of affected facility.**

(a)(1) Except as provided in paragraphs (a)(2), (b), (c), and (d) of this section, the provisions of this subpart are applicable to the following affected facilities in fixed or portable nonmetallic mineral processing plants: each crusher, grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, enclosed truck or railcar loading station. Also, crushers and grinding mills at hot mix asphalt facilities that reduce the size of nonmetallic minerals embedded in recycled asphalt

pavement and subsequent affected facilities up to, but not including, the first storage silo or bin are subject to the provisions of this subpart.

(2) The provisions of this subpart do not apply to the following operations: All facilities located in underground mines; and stand-alone screening operations at plants without crushers or grinding mills.

(b) An affected facility that is subject to the provisions of subpart F or I or that follows in the plant process any facility subject to the provisions of subparts F or I of this part is not subject to the provisions of this subpart.

(c) Facilities at the following plants are not subject to the provisions of this subpart:

(1) Fixed sand and gravel plants and crushed stone plants with capacities, as defined in §60.671, of 23 megagrams per hour (25 tons per hour) or less;

(2) Portable sand and gravel plants and crushed stone plants with capacities, as defined in §60.671, of 136 megagrams per hour (150 tons per hour) or less; and

(3) Common clay plants and pumice plants with capacities, as defined in §60.671, of 9 megagrams per hour (10 tons per hour) or less.

(d)(1) When an existing facility is replaced by a piece of equipment of equal or smaller size, as defined in §60.671, having the same function as the existing facility, the new facility is exempt from the provisions of §§60.672, 60.674, and 60.675 except as provided for in paragraph (d)(3) of this section.

(2) An owner or operator complying with paragraph (d)(1) of this section shall submit the information required in §60.676(a).

(3) An owner or operator replacing all existing facilities in a production line with new facilities does not qualify for the exemption described in paragraph (d)(1) of this section and must comply with the provisions of §§60.672, 60.674 and 60.675.

(e) An affected facility under paragraph (a) of this section that commences construction, reconstruction, or modification after August 31, 1983 is subject to the requirements of this part.

(f) Table 1 of this subpart specifies the provisions of subpart A of this part 60 that apply and those that do not apply to owners and operators of affected facilities subject to this subpart.

[51 FR 31337, Aug. 1, 1985, as amended at 62 FR 31359, June 9, 1997]

### **§ 60.671 Definitions.**

All terms used in this subpart, but not specifically defined in this section, shall have the meaning given them in the Act and in subpart A of this part.

*Bagging operation* means the mechanical process by which bags are filled with nonmetallic minerals.

*Belt conveyor* means a conveying device that transports material from one location to another by means of an endless belt that is carried on a series of idlers and routed around a pulley at each end.

*Bucket elevator* means a conveying device of nonmetallic minerals consisting of a head and foot assembly which supports and drives an endless single or double strand chain or belt to which buckets are attached.

*Building* means any frame structure with a roof.

*Capacity* means the cumulative rated capacity of all initial crushers that are part of the plant.

*Capture system* means the equipment (including enclosures, hoods, ducts, fans, dampers, etc.) used to capture and transport particulate matter generated by one or more process operations to a control device.

*Control device* means the air pollution control equipment used to reduce particulate matter emissions released to the atmosphere from one or more process operations at a nonmetallic mineral processing plant.

*Conveying system* means a device for transporting materials from one piece of equipment or location to another location within a plant. Conveying systems include but are not limited to the following: Feeders, belt conveyors, bucket elevators and pneumatic systems.

*Crusher* means a machine used to crush any nonmetallic minerals, and includes, but is not limited to, the following types: jaw, gyratory, cone, roll, rod mill, hammermill, and impactor.

*Enclosed truck or railcar loading station* means that portion of a nonmetallic mineral processing plant where nonmetallic minerals are loaded by an enclosed conveying system into enclosed trucks or railcars.

*Fixed plant* means any nonmetallic mineral processing plant at which the processing equipment specified in §60.670(a) is attached by a cable, chain, turnbuckle, bolt or other means (except electrical connections) to any anchor, slab, or structure including bedrock.

*Fugitive emission* means particulate matter that is not collected by a capture system and is released to the atmosphere at the point of generation.

*Grinding mill* means a machine used for the wet or dry fine crushing of any nonmetallic mineral. Grinding mills include, but are not limited to, the following types: hammer, roller, rod, pebble and ball, and fluid energy. The grinding mill includes the air conveying system, air separator, or air classifier, where such systems are used.

*Initial crusher* means any crusher into which nonmetallic minerals can be fed without prior crushing in the plant.

*Nonmetallic mineral* means any of the following minerals or any mixture of which the majority is any of the following minerals:

(a) Crushed and Broken Stone, including Limestone, Dolomite, Granite, Traprock, Sandstone, Quartz, Quartzite, Marl, Marble, Slate, Shale, Oil Shale, and Shell.

(b) Sand and Gravel.

(c) Clay including Kaolin, Fireclay, Bentonite, Fuller's Earth, Ball Clay, and Common Clay.

(d) Rock Salt.

(e) Gypsum.

(f) Sodium Compounds, including Sodium Carbonate, Sodium Chloride, and Sodium Sulfate.

(g) Pumice.

(h) Gilsonite.

- (i) Talc and Pyrophyllite.
- (j) Boron, including Borax, Kernite, and Colemanite.
- (k) Barite.
- (l) Fluorospars.
- (m) Feldspar.
- (n) Diatomite.
- (o) Perlite.
- (p) Vermiculite.
- (q) Mica.
- (r) Kyanite, including Andalusite, Sillimanite, Topaz, and Dumortierite.

*Nonmetallic mineral processing plant* means any combination of equipment that is used to crush or grind any nonmetallic mineral wherever located, including lime plants, power plants, steel mills, asphalt concrete plants, portland cement plants, or any other facility processing nonmetallic minerals except as provided in §60.670 (b) and (c).

*Portable plant* means any nonmetallic mineral processing plant that is mounted on any chassis or skids and may be moved by the application of a lifting or pulling force. In addition, there shall be no cable, chain, turnbuckle, bolt or other means (except electrical connections) by which any piece of equipment is attached or clamped to any anchor, slab, or structure, including bedrock that must be removed prior to the application of a lifting or pulling force for the purpose of transporting the unit.

*Production line* means all affected facilities (crushers, grinding mills, screening operations, bucket elevators, belt conveyors, bagging operations, storage bins, and enclosed truck and railcar loading stations) which are directly connected or are connected together by a conveying system.

*Screening operation* means a device for separating material according to size by passing undersize material through one or more mesh surfaces (screens) in series, and retaining oversize material on the mesh surfaces (screens).

*Size* means the rated capacity in tons per hour of a crusher, grinding mill, bucket elevator, bagging operation, or enclosed truck or railcar loading station; the total surface area of the top screen of a screening operation; the width of a conveyor belt; and the rated capacity in tons of a storage bin.

*Stack emission* means the particulate matter that is released to the atmosphere from a capture system.

*Storage bin* means a facility for storage (including surge bins) or nonmetallic minerals prior to further processing or loading.

*Transfer point* means a point in a conveying operation where the nonmetallic mineral is transferred to or from a belt conveyor except where the nonmetallic mineral is being transferred to a stockpile.

*Truck dumping* means the unloading of nonmetallic minerals from movable vehicles designed to transport nonmetallic minerals from one location to another. Movable vehicles include but are not limited to: trucks, front end loaders, skip hoists, and railcars.

*Vent* means an opening through which there is mechanically induced air flow for the purpose of exhausting from a building air carrying particulate matter emissions from one or more affected facilities.

*Wet mining operation* means a mining or dredging operation designed and operated to extract any nonmetallic mineral regulated under this subpart from deposits existing at or below the water table, where the nonmetallic mineral is saturated with water.

*Wet screening operation* means a screening operation at a nonmetallic mineral processing plant which removes unwanted material or which separates marketable fines from the product by a washing process which is designed and operated at all times such that the product is saturated with water.

[51 FR 31337, Aug. 1, 1985, as amended at 62 FR 31359, June 9, 1997]

#### **§ 60.672 Standard for particulate matter.**

(b) On and after the sixtieth day after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup as required under §60.11 of this part, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other affected facility any fugitive emissions which exhibit greater than 10 percent opacity, except as provided in paragraphs (c), (d), and (e) of this section.

(c) On and after the sixtieth day after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup as required under §60.11 of this part, no owner or operator shall cause to be discharged into the atmosphere from any crusher, at which a capture system is not used, fugitive emissions which exhibit greater than 15 percent opacity.

(d) Truck dumping of nonmetallic minerals into any screening operation, feed hopper, or crusher is exempt from the requirements of this section.

(f) On and after the sixtieth day after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup as required under §60.11 of this part, no owner or operator shall cause to be discharged into the atmosphere from any baghouse that controls emissions from only an individual, enclosed storage bin, stack emissions which exhibit greater than 7 percent opacity.

(h) On and after the sixtieth day after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup, no owner or operator shall cause to be discharged into the atmosphere any visible emissions from:

(1) Wet screening operations and subsequent screening operations, bucket elevators, and belt conveyors that process saturated material in the production line up to the next crusher, grinding mill or storage bin.

[51 FR 31337, Aug. 1, 1985, as amended at 62 FR 31359, June 9, 1997; 65 FR 61778, Oct. 17, 2000]

#### **§ 60.673 Reconstruction.**

(a) The cost of replacement of ore-contact surfaces on processing equipment shall not be considered in calculating either the “fixed capital cost of the new components” or the “fixed capital cost that would be required to construct a comparable new facility” under §60.15. Ore-contact surfaces are crushing surfaces; screen meshes, bars, and plates; conveyor belts; and elevator buckets.

(b) Under §60.15, the “fixed capital cost of the new components” includes the fixed capital cost of all depreciable components (except components specified in paragraph (a) of this section) which are or will

be replaced pursuant to all continuous programs of component replacement commenced within any 2-year period following August 31, 1983.

**§ 60.675 Test methods and procedures.**

(c)(1) In determining compliance with the particulate matter standards in §60.672 (b) and (c), the owner or operator shall use Method 9 and the procedures in §60.11, with the following additions:

(i) The minimum distance between the observer and the emission source shall be 4.57 meters (15 feet).

(ii) The observer shall, when possible, select a position that minimizes interference from other fugitive emission sources (e.g., road dust). The required observer position relative to the sun (Method 9, Section 2.1) must be followed.

(iii) For affected facilities using wet dust suppression for particulate matter control, a visible mist is sometimes generated by the spray. The water mist must not be confused with particulate matter emissions and is not to be considered a visible emission. When a water mist of this nature is present, the observation of emissions is to be made at a point in the plume where the mist is no longer visible.

(2) In determining compliance with the opacity of stack emissions from any baghouse that controls emissions only from an individual enclosed storage bin under §60.672(f) of this subpart, using Method 9, the duration of the Method 9 observations shall be 1 hour (ten 6-minute averages).

(3) When determining compliance with the fugitive emissions standard for any affected facility described under §60.672(b) of this subpart, the duration of the Method 9 observations may be reduced from 3 hours (thirty 6-minute averages) to 1 hour (ten 6-minute averages) only if the following conditions apply:

(i) There are no individual readings greater than 10 percent opacity; and

(ii) There are no more than 3 readings of 10 percent for the 1-hour period.

(4) When determining compliance with the fugitive emissions standard for any crusher at which a capture system is not used as described under §60.672(c) of this subpart, the duration of the Method 9 observations may be reduced from 3 hours (thirty 6-minute averages) to 1 hour (ten 6-minute averages) only if the following conditions apply:

(i) There are no individual readings greater than 15 percent opacity; and

(ii) There are no more than 3 readings of 15 percent for the 1-hour period.

(d) In determining compliance with §60.672(e), the owner or operator shall use Method 22 to determine fugitive emissions. The performance test shall be conducted while all affected facilities inside the building are operating. The performance test for each building shall be at least 75 minutes in duration, with each side of the building and the roof being observed for at least 15 minutes.

(e) The owner or operator may use the following as alternatives to the reference methods and procedures specified in this section:

(1) For the method and procedure of paragraph (c) of this section, if emissions from two or more facilities continuously interfere so that the opacity of fugitive emissions from an individual affected facility cannot be read, either of the following procedures may be used:

(i) Use for the combined emission stream the highest fugitive opacity standard applicable to any of the individual affected facilities contributing to the emissions stream.

(ii) Separate the emissions so that the opacity of emissions from each affected facility can be read.

[54 FR 6680, Feb. 14, 1989, as amended at 62 FR 31360, June 9, 1997]

**§ 60.676 Reporting and recordkeeping.**

(a) Each owner or operator seeking to comply with §60.670(d) shall submit to the Administrator the following information about the existing facility being replaced and the replacement piece of equipment.

(1) For a crusher, grinding mill, bucket elevator, bagging operation, or enclosed truck or railcar loading station:

(i) The rated capacity in megagrams or tons per hour of the existing facility being replaced and

(ii) The rated capacity in tons per hour of the replacement equipment.

(2) For a screening operation:

(i) The total surface area of the top screen of the existing screening operation being replaced and

(ii) The total surface area of the top screen of the replacement screening operation.

(3) For a conveyor belt:

(i) The width of the existing belt being replaced and

(ii) The width of the replacement conveyor belt.

(4) For a storage bin:

(i) The rated capacity in megagrams or tons of the existing storage bin being replaced and

(ii) The rated capacity in megagrams or tons of replacement storage bins.

(f) The owner or operator of any affected facility shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards set forth in §60.672 of this subpart, including reports of opacity observations made using Method 9 to demonstrate compliance with §60.672(b), (c), and (f), and reports of observations using Method 22 to demonstrate compliance with §60.672(e).

(g) The owner or operator of any screening operation, bucket elevator, or belt conveyor that processes saturated material and is subject to §60.672(h) and subsequently processes unsaturated materials, shall submit a report of this change within 30 days following such change. This screening operation, bucket elevator, or belt conveyor is then subject to the 10 percent opacity limit in §60.672(b) and the emission test requirements of §60.11 and this subpart. Likewise a screening operation, bucket elevator, or belt conveyor that processes unsaturated material but subsequently processes saturated material shall submit a report of this change within 30 days following such change. This screening operation, bucket elevator, or belt conveyor is then subject to the no visible emission limit in §60.672(h).

(h) The subpart A requirement under §60.7(a)(2) for notification of the anticipated date of initial startup of an affected facility shall be waived for owners or operators of affected facilities regulated under this subpart.

(i) A notification of the actual date of initial startup of each affected facility shall be submitted to the Administrator.

(1) For a combination of affected facilities in a production line that begin actual initial startup on the same day, a single notification of startup may be submitted by the owner or operator to the Administrator. The notification shall be postmarked within 15 days after such date and shall include a description of each affected facility, equipment manufacturer, and serial number of the equipment, if available.

(j) The requirements of this section remain in force until and unless the Agency, in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such States. In that event, affected facilities within the State will be relieved of the obligation to comply with the reporting requirements of this section, provided that they comply with requirements established by the State.

[51 FR 31337, Aug. 1, 1985, as amended at 54 FR 6680, Feb. 14, 1989; 62 FR 31360, June 9, 1997; 65 FR 61778, Oct. 17, 2000]

**SECTION D.2**

**FACILITY OPERATION CONDITIONS**

**Facility Description [326 IAC 2-8-4(10)]:**

**Insignificant Activities**

- (a) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons.
- (b) A petroleum fuel, other than gasoline, dispensing facility, having a storage capacity of less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month.
- (c) Application of oils, greases, lubricants or other nonvolatile materials applied as temporary protective coatings.
- (d) Paved and unpaved roads and parking lots with public access. [326 IAC 6-5]
- (e) On-site fire and emergency response training approved by the department.
- (f) Emergency generators as follows:
  - (1) Gasoline generators not exceeding 110 horsepower. [326 IAC 6.5-1-2(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.2.1 Particulate Matter Limitations Except Lake County [326 IAC 6.5-1-2(a)]**

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Pursuant to 326 IAC 6.5-1-2(a) (Particulate Matter Limitations Except Lake County), particulate matter (PM) emissions from gasoline generators not exceeding 110 horsepower shall be limited to three hundredths (0.03) grains per dry standard cubic foot of exhaust air.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
and  
INDIANAPOLIS OFFICE OF ENVIRONMENTAL SERVICES  
FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)  
CERTIFICATION**

Source Name: Hanson Aggregates Midwest, Inc. – Harding Street Quarry  
Source Address: 4200 South Harding Street, Indianapolis, IN 46217  
Mailing Address: 209 Old Harrods Creek Road, P.O. Box 436329, Louisville, Kentucky 40253-6329  
FESOP No.: F097-19718-00104

**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:

First Significant Permit Revision  
097-25362-00104  
Modified by: M. Caraher

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE BRANCH  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251  
Phone: 317-233-0178  
Fax: 317-233-6865  
and  
INDIANAPOLIS OFFICE OF ENVIRONMENTAL SERVICES  
Air Compliance  
2700 South Belmont Avenue  
Indianapolis, IN 46221-2209**

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

Source Name: Hanson Aggregates Midwest, Inc. – Harding Street Quarry  
Source Address: 4200 South Harding Street, Indianapolis, IN 46217  
Mailing Address: 209 Old Harrods Creek Road, P.O. Box 436329, Louisville, Kentucky 40253-6329  
FESOP No.: F097-19718-00104

**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"><li>• The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and</li><li>• The Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16</li></ul> |
|---|

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

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

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

Page 2 of 2

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency?    Y    N Describe:
Type of Pollutants Emitted: TSP, PM10, SO <sub>2</sub> , VOC, NO <sub>x</sub> , 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: \_\_\_\_\_

A certification is not required for this report.

First Significant Permit Revision  
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Modified by: M. Caraher

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

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)  
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: Hanson Aggregates Midwest, Inc. - Harding Street Quarry  
Source Address: 4200 South Harding Street, Indianapolis, IN 46217  
Mailing Address: 209 Old Harrods Creek Road, P.O. Box 436329, Louisville, Kentucky 40253-6329  
FESOP No.: F097-19718-00104

Months: \_\_\_\_\_ to \_\_\_\_\_ Year: \_\_\_\_\_

<p>This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, 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	
<b>Permit Requirement</b> (specify permit condition #)	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	
<b>Permit Requirement</b> (specify permit condition #)	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	

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

Form Completed By: \_\_\_\_\_

Title/Position: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

Attach a signed certification to complete this report.

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097-25362-00104  
Modified by: M. Caraher

## ATTACHMENT A

### Harding Street Quarry

#### FUGITIVE DUST CONTROL PLAN

#### Source Background and Description

Source Name: Hanson Aggregates Midwest, Inc.  
Source Location: 4200 South Harding Street, Indianapolis, Indiana 46217  
County: Marion  
ID No.: 097-00104  
SIC Code: 1422 & 1442

#### Section 1 - Introduction

The following control plan, when implemented, is designed to reduce uncontrolled fugitive dust from open storage piles, unpaved roadways, paved roadways, and material loading and unloading operations such that the visible emissions limitations specified in the permit are met.

The plan shall be implemented on a year-round basis until such time as another plan is approved or ordered by the Indiana Department of Environmental Management or Department of Public Works Office of Environmental Services.

The following persons shall be responsible for implementing the plan:

- (a) James R. Smith, Environmental Manager  
Office Tel. No.: 502-244-7550  
Mobile No.: 502-649-9264
- (b) Chris Kinney, Plant Superintendent  
Office Tel. No.: 317-788-4086  
Mobile No.: 317-491-3429
- (c) Jason Jones, Asst. Superintendent  
Office Tel. No.: 317-788-4086  
Mobile No.: 317-341-3860
- (d) Jan Michael Scott, Maint. Supervisor  
Office Tel. No.: 317-788-4086  
Mobile No.: 317-966-3005

#### Section 2 - Wind Erosion from Open Storage Piles

Open storage piles consist of limestone in various stages of processing. To maintain product quality and chemical stability, watering the stockpiles shall be the primary means of dust control. Water must be limited so as to keep the moisture content of the product within standards.

Hanson shall spray open storage piles with water, on an "as-needed" basis to eliminate wind erosion and not exceed the opacity limitations in the permit. Water added to the product during

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Modified by: M. Caraher

## **ATTACHMENT A**

processing provides added control. Visible emissions shall be determined in accordance with the procedures specified in the permit.

### **Section 3 - Unpaved Areas within the Limestone Processing Area**

Hanson shall treat unpaved areas traveled around material storage piles and limestone processing equipment with water on an “as needed” basis. Fugitive dust emissions shall be reduced by at least 50 percent instantaneous control on PM and PM-10 mass emission basis. This facility has an annual average precipitation history of 125 days of + 0.01 inches of rainfall, 55 days + 0.1 inches of rainfall and 10 days of snowfall accumulation.

Treating of unpaved areas may be delayed by one day when:

- (a) 0.1 or more inches of rain have accumulated during the 24-hour period prior to the scheduled treatment.
- (b) Unpaved areas are saturated with water.
- (c) Unpaved areas are frozen or covered by ice, snow, or standing water.
- (d) The area is closed or abandoned.
- (e) It is raining at the time of the scheduled treatment.

Hanson shall perform the above dust control measures such that the visible emission limitations in the permit are met. Visible emissions shall be determined in accordance with the procedures specified in the permit.

### **Section 4 - Paved Roadways**

Hanson shall control fugitive emissions generated from sections of all paved roadways that are within the permitted area by the use of a vehicular vacuum sweeper, in place spray nozzles (sprinklers) or water truck on an “as needed” basis. See precipitation history in Section 3.

Vacuum sweeping or water application shall be performed at least once every operating day. Vehicles shall also not be allowed to travel on the shoulder of paved roadways.

Cleaning of paved road segments and parking lots may be delayed by one day when:

- (a) 0.1 or more inches of rain has accumulated during the 24-hour period prior to the scheduled cleaning.
- (b) The road segment is closed or abandoned. Abandoned roads will be barricaded to prevent vehicle access.
- (c) It is raining at the time of the scheduled cleaning.

Hanson shall perform the above dust control measures such that the visible emission limitations in the permit are met. Visible emissions shall be determined in accordance with the procedures specified in the permit.

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## **ATTACHMENT A**

### **Section 5 - Material Handling and Processing**

Emissions from material processing operations shall be controlled through the application of water on an “as needed” basis. Application rates and frequencies shall be sufficient to provide at least 90 percent control efficiency by limiting conveyor to pile drop height, front end loader batch drop height into trucks and screening & crushing emission points.

### **Section 6 - Vehicle Speed Control**

Speed limits on paved roads shall be posted to be 15 mph. Speed limits on unpaved areas shall be 15 mph.

Compliance with these speed limits shall be monitored by plant superintendent or manager. Violations shall be documented and appropriate corrective actions shall be taken to eliminate repeat violations.

### **Section 7 - Material Spill Control**

Incidents of material spillage on plant property shall be investigated by the person responsible for implementing the plan. That person shall arrange for prompt cleanup and shall contact the party responsible for the spill to insure that corrective action can be taken. A “Safe Area” shall be provided to allow truckers the opportunity to clean off any excess material from tailgates and side panels.

### **Section 8 - Monitoring and Recording Keeping**

Records shall be kept within a journal which will be updated on a daily basis by the plant manager. The journals shall include vacuum sweeping and spill control activities. Also, the journal shall contain the amount of water sprayed on the open storage piles the amount of water sprayed at the limestone processing spray bars, and the amount of water applied on unpaved areas. The journals shall be kept at the designated plant location for a minimum of three years and shall be available for inspection or copying upon reasonable prior notice. Hanson shall retain a certified Visual Emissions reader on site.

### **Section 9 - Compliance Schedule**

This plan shall be fully implemented upon issuance of the Federally Enforceable State Operating Permit. Until that time, the plan shall be implemented on a timely manner as to be fully complete upon issuance of said permit.

**Indiana Department of Environmental Management  
Office of Air Quality  
and  
City of Indianapolis  
Office of Environmental Services**

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

**Source Description and Location**

<b>Source Name:</b>	<b>Hanson Aggregates Midwest, Inc. - Harding Street Quarry</b>
<b>Source Location:</b>	<b>4200 South Harding Street, Indianapolis, IN 46217</b>
<b>County:</b>	<b>Marion</b>
<b>SIC Code:</b>	<b>1422 &amp; 1442</b>
<b>Operation Permit No.:</b>	<b>F097-19718-00104</b>
<b>Operation Permit Issuance Date:</b>	<b>May 11, 2007</b>
<b>Significant Permit Revision No.:</b>	<b>SPR097-25362-00104</b>
<b>Permit Reviewer:</b>	<b>M. Caraher</b>

The Indiana Department of Environmental Management (IDEM) Office of Air Quality (OAQ) and the City of Indianapolis Office of Environmental Services (OES) have reviewed an application from Hanson Aggregates Midwest, Inc. - Harding Street Quarry relating to the modification of an existing mining and quarrying source operating under a Standard Industrial Classification (SIC) Code of 1422 (establishments primarily engaged in mining and quarrying crushed and broken limestone, including rip rap) and 1442 (establishments primarily engaged in operating sand and gravel pits and dredges and in washing, screening or otherwise preparing sand and gravel for construction uses).

**Existing Approvals**

The source was issued its initial FESOP, F097-19718-00104, on May 11, 2007.

**County Attainment Status**

The source is located in Marion County.

<b>Pollutant</b>	<b>Status</b>
PM10	Attainment
PM2.5	Nonattainment
SO <sub>2</sub>	Maintenance attainment
NO <sub>x</sub>	Attainment
8-hour Ozone	Attainment
CO	Attainment
Lead	Attainment

Note: On November 8, 2007 the Indiana Air Pollution Control Board finalized a temporary emergency rule to redesignate Marion County as attainment for the 8-hour ozone standard.

- (a) Marion County has been classified as nonattainment for PM2.5 in 70 FR 943 dated January 5, 2005. Until U.S. EPA adopts specific New Source Review rules for PM2.5 emissions, it has directed states to regulate PM10 emissions as a surrogate for PM2.5 emissions pursuant to the Non-attainment New Source Review requirements. See the State Rule Applicability – Entire Source section.

- (b) Volatile organic compounds (VOC) and nitrogen oxides (NO<sub>x</sub>) 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<sub>x</sub> emissions are considered when evaluating the rule applicability relating to the ozone. On November 8, 2007, a temporary emergency rule took effect redesignating Marion County to attainment for the eight-hour ozone standard. The Indiana Air Pollution Control Board has begun the process for a permanent rule revision to incorporate these changes into 326 IAC 1-4-1. The permanent revision to 326 IAC 1-4-1 should take effect prior to the expiration of the emergency rule. Therefore, VOC emissions and NO<sub>x</sub> emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability for the source section.
- (c) Marion County has been classified as attainment or unclassifiable in Indiana for PM<sub>10</sub>, SO<sub>2</sub>, CO and Lead. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the 326 IAC 2-2 discussion under State Rule Applicability - Entire Source.
- (d) On October 25, 2006, the Indiana Air Pollution Control Board finalized a rule revision to 326 IAC 1-4-1 revoking the one-hour ozone standard in Indiana.
- (e) Fugitive Emissions  
 Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 or 326 IAC 2-3 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive emissions are not counted toward determination of PSD or Emission Offset applicability.

<b>Source Status</b>
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The table below summarizes the potential to emit of the entire source, prior to the proposed modification, after consideration of all enforceable limits established in the effective permits:

Pollutant	Emissions (tons/year)
PM	< 250.0
PM <sub>10</sub>	< 100.0
SO <sub>2</sub>	4.6
VOC	15.0
CO	4.6
NO <sub>x</sub>	10.0

- (a) This existing source is not a major stationary source, under PSD (326 IAC 2-2), because no 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(gg)(1).
- (b) These emissions are based upon FESOP No. F097-19718-00104, issued on May 11, 2007.

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

HAPs	Potential To Emit (tons/year)
none	0.0
TOTAL	0.0

This existing source is not a major source of HAPs, as defined in 40 CFR 63.41, because HAPs emissions are less than ten (10) tons per year for any single HAP and less than twenty-five (25)

tons per year of a combination of HAPs. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA).

<b>Description of Proposed Revision</b>
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This source was issued FESOP No. F097-19718-00104 on May 11, 2007.

The Office of Air Quality (OAQ) and the City of Indianapolis Office of Environmental Services (OES) have reviewed a significant permit revision application, submitted by Hanson Aggregates Midwest, Inc. - Harding Street Quarry (hereafter referred to as Hanson) on October 1, 2007, relating to the construction and operation of additional, modified and replacement crushers, screens and conveyors at this nonmetallic mineral processing source. This source consists of a stone crushing plant, identified as Plant # 522, a sand and gravel plant, identified as Plant # 510, drilling and blasting of nonmetallic minerals in a mining and quarrying operation, and miscellaneous insignificant activities. All changes requested by Hanson are to operations in Plant # 522.

Prior to this proposed revision, a limited number of the entire number of operations in Plant # 522 (crushing operations identified as CR1, CR2, CR4, screening operations identified as S1, S2, S3, S4, S5, S6, S10, BS2, and conveying operations identified as C0, C1A, C2A, C3A, C22, C27, BC3, BC4, BC6, BC7, BC8, BC9, BC10, BC11, BC12, BC13 and BC16) are currently subject to the provisions of the New Source Performance Standards for 40 CFR 60.670, Subpart OOO (Standards of Performance for Nonmetallic Mineral Processing Plants) and 326 IAC 12 (New Source Performance Standards). The construction and operation of each additional, modified or replacement crusher, screen or conveyor in Plant # 522 is now subject to the provisions of 40 CFR 60.670, Subpart OOO and 326 IAC 12.

There is no increase in the primary crushing capacity of Plant # 522 and there are no changes to loading capacity, storage capacity or to the transportation of materials at this source. All existing crushing, screening and conveying operations in Plant # 522 will be replaced except for the following operations listed in the table below (see TSD Appendix A page 1 and 2 of 7):

<b>Process ID</b>	<b>Description</b>
F1	Receiving Hopper for Jaw Crusher
CR#1	Primary Jaw Crusher
C1A	CR#1 to C2A
C2A	C1A to C3A
F2	Receiving Hopper for Impact Crusher
CR#2	Primary Impact Crusher
C-1	Impact Crusher to C-2
C-2	C-1 to C-3
C-3	C-2 to D Stone Surge
CR#5	VSI Crusher - Tertiary

Prior to this proposed revision, Hanson has not claimed any portion of operations in Plant # 522 to have integral controls. Hanson has now requested in the permit revision application that the use and presence of water in a washing process in specified portions of screening operations in Plant # 522 and the subsequent conveying of saturated materials be deemed an integral part of the process (see Air Pollution Control Justification as an Integral Part of the Process Determination section). Plant # 522 currently has no operations where the use and presence of water is deemed an integral part of the process in the existing FESOP for this source, F097-19718-00104. Pursuant to 40 CFR 60.672(h)(1), wet screening operations and subsequent screening operations, bucket elevators, and belt conveyors that process saturated material in the production line up to the next crusher, grinding mill or storage bin are subject to a no visible emission opacity

standard. A wet screening operation is defined in 40 CFR 60.671 as a screening operation at a nonmetallic mineral processing plant which removes unwanted material or which separates marketable fines from the product by a washing process which is designed and operated at all times such that the product is saturated with water. As a result, 40 CFR 60.672(h)(1), a no visible emission standard, is a newly applicable requirement for Plant #522.

Hanson also requested that existing equipment that is not being replaced, i.e. receiving hopper R1A be renamed to F1, receiving hopper R1 be renamed F2, the primary jaw crusher CR1 be renamed CR#1, the primary impact crusher CR1A be renamed CR#2, and the secondary crusher CR4 be converted to a tertiary crusher and renamed CR#5.

In addition to the requested changes made by Hanson, IDEM, OAQ and OES are updating estimated control efficiencies for the use of water as a control method for crushing, screening and conveying operations at this source to be consistent with the efficiencies stated in AP-42 Chapter 11.19.2 (August 2004) for these operations. These changes do not affect the potential to emit of the source but they do affect the estimated PM and PM10 emissions after control (see TSD Appendix A page 3 through 6 of 7).

The potential to emit particulate matter (PM) and PM10 from the proposed revision is each greater than twenty five (25) tons per year (see TSD Appendix A page 7 of 7). In addition, the construction and operation of each crusher, screen and conveyor added or modified in this proposed revision is now subject to 40 CFR 60.670, Subpart OOO. Therefore, this permit revision qualifies as a significant permit revision pursuant to 326 IAC 2-8-11.1(f). The proposed significant permit revision is assigned the application tracking number SPR097-25362-00104.

The following is a list of the proposed emission units, pollution control devices and the proposed revision to Plant # 522:

- (a) One (1) Limestone Crushing Plant # 522, identified as Plant # 522, with a maximum primary crushing capacity of 1500 tons per hour, using a NESCO Systems water suppression system as control. Plant # 522 consists of:
  - (1) Two (2) receiving hoppers (F1 and F2). F2 was installed in 1974 and F1 was installed in 2003. Each receiving hopper capacity is 1500 tons.
  - (2) Two (2) primary crushers, a 5348 Cedar Rapids impact crusher (CR#2) installed in 1974, and a 4248 jaw crusher (CR#1) installed in 2003.
  - (3) Two (2) secondary crushers, a Symons cone crusher (CR#3) and a Stedman impactor crusher (CR#7). CR#3 has a maximum crushing capacity of 650 tons per hour and CR#7 has a maximum crushing capacity of 300 tons per hour. CR#3 and CR#7 were each approved to construct in 2008.
  - (4) Three (3) tertiary crushers, a Symons cone crusher (CR#4), a ISC VSI crusher (CR#5) and a Symons cone crusher (CR#6). CR#4 has a maximum crushing capacity of 225 tons per hour. CR#5 has a maximum crushing capacity of 500 tons per hour and CR#6 has a maximum crushing capacity of 325 tons per hour. CR#4, CR#5 and CR#6 were each approved to construct in 2008.
  - (5) Nine (9) screens (Scr#1, Scr#2, Scr#3, Scr#4, Scr#5, Scr#6, Scr#7, Scr#8 and DW Screen). Scr#1 has a maximum screening capacity of 1500 tons per hour. Scr#2 and Scr#3 each have a maximum screening capacity of 275 tons per hour. Scr#4, Scr#5 and Scr#8 each have a maximum screening capacity of 600 tons per hour. Scr#6 and Scr#7 each have a maximum screening capacity of 400 tons per hour. DW Screen has a maximum screening capacity of 40 tons per hour. The use and presence of water in order to wash the products in Scr#6, Scr#7 and

DW Screen is deemed an integral part of the process in Scr#6, Scr#7 and DW Screen. Scr#1, Scr#2, Scr#3, Scr#4, Scr#5, Scr#6, Scr#7, Scr#8 and DW Screen were each approved to construct in 2008.

- (6) Fifty (50) conveyors (C-1, C-2, C-3, C1A, C2A, C3A, C-4, C-5, C-6, C-7, C-8, C-9, C-10, C-11, C-12, C-13, C-14, C-15, C-16, C-17, C-18, C-19, C-20, C-21, C-22, C-23, C-24, C-25, C-26, C-27, C-28, C-29, C-30, C-31, C-32, C-33, C-34, C-35, C-36, C-37, C-38, C-39, C-40, C-41, C-42, C-43, C-44, C-45, Belt Fdr#1 and Belt Fdr#2). C-1, C-2, C-3, C1A, C2A, C3A, C-4 and C-5 each have a maximum capacity of 1500 tons per hour. C-6 has a maximum capacity of 925 tons per hour. C-7, C-9 and C-10 each have a maximum capacity of 650 tons per hour. C-8 has a maximum capacity of 675 tons per hour. C-11 has a maximum capacity of 130 tons per hour. C-12 and C-13 each have a maximum capacity of 300 tons per hour. C-14, C-15, C-16 and C-17 each have a maximum capacity of 225 tons per hour. C-18, C-22, C-23, C-43 and C-44 each have a maximum capacity of 60 tons per hour. C-19 has a maximum capacity of 330 tons per hour. C-20 has a maximum capacity of 550 tons per hour. C-21 and C-29 each have a maximum capacity of 75 tons per hour. C-24, C-41 and C-42 each have a maximum capacity of 20 tons per hour. C-25 and C-28 each have a maximum capacity of 500 tons per hour. C-26 has a maximum capacity of 900 tons per hour. C-27 has a maximum capacity of 1150 tons per hour. C-30 has a maximum capacity of 750 tons per hour. C-31, C-32, C-33, C-34, C-35, C-36 each have a maximum capacity of 250 tons per hour. C-37 and C-38 each have a maximum capacity of 425 tons per hour. C-39 and C-40 each have a maximum capacity of 175 tons per hour. C-45 has a maximum capacity of 40 tons per hour. Belt Fdr#1 and Belt Fdr#2 each have a maximum capacity of 30 tons per hour. The use and presence of water in C-31 through C-41 and in C-45 is deemed an integral part of the process in C-31 through C-41 and in C-45. C-1, C-2 and C-3 were each installed prior to 1983. C1A and C2A and C3A were installed in 2003. C-4, C-5, C-6, C-7, C-8, C-9, C-10, C-11, C-12, C-13, C-14, C-15, C-16, C-17, C-18, C-19, C-20, C-21, C-22, C-23, C-24, C-25, C-26, C-27, C-28, C-29, C-30, C-31, C-32, C-33, C-34, C-35, C-36, C-37, C-38, C-39, C-40, C-41, C-42, C-43, C-44, C-45, Belt Fdr#1 and Belt Fdr#2 were each approved to construct in 2008.
- (7) One (1) wet sand screw identified as Screw. Screened fines come out the bottom of the screens and then go to the bottom of the wet sand screw where they are totally immersed in water. The screw separates coarse fines to make manufactured sand. Screw has a maximum capacity of 175 tons per hour. The use and presence of water in Screw is deemed an integral part of the process. Screw was approved to construct in 2008.

Under 40 CFR 60.670, Subpart OOO, Cr#1, Cr#2, Cr#3, Cr#4, Cr#5, Cr#6, Cr#7, Scr#1, Scr#2, Scr#3, Scr#4, Scr#5, Scr#6, Scr#7, Scr#8, DW Screen, C-1, C-2, C-3, C1A, C2A, C3A, C-4, C-5, C-6, C-7, C-8, C-9, C-10, C-11, C-12, C-13, C-14, C-15, C-16, C-17, C-18, C-19, C-20, C-21, C-22, C-23, C-24, C-25, C-26, C-27, C-28, C-29, C-30, C-31, C-32, C-33, C-34, C-35, C-36, C-37, C-38, C-39, C-40, C-41, C-42, C-43, C-44, C-45, Belt Fdr#1, Belt Fdr#2 and Screw are each considered an affected facility.

### **Air Pollution Control Justification as an Integral Part of the Process Determination**

Hanson Aggregates Midwest, Inc. has submitted the following justification that the use and presence of water in the following operations in Plant # 522, should be considered as an integral part of Plant # 522: screening operations identified as Scr# 6, Scr # 7 and DW Screen; conveyors identified as C-31, C-32, C-33, C-34, C-35, C-36, C-37, C-38, C-39, C-40, C-41 and C-45; and a wet sand screw identified as Screw. Prior to this proposed revision, Hanson did not claim any portion of operations in Plant # 522 to have integral methods or controls.

- (a) A large portion of Hanson's sales are to asphalt plants and ready mix concrete plants. These customers demand a washed and clean product. Therefore, Hanson must wash the coarse aggregate as it goes across screens Scr# 6 and Scr# 7 to remove any fines. Screens Scr# 6 and Scr# 7 are the only screens utilized in Plant # 522 operations to exclusively produce washed and cleaned products. Screening operations in Scr# 6 and Scr# 7 do not provide Hanson any additional plant wide production capacity for producing non-washed products. The washing and cleaning operation for products screened by Scr# 6 and Scr# 7 operates independently from the NESCO Systems water suppression system as control for Plant # 522 operations.

Screens Scr# 6 and Scr# 7 have a series of several spray bars that put out a large volume of water down the entire length of the deck in order to wash the product. The fines come out the bottom of the screens and then go to the bottom of the wet sand screw, identified as Screw, where they are totally immersed in water. The screw separates the coarse fines out to make manufactured sand that is also supplied to customers. What remains is slurry that is pumped to DW Screen and then to the settling ponds. All of the associated conveyors, C-31, C-32, C-33, C-34, C-35, C-36, C-37, C-38, C-39, C-40, C-41 and C-45 transfer "totally saturated" materials to the sand screw, stockpiles or the settling ponds. Therefore, the use and presence of water in producing washed and cleaned products in these specific operations in Plant # 522 serve a purpose other than pollution control. Therefore, these specific operations in Plant # 522 should be considered a totally wet process and the use and presence of water in producing washed and cleaned products in these specifically identified operations should be considered an integral part of the process of producing washed and cleaned products screened in Scr# 6 and Scr# 7.

- (b) IDEM, OAQ and OES have evaluated the justification and agree that the use and presence of water in producing washed and cleaned products in Scr# 6, Scr# 7 and DW Screen, conveyors identified as C-31, C-32, C-33, C-34, C-35, C-36, C-37, C-38, C-39, C-40, C-41 and C-45, and the wet sand screw, identified as Screw, serve a purpose other than pollution control and will be considered as an integral part of these specific Plant # 522 operations. Therefore, the permitting level will be determined using the potential to emit after the wet process (see TSD Appendix A page 3 and 4 of 7). Operating conditions in the proposed permit will specify that screening operations identified as Scr# 6, Scr# 7 and DW Screen, conveyors identified as C-31, C-32, C-33, C-34, C-35, C-36, C-37, C-38, C-39, C-40, C-41 and C-45 and the wet sand screw identified as Screw in Plant # 522 shall be a wet process at all times Plant # 522 is in operation.

### **Enforcement Issues**

There are no pending enforcement actions related to this revision or this source.

### **Stack Summary**

There are no exhaust stacks associated with this revision or this source.

### **Emission Calculations**

See Appendix A of this document for detailed emission calculations.

<b>Permit Level Determination – FESOP Revision</b>
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Pursuant to 326 IAC 2-7-1(29), Potential to Emit is defined as “the maximum capacity of a stationary source or emission unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, IDEM, or the appropriate local air pollution control agency.”

The following table is used to determine the appropriate permit level under 326 IAC 2-8.11.1. This table reflects the PTE of the revision before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

<b>Pollutant</b>	<b>PTE of revision (tons/year)</b>
PM	656.04
PM10	238.14
SO <sub>2</sub>	0.00
VOC	0.00
CO	0.00
NO <sub>x</sub>	0.00
HAPs	0.00

This permit revision is subject to 326 IAC 2-8-11.1(f) because this source is adding, modifying and replacing emission units which have the combined potential to emit particulate matter (PM) and PM10 of each greater than twenty five (25) tons per year (see TSD Appendix A page 7 of 7). Prior to this proposed revision, only a limited number of the entire number of operations in Plant # 522 (crushing operations in identified as CR1, CR2, CR4, screening operations identified as S1, S2, S3, S4, S5, S6, S10, BS2, and conveying operations identified as C0, C1A, C2A, C3A, C22, C27, BC3, BC4, BC6, BC7, BC8, BC9, BC10, BC11, BC12, BC13 and BC16) are currently subject to the provisions of the New Source Performance Standards for 40 CFR 60.670, Subpart OOO (Standards of Performance for Nonmetallic Mineral Processing Plants) and 326 IAC 12 (New Source Performance Standards). However, the construction and operation of each additional, modified or replacement crusher, screen or conveyor in Plant # 522 is now subject to the provisions of 40 CFR 60.670, Subpart OOO and 326 IAC 12. Prior to this proposed revision, Hanson did not claim any portion of operations in Plant # 522 had integral controls (see Air Pollution Justification as an Integral Part of the Process Determination section of this TSD). Because Hanson has now claimed the washing process in Plant # 522 screening operations identified as Scr# 6, Scr # 7 and DW Screen should be considered a totally wet process and integral to these operations, a no visible emission standard pursuant to 40 CFR 60.672(h)(1) is now a newly applicable requirement for this source and for specified portions of Plant # 522 operations. Therefore, even though similar processes are being added to Plant # 522 operations, the proposed revision does not qualify as an Administrative Amendment, pursuant to 326 IAC 2-8-10, because Plant # 522 is now subject to a newly applicable requirement.

The emission units included in this permit revision are subject to 40 CFR 60.670, Subpart OOO (Standards of Performance for Nonmetallic Mineral Processing Plants). However, this NSPS is not the most stringent requirement because the NSPS does not have mass emission limitations for these units. The mass emission limit, pursuant to 326 IAC 6-3-2(e)(3) (Particulate Emission Limitations for Manufacturing Processes), also applies to the emission units being added as part of this permit revision. In addition, the unrestricted potential to emit from the emission units included as part of this proposed permit revision exceed the major source threshold for 326 IAC 2-

2 (PSD Requirements). Mass emission limitations for each operation in Plant # 522 are included in this proposed permit revision to limit the potential to emit regulated air pollutants such that 326 IAC 2-2 (PSD Requirements) does not apply. Therefore, 40 CFR 60.670 is not the most stringent emission limitation for these emission units included in this proposed permit revision (see State Rule Applicability Determination section). Therefore, this revision does not qualify as an administrative amendment under 326 IAC 2-8-10 or a minor permit revision under 326 IAC 2-8-11(d) because the existing mass emission limitations, pursuant to 326 IAC 6-3-2, must be adjusted to accommodate modified process rates for Plant # 522 crushing, screening and conveying operations. As a result, this proposed permit revision qualifies as a significant permit revision under 326 IAC 2-8-11.1(f). The proposed permit revision is assigned the application tracking number SPR097-25362-00104.

**Potential to Emit of the Entire Source with the Proposed Revision**

The table below summarizes the potential to emit, reflecting all limits, of the emission units before and after the proposed Revision. Any control equipment is considered federally enforceable only after issuance of this FESOP permit revision, and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

Existing (before Revision) PTE appears as ~~strikethroughs~~ and PTE after Revision appears in **bold**:

Process/facility	Potential to Emit (tons/year)						
	PM	PM10	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	HAPs
Limestone Crushing Plant # 522 crushing, <del>and screening and conveying</del> operations <b>Cr#1, Cr#2, Cr#3, Cr#4, Cr#5, Cr#6</b> <b>and Cr#7, Scr#1, Scr#2, Scr#3, Scr#4, Scr#5,</b> <b>Scr#6, Scr#7, Scr#8, DW Screen, C1A, C2A,</b> <b>C3A, C-1 through C-45, Belt Fdr#1 and Belt</b> <b>Fdr#2, and the wet sand screw identified as</b> <b>Screw</b> <del>CR1A, CR1, CR2, CR3, CR4, CR6, CR5, S1, S2,</del> <del>S3, S4, S5, S6, S7, S8, S9, S10, BS1, BS2</del>	<b>239.6</b> <del>220.4</del> <sup>(1)</sup>	<b>93.3</b> <del>86.2</del> <sup>(1)</sup>	0.0	0.0	0.0	0.0	0.0 / 0.0
<del>Limestone Crushing Plant</del> <del># 522 conveying operations C0, C1, C1A, C2,</del> <del>C2A, C3, C3A, C4 through C28 and BC1 through</del> <del>BC16</del>	<del>19.7</del>	<del>7.2</del>	<del>0.0</del>	<del>0.0</del>	<del>0.0</del>	<del>0.0</del>	<del>0.0 / 0.0</del>
Dredging and screening of sand and gravel Plant # 510 receiving, screening and conveying operations SR1, SS1, SSC1, SSC2, SC1 through SC7	5.5	1.9	0.0	0.0	0.0	0.0	0.0 / 0.0
Drilling & Mining; Insignificant Activities	4.6	4.6	4.6	15.0	4.6	10.0	0.0 / 0.0
Total Emissions	< 250.0	< 100.0	4.6	15.0	4.6	10.0	0.0 / 0.0
Title V Major Source Thresholds	250	100	100	100	100	100	Less than 10 for a single HAP and 25 for any combination of HAPs.

Notes: (1) Limited potential to emit, see State Rule Applicability section

**Potential to Emit of the Entire Source After Issuance of the Proposed Revision**

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

Process/facility	Potential to Emit (tons/year)						
	PM	PM10	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	HAPs
Limestone Crushing Plant # 522 crushing, screening and conveying operations Cr#1, Cr#2, Cr#3, Cr#4, Cr#5, Cr#6 and Cr#7, Scr#1, Scr#2, Scr#3, Scr#4, Scr#5, Scr#6, Scr#7, Scr#8, DW Screen, C1A, C2A, C3A, C-1 through C-45, Belt Fdr#1 and Belt Fdr#2, and the wet sand screw identified as Screw	239.6 <sup>(1)</sup>	93.3 <sup>(1)</sup>	0.0	0.0	0.0	0.0	0.0 / 0.0
Dredging and screening of sand and gravel Plant # 510 receiving, screening and conveying operations SR1, SS1, SSC1, SSC2, SC1 through SC7	5.5	1.9	0.0	0.0	0.0	0.0	0.0 / 0.0
Drilling & Mining; Insignificant Activities	4.6	4.6	4.6	15.0	4.6	10.0	0.0 / 0.0
Total Emissions	< 250.0 <sup>(1)</sup>	< 100.0 <sup>(1)</sup>	4.6	15.0	4.6	10.0	0.0 / 0.0
PSD and Nonattainment New Source Review Major Source Thresholds	250	100	100	100	100	100	NA

Notes: (1) Limited potential to emit, see State Rule Applicability section

- (a) This revision to an existing minor stationary source is not major, under 326 IAC 2-2, because the emissions increase is less than the PSD major source thresholds. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.
- (b) Marion County has been designated as nonattainment for PM 2.5 in 70 FR 943 dated January 5, 2005. According to the April 5, 2005 EPA memo titled "Implementation of New Source Review Requirements in PM2.5 Nonattainment Areas" authored by Steve Page, Director of OAQPS, until EPA promulgates the PM2.5 major NSR regulations, states should assume that a major stationary source's PM10 emissions represent PM2.5 emissions. IDEM and OES will use the PM10 nonattainment major NSR program as a surrogate to address the requirements of nonattainment major NSR for the PM2.5 NAAQS. A major source in a nonattainment area is a source that emits or has the potential to emit one hundred (100) tons per year of any nonattainment regulated pollutant. Hanson has a limited potential to emit of PM10 below one hundred (100) tons per year. Therefore, assuming that PM10 emissions represent PM2.5 emissions, 326 IAC 2-3 does not apply for PM2.5.
- (c) After this revision, this source is still a minor source pursuant to the Part 70 Permit program.
- (d) Since the unrestricted potential to emit of this source is greater than two hundred fifty (250) tons of PM per year and one hundred (100) tons of PM10 per year (see TSD Appendix A page 7 of 7), the Permittee has elected to limit the potential to emit of this source as follows:

- (1) Plant # 522 non-fugitive operations consisting of crushers Cr#1, Cr#2, Cr#3, Cr#4, Cr#5, Cr#6 and Cr#7, screens Scr#1, Scr#2, Scr#3, Scr#4, Scr#5, Scr#6, Scr#7, Scr#8 and DW Screen, and conveyors C1A, C2A, C3A, C-1 through C-45, Belt Fdr#1 and Belt Fdr#2, and the wet sand screw identified as Screw shall not exceed a combined emission rate of 54.7 lbs PM/hr.
- (2) Washing operations in screens Scr#6, Scr#7, DW Screen and Screw shall be a totally wet process at all times Scr#6, Scr#7, DW Screen and Screw are in operation.
- (3) The NESCO Systems water suppression systems shall be in operation at all times Plant # 522 is in operation in order to comply with the particulate (PM) limit.
- (4) Plant # 522 non-fugitive operations consisting of crushers Cr#1, Cr#2, Cr#3, Cr#4, Cr#5, Cr#6 and Cr#7, screens Scr#1, Scr#2, Scr#3, Scr#4, Scr#5, Scr#6, Scr#7, Scr#8 and DW Screen, and conveyors C1A, C2A, C3A, C-1 through C-45, Belt Fdr#1 and Belt Fdr#2, and the wet sand screw identified as Screw shall not exceed a combined emission rate of 21.3 lbs PM10/hr.
- (5) Washing operations in screens Scr#6, Scr#7, DW Screen and Screw shall be a totally wet process at all times Scr#6, Scr#7, DW Screen and Screw are in operation.
- (6) The NESCO Systems water suppression systems shall be in operation at all times Plant # 522 is in operation in order to comply with the particulate (PM) limit

Compliance with these emission limits will ensure that the potential to emit from this source is less than two hundred fifty (250) tons of PM per year and one hundred (100) tons of PM10 per year and, therefore, will render the requirements of 326 IAC 2-7 and 326 IAC 2-2 not applicable.

#### Federal Rule Applicability Determination

The following federal rules are applicable to the source due to this permit revision:

- (a) This source is subject to the New Source Performance Standards for 40 CFR 60.670, Subpart OOO (Standards of Performance for Nonmetallic Mineral Processing Plants), which is incorporated by reference as 326 IAC 12. An affected facility, pursuant to 40 CFR 60.670(a), is each crusher, grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin and enclosed truck or railcar loading station that commenced construction, reconstruction, or modification after August 31, 1983 at a nonmetallic mineral processing plant where any combination of equipment is used to crush or grind any nonmetallic mineral. The affected facilities subject to this rule include the following (see Appendix A page 1 and 2 of 7):
  - (1) Crushing operations identified as CR#1, CR#3, CR#4, CR#5, CR #6 and CR#7.
  - (2) Screening operations identified as Scr#1, Scr#2, Scr#3, Scr#4, Scr#5, Scr#6, Scr#7, Scr#8, and DW Screen.
  - (3) Conveying operations identified as C1A, C2A, C3A, C-4 through C-45, Belt Fdr#1 and Belt Fdr#2, and the wet sand screw identified as Screw.

Nonapplicable portions of the NSPS will not be included in the permit. These units are each subject to the following portions of Subpart OOO:

- (1) 40 CFR 60.670
- (2) 40 CFR 60.671

- (3) 40 CFR 60.672(b)
- (4) 40 CFR 60.672(c)
- (5) 40 CFR 60.672(d)
- (6) 40 CFR 60.672(f)
- (7) 40 CFR 60.672(h)(1)
- (8) 40 CFR 60.673
- (9) 40 CFR 60.675(c)
- (10) 40 CFR 60.675(d)
- (11) 40 CFR 60.675(e)
- (12) 40 CFR 60.676(a)
- (13) 40 CFR 60.676(f)
- (14) 40 CFR 60.676(g)
- (15) 40 CFR 60.676(h)(1)
- (16) 40 CFR 60.676(j)

The provisions of 40 CFR 60, Subpart A (General Provisions), which are incorporated as 326 IAC 12, apply to the affected facilities described in this section except when otherwise specified in 40 CFR 60, Subpart OOO.

- (b) There are no additional New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in the proposed revision for this source.
- (c) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in the proposed revision for this source.

#### **State Rule Applicability Determination**

The following state rules are applicable to the source due to the modification:

##### 326 IAC 2-1.1-5 (Non-attainment New Source Review)

Marion County has been designated as nonattainment for PM<sub>2.5</sub>. According to an EPA guidance memo dated April 5, 2005, PM<sub>10</sub> is to be utilized as a surrogate for PM<sub>2.5</sub> until the EPA can promulgate the PM<sub>2.5</sub> implementation rule. PM<sub>10</sub> emissions, and therefore PM<sub>2.5</sub> emissions, from this source are less than one hundred (100) tons per twelve consecutive month period. There have been no modifications to this source such that it is a major source of PM<sub>10</sub> emissions. Therefore, this source is not subject to nonattainment new source review requirements for PM<sub>2.5</sub> emissions.

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

This existing source was constructed prior to the promulgation of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD) Requirements). This source is not one (1) of the twenty eight (28) listed source categories under 326 IAC 2-2 (Prevention of Significant Deterioration (PSD) Requirements). This source has the potential to emit particulate (PM) of equal to or greater than two hundred fifty (250) tons per year from non-fugitive operations (crushing, screening and conveying; see TSD Appendix A page 7 of 7). This source does not have the potential to emit any other criteria pollutant of equal to or greater than two hundred fifty (250) tons per year from non-fugitive operations. Prior to this proposed revision, this source has not had any new construction or modification that was deemed subject to the provisions of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD) Requirements) at the time of construction or modification.

With the use of NESCO Systems water suppression systems as particulate control (PM) for Plant # 522 and for Plant # 510, source wide PM emissions after controls are less than two hundred fifty (250) tons per twelve (12) consecutive month period from combined total source wide non-fugitive operations (see TSD Appendix A page 7 of 7). Therefore, combined total non-fugitive particulate (PM) emissions from Plant # 522, Plant # 510 and insignificant activities (see TSD Appendix A page 7 of 7) are limited to less than two hundred fifty (250.0) tons per twelve (12) consecutive

month period with compliance determined at the end of each month such that 326 IAC 2-2 (Prevention of Significant Deterioration) is not applicable. The NESCO Systems water suppression systems shall be in operation at all times Plant # 522 and Plant # 510 is in operation in order to comply with the particulate (PM) limit. Washing operations in screens Scr#6, Scr#7, DW Screen and Screw shall be a totally wet process at all times Scr#6, Scr#7, DW Screen and Screw are in operation.

In order to make this limit practically enforceable, an hourly allowable PM limit is derived for the proposed revision to Plan # 522 operations as follows: (249.9 tons per year of source wide limited potential to emit – 5.5 tons potential to emit from Plant # 510 – 4.6 tons potential to emit from Insignificant Activity PM emissions) x 2000 lbs/ton/8760 hrs/yr = 54.7 lbs PM/hr for combined non-fugitive emissions in Plant # 522 operations consisting of crushers Cr#1, Cr#2, Cr#3, Cr#4, Cr#5, Cr#6 and Cr#7, screens Scr#1, Scr#2, Scr#3, Scr#4, Scr#5, Scr#6, Scr#7, Scr#8 and DW Screen, and conveyors C1A, C2A, C3A, C-1 through C-45, Belt Fdr#1 and Belt Fdr#2, and the wet sand screw identified as Screw . Individual process operations in Plant # 522 shall each not exceed the following:

### Plant # 522

Process	Highest Single Operation Process Rate (tons per hour)	AP-42 emission factor (pounds per ton)	Control efficiency (%)	Highest Single Operation PM emissions after control (pounds per hour)	Allowable PM emissions (pounds per hour) (pursuant to 326 IAC 2-2)
CR#1, CR#2, CR#3, CR#4, CR#5, CR#6, CR#7	1500	0.0054	77.7	1.81	2.00 (each)
Scr#1, Scr#2, Scr#3, Scr#4, Scr#5, Scr#6, Scr#7, Scr#8, DW Screen	1500	0.025	91.6	3.15	3.30 (each)
C-1 through C-45, C1A, C2A, C3A, Belt Fdr#1, Belt Fdr#2, Screw	1500	0.003	95.9	0.18	0.21 (each)
<b>Total</b>				<b>12.44 *</b>	<b>&lt; 54.70</b>

\* see TSD Appendix A page 3 and 5 for combined total PM emissions in pounds per hour after control.

Each individual crushing, screening or conveying operation is able to comply with the allowable PM emission rate in pounds per hour (see TSD Appendix A page 3 and 5 of 7).

#### 326 IAC 2-4.1 (New Source Toxics Control)

This existing source commenced operation prior to July 27, 1997 and does not have the potential to emit hazardous air pollutant (HAP) emissions of greater than ten (10) tons per year for any individual HAP nor does this source have the potential to emit HAP of greater than twenty five (25) tons per year for any combination of HAP. This source did not undergo a construction or a reconstruction of a major HAP source after July 27, 1997. Therefore, this source is not subject to 326 IAC 2-4.1 (New Source Toxics Control).

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

This source is not subject to 326 IAC 2-6-1(a) (Emission Reporting) because it is located in Marion County, it does not have an operating permit under 326 IAC 2-7 (Part 70 Permit Program), and it does not emit Lead into the ambient air at levels equal to or greater than five (5) tons per year.

#### 326 IAC 2-8 (Federally Enforceable State Operating Permit Program)

The potential to emit of non-fugitive PM10 (crushing, screening, conveying) of the proposed revision is greater than one hundred (100.0) tons per year (see TSD Appendix A page 7 of 7). The source wide potential to emit non-fugitive PM10 is greater than one hundred (100.0) tons per year (crushing, screening, conveying and insignificant activities; see TSD Appendix A page 7 of 7).

With the use of NESCO Systems water suppression systems as PM10 control for Plant # 522 and for Plant # 510, source wide PM10 emissions after controls are less than one hundred (100.0) tons per twelve (12) consecutive month period from combined total source wide non-fugitive operations (see TSD Appendix A page 7 of 7). Pursuant to 326 IAC 2-8-4, combined total non-fugitive PM10 emissions from Plant # 522, Plant # 510 and insignificant activities are limited to less than one hundred (100.0) tons per twelve (12) consecutive month period with compliance determined at the end of each month. Compliance with these conditions limits the potential to emit non-fugitive PM10 emissions to less than one hundred (100) tons per year and renders 326 IAC 2-2 (Prevention of Significant Deterioration (PSD) Requirements) and 326 IAC 2-7 (Part 70 Permit Program) not applicable to Hanson Aggregates Midwest, Inc. - Harding Street Quarry. The NESCO Systems water suppression systems shall be in operation at all times Plant # 522 and Plant # 510 is in operation in order to comply with the PM10 limit. Washing operations in screens Scr#6, Scr#7, DW Screen and Screw shall be a totally wet process at all times Scr#6, Scr#7, DW Screen and Screw are in operation.

In order to make this limit practically enforceable, an hourly PM10 limit is derived for the proposed revision to Plan # 522 operations as follows: (99.9 tons per year of source wide limited potential to emit – 1.9 tons potential to emit from Plant # 510 – 4.6 tons potential to emit from Insignificant Activity PM10 emissions) x 2000 lbs/ton/8760 hrs/yr = 21.3 lbs PM10/hr for combined non-fugitive emissions in Plant # 522 operations consisting of Cr#1, Cr#2, Cr#3, Cr#4, Cr#5, Cr#6 and Cr#7, screens Scr#1, Scr#2, Scr#3, Scr#4, Scr#5, Scr#6, Scr#7, Scr#8 and DW Screen, and conveyors C1A, C2A, C3A, C-1 through C-45, Belt Fdr#1 and Belt Fdr#2, and the wet sand screw identified as Screw . Individual process operations in Plant # 522 shall each not exceed the following:

**Plant # 522**

Process	Highest Single Operation Process Rate (tons per hour)	AP-42 emission factor (pounds per ton)	Control efficiency (%)	Highest Single Operation PM10 emissions after control (pounds per hour)	Allowable PM10 emissions (pounds per hour) (pursuant to 326 IAC 2-8)
CR#1, CR#2, CR#3, CR#4, CR#5, CR#6, CR#7	1500	0.00243	77.7	0.81	0.85 (each)
Scr#1, Scr#2, Scr#3, Scr#4, Scr#5, Scr#6, Scr#7, Scr#8, DW Screen	1500	0.00865	91.6	1.09	1.20 (each)
C-1 through C-45, C1A, C2A, C3A, Belt Fdr#1, Belt Fdr#2, Screw	1500	0.0011	95.9	0.07	0.08 (each)
			<b>Total</b>	<b>4.81 *</b>	<b>&lt; 21.3</b>

\* see TSD Appendix A page 4 and 6 for combined total PM emissions in pounds per hour after control.

Each individual crushing, screening or conveying operation is able to comply with the allowable PM emission rate in pounds per hour (see TSD Appendix A page 3 and 5 of 7).

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

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

- (a) Opacity shall not exceed an average of thirty percent (30%) 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.

326 IAC 6.5-1-2(a) (Particulate Matter Limitations Except Lake County)

Sources or facilities located in Marion County which have the potential to emit greater than one hundred (100) tons per year of particulate or that have actual emissions greater than ten (10) tons per year and are not otherwise limited by 326 IAC 6.5-1-2(b) through (g) or 326 IAC 6.5-6 shall not exceed three hundredth (0.03) grains per dry standard cubic foot of exhaust. This source is subject to 326 IAC 6.5-1-2(a) because the potential to emit particulate is greater than one hundred (100) tons per year. Mineral aggregate operations at this source are subject to 326 IAC 6.5-1-2(g).

326 IAC 6.5-1-2(g) (Particulate Emission Limitations; Mineral Aggregate Operations)

This source is subject to 326 IAC 6.5-1-2(g) because it has mineral aggregate operations located in Marion County with the potential to emit greater than one hundred (100) tons per year of particulate. Pursuant to 326 IAC 6.5-1-2(g) (Particulate Emission Limitations; Mineral Aggregate Operations), mineral aggregate operations (operations involving mining, blasting and crushing, sizing, storing and transporting of mineral materials) shall be limited to the following:

- (a) Mineral aggregate operations, where the process is totally enclosed, shall comply with the requirements set forth in 326 IAC 6.5-1-2(a) (Particulate Matter Limitations Except Lake County).
- (b) In addition, 326 IAC 2 (Permit Review Rules), 326 IAC 5-1 (Opacity Limitations), and 326 IAC 6-4 (Fugitive Dust Emissions) shall apply in all cases to mineral aggregate operations.

Mineral aggregate operations at Hanson Aggregates Midwest, Inc. - Harding Street Quarry are not totally enclosed. Therefore, the particulate emission limitation of three hundredths (0.03) grains per dry standard cubic foot of exhaust air established pursuant to 326 IAC 6.5-1-2(a) (Particulate Matter Limitations Except Lake County) does not apply to mineral aggregate operations at this source.

Pursuant to 326 IAC 6.5-1-2(g) (Particulate Emission Limitations; Mineral Aggregate Operations), Hanson Aggregates Midwest, Inc. - Harding Street Quarry shall comply with 326 IAC 2 (Permit Review Rules), 326 IAC 5-1 (Opacity Limitations), and 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 2 (Permit Review Rules), 326 IAC 5-1 and 326 IAC 6-4 shall apply in all cases to mineral aggregate operations. Hanson Aggregates Midwest, Inc. - Harding Street Quarry is seeking to comply with 326 IAC 6.5-1-2(g) and 326 IAC 2 (Permit Review Rules) by operating under the existing FESOP F097-19718-00104 for this source.

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

Pursuant to 326 IAC 6-3-1(c), 326 IAC 6-3 shall not apply if an applicable particulate matter emission limitation established in 326 IAC 6.5-1 (Particulate Matter Limitations Except Lake County) or 326 IAC 12 (New Source Performance Standards) is more stringent than the particulate limitation established in 326 IAC 6-3. This source is subject to 326 IAC 6.5-1 (Particulate Matter Limitations Except Lake County) and 326 IAC 12 (New Source Performance Standards). However, IDEM, OAQ and OES have determined that the opacity limitations required under 40 CFR 60.670, Subpart OOO, 326 IAC 12 and 326 IAC 6.5-1 are not more stringent than the allowable mass particulate emission limitation that would be established pursuant to 326 IAC 6-3. Therefore, 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes) does apply to this source.

Pursuant to 326 IAC 6-3-2(e)(3) (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from individual processes comprising the one (1) Limestone Crushing Plant, identified as Plant # 522, shall each not exceed the values shown in the following tables when operating at the process weight shown:

**PLANT # 522**

<b>Process</b>	<b>Process Weight (tons per hour)</b>	<b>326 IAC 6-3-2 Allowable Emissions (pounds per hour)</b>
CR#1, CR#2, C-1, C-2, C-3, C1A, C2A, C3A C-4, C-5, Scr#1	1500	82.9 (each)
Cr#3, C-7, C-9, C-10	650	72.15 (each)
Cr#4, C-14, C-15, C-16, C-17	225	59.79 (each)
Cr#5, C25, C-28	500	68.96 (each)
Cr#6	325	63.91
Scr#2, Scr#3	275	62.02 (each)
Scr#4, Scr#5, Scr#8	600	71.16 (each)
Scr#6, Scr#7	400	66.31 (each)
C-6	925	76.58
C-8	675	72.61
C-11	130	53.95
C-12, C-13, Cr#7	300	63.00 (each)
C-18, C-22, C-23, C-43, C-44	60	46.29 (each)
C-19	330	64.09
C-20	550	45.47
C-21, C-29	75	48.43 (each)
C-24, C-41, C-42	20	30.51 (each)
C-26	900	76.23
C-27	1150	79.41
C-30	750	73.93
C-31, C-32, C-33, C-34, C-35, C-36	250	60.96 (each)
C-37, C-38	425	67.02 (each)
Screw, C-39, C-40	175	57.07 (each)
Belt Fdr#1, Belt Fdr#2	30	40.04 (each)
DW Screen, C-45	40	42.53 (each)

The allowable particulate emission rate was calculated using the following equations:

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

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

When the process rate weight rate exceeds two hundred (200) tons per hour, the allowable emissions may exceed that calculated from the above equation provided the concentration of particulate in the discharge gases to the atmosphere is less than one-tenth (0.10) pound per thousand (1,000) pounds of gases.

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

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

Based on calculations, the NESCO water systems do not need to operate to comply with these limits (see TSD Appendix A page 3 of 7).

### 326 IAC 6-4 (Fugitive Dust Emissions)

A source or sources generating fugitive dust shall be in violation of this rule (326 IAC 6-4) if any of the following criteria are violated:

- (a) A source or combination of sources which cause to exist fugitive dust concentrations greater than sixty-seven percent (67%) in excess of ambient upwind concentrations as determined by the following formula:

$$P = 100 (R-U)/U$$

P = Percentage increase

R = Number of particles of fugitive dust measured at downward receptor site

U = Number of particles of fugitive dust measured at upwind or background site

- (b) The fugitive dust is comprised of fifty percent (50%) or more respirable dust, then the percent increase of dust concentration in subdivision (1) of this section shall be modified as follows:

$$P_R = (1.5 \pm N) P$$

N = Fraction of fugitive dust that is respirable dust;

$P_R$  = allowable percentage increase in dust concentration above background; and

P = no value greater than sixty-seven percent (67%).

- (c) The ground level ambient air concentrations exceed fifty (50) micrograms per cubic meter above background concentrations for a sixty (60) minute period.
- (d) If fugitive dust is visible crossing the boundary or property line of a source. This subdivision may be refuted by factual data expressed in subdivisions (a), (b) or (c) of this section.

Pursuant to 326 IAC 6-4-6 (Fugitive Dust Emissions: Exceptions), the following conditions will be considered as exceptions to this rule (326 IAC 6-4) and, therefore, not in violation:

- (a) Release of steam not in combination with any other gaseous or particulate pollutants unless the condensation from said steam creates a nuisance or hazard in the surrounding community.
- (b) Fugitive dust from publicly maintained unpaved thoroughfares where no nuisance or health hazard is created by its usage or where it is demonstrated to the commissioner that no means are available to finance the necessary road improvements immediately. A reasonable long-range schedule for necessary road improvements must be submitted to support the commissioner's granting such an exception.
- (c) Fugitive dust from construction or demolition where every reasonable precaution has been taken in minimizing fugitive dust emissions.
- (d) Fugitive dust generated from agricultural operations providing every reasonable precaution is taken to minimize emissions and providing operations are terminated if a severe health hazard is generated because of prevailing meteorological conditions.
- (e) Visible plumes from a stack or chimney which provide adequate dispersion and are in compliance with other applicable rules.
- (f) Fugitive dust from a source caused by adverse meteorological conditions.

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

326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations) applies to any source of fugitive particulate matter emissions located in nonattainment areas for particulate matter as designated by the Board which has potential fugitive particulate matter emissions of twenty-five (25) tons per year or more, including the following:

- (a) Primary nonattainment areas, to include the portion of Marion County bounded on the west by Keystone Avenue, on the north and east by Southeastern Avenue, and on the east and south by Center Township.
- (b) Secondary nonattainment areas as follows:
  - (1) The portions of Marion County included in Center and Wayne Townships, the portion of Decatur Township located east and north of I-465, and the portion of Perry Township located north of I-465.

Sources specified in 326 IAC 6-5-1(a) shall submit a fugitive particulate matter emissions control plan or request an exemption from the control plan within six (6) months following December 13, 1985. A control plan or request for an exemption from the control plan shall be included in all permit applications and submitted to the Administrator by those sources specified in 326 IAC 6-5-1(b). Any control practice or measure that has been used to determine applicability or exemption of this rule (326 IAC 6-5) shall be incorporated into the source's operating permit.

Hanson Aggregates Midwest, Inc. - Harding Street Quarry submitted a revised fugitive dust plan, pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), on October 1, 2007. This plan is included as Attachment A of the FESOP, F097-19718-00104 as revised by this proposed FESOP Significant Permit Revision 097-25362-00104.

### 326 IAC 11 (Emission Limitations for Specific Types of Operations)

Nonmetallic mineral processing plants and/or mineral aggregate operations (operations involving mining, blasting and crushing, sizing, storing and transporting of mineral materials) are not specifically identified in 326 IAC 11 (Emission Limitations for Specific Types of Operations). Therefore, 326 IAC 11 (Emission Limitations for Specific Types of Operations) does not apply to this source.

### 326 IAC 12 (New Source Performance Standards)

See discussion under Federal Rule Applicability section.

### 326 IAC 14 (Emission Standards for Hazardous Air Pollutants)

There are no provisions under 326 IAC 14 (and 40 CFR Part 61) for nonmetallic mineral processing plants and/or mineral aggregate operations (operations involving mining, blasting and crushing, sizing, storing and transporting of mineral materials). Therefore, this source is not subject to 326 IAC 14 (Emission Standards for Hazardous Air Pollutants).

### 326 IAC 20 (Hazardous Air Pollutants)

This source does not have the potential to emit any single Hazardous Air Pollutant (HAP) of equal to or greater than ten (10) tons per twelve (12) consecutive month period or equal to or greater than twenty five (25) tons of any combination of HAPs per twelve (12) consecutive month period. Therefore, this source is not subject to 326 IAC 20 (Hazardous Air Pollutants).

## Compliance Determination and Monitoring Requirements

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance with all applicable state and federal rules on a continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the

requirement for a continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-8-4. As a result, Compliance Determination Requirements are included in the permit. The Compliance Determination Requirements in Section D of the permit are those conditions that are found directly within state and federal rules and the violation of which serves as grounds for enforcement action.

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

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

- (a) The NESCO Systems water suppression system for particulate control shall be in operation and control emissions from Plant # 522 at all times that Plant # 522 is in operation.
- (b) Washing operations in screens Scr#6, Scr#7 and DW Screen shall be a totally wet process at all times Scr#6, Scr#7 and DW Screen are in operation.

This condition is necessary because the source needs to operate properly to ensure compliance with 326 IAC 6.5-1-2(g), 326 IAC 2-2 (PSD Requirements), 326 IAC 2-8 (Federally Enforceable State Operating Permit Program), 326 IAC 12 (New Source Performance Standards) and 40 CFR 60.670, Subpart OOO.

Hanson Aggregates Midwest, Inc. has applicable compliance monitoring conditions as specified below:

Emission Unit	Control Device	Parameter	Parameter Range	Frequency
Plant # 522: Crushers Cr#1, Cr#2, Cr#3, Cr#4, Cr#5, Cr#6 and Cr#7; Screens Scr#1, Scr#2, Scr#3, Scr#4, Scr#5, Scr#6, Scr#7, Scr#8 and DW Screen; Conveyors C1A, C2A, C3A, C-1 through C-45, Belt Fdr#1 and Belt Fdr#2	None; totally wet process at all times Scr#6, Scr#7 and DW Screen are in operation	Visible emission notations	Normal or Abnormal	Once per day during normal daylight operations
Plant # 522	NESCO Systems water suppression system	NESCO Systems water flow rate	water flow rate must be $\geq 3.0$ gallons per minute	Once per day during normal operations

These monitoring conditions are necessary because the source needs to operate properly to ensure compliance with 326 IAC 6.5-1-2(g), 326 IAC 2-2 (PSD Requirements), 326 IAC 2-8 (Federally Enforceable State Operating Permit Program), 326 IAC 12 (New Source Performance Standards) and 40 CFR 60.670, Subpart OOO.

**Testing Requirements**

<b>Emission Unit</b>	<b>Control Device</b>	<b>Timeframe for Testing</b>	<b>Pollutant</b>	<b>Frequency of Re-Testing</b>	<b>Limit or Requirement</b>
Plant # 522: Crusher CR#1	NESCO Systems water suppression system	Prior to May 2010	Opacity	Once every 5 years	NSPS Subpart OOO: < 15 % Opacity
Plant # 522: Conveyors C1A & C2A	NESCO Systems water suppression system	Prior to May 2010	Opacity	Once every 5 years	NSPS Subpart OOO: < 10 % Opacity
Plant # 522: Crushers CR#3, CR#4, CR#5 & CR#6	NESCO Systems water suppression system	60/180 days	Opacity	Once every 5 years	NSPS Subpart OOO: < 15 % Opacity
Plant # 522: Screens Scr#1, Scr#2, Scr#3, Scr#4, Scr#5 & Scr#8	NESCO Systems water suppression system	60/180 days	Opacity	Once every 5 years	NSPS Subpart OOO: < 10 % Opacity
Plant # 522: Screens Scr#6, Scr#7, DW Screen & Conveyors C-31 through C-41 & C-45	NESCO Systems water suppression system + wet process	60/180 days	Opacity	Once every 5 years	NSPS Subpart OOO: no visible emissions
Plant #522: Conveyors C3A, C-4 through C-30, C-42 through C-44, Belt Fdr#1 & Belt Fdr#2	NESCO Systems water suppression system	60/180 days	Opacity	Once every 5 years	NSPS Subpart OOO: < 10 % Opacity

The testing limits and requirements are pursuant to 40 CFR 60.670, Subpart OOO (New Source Performance Standards for Nonmetallic Mineral Processing Plants). There are no testing requirements for Crusher CR#2 and Conveyors C-1, C-2 and C-3 because these existing units are not subject to 40 CFR 60.670, Subpart OOO.

**Proposed Changes**

The changes listed below have been made to FESOP No. F097-19718-00104. Deleted language appears as ~~strike throughs~~ and new language appears in bold:

**Change 1**

Marion County has been designated as nonattainment for PM2.5. According to an EPA guidance memo dated April 5, 2005, PM10 is to be utilized as a surrogate for PM2.5 until the EPA can promulgate the PM2.5 implementation rule. PM10 emissions, and therefore, PM2.5 emissions, from this source are limited to less than one hundred (100) tons per twelve consecutive month period. Therefore, minor source nonattainment new source review status for PM2.5 is added to Condition A.1.

On November 8, 2007, a temporary emergency rule took effect redesignating Marion County to attainment for the eight-hour ozone standard. The Indiana Air Pollution Control Board has begun the process for a permanent rule revision to incorporate these changes into 326 IAC 1-4-1. The permanent revision to 326 IAC 1-4-1 should take effect prior to the expiration of the emergency rule. Therefore, Marion County is no longer nonattainment for ozone under the 8-hour standard. Condition A.1 is revised as follows:

A.1 General Information [326 IAC 2-8-3(b)]

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The Permittee owns and operates a stationary mining and quarrying operation and a stationary sand and gravel operation.

Source Address: 4200 South Harding Street, Indianapolis, Indiana 46217  
Mailing Address: 209 Old Harrods Creek Road, P.O. Box 436329, Louisville, Kentucky 40253-6329  
General Source Phone: (317) 788-4086  
SIC Code: 1422 and 1442  
County Location: Marion County  
Source Location Status: ~~Nonattainment for ozone under the 8-hour standard,~~  
Nonattainment for PM2.5  
Source Status: Attainment for all other criteria pollutants  
Federally Enforceable State Operating Permit (FESOP)  
Minor Source, under PSD and ~~Emission Offset Rules~~  
**Nonattainment New Source Review**  
Minor Source, Section 112 of the Clean Air Act

Change 2

The renaming of the remaining existing emission units in Plant # 522 and the proposed construction and operation of additional, modified and replacement crushers, screens and conveyors at this nonmetallic mineral processing source causes the following changes to Condition A.2 (these same changes are made to the emission unit description box in Section D.1):

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

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

- (a) One (1) Limestone Crushing Plant # 522, identified as Plant # 522, with a maximum primary crushing capacity of 1500 tons per hour, using a NESCO Systems water suppression system as control. Plant # 522 consists of:
- (1) Two (2) receiving hoppers (**F1 and F2**) ~~(R1 and R1A)~~. **F2** ~~R1~~ was installed in 1974 and **F1** ~~R1A~~ was installed in 2003. Each receiving hopper capacity is 1500 tons.
  - (2) Two (2) primary crushers, a 5348 Cedar Rapids impact crusher **CR#2** ~~(CR1A)~~ installed in 1974, and a 4248 jaw crusher **CR#1** ~~(CR1)~~ installed in 2003.
  - (3) **Two (2)** ~~Four (4)~~ secondary crushers, a **Symons cone crusher (CR#3)** and a **Stedman impactor crusher (CR#7)**. **CR#3 has a maximum crushing capacity of 650 tons per hour and CR#7 has a maximum crushing capacity of 300 tons per hour. CR#3 and CR#7 were each approved to construct in 2008.** a ~~Boehringer impact crusher (CR2) installed in 1993, a 5 1/2 standard cone crusher (CR3) installed prior to 1983, a VSI crusher (CR4) installed in 1997, and a 4 1/4 short head cone crusher (CR6) installed prior to 1983, with a combined maximum crushing capacity of 1500 tons per hour.~~

- (4) **Three (3) tertiary crushers, a Symons cone crusher (CR#4), a ISC VSI crusher (CR#5) and a Symons cone crusher (CR#6). CR#4 has a maximum crushing capacity of 225 tons per hour. CR#5 has a maximum crushing capacity of 500 tons per hour and CR#6 has a maximum crushing capacity of 325 tons per hour. CR#4, CR#5 and CR#6 were each approved to construct in 2008. ~~One (1) tertiary crusher (CR5), a 5 ½ short head cone crusher with a maximum capacity of 275 tons per hour installed in 1991.~~**
- (5) **Nine (9) screens (Scr#1, Scr#2, Scr#3, Scr#4, Scr#5, Scr#6, Scr#7, Scr#8 and DW Screen). Scr#1 has a maximum screening capacity of 1500 tons per hour. Scr#2 and Scr#3 each have a maximum screening capacity of 275 tons per hour. Scr#4, Scr#5 and Scr#8 each have a maximum screening capacity of 600 tons per hour. Scr#6 and Scr#7 each have a maximum screening capacity of 400 tons per hour. DW Screen has a maximum screening capacity of 40 tons per hour. The use and presence of water in order to wash the products in Scr#6, Scr#7 and DW Screen is deemed an integral part of the process in Scr#6, Scr#7 and DW Screen. Scr#1, Scr#2, Scr#3, Scr#4, Scr#5, Scr#6, Scr#7, Scr#8 and DW Screen were each approved to construct in 2008. ~~Twelve (12) screens (S1, S2, S3, S4, S5, S6, S7, S8, S9, S10, BS1 and BS2), with a combined maximum screening capacity of 1500 tons per hour. S7, S8, S9 and BS1 were installed in 1974. S1, S2, S3, S4, S10, and BS2 were installed in 1993. S5 and S6 were installed in 1997.~~**
- (6) **Fifty (50) conveyors (C-1, C-2, C-3, C1A, C2A, C3A, C-4, C-5, C-6, C-7, C-8, C-9, C-10, C-11, C-12, C-13, C-14, C-15, C-16, C-17, C-18, C-19, C-20, C-21, C-22, C-23, C-24, C-25, C-26, C-27, C-28, C-29, C-30, C-31, C-32, C-33, C-34, C-35, C-36, C-37, C-38, C-39, C-40, C-41, C-42, C-43, C-44, C-45, Belt Fdr#1 and Belt Fdr#2). C-1, C-2, C-3, C1A, C2A, C3A, C-4 and C-5 each have a maximum capacity of 1500 tons per hour. C-6 has a maximum capacity of 925 tons per hour. C-7, C-9 and C-10 each have a maximum capacity of 650 tons per hour. C-8 has a maximum capacity of 675 tons per hour. C-11 has a maximum capacity of 130 tons per hour. C-12 and C-13 each have a maximum capacity of 300 tons per hour. C-14, C-15, C-16 and C-17 each have a maximum capacity of 225 tons per hour. C-18, C-22, C-23, C-43 and C-44 each have a maximum capacity of 60 tons per hour. C-19 has a maximum capacity of 330 tons per hour. C-20 has a maximum capacity of 550 tons per hour. C-21 and C-29 each have a maximum capacity of 75 tons per hour. C-24, C-41 and C-42 each have a maximum capacity of 20 tons per hour. C-25 and C-28 each have a maximum capacity of 500 tons per hour. C-26 has a maximum capacity of 900 tons per hour. C-27 has a maximum capacity of 1150 tons per hour. C-30 has a maximum capacity of 750 tons per hour. C-31, C-32, C-33, C-34, C-35, C-36 each have a maximum capacity of 250 tons per hour. C-37 and C-38 each have a maximum capacity of 425 tons per hour. C-39 and C-40 each have a maximum capacity of 175 tons per hour. C-45 has a maximum capacity of 40 tons per hour. Belt Fdr#1 and Belt Fdr#2 each have a maximum capacity of 30 tons per hour. The use and presence of water in C-31 through C-41 and in C-45 is deemed an integral part of the process in C-31 through C-41 and in C-45. C-1, C-2 and C-3 were each installed prior to 1983. C1A and C2A and C3A were installed in 2003. C-4, C-5, C-6, C-7, C-8, C-9, C-10, C-11, C-12, C-13, C-14, C-15, C-16, C-17, C-18, C-19, C-20, C-21, C-22, C-23, C-24, C-25, C-26, C-27, C-28, C-29, C-30, C-31, C-32, C-33, C-34, C-35, C-36, C-37, C-38, C-39, C-40, C-41, C-42, C-43, C-44, C-45, Belt Fdr#1 and Belt Fdr#2 were each approved to construct in 2008. ~~Forty eight (48) conveyors (C0, C1, C1A, C2, C2A, C3, C3A, C4 through C28 and BC1 through BC16), with a combined maximum conveying capacity of 1500 tons per hour. C1, C2, C3, C4 through~~**

~~C21, C23 through C26, C28, BC1, BC2, BC5, BC14 and BC15 were installed prior to 1983. C22 was installed in 1993. C27, BC3, BC4, BC6 through BC13 and BC16 were installed in 1997. C0, C1A, C2A and C3A were installed in 2003.~~

- (7) **One (1) wet sand screw identified as Screw. Screened fines come out the bottom of the screens and then go to the bottom of the wet sand screw where they are totally immersed in water. The screw separates coarse fines to make manufactured sand. Screw has a maximum capacity of 175 tons per hour. The use and presence of water in Screw is deemed an integral part of the process. Screw was approved to construct in 2008.**

**Under 40 CFR 60.670, Subpart OOO, Cr#1, Cr#2, Cr#3, Cr#4, Cr#5, Cr#6, Scr#1, Scr#2, Scr#3, Scr#4, Scr#5, Scr#6, Scr#7, Scr#8, DW Screen, C-1, C-2, C-3, C1A, C2A, C3A, C-4, C-5, C-6, C-7, C-8, C-9, C-10, C-11, C-12, C-13, C-14, C-15, C-16, C-17, C-18, C-19, C-20, C-21, C-22, C-23, C-24, C-25, C-26, C-27, C-28, C-29, C-30, C-31, C-32, C-33, C-34, C-35, C-36, C-37, C-38, C-39, C-40, C-41, C-42, C-43, C-44, C-45, Belt Fdr#1, Belt Fdr#2 and Screw are each considered an affected facility.**

Change 3

The potential to emit PM of the proposed revision and of the entire source exceeds two hundred fifty (250) tons per year. The potential to emit PM of the proposed revision and of the entire source exceeds one hundred (100) tons per year. The proposed revision is modifying, adding and replacing existing operations in Plant # 522. In addition, text was added to Condition D.1.1 to clarify the condition. Therefore, Condition D.1.1, Condition D.1.2 and Condition D.1.3 are updated as follows:

**D.1.1 Particulate Emission Limitations; Mineral Aggregate Operations [326 IAC 6.5-1-2(g)]**

Pursuant to 326 IAC 6.5-1-2(g) (Particulate Emission Limitations; Mineral Aggregate Operations), **the requirements of 326 IAC 2 (Permit Review Rules), 326 IAC 5-1 (Opacity Limitations) and 326 6-4 (Fugitive Dust Emissions)** shall apply to all mineral aggregate operations (mining, blasting, crushing, sizing, storing and transporting of mineral materials) at Hanson Aggregates Midwest, Inc. - Harding Street Quarry.

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

PM emissions from the following **operations in Plant # 522** ~~emission units~~ shall not exceed the following:

**Plant # 522**

Process	Allowable PM emissions (pounds per hour)
<b>CR#1, CR#2, CR#3, CR#4, CR#5, CR#6, CR#7</b>	<b>2.00 (each)</b>
<b>Scr#1, Scr#2, Scr#3, Scr#4, Scr#5, Scr#6, Scr#7, Scr#8, DW Screen</b>	<b>3.30 (each)</b>
<b>C-1 through C-45, C1A, C2A, C3A, Belt Fdr#1, Belt Fdr#2, Screw</b>	<b>0.21 (each)</b>

Process	Combined Process Rate (tons per hour)	Allowable PM emissions (pounds per hour)
CR1A, CR1	1500	0.81 (each)
CR2, CR3, CR4, CR6	1500	0.81 (each)
CR5	275	0.15
S1, S2, S3, S4, S5, S6, S7, S8, S9, S10, BS1, BS2	1500	3.75 (each)

Compliance with these limits for these emission units, combined with the potential emissions from Plant # 522 conveyors identified as C0, C1, C1A, C2, C2A, C3, C3A, C4 through C28 and BC1 through BC16, the potential emissions from Plant # 510, and the potential emissions from Insignificant Activities shall render 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable to this source.

**D.1.3 PSD Minor Limit and FESOP Limit [326 IAC 2-2] [326 IAC 2-8-4]**

PM emissions from the following **operations in Plant # 522** emission units shall not exceed the following:

**Plant # 522**

Process	Allowable PM10 emissions (pounds per hour)
CR#1, CR#2, CR#3, CR#4, CR#5, CR#6, CR#7	0.85 (each)
Scr#1, Scr#2, Scr#3, Scr#4, Scr#5, Scr#6, Scr#7, Scr#8, DW Screen	1.20 (each)
C-1 through C-45, C1A, C2A, C3A, Belt Fdr#1, Belt Fdr#2, Screw	0.08 (each)

**Plant # 522**

Process	Combined Process Rate (tons per hour)	Allowable PM10 emissions (pounds per hour)
CR1A, CR1	1500	0.36 (each)
CR2, CR3, CR4, CR6	1500	0.36 (each)
CR5	275	1.82
S1, S2, S3, S4, S5, S6, S7, S8, S9, S10, BS1, BS2	1500	1.31 (each)

Compliance with these limits for these emission units, combined with the potential emissions from Plant # 522 conveyors identified as C0, C1, C1A, C2, C2A, C3, C3A, C4 through C28 and BC1 through BC16, the potential emissions from Plant # 510, and the potential emissions from Insignificant Activities shall render 326 IAC 2-2 (Prevention of Significant Deterioration (PSD) Requirements) and 326 IAC 2-7 (Part 70 Permit Program) not applicable to this source.

**Change 4**

The proposed revision is modifying, adding and replacing existing operations in Plant # 522. Therefore, allowable PM emissions, pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), need to be updated. In addition, two of the new operations in Plant # 522 have a process weight rate less than sixty thousand (60,000) pounds per hour. As a result, the equation for the Interpolation of the data for process weight rates up to sixty thousand (60,000) pounds is a newly applicable requirement for Plant # 522 and is also added to Condition D.1.4.

**D.1.4 Particulate [326 IAC 6-3-2]**

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from individual processes comprising the one (1) Limestone Crushing Plant, identified as Plant # 522 and the one (1) dredging and screening of sand and gravel operation, identified as Plant # 510, shall each not exceed the values shown in the following tables when operating at the process weight shown:

**Plant # 522**

Process	Process Weight (tons per hour)	326 IAC 6-3-2 Allowable Emissions (pounds per hour)
CR#1, CR#2, C-1, C-2, C-3, C1A, C2A, C3A C-4, C-5, Scr#1	1500	82.9 (each)
Cr#3, C-7, C-9, C-10	650	72.15 (each)
Cr#4, C-14, C-15, C-16, C-17	225	59.79 (each)
Cr#5, C25, C-28	500	68.96 (each)
Cr#6	325	63.91
Scr#2, Scr#3	275	62.02 (each)
Scr#4, Scr#5, Scr#8	600	71.16 (each)
Scr#6, Scr#7	400	66.31 (each)
C-6	925	76.58
C-8	675	72.61
C-11	130	53.95
C-12, C-13, Cr#7	300	63.00 (each)
C-18, C-22, C-23, C-43, C-44	60	46.29 (each)
C-19	330	64.09
C-20	550	45.47
C-21, C-29	75	48.43 (each)
C-24, C-41, C-42	20	30.51 (each)
C-26	900	76.23
C-27	1150	79.41
C-30	750	73.93
C-31, C-32, C-33, C-34, C-35, C-36	250	60.96 (each)
C-37, C-38	425	67.02 (each)
Screw, C-39, C-40	175	57.07 (each)
Belt Fdr#1, Belt Fdr#2	30	40.04 (each)
DW Screen, C-45	40	42.53 (each)

**PLANT # 522**

Process	Process Weight (tons per hour)	326 IAC 6-3-2 Allowable Emissions (pounds per hour)
R1	1500	82.9
R1A	1500	82.9
CR1A, CR1	1500	82.9 (each)
CR2, CR3, CR4, CR6	1500	82.9 (each)
CR5	275	62.0
S1, S2, S3, S4, S5, S6, S7, S8, S9, S10, BS1, BS2	1500	82.9 (each)
C0, C1, C1A, C2, C2A, C3, C3A, C4 through C28, BC1 through BC16	1500	82.9 (each)

**PLANT # 510**

Process	Process Weight (tons per hour)	326 IAC 6-3-2 Allowable Emissions (pounds per hour)
SR1	450	67.7
SS1	450	67.7
SSC1	100	51.3
SSC2	200	58.5
SC1	450	67.7
SC2	50	44.6
SC3, SC4, SC5	100	51.3 (each)

Process	Process Weight (tons per hour)	326 IAC 6-3-2 Allowable Emissions (pounds per hour)
SC6, SC7	200	58.5 (each)

The allowable particulate emission rate was calculated using the following equations:

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

$$E = 55.0 P^{0.11} - 40$$

where E = rate of emission in pounds per hour and  
 P = process weight rate in tons per hour

When the process rate weight rate exceeds two hundred (200) tons per hour, the allowable emissions may exceed that calculated from the above equation provided the concentration of particulate in the discharge gases to the atmosphere is less than one-tenth (0.10) pound per thousand (1,000) pounds of gases.

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

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour and  
 P = process weight rate in tons per hour

Change 5

The proposed revision causes the following revisions to Condition D.1.5, D.1.6, and D.1.7:

**D.1.5 Preventive Maintenance Plan [326 IAC 2-8-4(9)]**

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for **crushers Cr#1, Cr#2, Cr#3, Cr#4, Cr#5, Cr#6 and Cr#7, screens Scr#1, Scr#2, Scr#3, Scr#4, Scr#5, Scr#6, Scr#7, Scr#8 and DW Screen, and conveyors C1A, C2A, C3A, C-1 through C-45, Belt Fdr#1 and Belt Fdr#2** ~~R1, R1A, CR1A, CR1, CR2, CR3, CR4, CR6, CR5, S1, S2, S3, S4, S5, S6, S7, S8, S9, S10, BS1, BS2, C0, C1, C1A, C2, C2A, C3, C3A, C4 through C28, BC1 through BC16~~ and the NESCO Systems water suppression control device.

**Compliance Determination Requirements**

**D.1.6 Particulate Control**

In order to comply with Conditions D.1.1, D.1.2 and D.1.3, the NESCO Systems water suppression systems for particulate control shall be in operation and control emissions from Plant # 522 and Plant # 510 at all times that Plant # 522 and Plant # 510 are in operation. **Washing operations in screens Scr#6, Scr#7, DW Screen and in Screw shall be a totally wet process at all times Scr#6, Scr#7, DW Screen and Screw are in operation.**

**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 **Cr#1, Cr#2, Cr#3, Cr#4, Cr#5, Cr#6 and Cr#7, screens Scr#1, Scr#2, Scr#3, Scr#4, Scr#5, Scr#6, Scr#7, Scr#8 and DW Screen, and conveyors C1A, C2A, C3A, C-1 through C-45, Belt Fdr#1 and Belt Fdr#2**, ~~CR1A, CR1, CR2, CR3, CR4, CR5, CR6, S1, S2, S3, S4, S5, S6, S7, S8, S9, S10, BS1, BS2, C0, C1A, C2A, C3A, C22, C27, BC3, BC4, BC6, BC7, BC8, BC9, BC10, BC11, BC12, BC13 and BC16~~ shall be performed once per day during normal daylight operations when in operation. A trained employee shall record whether emissions are normal or abnormal.

...

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.1.9 Record Keeping Requirements

- (a) To document compliance with Conditions D.1.1, D.1.2, D.1.3, D.1.5, D.1.6, D.1.7 and D.1.8, the Permittee shall maintain records of once per day visible emission notations and once per day NESCO System water flow rate checks. The Permittee shall include in its daily record when a visible emission notation is not taken, when a water flow rate check is not taken and the reason for the lack of the visible emission notation or water flow rate check (**e.g.** ~~the process did not operate that day~~). Records necessary to demonstrate compliance shall be available within thirty (30) days of the end of each compliance period.

...

Change 6

The addition of wet screening operations (Scr#6 and Scr#7) in Plant # 522 where a washing process in these screens removes unwanted material and which separates marketable fines from the product causes 40 CFR 60.672(h)(1) and 40 CFR 60.676(g) to become newly applicable requirements for subsequent screening operations in DW Screen, subsequent belt conveyors C-31, C-32, C-33, C-34, C-35, C-36, C-37, C-38, C-39, C-40, C-41 and C-45, and the subsequent wet sand screw identified as Screw that process saturated material in the production line following a washing process. As a result, 40 CFR 60.672(h)(1) and 40 CFR 60.676(g) are added to Condition D.1.5 as follows:

D.1.11 New Source Performance Standards for Nonmetallic Mineral Processing Plants [40 CFR 60.670, Subpart OOO][326 IAC 12]

Pursuant to 40 CFR 60.670, Subpart OOO (New Source Performance Standards for Nonmetallic Mineral Processing Plants), crushing operations in Plant # 522 identified as **CR#1, CR#3, CR#4, CR#5, and CR #6** CR1, CR2, CR4, R1A, screening operations in Plant # 522 identified as **Scr#1, Scr#2, Scr#3, Scr#4, Scr#5, Scr#6, Scr#7, Scr#8, DW Screen** S1, S2, S3, S4, S5, S6, S10, BS2, and conveying operations in Plant # 522 identified as **C1A, C2A, C3A, C-4 through C-45, Belt Fdr#1 and Belt Fdr#2, and the wet sand screw identified as Screw** C0, C1A, C2A, C3A, C22, C27, BC3, BC4, BC6, BC7, BC8, BC9, BC10, BC11, BC12, BC13 and BC16 shall each comply with the following:

...

§ 60.672 Standard for particulate matter.

...

**(h) On and after the sixtieth day after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup, no owner or operator shall cause to be discharged into the atmosphere any visible emissions from:**

**(1) Wet screening operations and subsequent screening operations, bucket elevators, and belt conveyors that process saturated material in the production line up to the next crusher, grinding mill or storage bin.**

...

§ 60.676 Reporting and recordkeeping.

...

**(g) The owner or operator of any screening operation, bucket elevator, or belt conveyor that processes saturated material and is subject to §60.672(h) and subsequently processes unsaturated materials, shall submit a report of this change within 30 days following such change. This screening operation, bucket elevator, or belt conveyor is then subject to the 10 percent opacity limit in §60.672(b) and the emission test requirements of §60.11 and this subpart. Likewise**

**a screening operation, bucket elevator, or belt conveyor that processes unsaturated material but subsequently processes saturated material shall submit a report of this change within 30 days following such change. This screening operation, bucket elevator, or belt conveyor is then subject to the no visible emission limit in §60.672(h).**

<b>Conclusion and Recommendation</b>
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The construction and operation of this proposed revision shall be subject to the conditions of the attached proposed FESOP Significant Permit Revision No. 097-25362-00104. The staff recommend to the Administrator that this FESOP Significant Permit Revision be approved.

**Appendix A: Emission Calculations**

**Limestone Crushing Plant # 522 - Emission Units after the Revision**

**Company Name:** Hanson Aggregates Midwest, Inc.  
**Address City IN Zip:** 4200 South Harding Street, Indpls., IN 46217  
**Permit Number:** F097-19718-00104  
**Plt ID:** 097-00104  
**Significant Permit Revision No.:** SPR097-25362-00104  
**Reviewer:** M. Caraher  
**Date:** 11/15/07

Process ID	Manufacturer	Description	Status	Rtd Capacity Tons/Hour	Throughput Tons/Year	Emission Control	NSPS Subpart 000 apply?
F1		Receiving Hopper for Jaw	Existing	1500	13,140,000	Wet Suppression	No
CR#1	Lippman	Primary Jaw Crusher	Existing	1500	13,140,000	Wet Suppression	Yes (Test May 05)
C1A		CR#1 to C2A	Existing	1500	13,140,000	Wet Suppression	Yes (Test May 05)
C2A		C1A to C3A	Existing	1500	13,140,000	Wet Suppression	Yes (Test May 05)
F2		Receiving Hopper for Impact Crusher	Existing	1500	13,140,000	Wet Suppression	No
CR#2	Cedar Rapids	Primary Impact Crusher	Existing	1500	13,140,000	Wet Suppression	No
C-1		Impact Crusher to C-2	Existing	1500	13,140,000	Wet Suppression	No
C-2		C-1 to C-3	Existing	1500	13,140,000	Wet Suppression	No
C-3		C-2 to D Stone Surge	Existing	1500	13,140,000	Wet Suppression	No
C3A		C2A to A Stone Surge	New	1500	13,140,000	Wet Suppression	Yes
C-4		A & D Stone Surge to C-5	New	1500	13,140,000	Wet Suppression	Yes
C-5		C-4 to Scr#1	New	1500	13,140,000	Wet Suppression	Yes
Scr #1	Deister	10 X 24 Scalping Screen	New	1500	13,140,000	Wet Suppression	Yes
Cr#3	Symons	4ft Std Cone Crusher Secondary	Used	650	5,694,000	Wet Suppression	Yes
C-6		CR#3 to C-7 or Scr#8	New	925	8,103,000	Wet Suppression	Yes
C-7		C-6 to C-5	New	650	5,694,000	Wet Suppression	Yes
C-8		Scr#1 to C-9 or C-20	New	675	5,913,000	Wet Suppression	Yes
C-9		C-8 to C-10	New	650	5,694,000	Wet Suppression	Yes
C-10		C-9 to #53 pile	New	650	5,694,000	Wet Suppression	Yes
Scr #8	Deister	8 X 20 Scalping Screen	New	600	5,256,000	Wet Suppression	Yes
C-11		Scr#8 to C-10	New	130	1,138,800	Wet Suppression	Yes
Cr#7	Stedman	GS5460H Impactor - Secondary	New	300	2,628,000	Wet Suppression	Yes
C-12		CR-7 to C-13	New	300	2,628,000	Wet Suppression	Yes
C-13		C-12 to C-6	New	300	2,628,000	Wet Suppression	Yes
C-14		Scr#1 to C-15	New	225	1,971,000	Wet Suppression	Yes
C-15		C-14 to C-16	New	225	1,971,000	Wet Suppression	Yes
C-16		C-15 to C-17	New	225	1,971,000	Wet Suppression	Yes
C-17		C-16 to #2 pile	New	225	1,971,000	Wet Suppression	Yes
C-18		Scr#1 to Rip Rap pile	New	60	525,600	Wet Suppression	Yes
C-19		Scr#1 to C-27	New	330	2,890,800	Wet Suppression	Yes
C-20		C-8 to Scr#2 or Scr#3	New	550	4,818,000	Wet Suppression	Yes
Scr #2	Deister	8 X 20 Scalping Screen	New	275	2,409,000	Wet Suppression	Yes
Scr #3	Deister	8 X 20 Scalping Screen	New	275	2,409,000	Wet Suppression	Yes
C-21		Scr#1 or Scr#2 to C-24 or C-22	New	75	657,000	Wet Suppression	Yes
C-22		C-21 to C-23	New	60	525,600	Wet Suppression	Yes
C-23		C-22 to Lime/CIS pile	New	60	525,600	Wet Suppression	Yes
C-24		C-21 to Wet Sand Screw	New	20	175,200	Wet Suppression	Yes
C-25		Scr#2 or Scr#3 to C-30	New	325	2,847,000	Wet Suppression	Yes
C-26		Scr#2 or Scr#3 to CR#4/CR#5/CR#6	New	900	7,884,000	Wet Suppression	Yes

**Appendix A: Emission Calculations**

**Limestone Crushing Plant # 522 - Emission Units after the Revision**

**Company Name:** Hanson Aggregates Midwest, Inc.  
**Address City IN Zip:** 4200 South Harding Street, Indpls., IN 46217  
**Permit Number:** F097-19718-00104  
**Plt ID:** 097-00104  
**Significant Permit Revision No.:** SPR097-25362-00104  
**Reviewer:** M. Caraher  
**Date:** 11/15/07

Process ID	Manufacturer	Description	Status	Rtd Capacity Tons/Hour	Throughput Tons/Year	Emission Control	NSPS Subpart 000 apply?
Cr#4	Symons	7ft Shorthead Cone Crusher Tertiary	Used	225	1,971,000	Wet Suppression	Yes
Cr#5	ISC	VSI Crusher Tertiary	Existing	500	4,380,000	Wet Suppression	Yes (Test Dec 97)
Cr#6	Symons	7ft Shorthead Cone Crusher Tertiary	Used	325	2,847,000	Wet Suppression	Yes
C-27		CR#4,CR#5 or CR#6 to Scr#4 or Scr#5	New	1150	10,074,000	Wet Suppression	Yes
Scr #4	Deister	8 X 20 Scalping Screen	New	600	5,256,000	Wet Suppression	Yes
Scr #5	Deister	8 X 20 Scalping Screen	New	600	5,256,000	Wet Suppression	Yes
C-28		Scr#4 or Scr#5 to C-26	New	500	4,380,000	Wet Suppression	Yes
C-29		Scr#4 or Scr#5 to #4 pile	New	75	657,000	Wet Suppression	Yes
C-30		Scr#4,Scr#5,C-44 or C-25 to Scr#6 or Scr#7	New	750	6,570,000	Wet Suppression	Yes
Scr #6	Deister	8 X 24 Wet Fines Screen	New	400	3,504,000	Wet Process-Integral	Yes
Scr #7	Deister	8 X 24 Wet Fines Screen	New	400	3,504,000	Wet Process-Integral	Yes
C-31		Scr#6 or Scr#7 to C-32	New	250	2,190,000	Wet Process-Integral	Yes
C-32		C-31 to C-33	New	250	2,190,000	Wet Process-Integral	Yes
C-33		C-32 to #12 pile	New	250	2,190,000	Wet Process-Integral	Yes
C-34		Scr#6 or Scr#7 to C-35	New	250	2,190,000	Wet Process-Integral	Yes
C-35		C-34 to C-36	New	250	2,190,000	Wet Process-Integral	Yes
C-36		C-35 to #11 pile	New	250	2,190,000	Wet Process-Integral	Yes
C-37		Scr#6 or Scr#7 to C-38	New	425	3,723,000	Wet Process-Integral	Yes
C-38		C-37 to #8 pile	New	425	3,723,000	Wet Process-Integral	Yes
Screw		Wet Sand Screw	New	175	1,533,000	Wet Process-Integral	Yes
C-39		Wet Sand Screw to C-40	New	175	1,533,000	Wet Process-Integral	Yes
C-40		C-39 to #24 sand pile	New	175	1,533,000	Wet Process-Integral	Yes
C-41		Wet Sand Screw to C-9	New	20	175,200	Wet Process-Integral	Yes
C-42		Hopper to C-9	New	20	175,200	Wet Suppression	Yes
Belt Fdr #1		Twin Hoppers to C-43	New	30	262,800	Wet Suppression	Yes
Belt Fdr #2		Twin Hoppers to C-43	New	30	262,800	Wet Suppression	Yes
C-43		Belt Fdr#1 & Belt Fdr#2 to C-44	New	60	525,600	Wet Suppression	Yes
C-44		C-43 to C-30	New	60	525,600	Wet Suppression	Yes
DW Screen	Deister	Wet Sand Screen	New	40	350,400	Wet Process-Integral	Yes
C-45		Wet sand Screen to Fine pile	New	40	350,400	Wet Process-Integral	Yes

Notes:

All units listed as new or used are part of the permit revision. All units listed as existing, except CR#5, are not part of the permit revision. CR#5 is being converted from a secondary crusher to a tertiary crusher and was previously identified as CR#4.

All units listed as Wet Process-Integral have the use and presence of water as an integral control method.

**Appendix A: Emission Calculations  
Limestone Processing  
Potential to Emit of the Revision**

**Company Name:** Hanson Aggregates Midwest, Inc.  
**Address City IN Zip:** 4200 South Harding Street, Indpls., IN 46217  
**Permit Number:** F097-19718-00104  
**Pit ID:** 097-00104  
**Significant Permit Revision No.:** SPR097-25362-00104  
**Reviewer:** M. Caraher  
**Date:** 11/15/07

Plant # 522 Emission Unit	Capacity	Emission Factor	emissions before / after controls (PM100)		Potential Emissions (tons/yr)	Estimated Control Efficiency (%)	Emissions After Controls (tons/yr)	Emissions After Controls (pounds/hr)
Crushing (secondary) (CR#3)	650 ton/hr x	0.0054 lb/ton	/2000 lb/ton x	8760 hr/yr =	15.37	77.7%	3.43	0.78
Crushing (secondary) (CR#7)	300 ton/hr x	0.0054 lb/ton	/2000 lb/ton x	8760 hr/yr =	7.10	77.7%	1.58	0.36
Crushing (tertiary) (CR#4)	225 ton/hr x	0.0054 lb/ton	/2000 lb/ton x	8760 hr/yr =	5.32	77.7%	1.19	0.27
Crushing (tertiary) (CR#5)	500 ton/hr x	0.0054 lb/ton	/2000 lb/ton x	8760 hr/yr =	11.83	77.7%	2.64	0.60
Crushing (tertiary) (CR#6)	325 ton/hr x	0.0054 lb/ton	/2000 lb/ton x	8760 hr/yr =	7.69	77.7%	1.71	0.39
Screening (Scr#1)	1,500 ton/hr x	0.025 lb/ton	/2000 lb/ton x	8760 hr/yr =	164.25	91.6%	13.80	3.15
Screening (Scr#2 & Scr#3)	275 ton/hr x	0.025 lb/ton	/2000 lb/ton x	8760 hr/yr =	60.23	91.6%	5.06	0.58
Screening (Scr#4 & Scr#5)	600 ton/hr x	0.025 lb/ton	/2000 lb/ton x	8760 hr/yr =	131.40	91.6%	11.04	1.26
Screening (Scr#6 & Scr#7) *	400 ton/hr x	0.025 lb/ton	/2000 lb/ton x	8760 hr/yr =	0.00	100.0%	0.00	0.00
Screening (Scr#8)	600 ton/hr x	0.025 lb/ton	/2000 lb/ton x	8760 hr/yr =	65.70	91.6%	5.52	1.26
Screening (DW Sreen) *	40 ton/hr x	0.025 lb/ton	/2000 lb/ton x	8760 hr/yr =	0.00	100.0%	0.00	0.00
Conveyor Transfer (C3A, C-4 & C-5)	1,500 ton/hr x	0.0029 lb/ton	/2000 lb/ton x	8760 hr/yr =	57.16	95.9%	2.34	0.18
Conveyor Transfer (C-6)	925 ton/hr x	0.0029 lb/ton	/2000 lb/ton x	8760 hr/yr =	11.75	95.9%	0.48	0.11
Conveyor Transfer (C-7, C-9 & C-10)	650 ton/hr x	0.0029 lb/ton	/2000 lb/ton x	8760 hr/yr =	24.77	95.9%	1.02	0.08
Conveyor Transfer (C-8)	675 ton/hr x	0.0029 lb/ton	/2000 lb/ton x	8760 hr/yr =	8.57	95.9%	0.35	0.08
Conveyor Transfer (C-11)	130 ton/hr x	0.0029 lb/ton	/2000 lb/ton x	8760 hr/yr =	1.65	95.9%	0.07	0.02
Conveyor Transfer (C-12 & C-13)	300 ton/hr x	0.0029 lb/ton	/2000 lb/ton x	8760 hr/yr =	7.62	95.9%	0.31	0.04
Conveyor Transfer (C-14, C-15, C-16 & C-17)	225 ton/hr x	0.0029 lb/ton	/2000 lb/ton x	8760 hr/yr =	11.43	95.9%	0.47	0.03
Conveyor Transfer (C-18, C-22 & C-23)	60 ton/hr x	0.0029 lb/ton	/2000 lb/ton x	8760 hr/yr =	2.29	95.9%	0.09	0.01
Conveyor Transfer (C-19)	330 ton/hr x	0.0029 lb/ton	/2000 lb/ton x	8760 hr/yr =	4.19	95.9%	0.17	0.04
Conveyor Transfer (C-20)	550 ton/hr x	0.0029 lb/ton	/2000 lb/ton x	8760 hr/yr =	6.99	95.9%	0.29	0.07
Conveyor Transfer (C-21 & C-29)	75 ton/hr x	0.0029 lb/ton	/2000 lb/ton x	8760 hr/yr =	1.91	95.9%	0.08	0.01
Conveyor Transfer (C-24 & C-42)	20 ton/hr x	0.0029 lb/ton	/2000 lb/ton x	8760 hr/yr =	0.51	95.9%	0.02	0.00
Conveyor Transfer (C-25)	325 ton/hr x	0.0029 lb/ton	/2000 lb/ton x	8760 hr/yr =	4.13	95.9%	0.17	0.04
Conveyor Transfer (C-26)	900 ton/hr x	0.0029 lb/ton	/2000 lb/ton x	8760 hr/yr =	11.43	95.9%	0.47	0.11
Conveyor Transfer (C-27)	1,150 ton/hr x	0.0029 lb/ton	/2000 lb/ton x	8760 hr/yr =	14.61	95.9%	0.60	0.14
Conveyor Transfer (C-28)	500 ton/hr x	0.0029 lb/ton	/2000 lb/ton x	8760 hr/yr =	6.35	95.9%	0.26	0.06
Conveyor Transfer (C-30)	750 ton/hr x	0.0029 lb/ton	/2000 lb/ton x	8760 hr/yr =	9.53	95.9%	0.39	0.09
Conveyor Transfer (C-31 thru C-41, Screw, & C-45) *	2,935 ton/hr x **	0.0029 lb/ton	/2000 lb/ton x	8760 hr/yr =	0.00	100.0%	0.00	0.00
Conveyor Transfer (Belt Fdr#1 & Belt Fdr#2)	30 ton/hr x	0.0029 lb/ton	/2000 lb/ton x	8760 hr/yr =	0.76	95.9%	0.03	0.00
Conveyor Transfer (C-43 & C-44)	60 ton/hr x	0.0029 lb/ton	/2000 lb/ton x	8760 hr/yr =	1.52	95.9%	0.06	0.01
<b>Total non fugitive PM emissions before controls (crushing, screening, conveying):</b>					<b>656.04</b>		<b>53.63</b>	<b>9.74</b>

( ) \* = wet process; integral controls

\*\* = combined throughput

Emission factors are from AP-42 Ch. 11.19.2 (August 2004) & Background Information Document 5/12/03.

Potential emissions = # units x capacity of each unit x emission factor x 8760 hours per year / 2000 pounds per ton

Estimated control efficiency from AP-42 Ch. 11.19.2 (August 2004)

Emissions after controls = potential emissions (tons/yr) x (1 - estimated control efficiency)

**Appendix A: Emission Calculations  
Limestone & Sand & Gravel Processing  
Potential to Emit of the Revision**

**Company Name:** Hanson Aggregates Midwest, Inc.  
**Address City IN Zip:** 4200 South Harding Street, Indpls., IN 46217  
**Permit Number:** F097-19718-00104  
**Pit ID:** 097-00104  
**Significant Permit Revision No.:** SPR097-25362-00104  
**Reviewer:** M. Caraher  
**Date:** 11/15/07

emissions before / after controls (PM10)
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Plant # 522			Potential Emissions (tons/yr)	Estimated Control Efficiency (%)	Emissions After Controls (tons/yr)	Emissions After Controls (pounds/hr)	
Emission Unit	Capacity	Emission Factor					
Crushing (secondary) (CR#3)	650 ton/hr x	0.00243 lb/ton	/ 2000 lb/ton x 8760 hr/yr =	6.92	77.7%	1.54	0.35
Crushing (secondary) (CR#7)	300 ton/hr x	0.00243 lb/ton	/ 2000 lb/ton x 8760 hr/yr =	3.19	77.7%	0.71	0.16
Crushing (tertiary) (CR#4)	225 ton/hr x	0.00243 lb/ton	/ 2000 lb/ton x 8760 hr/yr =	2.39	77.7%	0.53	0.12
Crushing (tertiary) (CR#5)	500 ton/hr x	0.00243 lb/ton	/ 2000 lb/ton x 8760 hr/yr =	5.32	77.7%	1.19	0.27
Crushing (tertiary) (CR#6)	325 ton/hr x	0.00243 lb/ton	/ 2000 lb/ton x 8760 hr/yr =	3.46	77.7%	0.77	0.18
Screening (Scr#1)	1,500 ton/hr x	0.00865 lb/ton	/ 2000 lb/ton x 8760 hr/yr =	56.83	91.6%	4.77	1.09
Screening (Scr#2 & Scr#3)	275 ton/hr x	0.00865 lb/ton	/ 2000 lb/ton x 8760 hr/yr =	20.84	91.6%	1.75	0.20
Screening (Scr#4 & Scr#5)	600 ton/hr x	0.00865 lb/ton	/ 2000 lb/ton x 8760 hr/yr =	45.46	91.6%	3.82	0.44
Screening (Scr#6 & Scr#7) *	400 ton/hr x	0.00865 lb/ton	/ 2000 lb/ton x 8760 hr/yr =	0.00	100.0%	0.00	0.00
Screening (Scr#8)	600 ton/hr x	0.00865 lb/ton	/ 2000 lb/ton x 8760 hr/yr =	22.73	91.6%	1.91	0.44
Screening (DW Sreen) *	40 ton/hr x	0.00865 lb/ton	/ 2000 lb/ton x 8760 hr/yr =	0.00	100.0%	0.00	0.00
Conveyor Transfer (C3A, C-4 & C-5)	1,500 ton/hr x	0.0011 lb/ton	/ 2000 lb/ton x 8760 hr/yr =	21.68	95.9%	0.89	0.07
Conveyor Transfer (C-6)	925 ton/hr x	0.0011 lb/ton	/ 2000 lb/ton x 8760 hr/yr =	4.46	95.9%	0.18	0.04
Conveyor Transfer (C-7, C-9 & C-10)	650 ton/hr x	0.0011 lb/ton	/ 2000 lb/ton x 8760 hr/yr =	9.40	95.9%	0.39	0.03
Conveyor Transfer (C-8)	675 ton/hr x	0.0011 lb/ton	/ 2000 lb/ton x 8760 hr/yr =	3.25	95.9%	0.13	0.03
Conveyor Transfer (C-11)	130 ton/hr x	0.0011 lb/ton	/ 2000 lb/ton x 8760 hr/yr =	0.63	95.9%	0.03	0.01
Conveyor Transfer (C-12 & C-13)	300 ton/hr x	0.0011 lb/ton	/ 2000 lb/ton x 8760 hr/yr =	2.89	95.9%	0.12	0.01
Conveyor Transfer (C-14, C-15, C-16 & C-17)	225 ton/hr x	0.0011 lb/ton	/ 2000 lb/ton x 8760 hr/yr =	4.34	95.9%	0.18	0.01
Conveyor Transfer (C-18, C-22 & C-23)	60 ton/hr x	0.0011 lb/ton	/ 2000 lb/ton x 8760 hr/yr =	0.87	95.9%	0.04	0.00
Conveyor Transfer (C-19)	330 ton/hr x	0.0011 lb/ton	/ 2000 lb/ton x 8760 hr/yr =	1.59	95.9%	0.07	0.01
Conveyor Transfer (C-20)	550 ton/hr x	0.0011 lb/ton	/ 2000 lb/ton x 8760 hr/yr =	2.65	95.9%	0.11	0.02
Conveyor Transfer (C-21 & C-29)	75 ton/hr x	0.0011 lb/ton	/ 2000 lb/ton x 8760 hr/yr =	0.72	95.9%	0.03	0.00
Conveyor Transfer (C-24 & C-42)	20 ton/hr x	0.0011 lb/ton	/ 2000 lb/ton x 8760 hr/yr =	0.19	95.9%	0.01	0.00
Conveyor Transfer (C-25)	325 ton/hr x	0.0011 lb/ton	/ 2000 lb/ton x 8760 hr/yr =	1.57	95.9%	0.06	0.01
Conveyor Transfer (C-26)	900 ton/hr x	0.0011 lb/ton	/ 2000 lb/ton x 8760 hr/yr =	4.34	95.9%	0.18	0.04
Conveyor Transfer (C-27)	1,150 ton/hr x	0.0011 lb/ton	/ 2000 lb/ton x 8760 hr/yr =	5.54	95.9%	0.23	0.05
Conveyor Transfer (C-28)	500 ton/hr x	0.0011 lb/ton	/ 2000 lb/ton x 8760 hr/yr =	2.41	95.9%	0.10	0.02
Conveyor Transfer (C-30)	750 ton/hr x	0.0011 lb/ton	/ 2000 lb/ton x 8760 hr/yr =	3.61	95.9%	0.15	0.03
Conveyor Transfer (C-31 thru C-41, Screw, & C-45) *	2,935 ton/hr x **	0.0011 lb/ton	/ 2000 lb/ton x 8760 hr/yr =	0.00	100.0%	0.00	0.00
Conveyor Transfer (Belt Fdr#1 & Belt Fdr#2)	30 ton/hr x	0.0011 lb/ton	/ 2000 lb/ton x 8760 hr/yr =	0.29	95.9%	0.01	0.00
Conveyor Transfer (C-43 & C-44)	60 ton/hr x	0.0011 lb/ton	/ 2000 lb/ton x 8760 hr/yr =	0.58	95.9%	0.02	0.00
<b>Total non fugitive PM emissions before controls (crushing, screening, conveying):</b>				<b>238.14</b>		<b>19.91</b>	<b>3.66</b>

( ) \* = wet process; integral controls

\*\* = combined throughput

Emission factors are from AP-42 Ch.11.19.2 (August 2004)

Control efficiencies determined using estimates from AP-42 Chapters 11 and 13

Emissions after controls = potential emissions (tons/yr) x (1 - estimated control efficiency)

Appendix A: Emission Calculations

Limestone Processing

Existing non-fugitive Emissions Prior/After the Revision

Company Name: Hanson Aggregates Midwest, Inc.  
 Address City IN Zip: 4200 South Harding Street, Indpls., IN 46217  
 Permit Number: F097-19718-00104  
 Pit ID: 097-00104  
 Minor Permit Revision No.: 097-25362-00104  
 Reviewer: M. Caraher  
 Date: 11/15/07

emissions before / after controls  
(PM100)

Plant # 522

Emission Unit	Capacity	Emission Factor		Potential Emissions (tons/yr)	Estimated Control Efficiency (%)	Emissions After Controls (tons/yr)	Emissions After Controls (pounds/hr)
Crushing (primary) (CR#1 & CR#2 combined)	1,500 ton/hr x	0.0054 lb/ton	/ 2000 lb/ton x 8760 hr/yr =	35.48	77.7%	7.91	1.81
Conveyor Transfer (C1A)	1,500 ton/hr x	0.0029 lb/ton	/ 2000 lb/ton x 8760 hr/yr =	19.05	95.9%	0.78	0.18
Conveyor Transfer (C2A)	1,500 ton/hr x	0.0029 lb/ton	/ 2000 lb/ton x 8760 hr/yr =	19.05	95.9%	0.78	0.18
Conveyor Transfer (C-1)	1,500 ton/hr x	0.0029 lb/ton	/ 2000 lb/ton x 8760 hr/yr =	19.05	95.9%	0.78	0.18
Conveyor Transfer (C-2)	1,500 ton/hr x	0.0029 lb/ton	/ 2000 lb/ton x 8760 hr/yr =	19.05	95.9%	0.78	0.18
Conveyor Transfer (C-3)	1,500 ton/hr x	0.0029 lb/ton	/ 2000 lb/ton x 8760 hr/yr =	19.05	95.9%	0.78	0.18
<b>Total existing non fugitive PM emissions before controls (crushing, screening, conveying):</b>				<b>130.74</b>		<b>11.82</b>	<b>2.70</b>

Emission factors are from AP-42 Ch.11.19.2 (August 2004)

Control efficiencies determined using estimates from AP-42 Chapters 11 and 13

Emissions after controls = potential emissions (tons/yr) x (1 - estimated control efficiency)

Appendix A: Emission Calculations

Limestone Processing

Existing non-fugitive Emissions Prior/After the Revision

Company Name: Hanson Aggregates Midwest, Inc.  
 Address City IN Zip: 4200 South Harding Street, Indpls., IN 46217  
 Permit Number: F097-19718-00104  
 Pit ID: 097-00104  
 Significant Permit Revision No.: 097-25362-00104  
 Reviewer: M. Caraher  
 Date: 11/15/07

emissions before / after controls  
(PM10)

Plant # 522

Emission Unit	Capacity	Emission Factor		Potential Emissions (tons/yr)	Estimated Control Efficiency (%)	Emissions After Controls (tons/yr)	Emissions After Controls (pounds/hr)
Crushing (primary) (CR#1 & CR#2 combined)	1,500 ton/hr x	0.00243 lb/ton	/ 2000 lb/ton x 8760 hr/yr =	15.97	77.7%	3.56	0.81
Conveyor Transfer (C1A)	1,500 ton/hr x	0.0011 lb/ton	/ 2000 lb/ton x 8760 hr/yr =	7.23	95.9%	0.30	0.07
Conveyor Transfer (C2A)	1,500 ton/hr x	0.0011 lb/ton	/ 2000 lb/ton x 8760 hr/yr =	7.23	95.9%	0.30	0.07
Conveyor Transfer (C-1)	1,500 ton/hr x	0.0011 lb/ton	/ 2000 lb/ton x 8760 hr/yr =	7.23	95.9%	0.30	0.07
Conveyor Transfer (C-2)	1,500 ton/hr x	0.0011 lb/ton	/ 2000 lb/ton x 8760 hr/yr =	7.23	95.9%	0.30	0.07
Conveyor Transfer (C-3)	1,500 ton/hr x	0.0011 lb/ton	/ 2000 lb/ton x 8760 hr/yr =	7.23	95.9%	0.30	0.07
<b>Total existing non fugitive PM emissions before controls (crushing, screening, conveying):</b>				<b>52.10</b>		<b>5.04</b>	<b>1.15</b>

Emission factors are from AP-42 Ch.11.19.2 (August 2004)

Control efficiencies determined using estimates from AP-42 Chapters 11 and 13

Emissions after controls = potential emissions (tons/yr) x (1 - estimated control efficiency)

**Appendix A: Emission Calculations  
Source Wide Potential to Emit**

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**Company Name:** Hanson Aggregates Midwest, Inc.  
**Address City IN Zip:** 4200 South Harding Street, Indpls., IN 46217  
**Permit Number:** F097-19718-00104  
**Plt ID:** 097-00104  
**Significant Permit Revision No.:** SPR097-25362-00104  
**Reviewer:** M. Caraher  
**Date:** 11/15/07

Source Wide Potential to Emit (tons per year)							
Process		PM	PM10	SO <sub>2</sub>	NO <sub>x</sub>	VOC	CO
Plant # 522	new units non-fugitive	656.04	238.14	0.00	0.00	0.00	0.00
	existing units non-fugitive	130.74	52.10	0.00	0.00	0.00	0.00
	<b>total</b>	<b>3674.97</b>	<b>960.78</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
Plant # 510	non-fugitive	5.52	1.93	0.00	0.00	0.00	0.00
	<b>total</b>	<b>7.10</b>	<b>2.72</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
Drilling & Mining	<b>total</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
Insignificant Activities	non-fugitive	4.60	4.60	4.60	0.00	15.00	4.60
	<b>total</b>	<b>4.60</b>	<b>4.60</b>	<b>4.60</b>	<b>10.00</b>	<b>15.00</b>	<b>4.60</b>
<b>Total</b>	non-fugitive	796.91	296.78	4.60	0.00	15.00	4.60
	<b>total</b>	<b>3686.67</b>	<b>968.10</b>	<b>4.60</b>	<b>0.00</b>	<b>15.00</b>	<b>4.60</b>

Notes:

Non-fugitive = crushing, screening, conveying

Plant # 522 Total = non-fugitive + fugitive = crushing, screening, conveying + loading, storage, transport (see F097-19718-00104 TSD App A)

Total = non-fugitive + fugitive = crushing, screening, conveying + loading, storage, transport.

Plant # 522 total includes source wide fugitive emissions before controls, i.e. the use of water & Plant #522 non-fugitive integral controls, i.e. water washing of product screened.

Plant # 510 PTE is emissions after integral controls, i.e the presence and use of water in the sand plant.

Refer to F097-19718-00104 TSD Appendix A for Plant # 522 & Plant # 510 fugitive emission calculations & Drilling & Mining and Insignificant Activity calculations.

Source Wide Emissions After Controls (tons per year)							
Process		PM	PM10	SO <sub>2</sub>	NO <sub>x</sub>	VOC	CO
Plant # 522	new units non-fugitive	53.63	19.91				
	existing units non-fugitive	11.82	5.04	0.00	0.00	0.00	0.00
	<b>total</b>	<b>1509.54</b>	<b>360.31</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
Plant # 510	non-fugitive	5.52	1.93	0.00	0.00	0.00	0.00
	<b>total</b>	<b>7.10</b>	<b>2.72</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
Drilling & Mining	<b>total</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
Insignificant Activities	non-fugitive	4.60	4.60	4.60	0.00	15.00	4.60
	<b>total</b>	<b>4.60</b>	<b>4.60</b>	<b>4.60</b>	<b>10.00</b>	<b>15.00</b>	<b>4.60</b>
<b>Total</b>	non-fugitive	75.57	31.48	4.60	10.00	15.00	4.60
	<b>total</b>	<b>1521.24</b>	<b>367.63</b>	<b>4.60</b>	<b>10.00</b>	<b>15.00</b>	<b>4.60</b>

Notes:

Non-fugitive = crushing, screening, conveying

Plant # 522 Total = non-fugitive + fugitive = crushing, screening, conveying + loading, storage, transport (see F097-19718-00104 TSD App A)

Total = non-fugitive + fugitive = crushing, screening, conveying, loading, storage, transport

Plant # 522 total includes source wide fugitive emissions after controls, i.e. the use of water

Plant # 510 PTE is emissions after integral controls