



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
Toll Free (800) 451-6027
www.idem.IN.gov

TO: Interested Parties / Applicant

DATE: May 12, 2010

RE: Dave O'Mara Contractor, Inc. / 031-28784-05047

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

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, Suite N 501E, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (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 Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures
FNPER.dot12/03/07



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Ms. Amy Boswell
Dave O'Mara Contractor, Inc.
1100 East O & M Avenue
North Vernon, IN 47265

May 12, 2010

Re: 031-28784-05047
First Significant Revision to
F031-25342-05047

Dear Ms. Boswell

Dave O'Mara Contractor, Inc. was issued a Federally Enforceable State Operating Permit (FESOP) Renewal No. F031-25342-05047 on February 20, 2009 for a portable hot drum-mix asphalt plant located at New Point Stone at 992 South County Road 800 East, Greensburg, Indiana. On November 17, 2009, the Office of Air Quality (OAQ) received an application from the source requesting to revise Condition D.1.3 (Sulfur Dioxide 326 IAC 7-1.1-1) to remove the requirement to limit the No. 2 and No. 4 fuel oil sulfur content to 0.05% and 0.41%. In addition, the source has requested that the sulfur content limits established in Condition D.1.4 be increased and the No. 2 and No. 4 fuel oil sulfur content limits be determined on a calendar month average. The attached Technical Support Document (TSD) provides additional explanation of the changes to the source/permit. Pursuant to the provisions of 326 IAC 2-8-11.1, these changes to the permit are required to be reviewed in accordance with the Significant Permit Revision (SPR) procedures of 326 IAC 2-8-11.1(f). Pursuant to the provisions of 326 IAC 2-8-11.1, a significant permit revision to this permit is hereby approved as described in the attached Technical Support Document (TSD).

Pursuant to 326 IAC 2-8-11.1, this permit shall be revised by incorporating the significant permit revision into the permit. All other conditions of the permit shall remain unchanged and in effect. Attached please find the entire 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 Brian Williams, of my staff, at 317-234-5375 or 1-800-451-6027, and ask for extension 4-5375.

Sincerely,

Iryn Calilung, Section Chief
Permits Branch
Office of Air Quality

Attachments: Technical Support Document and revised permit

IC/BMW

cc: File - Decatur County
Decatur County Health Department
U.S. EPA, Region V
Compliance and Enforcement Branch
Billing, Licensing and Training Section



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Federally Enforceable State Operating Permit Renewal OFFICE OF AIR QUALITY

Dave O'Mara Contractor, Inc. Portable

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

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

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

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

Operation Permit No.: F031-25342-05047	
Original Signed by: Chrystal A. Wagner, Section Chief Permits Branch Office of Air Quality	Issuance Date: February 20, 2009 Expiration Date: February 20, 2019

Significant Permit Revision No.: 031-28784-05047	
Issued by:  Iryn Calilung, Section Chief Permits Branch Office of Air Quality	Issuance Date: May 12, 2010 Expiration Date: February 20, 2019

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SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

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

The Permittee owns and operates a portable hot drum-mix asphalt plant.

Current Source Address:	New Point Stone at 992 South County Road 800 East, Greensburg, Indiana 47240
General Source Phone Number:	(812) 346-4135
SIC Code:	2951
County Location:	Decatur
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Federally Enforceable State Operating Permit Program Minor Source, under PSD and Emission Offset Rules Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

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

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

- (a) One (1) portable asphalt drum-mix plant, constructed in 1998, with a nominal capacity of 300 tons per hour, equipped with one (1) aggregate dryer burner with a maximum rated capacity of 72 million British thermal units (MMBtu) per hour, using natural gas, No. 2 fuel oil, or residual No. 4 fuel oil, processing steel slag, and using one (1) pulse jet baghouse for particulate control, exhausting at one (1) stack, identified as #1. This source does not process blast furnace slag;
- (b) four (4) compartment cold feed bins with feeders and collection conveyors;
- (c) one (1) 30" incline conveyor with 4' X 10' scalping screen;
- (d) two (2) conveyors and one (1) screen to transfer aggregate from recycle bin to asphalt dryer;
- (e) one (1) conveyor to transfer product from asphalt dryer to storage silo;
- (f) two (2) 25,000 gallon asphalt storage tanks; and
- (g) one (1) 11,000 gallon #2 fuel oil storage tank.
- (h) cold-mix (stockpile mix) asphalt storage piles
- (i) one (1) 15,000 gallon No.4 fuel oil storage tank.

Under NSPS Subpart I, this is considered an affected hot mix asphalt facility.

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

This portable source also includes the following insignificant activities:

- (a) Paved and unpaved roads and parking lots with public access [326 IAC 6-4];
- (b) combustion source flame safety purging on startup;
- (c) 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;
- (d) Other categories with emissions below insignificant thresholds:
 - (1) one (1) #2 fuel fired hot oil heater, with a rated capacity of 0.828 MMBtu/hr;
 - (2) one (1) recycle bin with twenty-five (25) ton storage capacity;
 - (3) one (1) storage silo with seventy (70) ton storage capacity; and
 - (4) aggregate storage piles with a total storage capacity of 12,500 tons.

A.4 FESOP Applicability [326 IAC 2-8-2]

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

SECTION B GENERAL CONDITIONS

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

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

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

- (a) This permit, F031-25342-05047, is issued for a fixed term of ten (10) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.
- (b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, until the renewal permit has been issued or denied.

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

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

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

B.4 Enforceability [326 IAC 2-8-6] [IC 13-17-12]

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

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

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

B.6 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]

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

B.7 Duty to Provide Information [326 IAC 2-8-4(5)(E)]

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

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

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

- (i) it contains a certification by an "authorized individual", as defined by 326 IAC 2-1.1-1(1), and
 - (ii) the certification states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) The Permittee may use the attached Certification Form, or its equivalent with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.
- (c) An "authorized individual" is defined at 326 IAC 2-1.1-1(1).

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

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

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

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
- (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether compliance was continuous or intermittent;
 - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-8-4(3); and
 - (5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ may require to determine the compliance status of the source.

The submittal by the Permittee does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

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

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

- (a) A Preventive Maintenance Plan meets the requirements of 326 IAC 1-6-3 if it includes, at a minimum:
- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

The Permittee shall implement the PMPs.

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

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

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

The PMP extension notification does not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

The Permittee shall implement the PMPs.

- (c) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions. The PMPs and their submittal do not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

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

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation except as provided in 326 IAC 2-8-12.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

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

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance and Enforcement Branch), or
Telephone Number: 317-233-0178 (ask for Office of Air Quality, Compliance and Enforcement Branch)
Facsimile Number: 317-233-6865
Southeast Regional Office phone: (812) 358-2027; fax: (812) 358-2058.

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

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

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

The notice fulfills the requirement of 326 IAC 2-8-4(3)(C)(ii) and must contain the following:

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

The notification which shall be submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
 - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
 - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
 - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
 - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

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

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

- (a) All terms and conditions of permits established prior to F031-25342-05047 and issued pursuant to permitting programs approved into the state implementation plan have been either:
 - (1) incorporated as originally stated,
 - (2) revised, or
 - (3) deleted.
- (b) All previous registrations and permits are superseded by F031-25342-05047.

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

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-8-3(h) and 326 IAC 2-8-9.

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

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Federally Enforceable State Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)] The notification by the Permittee does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:
- (1) That this permit contains a material mistake.
 - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
 - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]
- (c) Proceedings by IDEM, OAQ to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-8-8(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

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

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

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

- (b) A timely renewal application is one that is:
 - (1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
 - (2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified, pursuant to 326 IAC 2-8-3(g), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

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

- (a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

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

Any such application does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

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

- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-8-15(b) through (d) without a prior permit revision, if each of the following conditions is met:
 - (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
 - (2) Any approval required by 326 IAC 2-8-11.1 has been obtained;
 - (3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
 - (4) The Permittee notifies the:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality

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

and

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

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

- (5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-8-15(b) through (d). The Permittee shall make such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ in the notices specified in 326 IAC 2-8-15(b)(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.19 Source Modification Requirement [326 IAC 2-8-11.1]

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

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

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

- (a) Enter upon the Permittee's premises where a FESOP source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

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

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

- (a) The Permittee must comply with the requirements of 326 IAC 2-8-10 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

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

Any such application does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

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

- (a) The Permittee shall pay annual fees to IDEM, OAQ no later than thirty (30) calendar days after receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.
- (b) Failure to pay may result in administrative enforcement action or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

B.23 Credible Evidence [326 IAC 2-8-4(3)][326 IAC 2-8-5][62 FR 8314] [326 IAC 1-1-6]

For the purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of any condition of this permit, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether the Permittee would have been in compliance with the condition of this permit if the appropriate performance or compliance test or procedure had been performed.

SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

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

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

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

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

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

(a) Pursuant to 326 IAC 2-8:

- (1) The potential to emit any regulated pollutant, except particulate matter (PM), from the entire source shall be limited to less than one hundred (100) tons per twelve (12) consecutive month period.
- (2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and
- (3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.

(b) Pursuant to 326 IAC 2-2 (PSD), potential to emit particulate matter (PM) from the entire source shall be limited to less than two hundred fifty (250) tons per twelve (12) consecutive month period.

(c) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided that the source's potential to emit does not exceed the above specified limits.

(d) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

C.3 Opacity [326 IAC 5-1]

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

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

C.4 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.5 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

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

C.6 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.7 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]

Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions shall be controlled according to the attached plan as in Attachment A.

C.8 Stack Height [326 IAC 1-7]

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

C.9 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.10 Performance Testing [326 IAC 3-6]

(a) For performance testing required by this permit, a test protocol, except as provided elsewhere in this permit, shall be submitted to:

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

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the Permittee submits to IDEM, OAQ a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.11 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.12 Compliance Monitoring [326 IAC 2-8-4(3)][326 IAC 2-8-5(a)(1)]

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

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

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

The notification which shall be submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

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

(a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale.

(b) The Permittee may request that the IDEM, OAQ approve the use of an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.

Corrective Actions and Response Steps [326 IAC 2-8-4][326 IAC 2-8-5(a)(1)]

C.14 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

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

(a) The Permittee shall maintain the most recently submitted written emergency reduction plans (ERPs) consistent with safe operating procedures.

- (b) Upon direct notification by IDEM, OAQ that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

C.15 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68]

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

C.16 Response to Excursions or Exceedances [326 IAC 2-8-4] [326 IAC 2-8-5]

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

- (a) The Permittee shall take reasonable response steps to restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing excess emissions.
- (b) The response shall include minimizing the period of any startup, shutdown or malfunction. The response may include, but is not limited to, the following:
 - (1) initial inspection and evaluation;
 - (2) recording that operations returned or are returning to normal without operator action (such as through response by a computerized distribution control system); or
 - (3) any necessary follow-up actions to return operation to normal or usual manner of operation.
- (c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:
 - (1) monitoring results;
 - (2) review of operation and maintenance procedures and records; and/or
 - (3) inspection of the control device, associated capture system, and the process.
- (d) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (e) The Permittee shall record the reasonable response steps taken.

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

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall submit a description of its response actions to IDEM, OAQ, no later than seventy-five (75) days after the date of the test.
- (b) A retest to demonstrate compliance shall be performed no later than one hundred eighty (180) days after the date of the test. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred eighty (180) days is not practicable, IDEM, OAQ may extend the retesting deadline.

- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

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

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, for all record keeping requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or the date of initial start-up, whichever is later, to begin such record keeping.

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

- (a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported except that a deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. This report shall be submitted not later than thirty (30) days after the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1). A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.
- (b) The address for report submittal is:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (d) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

Portable Source Requirement

C.20 Relocation of Portable Sources [326 IAC 2-14-4]

- (a) This permit is approved for operation in all areas of Indiana except in severe nonattainment areas for ozone and in Lake and Porter Counties. This determination is based on the requirements of Prevention of Significant Deterioration in 326 IAC 2-2, and Emission Offset requirements in 326 IAC 2-3. Prior to locating in any severe nonattainment area, the Permittee must submit a request and obtain a permit modification.
- (b) Pursuant to 326 IAC 2-14-4(a)(1), a request to relocate shall be submitted to IDEM, OAQ at least thirty (30) days prior to the intended date of relocation.
- (c) Pursuant to 326 IAC 2-14-4(a)(3), this submittal shall include the following:
 - (1) A list of governmental officials entitled to receive notice of application to relocate. IC 13-15-3-1
 - (2) If required by IC 13-15-8 a list of adjacent landowners that the Permittee will send written notice to not more than ten (10) days after submission of the request to relocate.
 - (3) The new location address of the portable source.
 - (4) Whether or not this portable source will be relocated to another source.
 - (5) If relocating to another source:
 - (A) Name, location address, and permit number of the source this portable source is relocating to.
 - (B) Whether or not the sources will be considered as one source. See Non Rule Policy (NRP) Air-005 and Air-006.
 - (6) If the sources will be considered as one source, whether or not the source to be relocated to has received the necessary approvals from IDEM to allow the relocation.

The notification by the Permittee does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (d) A "Relocation Site Approval" letter shall be obtained prior to relocating.
- (e) A valid operation permit consists of this document and any subsequent "Relocation Site Approval" letter specifying the current location of the portable plant.

Stratospheric Ozone Protection

C.21 Compliance with 40 CFR 82 and 326 IAC 22-1

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

SECTION D.1 FACILITY OPERATION CONDITIONS

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

- (a) One (1) portable asphalt drum-mix plant, constructed in 1998, with a nominal capacity of 300 tons per hour, equipped with one (1) aggregate dryer burner with a maximum rated capacity of 72 million British thermal units (MMBtu) per hour, using natural gas, No. 2 fuel oil, or residual No. 4 fuel oil, processing steel slag, and using one (1) pulse jet baghouse for particulate control, exhausting at one (1) stack, identified as #1. This source does not process blast furnace slag;
- (b) four (4) compartment cold feed bins with feeders and collection conveyors;
- (c) one (1) 30" incline conveyor with 4' X 10' scalping screen;
- (d) two (2) conveyors and one (1) screen to transfer aggregate from recycle bin to asphalt dryer;
- (e) one (1) conveyor to transfer product from asphalt dryer to storage silo;
- (f) two (2) 25,000 gallon asphalt storage tanks; and
- (g) one (1) 11,000 gallon #2 fuel oil storage tank.
- (h) cold-mix (stockpile mix) asphalt storage piles
- (i) one (1) 15,000 gallon No.4 fuel oil storage tank.

Under NSPS Subpart I, this is considered an affected hot mix asphalt facility.

(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 Matter (PM) [326 IAC 2-2]

- (a) The asphalt production rate shall not exceed 750,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (b) PM emissions from the dryer/mixer shall not exceed 0.538 pounds per ton of asphalt produced.

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

D.1.2 FESOP Limits [326 IAC 2-8-4] [326 IAC 2-2] [326 IAC 8-1-6]

Pursuant to 326 IAC 2-8-4, the Permittee shall comply with the following:

- (a) The asphalt production rate shall not exceed 750,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (b) PM10 emissions from the dryer/mixer shall not exceed 0.218 pounds per ton of asphalt produced.

- (c) PM2.5 emissions from the dryer/mixer shall not exceed 0.237 pounds per ton of asphalt produced.
- (d) CO emissions from the dryer/mixer shall not exceed 0.19 pounds per ton of asphalt produced.
- (e) VOC emissions from the dryer/mixer shall not exceed 0.049 pounds per ton of asphalt produced.

When combined with the limited potential to emit PM10, PM2.5, CO, and VOC from all other emission units at this source, compliance with these limits shall limit the source-wide total potential to emit of PM10, PM2.5, CO, and VOC to less than 100 tons per 12 consecutive month period, each, and shall render 326 IAC 2-7 (Part 70 Permit Program) and 326 IAC 2-2 (PSD) not applicable.

In addition, compliance with these limits shall limit the VOC emissions from the dryer/mixer to less than twenty-five (25) tons per twelve (12) consecutive month period and shall render 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities) not applicable.

D.1.3 Sulfur Dioxide (SO₂) Limits [326 IAC 2-8-4][326 IAC 2-2]

Pursuant to 326 IAC 2-8-4, the Permittee shall comply with the following:

- (a) Steel slag usage shall not exceed 75,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (b) Slag and Fuel Specifications
 - (1) SO₂ emissions from the usage of steel slag in the dryer/mixer shall not exceed 0.0014 pounds of SO₂ per ton of steel slag processed.
 - (2) The sulfur content of the steel slag shall not exceed 0.66 percent by weight.
 - (3) When combusting No. 2 fuel oil in the dryer/mixer burner the calendar month average sulfur content of the No. 2 fuel oil shall not exceed 0.5 percent by weight, with compliance determined at the end of each month.
 - (4) When combusting No. 4 fuel oil in the dryer/mixer burner the calendar month average sulfur content of the No. 4 fuel oil shall not exceed 1.60 percent by weight, with compliance determined at the end of each month.
- (c) Single Fuel Usage Limitations

When combusting only one type of fuel per twelve (12) consecutive month period in the dryer/mixer burner the usage of fuel shall be limited as follows:

- (1) Natural gas usage shall not exceed 631 million cubic feet per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (2) No. 2 fuel oil usage shall not exceed 2,626,479 gallons per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (3) No. 4 fuel oil usage shall not exceed 777,000 gallons per twelve (12) consecutive month period, with compliance determined at the end of each month.

(d) Multiple Fuel Usage Limitations

When combusting more than one fuel per twelve (12) consecutive month period in the dryer/mixer burner and in conjunction with the use of steel slag in the aggregate mix, emissions from the dryer/mixer shall be limited as follows:

- (1) SO₂ emissions from the dryer/mixer shall not exceed 93.29 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

When combined with the limited potential to emit SO₂ from all other emission units at this source, compliance with these limits shall limit the source-wide total potential to emit of SO₂ to less than 100 tons per 12 consecutive month period, each, and shall render 326 IAC 2-7 (Part 70 Permit Program) and 326 IAC 2-2 (PSD) not applicable.

D.1.4 Sulfur Dioxide (SO₂) [326 IAC 7-1.1-1][326 IAC 7-2-1]

Pursuant to 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations), the Permittee shall comply with the following:

- (a) The sulfur dioxide (SO₂) emissions from the dryer/mixer burner shall not exceed 0.5 pounds per MMBtu when using distillate oil.
- (b) The sulfur dioxide (SO₂) emissions from the dryer/mixer burner shall not exceed 1.60 pounds per MMBtu heat input when using residual oil.
- (c) Pursuant to 326 IAC 7-2-1, compliance shall be determined on a calendar month average.

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

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

Compliance Determination Requirements

D.1.6 Particulate Matter (PM, PM₁₀, and PM_{2.5}) Control

In order to comply with Conditions D.1.1(b) - Particulate Matter (PM), D.1.2(b) - FESOP Limits, and D.1.2(c) - FESOP Limits, the baghouse for particulate control shall be in operation and control emissions from the drum mix dryer/burner at all times that the drum mix dryer/burner is in operation.

D.1.7 Testing Requirements [326 IAC 2-8-5(a)(1), (4)] [326 IAC 2-1.1-11]

- (a) In order to demonstrate compliance with Condition D.1.1(b) - Particulate Matter (PM), the Permittee shall perform PM testing of the dryer/mixer at least once every five (5) years from the date of the most recent valid compliance demonstration, utilizing methods approved by the Commissioner. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.
- (b) In order to demonstrate compliance with Conditions D.1.2(b) and D.1.2(c) - FESOP Limits, the Permittee shall perform PM₁₀ and PM_{2.5} testing on the dryer/mixer not later than 180 days after final promulgation of the new or revised condensable PM test method(s) referenced in the U.S. EPA's Final Rule for Implementation of the New Source Review (NSR) Program for Particulate Matter Less Than 2.5 Micrometers (PM_{2.5}), signed on May 8th, 2008 or no later than five (5) years after the date of the most recent

valid compliance demonstration, whichever is later. These tests shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration. This testing shall be conducted utilizing methods as approved by the Commissioner. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition. PM10 and PM2.5 includes filterable and condensable PM.

D.1.8 Sulfur Dioxide Emissions and Sulfur Content

- (a) Compliance with the steel slag limitation established in Conditions D.1.3(b)(1) and D.1.3(b)(2) - Sulfur Dioxide (SO₂) Limits shall be determined utilizing one of the following options.
- (1) Providing vendor analysis of the steel slag delivered, if accompanied by a vendor certification; or
 - (2) Analyzing a sample of the slag delivery to determine the sulfur content of the steel slag, 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.
 - (3) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from the 72 MMBtu per hour burner, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6, or other procedures approved by IDEM, OAQ.

A determination of noncompliance pursuant to any of the methods specified above shall not be refuted by evidence of compliance pursuant to the other method.

- (b) Compliance with the fuel limitations established in Conditions D.1.3(b)(3) and D.1.3(b)(4) - Sulfur Dioxide (SO₂) Limits and D.1.4(a) and D.1.4(b) Sulfur Dioxide (SO₂) shall be determined utilizing one of the following options.
- (1) Pursuant to 326 IAC 3-7-4, the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed 0.5 pounds per million British thermal units heat input when combusting No. 2 distillate fuel oil, or 1.6 pounds per million British thermal units heat input when combusting No. 4 residual fuel oil, by:
 - (A) Providing vendor analysis of heat content and sulfur content of the fuel delivered, if accompanied by a vendor certification; or
 - (B) Analyzing the fuel sample to determine the sulfur content of the fuel via the procedures in 40 CFR 60, Appendix A, Method 19.
 - (i) Fuel samples may be collected from the fuel tank immediately after the fuel tank is filled and before any fuel is combusted; and
 - (ii) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling.
 - (2) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from the 72 MMBtu per hour burner, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6.

A determination of noncompliance pursuant to any of the methods specified above shall not be refuted by evidence of compliance pursuant to the other method.

D.1.9 Multiple Fuel Usage / Sulfur Dioxide (SO₂) Emissions

- (a) In order to determine compliance with Condition D.1.3(d) - Sulfur Dioxide (SO₂) Limits, when combusting more than one fuel per twelve (12) consecutive month period in the dryer/mixer burner and in conjunction with the use of steel slag in the aggregate mix, the Permittee shall use the following equation to determine the tons of SO₂ emitted per twelve (12) consecutive month period:

- (1) Sulfur Dioxide emission calculation

$$S = \frac{F(E_F) + R(E_R) + N(E_N) + L(E_L)}{2,000 \text{ lbs / ton}}$$

Where:

S = tons of sulfur dioxide emissions for twelve (12) month consecutive period

F = gallons of No. 2 fuel oil used in last twelve (12) months

R = gallons of No. 4 fuel oil used in last twelve (12) months

N = million cubic feet of natural gas used in last twelve (12) months

L = tons of steel slag used in last twelve (12) months with less than or equal to sixty-six hundredths percent (0.66%) sulfur content

Emission Factors:

E_F = 0.071 pounds per gallon of No. 2 fuel oil

E_R = 0.24 pounds per gallon of No. 4 fuel oil

E_N = 0.6 pounds per million cubic feet of natural gas

E_L = 0.0014 pounds per ton of slag

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

D.1.10 Visible Emissions Notations

- (a) Visible emission notations of the aggregate dryer/burner stack exhaust shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. An abnormal visible emission notation is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

D.1.11 Parametric Monitoring

- (a) The Permittee shall record the pressure drop across the baghouse used in conjunction with the aggregate dryer/mixer at least once per day when the drying/mixing process is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 3.0 and 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above-mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.
- (b) The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months or other time period specified by the manufacturer. The Permittee shall maintain records of the manufacturer specifications, if used.

D.1.12 Broken or Failed Bag Detection

In the event that bag failure has been observed:

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

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

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

D.1.13 Record Keeping Requirements

- (a) To document the compliance status with Conditions D.1.1(a) - Particulate Matter (PM) and D.1.2(a) - FESOP Limits, the Permittee shall maintain records of the amount of asphalt produced per month. Records necessary to demonstrate compliance shall be available no later than thirty (30) days after the end of each compliance period.
- (b) To document the compliance status with Conditions D.1.3(a), D.1.3(b), and D.1.3(d) - Sulfur Dioxide (SO₂) Limits, the Permittee shall maintain records in accordance with (1) through (4) below. Records necessary to demonstrate compliance shall be available no later than 30 days after the end of each compliance period.
 - (1) Calendar dates covered in the compliance determination period;
 - (2) Actual steel slag usage and sulfur content for all steel slag used at the source since the last compliance determination period;

- (3) A certification, signed by the owner or operator, that the records of the steel slag supplier certifications represent all of the steel slag used during the period; and
- (4) If the steel slag supplier certification is used to demonstrate compliance the following, as a minimum, shall be maintained:
 - (i) Steel slag supplier certifications;
 - (ii) The name of the steel slag supplier; and
 - (iii) A statement from the steel slag supplier that certifies the sulfur content of the steel slag.
- (c) To document the compliance status with Conditions D.1.3 - Sulfur Dioxide (SO₂) Limits and D.1.4 - Sulfur Dioxide (SO₂), the Permittee shall maintain records in accordance with (1) through (4) below. Records necessary to determine compliance shall be available no later than 30 days after the end of each compliance period.
 - (1) Calendar dates covered in the compliance determination period;
 - (2) Calendar month average sulfur content, heat content, fuel usage, and equivalent sulfur dioxide emission rates for each fuel used at the source since the last compliance determination period;
 - (3) A certification, signed by the owner or operator, that the records of the fuel oil supplier certifications represent all of the fuel combusted during the period; andIf the fuel supplier certification is used to demonstrate compliance the following, as a minimum, shall be maintained:
 - (4) The name of the fuel supplier; and
 - (5) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.The Permittee shall retain records of all recording/monitoring data and support information for a period of five (5) years, or longer if specified elsewhere in this permit, from the date of the monitoring sample, measurement, or report. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit.
- (d) To document the compliance status with Condition D.1.10 - Visible Emission Notations, the Permittee shall maintain records of the daily visible emission notations of the aggregate dryer/burner stack exhaust. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (i.e., the process did not operate that day).
- (e) To document the compliance status with Condition D.1.11 - Parametric Monitoring, the Permittee shall maintain records of the once per day pressure drop during reading. The Permittee shall include in its daily record when the pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that day).
- (f) Section C - General Record Keeping Requirements, of this permit contains the Permittee's obligations with regard to the records required by this condition.

D.1.14 Reporting Requirements

A quarterly summary of the information to document compliance status with Conditions D.1.1(a) - Particulate Matter (PM), D.1.2(a) - FESOP Limits, and D.1.3 - Sulfur Dioxide (SO₂) Limits shall be submitted no later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

SECTION D.2

FACILITY OPERATION CONDITIONS

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

(h) cold-mix (stockpile mix) asphalt storage piles.

(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 Volatile Organic Compounds (VOC) [326 IAC 2-2] [326 IAC 2-8-4]

Pursuant to 326 IAC 2-8-4, the Permittee shall comply with the following:

VOC emissions from the sum of the binders shall not exceed 66.82 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

When combined with the potential emissions from all other emission units at this source, compliance with this limit will limit source-wide emissions of VOC to less than 100 tons per year and shall render 326 IAC 2-7 (Part 70 Permits) and 326 IAC 2-2 (PSD) not applicable.

D.2.2 Volatile Organic Compounds (VOC) [326 IAC 2-2] [326 IAC 2-8-4]

(a) Liquid binders used in the production of cold mix asphalt shall be defined as follows:

- (1) Cut back asphalt rapid cure, containing a maximum of 25.3% of the liquid binder by weight of VOC solvent and 95% by weight of VOC solvent evaporating.
- (2) Cut back asphalt medium cure, containing a maximum of 28.6% of the liquid binder by weight of VOC solvent and 70% by weight of VOC solvent evaporating.
- (3) Cut back asphalt slow cure, containing a maximum of 20% of the liquid binder by weight of VOC solvent and 25% by weight of VOC solvent evaporating.
- (4) Emulsified asphalt with solvent, containing a maximum of 15% of liquid binder by weight of VOC solvent and 46.4% by weight of the VOC solvent in the liquid blend evaporating. The percent oil distillate in emulsified asphalt with solvent liquid, as determined by ASTM, must be 7% or less of the total emulsion by volume
- (5) Other asphalt with solvent binder, containing a maximum 25.9% of the liquid binder of VOC solvent and 2.5% by weight of the VOC solvent evaporating

(b) The liquid binder used in cold mix asphalt production shall be limited as follows:

- (1) The amount of VOC solvent used in rapid cure cutback asphalt shall not exceed 70.3 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (2) The amount of VOC solvent used in medium cure cutback asphalt shall not exceed 95.5 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (3) The amount of VOC solvent used in slow cure cutback asphalt shall not exceed 267.3 tons per twelve (12) consecutive month period, with compliance

determined at the end of each month.

- (4) The amount of VOC solvent used in emulsified asphalt shall not exceed 144.0 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (5) The amount of VOC solvent used in all other asphalt shall not exceed 2672.8 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (6) The VOC solvent allotments in (1) through (5) above shall be adjusted when more than one type of binder is used per twelve (12) consecutive month period with compliance determined at the end of each month. In order to determine the tons of VOC emitted per each type of binder, use the following formula and divide the tons of VOC solvent used for each type of binder by the corresponding adjustment factor listed in the table that follows.

$$\text{VOC emitted (tons/yr)} = \frac{\text{VOC solvent used for each binder (tons/yr)}}{\text{Adjustment factor}}$$

Type of binder	adjustment factor
cutback asphalt rapid cure	1.053
cutback asphalt medium cure	1.429
cutback asphalt slow cure	4.0
emulsified asphalt	2.155
other asphalt	40

When combined with the limited potential to emit VOC from all other emission units at this source, compliance with these limits shall limit the source-wide total potential to emit of VOC to less than 100 tons per 12 consecutive month period, and shall render 326 IAC 2-7 (Part 70 Permits) and 326 IAC 2-2 (PSD) not applicable.

D.2.3 Volatile Organic Compound Rules for Asphalt Pavers [326 IAC 8-5-2]

Pursuant to 326 IAC 8-5-2, Volatile Organic Compound Rules for Asphalt Pavers, the cutback asphalt or asphalt emulsions produced by the source shall not contain more than seven percent (7%) oil distillate by volume of emulsion as determined by ASTM D244-80a "Emulsific Asphalts" ASTM part 15, 1981 ASTM 1916 Race St., Philadelphia, PA 19103, Library of Congress Card Catalog #40-10712, for any paving application except as used for the following purposes:

- (a) penetrating prime coating;
- (b) stockpile storage;
- (c) application during the months of November, December, January, February, and March.

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

D.2.4 Record Keeping Requirements

(a) To document the compliance status with Conditions D.2.1 - Volatile Organic Compounds (VOC) and D.2.2 - Volatile Organic Compounds (VOC) the Permittee shall record and maintain complete monthly records of the information listed in items (1) through (4) below:

- (1) Calendar dates covered in the compliance determination period;
- (2) Liquid asphalt binder usage in the production of cold mix asphalt since the last compliance determination period.
- (3) VOC solvent content by weight of the liquid binder used in the production of cold mix asphalt since the last compliance determination period.
- (4) Amount of VOC solvent used in the production of cold mix asphalt and the amount of VOC emitted since the last compliance determination period.

Records that may be used to document the information included in (1) through (4) may include: delivery tickets, manufacturer's data, material safety data sheets (MSDS), and other documents necessary to verify the type and amount used. Test results of ASTM tests for asphalt cutback and asphalt emulsion may be used to document volatilization.

(b) Section C - General Record Keeping Requirements, of this permit contains the Permittee's obligations with regard to the records required by this condition.

D.2.5 Reporting Requirements

A quarterly summary of the information to document compliance status with Conditions D.2.1 - Volatile Organic Compounds (VOC) and D.2.2 - Volatile Organic Compounds (VOC) shall be submitted no later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

SECTION E.1

FACILITY OPERATION CONDITIONS

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

- (a) One (1) portable asphalt drum-mix plant, constructed in 1998, with a nominal capacity of 300 tons per hour, equipped with one (1) aggregate dryer burner with a maximum rated capacity of 72 million British thermal units (MMBtu) per hour, using natural gas, No. 2 fuel oil, or residual No. 4 fuel oil, processing steel slag, and using one (1) pulse jet baghouse for particulate control, exhausting at one (1) stack, identified as #1. This source does not process blast furnace slag;
- (b) four (4) compartment cold feed bins with feeders and collection conveyors;
- (c) one (1) 30" incline conveyor with 4' X 10' scalping screen;
- (d) two (2) conveyors and one (1) screen to transfer aggregate from recycle bin to asphalt dryer;
- (e) one (1) conveyor to transfer product from asphalt dryer to storage silo;

Insignificant Activities:

- (d) Other categories with emissions below insignificant thresholds:
 - (2) one (1) recycle bin with twenty-five (25) ton storage capacity;
 - (3) one (1) storage silo with seventy (70) ton storage capacity; and
 - (4) aggregate storage piles with a total storage capacity of 12,500 tons.

Under NSPS subpart I, this is considered an affected hot-mix asphalt facility.

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

New Source Performance Standards (NSPS) Requirements [326 IAC 2-8-4(1)]

E.1.1 General Provisions Relating to NSPS [326 IAC 12-1] [40 CFR 60, Subpart A]

- (a) Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference as 326 IAC 12-1, except as otherwise specified in 40 CFR 60, Subpart I.
- (b) Pursuant to 40 CFR 60.10, the Permittee shall submit all required notifications and reports to:

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

E.1.2 New Source Performance Standards (NSPS) for Hot Mix Asphalt Facilities [40 CFR Part 60, Subpart I] [326 IAC 12]

The Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart I (included as Attachment B of this permit), which are incorporated by reference as 326 IAC 12, except as otherwise specified in 40 CFR Part 60, Subpart I:

- (a) 40 CFR 60.90
- (b) 40 CFR 60.91
- (c) 40 CFR 60.92
- (d) 40 CFR 60.93

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

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

Source Name: Dave O'Mara Contractor, Inc.
Initial Source Address: New Point Stone at 992 South County Road 800 East, Greensburg, IN 47240
FESOP Permit No.: F031-25342-05047

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:

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

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

Source Name: Dave O'Mara Contractor, Inc.
Initial Source Address: New Point Stone at 992 South County Road 800 East, Greensburg, IN 47240
FESOP Permit No.: F031-25342-05047

This form consists of 2 pages

Page 1 of 2

- | |
|--|
| <p><input type="checkbox"/> This is an emergency as defined in 326 IAC 2-7-1(12)</p> <ul style="list-style-type: none">• The Permittee must notify the Office of Air Quality (OAQ), within four (4) daytime business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and• The Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16 |
|--|

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

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

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

Page 2 of 2

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

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

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

FESOP Quarterly Report - Hot Mix Asphalt Production

Source Name: Dave O'Mara Contractor, Inc.
Current Source Address: New Point Stone at 992 South County Road 800 East, Greensburg, IN 47240
FESOP Permit No.: F031-25342-05047
Facility: One (1) portable asphalt drum-mix plant with one (1) baghouse exhausting at one (1) stack, identified as #1;
Parameter: Hot Mix Asphalt Production
Limit: 750,000 tons per twelve (12) consecutive months

QUARTER: _____ YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

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

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

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

FESOP Quarterly Report

Source Name: Dave O'Mara Contractor, Inc.
Current Source Address: New Point Stone at 992 South County Road 800 East, Greensburg, IN 47240
FESOP Permit No.: F031-25342-05047
Facility: One (1) portable asphalt drum-mix plant with one (1) baghouse exhausting at one (1) stack, identified as #1;
Parameter: Steel Slag Usage
Limit: Steel slag usage shall not exceed 75,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

QUARTER: _____ YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

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

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

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

FESOP Quarterly Report

Source Name: Dave O'Mara Contractor, Inc.
 Current Source Address: New Point Stone at 992 South County Road 800 East, Greensburg, IN 47240
 FESOP Permit No.: F031-25342-05047
 Facility: One (1) portable asphalt drum-mix plant with one (1) baghouse exhausting at one (1) stack, identified as #1;
 Parameter: Single fuel usage
 Limit: When combusting only one type of fuel per twelve (12) consecutive month period in the dry/mixer burner the usage of fuel shall be limited as follows:

Fuel Type (units)	Fuel Usage Limit (per 12 consecutive month period)
Natural Gas (million cubic feet)	631
No. 2 fuel oil (gallons)	2,626,479
No. 4 fuel oil (gallons)	777,000

QUARTER: _____ YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

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

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

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

FESOP Quarterly Report
Page 1 of 2

Source Name: Dave O'Mara Contractor, Inc.
Current Source Address: New Point Stone at 992 South County Road 800 East, Greensburg, IN 47240
FESOP Permit No.: F031-25356-03326
Facility: One (1) portable asphalt drum-mix plant with one (1) baghouse exhausting at one (1) stack, identified as #1;
Parameter: Multiple fuel usage / Sulfur dioxide (SO₂) emissions
Limit: SO₂ emissions from the dryer/mixer shall not exceed 93.24 tons per twelve (12) consecutive month period, with compliance determined at the end of each month. When combusting more than one fuel per twelve (12) consecutive month period in the dryer/mixer burner and in conjunction with the use of steel slag in the aggregate mix, emissions from the dryer/mixer shall be limited as follows:

$$S = \frac{F(E_F) + R(E_R) + N(E_N) + L(E_L)}{2,000 \text{ lbs / ton}}$$

<p><u>Where:</u> S = tons of sulfur dioxide emissions for twelve (12) month consecutive period F = gallons of No. 2 fuel oil used in last twelve (12) months R = gallons of No. 4 fuel oil used in last twelve (12) months N = million cubic feet of natural gas used in last twelve (12) months L = tons of steel slag used in last twelve (12) months with less than or equal to sixty-six hundredths percent (0.66%) sulfur content</p>	<p><u>Emission Factors:</u> E_F = 0.071 pounds per gallon of No. 2 fuel oil E_R = 0.24 pounds per gallon of No. 4 fuel oil E_N = 0.6 pounds per million cubic feet of natural gas E_L = 0.0014 pounds per ton of slag</p>
--	---

FESOP Fuel Usage and SO2 Emissions Quarterly Reporting Form

QUARTER: _____ YEAR: _____

Month	Fuel Types/Slag (units)	Column 1	Column 2	Column 1 + Column 2	Total SO2 Emissions From All Fuels Used and Slag (tons per 12 month consecutive period)
		Usage This Month	Usage Previous 11 Months	Usage 12 Month Total	
Month 1	Natural gas (mmcf)				
	No. 2 fuel oil (gallons)				
	No. 4 fuel oil (gallons)				
	Steel Slag (tons)				
Month 2	Natural gas (mmcf)				
	No. 2 fuel oil (gallons)				
	No. 4 fuel oil (gallons)				
	Steel Slag (tons)				
Month 3	Natural gas (mmcf)				
	No. 2 fuel oil (gallons)				
	No. 4 fuel oil (gallons)				
	Steel Slag (tons)				

No deviation occurred in this quarter.

Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

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

FESOP Quarterly Report - Single Liquid Binder VOC Solvent

Source Name: Dave O'Mara Contractor, Inc.
Current Source Address: New Point Stone at 992 South County Road 800 East, Greensburg, IN 47240
FESOP Permit No.: F031-25342-05047
Facility: Cold-mix (stockpile mix) asphalt manufacturing operations and storage piles
Parameter: Cutback or emulsified asphalt VOC solvent usage
Limit: Cutback asphalt rapid cure liquid binder usage shall not exceed 70.3 tons of VOC solvent per twelve (12) consecutive month period. Cutback asphalt medium cure liquid binder usage shall not exceed 95.5 tons of VOC solvent per twelve (12) consecutive month period. Cutback asphalt slow cure liquid binder usage shall not exceed 267.3 tons of VOC solvent per twelve (12) consecutive month period. Emulsified asphalt with solvent liquid binder usage shall not exceed 144.0 tons of VOC solvent per twelve (12) consecutive month period. Other asphalt with solvent liquid binder shall not exceed 2672.8 tons of VOC solvent per twelve (12) consecutive month period.

QUARTER: _____ YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

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

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

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

Multiple Liquid Binder Solvent Quarterly Report

Source Name: Dave O'Mara Contractor, Inc.
 Current Source Address: New Point Stone at 992 South County Road 800 East, Greensburg, IN 47240
 FESOP Permit No.: F031-25342-05047
 Facility: Cold-mix (stockpile mix) asphalt manufacturing operations and storage piles
 Parameter: VOC emissions
 Limit: VOC emissions from the sum of the binders shall not exceed 66.82 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

Quarter _____ Year: _____

Month	Type of Liquid binder	Solvent Usage This Month (tons)	Divisor	VOC emissions This Month (tons) for each solvent	VOC emissions This Month (tons)	VOC emissions Previous 11 Months (tons)	This month + Previous 11 months =VOC emissions 12 Month Total (tons)
Month 1	Cutback asphalt rapid cure		1.053				
	Cutback asphalt medium cure		1.429				
	Cutback asphalt slow cure		4.0				
	Emulsified asphalt		2.155				
	other asphalt		40				
Month 2	Cutback asphalt rapid cure		1.053				
	Cutback asphalt medium cure		1.429				
	Cutback asphalt slow cure		4.0				
	Emulsified asphalt		2.155				
	other asphalt		40				
Month 3	Cutback asphalt rapid cure		1.053				
	Cutback asphalt medium cure		1.429				
	Cutback asphalt slow cure		4.0				
	Emulsified asphalt		2.155				
	other asphalt		40				

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

Submitted by: _____ Date: _____

Title / Position: _____ Phone: _____

Signature: _____

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

Source Name: Dave O'Mara Contractor, Inc.
Initial Source Address: New Point Stone at 992 South County Road 800 East, Greensburg, IN 47240
FESOP Permit No.: F031-25342-05047

Months: _____ to _____ Year: _____

Page 1 of 2

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

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

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

**FEDERALLY ENFORCEABLE
STATE OPERATING PERMIT RENEWAL
OFFICE OF AIR QUALITY**

**Dave O'Mara Contractor, Inc.
Portable Source**

Attachment A

**HOT-MIX ASPHALT PLANT
FUGITIVE DUST CONTROL PLAN**

F031-25342-05047

HOT-MIX ASPHALT PLANT SITE FUGITIVE DUST CONTROL PLAN

- (a) Fugitive particulate matter emissions from paved roads and parking lots shall be controlled by one or more of the following methods:
 - (1) cleaning by vacuum sweeping on an as needed basis (monthly at a minimum)
 - (2) power brooming while wet either from rain or application of water.

- (b) Fugitive particulate matter emissions from unpaved roads and parking lots shall be controlled by one or more of the following methods:
 - (1) paving with asphalt;
 - (2) treating with emulsified asphalt;
 - (3) watering;
 - (4) double chip and seal the road surface.

- (c) Fugitive particulate matter emissions from aggregate stockpiles shall be controlled by one or more of the following methods on an as needed basis:
 - (1) maintaining minimum size and number of stock piles of aggregate;
 - (2) treating around the stockpile area with emulsified asphalt;
 - (3) treating around the stockpile area with water;
 - (4) treating the stockpiles with water.

- (d) Fugitive particulate matter emissions from outdoor conveying of aggregates shall be controlled by the following method on an as needed basis:
 - (1) applying water at the feed and the intermediate points.

- (e) Fugitive particulate matter emissions from the transfer of aggregates shall be controlled by one of the following methods:
 - (1) minimize the vehicular distance between transfer points;
 - (2) enclose the transfer points;
 - (3) apply water on transfer points on an as needed basis.

- (f) Fugitive particulate matter emissions from transportation of aggregate by truck, front end loader, etc. shall be controlled by one of the following methods:
 - (1) tarping the aggregate hauling vehicles;
 - (2) maintain vehicle bodies in a condition to prevent leakage;
 - (3) spray the aggregates with water;
 - (4) maintain a 10 MPH speed limit in the yard.

- (g) Fugitive particulate matter emissions from the loading and unloading of aggregate shall be controlled by one of the following methods:
 - (1) reduce free fall distance to a minimum;
 - (2) reduce the rate of discharge of the aggregate;
 - (3) spray the aggregate with water on an as needed basis.

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

Attachment B

Title 40: Protection of Environment

Subpart I—Standards of Performance for Hot Mix Asphalt Facilities

§ 60.90 Applicability and designation of affected facility.

- (a) The affected facility to which the provisions of this subpart apply is each hot mix asphalt facility. For the purpose of this subpart, a hot mix asphalt facility is comprised only of any combination of the following: dryers; systems for screening, handling, storing, and weighing hot aggregate; systems for loading, transferring, and storing mineral filler, systems for mixing hot mix asphalt; and the loading, transfer, and storage systems associated with emission control systems.
- (b) Any facility under paragraph (a) of this section that commences construction or modification after June 11, 1973, is subject to the requirements of this subpart.

[42 FR 37936, July 25, 1977, as amended at 51 FR 12325, Apr. 10, 1986]

§ 60.91 Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given them in the Act and in subpart A of this part.

- (a) *Hot mix asphalt facility* means any facility, as described in §60.90, used to manufacture hot mix asphalt by heating and drying aggregate and mixing with asphalt cements.

[51 FR 12325, Apr. 10, 1986]

§ 60.92 Standard for particulate matter.

- (a) On and after the date on which the performance test required to be conducted by §60.8 is completed, no owner or operator subject to the provisions of this subpart shall discharge or cause the discharge into the atmosphere from any affected facility any gases which:
 - (1) Contain particulate matter in excess of 90 mg/dscm (0.04 gr/dscf).
 - (2) Exhibit 20 percent opacity, or greater.

[39 FR 9314, Mar. 8, 1974, as amended at 40 FR 46259, Oct. 6, 1975]

§ 60.93 Test methods and procedures.

- (a) In conducting the performance tests required in §60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in §60.8(b).
- (b) The owner or operator shall determine compliance with the particulate matter standards in §60.92 as follows:

- (1) Method 5 shall be used to determine the particulate matter concentration. The sampling time and sample volume for each run shall be at least 60 minutes and 0.90 dscm (31.8 dscf).
- (2) Method 9 and the procedures in §60.11 shall be used to determine opacity.

[54 FR 6667, Feb. 14, 1989]

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

Addendum to the Technical Support Document (ATSD) for a Significant
Permit Revision to a Federally Enforceable State Operating Permit
(FESOP)

Source Background and Description

Source Name:	Dave O'Mara Contractor, Inc.
Source Location:	Portable
Current Location:	New Point Stone at 992 South County Road 800 East, Greensburg, Indiana
County:	Decatur
SIC Code:	2951
Operation Permit No.:	F 031-25342-05047
Operation Permit Issuance Date:	February 20, 2009
Significant Permit Revision No.:	031-28784-05047
Permit Reviewer:	Brian Williams

On April 3, 2010, the Office of Air Quality (OAQ) had a notice published in the Greensburg Daily News, Greensburg, Indiana, stating that Dave O'Mara Contractor, Inc. had applied for a significant permit revision to revise existing emission and sulfur content limits. In addition, the source requested the ability to process steel slag in the dryer/mixer. The notice also stated that the OAQ proposed to issue a significant permit revision for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

Comments and Responses

On May 3, 2010, Astbury Environmental Engineering, Inc. and Hatchet and Hauck LLP submitted comments on behalf of Dave O'Mara Contractor, Inc. to IDEM, OAQ on the draft significant permit revision to a FESOP.

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

Comment 1:

Please remove the following language from Section A.3, "Under NSPS Subpart I, this is considered an affected hot mix asphalt facility." This language is repeated from Section A.2.

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

...

~~Under NSPS Subpart I, this is considered an affected hot mix asphalt facility.~~

Response to Comment 1:

IDEM agrees with the recommended changes, since the language is for descriptive purposes only. The permit has been revised as requested above.

Comment 2:

Please remove all instances of the following language from Condition B.11(a) and (b), "The Permittee shall implement the PMPs."

Response to Comment 2:

Pursuant to 326 IAC 2-8-4(9), a provision that requires the source to do all of the following shall be included in each FESOP issued under 326 IAC 2-8-4:

- (A) Maintain on-site the preventive maintenance plan required under section 3(c)(6) of this rule.
- (B) Implement the preventive maintenance plan.
- (C) Forward to the department upon request the preventive maintenance plan.

In order to be consistent with this rule, IDEM, OAQ revised Condition B.11 in this significant permit revision to directly state the FESOP requirement to implement the preventive maintenance plan. No changes were made as a result of this comment.

Comment 3:

Please revise Condition B.12 as follows:

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

...

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

...

- (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:

...

~~within~~ **not more than** two (2) working days **of** ~~of~~ **after** the time when emission limitations were exceeded due to the emergency.

...

Response to Comment 3:

Pursuant to 326 IAC 2-8-12(b)(5) - Emergency Provisions, "The permittee submitted notice either in writing or by facsimile of the emergency under subdivision (4) to the commissioner within two (2) working days of the time when emission limitations were exceeded due to the emergency." Therefore, since the rule explicitly uses this language, IDEM cannot revise Condition B.12 as requested. No changes were made as a result of this comment.

Comment 4:

The requirements of IC 13-15-8 only apply to an application for a permit issued under IC 13-15-1 upon property that is undeveloped or for which a valid existing permit has not been issued (IC 13-15-8-1). If this portable source is relocating to developed property or to another source for which a permit has been issued, this requirement does not apply. Provision (b)(2) of Condition C.20 should either be removed or revised to more fully state the requirements of IC 13-15-8, which has been cited as the basis of the requirement.

Response to Comment 4:

IDEM agrees with the recommended changes, since there are potential relocation scenarios where the requirements of IC 13-15-8 are not applicable to this portable source. It is the source's responsibility to evaluate if the requirements of IC 13-15-8 are applicable to the source. The permit has been revised as follows:

(c) Pursuant to 326 IAC 2-14-4(a)(3), this submittal shall include the following:

- (2) **If required by IC 13-15-8** Aa list of adjacent landowners that the Permittee will send written notice to not more than ten (10) days after submission of the request to relocate. ~~IC 13-15-8~~

Comment 5:

Please revise Condition C.20(c) to include the following requirement from 326 IAC 2-14-4(a)(2):

C.20 Relocation of Portable Sources [326 IAC 2-14-4]

- (c) A "Relocation Site Approval" letter shall be obtained prior to relocating. **The commissioner shall approve or deny the relocation within thirty (30) days or receipt of the notification of the proposed relocation.**

Response to Comment 5:

326 IAC 2-14-4(a)(2) is not appropriate to include in Condition C.20 because this is a requirement for IDEM, OAQ to perform. The permit contains the requirements of Title 326 of the Indiana Administrative Code that are applicable to the Permittee, not IDEM, OAQ. No changes were made as a result of this comment.

Comment 6:

Please revise the asphalt production limit from 1,000,000 tons per year to 750,000 tons per year and update the relevant FESOP Quarterly report. In addition, please revise the PM limit to 0.538 pounds per ton of asphalt produced, the PM10 limit to 0.218 pounds per ton of asphalt produced, and the PM2.5 limit to 0.237 pounds per ton of asphalt produced.

Response to Comment 6:

IDEM agrees with the recommended changes, since compliance with the revised limits will still render the requirements of 326 IAC 2-2 and 326 IAC 2-7 not applicable (see Appendix A to the ATSD for the updated limited potential to emit calculations). The permit has been revised as follows:

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

- (a) The asphalt production rate shall not exceed ~~1,000,000~~ **750,000** tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (b) PM emissions from the dryer/mixer shall not exceed ~~0.380~~ **0.538** pounds per ton of asphalt produced.

D.1.2 FESOP Limits [326 IAC 2-8-4] [326 IAC 2-2] [326 IAC 8-1-6]

Pursuant to 326 IAC 2-8-4, the Permittee shall comply with the following:

- (a) The asphalt production rate shall not exceed ~~1,000,000~~ **750,000** tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (b) PM10 emissions from the dryer/mixer shall not exceed ~~0.155~~ **0.218** pounds per ton of asphalt produced.
- (c) PM2.5 emissions from the dryer/mixer shall not exceed ~~0.173~~ **0.237** pounds per ton of asphalt produced.

...
 FESOP Quarterly Report - Hot Mix Asphalt Production

...
 Facility: One (1) portable asphalt drum-mix plant with one (1) baghouse exhausting at one (1) stack, identified as #1;
 Parameter: Hot Mix Asphalt Production
 Limit: ~~1,000,000~~ **750,000** tons per twelve (12) consecutive months

PTE of the Entire Source After Issuance of the FESOP Revision

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

Process/ Emission Unit	Potential To Emit of the Entire Source After Issuance of Revision (tons/year)								
	PM	PM10 ¹	PM2.5	SO ₂	NOx	VOC	CO	Total HAPs	Worst Single HAP
Ducted Emissions									
Fuel Combustion (worst case)	2.72	4.33	4.33	93.24	31.55	1.74	26.5	0.70	0.57 Hexane
Dryer/Mixer (Process)	190.0 201.75	77.5 81.75	86.5 88.88	29.0 21.75	27.5 20.63	24.5 18.38	95.0 71.25	5.33 4.00	1.55 1.16 Formaldehyde
Dryer/Mixer Slag Processing	0	0	0	0.05	0	0	0	0	0
Hot Oil Heaters Fuel Combustion	0.05	0.09	0.09	1.66	0.52	0.01	0.13	0.002	0.002 Hexane
Worst Case Emissions	190.05 201.80	77.59 81.84	86.59 88.96	95.13	32.07	24.51 18.38	95.13 71.38	5.33 4.00	1.55 1.16 Formaldehyde
Fugitive Emissions									
Asphalt Load-Out, Silo Filling, On-Site Yard	0.55 0.42	0.55 0.42	0.55 0.42	0	0	8.57 6.42	1.44 1.08	0.14 0.11	0.04 0.03 Formaldehyde
Material Storage Piles	1.60	0.56	0.56	0	0	0	0	0	0
Material Processing and Handling	3.23 2.42	1.53 1.15	0.23 0.17	0	0	0	0	0	0
Material Crushing, Screening, and Conveying	15.87 11.90	5.80 4.35	5.80 4.35	0	0	0	0	0	0
Paved and Unpaved Roads (worst case)	35.52 26.65	9.05 6.79	0.91 0.68	0	0	0	0	0	0

Process/ Emission Unit	Potential To Emit of the Entire Source After Issuance of Revision (tons/year)								
	PM	PM10 ¹	PM2.5	SO ₂	NOx	VOC	CO	Total HAPs	Worst Single HAP
Cold Mix Asphalt Production	0	0	0	0	0	66.82	0	17.43	6.01 Xylenes
Volatile Organic Liquid Storage Vessels	0	0	0	0	0	negl.	0	negl.	negl.
Total Fugitive Emissions	56.76 42.98	17.49 13.26	8.05 6.17	0	0	75.39 73.24	1.44 1.08	17.57 17.54	6.01 Xylenes
Total PTE of Entire Source	246.82 244.78	95.07 95.09	94.63 95.13	95.13	32.07	99.89 91.62	96.57 72.46	22.90 21.54	6.01 Xylenes
Title V Major Source Thresholds	NA	100	100	100	100	100	100	25	10
PSD Major Source Thresholds	250	250	250	250	250	250	250	NA	NA
Emission Offset/ Nonattainment NSR Major Source Thresholds	NA	NA	NA	NA	NA	NA	NA	NA	NA
negl. = negligible ¹ Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant".									

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

Process/ Emission Unit	Potential To Emit of the Entire Source After Issuance of Revision (tons/year)								
	PM	PM10 ¹	PM2.5	SO ₂	NOx	VOC	CO	Total HAPs	Worst Single HAP
Ducted Emissions									
Fuel Combustion (worst case)	2.72	4.33	4.33	93.24	31.55	1.74	26.5	0.70	0.57 Hexane
Dryer/Mixer (Process)	201.75	81.75	88.88	21.75	20.63	18.38	71.25	4.00	1.16 Formaldehyde
Dryer/Mixer Slag Processing	0	0	0	0.05	0	0	0	0	0
Hot Oil Heaters Fuel Combustion	0.05	0.09	0.09	1.66	0.52	0.01	0.13	0.002	0.002 Hexane
Worst Case Emissions	201.80	81.84	88.96	95.13	32.07	18.38	71.38	4.00	1.16 Formaldehyde
Fugitive Emissions									
Asphalt Load-Out, Silo Filling, On-Site Yard	0.42	0.42	0.42	0	0	6.42	1.08	0.11	0.03 Formaldehyde
Material Storage Piles	1.60	0.56	0.56	0	0	0	0	0	0

Process/ Emission Unit	Potential To Emit of the Entire Source After Issuance of Revision (tons/year)								
	PM	PM10 ¹	PM2.5	SO ₂	NOx	VOC	CO	Total HAPs	Worst Single HAP
Material Processing and Handling	2.42	1.15	0.17	0	0	0	0	0	0
Material Crushing, Screening, and Conveying	11.90	4.35	4.35	0	0	0	0	0	0
Paved and Unpaved Roads (worst case)	26.65	6.79	0.68	0	0	0	0	0	0
Cold Mix Asphalt Production	0	0	0	0	0	66.82	0	17.43	6.01 Xylenes
Volatile Organic Liquid Storage Vessels	0	0	0	0	0	negl.	0	negl.	negl.
Total Fugitive Emissions	42.98	13.26	6.17	0	0	73.24	1.08	17.54	6.01 Xylenes
Total PTE of Entire Source	244.78	95.09	95.13	95.13	32.07	91.62	72.46	21.54	6.01 Xylenes
Title V Major Source Thresholds	NA	100	100	100	100	100	100	25	10
PSD Major Source Thresholds	250	250	250	250	250	250	250	NA	NA
Emission Offset/ Nonattainment NSR Major Source Thresholds	NA	NA	NA	NA	NA	NA	NA	NA	NA
negl. = negligible ¹ Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant".									

Comment 7:

Please revise Condition D.1.9 to include the SO₂ emissions from slag in the equation. In addition, please update the FESOP Quarterly Report for multiple fuels to include slag.

Response to Comment 7:

IDEM agrees with the recommended changes, since the SO₂ emissions will remain limited to less than 100 tons per year when using multiple fuels and processing steel slag. The permit has been revised as follows:

...

D.1.3 Sulfur Dioxide (SO₂) Limits [326 IAC 2-8-4][326 IAC 2-2]

...

(d) Multiple Fuel Usage Limitations

When combusting more than one fuel per twelve (12) consecutive month period in the dryer/mixer burner **and in conjunction with the use of steel slag in the aggregate mix**, emissions from the dryer/mixer burner shall be limited as follows:

- (1) SO₂ emissions from the dryer/mixer shall not exceed 93.249 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

...

D.1.9 Multiple Fuel Usage / Sulfur Dioxide (SO₂) Emissions

(a) In order to determine compliance with Condition D.1.3(d) - Sulfur Dioxide (SO₂) Limits, when combusting more than one fuel per twelve (12) consecutive month period in the dryer/mixer burner **and in conjunction with the use of steel slag in the aggregate mix**, the Permittee shall use the following equation to determine the tons of SO₂ emitted per twelve (12) consecutive month period:

(1) Sulfur Dioxide emission calculation

$$S = \frac{F(E_F) + R(E_R) + N(E_N) + L(E_L)}{2,000 \text{ lbs / ton}}$$

Where:

L = tons of steel slag used in last twelve (12) months with less than or equal to sixty-six hundredths percent (0.66%) sulfur content

Emission Factors:

E_L = 0.0014 pounds per ton of slag

D.1.13 Record Keeping Requirements

(b) To document the compliance status with Conditions D.1.3(a), ~~and~~ D.1.3(b), **and D.1.3(d)** - Sulfur Dioxide (SO₂) Limits, the Permittee shall maintain records in accordance with (1) through (4) below. Records necessary to demonstrate compliance shall be available no later than 30 days after the end of each compliance period.

FESOP Quarterly Report

Facility: One (1) portable asphalt drum-mix plant with one (1) baghouse exhausting at one (1) stack, identified as #1;
 Parameter: Multiple fuel usage / Sulfur dioxide (SO₂) emissions
 Limit: SO₂ emissions from the dryer/mixer shall not exceed 93.249 tons per twelve (12) consecutive month period, with compliance determined at the end of each month. When combusting more than one fuel per twelve (12) consecutive month period in the dryer/mixer burner **and in conjunction with the use of steel slag in the aggregate mix**, emissions from the dryer/mixer burner shall be limited as follows:

$$S = \frac{F(E_F) + R(E_R) + N(E_N) + L(E_L)}{2,000 \text{ lbs / ton}}$$

<p><u>Where:</u></p> <p>...</p> <p>L = tons of steel slag used in last twelve (12) months with less than or equal to sixty-six hundredths percent (0.66%) sulfur content</p>	<p><u>Emission Factors:</u></p> <p>...</p> <p>E_L = 0.0014 pounds per ton of slag</p>
---	--

Month	Fuel Types/Slag (units)	Column 1	Column 2	Column 1 + Column 2	Total SO2 Emissions From All Fuels Used and Slag (tons per 12 month consecutive period)
		Usage This Month	Usage Previous 11 Months	Usage 12 Month Total	
Month 1	...				
	Steel Slag (tons)				
Month 2	...				
	Steel Slag (tons)				
Month 3	...				
	Steel Slag (tons)				

...
Comment 8:

Please revise Condition D.1.14 to correct a typographical error as follows:

D.1.14 Reporting Requirements

A quarterly summary of the information to document compliance status with Conditions D.1.1(a) - Particulate Matter (PM), D.1.2(a) - FESOP Limits, and D.1.3 - Sulfur Dioxide (SO₂) Limits shall be **submitted** no later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Response to Comment 8:

IDEM agrees with the recommended changes, since Condition D.1.14 contained a typographical error. The permit has been revised as requested above.

Comment 9:

Please revise Condition E.1.2 to include the following language:

E.1.2 New Source Performance Standards (NSPS) for Hot Mix Asphalt Facilities [40 CFR Part 60, Subpart I] [326 IAC 12]

The Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart I (included as Attachment B of this permit), which are incorporated by reference as 326 IAC 12, except as otherwise specified in 40 CFR Part 60, Subpart I: **Where the NSPS provides options for compliance, nothing in this condition precludes the Permittee from choosing among those options or requires the Permittee to use a particular option:**

...

Response to Comment 9:

NSPS Subpart I does not contain any alternative options for compliance. Therefore, this language is unnecessary. No changes were made as a result of this comment.

Comment 10:

In order to make the form language consistent with Condition B.12 - Emergency Provisions and to correct a grammatical inconsistency, please revise the emergency occurrence report as follows:

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

Response to Comment 10:

Based on comments submitted by the source during the applicant review period, IDEM revised the emergency occurrence report to include the word "daytime" (see page 25 of the TSD). However, IDEM does not agree with the additional requested changes since this form is not designed to reflect the condition word for word. If the Permittee needs more information regarding the timelines for notifying IDEM of an emergency, please refer to Condition B.12. No changes were made as a result of this comment.

Additional Changes

IDEM, OAQ has decided to make additional revisions to the permit as described below, with deleted language as ~~strikeouts~~ and new language **bolded**.

- (a) IDEM, OAQ has decided to remove all references to the source mailing address. IDEM, OAQ will continue to maintain records of the mailing address.
- (b) IDEM, OAQ has decided to clarify Section B - Certification to be consistent with the rule.
- (c) Condition C.20 has been revised to correct a typographical error.

Mailing Address: ~~1100 East O & M Avenue, North Vernon, IN 47265~~

...

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

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

...

(ii) the certification **is states that**, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

...

C.20 Relocation of Portable Sources [326 IAC 2-14-4]

...

(ed) A "Relocation Site Approval" letter shall be obtained prior to relocating.

- (de) A valid operation permit consists of this document and any subsequent "Relocation Site Approval" letter specifying the current location of the portable plant.

IDEM Contact

- (a) Questions regarding this proposed significant permit revision to a FESOP can be directed to Brian Williams at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 234-5375 or toll free at 1-800-451-6027 extension 4-5375.
- (b) A copy of the permit is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>
- (c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: www.idem.in.gov

**ATSD Appendix A: Limited Emissions Calculations
Entire Source**

Company Name: Dave O'Mara Contractor, Inc.
Source Address: New Point Stone at 992 South County Road 800 East, Greensburg, Indiana
Permit Number: 031-28784-05047
Reviewer: Brian Williams

Asphalt Plant Limitations

Maximum Hourly Asphalt Production =	300	ton/hr								
Annual Asphalt Production Limitation =	750,000	ton/yr								
Steel Slag Usage Limitation =	75,000	ton/yr	0.66	% sulfur						
Natural Gas Limitation =	631	MMCF/yr								
No. 2 Fuel Oil Limitation =	2,626,479	gal/yr, and	0.50	% sulfur						
No. 4 Fuel Oil Limitation =	777,000	gal/yr, and	1.60	% sulfur						
Residual (No. 5 or No. 6) Fuel Oil Limitation =	0	gal/yr, and	0.00	% sulfur						
Propane Limitation =	0	gal/yr, and	0.00	gr/100 ft3 sulfur						
Butane Limitation =	0	gal/yr, and	0.00	gr/100 ft3 sulfur						
Used/Waste Oil Limitation =	0	gal/yr, and	0.00	% sulfur	0.00	% ash	0.00	% chlorine,	0.000	% lead
PM Dryer/Mixer Limitation =	0.538	lb/ton of asphalt production								
PM10 Dryer/Mixer Limitation =	0.218	lb/ton of asphalt production								
PM2.5 Dryer/Mixer Limitation =	0.237	lb/ton of asphalt production								
CO Dryer/Mixer Limitation =	0.190	lb/ton of asphalt production								
VOC Dryer/Mixer Limitation =	0.049	lb/ton of asphalt production								
Steel Slag SO2 Dryer/Mixer Limitation =	0.0014	lb/ton of slag processed								
Cold Mix Asphalt VOC Usage Limitation =	66.8	tons/yr								
HCl Limitation =	0	lb/kgal								

Limited/Controlled Emissions

Process Description	Limited/Controlled Potential Emissions (tons/year)									
	Criteria Pollutants							Hazardous Air Pollutants		
	PM	PM10	PM2.5	SO2	NOx	VOC	CO	Total HAPs	Worst Case HAP	
Ducted Emissions										
Dryer Fuel Combustion (worst case)	2.72	4.33	4.33	93.24	31.55	1.74	26.50	0.70	0.57	(hexane)
Dryer/Mixer (Process)	201.75	81.75	88.88	21.75	20.63	18.38	71.25	4.00	1.16	(formaldehyde)
Dryer/Mixer Slag Processing	0	0	0	0.05	0	0	0	0	0	
Hot Oil Heater Fuel Combustion (worst case)	0.05	0.09	0.09	1.84	0.52	0.01	0.13	0.002	0.002	(hexane)
Worst Case Emissions*	201.80	81.84	88.96	95.13	32.07	18.38	71.38	4.00	1.16	(formaldehyde)
Fugitive Emissions										
Asphalt Load-Out, Silo Filling, On-Site Yard	0.42	0.42	0.42	0	0	6.42	1.08	0.11	0.03	(formaldehyde)
Material Storage Piles	1.60	0.56	0.56	0	0	0	0	0	0	
Material Processing and Handling	2.42	1.15	0.17	0	0	0	0	0	0	
Material Crushing, Screening, and Conveying	11.90	4.35	4.35	0	0	0	0	0	0	
Unpaved and Paved Roads (worst case)	26.65	6.79	0.68	0	0	0	0	0	0	
Cold Mix Asphalt Production	0	0	0	0	0	66.82	0	17.43	6.01	(xylenes)
Gasoline Fuel Transfer and Dispensing	0	0	0	0	0	0.00	0	0.00	0.00	(xylenes)
Volatile Organic Liquid Storage Vessels	0	0	0	0	0	negl	0	negl	negl	
Total Fugitive Emissions	42.98	13.26	6.17	0	0	73.24	1.08	17.54	6.01	(xylenes)
Totals Limited/Controlled Emissions	244.78	95.09	95.13	95.13	32.07	91.62	72.46	21.54	6.01	(xylenes)

negl = negligible

Worst Case Fuel Combustion is based on the fuel with the highest emissions for each specific pollutant.

*Worst Case Emissions (tons/yr) = Emissions from Dryer Fuel Combustion or Dryer/Mixer Process (Worst Case) + Dryer/Mixer Slag Processing + Worst Case Emissions from Hot Oil Heater Fuel Combustion
Fuel component percentages provided by the source.

ATSD Appendix A: Limited Emissions Calculations
Dryer/Mixer Fuel Combustion with Maximum Capacity < 100 MMBtu/hr

Company Name: Dave O'Mara Contractor, Inc.
 Source Address: New Point Stone at 992 South County Road 800 East, Greensburg, Indiana
 Permit Number: 031-28784-05047
 Reviewer: Brian Williams

The following calculations determine the limited emissions created from the combustion of natural gas, fuel oil, propane, butane, or used/waste oil in the dryer/mixer and all other fuel combustion sources at the source.

Production and Fuel Limitations

Maximum Hourly Asphalt Production =	300	ton/hr
Annual Asphalt Production Limitation =	750,000	ton/yr
Natural Gas Limitation =	631	MMCF/yr
No. 2 Fuel Oil Limitation =	2,626,479	gal/yr, and
No. 4 Fuel Oil Limitation =	777,000	gal/yr, and
Residual (No. 5 or No. 6) Fuel Oil Limitation =	0	gal/yr, and
Propane Limitation =	0	gal/yr, and
Butane Limitation =	0	gal/yr, and
Used/Waste Oil Limitation =	0	gal/yr, and

0.50	% sulfur
1.60	% sulfur
0.00	% sulfur
0.00	gr/100 ft3 sulfur
0.00	gr/100 ft3 sulfur
0.00	% ash
0.000	% chlorine
0.000	% lead

Limited Emissions

Criteria Pollutant	Emission Factor (units)							Limited Potential to Emit (tons/yr)							Worse Case Fuel (tons/yr)
	Natural Gas (lb/MMCF)	No. 2 Fuel Oil (lb/kgal)	No. 4 Fuel Oil* (lb/kgal)	Residual (No. 5 or No. 6) Fuel Oil (lb/kgal)	Propane (lb/kgal)	Butane (lb/kgal)	Used/Waste Oil (lb/kgal)	Natural Gas (tons/yr)	No. 2 Fuel Oil (tons/yr)	No. 4 Fuel Oil (tons/yr)	Residual (No. 5 or No. 6) Fuel Oil (tons/yr)	Propane (tons/yr)	Butane (tons/yr)	Used/Waste Oil (tons/yr)	
PM	1.9	2.0	7.0	3.22	0.5	0.6	0.0	0.60	2.63	2.72	0.00	0.000	0.000	0.00	2.72
PM10	7.6	3.3	8.3	4.72	0.5	0.6	0	2.40	4.33	3.22	0.00	0.000	0.000	0.00	4.33
SO2	0.6	71.0	240.0	0.0	0.00	0.00	0.0	0.19	93.24	93.24	0.00	0.000	0.000	0.00	93.24
NOx	100	20.0	20.0	55.0	13.0	15.0	19.0	31.55	26.26	7.77	0.00	0.00	0.00	0.00	31.55
VOC	5.5	0.20	0.20	0.28	1.0	1.10	1.0	1.74	0.26	0.08	0.00	0.00	0.00	0.00	1.74
CO	84	5.0	5.0	5.0	7.5	8.4	5.0	26.50	6.57	1.94	0.00	0.00	0.00	0.00	26.50
Hazardous Air Pollutant															
HCl							0.0							0.00	0.00
Antimony			5.25E-03	5.25E-03			negl			2.04E-03	0.00E+00			negl	2.0E-03
Arsenic	2.0E-04	5.6E-04	1.32E-03	1.32E-03			1.1E-01	6.3E-05	7.35E-04	5.13E-04	0.00E+00			0.00E+00	7.4E-04
Beryllium	1.2E-05	4.2E-04	2.78E-05	2.78E-05			negl	3.8E-06	5.52E-04	1.08E-05	0.00E+00			0.00E+00	5.5E-04
Cadmium	1.1E-03	4.2E-04	3.98E-04	3.98E-04			9.3E-03	3.5E-04	5.52E-04	1.55E-04	0.00E+00			0.00E+00	5.5E-04
Chromium	1.4E-03	4.2E-04	8.45E-04	8.45E-04			2.0E-02	4.4E-04	5.52E-04	3.29E-04	0.00E+00			0.00E+00	5.5E-04
Cobalt	8.4E-05		6.02E-03	6.02E-03			2.1E-04	2.7E-05		2.34E-03	0.00E+00			0.00E+00	2.3E-03
Lead	5.0E-04	1.3E-03	1.51E-03	1.51E-03			0	1.6E-04	1.65E-03	5.87E-04	0.00E+00			0.0E+00	0.00
Manganese	3.8E-04	8.4E-04	3.00E-03	3.00E-03			6.8E-02	1.2E-04	1.10E-03	1.17E-03	0.00E+00			0.00E+00	0.00
Mercury	2.6E-04	4.2E-04	1.13E-04	1.13E-04				8.2E-05	5.52E-04	4.39E-05	0.00E+00			0.00E+00	5.5E-04
Nickel	2.1E-03	4.2E-04	8.45E-02	8.45E-02			1.1E-02	6.6E-04	5.52E-04	3.28E-02	0.00E+00			0.00E+00	0.033
Selenium	2.4E-05	2.1E-03	6.83E-04	6.83E-04			negl	7.6E-06	2.76E-03	2.65E-04	0.00E+00			negl	2.8E-03
1,1,1-Trichloroethane			2.36E-04	2.36E-04						9.17E-05	0.00E+00				9.2E-05
1,3-Butadiene															0.0E+00
Acetaldehyde															0.0E+00
Acrolein															0.0E+00
Benzene	2.1E-03		2.14E-04	2.14E-04				6.6E-04		8.31E-05	0.00E+00				6.6E-04
Bis(2-ethylhexyl)phthalate							2.2E-03							0.00E+00	0.0E+00
Dichlorobenzene	1.2E-03						8.0E-07	3.8E-04						0.00E+00	3.8E-04
Ethylbenzene			6.36E-05	6.36E-05						2.47E-05	0.00E+00				2.5E-05
Formaldehyde	7.5E-02	6.10E-02	3.30E-02	3.30E-02				2.4E-02	8.01E-02	1.28E-02	0.00E+00				0.080
Hexane	1.8E+00							0.57							0.568
Phenol							2.4E-03							0.00E+00	0.0E+00
Toluene	3.4E-03		6.20E-03	6.20E-03				1.1E-03		2.41E-03	0.00E+00				2.4E-03
Total PAH Haps	negl		1.13E-03	1.13E-03			3.9E-02	negl		4.39E-04	0.00E+00			0.00E+00	4.4E-04
Polycyclic Organic Matter		3.30E-03							4.33E-03						4.3E-03
Xylene			1.09E-04	1.09E-04						4.23E-05	0.00E+00				4.2E-05
Total HAPs							0.60	0.09	0.06	0.00	0	0	0.00	0.70	

Methodology

Natural Gas: Limited Potential to Emit (tons/yr) = (Natural Gas Limitation (MMCF/yr)) * (Emission Factor (lb/MMCF)) * (ton/2000 lbs)
 All Other Fuels: Limited Potential to Emit (tons/yr) = (Fuel Limitation (gals/yr)) * (Emission Factor (lb/kgal)) * (kgal/1000 gal) * (ton/2000 lbs)
 Sources of AP-42 Emission Factors for fuel combustion:

- Natural Gas : AP-42 Chapter 1.4 (dated 7/98), Tables 1.4-1, 1.4-2, 1.4-3, and 1.4-4
- No. 2, No. 4, and No. 6 Fuel Oil: AP-42 Chapter 1.3 (dated 9/98), Tables 1.3-1, 1.3-2, 1.3-3, 1.3-8, 1.3-9, 1.3-10, and 1.3-11
- Propane and Butane: AP-42 Chapter 1.5 (dated 7/08), Tables 1.5-1 (assuming PM = PM10)
- Waste Oil: AP-42 Chapter 1.11 (dated 10/98), Tables 1.11-1, 1.11-2, 1.11-3, 1.11-4, and 1.11-5

*Since there are no specific AP-42 HAP emission factors for combustion of No. 4 fuel oil, it was assumed that HAP emissions from combustion of No. 4 fuel oil were equal to combustion of residual or No. 6 fuel oil.

Abbreviations

- PM = Particulate Matter
- PM10 = Particulate Matter (<10 um)
- SO2 = Sulfur Dioxide
- NOx = Nitrous Oxides
- VOC = Volatile Organic Compounds
- CO = Carbon Monoxide

- HAP = Hazardous Air Pollutant
- HCl = Hydrogen Chloride
- PAH = Polyaromatic Hydrocarbon

**ATSD Appendix A: Limited Emissions Calculations
Dryer/Mixer Process**

Company Name: Dave O'Mara Contractor, Inc.
Source Address: New Point Stone at 992 South County Road 800 East, Greensburg, Indiana
Permit Number: 031-28784-05047
Reviewer: Brian Williams

The following calculations determine the limited emissions from the aggregate drying/mixing

Maximum Hourly Asphalt Production =	300	ton/hr
Annual Asphalt Production Limitation =	750,000	ton/yr
PM Dryer/Mixer Limitation =	0.538	lb/ton of asphalt production
PM10 Dryer/Mixer Limitation =	0.218	lb/ton of asphalt production
PM2.5 Dryer/Mixer Limitation =	0.237	lb/ton of asphalt production
CO Dryer/Mixer Limitation =	0.190	lb/ton of asphalt production
VOC Dryer/Mixer Limitation =	0.049	lb/ton of asphalt production

Criteria Pollutant	Emission Factor or Limitation (lb/ton)			Limited/Controlled Potential to Emit (tons/yr)			Worse Case PTE
	Drum-Mix Plant (dryer/mixer, controlled by fabric filter)			Drum-Mix Plant (dryer/mixer, controlled by fabric filter)			
	Natural Gas	No. 2 Fuel Oil	Waste Oil	Natural Gas	No. 2 Fuel Oil	Waste Oil	
PM*	0.538	0.538	0.538	201.8	201.8	201.8	201.8
PM10*	0.218	0.218	0.218	81.8	81.8	81.8	81.8
PM2.5*	0.237	0.237	0.237	88.9	88.9	88.9	88.9
SO2**	0.003	0.011	0.058	1.3	4.1	21.8	21.8
NOx**	0.026	0.055	0.055	9.8	20.6	20.6	20.6
VOC**	0.049	0.049	0.049	18.4	18.4	18.4	18.4
CO***	0.190	0.190	0.190	71.3	71.3	71.3	71.3
Hazardous Air Pollutant							
HCl			2.10E-04			0.08	0.08
Antimony	1.80E-07	1.80E-07	1.80E-07	6.75E-05	6.75E-05	6.75E-05	6.75E-05
Arsenic	5.60E-07	5.60E-07	5.60E-07	2.10E-04	2.10E-04	2.10E-04	2.10E-04
Beryllium	negl	negl	negl	negl	negl	negl	0.00E+00
Cadmium	4.10E-07	4.10E-07	4.10E-07	1.54E-04	1.54E-04	1.54E-04	1.54E-04
Chromium	5.50E-06	5.50E-06	5.50E-06	2.06E-03	2.06E-03	2.06E-03	2.06E-03
Cobalt	2.60E-08	2.60E-08	2.60E-08	9.75E-06	9.75E-06	9.75E-06	9.75E-06
Lead	6.20E-07	1.50E-05	1.50E-05	2.33E-04	5.63E-03	5.63E-03	5.63E-03
Manganese	7.70E-06	7.70E-06	7.70E-06	2.89E-03	2.89E-03	2.89E-03	2.89E-03
Mercury	2.40E-07	2.60E-06	2.60E-06	9.00E-05	9.75E-04	9.75E-04	9.75E-04
Nickel	6.30E-05	6.30E-05	6.30E-05	2.36E-02	2.36E-02	2.36E-02	2.36E-02
Selenium	3.50E-07	3.50E-07	3.50E-07	1.31E-04	1.31E-04	1.31E-04	1.31E-04
2,2,4 Trimethylpentane	4.00E-05	4.00E-05	4.00E-05	1.50E-02	1.50E-02	1.50E-02	1.50E-02
Acetaldehyde			1.30E-03			0.49	0.49
Acrolein			2.60E-05			9.75E-03	9.75E-03
Benzene	3.90E-04	3.90E-04	3.90E-04	0.15	0.15	0.15	0.15
Ethylbenzene	2.40E-04	2.40E-04	2.40E-04	0.09	0.09	0.09	0.09
Formaldehyde	3.10E-03	3.10E-03	3.10E-03	1.16	1.16	1.16	1.16
Hexane	9.20E-04	9.20E-04	9.20E-04	0.35	0.35	0.35	0.35
Methyl chloroform	4.80E-05	4.80E-05	4.80E-05	0.02	0.02	0.02	0.02
MEK			2.00E-05			0.01	0.01
Propionaldehyde			1.30E-04			0.05	0.05
Quinone			1.60E-04			0.06	0.06
Toluene	1.50E-04	2.90E-03	2.90E-03	0.06	1.09	1.09	1.09
Total PAH Haps	1.90E-04	8.80E-04	8.80E-04	0.07	0.33	0.33	0.33
Xylene	2.00E-04	2.00E-04	2.00E-04	0.08	0.08	0.08	0.08
Total HAPs							4.00
Worst Single HAP							1.1625 (formaldehyde)

Methodology

Limited/Controlled Potential to Emit (tons/yr) = (Annual Asphalt Production Limitation (tons/yr)) * (Emission Factor (lb/ton)) * (ton/2000 lbs)
 Emission Factors from AP-42 Chapter 11.1 (dated 3/04), Tables 11.1-3, 11.1-4, 11.1-7, 11.1-8, 11.1-10, and 11.1-12
 Natural gas, No. 2 fuel oil, and waste oil represent the worst possible emissions scenario. AP-42 did not provide emission factors for any other fuels.

* PM, PM10, and PM2.5 AP-42 emission factors based on drum mix dryer fired with natural gas, propane, fuel oil, and waste oil. According to AP-42 fuel type does not significantly effect PM, PM10, and PM2.5 emissions.

** SO2, NOx, and VOC AP-42 emission factors are for natural gas, No. 2 fuel oil, and waste oil only.

*** CO AP-42 emission factor determined by combining data from drum mix dryer fired with natural gas, No. 6 fuel oil, and No. 2 fuel oil to develop single CO emission factor.

Abbreviations

VOC - Volatile Organic Compounds HAP = Hazardous Air Pollutant
 HCl = Hydrogen Chloride PAH = Polyaromatic Hydrocarbon
 SO2 = Sulfur Dioxide

**ATSD Appendix A: Limited Emissions Calculations
Dryer/Mixer Slag Processing**

Company Name: Dave O'Mara Contractor, Inc.
Source Address: New Point Stone at 992 South County Road 800 East, Greensburg, Indiana
Permit Number: 031-28784-05047
Reviewer: Brian Williams

The following calculations determine the limited emissions from the processing of slag in the aggregate drying/mixing

Steel Slag Usage Limitation =

75,000

 ton/yr
 SO2 Slag Limitation =

0.0014

 lb/ton of slag processed

0.66

 % sulfur

	Emission Factor or Limitation (lb/ton)*	Limited Potential to Emit (tons/yr)
Criteria Pollutant	Slag Processing	Slag Processing
SO2	0.0014	0.05

Methodology

* Testing results for steel slag, obtained June 2009 from E & B Paving, Inc. facility located in Huntington, IN. The testing results showed a steel slag emission factor of 0.0007 lb/ton from slag containing 0.33% sulfur content.
 Limited Potential to Emit SO2 from Slag (tons/yr) = (Slag Usage Limitation (ton/yr)) * [Limited Emission Factor (lb/ton)] * [ton/2000 lbs]

Abbreviations
 SO2 = Sulfur Dioxide

ATSD Appendix A: Limited Emissions Calculations
Hot Oil Heater
Fuel Combustion with Maximum Capacity < 100 MMBtu/hr

Company Name: Dave O'Mara Contractor, Inc.
Source Location: New Point Stone at 992 South County Road 800 East, Greensburg, Indiana
Permit Number: 031-28784-05047
Reviewer: Brian Williams

Maximum Hot Oil Heater Fuel Input Rate = 0.83 MMBtu/hr
 Natural Gas Usage = 0 MMCF/yr
 No. 2 Fuel Oil Usage = 51,809 gal/yr, and 0.50 % sulfur

Unlimited/Uncontrolled Emissions

Criteria Pollutant	Emission Factor (units)		Unlimited/Uncontrolled Potential to Emit (tons/yr)		Worse Case Fuel (tons/yr)
	Hot Oil Heater		Hot Oil Heater		
	Natural Gas (lb/MMCF)	No. 2 Fuel Oil (lb/kgal)	Natural Gas (tons/yr)	No. 2 Fuel Oil (tons/yr)	
PM	1.9	2.0	0.000	0.052	0.05
PM10/PM2.5	7.6	3.3	0.000	0.085	0.09
SO2	0.6	71.0	0.000	1.839	1.84
NOx	100	20.0	0.000	0.518	0.52
VOC	5.5	0.20	0.000	0.005	0.01
CO	84	5.0	0.000	0.130	0.13
Hazardous Air Pollutant					
Arsenic	2.0E-04	5.6E-04	0.0E+00	1.45E-05	1.5E-05
Beryllium	1.2E-05	4.2E-04	0.0E+00	1.09E-05	1.1E-05
Cadmium	1.1E-03	4.2E-04	0.0E+00	1.09E-05	1.1E-05
Chromium	1.4E-03	4.2E-04	0.0E+00	1.09E-05	1.1E-05
Cobalt	8.4E-05		0.0E+00		0.0E+00
Lead	5.0E-04	1.3E-03	0.0E+00	3.26E-05	3.3E-05
Manganese	3.8E-04	8.4E-04	0.0E+00	2.18E-05	2.2E-05
Mercury	2.6E-04	4.2E-04	0.0E+00	1.09E-05	1.1E-05
Nickel	2.1E-03	4.2E-04	0.0E+00	1.09E-05	1.1E-05
Selenium	2.4E-05	2.1E-03	0.0E+00	5.44E-05	5.4E-05
Benzene	2.1E-03		0.0E+00		0.0E+00
Dichlorobenzene	1.2E-03		0.0E+00		0.0E+00
Ethylbenzene					0
Formaldehyde	7.5E-02	6.10E-02	0.0E+00	1.58E-03	0.002
Hexane	1.8E+00		0.00		0.000
Phenol					0
Toluene	3.4E-03		0.0E+00		0.0E+00
Total PAH Haps	negl		negl		0
Polycyclic Organic Matter		3.30E-03		8.55E-05	8.5E-05
Total HAPs =			0.0E+00	1.8E-03	0.002

Methodology

Equivalent Natural Gas Usage (MMCF/yr) = [Maximum Fuel Input Rate (MMBtu/hr)] * [8,760 hrs/yr] * [1 MMCF/1,000 MMBtu]
 Equivalent Oil Usage (gal/yr) = [Maximum Fuel Input Rate (MMBtu/hr)] * [8,760 hrs/yr] * [1 gal/0.140 MMBtu]
 Natural Gas: Unlimited/Uncontrolled Potential to Emit (tons/yr) = [Maximum Natural Gas Usage (MMCF/yr)] * [Emission Factor (lb/MMCF)] * [ton/2000 lbs]
 All Other Fuels: Unlimited/Uncontrolled Potential to Emit (tons/yr) = [Maximum Fuel Usage (gals/yr)] * [Emission Factor (lb/kgal)] * [kgal/1000 gal] * [ton/2000 lbs]
 Sources of AP-42 Emission Factors for fuel combustion:
 Natural Gas : AP-42 Chapter 1.4 (dated 7/98), Tables 1.4-1, 1.4-2, 1.4-3, and 1.4-4
 No. 2 Fuel Oil: AP-42 Chapter 1.3 (dated 9/98), Tables 1.3-1, 1.3-2, 1.3-3, 1.3-8, 1.3-9, 1.3-10, and 1.3-11

Abbreviations

PM = Particulate Matter
 PM10 = Particulate Matter (<10 um)
 SO2 = Sulfur Dioxide
 NOx = Nitrous Oxides
 VOC - Volatile Organic Compounds
 CO = Carbon Monoxide
 HAP = Hazardous Air Pollutant
 HCl = Hydrogen Chloride
 PAH = Polyaromatic Hydrocarbon

**ATSD Appendix A: Limited Emissions Calculations
Asphalt Load-Out, Silo Filling, and Yard Emissions**

Company Name: Dave O'Mara Contractor, Inc.
Source Address: New Point Stone at 992 South County Road 800 East, Greensburg, Indiana
Permit Number: 031-28784-05047
Reviewer: Brian Williams

The following calculations determine the limited fugitive emissions from hot asphalt mix load-out, silo filling, and on-site yard for a drum mix hot mix asphalt plant

Asphalt Temperature, T =	325	F
Asphalt Volatility Factor, V =	-0.5	
Annual Asphalt Production Limitation =	750,000	tons/yr

Pollutant	Emission Factor (lb/ton asphalt)			Limited Potential to Emit (tons/yr)			
	Load-Out	Silo Filling	On-Site Yard	Load-Out	Silo Filling	On-Site Yard	Total
Total PM*	5.2E-04	5.9E-04	NA	0.20	0.22	NA	0.42
Organic PM	3.4E-04	2.5E-04	NA	0.13	0.095	NA	0.22
TOC	0.004	0.012	0.001	1.56	4.57	0.413	6.5
CO	0.001	0.001	3.5E-04	0.51	0.442	0.132	1.08

NA = Not Applicable (no AP-42 Emission Factor)

0.0029

PM/HAPs	0.009	0.011	0	0.020
VOC/HAPs	0.023	0.058	0.006	0.087
non-VOC/HAPs	1.2E-04	1.2E-05	3.2E-05	1.6E-04
non-VOC/non-HAPs	0.11	0.06	0.03	0.21

Total VOCs	1.47	4.57	0.4	6.4
Total HAPs	0.03	0.07	0.006	0.11
Worst Single HAP				0.033
				(formaldehyde)

Methodology

The asphalt temperature and volatility factor were provided by the source.

Limited Potential to Emit (tons/yr) = (Annual Asphalt Production Limitation (tons/yr)) * (Emission Factor (lb/ton)) * (ton/2000 lbs)

Emission Factors from AP-42 Chapter 11.1 (dated 3/04), Tables 11.1-14, 11.1-15, and 11.1-16

Plant Load-Out Emission Factor Equations (AP-42 Table 11.1-14)::

Total PM/PM10 Ef = $0.000181 + 0.00141(-V)e^{((0.0251)(T+460)-20.43)}$

Organic PM Ef = $0.00141(-V)e^{((0.0251)(T+460)-20.43)}$

TOC Ef = $0.0172(-V)e^{((0.0251)(T+460)-20.43)}$

CO Ef = $0.00558(-V)e^{((0.0251)(T+460)-20.43)}$

Silo Filling Emission Factor Equations (AP-42 Table 11.1-14):

PM/PM10 Ef = $0.000332 + 0.00105(-V)e^{((0.0251)(T+460)-20.43)}$

Organic PM Ef = $0.00105(-V)e^{((0.0251)(T+460)-20.43)}$

TOC Ef = $0.0504(-V)e^{((0.0251)(T+460)-20.43)}$

CO Ef = $0.00488(-V)e^{((0.0251)(T+460)-20.43)}$

On Site Yard CO emissions estimated by multiplying the TOC emissions by 0.32

*No emission factors available for PM10 or PM2.5, therefore IDEM assumes PM10 and PM2.5 are equivalent to Total PM.

Abbreviations

TOC = Total Organic Compounds

CO = Carbon Monoxide

PM = Particulate

Matter

PM10 = Particulate Matter (<10 um)

PM2.5 = Particulate Matter (<2.5 um)

HAP = Hazardous Air Pollutant

VOC = Volatile Organic Compound

**ATSD Appendix A: Limited Emissions Calculations
Asphalt Load-Out, Silo Filling, and Yard Emissions (continued)**

Company Name: Dave O'Mara Contractor, Inc.
 Source Address: New Point Stone at 992 South County Road 800 East, Greensburg, Indiana
 Permit Number: 031-28784-05047
 Reviewer: Brian Williams

Organic Particulate-Based Compounds (Table 11.1-15)

Pollutant	CASRN	Category	HAP Type	Source	Speciation Profile		Limited Potential to Emit (tons/yr)			
					Load-out and Onsite Yard (% by weight of Total Organic PM)	Silo Filling and Asphalt Storage Tank (% by weight of Total Organic PM)	Load-out	Silo Filling	Onsite Yard	Total
PAH HAPs										
Acenaphthene	83-32-9	PM/HAP	POM	Organic PM	0.26%	0.47%	3.3E-04	4.5E-04	NA	7.8E-04
Acenaphthylene	208-96-8	PM/HAP	POM	Organic PM	0.028%	0.014%	3.6E-05	1.3E-05	NA	4.9E-05
Anthracene	120-12-7	PM/HAP	POM	Organic PM	0.07%	0.13%	8.9E-05	1.2E-04	NA	2.1E-04
Benzo(a)anthracene	56-55-3	PM/HAP	POM	Organic PM	0.019%	0.056%	2.4E-05	5.3E-05	NA	7.8E-05
Benzo(b)fluoranthene	205-99-2	PM/HAP	POM	Organic PM	0.0076%	0	9.7E-06	0	NA	9.7E-06
Benzo(k)fluoranthene	207-08-9	PM/HAP	POM	Organic PM	0.0022%	0	2.8E-06	0	NA	2.8E-06
Benzo(g,h,i)perylene	191-24-2	PM/HAP	POM	Organic PM	0.0019%	0	2.4E-06	0	NA	2.4E-06
Benzo(a)pyrene	50-32-8	PM/HAP	POM	Organic PM	0.0023%	0	2.9E-06	0	NA	2.9E-06
Benzo(e)pyrene	192-97-2	PM/HAP	POM	Organic PM	0.0078%	0.0095%	1.0E-05	9.0E-06	NA	1.9E-05
Chrysene	218-01-9	PM/HAP	POM	Organic PM	0.103%	0.21%	1.3E-04	2.0E-04	NA	3.3E-04
Dibenz(a,h)anthracene	53-70-3	PM/HAP	POM	Organic PM	0.00037%	0	4.7E-07	0	NA	4.7E-07
Fluoranthene	206-44-0	PM/HAP	POM	Organic PM	0.05%	0.15%	6.4E-05	1.4E-04	NA	2.1E-04
Fluorene	86-73-7	PM/HAP	POM	Organic PM	0.77%	1.01%	9.8E-04	9.6E-04	NA	1.9E-03
Indeno(1,2,3-cd)pyrene	193-39-5	PM/HAP	POM	Organic PM	0.00047%	0	6.0E-07	0	NA	6.0E-07
2-Methylnaphthalene	91-57-6	PM/HAP	POM	Organic PM	2.38%	5.27%	3.0E-03	5.0E-03	NA	0.008
Naphthalene	91-20-3	PM/HAP	POM	Organic PM	1.25%	1.82%	1.6E-03	1.7E-03	NA	3.3E-03
Perylene	198-55-0	PM/HAP	POM	Organic PM	0.022%	0.03%	2.8E-05	2.9E-05	NA	5.7E-05
Phenanthrene	85-01-8	PM/HAP	POM	Organic PM	0.81%	1.80%	1.0E-03	1.7E-03	NA	2.7E-03
Pyrene	129-00-0	PM/HAP	POM	Organic PM	0.15%	0.44%	1.9E-04	4.2E-04	NA	6.1E-04
Total PAH HAPs							0.008	0.011	NA	0.018
Other semi-volatile HAPs										
Phenol		PM/HAP	---	Organic PM	1.18%	0	1.5E-03	0	0	1.5E-03

NA = Not Applicable (no AP-42 Emission Factor)

Methodology

Limited Potential to Emit (tons/yr) = [Speciation Profile (%)] * [Organic PM (tons/yr)]
 Speciation Profiles from AP-42 Chapter 11.1 (dated 3/04), Tables 11.1-15 and 11.1-16

Abbreviations

PM = Particulate Matter
 HAP = Hazardous Air Pollutant
 POM = Polycyclic Organic Matter

ATSD Appendix A: Limited Emissions Calculations
Asphalt Load-Out, Silo Filling, and Yard Emissions (continued)

Organic Volatile-Based Compounds (Table 11.1-16)

Pollutant	CASRN	Category	HAP Type	Source	Speciation Profile		Limited Potential to Emit (tons/yr)			
					Load-out and Onsite Yard (% by weight of TOC)	Silo Filling and Asphalt Storage Tank (% by weight of TOC)	Load-out	Silo Filling	Onsite Yard	Total
VOC		VOC	---	TOC	94%	100%	1.47	4.57	0.39	6.42
non-VOC/non-HAPS										
Methane	74-82-8	non-VOC/non-HAP	---	TOC	6.50%	0.26%	1.0E-01	1.2E-02	2.7E-02	0.140
Acetone	67-64-1	non-VOC/non-HAP	---	TOC	0.046%	0.055%	7.2E-04	2.5E-03	1.9E-04	0.003
Ethylene	74-85-1	non-VOC/non-HAP	---	TOC	0.71%	1.10%	1.1E-02	5.0E-02	2.9E-03	0.064
Total non-VOC/non-HAPS					7.30%	1.40%	0.114	0.064	0.030	0.21
Volatile organic HAPs										
Benzene	71-43-2	VOC/HAP	---	TOC	0.052%	0.032%	8.1E-04	1.5E-03	2.1E-04	2.5E-03
Bromomethane	74-83-9	VOC/HAP	---	TOC	0.0096%	0.0049%	1.5E-04	2.2E-04	4.0E-05	4.1E-04
2-Butanone	78-93-3	VOC/HAP	---	TOC	0.049%	0.039%	7.6E-04	1.8E-03	2.0E-04	2.7E-03
Carbon Disulfide	75-15-0	VOC/HAP	---	TOC	0.013%	0.016%	2.0E-04	7.3E-04	5.4E-05	9.9E-04
Chloroethane	75-00-3	VOC/HAP	---	TOC	0.00021%	0.004%	3.3E-06	1.8E-04	8.7E-07	1.9E-04
Chloromethane	74-87-3	VOC/HAP	---	TOC	0.015%	0.023%	2.3E-04	1.1E-03	6.2E-05	1.3E-03
Cumene	92-82-8	VOC/HAP	---	TOC	0.11%	0	1.7E-03	0	4.5E-04	2.2E-03
Ethylbenzene	100-41-4	VOC/HAP	---	TOC	0.28%	0.038%	4.4E-03	1.7E-03	1.2E-03	0.007
Formaldehyde	50-00-0	VOC/HAP	---	TOC	0.088%	0.69%	1.4E-03	3.2E-02	3.6E-04	0.033
n-Hexane	100-54-3	VOC/HAP	---	TOC	0.15%	0.10%	2.3E-03	4.6E-03	6.2E-04	0.008
Isooctane	540-84-1	VOC/HAP	---	TOC	0.0018%	0.00031%	2.8E-05	1.4E-05	7.4E-06	5.0E-05
Methylene Chloride	75-09-2	non-VOC/HAP	---	TOC	0	0.00027%	0	1.2E-05	0	1.2E-05
MTBE	1634-04-4	VOC/HAP	---	TOC	0	0	0	0	0	0
Styrene	100-42-5	VOC/HAP	---	TOC	0.0073%	0.0054%	1.1E-04	2.5E-04	3.0E-05	3.9E-04
Tetrachloroethene	127-18-4	non-VOC/HAP	---	TOC	0.0077%	0	1.2E-04	0	3.2E-05	1.5E-04
Toluene	100-88-3	VOC/HAP	---	TOC	0.21%	0.062%	3.3E-03	2.8E-03	8.7E-04	0.007
1,1,1-Trichloroethane	71-55-6	VOC/HAP	---	TOC	0	0	0	0	0	0
Trichloroethene	79-01-6	VOC/HAP	---	TOC	0	0	0	0	0	0
Trichlorofluoromethane	75-69-4	VOC/HAP	---	TOC	0.0013%	0	2.0E-05	0	5.4E-06	2.6E-05
m-/p-Xylene	1330-20-7	VOC/HAP	---	TOC	0.41%	0.20%	6.4E-03	9.1E-03	1.7E-03	0.017
o-Xylene	95-47-6	VOC/HAP	---	TOC	0.08%	0.057%	1.2E-03	2.6E-03	3.3E-04	4.2E-03
Total volatile organic HAPs					1.50%	1.30%	0.023	0.059	0.006	0.089

Methodology

Limited Potential to Emit (tons/yr) = [Speciation Profile (%)] * [TOC (tons/yr)]

Speciation Profiles from AP-42 Chapter 11.1 (dated 3/04), Tables 11.1-15 and 11.1-16

Abbreviations

TOC = Total Organic Compounds

HAP = Hazardous Air Pollutant

VOC = Volatile Organic Compound

MTBE = Methyl tert butyl ether

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

Company Name: Dave O'Mara Contractor, Inc.
Source Address: New Point Stone at 992 South County Road 800 East, Greensburg, Indiana
Permit Number: 031-28784-05047
Reviewer: Brian Williams

Note: Since the emissions from the storage piles are minimal, the limited emissions are equal to the unlimited emissions.

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

$E_f = 1.7 \cdot (s/1.5) \cdot (365-p)/235 \cdot (f/15)$ <p>where E_f = emission factor (lb/acre/day) s = silt content (wt %) p = 125 days of rain greater than or equal to 0.01 inches f = 15 % of wind greater than or equal to 12 mph</p>

Material	Silt Content (wt %)*	Emission Factor (lb/acre/day)	Maximum Anticipated Pile Size (acres)**	PTE of PM (tons/yr)	PTE of PM10/PM2.5 (tons/yr)
Sand	2.6	3.01	0.75	0.412	0.144
Limestone	1.6	1.85	0.75	0.253	0.089
RAP	0.5	0.58	0.75	0.079	0.028
Gravel	1.6	1.85	0.75	0.253	0.089
Slag	3.8	4.40	0.75	0.602	0.211
Totals				1.60	0.56

Methodology

PTE of PM (tons/yr) = (Emission Factor (lb/acre/day)) * (Maximum Pile Size (acres)) * (ton/2000 lbs) * (8760 hours/yr)

PTE of PM10/PM2.5 (tons/yr) = (Potential PM Emissions (tons/yr)) * 35%

*Silt content values obtained from AP-42 Table 13.2.4-1 (dated 1/95)

**Maximum anticipated pile size (acres) provided by the source.

RAP = recycled asphalt pavement

Abbreviations

PM = Particulate Matter

PM10 = Particulate Matter (<10 um)

PM2.5 = Particulate Matter (<2.5 um)

PM2.5 = PM10

PTE = Potential to Emit

ATSD Appendix A: Limited Emissions Calculations
Material Processing, Handling, Crushing, Screening, and Conveying

Company Name: Dave O'Mara Contractor, Inc.
Source Address: New Point Stone at 992 South County Road 800 East, Greensburg, Indiana
Permit Number: 031-28784-05047
Reviewer: Brian Williams

Batch or Continuous Drop Operations (AP-42 Section 13.2.4)

To estimate potential fugitive dust emissions from processing and handling of raw materials (batch or continuous drop operations), AP-42 emission factors for Aggregate Handling, Section 13.2.4 (fifth edition, 1/95) are utilized.

$$E_f = k \cdot (0.0032)^U \cdot (U/5)^{1.3} / (M/2)^{1.4}$$

where: E_f = Emission factor (lb/ton)

k (PM) = 0.74	= particle size multiplier (0.74 assumed for aerodynamic diameter <=100 um)
k (PM10) = 0.35	= particle size multiplier (0.35 assumed for aerodynamic diameter <=10 um)
k (PM2.5) = 0.053	= particle size multiplier (0.053 assumed for aerodynamic diameter <=2.5 um)
U = 10.2	= worst case annual mean wind speed (Source: NOAA, 2006*)
M = 4.0	= material % moisture content of aggregate (Source: AP-42 Section 11.1.1.1)
E_f (PM) = 2.27E-03	lb PM/ton of material handled
E_f (PM10) = 1.07E-03	lb PM10/ton of material handled
E_f (PM2.5) = 1.62E-04	lb PM2.5/ton of material handled

Annual Asphalt Production Limitation = 750,000 tons/yr
 Percent Asphalt Cement/Binder (weight %) = 5.0%
 Maximum Material Handling Throughput = 712,500 tons/yr

Type of Activity	Limited PTE of PM (tons/yr)	Limited PTE of PM10 (tons/yr)	Limited PTE of PM2.5 (tons/yr)
Truck unloading of materials into storage piles	0.81	0.38	0.06
Front-end loader dumping of materials into feeder bins	0.81	0.38	0.06
Conveyor dropping material into dryer/mixer or batch tower	0.81	0.38	0.06
Total (tons/yr)	2.42	1.15	0.17

Methodology

The percent asphalt cement/binder provided by the source.
 Maximum Material Handling Throughput (tons/yr) = [Annual Asphalt Production Limitation (tons/yr)] * [1 - Percent Asphalt Cement/Binder (weight %)]
 Limited Potential to Emit (tons/yr) = (Maximum Material Handling Throughput (tons/yr)) * (Emission Factor (lb/ton)) * (ton/2000 lbs)
 Raw materials may include limestone, sand, recycled asphalt pavement (RAP), gravel, slag, and other additives
 *Worst case annual mean wind speed (Indianapolis, IN) from "Comparative Climatic Data", National Climatic Data Center, NOAA, 2006

Material Screening and Conveying (AP-42 Section 19.2.2)

To estimate potential fugitive dust emissions from raw material crushing, screening, and conveying, AP-42 emission factors for Crushed Stone Processing Operations, Section 19.2.2 (dated 8/04) are utilized.

Operation	Uncontrolled Emission Factor for PM (lbs/ton)*	Uncontrolled Emission Factor for PM10 (lbs/ton)*	Limited PTE of PM (tons/yr)	Limited PTE of PM10/PM2.5 (tons/yr)**
Crushing	0.0054	0.0024	1.92	0.86
Screening	0.025	0.0087	8.91	3.10
Conveying	0.003	0.0011	1.07	0.39
Limited Potential to Emit (tons/yr) =			11.90	4.35

Methodology

Maximum Material Handling Throughput (tons/yr) = [Annual Asphalt Production Limitation (tons/yr)] * [1 - Percent Asphalt Cement/Binder (weight %)]
 Limited Potential to Emit (tons/yr) = [Maximum Material Handling Throughput (tons/yr)] * [Emission Factor (lb/ton)] * [ton/2000 lbs]
 Raw materials may include stone/gravel, slag, and recycled asphalt pavement (RAP)
 Emission Factors from AP-42 Chapter 11.19.2 (dated 8/04), Table 11.19.2-2
 *Uncontrolled emissions factors for PM/PM10 represent tertiary crushing of stone with moisture content ranging from 0.21 to 1.3 percent by weight (Table 11.19.2-2). The bulk moisture content of aggregate in the storage piles at a hot mix asphalt production plant typically stabilizes between 3 to 5 percent by weight (Source: AP-42 Section 11.1.1.1).
 **Assumes PM10 = PM2.5

Abbreviations

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

**ATSD Appendix A: Limited Emissions Calculations
Unpaved Roads**

Company Name: Dave O'Mara Contractor, Inc.
Source Address: New Point Stone at 992 South County Road 800 East, Greensburg, Indiana
Permit Number: 031-28784-05047
Reviewer: Brian Williams

Unpaved Roads at Industrial Site

The following calculations determine the amount of emissions created by unpaved roads, based on 8,760 hours of use and AP-42, Ch 13.2.2 (12/2003).

Annual Asphalt Production Limitation	750,000	tons/yr
Percent Asphalt Cement/Binder (weight %)	5.0%	
Maximum Material Handling Throughput	712,500	tons/yr
Maximum Asphalt Cement/Binder Throughput	37,500	tons/yr
No. 2 Fuel Oil Limitation	2,626,479	gallons/yr

Process	Vehicle Type	Maximum Weight of Vehicle (tons)	Maximum Weight of Load (tons)	Maximum Weight of Vehicle and Load (tons/trip)	Maximum trips per year (trip/yr)	Total Weight driven per year (ton/yr)	Maximum one-way distance (feet/trip)	Maximum one-way distance (mi/trip)	Maximum one-way miles (miles/yr)
Aggregate/RAP Truck Enter Full	Dump truck (16 CY)	17.0	22.4	39.4	3.2E+04	1.3E+06	300	0.057	1807.3
Aggregate/RAP Truck Leave Empty	Dump truck (16 CY)	17.0	0	17.0	3.2E+04	5.4E+05	300	0.057	1807.3
Asphalt Cement/Binder Truck Enter Full	Tanker truck (6000 gal)	12.0	36.0	48.0	1.0E+03	5.0E+04	300	0.057	59.2
Asphalt Cement/Binder Truck Leave Empty	Tanker truck (6000 gal)	12.0	0	12.0	1.0E+03	1.3E+04	300	0.057	59.2
Fuel Oil Truck Enter Full	Tanker truck (6000 gal)	12.0	32.0	44.0	2.8E+02	1.2E+04	300	0.057	15.8
Fuel Oil Truck Leave Empty	Tanker truck (6000 gal)	12.0	0	12.0	2.8E+02	3.3E+03	300	0.057	15.8
Aggregate/RAP Loader Full	Front-end loader (3 CY)	15.0	4.2	19.2	1.7E+05	3.3E+06	300	0.057	9638.8
Aggregate/RAP Loader Empty	Front-end loader (3 CY)	15.0	0	15.0	1.7E+05	2.5E+06	300	0.057	9638.8
Asphalt Concrete Truck Leave Full	Dump truck (16 CY)	17.0	24.0	41.0	3.1E+04	1.3E+06	300	0.057	1775.6
Asphalt Concrete Truck Enter Empty	Dump truck (16 CY)	17.0	0	17.0	3.1E+04	5.3E+05	300	0.057	1775.6
Total					4.7E+05	9.5E+06			2.7E+04

Average Vehicle Weight Per Trip	20.3	tons/trip
Average Miles Per Trip	0.057	miles/trip

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

	PM	PM10	PM2.5	
where k =	4.9	1.5	0.15	lb/mi = particle size multiplier (AP-42 Table 13.2.2-2 for Industrial Roads)
s =	4.8	4.8	4.8	% = mean % silt content of unpaved roads (AP-42 Table 13.2.2-3 Sand/Gravel Processing Plant Road)
a =	0.7	0.9	0.9	= constant (AP-42 Table 13.2.2-2)
W =	20.3	20.3	20.3	tons = average vehicle weight (provided by source)
b =	0.45	0.45	0.45	= constant (AP-42 Table 13.2.2-2)

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, $E_{ext} = E_f \cdot [(365 - P)/365]$

Mitigated Emission Factor, E_{ext}	$E_f \cdot [(365 - P)/365]$
where P =	125
	days of rain greater than or equal to 0.01 inches (see Fig. 13.2.2-1)

	PM	PM10	PM2.5	
Unmitigated Emission Factor, E_f	6.10	1.55	0.16	lb/mile
Mitigated Emission Factor, E_{ext}	4.01	1.02	0.10	lb/mile
Dust Control Efficiency =	50%	50%	50%	(pursuant to control measures outlined in fugitive dust control plan)

Process	Vehicle Type	Unmitigated PTE of PM (tons/yr)	Unmitigated PTE of PM10 (tons/yr)	Unmitigated PTE of PM2.5 (tons/yr)	Mitigated PTE of PM (tons/yr)	Mitigated PTE of PM10 (tons/yr)	Mitigated PTE of PM2.5 (tons/yr)	Controlled PTE of PM (tons/yr)	Controlled PTE of PM10 (tons/yr)	Controlled PTE of PM2.5 (tons/yr)
Aggregate/RAP Truck Enter Full	Dump truck (16 CY)	5.51	1.40	0.14	3.62	0.92	0.09	1.81	0.46	0.05
Aggregate/RAP Truck Leave Empty	Dump truck (16 CY)	5.51	1.40	0.14	3.62	0.92	0.09	1.81	0.46	0.05
Asphalt Cement/Binder Truck Enter Full	Tanker truck (6000 gal)	0.180	0.046	0.00	0.119	0.030	3.0E-03	0.059	0.015	1.5E-03
Asphalt Cement/Binder Truck Leave Empty	Tanker truck (6000 gal)	0.180	0.046	0.00	0.119	0.030	3.0E-03	0.059	0.015	1.5E-03
Fuel Oil Truck Enter Full	Tanker truck (6000 gal)	0.048	0.012	1.2E-03	0.032	0.008	8.1E-04	0.016	0.004	4.0E-04
Fuel Oil Truck Leave Empty	Tanker truck (6000 gal)	0.048	0.012	1.2E-03	0.032	0.008	8.1E-04	0.016	0.004	4.0E-04
Aggregate/RAP Loader Full	Front-end loader (3 CY)	29.38	7.49	0.75	19.32	4.92	0.49	9.66	2.46	0.25
Aggregate/RAP Loader Empty	Front-end loader (3 CY)	29.38	7.49	0.75	19.32	4.92	0.49	9.66	2.46	0.25
Asphalt Concrete Truck Leave Full	Dump truck (16 CY)	5.41	1.38	0.14	3.56	0.91	0.09	1.78	0.45	0.05
Asphalt Concrete Truck Enter Empty	Dump truck (16 CY)	5.41	1.38	0.14	3.56	0.91	0.09	1.78	0.45	0.05
Totals		81.05	20.66	2.07	53.29	13.58	1.36	26.65	6.79	0.68

Methodology

Maximum Material Handling Throughput = [Annual Asphalt Production Limitation (tons/yr)] * [1 - Percent Asphalt Cement/Binder (weight %)]
 Maximum Asphalt Cement/Binder Throughput = [Annual Asphalt Production Limitation (tons/yr)] * [Percent Asphalt Cement/Binder (weight %)]
 Maximum Weight of Vehicle and Load (tons/trip) = [Maximum Weight of Vehicle (tons/trip)] + [Maximum Weight of Load (tons/trip)]
 Maximum trips per year (trip/yr) = [Throughput (tons/yr)] / [Maximum Weight of Load (tons/trip)]
 Total Weight driven per year (ton/yr) = [Maximum Weight of Vehicle and Load (tons/trip)] * [Maximum trips per year (trip/yr)]
 Maximum one-way distance (mi/trip) = [Maximum one-way distance (feet/trip)] / [5280 ft/mile]
 Maximum one-way miles (miles/yr) = [Maximum trips per year (trip/yr)] * [Maximum one-way distance (mi/trip)]
 Average Vehicle Weight Per Trip (ton/trip) = SUM[Total Weight driven per year (ton/yr)] / SUM[Maximum trips per year (trip/yr)]
 Average Miles Per Trip (miles/trip) = SUM[Maximum one-way miles (miles/yr)] / SUM[Maximum trips per year (trip/yr)]
 Unmitigated PTE (tons/yr) = (Maximum one-way miles (miles/yr)) * (Unmitigated Emission Factor (lb/mile)) * (ton/2000 lbs)
 Mitigated PTE (tons/yr) = (Maximum one-way miles (miles/yr)) * (Mitigated Emission Factor (lb/mile)) * (ton/2000 lbs)
 Controlled PTE (tons/yr) = (Mitigated PTE (tons/yr)) * (1 - Dust Control Efficiency)

Abbreviations

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

ATSD Appendix A: Limited Emissions Calculations
Paved Roads

Company Name: Dave O'Mara Contractor, Inc.
Source Address: New Point Stone at 992 South County Road 800 East, Greensburg, Indiana
Permit Number: 031-28784-05047
Reviewer: Brian Williams

Paved Roads at Industrial Site

The following calculations determine the amount of emissions created by paved roads, based on 8,760 hours of use and AP-42, Ch 13.2.1 (12/2003).

Annual Asphalt Production Limitation	750,000	tons/yr
Percent Asphalt Cement/Binder (weight %)	5.0%	
Maximum Material Handling Throughput	712,500	tons/yr
Maximum Asphalt Cement/Binder Throughput	37,500	tons/yr
No. 2 Fuel Oil Limitation	2,626,479	gallons/yr

Process	Vehicle Type	Maximum Weight of Vehicle (tons)	Maximum Weight of Load (tons)	Maximum Weight of Vehicle and Load (tons/trip)	Maximum trips per year (trip/yr)	Total Weight driven per day (ton/yr)	Maximum one-way distance (feet/trip)	Maximum one-way distance (mi/trip)	Maximum one-way miles (miles/yr)
Aggregate/RAP Truck Enter Full	Dump truck (16 CY)	17.0	22.4	39.40	3.2E+04	1.3E+06	300	0.057	1807.3
Aggregate/RAP Truck Leave Empty	Dump truck (16 CY)	17.0	0	17.00	3.2E+04	5.4E+05	300	0.057	1807.3
Asphalt Cement/Binder Truck Enter Full	Tanker truck (6000 gal)	12.0	36.0	48.00	1.0E+03	5.0E+04	300	0.057	59.2
Asphalt Cement/Binder Truck Leave Empty	Tanker truck (6000 gal)	12.0	0	12.00	1.0E+03	1.3E+04	300	0.057	59.2
Fuel Oil Truck Enter Full	Tanker truck (6000 gal)	12.0	32.0	44.00	2.8E+02	1.2E+04	300	0.057	15.8
Fuel Oil Truck Leave Empty	Tanker truck (6000 gal)	12.0	0	12.00	2.8E+02	3.3E+03	300	0.057	15.8
Aggregate/RAP Loader Full	Front-end loader (3 CY)	15.0	4.2	19.20	1.7E+05	3.3E+06	300	0.057	9638.8
Aggregate/RAP Loader Empty	Front-end loader (3 CY)	15.0	0	15.00	1.7E+05	2.5E+06	300	0.057	9638.8
Asphalt Concrete Truck Leave Full	Dump truck (16 CY)	17.0	24.0	41.00	3.1E+04	1.3E+06	300	0.057	1775.6
Asphalt Concrete Truck Enter Empty	Dump truck (16 CY)	17.0	0	17.00	3.1E+04	5.3E+05	300	0.057	1775.6
Total					4.7E+05	9.5E+06			2.7E+04

Average Vehicle Weight Per Trip = 20.3 tons/trip
 Average Miles Per Trip = 0.057 miles/trip

Unmitigated Emission Factor, $E_f = [k * (sL/2)^{0.65} * (W/3)^{1.5} - C]$ (Equation 1 from AP-42 13.2.1)

	PM	PM10	PM2.5
where k =	0.082	0.016	0.0024
W =	20.3	20.3	20.3
C =	0.00047	0.00047	0.00038
sL =	0.6	0.6	0.6

lb/mi = particle size multiplier (AP-42 Table 13.2.1-1)

tons = average vehicle weight (provided by source)

lb/mi = emission factor for vehicle exhaust, brake wear, and tire wear (AP-42 Table 13.2.1-2)

g/m² = Ubiquitous Baseline Silt Loading Values of paved roads (Table 13.2.1-3 for summer months)

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, $E_{ext} = E_f * [1 - (p/4N)]$

Mitigated Emission Factor, $E_{ext} = E_f * [1 - (p/4N)]$

where p = 125 days of rain greater than or equal to 0.01 inches (see Fig. 13.2.1-2)

N = 365 days per year

	PM	PM10	PM2.5
Unmitigated Emission Factor, E_f =	0.66	0.13	0.02
Mitigated Emission Factor, E_{ext} =	0.60	0.12	0.02
Dust Control Efficiency =	50%	50%	50%

(pursuant to control measures outlined in fugitive dust control plan)

Process	Vehicle Type	Unmitigated PTE of PM (tons/yr)	Unmitigated PTE of PM10 (tons/yr)	Unmitigated PTE of PM2.5 (tons/yr)	Mitigated PTE of PM (tons/yr)	Mitigated PTE of PM10 (tons/yr)	Mitigated PTE of PM2.5 (tons/yr)	Controlled PTE of PM (tons/yr)	Controlled PTE of PM10 (tons/yr)	Controlled PTE of PM2.5 (tons/yr)
Aggregate/RAP Truck Enter Full	Dump truck (16 CY)	0.59	0.12	0.02	0.54	0.11	0.02	0.27	0.05	0.01
Aggregate/RAP Truck Leave Empty	Dump truck (16 CY)	0.59	0.12	0.02	0.54	0.11	0.02	0.27	0.05	0.01
Asphalt Cement/Binder Truck Enter Full	Tanker truck (6000 gal)	0.019	0.004	5.6E-04	0.018	0.003	5.1E-04	0.009	1.7E-03	2.6E-04
Asphalt Cement/Binder Truck Leave Empty	Tanker truck (6000 gal)	0.019	0.004	5.6E-04	0.018	0.003	5.1E-04	0.009	1.7E-03	2.6E-04
Fuel Oil Truck Enter Full	Tanker truck (6000 gal)	5.2E-03	1.0E-03	1.5E-04	4.7E-03	9.2E-04	1.4E-04	2.4E-03	4.6E-04	6.8E-05
Fuel Oil Truck Leave Empty	Tanker truck (6000 gal)	5.2E-03	1.0E-03	1.5E-04	4.7E-03	9.2E-04	1.4E-04	2.4E-03	4.6E-04	6.8E-05
Aggregate/RAP Loader Full	Front-end loader (3 CY)	3.17	0.62	0.09	2.90	0.56	0.08	1.45	0.28	0.04
Aggregate/RAP Loader Empty	Front-end loader (3 CY)	3.17	0.62	0.09	2.90	0.56	0.08	1.45	0.28	0.04
Asphalt Concrete Truck Leave Full	Dump truck (16 CY)	0.58	0.11	0.02	0.53	0.10	0.02	0.27	0.05	0.01
Asphalt Concrete Truck Enter Empty	Dump truck (16 CY)	0.58	0.11	0.02	0.53	0.10	0.02	0.27	0.05	0.01
Totals		8.75	1.70	0.25	8.00	1.56	0.23	4.00	0.78	0.11

Methodology

Maximum Material Handling Throughput = [Annual Asphalt Production Limitation (tons/yr)] * [1 - Percent Asphalt Cement/Binder (weight %)]
 Maximum Asphalt Cement/Binder Throughput = [Annual Asphalt Production Limitation (tons/yr)] * [Percent Asphalt Cement/Binder (weight %)]
 Maximum Weight of Vehicle and Load (tons/trip) = [Maximum Weight of Vehicle (tons/trip)] + [Maximum Weight of Load (tons/trip)]
 Maximum trips per year (trip/yr) = [Throughput (tons/yr)] / [Maximum Weight of Load (tons/trip)]
 Total Weight driven per year (ton/yr) = [Maximum Weight of Vehicle and Load (tons/trip)] * [Maximum trips per year (trip/yr)]
 Maximum one-way distance (mi/trip) = [Maximum one-way distance (feet/trip)] / [5280 ft/mile]
 Maximum one-way miles (miles/yr) = [Maximum trips per year (trip/yr)] * [Maximum one-way distance (mi/trip)]
 Average Vehicle Weight Per Trip (ton/trip) = SUM[Total Weight driven per year (ton/yr)] / SUM[Maximum trips per year (trip/yr)]
 Average Miles Per Trip (miles/trip) = SUM[Maximum one-way miles (miles/yr)] / SUM[Maximum trips per year (trip/yr)]
 Unmitigated PTE (tons/yr) = (Maximum one-way miles (miles/yr)) * (Unmitigated Emission Factor (lb/mile)) * (ton/2000 lbs)
 Mitigated PTE (tons/yr) = (Maximum one-way miles (miles/yr)) * (Mitigated Emission Factor (lb/mile)) * (ton/2000 lbs)
 Controlled PTE (tons/yr) = (Mitigated PTE (tons/yr)) * (1 - Dust Control Efficiency)

Abbreviations

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

**ATSD Appendix A: Limited Emissions Calculations
Cold Mix Asphalt Production and Stockpiles**

Company Name: Dave O'Mara Contractor, Inc.
Source Address: New Point Stone at 992 South County Road 800 East, Greensburg, Indiana
Permit Number: 031-28784-05047
Reviewer: Brian Williams

The following calculations determine the amount of VOC and HAP emissions created from volatilization of solvent used as diluent in the liquid binder for cold mix asphalt production

Cold Mix Asphalt VOC Usage Limitation = tons/yr

Volatile Organic Compounds

	Maximum weight % of VOC solvent in binder	Weight % VOC solvent in binder that evaporates	VOC Solvent Usage Limitation (tons/yr)	Limited PTE of VOC (tons/yr)	Liquid Binder Adjustment Ratio
Cut back asphalt rapid cure (assuming gasoline or naphtha solvent)	25.3%	95.0%	70.3	66.8	1.053
Cut back asphalt medium cure (assuming kerosene solvent)	28.6%	70.0%	95.5	66.8	1.429
Cut back asphalt slow cure (assuming fuel oil solvent)	20.0%	25.0%	267.3	66.8	4.000
Emulsified asphalt with solvent (assuming water, emulsifying agent, and 15% fuel oil solvent)	15.0%	46.4%	144.0	66.8	2.155
Other asphalt with solvent binder	25.9%	2.5%	2672.8	66.8	40.0
Worst Case Limited PTE of VOC =				66.8	

Hazardous Air Pollutants

Worst Case Total HAP Content of VOC solvent (weight %) =	26.08%
Worst Case Single HAP Content of VOC solvent (weight %) =	9.0% Xylenes
Limited PTE of Total HAPs (tons/yr) =	17.43
Limited PTE of Single HAP (tons/yr) =	6.01 Xylenes

Hazardous Air Pollutant (HAP) Content (% by weight) For Various Petroleum Solvents*

Volatile Organic HAP	CAS#	Hazardous Air Pollutant (HAP) Content (% by weight)* For Various Petroleum Solvents				
		Gasoline	Kerosene	Diesel (#2) Fuel Oil	No. 2 Fuel Oil	No. 6 Fuel Oil
1,3-Butadiene	106-99-0	3.70E-5%				
2,2,4-Trimethylpentane	540-84-1	2.40%				
Acenaphthene	83-32-9		4.70E-5%		1.80E-4%	
Acenaphthylene	208-96-8		4.50E-5%		6.00E-5%	
Anthracene	120-12-7		1.20E-6%	5.80E-5%	2.80E-5%	5.00E-5%
Benzene	71-43-2	1.90%		2.90E-4%		
Benzo(a)anthracene	56-55-3			9.60E-7%	4.50E-7%	5.50E-4%
Benzo(a)pyrene	50-32-8			2.20E-6%	2.10E-7%	4.40E-5%
Benzo(g,h,i)perylene	191-24-2			1.20E-7%	5.70E-8%	
Biphenyl	92-52-4			6.30E-4%	7.20E-5%	
Chrysene	218-01-9			4.50E-7%	1.40E-6%	6.90E-4%
Ethylbenzene	100-41-4	1.70%		0.07%	3.40E-4%	
Fluoranthene	206-44-0		7.10E-6%	5.90E-5%	1.40E-5%	2.40E-4%
Fluorene	86-73-7		4.20E-5%	8.60E-4%	1.90E-4%	
Indeno(1,2,3-cd)pyrene	193-39-5			1.60E-7%		1.00E-4%
Methyl-tert-butylether	1634-04-4	0.33%				
Naphthalene	91-20-3	0.25%	0.31%	0.26%	0.22%	4.20E-5%
n-Hexane	110-54-3	2.40%				
Phenanthrene	85-01-8		8.60E-6%	8.80E-4%	7.90E-4%	2.10E-4%
Pyrene	129-00-0		2.40E-6%	4.60E-5%	2.90E-5%	2.30E-5%
Toluene	108-88-3	8.10%		0.18%	6.20E-4%	
Total Xylenes	1330-20-7	9.00%		0.50%	0.23%	
Total Organic HAPs		26.08%	0.33%	1.29%	0.68%	0.19%
Worst Single HAP		9.00%	0.31%	0.50%	0.23%	0.07%
		Xylenes	Naphthalene	Xylenes	Xylenes	Chrysene

Methodology

Limited PTE of VOC (tons/yr) = [Weight % VOC solvent in binder that evaporates] * [VOC Solvent Usage Limitation (tons/yr)]
 Limited PTE of Total HAPs (tons/yr) = [Worst Case Total HAP Content of VOC solvent (weight %)] * [Worst Case Limited PTE of VOC (tons/yr)]
 Limited PTE of Single HAP (tons/yr) = [Worst Case Single HAP Content of VOC solvent (weight %)] * [Worst Case Limited PTE of VOC (tons/yr)]
 *Source: Petroleum Liquids. Potter, T.L. and K.E. Simmons. 1998. Total Petroleum Hydrocarbon Criteria Working Group Series, Volume 2. Composition of Petroleum Mixtures. The Association for Environmental Health and Science. Available on the Internet at: <http://www.aehs.com/publications/catalog/contents/tp.htm>

Abbreviations

VOC = Volatile Organic Compounds
 PTE = Potential to Emit

**ATSD Appendix A: Limited Emissions Calculations
Gasoline Fuel Transfer and Dispensing Operation**

Company Name: Dave O'Mara Contractor, Inc.
Source Address: New Point Stone at 992 South County Road 800 East, Greensburg, Indiana
Permit Number: 031-28784-05047
Reviewer: Brian Williams

Note: Since the emissions from the gasoline fuel transfer and dispensing operation are minimal, the limited emissions are equal to the unlimited emissions.

To calculate evaporative emissions from the gasoline dispensing fuel transfer and dispensing operation handling emission factors from AP-42 Table 5.2-7 were used. The total potential emission of VOC is as follows:

$$\begin{aligned} \text{Gasoline Throughput} &= 0 \text{ gallons/day} \\ &= 0.0 \text{ kgal/yr} \end{aligned}$$

Volatile Organic Compounds

Emission Source	Emission Factor (lb/kgal of throughput)	PTE of VOC (tons/yr)*
Filling storage tank (balanced submerged filling)	0.3	0.00
Tank breathing and emptying	1.0	0.00
Vehicle refueling (displaced losses - controlled)	1.1	0.00
Spillage	0.7	0.00
Total		0.00

Hazardous Air Pollutants

Worst Case Total HAP Content of VOC solvent (weight %)* =	26.08%	
Worst Case Single HAP Content of VOC solvent (weight %)* =	9.0%	Xylenes
Limited PTE of Total HAPs (tons/yr) =	0.00	
Limited PTE of Single HAP (tons/yr) =	0.00	Xylenes

Methodology

The gasoline throughput was provided by the source.

Gasoline Throughput (kgal/yr) = [Gasoline Throughput (lbs/day)] * [365 days/yr] * [kgal/1000 gal]

PTE of VOC (tons/yr) = [Gasoline Throughput (kgal/yr)] * [Emission Factor (lb/kgal)] * [ton/2000 lb]

PTE of Total HAPs (tons/yr) = [Worst Case Total HAP Content of VOC solvent (weight %)] * [PTE of VOC (tons/yr)]

PTE of Single HAP (tons/yr) = [Worst Case Single HAP Content of VOC solvent (weight %)] * [PTE of VOC (tons/yr)]

*Source: Petroleum Liquids. Potter, T.L. and K.E. Simmons. 1998. Total Petroleum Hydrocarbon Criteria Working Group Series, Volume 2.

Composition of Petroleum Mixtures. The Association for Environmental Health and Science. Available on the Internet at:

<http://www.aehs.com/publications/catalog/contents/tph.htm>

Abbreviations

VOC = Volatile Organic Compounds

PTE = Potential to Emit

Indiana Department of Environmental Management Office of Air Quality

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

Source Description and Location

Source Name:	Dave O'Mara Contractor, Inc.
Source Location:	Portable
Current Location:	New Point Stone at 992 South County Road 800 East, Greensburg, Indiana
County:	Decatur
SIC Code:	2951
Operation Permit No.:	F 031-25342-05047
Operation Permit Issuance Date:	February 20, 2009
Significant Permit Revision No.:	031-28784-05047
Permit Reviewer:	Brian Williams

On November 17, 2009, the Office of Air Quality (OAQ) received an application from Dave O'Mara Contractor, Inc. related to a modification to an existing portable hot drum-mix asphalt plant.

Existing Approvals

The source was issued FESOP Renewal No. 031-25342-05047 on February 20, 2009.

County Attainment Status

The source is located in Decatur County.

Pollutant	Designation
SO ₂	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O ₃	Unclassifiable or attainment effective June 15, 2004, for the 8-hour ozone standard. ¹
PM ₁₀	Unclassifiable effective November 15, 1990.
NO ₂	Cannot be classified or better than national standards.
Pb	Not designated.
¹ Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005. Unclassifiable or attainment effective April 5, 2005, for PM2.5.	

- (a) **Ozone Standards**
 Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to ozone. Decatur County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (b) **PM2.5**
 Decatur County has been classified as attainment for PM2.5. On May 8, 2008 U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for PM2.5

emissions, and the effective date of these rules was July 15, 2008. Indiana has three years from the publication of these rules to revise its PSD rules, 326 IAC 2-2, to include those requirements. The May 8, 2008 rule revisions require IDEM to regulate PM10 emissions as a surrogate for PM2.5 emissions until 326 IAC 2-2 is revised.

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

Fugitive Emissions

This type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2, 326 IAC 2-3, or 326 IAC 2-7, however, there is an applicable New Source Performance Standard that was in effect on August 7, 1980, therefore fugitive emissions are counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

Status of the Existing Source

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

Process/ Emission Unit	Potential To Emit of the Entire Source Prior to Revision (tons/year)								
	PM	PM10	PM2.5	SO ₂	NO _x	VOC	CO	Total HAPs	Worst Single HAP
Dryer/Mixer	190.0	80.0	80.0	29.0	27.5	24.5	95.0	4.41	1.55 formaldehyde
Asphalt Load-Out, Silo Filling, On-Site Yard	0.55	0.55	0.55	0	0	8.57	1.44	0.14	0.04 formaldehyde
Hot Oil and Asphalt Heaters	0	0	0	0	0	6.9E-04	0.03	6.9E-04	4.4E-04 naphthalene
Material Storage Piles	1.60	0.56	0.56	0	0	0	0	0	0
Material Processing and Handling	3.23	1.53	1.53	0	0	0	0	0	0
Material Crushing, Screening, and Conveying	15.87	5.80	5.80	0	0	0	0	0	0
Paved and Unpaved Roads (worst case)	35.52	9.05	9.05	0	0	0	0	0	0
Cold Mix Asphalt Production	0	0	0	0	0	60.0	0	15.65	5.40 xylenes
Total PTE of Entire Source	246.77	97.49	97.49	29.0	27.5	93.07	96.5	20.2	5.4 xylenes
Title V Major Source Thresholds	NA	100	100	100	100	100	100	25	10
PSD Major Source Thresholds	250	250	250	250	250	250	250	NA	NA
Emission Offset/ Nonattainment NSR Major Source Thresholds	NA	NA	NA	NA	100	NA	NA	NA	NA

Process/ Emission Unit	Potential To Emit of the Entire Source Prior to Revision (tons/year)								
	PM	PM10	PM2.5	SO ₂	NOx	VOC	CO	Total HAPs	Worst Single HAP
negl. = negligible These emissions are based upon TSD to FESOP Renewal No. 031-25342-05047.									

- (a) This existing source is not a major stationary source, under PSD (326 IAC 2-2), because no attainment 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) This existing source is not a major source of HAPs, as defined in 40 CFR 63.41, because the Permittee has accepted limits on HAPs emissions to less than ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year of a combination of HAPs. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA).

Description of Proposed Revision

The Office of Air Quality (OAQ) has reviewed an application, submitted by Dave O'Mara Contractor, Inc. on November 17, 2009, relating to the existing sulfur content limits for No. 2 and No. 4 fuel oils used in the dryer/mixer burner. The source has requested to revise Condition D.1.3 (Sulfur Dioxide 326 IAC 7-1.1-1) to remove the requirement to limit the No. 2 and No. 4 fuel oil sulfur content to 0.05% and 0.41%. This condition inappropriately combines FESOP limits with the 326 IAC 7-1.1-2 sulfur dioxide rules. In addition, the source has requested that the No. 2 and No. 4 fuel oil sulfur content limits established in Condition D.1.4 be increased and with compliance determined on a calendar month average. The source also requested to revise the existing PM10, PM2.5, and cold mix asphalt limits. Finally, the source requested the ability to process steel slag in the dryer/mixer.

Since the source has the ability to use multiple fuels the existing fuel usage limits should have included fuel equivalencies or an equation to determine the equivalent SO₂ emissions when combusting multiple fuels. Therefore, the source has requested fixed fuel usage limits when combusting a single fuel. When the source combusts multiple fuels an equation will be used to determine SO₂ emissions.

Enforcement Issues

There are no pending enforcement actions related to this revision.

Emission Calculations

See Appendix A of this TSD for detailed emission calculations.

Permit Level Determination – FESOP Revision

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

Process/ Emission Unit	PTE of Proposed Revision (tons/year)								
	PM	PM10*	PM2.5	SO ₂	NOx	VOC	CO	Total HAPs	Worst Single HAP
Dryer Fuel Combustion (worst case)	0	0	0	68.34	0	0	0	0	0
Dryer/Mixer Slag Processing	0	0	0	1.38	0	0	0	0	0

Process/ Emission Unit	PTE of Proposed Revision (tons/year)								
	PM	PM10*	PM2.5	SO ₂	NOx	VOC	CO	Total HAPs	Worst Single HAP
Total PTE of Proposed Revision	0	0	0	69.72	0	0	0	0	0
negl. = negligible * Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant".									

This FESOP is being revised through a FESOP Significant Permit Revision pursuant to 326 IAC 2-8-11.1(f)(1)(E)(ii), because the revision involves a modification with potential to emit (PTE) greater than 25 tons per year. In addition, this FESOP is being revised through a FESOP Significant Permit Revision pursuant to 326 IAC 2-8-11.1(g)(2) because it involves adjustment to the existing source-wide emissions limitations to maintain the FESOP status of the source (see PTE of the Entire Source After The Issuance of the FESOP Revision Section).

PTE of the Entire Source After Issuance of the FESOP Revision

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

Process/ Emission Unit	Potential To Emit of the Entire Source to accommodate the Proposed Revision (tons/year)								
	PM	PM10 ¹	PM2.5	SO ₂	NOx	VOC	CO	Total HAPs	Worst Single HAP
Ducted Emissions									
Fuel Combustion (worst case)	2.72	4.33	4.33	93.24	31.55	1.74	26.5	0.70	0.57 Hexane
Dryer/Mixer (Process)	190.0	80.0 77.5	80.0 86.5	29.0	27.5	24.5	95.0	4.41 5.33	1.55 Formaldehyde
Dryer/Mixer Slag Processing	0	0	0	0.05	0	0	0	0	0
Hot Oil Heaters Fuel Combustion	0.05	0.09	0.09	1.66	0.52	0.01	0.13	0.002	0.002 Hexane
Worst Case Emissions	190.05	80.0 77.59	80.0 86.59	29.0 95.13	27.5 32.07	24.51	95.0 95.13	4.41 5.33	1.55 Formaldehyde
Fugitive Emissions									
Asphalt Load-Out, Silo Filling, On-Site Yard	0.55	0.55	0.55	0	0	8.57	1.44	0.14	0.04 Formaldehyde
Hot Oil and Asphalt Heaters	0	0	0	0	0	6.0E-04	0.03	6.0E-04	4.4E-04 Naphthalene
Material Storage Piles	1.60	0.56	0.56	0	0	0	0	0	0
Material Processing and Handling	3.23	1.53	4.53 0.23	0	0	0	0	0	0
Material Crushing, Screening, and Conveying	15.87	5.80	5.80	0	0	0	0	0	0
Paved and Unpaved Roads (worst case)	35.52	9.05	9.05 0.91	0	0	0	0	0	0
Cold Mix Asphalt Production	0	0	0	0	0	60.0 66.82	0	15.65 17.43	5.40 6.01 Xylenes
Volatile Organic Liquid Storage Vessels	0	0	0	0	0	negl.	0	negl.	negl.
Total Fugitive Emissions	56.77 56.76	17.49	17.49 8.05	0	0	68.57 75.39	1.47 1.44	15.79 17.57	5.40 6.01 Xylenes
Total PTE of Entire Source	246.77 246.82	97.49 95.07	97.49 94.63	29.0 95.13	40.0 32.07	93.07 99.89	96.47 94.57	20.20 22.90	5.40 6.01 Xylenes
Title V Major Source Thresholds	NA	100	100	100	100	100	100	25	10
PSD Major Source Thresholds	250	250	250	250	250	250	250	NA	NA
Emission Offset/ Nonattainment NSR Major Source Thresholds	NA	NA	NA	NA	NA	NA	NA	NA	NA
negl. = negligible ¹ Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant".									

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

Process/ Emission Unit	Potential To Emit of the Entire Source After Issuance of Revision (tons/year)								
	PM	PM10 ¹	PM2.5	SO ₂	NO _x	VOC	CO	Total HAPs	Worst Single HAP
Ducted Emissions									
Fuel Combustion (worst case)	2.72	4.33	4.33	93.24	31.55	1.74	26.5	0.70	0.57 Hexane
Dryer/Mixer (Process)	190.0	77.5	86.5	29.0	27.5	24.5	95.0	5.33	1.55 Formaldehyde
Dryer/Mixer Slag Processing	0	0	0	0.05	0	0	0	0	0
Hot Oil Heaters Fuel Combustion	0.05	0.09	0.09	1.66	0.52	0.01	0.13	0.002	0.002 Hexane
Worst Case Emissions	190.05	77.59	86.59	95.13	32.07	24.51	95.13	5.33	1.55 Formaldehyde
Fugitive Emissions									
Asphalt Load-Out, Silo Filling, On-Site Yard	0.55	0.55	0.55	0	0	8.57	1.44	0.14	0.04 Formaldehyde
Material Storage Piles	1.60	0.56	0.56	0	0	0	0	0	0
Material Processing and Handling	3.23	1.53	0.23	0	0	0	0	0	0
Material Crushing, Screening, and Conveying	15.87	5.80	5.80	0	0	0	0	0	0
Paved and Unpaved Roads (worst case)	35.52	9.05	0.91	0	0	0	0	0	0
Cold Mix Asphalt Production	0	0	0	0	0	66.82	0	17.43	6.01 Xylenes
Volatile Organic Liquid Storage Vessels	0	0	0	0	0	negl.	0	negl.	negl.
Total Fugitive Emissions	56.76	17.49	8.05	0	0	75.39	1.44	17.57	6.01 Xylenes
Total PTE of Entire Source	246.82	95.07	94.63	95.13	32.07	99.89	96.57	22.90	6.01 Xylenes
Title V Major Source Thresholds	NA	100	100	100	100	100	100	25	10
PSD Major Source Thresholds	250	250	250	250	250	250	250	NA	NA
Emission Offset/ Nonattainment NSR Major Source Thresholds	NA	NA	NA	NA	NA	NA	NA	NA	NA
negl. = negligible ¹ Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant".									

(a) FESOP Status

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

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

- (1) Pursuant to 326 IAC 2-8-4, the PM10, PM2.5, and CO, emissions from the dryer/mixer shall be limited as follows:
 - (A) The asphalt production rate shall not exceed 1,000,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
 - (B) PM10 emissions from the dryer/mixer shall not exceed 0.155 pounds per ton of asphalt produced.
 - (C) PM2.5 emissions from the dryer/mixer shall not exceed 0.173 pounds per ton of asphalt produced.
 - (D) CO emissions from the dryer/mixer shall not exceed 0.19 pounds per ton of asphalt produced.

This revision did not require any adjustment to the existing asphalt production limit or CO emission limit. However, due to this revision, the existing PM10 emission limit has been revised and a new PM2.5 emission limit has been included.

- (2) Pursuant to 326 IAC 2-8-4, the SO2 emissions from the dryer/mixer shall be limited as follows:
 - (A) Steel slag usage shall not exceed 75,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
 - (B) Slag and Fuel Specifications
 - (i) SO2 emissions from the usage of steel slag in the dryer/mixer shall not exceed 0.0014 pounds of SO2 per ton of steel slag processed.
 - (ii) The sulfur content of the steel slag shall not exceed 0.66 percent by weight.
 - (i) When combusting No. 2 fuel oil in the dryer/mixer burner the calendar month average sulfur content of the No. 2 fuel oil shall not exceed 0.5 percent by weight, with compliance determined at the end of each month.
 - (ii) When combusting No. 4 fuel oil in the dryer/mixer burner the calendar month average sulfur content of the No. 4 fuel oil shall not exceed 1.60 percent by weight, with compliance determined at the end of each month.
 - (C) Single Fuel Usage Limitations

When combusting only one type of fuel per twelve (12) consecutive month period in the dryer/mixer burner the usage of fuel shall be limited as follows:

 - (i) Natural gas usage shall not exceed 631 million cubic feet per twelve (12)

consecutive month period, with compliance determined at the end of each month.

- (ii) No. 2 fuel oil usage shall not exceed 2,626,479 gallons per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (iii) No. 4 fuel oil usage shall not exceed 777,000 gallons per twelve (12) consecutive month period, with compliance determined at the end of each month.

(D) Multiple Fuel Usage Limitations

When combusting more than one fuel per twelve (12) consecutive month period in the dryer/mixer burner, emissions from the dryer/mixer burner shall be limited as follows:

- (i) SO₂ emissions from the dryer/mixer shall not exceed 93.24 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

Due to this revision, the existing No. 2 and No. 4 fuel oil sulfur content and usage limits have been revised. In addition, new slag usage, SO₂ emission, and slag sulfur content limits have been included.

(3) Pursuant to 326 IAC 2-8-4, the VOC emissions from cold mix asphalt production shall be limited as follows:

- (A) VOC emissions from the sum of the binders shall not exceed 66.82 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

(B) Liquid binder used in the production of cold mix asphalt shall be defined as follows:

- (i) Cut back asphalt rapid cure, containing a maximum of 25.3% by weight of VOC solvent in the liquid binder and 95% by weight of VOC solvent evaporating.
- (ii) Cut back asphalt medium cure, containing a maximum of 28.6% by weight of VOC solvent in the liquid binder and 70% by weight of VOC solvent evaporating.
- (iii) Cut back asphalt slow cure, containing a maximum of 20% by weight of VOC solvent in the liquid binder and 25% by weight of VOC solvent evaporating.
- (iv) Emulsified asphalt with solvent, containing a maximum of 15% by weight of VOC solvent in the liquid binder and 46.4% by weight of VOC solvent evaporating. The percent oil distillate in emulsified asphalt with solvent liquid, as determined by ASTM, must be 7% or less of the total emulsion by volume
- (v) Other asphalt with solvent binder, containing a maximum of 25.9% by weight of VOC solvent in the liquid binder and 2.5% by weight of VOC solvent evaporating.

- (C) The liquid binder used in the production of cold mix asphalt shall be limited as follows:
- (i) The amount of VOC solvent used in rapid cure cut back asphalt shall not exceed 70.3 tons per twelve (12) consecutive month period with compliance determined at the end of each month.
 - (ii) The amount of VOC solvent used in medium cure cut back asphalt shall not exceed 95.5 tons per twelve (12) consecutive month period with compliance determined at the end of each month.
 - (iii) The amount of VOC solvent used in slow cure cut back asphalt shall not exceed 267.3 tons per twelve (12) consecutive month period with compliance determined at the end of each month.
 - (iv) The amount of VOC solvent used in emulsified asphalt shall not exceed 144.0 tons per twelve (12) consecutive month period with compliance determined at the end of each month.
 - (v) The amount of VOC solvent used in all other asphalt shall not exceed 2672.8 tons per twelve (12) consecutive month period with compliance determined at the end of each month.
 - (vi) The VOC solvent allotments in (i) through (v) above shall be adjusted when more than one type of binder is used per twelve (12) consecutive month period with compliance determined at the end of each month. In order to determine the tons of VOC emitted per each type of binder, use the following formula and divide the tons of VOC solvent used for each type of binder by the corresponding adjustment factor listed in the table that follows.

$$\text{VOC Emitted} = \frac{\text{VOC solvent used for each binder (tons/yr)}}{\text{Adjustment factor}}$$

Type of Liquid Binder	Adjustment Factor
Cutback Asphalt Rapid Cure	1.053
Cutback Asphalt Medium Cure	1.429
Cutback Asphalt Slow Cure	4.0
Emulsified Asphalt with Liquid Binder	2.155
Other Asphalt with Liquid Binder	40.0

Due to this revision, the existing cold mix asphalt usage limits have been increased.

When combined with the potential to emit PM10, PM2.5, SO2, NOx, VOC, CO, and HAPs from all other emission units at this source, compliance with these limits shall limit the source-wide total potential to emit of PM10, PM2.5, SO2, NOx, VOC, and CO to less than 100 tons per twelve (12) consecutive month period, each, any single HAP to less than ten (10) tons per twelve (12) consecutive month period, and total HAPs to less than twenty-five (25) tons per twelve (12) consecutive month period and shall render 326 IAC 2-7 (Part 70 Permits), 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)), and 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP) not applicable.

- (b) PSD Minor Source
This modification to an existing PSD minor stationary source will not change the PSD minor status, because the potential to emit of all attainment regulated pollutants from the entire source will continue to be less than the PSD major source threshold levels. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

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

- (1) The asphalt production rate shall not exceed 1,000,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (2) PM emissions from the dryer/mixer shall not exceed 0.38 pounds per ton of asphalt produced.

This revision did not require any adjustment to the existing asphalt production limit or PM emission limit.

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

Federal Rule Applicability Determination

New Source Performance Standards (NSPS)

- (a) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included for this proposed revision.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

- (a) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included for this proposed revision.

Compliance Assurance Monitoring (CAM)

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

State Rule Applicability Determination

The following state rules are applicable to the proposed revision:

- (a) 326 IAC 2-8-4 (FESOP)
This revision to an existing Title V minor stationary source will not change the minor status, because the potential to emit criteria pollutants from the entire source will still be limited to less than the Title V major source threshold levels. Therefore, the source will still be subject to the provisions of 326 IAC 2-8 (FESOP). See PTE of the Entire Source After Issuance of the FESOP Revision Section above.
- (b) 326 IAC 2-2 (Prevention of Significant Deterioration(PSD))
This modification to an existing PSD minor stationary source will not change the PSD minor

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

- (c) 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
The proposed revision is not subject to the requirements of 326 IAC 2-4.1, since the unlimited potential to emit of HAPs from the dryer/mixer is less than ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year of a combination of HAPs.
- (d) 326 IAC 2-6 (Emission Reporting)
Pursuant to 326 IAC 2-6-1, this source is not subject to this rule, because it is not required to have an operating permit under 326 IAC 2-7 (Part 70), it is not located in Lake, Porter, or LaPorte County, and it does not emit lead into the ambient air at levels equal to or greater than 5 tons per year. Therefore, 326 IAC 2-6 does not apply.
- (e) 326 IAC 5-1 (Opacity Limitations)
Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:
 - (1) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
 - (2) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.
- (f) 326 IAC 6-4 (Fugitive Dust Emissions Limitations)
Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions Limitations), the source shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4.
- (g) 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)
Pursuant to 326 IAC 6-5, fugitive particulate matter emissions shall be controlled according to the Fugitive Dust Control Plan, which is included as Attachment A to the permit.

Asphalt Plant

- (a) 326 IAC 7-1.1-2 (Sulfur Dioxide (SO₂) Emission Limitations)
Pursuant to 326 IAC 7-1.1-1, the dryer/mixer is subject to the requirements of 326 IAC 7-1.1-2, because it has potential sulfur dioxide emissions greater than twenty-five (25) tons per year. Pursuant to 7-1.1-2, sulfur dioxide emissions from the dryer/mixer shall not exceed five-tenths (0.5) pound per MMBtu for distillate oil combustion and one and six-tenths (1.6) pounds per MMBtu for residual oil combustion. Note: No. 2 fuel oil is distillate oil and No. 4 fuel oil is residual oil.
- (b) 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)
The unlimited VOC potential emissions from the dryer/mixer are greater than twenty-five (25) tons per year. However, the source shall limit the VOC potential emissions from the dryer/mixer to less than twenty-five (25) tons per year. Therefore, the requirements of 326 IAC 8-1-6 do not apply.

In order to render the requirements of 326 IAC 8-1-6 not applicable, the dryer/mixer shall be limited as follows:

- (1) The asphalt production rate shall not exceed 1,000,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month.
- (2) VOC emissions from the dryer/mixer shall not exceed 0.049 pounds per ton of asphalt produced.

Compliance with these limits shall limit the potential to emit VOC from the dryer/mixer to less than twenty-five (25) tons per twelve (12) consecutive month period and shall render 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities) not applicable.

The source shall continue to comply with the existing applicable requirements and permit conditions as contained in FESOP Renewal No. 031-25342-05047, issued on February 20, 2009.

Compliance Determination, Monitoring and Testing Requirements
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- (a) The existing compliance requirements will not change because of this revision. The source shall continue to comply with the applicable requirements and permit conditions as contained in FESOP Renewal No. 031-25342-05047, issued on February 20, 2009.
- (b) The testing requirements applicable to this proposed revision are as follows:

Testing Requirements				
Emission Unit	Control Device	Pollutant	Timeframe for Testing	Frequency of Testing
Dryer/Mixer	Baghouse	PM	At least once every five (5) years from the date of the most recent valid compliance determination ¹	Once every five (5) years
		PM10		
		PM2.5		

- (1) The Permittee shall perform PM10 and PM2.5 testing on the dryer/mixer not later than 180 days after final promulgation of the new or revised condensable PM test method(s) referenced in the U.S. EPA's Final Rule for Implementation of the New Source Review (NSR) Program for Particulate Matter Less Than 2.5 Micrometers (PM2.5), signed on May 8th, 2008 or no later than five (5) years after the date of the most recent valid compliance demonstration, whichever is later. These tests shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration. This testing shall be conducted utilizing methods as approved by the Commissioner. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition. PM10 and PM2.5 includes filterable and condensable PM.
- (2) The Permittee shall perform PM testing of the dryer/mixer at least once every five (5) years from the date of the most recent valid compliance demonstration, utilizing methods approved by the Commissioner. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

The existing testing requirements have been revised to include PM2.5 testing and to clarify the testing timeframe. The most recent valid compliance demonstration was performed by the source on June 27, 2007.

Proposed Changes

- (a) The following changes listed below are due to the proposed revision. Deleted language appears as ~~strikethrough~~ text and new language appears as **bold** text:
- (1) The source requested that the emission unit description found in Sections A.2 and D.1 for the existing dryer/mixer be revised to indicate that it has a nominal capacity of 300 tons per hour and to clarify that the dryer does not primarily burn No. 2 fuel oil. In addition, IDEM has revised the dryer/mixer emission unit description to indicate that this source processes steel slag.
 - (2) The source requested that Condition B.13 - Prior Permits Superseded by revised to correct the permit number in Condition B.13(a). In addition, Condition B.13(b) should explicitly reference the permit number instead of referring to it as "this permit".
 - (3) The annual asphalt throughput limit and PM and PM10 emission limit language in Conditions D.1.1 and D.1.2 have been revised to provide clarity and consistency throughout the permit. In addition, the existing PM10 emission limit has been increased.
 - (4) Condition D.1.2 has been revised to include an emission limit for PM2.5. In addition, the existing CO and VOC emission limits found in original Conditions D.1.5 and D.1.6 have been incorporated into Condition D.1.2.
 - (5) Condition D.1.3 (original Condition D.1.4 Sulfur Dioxide) has been revised as follows:
 - (i) Since this source processes steel slag, a usage, SO₂ emission, and sulfur content limits have been included. In addition, a new FESOP Quarterly Reporting form has been included to allow the source to record steel slag usage.
 - (ii) The existing No. 2 and No. 4 fuel oil sulfur content limits have been increased and compliance with these limits will be determined on a calendar month average.
 - (iii) The source has the ability to use multiple fuels, but the existing fuel usage limits do not include fuel equivalencies or an equation to determine the equivalent SO₂ emissions when combusting multiple fuels. Therefore, the source has requested fixed fuel usage limits when combusting a single fuel. When the source combusts multiple fuels an equation will be used to determine SO₂ emissions. A new compliance determination condition will be included in the permit. In addition, the existing No. 2 and No. 4 fuel usage limits have been increased when the source combusts only one fuel. Finally, new FESOP Quarterly Reporting forms have been included to allow the source to record the fuel usage.
 - (6) Conditions D.1.4 and D.1.8 (original Conditions D.1.3 Sulfur Dioxide and D.1.10 Sulfur Dioxide Emissions and Sulfur Content) have been updated to include updated language that more accurately reflects the respective rules referenced in the condition. In addition, the sulfur content limits have been removed since Condition D.1.4 is in reference to 326 IAC 7-1.1-1. Finally, new requirements have been included to address sulfur dioxide emissions from steel slag.
 - (7) Condition D.1.6 (Original Condition D.1.8 - Particulate Matter) has been updated to clarify that the source must operate the drum mix dryer/burner baghouse at all times the drum mix dryer/burner is in operation in order to comply with the PM, PM10, and PM2.5 emission limits found in Conditions D.1.1 and D.1.2.

- (8) The existing testing requirements (original Condition D.1.9) have been revised to include new PM10 and PM2.5 requirements and to clarify when the testing timeline.
- (9) To prevent confusion the source has requested that the condition titles be included when referencing a condition in the compliance determination, record keeping, and reporting requirement sections of the permit.
- (10) Conditions D.1.13 and D.1.14 (Original Conditions D.1.14 and D.1.15 Record Keeping and Reporting Requirements) have been revised to include new recordkeeping and reporting requirements. In addition, the existing recordkeeping requirements have been updated.
- (11) The existing cold mix asphalt limits in Conditions D.2.1 and D.2.2 have been increased. In addition, the FESOP Quarterly Reports have been updated to reflect the increase to the cold mix asphalt limits.
- (12) In order to remain consistent with Condition B.12 - Emergency Provisions, the source has requested that the Emergency Occurrence Report be updated to indicate that the source must notify the Office of Air Quality no later than four daytime business hours.

...

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

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

- (a) ~~One~~ **One** (1) portable asphalt drum-mix plant, constructed in 1998, with a ~~maximum~~ **nominal** capacity of 300 tons per hour, equipped with one (1) ~~#2 fuel oil fired~~ aggregate dryer burner with a maximum rated capacity of 72 million British thermal units (MMBtu) per hour, using natural gas, **No. 2 fuel oil**, or **residual** No. 4 fuel oil ~~as back-up fuels~~, **processing steel slag**, and **using** one (1) pulse jet baghouse for particulate control, exhausting at one (1) stack, identified as #1. **This source does not process blast furnace slag;**

...

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

- (a) All terms and conditions of permits established prior to ~~F055031-25342-05047~~ and issued pursuant to permitting programs approved into the state implementation plan have been either:
 - (b) All previous registrations and permits are superseded by ~~this permit~~ **F031-25342-05047**.

...

SECTION D.1 FACILITY OPERATION CONDITIONS

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

- (a) ~~One~~ **One** (1) portable asphalt drum-mix plant, constructed in 1998, with a ~~maximum~~ **nominal** capacity of 300 tons per hour, equipped with one (1) ~~#2 fuel oil fired~~ aggregate dryer burner with a maximum rated capacity of 72 million British thermal units (MMBtu) per hour, using natural gas, **No. 2 fuel oil**, or **residual** No. 4 fuel oil ~~as back-up fuels~~, **processing steel slag**, and **using** one (1) pulse jet baghouse for particulate control, exhausting at one (1) stack, identified as #1. **This source does not process blast furnace slag;**

...

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

- ~~(a) The amount of asphalt processed shall not exceed one million (1,000,000) tons per twelve (12) consecutive month period, and~~
- (a) The asphalt production rate shall not exceed 1,000,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.**
- ~~(b) PM emissions from the dryer/mixer shall be less than not exceed thirty-eight hundredths (0.380) pounds per one (1) ton of asphalt produced.~~

~~Compliance with these requirements will limit PM to less than two hundred fifty (250) tons per year and render 326 IAC 2-2 not applicable.~~

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

~~D.1.2 Particulate Matter 10 Microns (PM₁₀) [326 IAC 2-8-4][326 IAC 2-2]~~

~~Pursuant to 326 IAC 2-8-4, PM₁₀ emissions from the aggregate mixing and drying operation shall not exceed 0.068 pound of PM₁₀ per ton of asphalt mix produced based on a maximum asphalt throughput of 300 tons per hour. This will limit PM₁₀ emissions from the aggregate mixing and drying operations to less than eighty (80) tons per year and source-wide PM₁₀ emissions to less than 100 tons per year. Compliance with this limit will satisfy 326 IAC 2-8-4. Therefore, 326 IAC 2-7 and 326 IAC 2-2 will not apply.~~

D.1.2 FESOP Limits [326 IAC 2-8-4] [326 IAC 2-2] [326 IAC 8-1-6]

Pursuant to 326 IAC 2-8-4, the Permittee shall comply with the following:

- (a) The asphalt production rate shall not exceed 1,000,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.**
- (b) PM10 emissions from the dryer/mixer shall not exceed 0.155 pounds per ton of asphalt produced.**
- (c) PM2.5 emissions from the dryer/mixer shall not exceed 0.173 pounds per ton of asphalt produced.**
- (d) CO emissions from the dryer/mixer shall not exceed 0.19 pounds per ton of asphalt produced.**
- (e) VOC emissions from the dryer/mixer shall not exceed 0.049 pounds per ton of asphalt produced.**

When combined with the limited potential to emit PM10, PM2.5, CO, and VOC from all other emission units at this source, compliance with these limits shall limit the source-wide total potential to emit of PM10, PM2.5, CO, and VOC to less than 100 tons per 12 consecutive month period, each, and shall render 326 IAC 2-7 (Part 70 Permit Program) and 326 IAC 2-2 (PSD) not applicable.

In addition, compliance with these limits shall limit the VOC emissions from the dryer/mixer to less than twenty-five (25) tons per twelve (12) consecutive month period and shall render 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities) not applicable.

~~D.1.3 Sulfur Dioxide (SO₂) [326 IAC 7-1.1-1][326 IAC 7-2-1]~~

- ~~(a) Pursuant to 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations), sulfur dioxide emissions from the 72.0 million Btu per hour burner for the aggregate dryer shall be limited to 0.5 pounds per million Btu heat input or a sulfur content of less than or equal to 0.05% when using distillate oil.~~
- ~~(b) Pursuant to 326 IAC 7-1.1, sulfur dioxide emissions from the 72.0 million Btu per hour burner for the aggregate dryer shall be limited to 1.6 pounds per million Btu heat input or a sulfur content of less than or equal to 0.41% when using No. 4 residual fuel oil.~~

D.1.43 Sulfur Dioxide (SO₂) Limits [326 IAC 2-8-4][326 IAC 2-2]

- ~~(a) The use of No. 2 fuel oil shall be limited to less than 2,800,000 gallons per twelve (12) consecutive month period, and~~
- ~~(b) The use of No. 4 fuel oil shall be limited to less than 800,000 gallons per twelve (12) consecutive month period.~~
- ~~(c) The sulfur content of the No. 2 fuel oil shall not exceed 0.05% and the sulfur content of the No. 4 fuel oil shall not exceed 0.41%, by weight.~~

~~Compliance with these requirements shall limit source-wide SO₂ emissions to less than one hundred (100) tons per twelve (12) consecutive month period. Thus, the requirements of 326 IAC 2-7, Part 70, do not apply with respect to SO₂ emissions.~~

~~Compliance with Condition D.1.4 will also satisfy Condition D.1.3.~~

Pursuant to 326 IAC 2-8-4, the Permittee shall comply with the following:

- (a) Steel slag usage shall not exceed 75,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.**
- (b) Slag and Fuel Specifications**
 - (1) SO₂ emissions from the usage of steel slag in the dryer/mixer shall not exceed 0.0014 pounds of SO₂ per ton of steel slag processed.**
 - (2) The sulfur content of the steel slag shall not exceed 0.66 percent by weight.**
 - (3) When combusting No. 2 fuel oil in the dryer/mixer burner the calendar month average sulfur content of the No. 2 fuel oil shall not exceed 0.5 percent by weight, with compliance determined at the end of each month.**
 - (4) When combusting No. 4 fuel oil in the dryer/mixer burner the calendar month average sulfur content of the No. 4 fuel oil shall not exceed 1.60 percent by weight, with compliance determined at the end of each month.**

(c) Single Fuel Usage Limitations

When combusting only one type of fuel per twelve (12) consecutive month period in the dryer/mixer burner the usage of fuel shall be limited as follows:

- (1) Natural gas usage shall not exceed 631 million cubic feet per twelve (12) consecutive month period, with compliance determined at the end of each month.**
- (2) No. 2 fuel oil usage shall not exceed 2,626,479 gallons per twelve (12)**

consecutive month period, with compliance determined at the end of each month.

- (3) No. 4 fuel oil usage shall not exceed 777,000 gallons per twelve (12) consecutive month period, with compliance determined at the end of each month.

(d) **Multiple Fuel Usage Limitations**

When combusting more than one fuel per twelve (12) consecutive month period in the dryer/mixer burner, emissions from the dryer/mixer burner shall be limited as follows:

- (1) SO₂ emissions from the dryer/mixer shall not exceed 93.24 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

When combined with the limited potential to emit SO₂ from all other emission units at this source, compliance with these limits shall limit the source-wide total potential to emit of SO₂ to less than 100 tons per 12 consecutive month period, each, and shall render 326 IAC 2-7 (Part 70 Permit Program) and 326 IAC 2-2 (PSD) not applicable.

D.1.4 Sulfur Dioxide (SO₂) [326 IAC 7-1.1-1][326 IAC 7-2-1]

Pursuant to 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations), the Permittee shall comply with the following:

- (a) The sulfur dioxide (SO₂) emissions from the dryer/mixer burner shall not exceed 0.5 pounds per MMBtu when using distillate oil.
- (b) The sulfur dioxide (SO₂) emissions from the dryer/mixer burner shall not exceed 1.60 pounds per MMBtu heat input when using residual oil.
- (c) Pursuant to 326 IAC 7-2-1, compliance shall be determined on a calendar month average.

~~D.1.5 Carbon Monoxide (CO) [326 IAC 2-8-4]~~

~~The potential to emit CO from the aggregate dryer burner shall not exceed one hundred ninety thousandths (0.190) of a pound per one (1) ton of asphalt processed. This requirement shall limit CO emissions to less than ninety-five (95.0) tons per twelve (12) consecutive month period from the aggregate dryer burner and less than one hundred (100) tons per twelve (12) consecutive month period from the entire source. Thus, the requirements of 326 IAC 2-7, Part 70, do not apply with respect to CO emissions.~~

~~D.1.6 Volatile Organic Compounds (VOC) [326 IAC 2-8-4(9)]~~

~~In order to limit the potential to emit VOC from the entire source to less than one hundred (100) tons per twelve (12) consecutive month period, the potential to emit VOC from the aggregate dryer burner shall be forty-nine thousandths (0.049) of a pound per one (1) ton of asphalt processed. This requirement shall limit VOC emissions to twenty-four and five-tenths (24.5) tons per twelve (12) consecutive month period from the aggregate dryer burner.~~

D.1.75 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

...

D.1.86 Particulate Matter (PM, PM₁₀, and PM_{2.5}) Control

In order to comply with **Conditions D.1.1(b) - Particulate Matter (PM)**, and **D.1.2(b) - FESOP**

Limits, and D.1.2(c) - FESOP Limits, the baghouse for ~~PM and PM10~~ **particulate** control shall be in operation and control emissions from the drum mix dryer/burner at all times that the drum mix dryer/burner is in operation.

D.1.97 Testing Requirements [326 IAC 2-8-5(a)(1), (4)] [326 IAC 2-1.1-11]

- ~~(a) In order to demonstrate compliance with Conditions D.1.1 and D.1.2, the permittee shall perform testing for PM and PM₁₀ within 180 days of publication of the new or revised condensable PM test method(s) referenced in the U. S. EPA's Final Rule for Implementation of the New Source Review (NSR) Program for Particulate Matter Less Than 2.5 Micrometers (PM_{2.5}), signed on May 8, 2008 or once every five years from June 27, 2007, whichever is later. These tests shall be repeated at least once every five (5) years after completion of the most recent valid compliance stack test. Testing shall be conducted utilizing methods approved by the Commissioner and in accordance with Section C – Performance Testing. PM10 includes filterable and condensable PM.~~
- (a) In order to demonstrate compliance with Condition D.1.1(b) - Particulate Matter (PM), the Permittee shall perform PM testing of the dryer/mixer at least once every five (5) years from the date of the most recent valid compliance demonstration, utilizing methods approved by the Commissioner. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.**
- (b) In order to demonstrate compliance with Conditions D.1.2(b) and D.1.2(c) - FESOP Limits, the Permittee shall perform PM10 and PM2.5 testing on the dryer/mixer not later than 180 days after final promulgation of the new or revised condensable PM test method(s) referenced in the U.S. EPA's Final Rule for Implementation of the New Source Review (NSR) Program for Particulate Matter Less Than 2.5 Micrometers (PM2.5), signed on May 8th, 2008 or no later than five (5) years after the date of the most recent valid compliance demonstration, whichever is later. These tests shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration. This testing shall be conducted utilizing methods as approved by the Commissioner. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition. PM10 and PM2.5 includes filterable and condensable PM.**

D.1.408 Sulfur Dioxide Emissions and Sulfur Content

~~Compliance with conditions D.1.3 and D.1.4 shall be determined utilizing one of the following options:~~

- ~~(a) Pursuant to 326 IAC 3-7-4, the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed five-tenths (0.5) pounds per million Btu heat input and 0.05% sulfur content when burning No. 2 distillate fuel oil by:~~
- ~~(1) Providing vendor analysis of fuel delivered, if accompanied by a vendor certification; or~~
- ~~(2) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.~~
- ~~(A) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and~~

~~(B) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling.~~

~~(b) Pursuant to 326 IAC 3-7-4, the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed 1.6 pounds per million Btu heat input and 0.41% sulfur content when burning No. 4 fuel oil by:~~

~~(1) Providing vendor analysis of fuel delivered, if accompanied by a vendor certification; or~~

~~(2) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.~~

~~(A) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and~~

~~(B) If a partial empty fuel tank is refilled, a new sample and analysis would be required upon filling.~~

~~(c) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from the 72 MMBtu per hour burner for the aggregate dryer, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6.~~

~~A determination of noncompliance pursuant to any of the methods specified in (a), (b), or (c) above shall not be refuted by evidence of compliance pursuant to the other method.~~

(a) Compliance with the steel slag limitation established in Conditions D.1.3(b)(1) and D.1.3(b)(2) - Sulfur Dioxide (SO₂) Limits shall be determined utilizing one of the following options.

(1) Providing vendor analysis of the steel slag delivered, if accompanied by a vendor certification; or

(2) Analyzing a sample of the slag delivery to determine the sulfur content of the steel slag, 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.

(3) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from the 72 MMBtu per hour burner, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6, or other procedures approved by IDEM, OAQ.

A determination of noncompliance pursuant to any of the methods specified above shall not be refuted by evidence of compliance pursuant to the other method.

(b) Compliance with the fuel limitations established in Conditions D.1.3(b)(3) and D.1.3(b)(4) - Sulfur Dioxide (SO₂) Limits and D.1.4(a) and D.1.4(b) Sulfur Dioxide (SO₂) shall be determined utilizing one of the following options.

(1) Pursuant to 326 IAC 3-7-4, the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed 0.5 pounds per million British thermal units heat input when combusting No. 2 distillate fuel oil, or 1.6 pounds per million British thermal units heat input when combusting No. 4 residual fuel oil, by:

- (A) Providing vendor analysis of heat content and sulfur content of the fuel delivered, if accompanied by a vendor certification; or
- (B) Analyzing the fuel sample to determine the sulfur content of the fuel via the procedures in 40 CFR 60, Appendix A, Method 19.
 - (i) Fuel samples may be collected from the fuel tank immediately after the fuel tank is filled and before any fuel is combusted; and
 - (ii) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling.
- (2) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from the 72 MMBtu per hour burner, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6.

A determination of noncompliance pursuant to any of the methods specified above shall not be refuted by evidence of compliance pursuant to the other method.

D.1.9 Multiple Fuel Usage / Sulfur Dioxide (SO₂) Emissions

- (a) In order to determine compliance with Condition D.1.3(d) - Sulfur Dioxide (SO₂) Limits, when combusting more than one fuel per twelve (12) consecutive month period in the dryer/mixer burner, the Permittee shall use the following equation to determine the tons of SO₂ emitted per twelve (12) consecutive month period:

- (1) **Sulfur Dioxide emission calculation**

$$S = \frac{F(E_f) + R(E_r) + N(E_n)}{2,000 \text{ lbs/ton}}$$

Where:

S = tons of sulfur dioxide emissions for twelve (12) month consecutive period

F = gallons of No. 2 fuel oil used in last twelve (12) months

R = gallons of No. 4 fuel oil used in last twelve (12) months

N = million cubic feet of natural gas used in last twelve (12) months

Emission Factors:

E_F = 0.071 pounds per gallon of No. 2 fuel oil

E_R = 0.24 pounds per gallon of No. 4 fuel oil

E_N = 0.6 pounds per million cubic feet of natural gas

D.1.140 Visible Emissions Notations

...

D.1.121 Parametric Monitoring

...

D.1.132 Broken or Failed Bag Detection

...

D.1.143 Record Keeping Requirements

- (a) **To document the compliance status with Conditions D.1.1(a) - Particulate Matter (PM) and D.1.2(a) - FESOP Limits, the Permittee shall maintain records of the amount of asphalt produced per month. Records necessary to demonstrate compliance shall be available no later than thirty (30) days after the end of each compliance period.**
- (b) **To document the compliance status with Conditions D.1.3(a) and D.1.3(b) - Sulfur Dioxide (SO₂) Limits, the Permittee shall maintain records in accordance with (1) through (4) below. Records necessary to demonstrate compliance shall be available no later than 30 days after the end of each compliance period.**
- (1) **Calendar dates covered in the compliance determination period;**
- (2) **Actual steel slag usage and sulfur content for all steel slag used at the source since the last compliance determination period;**
- (3) **A certification, signed by the owner or operator, that the records of the steel slag supplier certifications represent all of the steel slag used during the period; and**
- (4) **If the steel slag supplier certification is used to demonstrate compliance the following, as a minimum, shall be maintained:**
- (i) **Steel slag supplier certifications;**
- (ii) **The name of the steel slag supplier; and**
- (iii) **A statement from the steel slag supplier that certifies the sulfur content of the steel slag.**
- (ac) **To document the compliance status with Conditions D.1.3 - Sulfur Dioxide (SO₂) Limits and D.1.4 - Sulfur Dioxide (SO₂), the Permittee shall maintain records in accordance with (1) through (4) below. Records necessary to demonstrate determine compliance shall be available within no later than 30 days of after the end of each compliance period.**
- (1) **Calendar dates covered in the compliance determination period;**
- (2) **Calendar month average sulfur content, heat content, fuel usage, and equivalent sulfur dioxide emission rates for each fuel used at the source since the last compliance determination period;**
- (23) **A certification, signed by the owner or operator, that the records of the fuel oil supplier certifications represent all of the fuel combusted during the period; and**
- If the fuel supplier certification is used to demonstrate compliance the following, as a minimum, shall be maintained:
- (34) **The name of the fuel supplier; and**
- (45) **A statement from the fuel supplier that certifies the sulfur content of the fuel oil.**
- ...
- ~~(b) To document compliance with Conditions D.1.3 and D.1.4, the Permittee shall keep~~

~~records of the total amount of each fuel used at the aggregate dryer burner and the one (1) direct fired heater. Records necessary to demonstrate compliance shall be available within thirty (30) days of the end of each compliance period.~~

- ~~(c) To document compliance with Condition D.1.1, the Permittee shall keep records of the amount of asphalt processed through the aggregate dryer burner. Records necessary to demonstrate compliance shall be available within thirty (30) days of the end of each compliance period.~~
- ~~(d) The Permittee shall maintain records sufficient to verify compliance with the procedures specified in condition D.1.10. Records shall be maintained for a period of five (5) years and shall be made available upon request by IDEM.~~
- (ed) To document **the compliance status** with Condition D.1.140 - **Visible Emission Notations**, the Permittee shall maintain records of the daily visible emission notations of the **aggregate dryer/burner** ~~drum mix dryer burner baghouse stack exhaust, conveyors, and transfer points~~. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (i.e., the process did not operate that day).
- ~~(f) To document compliance with Condition D.1.12, the Permittee shall maintain the following:~~
- ~~(1) Records of the pressure drop across the baghouses during normal operation once per day. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading, (e.g., the aggregate dryer/burner did not operate that day).~~
- (e) **To document the compliance status with Condition D.1.11 - Parametric Monitoring, the Permittee shall maintain records of the once per day pressure drop reading. The Permittee shall include in its daily record when the pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that day).**
- (gf) ~~All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit~~ **contains the Permittee's obligations with regard to the records required by this condition.**

D.1.154 Reporting Requirements

~~A quarterly summary of the information to document compliance status with Conditions D.1.1(a) - Particulate Matter (PM), D.1.2(a) - FESOP Limits, and D.1.3 - Sulfur Dioxide (SO₂), D.1.4, and D.1.6 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within no later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require the a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).~~

~~New Source Performance Standards (NSPS) Requirements [326 IAC 2-8-4(1)]~~

~~D.1.16 General Provisions Relating to NSPS [326 IAC 12-1] [40 CFR 60, Subpart A]~~

~~The provisions of 40 CFR 60 Subpart A - General Provisions, which are incorporated as 326 IAC 12-1, apply to the asphalt plant described in this section except when otherwise specified in 40 CFR 60 Subpart I.~~

~~D.1.17 NSPS Subpart I Requirements [40 CFR Part 60, Subpart I] [326 IAC 12]~~

~~Pursuant to CFR Part 60, Subpart I, the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart I, which are incorporated by reference as 326 IAC 12-1 for the asphalt plant as specified as follows.~~

~~**§ 60.90 Applicability and designation of affected facility.**~~

~~(a) The affected facility to which the provisions of this subpart apply is each hot mix asphalt facility. For the purpose of this subpart, a hot mix asphalt facility is comprised only of any combination of the following: dryers; systems for screening, handling, storing, and weighing hot aggregate; systems for loading, transferring, and storing mineral filler, systems for mixing hot mix asphalt; and the loading, transfer, and storage systems associated with emission control systems.~~

~~(b) Any facility under paragraph (a) of this section that commences construction or modification after June 11, 1973, is subject to the requirements of this subpart.~~

~~**§ 60.91 Definitions**~~

~~As used in this subpart, all terms not defined herein shall have the meaning given them in the Act and in subpart A of this part.~~

~~(a) *Hot mix asphalt facility* means any facility, as described in §60.90, used to manufacture hot mix asphalt by heating and drying aggregate and mixing with asphalt cements.~~

~~**§ 60.92 Standard for particulate matter**~~

~~(a) On and after the date on which the performance test required to be conducted by §60.8 is completed, no owner or operator subject to the provisions of this subpart shall discharge or cause the discharge into the atmosphere from any affected facility any gases which:~~

- ~~(1) Contain particulate matter in excess of 90 mg/dscm (0.04 gr/dscf).~~
- ~~(2) Exhibit 20 percent opacity, or greater.~~

~~**§ 60.93 Test methods and procedures**~~

~~(a) In conducting the performance tests required in §60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in §60.8(b).~~

~~(b) The owner or operator shall determine compliance with the particulate matter standards in §60.92 as follows:~~

- ~~(1) Method 5 shall be used to determine the particulate matter concentration. The sampling time and sample volume for each run shall be at least 60 minutes and 0.90 dscm (31.8 dscf).~~
- ~~(2) Method 9 and the procedures in §60.11 shall be used to determine opacity.~~

...
~~D.2.1 Volatile Organic Compounds (VOC) [326 IAC 2-2] [326 IAC 2-8-4]~~

~~The Permittee shall limit the emissions of VOC from cold mix asphalt production to less than sixty (60) tons per twelve (12) consecutive month period, with compliance determined at the end of each month.~~

Pursuant to 326 IAC 2-8-4, the Permittee shall comply with the following:

VOC emissions from the sum of the binders shall not exceed 66.82 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

Compliance with this limit **When** combined with the potential emissions from all other emission units at this source, **compliance with this limit** will limit source-wide emissions of VOC to less than 100 tons per year and shall render 326 IAC 2-7 (Part 70 Permits) and 326 IAC 2-2 (PSD) not applicable.

~~D.2.2 Volatile Organic Compounds (VOC) [326 IAC 2-2] [326 IAC 2-8-4]~~

...

- (b) The liquid binder used in cold mix asphalt production shall be limited as follows:
- (1) The amount of VOC solvent used in rapid cure cutback asphalt shall ~~be limited to less than~~ **not exceed** ~~sixty-three and two tenths (63.2)~~ **70.3** tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
 - (2) The amount of VOC solvent used in medium cure cutback asphalt shall ~~be limited to less than~~ **not exceed** ~~eighty-five and seven tenths (85.7)~~ **95.5** tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
 - (3) The amount of VOC solvent used in slow cure cutback asphalt shall ~~be limited to less than~~ **not exceed** ~~two hundred forty (240)~~ **267.3** tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
 - (4) The amount of VOC solvent used in emulsified asphalt shall ~~be limited to less than~~ **not exceed** ~~one hundred twenty-three and three tenths (129.3)~~ **144.0** tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
 - (5) The amount of VOC solvent used in all other asphalt shall ~~be limited to less than~~ **not exceed** ~~two thousand four hundred (2,400)~~ **2672.8** tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
 - ~~(6) When more than one type of binder is used per twelve (12) consecutive month period, the total usage of all binders shall be limited so that the total potential to emit VOC is less than sixty (60) tons per twelve (12) consecutive month period, with compliance determined at the end of each month.~~

~~In order to determine the tons of VOC emitted per year for each type of binder, use the following formula by dividing the tons of VOC solvent used per twelve (12) consecutive month period for each type of binder by the corresponding adjustment ratio listed in the table that follows.~~

- (6) **The VOC solvent allotments in (1) through (5) above shall be adjusted when more than one type of binder is used per twelve (12) consecutive month period with compliance determined at the end of each month. In order to determine the tons of VOC emitted per each type of binder, use the following formula and divide the tons of VOC solvent used for each type of binder by the corresponding adjustment factor listed in the table that follows.**

$$\text{VOC emitted (tons/yr)} = \frac{\text{VOC solvent used for each binder (tons/yr)}}{\text{Adjustment ratio factor}}$$

Type of binder	tons solvent	adjustment ratio factor	tons VOC emitted
cutback asphalt rapid cure		1.053	
cutback asphalt medium cure		1.429	
cutback asphalt slow cure		4.0	
emulsified asphalt		2.155	
other asphalt		40	

~~These requirements will limit the potential to emit VOC from cutback and emulsified asphalt usage to less than or equal to sixty (60.0) tons per twelve (12) consecutive month period, and the total source potential to emit VOC to less than one hundred (100) tons per twelve (12) consecutive month period. Compliance with these limits~~ **When** combined with the **limited** potential emissions to emit VOC from all other emission units at this source, **compliance with these limits shall limit the source-wide total potential to emit of VOC to less than 100 tons per 12 consecutive month period, and** shall render 326 IAC 2-7 (Part 70 Permits) and 326 IAC 2-2 (PSD) not applicable with respect to VOC emissions.

- ...
- This is an emergency as defined in 326 IAC 2-7-1(12)
 - The Permittee must notify the Office of Air Quality (OAQ), no later than four (4) **daytime** business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and
 - The Permittee must submit notice in writing or by facsimile no later than two (2) working days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16

...

Source Name: Dave O'Mara Contractor, Inc.
Current Source Address: New Point Stone at 992 South County Road 800 East, Greensburg, IN
Mailing Address: 1100 East O & M Avenue, North Vernon, IN 47265
FESOP Permit No.: F031-25342-05047
Facility: One (1) portable asphalt drum-mix plant with one (1) baghouse exhausting at one (1) stack, identified as #1;
Parameter: Steel Slag Usage
Limit: Steel slag usage shall not exceed 75,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

...

FESOP Quarterly Report ~~No. 2 Fuel Oil Usage~~

...

Parameter: ~~No. 2~~ **Single** fuel oil usage
Limit: ~~Less than 2,800,000 gallons per twelve (12) consecutive month period.~~ **When combusting only one type of fuel per twelve (12) consecutive month period in the dryer/mixer burner the usage of fuel shall be limited as follows:**

Fuel Type (units)	Fuel Usage Limit (per 12 consecutive month period)
Natural Gas (million cubic feet)	631
No. 2 fuel oil (gallons)	2,626,479
No. 4 fuel oil (gallons)	777,000

...

FESOP Quarterly Report – ~~No. 4 Fuel Oil Usage~~

...

Parameter: **No. 4 Multiple fuel oil usage / Sulfur dioxide (SO₂) emissions**
 Limit: ~~Less than 800,000 gallons per twelve (12) consecutive month period.~~ **SO₂ emissions from the dryer/mixer shall not exceed 93.24 tons per twelve (12) consecutive month period, with compliance determined at the end of each month. When combusting more than one fuel per twelve (12) consecutive month period in the dryer/mixer burner, emissions from the dryer/mixer burner shall be limited as follows:**

$$S = \frac{F(E_f) + R(E_r) + N(E_n)}{2,000 \text{ lbs / ton}}$$

<p><u>Where:</u> S = tons of sulfur dioxide emissions for twelve (12) month consecutive period F = gallons of No. 2 fuel oil used in last twelve (12) months R = gallons of No. 4 fuel oil used in last twelve (12) months N = million cubic feet of natural gas used in last twelve (12) months</p>	<p><u>Emission Factors:</u> E_F = 0.071 pounds per gallon of No. 2 fuel oil E_R = 0.24 pounds per gallon of No. 4 fuel oil E_N = 0.6 pounds per million cubic feet of natural gas</p>
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...

FESOP Quarterly Report - Single Liquid Binder VOC Solvent

...

Limit: Cutback asphalt rapid cure liquid binder usage shall not exceed ~~63.2~~ **70.3** tons of VOC solvent per twelve (12) consecutive month period. Cutback asphalt medium cure liquid binder usage shall not exceed ~~85.7~~ **95.5** tons of VOC solvent per twelve (12) consecutive month period. Cutback asphalt slow cure liquid binder usage shall not exceed ~~240.0~~ **267.3** tons of VOC solvent per twelve (12) consecutive month period. Emulsified asphalt with solvent liquid binder usage shall not exceed ~~129.3~~ **144.0** tons of VOC solvent per twelve (12) consecutive month period. Other asphalt with solvent liquid binder shall not exceed ~~2,400.0~~ **2672.8** tons of VOC solvent per twelve (12) consecutive month period.

...

Multiple Liquid Binder Solvent Quarterly Report

...

Limit: ~~sixty (60) tons per consecutive 12-month period~~ **VOC emissions from the sum of the binders shall not exceed 66.82 per twelve (12) consecutive month period with compliance determined at the end of each month.**

...

(b) Upon further review, IDEM, OAQ has decided to make the following changes to the permit. Deleted language appears as ~~strikethrough~~ text and new language appears as **bold** text:

- (1) Several of IDEM's branches and sections have been renamed. Therefore, IDEM has updated the addresses listed in the permit. References to "Permit Administration and Development Section" and the "Permits Branch" have been changed to "Permit Administration and Support Section". References to "Asbestos Section", "Compliance Data Section", "Air Compliance Section", and "Compliance Branch" have been changed to "Compliance and Enforcement Branch". The permit has been revised as follows:

Indiana Department of Environmental Management

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

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

- (2) Since this asphalt plant is a portable source all instances of "source address" in the permit have been revised to "**current** source address".
- (3) Local agencies no longer have effective authority to implement state and federal requirements for IDEM. Therefore, IDEM has removed all references to local agencies from the permit. The revised permit specifies that all reports, notices, applications, and any other required submittals shall be submitted to IDEM. The Permittee should note that the local agency could have its own requirements beyond the state and federal requirements contained in the permit. Please contact the local agency for further information.
- (4) For clarity, IDEM has changed references to the general conditions: "*in accordance with Section B*", "*in accordance with Section C*", or other similar language, to "Section C ... *contains the Permit tee's obligations with regard to the records required by this condition.*"
- (5) IDEM has decided that the phrases "*no later than*" and "*not later than*" are clearer than "*within*" in relation to the end of a timeline. Therefore, all timelines have been switched to "*no later than*" or "*not later than*" except for the timelines in Section B - Emergency Provisions because the underlying rule states for these conditions to specify "*within*."
- (6) Section B -Duty to Provide Information has been revised.
- (7) To clarify that Section B - Certification only states what a certification must be, IDEM has revised the condition.
- (8) IDEM has decided to clarify what rule requirements a certification needs to meet. IDEM has decided to remove the last sentence dealing with the need for certification from the forms because the Conditions requiring the forms already address this issue.
- (9) IDEM has added a new paragraph (b) to handle a future situation where the Permittee adds units that need preventive maintenance plans developed. IDEM has decided to clarify other aspects of Section B - Preventive Maintenance Plan to be consistent with the rule.
- (10) IDEM is revising Section B - Emergency Provisions to delete paragraph (h). 326 IAC 2-8-4(3) (C) (ii) allows that deviations reported under an independent requirement do not have to be included in the Quarterly Deviation and Compliance Monitoring Report. In addition, IDEM has added the Southeastern Regional Office to Section B - Emergency Provisions, as applicable.
- (11) IDEM has decided to state which rule establishes the authority to set a deadline for the Permittee to submit additional information. Therefore, Section B - Permit Renewal has been revised.

- (12) IDEM has decided to reference 326 IAC 2 in Section B-Source Modification Requirements, rather than specific construction rule.
- (13) IDEM has added 326 IAC 5-1-1 to the exception clause of Section C - Opacity, since 326 IAC 5-1-1 does list exceptions.
- (14) IDEM has revised Section C - Incineration to more closely reflect the two underlying rules.
- (15) IDEM has added Section C - Stack Height, since this dryer/mixer stack #1 has the potential to emit greater than 25 tons of PM and SO₂ before control.
- (16) IDEM has decided to simplify the referencing in Section C - Asbestos Abatement Projects with 326 IAC 14-10, 326 IAC 18, and 40 CFR 61.140.
- (17) IDEM has removed the first paragraph of Section C - Performance Testing because specific testing conditions elsewhere in the permit will specify the timeline and procedures.
- (18) IDEM has removed Section C - Monitoring Methods. The conditions that require the monitoring or testing, if required, state what methods shall be used.
- (19) IDEM has revised Section C - Compliance Monitoring. The reference to recordkeeping has been removed because other conditions already address recordkeeping. The voice of the condition has been changed to clearly indicate that it is the Permittee that must follow the requirements of the condition.
- (20) IDEM has revised Section C - Response to Excursions or Exceedances. The introduction sentence has been added to clarify that it is only when an excursion or exceedance is detected that the requirements of this condition need to be followed. The word "excess" was added to the last sentence of paragraph (a) because the Permittee only has to minimize excess emissions. The middle of paragraph (b) has been deleted as it was duplicative of paragraph (a). The phrase "or are returning" was added to subparagraph (b)(2) as this is an acceptable response assuming the operation or emission unit does return to normal or its usual manner of operation. The phrase "within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable" was replaced with "normal or usual manner of operation" because the first phrase is just a limited list of the second phrase. The recordkeeping required by paragraph (e) was changed to require only records of the response because the previously listed items are required to be recorded elsewhere in the permit.
- (21) IDEM has revised Section C - Actions Related to Noncompliance Demonstrated by a Stack Test. The requirements to take response steps and minimize excess emissions have been removed because Section C - Response to Excursions or Exceedances already requires response steps related to exceedances and excess emissions minimization. The start of the timelines was switched from "the receipt of the test results" to "the date of the test." There was confusion if the "receipt" was by IDEM, the Permittee, or someone else. Since the start of the timelines has been moved up, the length of the timelines was increased. The new timelines require action within a comparable timeline; and the new timelines still ensure that the Permittee will return to compliance within a reasonable timeframe.
- (22) The voice of paragraph (b) of Section C - General Record Keeping Requirements has been change to clearly indicate that it is the Permittee that must follow the requirements of the paragraph.
- (23) IDEM, OAQ has decided that having a separate condition for the reporting of deviations is unnecessary. Therefore, IDEM has removed Section B - Deviation form Permit

Requirements and Conditions and added the requirements of that condition to Section C - General Reporting Requirements. Paragraph (d) of Section C - General Reporting Requirements has been removed because IDEM already states the timeline and certification needs of each report in the condition requiring the report.

- (24) IDEM has decided to require the additional information when the Permittee plans to relocate the source. In addition, since this is a portable source, IDEM has decided to clarify that this source is approved for operation in all areas of Indiana except in severe nonattainment areas for ozone and Lake and Porter Counties. Therefore, Section C - Relocation of Portable Sources has been revised.
- (25) IDEM has decided to simplify the referencing in Section C - Compliance with 40 CFR 82 and 326 IAC 22-1.
- (26) IDEM has decided to clarify Section D - Testing Requirements.
- (27) IDEM has included the replacement of an instrument as an acceptable action.
- (28) IDEM has decided to allow the Permittee the option of using manufacturer's recommendations for the calibration frequency.
- (29) The word "status" has been added to Section D - Reporting Requirements. The Permittee has the obligation to document the compliance status. The wording has been revised to properly reflect this.
- (30) The table in Condition D.2.2 has been revised to reflect IDEM's new format. As a result, the tons solvent and tons VOC emitted columns were deleted.
- (31) Original Condition D.2.4 has been removed from the permit. Since the VOC emissions from the production of cold mix asphalt have been limited, it is unnecessary to include HAPs limits. Compliance with the VOC limits in Conditions D.2.1 and D.2.2 will limit HAPs emission to less than 10 tons for any single HAP and 25 tons for any combination of HAPs.
- (32) The HAPs record keeping requirements in Condition D.2.4 (original Condition D.2.5) and associated FESOP Quarterly Reports have been removed from the permit. In addition, the VOC record keeping requirements have been updated to clarify the information the source needs to keep and the frequency.
- (33) The NSPS for Hot Mix Asphalt Facilities, Subpart I will no longer be included in Section D.1, it will now be found in Section E.1 and Attachment B (see changes above).
- (34) The phrase "of this permit" has been added to the paragraph of the Quarterly Deviation and Compliance Monitoring Report to match the underlying rule.

~~SECTION B~~ GENERAL CONDITIONS

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

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

~~B.2~~ Permit Term [326 IAC 2-8-4(2)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)]

- ~~(a) This permit, F055-25342-05047, is issued for a fixed term of ten (10) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and~~

~~IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.~~

- ~~(b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, until the renewal permit has been issued or denied.~~

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

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

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

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

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

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

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

~~B.6 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]~~

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

~~B.7 Duty to Provide Information [326 IAC 2-8-4(5)(E)]~~

- ~~(a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1). Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.~~
- ~~(b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.~~

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

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

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

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

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

- ~~(b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.~~

- ~~(c) The annual compliance certification report shall include the following:~~

- ~~(1) The appropriate identification of each term or condition of this permit that is the basis of the certification;~~
- ~~(2) The compliance status;~~
- ~~(3) Whether compliance was continuous or intermittent;~~
- ~~(4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-8-4(3); and~~
- ~~(5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ may require to determine the compliance status of the source.~~

~~The submittal by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).~~

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

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

~~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 maintain and implement Preventive Maintenance Plans (PMPs) including the following information on each facility:~~

- ~~(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;~~
- ~~(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and~~
- ~~(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.~~

- (b) ~~A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMPs do not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).~~
- (c) ~~To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.~~

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

- (a) ~~An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation except as provided in 326 IAC 2-8-12.~~
- (b) ~~An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:~~
- ~~(1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;~~
 - ~~(2) The permitted facility was at the time being properly operated;~~
 - ~~(3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;~~
 - ~~(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;~~

~~Telephone Number: 1-800-451-6027 (ask for Office of Air Quality,
Compliance Section), or~~

~~Telephone Number: 317-233-0178 (ask for Compliance Section)~~

~~Facsimile Number: 317-233-6865~~

- ~~(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 46204-2254~~

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

- ~~(6) — The Permittee immediately took all reasonable steps to correct the emergency.~~
 - ~~(c) — In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.~~
 - ~~(d) — This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.~~
 - ~~(e) — The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.~~
 - ~~(f) — Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.~~
 - ~~(g) — Operations may continue during an emergency only if the following conditions are met:
 - ~~(1) — If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.~~
 - ~~(2) — If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
 - ~~(A) — The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and~~
 - ~~(B) — Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.~~~~~~
- ~~Any operations shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.~~
- ~~(h) — The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.~~

...

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

~~The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-8-3(h) and 326 IAC 2-8-9.~~

~~B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]~~

~~(a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), 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~~

~~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 an "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 Federally Enforceable State Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)] The notification by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).~~

~~(b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:~~

~~(1) That this permit contains a material mistake.~~

~~(2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.~~

~~(3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]~~

~~(c) Proceedings by IDEM, OAQ to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-8-8(b)]~~

~~(d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ at least thirty (30)~~

~~days in advance of the date this permit is to be reopened, except that IDEM, OAQ may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]~~

~~B.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 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 an "authorized individual" as defined by 326 IAC 2-1.1-1(1).~~

~~Request for renewal shall be submitted to:~~

~~Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2254~~

- ~~(b) A timely renewal application is one that is:~~
- ~~(1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and~~
- ~~(2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.~~
- ~~(c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ any additional information identified as being 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 46204-2254~~
- ~~Any such application shall be certified by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).~~
- ~~(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]~~

~~B.19 — Operational Flexibility [326 IAC 2-8-15][326 IAC 2-8-11.1]~~

~~(a) — The Permittee may make any change or changes at the source that are described in 326 IAC 2-8-15(b) through (d) without a prior permit revision, if each of the following conditions is met:~~

- ~~(1) — The changes are not modifications under any provision of Title I of the Clean Air Act;~~
- ~~(2) — Any approval required by 326 IAC 2-8-11.1 has been obtained;~~
- ~~(3) — The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);~~
- ~~(4) — The Permittee notifies the:~~

~~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~~

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

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

- ~~(5) — The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-8-15(b) through (d). The Permittee shall make such records available, upon reasonable request, for public review.~~

~~Such records shall consist of all information required to be submitted to IDEM, OAQ in the notices specified in 326 IAC 2-8-15(b)(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]~~

~~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, 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 46204-2254~~

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

- ~~(c) — The Permittee may implement 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 B GENERAL CONDITIONS

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

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

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

- (a) This permit, F031-25342-05047, is issued for a fixed term of ten (10) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.
- (b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, until the renewal permit has been issued or denied.

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

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

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

B.4 Enforceability [326 IAC 2-8-6] [IC 13-17-12]

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

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

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

B.6 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]

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

B.7 Duty to Provide Information [326 IAC 2-8-4(5)(E)]

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

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

- (a) A certification required by this permit meets the requirements of 326 IAC 2-8-5(a)(1) if:
 - (i) it contains a certification by an "authorized individual", as defined by 326 IAC 2-1.1-1(1), and
 - (ii) the certification is based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) The Permittee may use the attached Certification Form, or its equivalent with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.
- (c) An "authorized individual" is defined at 326 IAC 2-1.1-1(1).

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

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

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

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it

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

- (d) The annual compliance certification report shall include the following:
- (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether compliance was continuous or intermittent;
 - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-8-4(3); and
 - (5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ may require to determine the compliance status of the source.

The submittal by the Permittee does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

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

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

- (a) A Preventive Maintenance Plan meets the requirements of 326 IAC 1-6-3 if it includes, at a minimum:
- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

The Permittee shall implement the PMPs.

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

- (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

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

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

The PMP extension notification does not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

The Permittee shall implement the PMPs.

- (c) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions. The PMPs and their submittal do not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

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

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation except as provided in 326 IAC 2-8-12.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
- (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
 - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, or Southeast Regional Office within four (4) daytime business

hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance and Enforcement Branch), or
Telephone Number: 317-233-0178 (ask for Office of Air Quality, Compliance and Enforcement Branch)
Facsimile Number: 317-233-6865
Southeast Regional Office phone: (812) 358-2027; fax: (812) 358-2058.

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

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

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

The notice fulfills the requirement of 326 IAC 2-8-4(3)(C)(ii) and must contain the following:

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

The notification which shall be submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
 - (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
 - (e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.
 - (f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.

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

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

...

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

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-8-3(h) and 326 IAC 2-8-9.

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

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Federally Enforceable State Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)] The notification by the Permittee does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).**
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:**
 - (1) That this permit contains a material mistake.**
 - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.**
 - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]**
- (c) Proceedings by IDEM, OAQ to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of**

this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-8-8(b)]

- (d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]**

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

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).**

Request for renewal shall be submitted to:

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

- (b) A timely renewal application is one that is:**
- (1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and**
- (2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.**
- (c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified, pursuant to 326 IAC 2-8-3(g), in writing by IDEM, OAQ any additional information identified as being needed to process the application.**

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

- (a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this permit.**
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:**

**Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality**

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

Any such application does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]**

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

- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-8-15(b) through (d) without a prior permit revision, if each of the following conditions is met:**

- (1) The changes are not modifications under any provision of Title I of the Clean Air Act;**
- (2) Any approval required by 326 IAC 2-8-11.1 has been obtained;**
- (3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);**
- (4) The Permittee notifies the:**

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

and

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

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

- (5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-8-15(b) through (d). The Permittee shall make such records available, upon reasonable request, for public review.**

Such records shall consist of all information required to be submitted to IDEM, OAQ in the notices specified in 326 IAC 2-8-15(b)(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.19 Source Modification Requirement [326 IAC 2-8-11.1]

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

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

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

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

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

- (a) The Permittee must comply with the requirements of 326 IAC 2-8-10 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.**

- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

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

Any such application does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

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

- (a) The Permittee shall pay annual fees to IDEM, OAQ no later than thirty (30) calendar days after receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.
- (b) Failure to pay may result in administrative enforcement action or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

B.23 Credible Evidence [326 IAC 2-8-4(3)][326 IAC 2-8-5][62 FR 8314] [326 IAC 1-1-6]

For the purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of any condition of this permit, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information relevant to 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

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

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

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

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

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

- (a) Pursuant to 326 IAC 2-8:

- (1) ~~— The potential to emit any regulated pollutant, except particulate matter (PM), from the entire source shall be limited to less than one hundred (100) tons per twelve (12) consecutive month period.~~
- (2) ~~— The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and~~
- (3) ~~— The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty five (25) tons per twelve (12) consecutive month period.~~

- (b) ~~— 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.~~

G.3 ~~— 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 forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.~~
- (b) ~~— Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.~~

G.4 ~~— 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.~~

G.5 ~~— Incineration [326 IAC 4-2] [326 IAC 9-1-2]~~

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

G.6 ~~— 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.7 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 June 18, 1997. The plan is included as Attachment A.~~

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

~~(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos-containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.~~

~~(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:~~

~~(1) When the amount of affected asbestos-containing material increases or decreases by at least twenty percent (20%); or~~

~~(2) If there is a change in the following:~~

~~(A) Asbestos removal or demolition start date;~~

~~(B) Removal or demolition contractor; or~~

~~(C) Waste disposal site.~~

~~(c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).~~

~~(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).~~

~~All required notifications shall be submitted to:~~

~~Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue
MC 61-52 IGCN 1003
Indianapolis, Indiana 46204-2254~~

~~The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).~~

~~(e) Procedures for Asbestos Emission Control~~

~~The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(e). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.~~

- (f) ~~Demolition and Renovation~~
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).
- (g) ~~Indiana Accredited Asbestos Inspector~~
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos.

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

~~C.9 Performance Testing [326 IAC 3-6]~~

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

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

~~Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2254~~

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

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

~~Compliance Requirements [326 IAC 2-1.1-11]~~

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

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

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

~~C.11 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~~

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

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

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

~~C.12 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]~~

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

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

- ~~(a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale.~~
- ~~(b) The Permittee may request that the IDEM, OAQ approve the use of an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.~~

~~Corrective Actions and Response Steps [326 IAC 2-8-4][326 IAC 2-8-5(a)(1)]~~

~~C.14 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]~~

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

- ~~(a) If the Permittee has not already done so, the Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.~~
- ~~(b) These ERPs shall be submitted for approval to:~~

~~Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015~~

~~and~~

~~any applicable Local Air Pollution Control Agency within ninety (90) days from the date of issuance of this permit.~~

~~The ERP does require the certification by the Authorized Individual as defined by 326 IAC 2-1.1-1(1).~~

~~(c) If the ERP is disapproved by IDEM, OAQ, or any applicable Local Air Pollution Control Agency, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.~~

~~(d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.~~

~~(e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.~~

~~(f) Upon direct notification by IDEM, OAQ, or any applicable Local Air Pollution Control Agency, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]~~

~~C.15 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68]~~

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

~~C.16 Response to Excursions or Exceedances [326 IAC 2-8-4] [326 IAC 2-8-5]~~

~~(a) Upon detecting an excursion or exceedance, the Permittee shall restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.~~

~~(b) The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Corrective actions may include, but are not limited to, the following:~~

~~(1) initial inspection and evaluation;~~

~~(2) recording that operations returned to normal without operator action (such as through response by a computerized distribution control system); or~~

~~(3) any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.~~

~~(c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:~~

~~(1) monitoring results;~~

~~(2) review of operation and maintenance procedures and records; and/or~~

~~(3) inspection of the control device, associated capture system, and the process.~~

- (d) ~~Failure to take reasonable response steps shall be considered a deviation from the permit.~~
- (e) ~~The Permittee shall maintain the following records:~~
 - (1) ~~monitoring data;~~
 - (2) ~~monitor performance data, if applicable; and~~
 - (3) ~~corrective actions taken.~~

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

- (a) ~~When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.~~
- (b) ~~A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.~~
- (c) ~~IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.~~

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

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

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

- (a) ~~Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.~~
- (b) ~~Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.~~

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

- (a) ~~The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. 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 an "authorized individual" as defined by 326 IAC 2-1.1-1(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 Data Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2254

- ~~(c) — Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.~~
- ~~(d) — Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).~~
- ~~(e) — 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

~~G.20 — Compliance with 40 CFR 82 and 326 IAC 22-1~~

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

Portable Source Requirement

~~G.21 — Relocation of Portable Sources [326 IAC 2-14-4]~~

-
- ~~(a) — Pursuant to 2-14-4 (Relocation), a portable source, operation, process, or emissions unit that has been issued a valid operating permit under this article may be issued an approval letter for relocation that authorizes operation of the source, operation, process, or emissions unit as follows:
 - ~~(1) — The source submits a notification at least thirty (30) days prior to relocation.~~
 - ~~(2) — The commissioner shall approve or deny the relocation within thirty (30) days of receipt of the notification of the proposed relocation.~~
 - ~~(3) — The application submitted for a permit revision in accordance with 326 IAC 2-6.1-6, 326 IAC 2-7-12, or 326 IAC 2-8-11.1 shall satisfy the notification requirements of this section.~~~~

~~The commissioner shall not approve a relocation of a portable source, operation, process,~~

~~or emissions unit, if the following applies:~~

- ~~(1) The relocation would allow a violation of the national ambient air quality standards (NAAQS).~~
 - ~~(2) The relocation would allow a violation of a prevention of significant deterioration (PSD) maximum allowable increase.~~
 - ~~(3) The source is not in compliance with all applicable air pollution control rules.~~
 - ~~(4) The relocation would adversely affect the public health.~~
- ~~(b) This permit is approved for operation in all areas of Indiana except in Lake and Porter Counties. This determination is based on the requirements of Prevention of Significant Deterioration in 326 IAC 2-2, and Emission Offset requirements in 326 IAC 2-3. Prior to locating in any of these counties, the Permittee shall submit a request and obtain a permit modification.~~
- ~~(c) A request to relocate shall be submitted to IDEM, OAQ at least thirty (30) days prior to the intended date of relocation. This submittal shall include the following:~~
- ~~(1) A list of governmental officials entitled to receive notice of application to relocate. IC 13-15-3-1~~
 - ~~(2) A list of adjacent landowners that the Permittee will send written notice to not more than ten (10) days after submission of the request to relocate. IC 13-15-8~~
- ~~The notification by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).~~
- ~~(d) A "Relocation Site Approval" letter shall be obtained prior to relocating.~~
- ~~(e) The Permittee shall also notify the applicable local air pollution control agency when relocating to, or from, one the following:~~
- ~~(1) City of Gary - (Gary Department of Environmental Affairs)~~
 - ~~(2) City of Hammond - (Hammond Department of Environmental Management)~~
 - ~~(3) Vigo County - (Vigo County Air Pollution Control)~~
- ~~(f) A valid operation permit consists of this document and any subsequent "Relocation Site Approval" letter specifying the current location of the portable plant.~~

SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

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

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

Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per

hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

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

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

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

C.3 Opacity [326 IAC 5-1]

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

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

C.4 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.5 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

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

C.6 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.7 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]

Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions shall be controlled according to the attached plan as in Attachment A.

C.8 Stack Height [326 IAC 1-7]

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

C.9 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.10 Performance Testing [326 IAC 3-6]

(a) For performance testing required by this permit, a test protocol, except as provided elsewhere in this permit, shall be submitted to:

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

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the Permittee submits to IDEM, OAQ a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.11 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.12 Compliance Monitoring [326 IAC 2-8-4(3)][326 IAC 2-8-5(a)(1)]

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

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

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

The notification which shall be submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

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

- (a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale.
- (c) The Permittee may request that the IDEM, OAQ approve the use of an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.

Corrective Actions and Response Steps [326 IAC 2-8-4][326 IAC 2-8-5(a)(1)]

C.14 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

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

- (a) The Permittee shall maintain the most recently submitted written emergency reduction plans (ERPs) consistent with safe operating procedures.

- (b) Upon direct notification by IDEM, OAQ that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

C.15 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68]

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

C.16 Response to Excursions or Exceedances [326 IAC 2-8-4] [326 IAC 2-8-5]

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

- (a) The Permittee shall take reasonable response steps to restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing excess emissions.
- (b) The response shall include minimizing the period of any startup, shutdown or malfunction. The response may include, but is not limited to, the following:
 - (1) initial inspection and evaluation;
 - (2) recording that operations returned or are returning to normal without operator action (such as through response by a computerized distribution control system); or
 - (3) any necessary follow-up actions to return operation to normal or usual manner of operation.
- (c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:
 - (1) monitoring results;
 - (2) review of operation and maintenance procedures and records; and/or
 - (3) inspection of the control device, associated capture system, and the process.
- (d) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (e) The Permittee shall record the reasonable response steps taken.

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

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall submit a description of its response actions to IDEM, OAQ, no later than seventy-five (75) days after the date of the test.

- (b) A retest to demonstrate compliance shall be performed no later than one hundred eighty (180) days after the date of the test. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred eighty (180) days is not practicable, IDEM, OAQ may extend the retesting deadline
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

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

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, for all record keeping requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or the date of initial start-up, whichever is later, to begin such record keeping.

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

- (a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported except that a deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. This report shall be submitted not later than thirty (30) days after the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1). A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.
- (b) The address for report submittal is:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other

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

- (d) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

Portable Source Requirement

C.20 Relocation of Portable Sources [326 IAC 2-14-4]

- (a) This permit is approved for operation in all areas of Indiana except in severe nonattainment areas for ozone and in Lake and Porter Counties. This determination is based on the requirements of Prevention of Significant Deterioration in 326 IAC 2-2, and Emission Offset requirements in 326 IAC 2-3. Prior to locating in any severe nonattainment area, the Permittee must submit a request and obtain a permit modification.
- (b) Pursuant to 326 IAC 2-14-4(a)(1), a request to relocate shall be submitted to IDEM, OAQ at least thirty (30) days prior to the intended date of relocation.
- (c) Pursuant to 326 IAC 2-14-4(a)(3), this submittal shall include the following:
- (1) A list of governmental officials entitled to receive notice of application to relocate. IC 13-15-3-1
 - (2) A list of adjacent landowners that the Permittee will send written notice to not more than ten (10) days after submission of the request to relocate. IC 13-15-8
 - (3) The new location address of the portable source.
 - (4) Whether or not this portable source will be relocated to another source.
 - (5) If relocating to another source:
 - (A) Name, location address, and permit number of the source this portable source is relocating to.
 - (B) Whether or not the sources will be considered as one source. See Non Rule Policy (NRP) Air-005 and Air-006.
 - (6) If the sources will be considered as one source, whether or not the source to be relocated to has received the necessary approvals from IDEM to allow the relocation.

The notification by the Permittee does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) A "Relocation Site Approval" letter shall be obtained prior to relocating.
- (d) A valid operation permit consists of this document and any subsequent "Relocation Site Approval" letter specifying the current location of the portable plant.

Stratospheric Ozone Protection

C.21 Compliance with 40 CFR 82 and 326 IAC 22-1

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

...

D.1.75 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 this facility and its control device. **Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.**

D.1.140 Visible Emissions Notations

- ...
- (e) If abnormal emissions are observed, the Permittee shall take reasonable **response** steps. ~~in accordance with Section C - Response to Excursions or Exceedances~~ **contains the Permittee's obligation with regard to the reasonable response steps required by this condition. An abnormal visible emission notation is not a deviation from this permit.** Failure to take response steps ~~in accordance with Section C - Excursions or Exceedances~~ shall be considered a deviation from this permit.

D.1.121 Parametric Monitoring

- (a) The Permittee shall record the pressure drop across the baghouse used in conjunction with the aggregate dryer/mixer at least once per day when the drying/mixing process is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 3.0 and 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps. ~~in accordance with Section C - Response to Excursions or Exceedances~~ **contains the Permittee's obligation with regard to the reasonable response steps required by this condition.** A pressure reading that is outside the above-mentioned range is not a deviation from this permit. Failure to take response steps ~~in accordance with Section C - Response to Excursions or Exceedances,~~ shall be considered a deviation from this permit.
- (b) The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated **or replaced** at least once every six (6) months **or other time period specified by the manufacturer. The Permittee shall maintain records of the manufacturer specifications, if used.**

...

D.2.4 Hazardous Air Pollutants (HAP) [326 IAC 2-8-4]

~~The HAPs from the use of liquid binders in cold mix shall be:~~

- (a) ~~less than five and four-tenths (5.40) tons for a single HAP per consecutive 12 month period, and~~
- (b) ~~less than twenty and twenty-hundredths (20.20) tons of combined HAPs, per twelve (12) consecutive month period, with compliance determined at the end of each month.~~

~~Compliance with these limits shall render 326 IAC 2-7 (Part 70 Permits) not applicable with respect to HAP emissions.~~

D.2.54 Record Keeping Requirements

- (a) ~~To document compliance with Conditions D.2.1, D.2.2 and D.2.4, The permittee shall maintain records that document VOC and HAP usage as follows:~~

(a) **To document the compliance status with Conditions D.2.1 - Volatile Organic Compounds (VOC) and D.2.2 - Volatile Organic Compounds (VOC) the Permittee shall record and maintain complete monthly records of the information listed in items (1) through (4) below:**

- (1) **Calendar dates covered in the compliance determination period;**
- (12) ~~Amount and type of liquid asphalt binder used~~ **usage** in the production of cold mix asphalt ~~each day~~ since the last compliance determination period.
- (23) ~~Type of solvent, and VOC and single and combined HAP~~ **solvent** content by weight of the liquid binder used in the production of cold mix asphalt ~~each day~~ since the last compliance determination period.
- (34) ~~Amount of VOC and single and combined HAP,~~ solvent used in the production of cold mix asphalt ~~each day~~ and the amount of VOC emitted since the last compliance determination period.

Records **that may be used to document the information included in (1) through (4)** may include: delivery tickets, manufacturer's data, material safety data sheets (MSDS), and other documents necessary to verify the type and amount used. Test results of ASTM tests for asphalt cutback and asphalt emulsion may be used to document volatilization.

(b) **Section C - General Record Keeping Requirements, of this permit contains the Permittee's obligations with regard to the records required by this condition.**

...
D.2.65 Reporting Requirements

A quarterly summary of the information to document compliance **status** with Conditions D.2.1 - **Volatile Organic Compounds (VOC)**, and D.2.2 - **Volatile Organic Compounds (VOC)** and D.2.4 shall be submitted to the addresses listed in Section C - ~~General Reporting Requirements~~, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within **no later than thirty (30) days** after the end of the quarter being reported. **Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition.** The report submitted by the Permittee does require ~~the~~ a certification **that meets the requirements of 326 IAC 2-8-5(a)(1)** by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

SECTION E.1 FACILITY OPERATION CONDITIONS

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

- (a) **One (1) portable asphalt drum-mix plant, constructed in 1998, with a nominal capacity of 300 tons per hour, equipped with one (1) aggregate dryer burner with a maximum rated capacity of 72 million British thermal units (MMBtu) per hour, using natural gas, No. 2 fuel oil, or residual No. 4 fuel oil, processing steel slag, and using one (1) pulse jet baghouse for particulate control, exhausting at one (1) stack, identified as #1. This source does not process blast furnace slag;**
- (b) **four (4) compartment cold feed bins with feeders and collection conveyors;**
- (c) **one (1) 30" incline conveyor with 4' X 10' scalping screen;**

(d) two (2) conveyors and one (1) screen to transfer aggregate from recycle bin to asphalt dryer;

(e) one (1) conveyor to transfer product from asphalt dryer to storage silo;

Insignificant Activities:

(d) Other categories with emissions below insignificant thresholds:

(2) one (1) recycle bin with twenty-five (25) ton storage capacity;

(3) one (1) storage silo with seventy (70) ton storage capacity; and

(4) aggregate storage piles with a total storage capacity of 12,500 tons.

Under NSPS subpart I, this is considered an affected hot-mix asphalt facility.

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

New Source Performance Standards (NSPS) Requirements [326 IAC 2-8-4(1)]

E.1.1 General Provisions Relating to NSPS [326 IAC 12-1] [40 CFR 60, Subpart A]

- (a) Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference as 326 IAC 12-1, except as otherwise specified in 40 CFR 60, Subpart I.
- (b) Pursuant to 40 CFR 60.10, the Permittee shall submit all required notifications and reports to:

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

E.1.2 New Source Performance Standards (NSPS) for Hot Mix Asphalt Facilities [40 CFR Part 60, Subpart I] [326 IAC 12]

The Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart I (included as Attachment B of this permit), which are incorporated by reference as 326 IAC 12, except as otherwise specified in 40 CFR Part 60, Subpart I:

- (a) 40 CFR 60.90
(b) 40 CFR 60.91
(c) 40 CFR 60.92
(d) 40 CFR 60.93

...

FESOP Quarterly Report

Source Name: Dave O'Mara Contractor, Inc.
Source Address: New Point Stone at 992 South County Road 800 East, Greensburg, IN
Mailing Address: 1100 East O & M Avenue, North Vernon, IN 47265
FESOP Permit No.: F031-25342-05047
Facilities: Cold mix (stockpile mix) asphalt manufacturing operations and storage piles
Parameter: Single HAP usage

Limit: ~~_____ Total less than five and four tenths (5.4) tons per twelve (12) consecutive month period, with compliance determined at the end of each month.~~

...

FESOP Quarterly Report

Source Name: ~~_____ Dave O'Mara Contractor, Inc. _____~~
Source Address: ~~_____ New Point Stone at 992 South County Road 800 East, Greensburg, IN _____~~
Mailing Address: ~~_____ 1100 East O & M Avenue, North Vernon, IN 47265 _____~~
FESOP Permit No.: ~~_____ F031-25342-05047 _____~~
Facilities: ~~_____ Cold mix (stockpile mix) asphalt manufacturing operations and storage piles _____~~
Parameter: ~~_____ Combined HAPs usage _____~~
Limit: ~~_____ Total less than twenty and twenty hundredths (20.20) tons per twelve (12) consecutive month period, with compliance determined at the end of each month.~~

...

Page 1 of 2

This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements **of this permit**, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

...

Conclusion and Recommendation

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant. An application for the purposes of this review was received on November 17, 2009.

The construction and operation of this proposed revision shall be subject to the conditions of the attached proposed FESOP Significant Revision No. 031-28784-05047. The staff recommends to the Commissioner that this FESOP Significant Revision be approved.

IDEM Contact

- (a) Questions regarding this proposed permit can be directed to Brian Williams at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) (234-5375) or toll free at 1-800-451-6027 extension (4-5375).
- (b) A copy of the findings is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>
- (c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: www.idem.in.gov

Appendix A.1: Unlimited Emissions Calculations

Company Name: Dave O'Mara Contractor, Inc.
 Source Address: New Point Stone at 992 South County Road 800 East, Greensburg, Indiana
 Permit Number: 031-28784-05047
 Reviewer: Brian Williams

Asphalt Plant Maximum Capacity

Maximum Hourly Asphalt Production =	300	ton/hr								
Maximum Annual Asphalt Production =	2,628,000	ton/yr								
Maximum Annual Slag Usage =	1,971,000	ton/yr	0.66	% sulfur						
Maximum Dryer Fuel Input Rate =	72.0	MMBtu/hr								
Natural Gas Usage =	631	MMCF/yr								
No. 2 Fuel Oil Usage =	4,505,143	gal/yr, and	0.50	% sulfur						
No. 4 Fuel Oil Usage =	4,505,143	gal/yr, and	1.60	% sulfur						
Residual (No. 5 or No. 6) Fuel Oil Usage =	0	gal/yr, and	0.00	% sulfur						
Propane Usage =	0	gal/yr, and	0.00	gr/100 ft ³ sulfur						
Butane Usage =	0	gal/yr, and	0.00	gr/100 ft ³ sulfur						
Used/Waste Oil Usage =	0	gal/yr, and	0.00	% sulfur	0.00	% ash	0.000	% chlorine,	0.000	% lead
Unlimited PM Dryer/Mixer Emission Factor =	28.0	lb/ton of asphalt production								
Unlimited PM10 Dryer/Mixer Emission Factor =	6.5	lb/ton of asphalt production								
Unlimited PM2.5 Dryer/Mixer Emission Factor =	1.5	lb/ton of asphalt production								
Unlimited VOC Dryer/Mixer Emission Factor =	0.032	lb/ton of asphalt production								
Unlimited CO Dryer/Mixer Emission Factor =	0.13	lb/ton of asphalt production								
Unlimited Slag SO2 Dryer/Mixer Emission Factor =	0.0014	lb/ton of slag processed								

Unlimited/Uncontrolled Emissions

Process Description	Unlimited/Uncontrolled Potential to Emit (tons/year)									
	Criteria Pollutants							Hazardous Air Pollutants		
	PM	PM10	PM2.5	SO2	NOx	VOC	CO	Total HAPs	Worst Case HAP	
Ducted Emissions										
Dryer Fuel Combustion (worst case)	15.77	18.70	18.70	540.62	45.05	1.73	26.49	0.97	0.57	(hydrogen chloride)
Dryer/Mixer (Process)	36792.00	8541.00	1971.00	76.21	72.27	42.05	170.82	14.01	4.07	(formaldehyde)
Dryer/Mixer Slag Processing	0	0	0	1.38	0	0	0	0	0	
Hot Oil Heater Fuel Combustion (worst case)	0.05	0.09	0.09	1.84	0.52	0.01	0.13	0.002	0.002	(hexane)
Worst Case Emissions*	36792.05	8541.09	1971.09	543.84	72.79	42.05	170.95	14.01	4.07	(hydrogen chloride)
Fugitive Emissions										
Asphalt Load-Out, Silo Filling, On-Site Yard	1.46	1.46	1.46	0	0	22.51	3.79	0.38	0.12	(formaldehyde)
Material Storage Piles	1.60	0.56	0.56	0	0	0	0	0	0	
Material Processing and Handling	8.49	4.02	0.61	0	0	0	0	0	0	
Material Crushing, Screening, and Conveying	41.69	15.23	15.23	0	0	0	0	0	0	
Unpaved and Paved Roads (worst case)	93.30	23.78	2.38	0	0	0	0	0	0	
Cold Mix Asphalt Production	0	0	0	0	0	31581.99	0	8237.75	2842.38	(xylenes)
Gasoline Fuel Transfer and Dispensing	0	0	0	0	0	0.00	0	0.00	0.00	(xylenes)
Volatile Organic Liquid Storage Vessels	0	0	0	0	0	negl	0	negl	0	
Total Fugitive Emissions	146.54	45.04	20.23	0	0.00	31604.50	3.79	8238.13	2842.38	(xylenes)
Totals Unlimited/Uncontrolled PTE	36938.59	8586.12	1991.32	543.84	72.79	31646.55	174.74	8252.14	2842.38	(xylenes)

negl = negligible

Worst Case Fuel Combustion is based on the fuel with the highest emissions for each specific pollutant.

*Worst Case Emissions (tons/yr) = Worst Case Emissions from Dryer Fuel Combustion and Dryer/Mixer + Dryer/Mixer Slag Processing + Worst Case Emissions from Hot Oil Heater Fuel Combustion Fuel component percentages provided by the source.

Appendix A.1: Unlimited Emissions Calculations
Dryer/Mixer Fuel Combustion with Maximum Capacity < 100 MMBtu/hr

Company Name: Dave O'Mara Contractor, Inc.
Source Address: New Point Stone at 992 South County Road 800 East, Greensburg, Indiana
Permit Number: 031-28784-05047
Reviewer: Brian Williams

The following calculations determine the unlimited/uncontrolled emissions created from the combustion of natural gas, fuel oil, propane, butane, or used/waste oil in the dryer/mixer at the source.

Maximum Capacity

Maximum Hourly Asphalt Production =	300	ton/hr
Maximum Annual Asphalt Production =	2,628,000	ton/yr
Maximum Fuel Input Rate =	72	MMBtu/hr
Natural Gas Usage =	631	MMCF/yr
No. 2 Fuel Oil Usage =	4,505,143	gal/yr, and
	0.50	% sulfur
No. 4 Fuel Oil Usage =	4,505,143	gal/yr, and
	1.60	% sulfur
Residual (No. 5 or No. 6) Fuel Oil Usage =	0	gal/yr, and
	0.00	% sulfur
Propane Usage =	0	gal/yr, and
	0.00	gr/100 ft3 sulfur
Butane Usage =	0	gal/yr, and
	0.00	gr/100 ft3 sulfur
Used/Waste Oil Usage =	0	gal/yr, and
	0.00	% sulfur
	0.00	% ash
	0.00	% chlorine
	0.00	% lead

Unlimited/Uncontrolled Emissions

Criteria Pollutant	Emission Factor (units)							Unlimited/Uncontrolled Potential to Emit (tons/yr)							
	Natural Gas (lb/MMCF)	No. 2 Fuel Oil (lb/kgal)	No. 4 Fuel Oil* (lb/kgal)	Residual (No. 5 or No. 6) Fuel Oil (lb/kgal)	Propane (lb/kgal)	Butane (lb/kgal)	Used/Waste Oil (lb/kgal)	Natural Gas (tons/yr)	No. 2 Fuel Oil (tons/yr)	No. 4 Fuel Oil (tons/yr)	Residual (No. 5 or No. 6) Fuel Oil (tons/yr)	Propane (tons/yr)	Butane (tons/yr)	Used/Waste Oil (tons/yr)	Worse Case Fuel (tons/yr)
PM	1.9	2.0	7.0	3.22	0.5	0.6	0.0	0.60	4.51	15.77	0.00	0.00	0.00	0.00	15.77
PM10/PM2.5	7.6	3.3	8.3	4.72	0.5	0.6	0	2.40	7.43	18.70	0.00	0.00	0.00	0.00	18.70
SO2	0.6	71.0	240.0	0.0	0.000	0.000	0.0	0.19	159.93	540.62	0.00	0.00	0.00	0.00	540.62
NOx	100	20.0	20.0	55.0	13.0	15.0	19.0	31.54	45.05	45.05	0.00	0.00	0.00	0.00	45.05
VOC	5.5	0.20	0.20	0.28	1.00	1.10	1.0	1.73	0.45	0.45	0.00	0.00	0.00	0.00	1.73
CO	84	5.0	5.0	5.0	7.5	8.4	5.0	26.49024	11.26	11.26	0.00	0.00	0.00	0.00	26.49
Hazardous Air Pollutant															
HCl							0.0							0.00	0.00
Antimony			5.25E-03	5.25E-03			negl			1.18E-02	0.00E+00			negl	1.2E-02
Arsenic	2.0E-04	5.6E-04	1.32E-03	1.32E-03			1.1E-01	6.3E-05	1.26E-03	2.97E-03	0.00E+00			0.00E+00	3.0E-03
Beryllium	1.2E-05	4.2E-04	2.79E-05	2.79E-05			negl	3.9E-06	9.48E-04	6.26E-05	0.00E+00			negl	9.5E-04
Cadmium	1.1E-03	4.2E-04	3.98E-04	3.98E-04			9.9E-03	3.5E-04	9.48E-04	8.97E-04	0.00E+00			0.00E+00	9.5E-04
Chromium	1.4E-03	4.2E-04	8.45E-04	8.45E-04			2.0E-02	4.4E-04	9.48E-04	1.90E-03	0.00E+00			0.00E+00	1.9E-03
Cobalt	8.4E-05	6.02E-03	6.02E-03	6.02E-03			2.1E-04	2.6E-05		1.36E-02	0.00E+00			0.00E+00	1.4E-02
Lead	5.0E-04	1.3E-03	1.51E-03	1.51E-03			0	1.6E-04	2.84E-03	3.40E-03	0.00E+00			0.0E+00	0.00
Manganese	3.8E-04	8.4E-04	3.00E-03	3.00E-03			6.8E-02	1.2E-04	1.89E-03	6.76E-03	0.00E+00			0.00E+00	0.01
Mercury	2.6E-04	4.2E-04	1.13E-04	1.13E-04				8.2E-05	9.46E-04	2.55E-04	0.00E+00				9.5E-04
Nickel	2.1E-03	4.2E-04	8.45E-02	8.45E-02			1.1E-02	6.6E-04	9.46E-04	1.90E-01	0.00E+00			0.00E+00	0.190
Selenium	2.4E-05	2.1E-03	6.83E-04	6.83E-04			negl	7.6E-06	4.73E-03	1.54E-03	0.00E+00			negl	4.7E-03
1,1,1-Trichloroethane			2.36E-04	2.36E-04						5.32E-04	0.00E+00				5.3E-04
1,3-Butadiene															0.0E+00
Acetaldehyde															0.0E+00
Acrolein															0.0E+00
Benzene	2.1E-03		2.14E-04	2.14E-04				6.6E-04		4.82E-04	0.00E+00				6.6E-04
Bis(2-ethylhexyl)phthalate							2.2E-03							0.00E+00	0.0E+00
Dichlorobenzene	1.2E-03						8.0E-07	3.8E-04						0.00E+00	3.8E-04
Ethylbenzene			6.36E-05	6.36E-05						1.43E-04	0.00E+00				1.4E-04
Formaldehyde	7.5E-02	6.10E-02	3.30E-02	3.30E-02				2.4E-02	1.37E-01	7.43E-02	0.00E+00				0.137
Hexane	1.8E+00							0.57							0.568
Phenol							2.4E-03							0.00E+00	0.0E+00
Toluene	3.4E-03		6.20E-03	6.20E-03				1.1E-03		1.40E-02	0.00E+00				1.4E-02
Total PAH Haps	negl		1.13E-03	1.13E-03			3.9E-02	negl		2.55E-03	0.00E+00			0.00E+00	2.5E-03
Polycyclic Organic Matter		3.30E-03							7.43E-03						7.4E-03
Xylene			1.09E-04	1.09E-04						2.46E-04	0.00E+00				2.5E-04
Total HAPs								0.60	0.16	0.33	0.00	0	0	0.00	0.97

Methodology

Natural Gas Usage (MMCF/yr) = [Maximum Fuel Input Rate (MMBtu/hr)] * [8,760 hrs/yr] * [1 MMCF/1,000 MMBtu]
 Oil Usage (gal/yr) = [Maximum Fuel Input Rate (MMBtu/hr)] * [8,760 hrs/yr] * [1 gal/0.140 MMBtu]
 Propane Usage (gal/yr) = [Maximum Fuel Input Rate (MMBtu/hr)] * [8,760 hrs/yr] * [1 gal/0.0905 MMBtu]
 Butane Usage (gal/yr) = [Maximum Fuel Input Rate (MMBtu/hr)] * [8,760 hrs/yr] * [1 gal/0.0974 MMBtu]
 Natural Gas: Unlimited/Uncontrolled Potential to Emit (tons/yr) = [Maximum Natural Gas Usage (MMCF/yr)] * [Emission Factor (lb/MMCF)] * [ton/2000 lbs]
 All Other Fuels: Unlimited/Uncontrolled Potential to Emit (tons/yr) = [Maximum Fuel Usage (gals/yr)] * [Emission Factor (lb/kgal)] * [kgal/1000 gal] * [ton/2000 lbs]
 Sources of AP-42 Emission Factors for fuel combustion:
 Natural Gas: AP-42 Chapter 1.4 (dated 7/98), Tables 1.4-1, 1.4-2, 1.4-3, and 1.4-4
 No. 2, No. 4, and No. 6 Fuel Oil: AP-42 Chapter 1.3 (dated 9/98), Tables 1.3-1, 1.3-2, 1.3-3, 1.3-4, 1.3-9, 1.3-10, and 1.3-11
 Propane and Butane: AP-42 Chapter 1.5 (dated 7/08), Tables 1.5-1 (assuming PM = PM10)
 Waste Oil: AP-42 Chapter 1.11 (dated 10/96), Tables 1.11-1, 1.11-2, 1.11-3, 1.11-4, and 1.11-5

Abbreviations

PM = Particulate Matter
 PM10 = Particulate Matter (<10 um)
 PM2.5 = Particulate Matter (< 2.5 um)
 SO2 = Sulfur Dioxide
 NOx = Nitrogen Oxides
 VOC = Volatile Organic Compounds
 CO = Carbon Monoxide
 HAP = Hazardous Air Pollutant
 HCl = Hydrogen Chloride
 PAH = Polycyclic Aromatic Hydrocarbon

*Since there are no specific AP-42 HAP emission factors for combustion of No. 4 fuel oil, it was assumed that HAP emissions from combustion of No. 4 fuel oil were equal to combustion of residual or No. 6 fuel oil.

**Appendix A.1: Unlimited Emissions Calculations
Dryer/Mixer Process Emissions**

**Company Name: Dave O'Mara Contractor, Inc.
Source Address: New Point Stone at 992 South County Road 800 East, Greensburg, Indiana
Permit Number: 031-28784-05047
Reviewer: Brian Williams**

The following calculations determine the unlimited/uncontrolled emissions from the aggregate drying/mixing

Maximum Hourly Asphalt Production = ton/hr
Maximum Annual Asphalt Production = ton/yr

Criteria Pollutant	Uncontrolled Emission Factors (lb/ton)			Unlimited/Uncontrolled Potential to Emit (tons/yr)			Worse Case PTE
	Drum-Mix Plant (dryer/mixer)			Drum-Mix Plant (dryer/mixer)			
	Natural Gas	No. 2 Fuel Oil	Waste Oil	Natural Gas	No. 2 Fuel Oil	Waste Oil	
PM*	28	28	28	36792	36792	36792	36792
PM10*	6.5	6.5	6.5	8541	8541	8541	8541
PM2.5*	1.5	1.5	1.5	1971	1971	1971	1971
SO2**	0.0034	0.011	0.058	4.5	14.5	76.2	76.2
NOx**	0.026	0.055	0.055	34.2	72.3	72.3	72.3
VOC**	0.032	0.032	0.032	42.0	42.0	42.0	42.0
CO***	0.13	0.13	0.13	170.8	170.8	170.8	170.8
Hazardous Air Pollutant							
HCl			2.10E-04			2.76E-01	0.28
Antimony	1.80E-07	1.80E-07	1.80E-07	2.37E-04	2.37E-04	2.37E-04	2.37E-04
Arsenic	5.60E-07	5.60E-07	5.60E-07	7.36E-04	7.36E-04	7.36E-04	7.36E-04
Beryllium	negl	negl	negl	negl	negl	negl	0.00E+00
Cadmium	4.10E-07	4.10E-07	4.10E-07	5.39E-04	5.39E-04	5.39E-04	5.39E-04
Chromium	5.50E-06	5.50E-06	5.50E-06	7.23E-03	7.23E-03	7.23E-03	7.23E-03
Cobalt	2.60E-08	2.60E-08	2.60E-08	3.42E-05	3.42E-05	3.42E-05	3.42E-05
Lead	6.20E-07	1.50E-05	1.50E-05	8.15E-04	1.97E-02	1.97E-02	1.97E-02
Manganese	7.70E-06	7.70E-06	7.70E-06	1.01E-02	1.01E-02	1.01E-02	1.01E-02
Mercury	2.40E-07	2.60E-06	2.60E-06	3.15E-04	3.42E-03	3.42E-03	3.42E-03
Nickel	6.30E-05	6.30E-05	6.30E-05	0.08	0.08	0.08	0.08
Selenium	3.50E-07	3.50E-07	3.50E-07	4.60E-04	4.60E-04	4.60E-04	4.60E-04
2,2,4 Trimethylpentane	4.00E-05	4.00E-05	4.00E-05	0.05	0.05	0.05	0.05
Acetaldehyde			1.30E-03			1.71	1.71
Acrolein			2.60E-05			3.42E-02	3.42E-02
Benzene	3.90E-04	3.90E-04	3.90E-04	0.51	0.51	0.51	0.51
Ethylbenzene	2.40E-04	2.40E-04	2.40E-04	0.32	0.32	0.32	0.32
Formaldehyde	3.10E-03	3.10E-03	3.10E-03	4.07	4.07	4.07	4.07
Hexane	9.20E-04	9.20E-04	9.20E-04	1.21	1.21	1.21	1.21
Methyl chloroform	4.80E-05	4.80E-05	4.80E-05	0.06	0.06	0.06	0.06
MEK			2.00E-05			0.03	0.03
Propionaldehyde			1.30E-04			0.17	0.17
Quinone			1.60E-04			0.21	0.21
Toluene	1.50E-04	2.90E-03	2.90E-03	0.20	3.81	3.81	3.81
Total PAH Haps	1.90E-04	8.80E-04	8.80E-04	0.25	1.16	1.16	1.16
Xylene	2.00E-04	2.00E-04	2.00E-04	0.26	0.26	0.26	0.26

Total HAPs 14.01

Worst Single HAP 4.07 (formaldehyde)

Methodology

Unlimited/Uncontrolled Potential to Emit (tons/yr) = (Maximum Annual Asphalt Production (tons/yr)) * (Emission Factor (lb/ton)) * (ton/2000 lbs)

Emission Factors from AP-42 Chapter 11.1 (dated 3/04), Tables 11.1-3, 11.1-4, 11.1-7, 11.1-8, 11.1-10, and 11.1-12

Natural gas, No. 2 fuel oil, and waste oil represent the worst possible emissions scenario. AP-42 did not provide emission factors for any other fuels.

* PM, PM10, and PM2.5 AP-42 emission factors based on drum mix dryer fired with natural gas, propane, fuel oil, and waste oil. According to AP-42 fuel type does not significantly effect PM, PM10, and PM2.5 emissions.

** SO2, NOx, and VOC AP-42 emission factors are for natural gas, No. 2 fuel oil, and waste oil only.

*** CO AP-42 emission factor determined by combining data from drum mix dryer fired with natural gas, No. 6 fuel oil, and No. 2 fuel oil to develop single CO emission factor.

Abbreviations

VOC - Volatile Organic Compounds

HAP = Hazardous Air Pollutant

HCl = Hydrogen Chloride

PAH = Polyaromatic Hydrocarbon

SO2 = Sulfur Dioxide

**Appendix A.1: Unlimited Emissions Calculations
Dryer/Mixer Slag Processing**

Company Name: Dave O'Mara Contractor, Inc.
Source Address: New Point Stone at 992 South County Road 800 East, Greensburg, Indiana
Permit Number: 031-28784-05047
Reviewer: Brian Williams

The following calculations determine the unlimited emissions from the processing of slag in the aggregate drying/mixing

Maximum Annual Slag Usage* = ton/yr % sulfur

	Emission Factor (lb/ton)**	Unlimited Potential to Emit (tons/yr)
Criteria Pollutant	Slag Processing	Slag Processing
SO2	0.0014	1.4

Methodology

* The maximum annual slag usage was provided by the source.

* Testing results for steel slag, obtained June 2009 from E & B Paving, Inc. facility located in Huntington, IN. The testing results showed a steel slag emission factor of 0.0007 lb/ton from slag containing 0.33% sulfur content.

Unlimited Potential to Emit SO2 from Slag (tons/yr) = [(Maximum Annual Slag Usage (ton/yr)) * [Emission Factor (lb/ton)] * [ton/2000 lbs]

Abbreviations

SO2 = Sulfur Dioxide

Appendix A.1: Unlimited Emissions Calculations
Hot Oil Heater
Fuel Combustion with Maximum Capacity < 100 MMBtu/hr

Company Name: Dave O'Mara Contractor, Inc.
Source Location: New Point Stone at 992 South County Road 800 East, Greensburg, Indiana
Permit Number: 031-28784-05047
Reviewer: Brian Williams

Maximum Hot Oil Heater Fuel Input Rate = 0.83 MMBtu/hr
 Natural Gas Usage = 0.0 MMCF/yr
 No. 2 Fuel Oil Usage = 51,809 gal/yr, and 0.50 % sulfur

Unlimited/Uncontrolled Emissions

Criteria Pollutant	Emission Factor (units)		Unlimited/Uncontrolled Potential to Emit (tons/yr)		Worse Case Fuel (tons/yr)
	Hot Oil Heater		Hot Oil Heater		
	Natural Gas (lb/MMCF)	No. 2 Fuel Oil (lb/kgal)	Natural Gas (tons/yr)	No. 2 Fuel Oil (tons/yr)	
PM	1.9	2.0	0.000	0.052	0.05
PM10/PM2.5	7.6	3.3	0.000	0.085	0.09
SO2	0.6	71.0	0.000	1.839	1.84
NOx	100	20.0	0.000	0.518	0.52
VOC	5.5	0.20	0.000	0.005	0.01
CO	84	5.0	0.000	0.130	0.13
Hazardous Air Pollutant					
Arsenic	2.0E-04	5.6E-04	0.0E+00	1.45E-05	1.5E-05
Beryllium	1.2E-05	4.2E-04	0.0E+00	1.09E-05	1.1E-05
Cadmium	1.1E-03	4.2E-04	0.0E+00	1.09E-05	1.1E-05
Chromium	1.4E-03	4.2E-04	0.0E+00	1.09E-05	1.1E-05
Cobalt	8.4E-05		0.0E+00		0.0E+00
Lead	5.0E-04	1.3E-03	0.0E+00	3.26E-05	3.3E-05
Manganese	3.8E-04	8.4E-04	0.0E+00	2.18E-05	2.2E-05
Mercury	2.6E-04	4.2E-04	0.0E+00	1.09E-05	1.1E-05
Nickel	2.1E-03	4.2E-04	0.0E+00	1.09E-05	1.1E-05
Selenium	2.4E-05	2.1E-03	0.0E+00	5.44E-05	5.4E-05
Benzene	2.1E-03		0.0E+00		0.0E+00
Dichlorobenzene	1.2E-03		0.0E+00		0.0E+00
Ethylbenzene					0.0E+00
Formaldehyde	7.5E-02	6.10E-02	0.0E+00	1.58E-03	1.6E-03
Hexane	1.8E+00		0.00		0.0E+00
Phenol					0.0E+00
Toluene	3.4E-03		0.0E+00		0.0E+00
Total PAH Haps	negl		negl		0.0E+00
Polycyclic Organic Matter		3.30E-03		8.55E-05	8.5E-05
Total HAPs =			0.0E+00	1.8E-03	0.002

Methodology

Equivalent Natural Gas Usage (MMCF/yr) = [Maximum Fuel Input Rate (MMBtu/hr)] * [8,760 hrs/yr] * [1 MMCF/1,000 MMBtu]
 Equivalent Oil Usage (gal/yr) = [Maximum Fuel Input Rate (MMBtu/hr)] * [8,760 hrs/yr] * [1 gal/0.140 MMBtu]
 Natural Gas: Unlimited/Uncontrolled Potential to Emit (tons/yr) = [Maximum Natural Gas Usage (MMCF/yr)] * [Emission Factor (lb/MMCF)] * [ton/2000 lbs]
 All Other Fuels: Unlimited/Uncontrolled Potential to Emit (tons/yr) = [Maximum Fuel Usage (gals/yr)] * [Emission Factor (lb/kgal)] * [kgal/1000 gal] * [ton/2000 lbs]

Sources of AP-42 Emission Factors for fuel combustion:
 Natural Gas : AP-42 Chapter 1.4 (dated 7/98), Tables 1.4-1, 1.4-2, 1.4-3, and 1.4-4
 No. 2 Fuel Oil: AP-42 Chapter 1.3 (dated 9/98), Tables 1.3-1, 1.3-2, 1.3-3, 1.3-8, 1.3-9, 1.3-10, and 1.3-11

Abbreviations

PM = Particulate Matter
 PM10 = Particulate Matter (<10 um)
 SO2 = Sulfur Dioxide
 NOx = Nitrous Oxides
 VOC = Volatile Organic Compounds
 CO = Carbon Monoxide
 HAP = Hazardous Air Pollutant
 HCl = Hydrogen Chloride
 PAH = Polyaromatic Hydrocarbon

**Appendix A.1: Unlimited Emissions Calculations
Asphalt Load-Out, Silo Filling, and Yard Emissions**

Company Name: Dave O'Mara Contractor, Inc.
Source Address: New Point Stone at 992 South County Road 800 East, Greensburg, Indiana
Permit Number: 031-28784-05047
Reviewer: Brian Williams

The following calculations determine the unlimited/uncontrolled fugitive emissions from hot asphalt mix load-out, silo filling, and on-site yard for a drum mix hot mix asphalt plant

Asphalt Temperature, T =	325	F
Asphalt Volatility Factor, V =	-0.5	
Maximum Annual Asphalt Production =	2,628,000	tons/yr

Pollutant	Emission Factor (lb/ton asphalt)			Unlimited/Uncontrolled Potential to Emit (tons/yr)			
	Load-Out	Silo Filling	On-Site Yard	Load-Out	Silo Filling	On-Site Yard	Total
Total PM*	5.2E-04	5.9E-04	NA	0.69	0.77	NA	1.46
Organic PM	3.4E-04	2.5E-04	NA	0.45	0.334	NA	0.78
TOC	0.004	0.012	0.001	5.46	16.01	1.445	22.9
CO	0.001	0.001	3.5E-04	1.77	1.550	0.463	3.79

NA = Not Applicable (no AP-42 Emission Factor)

PM/HAPs	0.032	0.038	0	0.069
VOC/HAPs	0.081	0.204	0.021	0.306
non-VOC/HAPs	4.2E-04	4.3E-05	1.1E-04	5.8E-04
non-VOC/non-HAPs	0.40	0.23	0.10	0.73

Total VOCs	5.14	16.01	1.4	22.5
Total HAPs	0.11	0.24	0.021	0.38
		Worst Single HAP		0.117
				(formaldehyde)

Methodology

The asphalt temperature and volatility factor were provided by the source.

Unlimited/Uncontrolled Potential to Emit (tons/yr) = (Maximum Annual Asphalt Production (tons/yr)) * (Emission Factor (lb/ton)) * (ton/2000 lbs)

Emission Factors from AP-42 Chapter 11.1 (dated 3/04), Tables 11.1-14, 11.1-15, and 11.1-16

Plant Load-Out Emission Factor Equations (AP-42 Table 11.1-14)::

Total PM/PM10/PM2.5 Ef = 0.000181 + 0.00141(-V)e^{-(0.0251)(T+460)-20.43}

Organic PM Ef = 0.00141(-V)e^{-(0.0251)(T+460)-20.43}

TOC Ef = 0.0172(-V)e^{-(0.0251)(T+460)-20.43}

CO Ef = 0.00558(-V)e^{-(0.0251)(T+460)-20.43}

Silo Filling Emission Factor Equations (AP-42 Table 11.1-14):

PM/PM10 Ef = 0.000332 + 0.00105(-V)e^{-(0.0251)(T+460)-20.43}

Organic PM Ef = 0.00105(-V)e^{-(0.0251)(T+460)-20.43}

TOC Ef = 0.0504(-V)e^{-(0.0251)(T+460)-20.43}

CO Ef = 0.00488(-V)e^{-(0.0251)(T+460)-20.43}

On Site Yard CO emissions estimated by multiplying the TOC emissions by 0.32

*No emission factors available for PM10 or PM2.5, therefore IDEM assumes PM10 and PM2.5 are equivalent to Total PM.

Abbreviations

TOC = Total Organic Compounds

CO = Carbon Monoxide

PM = Particulate Matter

PM10 = Particulate Matter (<10 um)

PM2.5 = Particulate Matter (<2.5 um)

HAP = Hazardous Air Pollutant

VOC = Volatile Organic Compound

**Appendix A.1: Unlimited Emissions Calculations
Asphalt Load-Out, Silo Filling, and Yard Emissions (continued)**

Company Name: Dave O'Mara Contractor, Inc.
 Source Address: New Point Stone at 992 South County Road 800 East, Greensburg, Indiana
 Permit Number: 031-28784-05047
 Reviewer: Brian Williams

Organic Particulate-Based Compounds (Table 11.1-15)

Pollutant	CASRN	Category	HAP Type	Source	Speciation Profile		Unlimited/Uncontrolled Potential to Emit (tons/yr)			
					Load-out and Onsite Yard (% by weight of Total Organic PM)	Silo Filling and Asphalt Storage Tank (% by weight of Total Organic PM)	Load-out	Silo Filling	Onsite Yard	Total
PAH HAPs										
Acenaphthene	83-32-9	PM/HAP	POM	Organic PM	0.26%	0.47%	1.2E-03	1.6E-03	NA	2.7E-03
Acenaphthylene	208-96-8	PM/HAP	POM	Organic PM	0.028%	0.014%	1.3E-04	4.7E-05	NA	1.7E-04
Anthracene	120-12-7	PM/HAP	POM	Organic PM	0.07%	0.13%	3.1E-04	4.3E-04	NA	7.5E-04
Benzo(a)anthracene	56-55-3	PM/HAP	POM	Organic PM	0.019%	0.056%	8.5E-05	1.9E-04	NA	2.7E-04
Benzo(b)fluoranthene	205-99-2	PM/HAP	POM	Organic PM	0.0076%	0	3.4E-05	0	NA	3.4E-05
Benzo(k)fluoranthene	207-08-9	PM/HAP	POM	Organic PM	0.0022%	0	9.9E-06	0	NA	9.9E-06
Benzo(g,h,i)perylene	191-24-2	PM/HAP	POM	Organic PM	0.0019%	0	8.5E-06	0	NA	8.5E-06
Benzo(a)pyrene	50-32-8	PM/HAP	POM	Organic PM	0.0023%	0	1.0E-05	0	NA	1.0E-05
Benzo(e)pyrene	192-97-2	PM/HAP	POM	Organic PM	0.0078%	0.0095%	3.5E-05	3.2E-05	NA	6.7E-05
Chrysene	218-01-9	PM/HAP	POM	Organic PM	0.103%	0.21%	4.6E-04	7.0E-04	NA	1.2E-03
Dibenz(a,h)anthracene	53-70-3	PM/HAP	POM	Organic PM	0.00037%	0	1.7E-06	0	NA	1.7E-06
Fluoranthene	206-44-0	PM/HAP	POM	Organic PM	0.05%	0.15%	2.2E-04		NA	2.2E-04
Fluorene	86-73-7	PM/HAP	POM	Organic PM	0.77%	1.01%	3.4E-03	3.4E-03	NA	6.8E-03
Indeno(1,2,3-cd)pyrene	193-39-5	PM/HAP	POM	Organic PM	0.00047%	0	2.1E-06	0	NA	2.1E-06
2-Methylnaphthalene	91-57-6	PM/HAP	POM	Organic PM	2.38%	5.27%	1.1E-02	1.8E-02	NA	0.028
Naphthalene	91-20-3	PM/HAP	POM	Organic PM	1.25%	1.82%	5.6E-03	6.1E-03	NA	1.2E-02
Perylene	198-55-0	PM/HAP	POM	Organic PM	0.022%	0.03%	9.9E-05	1.0E-04	NA	2.0E-04
Phenanthrene	85-01-8	PM/HAP	POM	Organic PM	0.81%	1.80%	3.6E-03	6.0E-03	NA	9.6E-03
Pyrene	129-00-0	PM/HAP	POM	Organic PM	0.15%	0.44%	6.7E-04	1.5E-03	NA	2.1E-03
Total PAH HAPs							0.027	0.038	NA	0.064
Other semi-volatile HAPs										
Phenol		PM/HAP	---	Organic PM	1.18%	0	5.3E-03	0	0	5.3E-03

NA = Not Applicable (no AP-42 Emission Factor)

Methodology

Unlimited/Uncontrolled Potential to Emit (tons/yr) = [Speciation Profile (%)] * [Organic PM (tons/yr)]
 Speciation Profiles from AP-42 Chapter 11.1 (dated 3/04), Tables 11.1-15 and 11.1-16

Abbreviations

PM = Particulate Matter
 HAP = Hazardous Air Pollutant
 POM = Polycyclic Organic Matter

**Appendix A.1: Unlimited Emissions Calculations
Asphalt Load-Out, Silo Filling, and Yard Emissions (continued)**

Organic Volatile-Based Compounds (Table 11.1-16)

Pollutant	CASRN	Category	HAP Type	Source	Speciation Profile		Unlimited/Uncontrolled Potential to Emit (tons/yr)			
					Load-out and Onsite Yard (% by weight of TOC)	Silo Filling and Asphalt Storage Tank (% by weight of TOC)	Load-out	Silo Filling	Onsite Yard	Total
VOC		VOC	---	TOC	94%	100%	5.14	16.01	1.36	22.51
non-VOC/non-HAPS										
Methane	74-82-8	non-VOC/non-HAP	---	TOC	6.50%	0.26%	3.6E-01	4.2E-02	9.4E-02	0.491
Acetone	67-64-1	non-VOC/non-HAP	---	TOC	0.046%	0.055%	2.5E-03	8.8E-03	6.6E-04	0.012
Ethylene	74-85-1	non-VOC/non-HAP	---	TOC	0.71%	1.10%	3.9E-02	1.8E-01	1.0E-02	0.225
Total non-VOC/non-HAPS					7.30%	1.40%	0.399	0.224	0.106	0.73
Volatile organic HAPs										
Benzene	71-43-2	VOC/HAP	---	TOC	0.052%	0.032%	2.8E-03	5.1E-03	7.5E-04	8.7E-03
Bromomethane	74-83-9	VOC/HAP	---	TOC	0.0096%	0.0049%	5.2E-04	7.8E-04	1.4E-04	1.4E-03
2-Butanone	78-93-3	VOC/HAP	---	TOC	0.049%	0.039%	2.7E-03	6.2E-03	7.1E-04	9.6E-03
Carbon Disulfide	75-15-0	VOC/HAP	---	TOC	0.013%	0.016%	7.1E-04	2.6E-03	1.9E-04	3.5E-03
Chloroethane	75-00-3	VOC/HAP	---	TOC	0.00021%	0.004%	1.1E-05	6.4E-04	3.0E-06	6.6E-04
Chloromethane	74-87-3	VOC/HAP	---	TOC	0.015%	0.023%	8.2E-04	3.7E-03	2.2E-04	4.7E-03
Cumene	92-82-8	VOC/HAP	---	TOC	0.11%	0	6.0E-03	0	1.6E-03	7.6E-03
Ethylbenzene	100-41-4	VOC/HAP	---	TOC	0.28%	0.038%	1.5E-02	6.1E-03	4.0E-03	0.025
Formaldehyde	50-00-0	VOC/HAP	---	TOC	0.088%	0.69%	4.8E-03	1.1E-01	1.3E-03	0.117
n-Hexane	100-54-3	VOC/HAP	---	TOC	0.15%	0.10%	8.2E-03	1.6E-02	2.2E-03	0.026
Isooctane	540-84-1	VOC/HAP	---	TOC	0.0018%	0.00031%	9.8E-05	5.0E-05	2.6E-05	1.7E-04
Methylene Chloride	75-09-2	non-VOC/HAP	---	TOC	0	0.00027%	0	4.3E-05	0	4.3E-05
MTBE	1634-04-4	VOC/HAP	---	TOC	0	0	0	0	0	0
Styrene	100-42-5	VOC/HAP	---	TOC	0.0073%	0.0054%	4.0E-04	8.6E-04	1.1E-04	1.4E-03
Tetrachloroethene	127-18-4	non-VOC/HAP	---	TOC	0.0077%	0	4.2E-04	0	1.1E-04	5.3E-04
Toluene	100-88-3	VOC/HAP	---	TOC	0.21%	0.062%	1.1E-02	9.9E-03	3.0E-03	0.024
1,1,1-Trichloroethane	71-55-6	VOC/HAP	---	TOC	0	0	0	0	0	0
Trichloroethene	79-01-6	VOC/HAP	---	TOC	0	0	0	0	0	0
Trichlorofluoromethane	75-69-4	VOC/HAP	---	TOC	0.0013%	0	7.1E-05	0	1.9E-05	9.0E-05
m-/p-Xylene	1330-20-7	VOC/HAP	---	TOC	0.41%	0.20%	2.2E-02	3.2E-02	5.9E-03	0.060
o-Xylene	95-47-6	VOC/HAP	---	TOC	0.08%	0.057%	4.4E-03	9.1E-03	1.2E-03	1.5E-02
Total volatile organic HAPs					1.50%	1.30%	0.082	0.208	0.022	0.312

Methodology

Unlimited/Uncontrolled Potential to Emit (tons/yr) = [Speciation Profile (%)] * [TOC (tons/yr)]
Speciation Profiles from AP-42 Chapter 11.1 (dated 3/04), Tables 11.1-15 and 11.1-16

Abbreviations

TOC = Total Organic Compounds
HAP = Hazardous Air Pollutant
VOC = Volatile Organic Compound
MTBE = Methyl tert butyl ether

**Appendix A.1: Unlimited Emissions Calculations
Material Storage Piles**

Company Name: Dave O'Mara Contractor, Inc.
Source Address: New Point Stone at 992 South County Road 800 East, Greensburg, Indiana
Permit Number: 031-28784-05047
Reviewer: Brian Williams

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

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

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

Material	Silt Content (wt %)*	Emission Factor (lb/acre/day)	Maximum Anticipated Pile Size (acres)**	PTE of PM (tons/yr)	PTE of PM10/PM2.5 (tons/yr)
Sand	2.6	3.01	0.75	0.412	0.144
Limestone	1.6	1.85	0.75	0.253	0.089
RAP	0.5	0.58	0.75	0.079	0.028
Gravel	1.6	1.85	0.75	0.253	0.089
Slag	3.8	4.40	0.75	0.602	0.211
Totals				1.60	0.56

Methodology

PTE of PM (tons/yr) = (Emission Factor (lb/acre/day)) * (Maximum Pile Size (acres)) * (ton/2000 lbs) * (8760 hours/yr)

PTE of PM10/PM2.5 (tons/yr) = (Potential PM Emissions (tons/yr)) * 35%

*Silt content values obtained from AP-42 Table 13.2.4-1 (dated 1/95)

**Maximum anticipated pile size (acres) provided by the source.

RAP - recycled asphalt pavement

Abbreviations

PM = Particulate Matter

PM10 = Particulate Matter (<10 um)

PM2.5 = Particulate Matter (<2.5 um)

PM2.5 = PM10

PTE = Potential to Emit

Appendix A.1: Unlimited Emissions Calculations
Material Processing, Handling, Crushing, Screening, and Conveying

Company Name: Dave O'Mara Contractor, Inc.
Source Address: New Point Stone at 992 South County Road 800 East, Greensburg, Indiana
Permit Number: 031-28784-05047
Reviewer: Brian Williams

Batch or Continuous Drop Operations (AP-42 Section 13.2.4)

To estimate potential fugitive dust emissions from processing and handling of raw materials (batch or continuous drop operations), AP-42 emission factors for Aggregate Handling, Section 13.2.4 (fifth edition, 1/95) are utilized.

$$E_f = k \cdot (0.0032) \cdot [(U/5)^{1.3} / (M/2)^{1.4}]$$

where: E_f = Emission factor (lb/ton)

k (PM) =	0.74	= particle size multiplier (0.74 assumed for aerodynamic diameter <=100 um)
k (PM10) =	0.35	= particle size multiplier (0.35 assumed for aerodynamic diameter <=10 um)
k (PM2.5) =	0.053	= particle size multiplier (0.053 assumed for aerodynamic diameter <=2.5 um)
U =	10.2	= worst case annual mean wind speed (Source: NOAA, 2006*)
M =	4.0	= material % moisture content of aggregate (Source: AP-42 Section 11.1.1.1)
Ef (PM) =	2.27E-03	lb PM/ton of material handled
Ef (PM10) =	1.07E-03	lb PM10/ton of material handled
Ef (PM2.5) =	1.62E-04	lb PM2.5/ton of material handled

Maximum Annual Asphalt Production =	2,628,000	tons/yr
Percent Asphalt Cement/Binder (weight %) =	5.0%	
Maximum Material Handling Throughput =	2,496,600	tons/yr

Type of Activity	Unlimited/Uncontrolled PTE of PM (tons/yr)	Unlimited/Uncontrolled PTE of PM10 (tons/yr)	Unlimited/Uncontrolled PTE of PM2.5 (tons/yr)
Truck unloading of materials into storage piles	2.83	1.34	0.20
Front-end loader dumping of materials into feeder bins	2.83	1.34	0.20
Conveyor dropping material into dryer/mixer or batch tower	2.83	1.34	0.20
Total (tons/yr)	8.49	4.02	0.61

Methodology

The percent asphalt cement/binder provided by the source.
Maximum Material Handling Throughput (tons/yr) = [Annual Asphalt Production Limitation (tons/yr)] * [1 - Percent Asphalt Cement/Binder (weight %)]
Unlimited Potential to Emit (tons/yr) = (Maximum Material Handling Throughput (tons/yr)) * (Emission Factor (lb/ton)) * (ton/2000 lbs)
Raw materials may include limestone, sand, recycled asphalt pavement (RAP), gravel, slag, and other additives
*Worst case annual mean wind speed (Indianapolis, IN) from "Comparative Climatic Data", National Climatic Data Center, NOAA, 2006

Material Screening and Conveying (AP-42 Section 11.19.2)

To estimate potential fugitive dust emissions from raw material crushing, screening, and conveying, AP-42 emission factors for Crushed Stone Processing Operations, Section 11.19.2 (dated 8/04) are utilized.

Operation	Uncontrolled Emission Factor for PM (lbs/ton)*	Uncontrolled Emission Factor for PM10 (lbs/ton)*	Unlimited/Uncontrolled PTE of PM (tons/yr)	Unlimited/Uncontrolled PTE of PM10/PM2.5 (tons/yr)**
Crushing	0.0054	0.0024	6.74	3.00
Screening	0.025	0.0087	31.21	10.86
Conveying	0.003	0.0011	3.74	1.37
Unlimited Potential to Emit (tons/yr) =			41.69	15.23

Methodology

Maximum Material Handling Throughput (tons/yr) = [Annual Asphalt Production Limitation (tons/yr)] * [1 - Percent Asphalt Cement/Binder (weight %)]
Unlimited Potential to Emit (tons/yr) = [Maximum Material Handling Throughput (tons/yr)] * [Emission Factor (lb/ton)] * [ton/2000 lbs]
Raw materials may include stone/gravel, slag, and recycled asphalt pavement (RAP)
Emission Factors from AP-42 Chapter 11.19.2 (dated 8/04), Table 11.19.2-2
*Uncontrolled emissions factors for PM/PM10 represent tertiary crushing of stone with moisture content ranging from 0.21 to 1.3 percent by weight (Table 11.19.2-2). The bulk moisture content of aggregate in the storage piles at a hot mix asphalt production plant typically stabilizes between 3 to 5 percent by weight (Source: AP-42 Section 11.1.1.1).
**Assumes PM10 = PM2.5

Abbreviations

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

Appendix A.1: Unlimited Emissions Calculations
Unpaved Roads

Company Name: Dave O'Mara Contractor, Inc.
Source Address: New Point Stone at 992 South County Road 800 East, Greensburg, Indiana
Permit Number: 031-28784-05047
Reviewer: Brian Williams

Unpaved Roads at Industrial Site

The following calculations determine the amount of emissions created by unpaved roads, based on 8,760 hours of use and AP-42, Ch 13.2.2 (12/2003).

Maximum Annual Asphalt Production	2,628,000	tons/yr
Percent Asphalt Cement/Binder (weight %)	5.0%	
Maximum Material Handling Throughput	2,496,600	tons/yr
Maximum Asphalt Cement/Binder Throughput	131,400	tons/yr
Maximum No. 2 Fuel Oil Usage	4,505,143	gallons/yr

Process	Vehicle Type	Maximum Weight of Vehicle (tons)	Maximum Weight of Load (tons)	Maximum Weight of Vehicle and Load (tons/trip)	Maximum trips per year (trip/yr)	Total Weight driven per year (ton/yr)	Maximum one-way distance (feet/trip)	Maximum one-way distance (mi/trip)	Maximum one-way miles (miles/yr)
Aggregate/RAP Truck Enter Full	Dump truck (16 CY)	17.0	22.4	39.4	1.1E+05	4.4E+06	300	0.057	6332.7
Aggregate/RAP Truck Leave Empty	Dump truck (16 CY)	17.0	0	17.0	1.1E+05	1.9E+06	300	0.057	6332.7
Asphalt Cement/Binder Truck Enter Full	Tanker truck (6000 gal)	12.0	36.0	48.0	3.7E+03	1.8E+05	300	0.057	207.4
Asphalt Cement/Binder Truck Leave Empty	Tanker truck (6000 gal)	12.0	0	12.0	3.7E+03	4.4E+04	300	0.057	207.4
Fuel Oil Truck Enter Full	Tanker truck (6000 gal)	12.0	32.0	44.0	4.8E+02	2.1E+04	300	0.057	27.0
Fuel Oil Truck Leave Empty	Tanker truck (6000 gal)	12.0	0	12.0	4.8E+02	5.7E+03	300	0.057	27.0
Aggregate/RAP Loader Full	Front-end loader (3 CY)	15.0	4.2	19.2	5.9E+05	1.1E+07	300	0.057	33774.4
Aggregate/RAP Loader Empty	Front-end loader (3 CY)	15.0	0	15.0	5.9E+05	8.9E+06	300	0.057	33774.4
Asphalt Concrete Truck Leave Full	Dump truck (16 CY)	17.0	24.0	41.0	1.1E+05	4.5E+06	300	0.057	6221.6
Asphalt Concrete Truck Enter Empty	Dump truck (16 CY)	17.0	0	17.0	1.1E+05	1.9E+06	300	0.057	6221.6
Total					1.6E+06	3.3E+07			9.3E+04

Average Vehicle Weight Per Trip	20.3	tons/trip
Average Miles Per Trip	0.057	miles/trip

Unmitigated Emission Factor, $E_f = k \left[\frac{s}{12} \right]^a \left[\frac{W}{3} \right]^b$ (Equation 1a from AP-42 13.2.2)

	PM	PM10	PM2.5	
where k =	4.9	1.5	0.15	lb/mi = particle size multiplier (AP-42 Table 13.2.2-2 for Industrial Roads)
s =	4.8	4.8	4.8	% = mean % silt content of unpaved roads (AP-42 Table 13.2.2-3 Sand/Gravel Processing Plant Road)
a =	0.7	0.9	0.9	= constant (AP-42 Table 13.2.2-2)
W =	20.3	20.3	20.3	tons = average vehicle weight (provided by source)
b =	0.45	0.45	0.45	= constant (AP-42 Table 13.2.2-2)

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, $E_{ext} = E_f \cdot \left[\frac{365 - P}{365} \right]$

Mitigated Emission Factor, $E_{ext} = E_f \cdot \left[\frac{365 - P}{365} \right]$
 where P = 125 days of rain greater than or equal to 0.01 inches (see Fig. 13.2.2-1)

	PM	PM10	PM2.5	
Unmitigated Emission Factor, E_f	6.09	1.55	0.16	lb/mile
Mitigated Emission Factor, E_{ext}	4.01	1.02	0.10	lb/mile
Dust Control Efficiency	50%	50%	50%	(pursuant to control measures outlined in fugitive dust control plan)

Process	Vehicle Type	Unmitigated PTE of PM (tons/yr)	Unmitigated PTE of PM10 (tons/yr)	Unmitigated PTE of PM2.5 (tons/yr)	Mitigated PTE of PM (tons/yr)	Mitigated PTE of PM10 (tons/yr)	Mitigated PTE of PM2.5 (tons/yr)	Controlled PTE of PM (tons/yr)	Controlled PTE of PM10 (tons/yr)	Controlled PTE of PM2.5 (tons/yr)
Aggregate/RAP Truck Enter Full	Dump truck (16 CY)	19.30	4.92	0.49	12.69	3.23	0.32	6.34	1.62	0.16
Aggregate/RAP Truck Leave Empty	Dump truck (16 CY)	19.30	4.92	0.49	12.69	3.23	0.32	6.34	1.62	0.16
Asphalt Cement/Binder Truck Enter Full	Tanker truck (6000 gal)	0.632	0.161	0.02	0.416	0.106	0.01	0.208	0.053	0.01
Asphalt Cement/Binder Truck Leave Empty	Tanker truck (6000 gal)	0.632	0.161	0.02	0.416	0.106	0.01	0.208	0.053	0.01
Fuel Oil Truck Enter Full	Tanker truck (6000 gal)	0.082	0.021	0.00	0.054	0.014	0.00	0.027	0.007	0.00
Fuel Oil Truck Leave Empty	Tanker truck (6000 gal)	0.082	0.021	0.00	0.054	0.014	0.00	0.027	0.007	0.00
Aggregate/RAP Loader Full	Front-end loader (3 CY)	102.92	26.23	2.62	67.68	17.25	1.72	33.84	8.62	0.86
Aggregate/RAP Loader Empty	Front-end loader (3 CY)	102.92	26.23	2.62	67.68	17.25	1.72	33.84	8.62	0.86
Asphalt Concrete Truck Leave Full	Dump truck (16 CY)	18.96	4.83	0.48	12.47	3.18	0.32	6.23	1.59	0.16
Asphalt Concrete Truck Enter Empty	Dump truck (16 CY)	18.96	4.83	0.48	12.47	3.18	0.32	6.23	1.59	0.16
Totals		283.79	72.33	7.23	186.60	47.56	4.76	93.30	23.78	2.38

Methodology

Maximum Material Handling Throughput = [Annual Asphalt Production Limitation (tons/yr)] * [1 - Percent Asphalt Cement/Binder (weight %)]
 Maximum Asphalt Cement/Binder Throughput = [Annual Asphalt Production Limitation (tons/yr)] * [Percent Asphalt Cement/Binder (weight %)]
 Maximum Weight of Vehicle and Load (tons/trip) = [Maximum Weight of Vehicle (tons/trip)] + [Maximum Weight of Load (tons/trip)]
 Maximum trips per year (trip/yr) = [Throughput (tons/yr)] / [Maximum Weight of Load (tons/trip)]
 Total Weight driven per year (ton/yr) = [Maximum Weight of Vehicle and Load (tons/trip)] * [Maximum trips per year (trip/yr)]
 Maximum one-way distance (mi/trip) = [Maximum one-way distance (feet/trip)] / [5280 ft/mile]
 Maximum one-way miles (miles/yr) = [Maximum trips per year (trip/yr)] * [Maximum one-way distance (mi/trip)]
 Average Vehicle Weight Per Trip (ton/trip) = SUM[Total Weight driven per year (ton/yr)] / SUM[Maximum trips per year (trip/yr)]
 Average Miles Per Trip (miles/trip) = SUM[Maximum one-way miles (miles/yr)] / SUM[Maximum trips per year (trip/yr)]
 Unmitigated PTE (tons/yr) = (Maximum one-way miles (miles/yr)) * (Unmitigated Emission Factor (lb/mile)) * (ton/2000 lbs)
 Mitigated PTE (tons/yr) = (Maximum one-way miles (miles/yr)) * (Mitigated Emission Factor (lb/mile)) * (ton/2000 lbs)
 Controlled PTE (tons/yr) = (Mitigated PTE (tons/yr)) * (1 - Dust Control Efficiency)

Abbreviations

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

**Appendix A.1: Unlimited Emissions Calculations
Paved Roads**

Company Name: Dave O'Mara Contractor, Inc.
Source Address: New Point Stone at 992 South County Road 800 East, Greensburg, Indiana
Permit Number: 031-28784-05047
Reviewer: Brian Williams

Paved Roads at Industrial Site

The following calculations determine the amount of emissions created by paved roads, based on 8,760 hours of use and AP-42, Ch 13.2.1 (12/2003).

Maximum Annual Asphalt Production	= 2,628,000	tons/yr
Percent Asphalt Cement/Binder (weight %)	= 5.0%	
Maximum Material Handling Throughput	= 2,496,600	tons/yr
Maximum Asphalt Cement/Binder Throughput	= 131,400	tons/yr
Maximum No. 2 Fuel Oil Usage	= 4,505.143	gallons/yr

Process	Vehicle Type	Maximum Weight of Vehicle (tons)	Maximum Weight of Load (tons)	Maximum Weight of Vehicle and Load (tons/trip)	Maximum trips per year (trip/yr)	Total Weight driven per day (ton/yr)	Maximum one-way distance (feet/trip)	Maximum one-way distance (mi/trip)	Maximum one-way miles (miles/yr)
Aggregate/RAP Truck Enter Full	Dump truck (16 CY)	17.0	22.4	39.40	1.1E+05	4.4E+06	300	0.057	6332.7
Aggregate/RAP Truck Leave Empty	Dump truck (16 CY)	17.0	0	17.00	1.1E+05	1.9E+06	300	0.057	6332.7
Asphalt Cement/Binder Truck Enter Full	Tanker truck (6000 gal)	12.0	36.0	48.00	3.7E+03	1.8E+05	300	0.057	207.4
Asphalt Cement/Binder Truck Leave Empty	Tanker truck (6000 gal)	12.0	0	12.00	3.7E+03	4.4E+04	300	0.057	207.4
Fuel Oil Truck Enter Full	Tanker truck (6000 gal)	12.0	32.0	44.00	4.8E+02	2.1E+04	300	0.057	27.0
Fuel Oil Truck Leave Empty	Tanker truck (6000 gal)	12.0	0	12.00	4.8E+02	5.7E+03	300	0.057	27.0
Aggregate/RAP Loader Full	Front-end loader (3 CY)	15.0	4.2	19.20	5.9E+05	1.1E+07	300	0.057	33774.4
Aggregate/RAP Loader Empty	Front-end loader (3 CY)	15.0	0	15.00	5.9E+05	8.9E+06	300	0.057	33774.4
Asphalt Concrete Truck Leave Full	Dump truck (16 CY)	17.0	24.0	41.00	1.1E+05	4.5E+06	300	0.057	6221.6
Asphalt Concrete Truck Enter Empty	Dump truck (16 CY)	17.0	0	17.00	1.1E+05	1.9E+06	300	0.057	6221.6
Total					1.6E+06	3.3E+07			9.3E+04

Average Vehicle Weight Per Trip	= 20.3	tons/trip
Average Miles Per Trip	= 0.057	miles/trip

Unmitigated Emission Factor, $E_f = [k * (sL/2)^{0.65} * (W/3)^{1.5} - C]$ (Equation 1 from AP-42 13.2.1)

	PM	PM10	PM2.5
where k =	0.082	0.016	0.0024
W =	20.3	20.3	20.3
C =	0.00047	0.00047	0.00036
sL =	0.6	0.6	0.6

lb/mi = particle size multiplier (AP-42 Table 13.2.1-1)
 tons = average vehicle weight (provided by source)
 lb/mi = emission factor for vehicle exhaust, brake wear, and tire wear (AP-42 Table 13.2.1-2)
 g/m² = Ubiquitous Baseline Silt Loading Values of paved roads (Table 13.2.1-3 for summer months)

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, $E_{ext} = E * [1 - (p/4N)]$

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

	PM	PM10	PM2.5	lb/mile
Unmitigated Emission Factor, E_f	0.66	0.13	0.02	lb/mile
Mitigated Emission Factor, E_{ext}	0.60	0.12	0.02	lb/mile
Dust Control Efficiency	50%	50%	50%	(pursuant to control measures outlined in fugitive dust control plan)

Process	Vehicle Type	Unmitigated PTE of PM (tons/yr)	Unmitigated PTE of PM10 (tons/yr)	Unmitigated PTE of PM2.5 (tons/yr)	Mitigated PTE of PM (tons/yr)	Mitigated PTE of PM10 (tons/yr)	Mitigated PTE of PM2.5 (tons/yr)	Controlled PTE of PM (tons/yr)	Controlled PTE of PM10 (tons/yr)	Controlled PTE of PM2.5 (tons/yr)
Aggregate/RAP Truck Enter Full	Dump truck (16 CY)	2.08	0.41	0.06	1.90	0.37	0.05	0.95	0.19	0.03
Aggregate/RAP Truck Leave Empty	Dump truck (16 CY)	2.08	0.41	0.06	1.90	0.37	0.05	0.95	0.19	0.03
Asphalt Cement/Binder Truck Enter Full	Tanker truck (6000 gal)	0.068	0.013	2.0E-03	0.062	0.012	1.8E-03	0.031	6.1E-03	9.0E-04
Asphalt Cement/Binder Truck Leave Empty	Tanker truck (6000 gal)	0.068	0.013	2.0E-03	0.062	0.012	1.8E-03	0.031	6.1E-03	9.0E-04
Fuel Oil Truck Enter Full	Tanker truck (6000 gal)	8.9E-03	1.7E-03	2.6E-04	8.1E-03	1.6E-03	2.3E-04	4.1E-03	7.9E-04	1.2E-04
Fuel Oil Truck Leave Empty	Tanker truck (6000 gal)	8.9E-03	1.7E-03	2.6E-04	8.1E-03	1.6E-03	2.3E-04	4.1E-03	7.9E-04	1.2E-04
Aggregate/RAP Loader Full	Front-end loader (3 CY)	11.11	2.16	0.32	10.16	1.98	0.29	5.08	0.99	0.15
Aggregate/RAP Loader Empty	Front-end loader (3 CY)	11.11	2.16	0.32	10.16	1.98	0.29	5.08	0.99	0.15
Asphalt Concrete Truck Leave Full	Dump truck (16 CY)	2.05	0.40	0.06	1.87	0.36	0.05	0.94	0.18	0.03
Asphalt Concrete Truck Enter Empty	Dump truck (16 CY)	2.05	0.40	0.06	1.87	0.36	0.05	0.94	0.18	0.03
Totals		30.62	5.96	0.88	28.00	5.45	0.80	14.00	2.72	0.40

Methodology

Maximum Material Handling Throughput = [Annual Asphalt Production Limitation (tons/yr)] * [1 - Percent Asphalt Cement/Binder (weight %)]
 Maximum Asphalt Cement/Binder Throughput = [Annual Asphalt Production Limitation (tons/yr)] * [Percent Asphalt Cement/Binder (weight %)]
 Maximum Weight of Vehicle and Load (tons/trip) = [Maximum Weight of Vehicle (tons/trip)] + [Maximum Weight of Load (tons/trip)]
 Maximum trips per year (trip/yr) = [Throughput (tons/yr)] / [Maximum Weight of Load (tons/trip)]
 Total Weight driven per year (ton/yr) = [Maximum Weight of Vehicle and Load (tons/trip)] * [Maximum trips per year (trip/yr)]
 Maximum one-way distance (mi/trip) = [Maximum one-way distance (feet/trip)] / [5280 ft/mile]
 Maximum one-way miles (miles/yr) = [Maximum trips per year (trip/yr)] * [Maximum one-way distance (mi/trip)]
 Average Vehicle Weight Per Trip (ton/trip) = SUM[Total Weight driven per year (ton/yr)] / SUM[Maximum trips per year (trip/yr)]
 Average Miles Per Trip (miles/trip) = SUM[Maximum one-way miles (miles/yr)] / SUM[Maximum trips per year (trip/yr)]
 Unmitigated PTE (tons/yr) = (Maximum one-way miles (miles/yr)) * (Unmitigated Emission Factor (lb/mile)) * (ton/2000 lbs)
 Mitigated PTE (tons/yr) = (Maximum one-way miles (miles/yr)) * (Mitigated Emission Factor (lb/mile)) * (ton/2000 lbs)
 Controlled PTE (tons/yr) = (Mitigated PTE (tons/yr)) * (1 - Dust Control Efficiency)

Abbreviations

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

**Appendix A.1: Unlimited Emissions Calculations
Cold Mix Asphalt Production and Stockpiles**

Company Name: Dave O'Mara Contractor, Inc.
Source Address: New Point Stone at 992 South County Road 800 East, Greensburg, Indiana
Permit Number: 031-28784-05047
Reviewer: Brian Williams

The following calculations determine the amount of VOC and HAP emissions created from volatilization of solvent used as diluent in the liquid binder for cold mix asphalt production

Maximum Annual Asphalt Production =	2,628,000	tons/yr
Percent Asphalt Cement/Binder (weight %) =	5.0%	
Maximum Asphalt Cement/Binder Throughput =	131,400	tons/yr

Volatile Organic Compounds

	Maximum weight % of VOC solvent in binder*	Weight % VOC solvent in binder that evaporates	Maximum VOC Solvent Usage (tons/yr)	PTE of VOC (tons/yr)
Cut back asphalt rapid cure (assuming gasoline or naphtha solvent)	25.3%	95.0%	33244.2	31582.0
Cut back asphalt medium cure (assuming kerosene solvent)	28.6%	70.0%	37580.4	26306.3
Cut back asphalt slow cure (assuming fuel oil solvent)	20.0%	25.0%	26280.0	6570.0
Emulsified asphalt with solvent (assuming water, emulsifying agent, and 15% fuel oil solvent)	15.0%	46.4%	19710.0	9145.4
Other asphalt with solvent binder	25.9%	2.5%	34032.6	850.8
Worst Case PTE of VOC =				31582.0

Hazardous Air Pollutants

Worst Case Total HAP Content of VOC solvent (weight %)* =	26.08%
Worst Case Single HAP Content of VOC solvent (weight %)* =	9.0% Xylenes
PTE of Total HAPs (tons/yr) =	8237.75
PTE of Single HAP (tons/yr) =	2842.38 Xylenes

Hazardous Air Pollutant (HAP) Content (% by weight) For Various Petroleum Solvents*

Volatile Organic HAP	CAS#	Hazardous Air Pollutant (HAP) Content (% by weight)* For Various Petroleum Solvents				
		Gasoline	Kerosene	Diesel (#2) Fuel Oil	No. 2 Fuel Oil	No. 6 Fuel Oil
1,3-Butadiene	106-99-0	3.70E-5%				
2,2,4-Trimethylpentane	540-84-1	2.40%				
Acenaphthene	83-32-9		4.70E-5%		1.80E-4%	
Acenaphthylene	208-96-8		4.50E-5%		6.00E-5%	
Anthracene	120-12-7		1.20E-6%	5.80E-5%	2.80E-5%	5.00E-5%
Benzene	71-43-2	1.90%		2.90E-4%		
Benzo(a)anthracene	56-55-3			9.60E-7%	4.50E-7%	5.50E-4%
Benzo(a)pyrene	50-32-8			2.20E-6%	2.10E-7%	4.40E-5%
Benzo(g,h,i)perylene	191-24-2			1.20E-7%	5.70E-8%	
Biphenyl	92-52-4			6.30E-4%	7.20E-5%	
Chrysene	218-01-9			4.50E-7%	1.40E-6%	6.90E-4%
Ethylbenzene	100-41-4	1.70%		0.07%	3.40E-4%	
Fluoranthene	206-44-0		7.10E-6%	5.90E-5%	1.40E-5%	2.40E-4%
Fluorene	86-73-7		4.20E-5%	8.60E-4%	1.90E-4%	
Indeno(1,2,3-cd)pyrene	193-39-5			1.60E-7%		1.00E-4%
Methyl-tert-butylether	1634-04-4	0.33%				
Naphthalene	91-20-3	0.25%	0.31%	0.26%	0.22%	4.20E-5%
n-Hexane	110-54-3	2.40%				
Phenanthrene	85-01-8		8.60E-6%	8.80E-4%	7.90E-4%	2.10E-4%
Pyrene	129-00-0		2.40E-6%	4.60E-5%	2.90E-5%	2.30E-5%
Toluene	108-88-3	8.10%		0.18%	6.20E-4%	
Total Xylenes	1330-20-7	9.00%		0.50%	0.23%	
Total Organic HAPs		26.08%	0.33%	1.29%	0.68%	0.19%
Worst Single HAP		9.00%	0.31%	0.50%	0.23%	0.07%
		Xylenes	Naphthalene	Xylenes	Xylenes	Chrysene

Methodology

Maximum Asphalt Cement/Binder Throughput = [Annual Asphalt Production Limitation (tons/yr)] * [Percent Asphalt Cement/Binder (weight %)]
 Maximum VOC Solvent Usage (tons/yr) = [Maximum Asphalt Cement/Binder Throughput (tons/yr)] * [Maximum Weight % of VOC Solvent in Binder]
 PTE of VOC (tons/yr) = [Weight % VOC solvent in binder that evaporates] * [Maximum VOC Solvent Usage (tons/yr)]
 PTE of Total HAPs (tons/yr) = [Worst Case Total HAP Content of VOC solvent (weight %)] * [Worst Case Limited PTE of VOC (tons/yr)]
 PTE of Single HAP (tons/yr) = [Worst Case Single HAP Content of VOC solvent (weight %)] * [Worst Case Limited PTE of VOC (tons/yr)]
 *Source: Petroleum Liquids. Potter, T.L. and K.E. Simmons. 1998. Total Petroleum Hydrocarbon Criteria Working Group Series, Volume 2. Composition of Petroleum Mixtures. The Association for Environmental Health and Science. Available on the Internet at: <http://www.aehs.com/publications/catalog/contents/tp.htm>

Abbreviations

VOC = Volatile Organic Compounds
 PTE = Potential to Emit

**Appendix A.1: Unlimited Emissions Calculations
Gasoline Fuel Transfer and Dispensing Operation**

Company Name: Dave O'Mara Contractor, Inc.
Source Address: New Point Stone at 992 South County Road 800 East, Greensburg, Indiana
Permit Number: 031-28784-05047
Reviewer: Brian Williams

To calculate evaporative emissions from the gasoline dispensing fuel transfer and dispensing operation handling emission factors from AP-42 Table 5.2-7 were used. The total potential emission of VOC is as follows:

$$\begin{aligned} \text{Gasoline Throughput} &= \frac{0}{0.0} \text{ gallons/day} \\ &= \text{0.0 kgal/yr} \end{aligned}$$

Volatile Organic Compounds

Emission Source	Emission Factor (lb/kgal of throughput)	PTE of VOC (tons/yr)*
Filling storage tank (balanced submerged filling)	0.3	0.00
Tank breathing and emptying	1.0	0.00
Vehicle refueling (displaced losses - controlled)	1.1	0.00
Spillage	0.7	0.00
Total		0.00

Hazardous Air Pollutants

Worst Case Total HAP Content of VOC solvent (weight %)* =	26.08%
Worst Case Single HAP Content of VOC solvent (weight %)* =	9.0% Xylenes
Limited PTE of Total HAPs (tons/yr) =	0.00
Limited PTE of Single HAP (tons/yr) =	0.00 Xylenes

Methodology

The gasoline throughput was provided by the source.

$$\text{Gasoline Throughput (kgal/yr)} = [\text{Gasoline Throughput (lbs/day)}] * [365 \text{ days/yr}] * [\text{kgal}/1000 \text{ gal}]$$

$$\text{PTE of VOC (tons/yr)} = [\text{Gasoline Throughput (kgal/yr)}] * [\text{Emission Factor (lb/kgal)}] * [\text{ton}/2000 \text{ lb}]$$

$$\text{PTE of Total HAPs (tons/yr)} = [\text{Worst Case Total HAP Content of VOC solvent (weight \%)}] * [\text{PTE of VOC (tons/yr)}]$$

$$\text{PTE of Single HAP (tons/yr)} = [\text{Worst Case Single HAP Content of VOC solvent (weight \%)}] * [\text{PTE of VOC (tons/yr)}]$$

*Source: Petroleum Liquids. Potter, T.L. and K.E. Simmons. 1998. Total Petroleum Hydrocarbon Criteria Working Group Series, Volume 2. Composition of Petroleum Mixtures. The Association for Environmental Health and Science. Available on the Internet at: <http://www.aehs.com/publications/catalog/contents/tph.htm>

Abbreviations

VOC = Volatile Organic Compounds

PTE = Potential to Emit

**Appendix A.2: Limited Emissions Calculations
Entire Source**

Company Name: Dave O'Mara Contractor, Inc.
Source Address: New Point Stone at 992 South County Road 800 East, Greensburg, Indiana
Permit Number: 031-28784-05047
Reviewer: Brian Williams

Asphalt Plant Limitations

Maximum Hourly Asphalt Production =	300	ton/hr								
Annual Asphalt Production Limitation =	1,000,000	ton/yr								
Steel Slag Usage Limitation =	75,000	ton/yr	0.66	% sulfur						
Natural Gas Limitation =	631	MMCF/yr								
No. 2 Fuel Oil Limitation =	2,626,479	gal/yr, and	0.50	% sulfur						
No. 4 Fuel Oil Limitation =	777,000	gal/yr, and	1.60	% sulfur						
Residual (No. 5 or No. 6) Fuel Oil Limitation =	0	gal/yr, and	0.00	% sulfur						
Propane Limitation =	0	gal/yr, and	0.00	gr/100 ft3 sulfur						
Butane Limitation =	0	gal/yr, and	0.00	gr/100 ft3 sulfur						
Used/Waste Oil Limitation =	0	gal/yr, and	0.00	% sulfur	0.00	% ash	0.00	% chlorine,	0.000	% lead
PM Dryer/Mixer Limitation =	0.380	lb/ton of asphalt production								
PM10 Dryer/Mixer Limitation =	0.155	lb/ton of asphalt production								
PM2.5 Dryer/Mixer Limitation =	0.173	lb/ton of asphalt production								
CO Dryer/Mixer Limitation =	0.190	lb/ton of asphalt production								
VOC Dryer/Mixer Limitation =	0.049	lb/ton of asphalt production								
Steel Slag SO2 Dryer/Mixer Limitation =	0.0014	lb/ton of slag processed								
Cold Mix Asphalt VOC Usage Limitation =	66.8	tons/yr								
HCl Limitation =	0	lb/kgal								

Limited/Controlled Emissions

Process Description	Limited/Controlled Potential Emissions (tons/year)									
	Criteria Pollutants							Hazardous Air Pollutants		
	PM	PM10	PM2.5	SO2	NOx	VOC	CO	Total HAPs	Worst Case HAP	
Ducted Emissions										
Dryer Fuel Combustion (worst case)	2.72	4.33	4.33	93.24	31.55	1.74	26.50	0.70	0.57	(hexane)
Dryer/Mixer (Process)	190.00	77.50	86.50	29.00	27.50	24.50	95.00	5.33	1.55	(formaldehyde)
Dryer/Mixer Slag Processing	0	0	0	0.05	0	0	0	0	0	
Hot Oil Heater Fuel Combustion (worst case)	0.05	0.09	0.09	1.84	0.52	0.01	0.13	0.002	0.002	(hexane)
Worst Case Emissions*	190.05	77.59	86.59	95.13	32.07	24.51	95.13	5.33	1.55	(formaldehyde)
Fugitive Emissions										
Asphalt Load-Out, Silo Filling, On-Site Yard	0.55	0.55	0.55	0	0	8.57	1.44	0.14	0.04	(formaldehyde)
Material Storage Piles	1.60	0.56	0.56	0	0	0	0	0	0	
Material Processing and Handling	3.23	1.53	0.23	0	0	0	0	0	0	
Material Crushing, Screening, and Conveying	15.87	5.80	5.80	0	0	0	0	0	0	
Unpaved and Paved Roads (worst case)	35.52	9.05	0.91	0	0	0	0	0	0	
Cold Mix Asphalt Production	0	0	0	0	0	66.82	0	17.43	6.01	(xylenes)
Gasoline Fuel Transfer and Dispensing	0	0	0	0	0	0.00	0	0.00	0.00	(xylenes)
Volatile Organic Liquid Storage Vessels	0	0	0	0	0	negl	0	negl	negl	
Total Fugitive Emissions	56.76	17.49	8.05	0	0	75.39	1.44	17.57	6.01	(xylenes)
Totals Limited/Controlled Emissions	246.82	95.07	94.63	95.13	32.07	99.89	96.57	22.90	6.01	(xylenes)

negl = negligible

Worst Case Fuel Combustion is based on the fuel with the highest emissions for each specific pollutant.

*Worst Case Emissions (tons/yr) = Emissions from Dryer Fuel Combustion or Dryer/Mixer Process (Worst Case) + Dryer/Mixer Slag Processing + Worst Case Emissions from Hot Oil Heater Fuel Combustion
Fuel component percentages provided by the source.

Appendix A.2: Limited Emissions Calculations
Dryer/Mixer Fuel Combustion with Maximum Capacity < 100 MMBtu/hr

Company Name: Dave O'Mara Contractor, Inc.
 Source Address: New Point Stone at 992 South County Road 800 East, Greensburg, Indiana
 Permit Number: 031-28784-05047
 Reviewer: Brian Williams

The following calculations determine the limited emissions created from the combustion of natural gas, fuel oil, propane, butane, or used/waste oil in the dryer/mixer and all other fuel combustion sources at the source.

Production and Fuel Limitations

Maximum Hourly Asphalt Production =	300	ton/hr
Annual Asphalt Production Limitation =	1,000,000	ton/yr
Natural Gas Limitation =	631	MMCF/yr
No. 2 Fuel Oil Limitation =	2,626,479	gal/yr, and
No. 4 Fuel Oil Limitation =	777,000	gal/yr, and
Residual (No. 5 or No. 6) Fuel Oil Limitation =	0	gal/yr, and
Propane Limitation =	0	gal/yr, and
Butane Limitation =	0	gal/yr, and
Used/Waste Oil Limitation =	0	gal/yr, and

0.50	% sulfur
1.60	% sulfur
0.00	% sulfur
0.00	gr/100 ft3 sulfur
0.00	gr/100 ft3 sulfur
0.00	% sulfur
0.00	% ash
0.000	% chlorine
0.000	% lead

Limited Emissions

Criteria Pollutant	Emission Factor (units)							Limited Potential to Emit (tons/yr)							Worse Case Fuel (tons/yr)
	Natural Gas (lb/MMCF)	No. 2 Fuel Oil (lb/kgal)	No. 4 Fuel Oil* (lb/kgal)	Residual (No. 5 or No. 6) Fuel Oil (lb/kgal)	Propane (lb/kgal)	Butane (lb/kgal)	Used/Waste Oil (lb/kgal)	Natural Gas (tons/yr)	No. 2 Fuel Oil (tons/yr)	No. 4 Fuel Oil (tons/yr)	Residual (No. 5 or No. 6) Fuel Oil (tons/yr)	Propane (tons/yr)	Butane (tons/yr)	Used/Waste Oil (tons/yr)	
PM	1.9	2.0	7.0	3.22	0.5	0.6	0.0	0.60	2.63	2.72	0.00	0.000	0.000	0.00	2.72
PM10	7.6	3.3	8.3	4.72	0.5	0.6	0.0	2.40	4.33	3.22	0.00	0.000	0.000	0.00	4.33
SO2	0.6	71.0	240.0	0.0	0.00	0.00	0.0	0.19	93.24	93.24	0.00	0.000	0.000	0.00	93.24
NOx	100	20.0	20.0	55.0	13.0	15.0	19.0	31.55	26.26	7.77	0.00	0.00	0.00	0.00	31.55
VOC	5.5	0.20	0.20	0.28	1.0	1.10	1.0	1.74	0.26	0.08	0.00	0.00	0.00	0.00	1.74
CO	84	5.0	5.0	5.0	7.5	8.4	5.0	26.50	6.57	1.94	0.00	0.00	0.00	0.00	26.50
Hazardous Air Pollutant															
HCl							0.0							0.00	0.00
Antimony			5.25E-03	5.25E-03			negl			2.04E-03	0.00E+00			negl	2.0E-03
Arsenic	2.0E-04	5.6E-04	1.32E-03	1.32E-03			1.1E-01	6.3E-05	7.35E-04	5.13E-04	0.00E+00			0.00E+00	7.4E-04
Beryllium	1.2E-05	4.2E-04	2.78E-05	2.78E-05			negl	3.8E-06	5.52E-04	1.08E-05	0.00E+00			0.00E+00	5.5E-04
Cadmium	1.1E-03	4.2E-04	3.98E-04	3.98E-04			9.3E-03	3.5E-04	5.52E-04	1.55E-04	0.00E+00			0.00E+00	5.5E-04
Chromium	1.4E-03	4.2E-04	8.45E-04	8.45E-04			2.0E-02	4.4E-04	5.52E-04	3.29E-04	0.00E+00			0.00E+00	5.5E-04
Cobalt	8.4E-05		6.02E-03	6.02E-03			2.1E-04	2.7E-05		2.34E-03	0.00E+00			0.00E+00	2.3E-03
Lead	5.0E-04	1.3E-03	1.51E-03	1.51E-03			0	1.6E-04	1.65E-03	5.87E-04	0.00E+00			0.0E+00	0.00
Manganese	3.8E-04	8.4E-04	3.00E-03	3.00E-03			6.8E-02	1.2E-04	1.10E-03	1.17E-03	0.00E+00			0.00E+00	0.00
Mercury	2.6E-04	4.2E-04	1.13E-04	1.13E-04				8.2E-05	5.52E-04	4.39E-05	0.00E+00			0.00E+00	5.5E-04
Nickel	2.1E-03	4.2E-04	8.45E-02	8.45E-02			1.1E-02	6.6E-04	5.52E-04	3.28E-02	0.00E+00			0.00E+00	0.033
Selenium	2.4E-05	2.1E-03	6.83E-04	6.83E-04			negl	7.6E-06	2.76E-03	2.65E-04	0.00E+00			negl	2.8E-03
1,1,1-Trichloroethane			2.36E-04	2.36E-04						9.17E-05	0.00E+00				9.2E-05
1,3-Butadiene															0.0E+00
Acetaldehyde															0.0E+00
Acrolein															0.0E+00
Benzene	2.1E-03		2.14E-04	2.14E-04				6.6E-04		8.31E-05	0.00E+00				6.6E-04
Bis(2-ethylhexyl)phthalate							2.2E-03							0.00E+00	0.0E+00
Dichlorobenzene	1.2E-03						8.0E-07	3.8E-04						0.00E+00	3.8E-04
Ethylbenzene			6.36E-05	6.36E-05						2.47E-05	0.00E+00				2.5E-05
Formaldehyde	7.5E-02	6.10E-02	3.30E-02	3.30E-02				2.4E-02	8.01E-02	1.28E-02	0.00E+00				0.080
Hexane	1.8E+00							0.57							0.568
Phenol							2.4E-03							0.00E+00	0.0E+00
Toluene	3.4E-03		6.20E-03	6.20E-03				1.1E-03		2.41E-03	0.00E+00				2.4E-03
Total PAH Haps	negl		1.13E-03	1.13E-03			3.9E-02	negl		4.39E-04	0.00E+00			0.00E+00	4.4E-04
Polycyclic Organic Matter		3.30E-03							4.33E-03						4.3E-03
Xylene			1.09E-04	1.09E-04						4.23E-05	0.00E+00				4.2E-05
Total HAPs							0.60	0.09	0.06	0.00	0	0	0.00	0.70	

Methodology

Natural Gas: Limited Potential to Emit (tons/yr) = (Natural Gas Limitation (MMCF/yr)) * (Emission Factor (lb/MMCF)) * (ton/2000 lbs)
 All Other Fuels: Limited Potential to Emit (tons/yr) = (Fuel Limitation (gals/yr)) * (Emission Factor (lb/kgal)) * (kgal/1000 gal) * (ton/2000 lbs)
 Sources of AP-42 Emission Factors for fuel combustion:
 Natural Gas : AP-42 Chapter 1.4 (dated 7/98), Tables 1.4-1, 1.4-2, 1.4-3, and 1.4-4
 No. 2, No. 4, and No. 6 Fuel Oil: AP-42 Chapter 1.3 (dated 9/98), Tables 1.3-1, 1.3-2, 1.3-3, 1.3-8, 1.3-9, 1.3-10, and 1.3-11
 Propane and Butane: AP-42 Chapter 1.5 (dated 7/08), Tables 1.5-1 (assuming PM = PM10)
 Waste Oil: AP-42 Chapter 1.11 (dated 10/98), Tables 1.11-1, 1.11-2, 1.11-3, 1.11-4, and 1.11-5

*Since there are no specific AP-42 HAP emission factors for combustion of No. 4 fuel oil, it was assumed that HAP emissions from combustion of No. 4 fuel oil were equal to combustion of residual or No. 6 fuel oil.

Abbreviations

PM = Particulate Matter
 PM10 = Particulate Matter (<10 um)
 SO2 = Sulfur Dioxide
 NOx = Nitrous Oxides
 VOC = Volatile Organic Compounds
 CO = Carbon Monoxide
 HAP = Hazardous Air Pollutant
 HCl = Hydrogen Chloride
 PAH = Polyaromatic Hydrocarbon

**Appendix A.2: Limited Emissions Calculations
Dryer/Mixer Process**

Company Name: Dave O'Mara Contractor, Inc.
Source Address: New Point Stone at 992 South County Road 800 East, Greensburg, Indiana
Permit Number: 031-28784-05047
Reviewer: Brian Williams

The following calculations determine the limited emissions from the aggregate drying/mixing

Maximum Hourly Asphalt Production =	300	ton/hr
Annual Asphalt Production Limitation =	1,000,000	ton/yr
PM Dryer/Mixer Limitation =	0.380	lb/ton of asphalt production
PM10 Dryer/Mixer Limitation =	0.155	lb/ton of asphalt production
PM2.5 Dryer/Mixer Limitation =	0.173	lb/ton of asphalt production
CO Dryer/Mixer Limitation =	0.190	lb/ton of asphalt production
VOC Dryer/Mixer Limitation =	0.049	lb/ton of asphalt production

Criteria Pollutant	Emission Factor or Limitation (lb/ton)			Limited/Controlled Potential to Emit (tons/yr)			Worse Case PTE
	Drum-Mix Plant (dryer/mixer, controlled by fabric filter)			Drum-Mix Plant (dryer/mixer, controlled by fabric filter)			
	Natural Gas	No. 2 Fuel Oil	Waste Oil	Natural Gas	No. 2 Fuel Oil	Waste Oil	
PM*	0.380	0.380	0.380	190.0	190.0	190.0	190.0
PM10*	0.155	0.155	0.155	77.5	77.5	77.5	77.5
PM2.5*	0.173	0.173	0.173	86.5	86.5	86.5	86.5
SO2**	0.003	0.011	0.058	1.7	5.5	29.0	29.0
NOx**	0.026	0.055	0.055	13.0	27.5	27.5	27.5
VOC**	0.049	0.049	0.049	24.5	24.5	24.5	24.5
CO***	0.190	0.190	0.190	95.0	95.0	95.0	95.0
Hazardous Air Pollutant							
HCl			2.10E-04			0.11	0.11
Antimony	1.80E-07	1.80E-07	1.80E-07	9.00E-05	9.00E-05	9.00E-05	9.00E-05
Arsenic	5.60E-07	5.60E-07	5.60E-07	2.80E-04	2.80E-04	2.80E-04	2.80E-04
Beryllium	negl	negl	negl	negl	negl	negl	0.00E+00
Cadmium	4.10E-07	4.10E-07	4.10E-07	2.05E-04	2.05E-04	2.05E-04	2.05E-04
Chromium	5.50E-06	5.50E-06	5.50E-06	2.75E-03	2.75E-03	2.75E-03	2.75E-03
Cobalt	2.60E-08	2.60E-08	2.60E-08	1.30E-05	1.30E-05	1.30E-05	1.30E-05
Lead	6.20E-07	1.50E-05	1.50E-05	3.10E-04	7.50E-03	7.50E-03	7.50E-03
Manganese	7.70E-06	7.70E-06	7.70E-06	3.85E-03	3.85E-03	3.85E-03	3.85E-03
Mercury	2.40E-07	2.60E-06	2.60E-06	1.20E-04	1.30E-03	1.30E-03	1.30E-03
Nickel	6.30E-05	6.30E-05	6.30E-05	3.15E-02	3.15E-02	3.15E-02	3.15E-02
Selenium	3.50E-07	3.50E-07	3.50E-07	1.75E-04	1.75E-04	1.75E-04	1.75E-04
2,2,4 Trimethylpentane	4.00E-05	4.00E-05	4.00E-05	2.00E-02	2.00E-02	2.00E-02	2.00E-02
Acetaldehyde			1.30E-03			0.65	0.65
Acrolein			2.60E-05			1.30E-02	1.30E-02
Benzene	3.90E-04	3.90E-04	3.90E-04	0.20	0.20	0.20	0.20
Ethylbenzene	2.40E-04	2.40E-04	2.40E-04	0.12	0.12	0.12	0.12
Formaldehyde	3.10E-03	3.10E-03	3.10E-03	1.55	1.55	1.55	1.55
Hexane	9.20E-04	9.20E-04	9.20E-04	0.46	0.46	0.46	0.46
Methyl chloroform	4.80E-05	4.80E-05	4.80E-05	0.02	0.02	0.02	0.02
MEK			2.00E-05			0.01	0.01
Propionaldehyde			1.30E-04			0.07	0.07
Quinone			1.60E-04			0.08	0.08
Toluene	1.50E-04	2.90E-03	2.90E-03	0.08	1.45	1.45	1.45
Total PAH Haps	1.90E-04	8.80E-04	8.80E-04	0.10	0.44	0.44	0.44
Xylene	2.00E-04	2.00E-04	2.00E-04	0.10	0.10	0.10	0.10
						Total HAPs	5.33
						Worst Single HAP	1.55 (formaldehyde)

Methodology

Limited/Controlled Potential to Emit (tons/yr) = (Annual Asphalt Production Limitation (tons/yr)) * (Emission Factor (lb/ton)) * (ton/2000 lbs)
 Emission Factors from AP-42 Chapter 11.1 (dated 3/04), Tables 11.1-3, 11.1-4, 11.1-7, 11.1-8, 11.1-10, and 11.1-12
 Natural gas, No. 2 fuel oil, and waste oil represent the worst possible emissions scenario. AP-42 did not provide emission factors for any other fuels.

* PM, PM10, and PM2.5 AP-42 emission factors based on drum mix dryer fired with natural gas, propane, fuel oil, and waste oil. According to AP-42 fuel type does not significantly effect PM, PM10, and PM2.5 emissions.

** SO2, NOx, and VOC AP-42 emission factors are for natural gas, No. 2 fuel oil, and waste oil only.

*** CO AP-42 emission factor determined by combining data from drum mix dryer fired with natural gas, No. 6 fuel oil, and No. 2 fuel oil to develop single CO emission factor.

Abbreviations

VOC - Volatile Organic Compounds HAP = Hazardous Air Pollutant
 HCl = Hydrogen Chloride PAH = Polyaromatic Hydrocarbon
 SO2 = Sulfur Dioxide

**Appendix A.2: Limited Emissions Calculations
Dryer/Mixer Slag Processing**

Company Name: Dave O'Mara Contractor, Inc.
Source Address: New Point Stone at 992 South County Road 800 East, Greensburg, Indiana
Permit Number: 031-28784-05047
Reviewer: Brian Williams

The following calculations determine the limited emissions from the processing of slag in the aggregate drying/mixing

Steel Slag Usage Limitation =

75,000

 ton/yr
 SO2 Slag Limitation =

0.0014

 lb/ton of slag processed

0.66

 % sulfur

	Emission Factor or Limitation (lb/ton)*	Limited Potential to Emit (tons/yr)
Criteria Pollutant	Slag Processing	Slag Processing
SO2	0.0014	0.05

Methodology

* Testing results for steel slag, obtained June 2009 from E & B Paving, Inc. facility located in Huntington, IN. The testing results showed a steel slag emission factor of 0.0007 lb/ton from slag containing 0.33% sulfur content.
 Limited Potential to Emit SO2 from Slag (tons/yr) = (Slag Usage Limitation (ton/yr)) * [Limited Emission Factor (lb/ton)] * [ton/2000 lbs]

Abbreviations
 SO2 = Sulfur Dioxide

Appendix A.2: Limited Emissions Calculations
Hot Oil Heater
Fuel Combustion with Maximum Capacity < 100 MMBtu/hr

Company Name: Dave O'Mara Contractor, Inc.
Source Location: New Point Stone at 992 South County Road 800 East, Greensburg, Indiana
Permit Number: 031-28784-05047
Reviewer: Brian Williams

Maximum Hot Oil Heater Fuel Input Rate = 0.83 MMBtu/hr
 Natural Gas Usage = 0 MMCF/yr
 No. 2 Fuel Oil Usage = 51,809 gal/yr, and 0.50 % sulfur

Unlimited/Uncontrolled Emissions

Criteria Pollutant	Emission Factor (units)		Unlimited/Uncontrolled Potential to Emit (tons/yr)		Worse Case Fuel (tons/yr)
	Hot Oil Heater		Hot Oil Heater		
	Natural Gas (lb/MMCF)	No. 2 Fuel Oil (lb/kgal)	Natural Gas (tons/yr)	No. 2 Fuel Oil (tons/yr)	
PM	1.9	2.0	0.000	0.052	0.05
PM10/PM2.5	7.6	3.3	0.000	0.085	0.09
SO2	0.6	71.0	0.000	1.839	1.84
NOx	100	20.0	0.000	0.518	0.52
VOC	5.5	0.20	0.000	0.005	0.01
CO	84	5.0	0.000	0.130	0.13
Hazardous Air Pollutant					
Arsenic	2.0E-04	5.6E-04	0.0E+00	1.45E-05	1.5E-05
Beryllium	1.2E-05	4.2E-04	0.0E+00	1.09E-05	1.1E-05
Cadmium	1.1E-03	4.2E-04	0.0E+00	1.09E-05	1.1E-05
Chromium	1.4E-03	4.2E-04	0.0E+00	1.09E-05	1.1E-05
Cobalt	8.4E-05		0.0E+00		0.0E+00
Lead	5.0E-04	1.3E-03	0.0E+00	3.26E-05	3.3E-05
Manganese	3.8E-04	8.4E-04	0.0E+00	2.18E-05	2.2E-05
Mercury	2.6E-04	4.2E-04	0.0E+00	1.09E-05	1.1E-05
Nickel	2.1E-03	4.2E-04	0.0E+00	1.09E-05	1.1E-05
Selenium	2.4E-05	2.1E-03	0.0E+00	5.44E-05	5.4E-05
Benzene	2.1E-03		0.0E+00		0.0E+00
Dichlorobenzene	1.2E-03		0.0E+00		0.0E+00
Ethylbenzene					0
Formaldehyde	7.5E-02	6.10E-02	0.0E+00	1.58E-03	0.002
Hexane	1.8E+00		0.00		0.000
Phenol					0
Toluene	3.4E-03		0.0E+00		0.0E+00
Total PAH Haps	negl		negl		0
Polycyclic Organic Matter		3.30E-03		8.55E-05	8.5E-05
Total HAPs =			0.0E+00	1.8E-03	0.002

Methodology

Equivalent Natural Gas Usage (MMCF/yr) = [Maximum Fuel Input Rate (MMBtu/hr)] * [8,760 hrs/yr] * [1 MMCF/1,000 MMBtu]
 Equivalent Oil Usage (gal/yr) = [Maximum Fuel Input Rate (MMBtu/hr)] * [8,760 hrs/yr] * [1 gal/0.140 MMBtu]
 Natural Gas: Unlimited/Uncontrolled Potential to Emit (tons/yr) = [Maximum Natural Gas Usage (MMCF/yr)] * [Emission Factor (lb/MMCF)] * [ton/2000 lbs]
 All Other Fuels: Unlimited/Uncontrolled Potential to Emit (tons/yr) = [Maximum Fuel Usage (gals/yr)] * [Emission Factor (lb/kgal)] * [kgal/1000 gal] * [ton/2000 lbs]
 Sources of AP-42 Emission Factors for fuel combustion:
 Natural Gas : AP-42 Chapter 1.4 (dated 7/98), Tables 1.4-1, 1.4-2, 1.4-3, and 1.4-4
 No. 2 Fuel Oil: AP-42 Chapter 1.3 (dated 9/98), Tables 1.3-1, 1.3-2, 1.3-3, 1.3-8, 1.3-9, 1.3-10, and 1.3-11

Abbreviations

PM = Particulate Matter
 PM10 = Particulate Matter (<10 um)
 SO2 = Sulfur Dioxide
 NOx = Nitrous Oxides
 VOC - Volatile Organic Compounds
 CO = Carbon Monoxide
 HAP = Hazardous Air Pollutant
 HCl = Hydrogen Chloride
 PAH = Polyaromatic Hydrocarbon

**Appendix A.2: Limited Emissions Calculations
Asphalt Load-Out, Silo Filling, and Yard Emissions**

Company Name: Dave O'Mara Contractor, Inc.
Source Address: New Point Stone at 992 South County Road 800 East, Greensburg, Indiana
Permit Number: 031-28784-05047
Reviewer: Brian Williams

The following calculations determine the limited fugitive emissions from hot asphalt mix load-out, silo filling, and on-site yard for a drum mix hot mix asphalt plant

Asphalt Temperature, T =	325	F
Asphalt Volatility Factor, V =	-0.5	
Annual Asphalt Production Limitation =	1,000,000	tons/yr

Pollutant	Emission Factor (lb/ton asphalt)			Limited Potential to Emit (tons/yr)			
	Load-Out	Silo Filling	On-Site Yard	Load-Out	Silo Filling	On-Site Yard	Total
Total PM*	5.2E-04	5.9E-04	NA	0.26	0.29	NA	0.55
Organic PM	3.4E-04	2.5E-04	NA	0.17	0.127	NA	0.30
TOC	0.004	0.012	0.001	2.08	6.09	0.550	8.7
CO	0.001	0.001	3.5E-04	0.67	0.590	0.176	1.44

NA = Not Applicable (no AP-42 Emission Factor)

0.0029

PM/HAPs	0.012	0.014	0	0.027
VOC/HAPs	0.031	0.077	0.008	0.116
non-VOC/HAPs	1.6E-04	1.6E-05	4.2E-05	2.2E-04
non-VOC/non-HAPs	0.15	0.09	0.04	0.28

Total VOCs	1.95	6.09	0.5	8.6
Total HAPs	0.04	0.09	0.008	0.14
Worst Single HAP				0.044
				(formaldehyde)

Methodology

The asphalt temperature and volatility factor were provided by the source.

Limited Potential to Emit (tons/yr) = (Annual Asphalt Production Limitation (tons/yr)) * (Emission Factor (lb/ton)) * (ton/2000 lbs)

Emission Factors from AP-42 Chapter 11.1 (dated 3/04), Tables 11.1-14, 11.1-15, and 11.1-16

Plant Load-Out Emission Factor Equations (AP-42 Table 11.1-14)::

Total PM/PM10 Ef = 0.000181 + 0.00141(-V)e^{-(0.0251)(T+460)-20.43}

Organic PM Ef = 0.00141(-V)e^{-(0.0251)(T+460)-20.43}

TOC Ef = 0.0172(-V)e^{-(0.0251)(T+460)-20.43}

CO Ef = 0.00558(-V)e^{-(0.0251)(T+460)-20.43}

Silo Filling Emission Factor Equations (AP-42 Table 11.1-14):

PM/PM10 Ef = 0.000332 + 0.00105(-V)e^{-(0.0251)(T+460)-20.43}

Organic PM Ef = 0.00105(-V)e^{-(0.0251)(T+460)-20.43}

TOC Ef = 0.0504(-V)e^{-(0.0251)(T+460)-20.43}

CO Ef = 0.00488(-V)e^{-(0.0251)(T+460)-20.43}

On Site Yard CO emissions estimated by multiplying the TOC emissions by 0.32

*No emission factors available for PM10 or PM2.5, therefore IDEM assumes PM10 and PM2.5 are equivalent to Total PM.

Abbreviations

TOC = Total Organic Compounds

CO = Carbon Monoxide

PM = Particulate

Matter

PM10 = Particulate Matter (<10 um)

PM2.5 = Particulate Matter (<2.5 um)

HAP = Hazardous Air Pollutant

VOC = Volatile Organic Compound

Appendix A.2: Limited Emissions Calculations
Asphalt Load-Out, Silo Filling, and Yard Emissions (continued)

Company Name: Dave O'Mara Contractor, Inc.
 Source Address: New Point Stone at 992 South County Road 800 East, Greensburg, Indiana
 Permit Number: 031-28784-05047
 Reviewer: Brian Williams

Organic Particulate-Based Compounds (Table 11.1-15)

Pollutant	CASRN	Category	HAP Type	Source	Speciation Profile		Limited Potential to Emit (tons/yr)			
					Load-out and Onsite Yard (% by weight of Total Organic PM)	Silo Filling and Asphalt Storage Tank (% by weight of Total Organic PM)	Load-out	Silo Filling	Onsite Yard	Total
PAH HAPs										
Acenaphthene	83-32-9	PM/HAP	POM	Organic PM	0.26%	0.47%	4.4E-04	6.0E-04	NA	1.0E-03
Acenaphthylene	208-96-8	PM/HAP	POM	Organic PM	0.028%	0.014%	4.8E-05	1.8E-05	NA	6.6E-05
Anthracene	120-12-7	PM/HAP	POM	Organic PM	0.07%	0.13%	1.2E-04	1.7E-04	NA	2.8E-04
Benzo(a)anthracene	56-55-3	PM/HAP	POM	Organic PM	0.019%	0.056%	3.2E-05	7.1E-05	NA	1.0E-04
Benzo(b)fluoranthene	205-99-2	PM/HAP	POM	Organic PM	0.0076%	0	1.3E-05	0	NA	1.3E-05
Benzo(k)fluoranthene	207-08-9	PM/HAP	POM	Organic PM	0.0022%	0	3.8E-06	0	NA	3.8E-06
Benzo(g,h,i)perylene	191-24-2	PM/HAP	POM	Organic PM	0.0019%	0	3.2E-06	0	NA	3.2E-06
Benzo(a)pyrene	50-32-8	PM/HAP	POM	Organic PM	0.0023%	0	3.9E-06	0	NA	3.9E-06
Benzo(e)pyrene	192-97-2	PM/HAP	POM	Organic PM	0.0078%	0.0095%	1.3E-05	1.2E-05	NA	2.5E-05
Chrysene	218-01-9	PM/HAP	POM	Organic PM	0.103%	0.21%	1.8E-04	2.7E-04	NA	4.4E-04
Dibenz(a,h)anthracene	53-70-3	PM/HAP	POM	Organic PM	0.00037%	0	6.3E-07	0	NA	6.3E-07
Fluoranthene	206-44-0	PM/HAP	POM	Organic PM	0.05%	0.15%	8.5E-05	1.9E-04	NA	2.8E-04
Fluorene	86-73-7	PM/HAP	POM	Organic PM	0.77%	1.01%	1.3E-03	1.3E-03	NA	2.6E-03
Indeno(1,2,3-cd)pyrene	193-39-5	PM/HAP	POM	Organic PM	0.00047%	0	8.0E-07	0	NA	8.0E-07
2-Methylnaphthalene	91-57-6	PM/HAP	POM	Organic PM	2.38%	5.27%	4.1E-03	6.7E-03	NA	0.011
Naphthalene	91-20-3	PM/HAP	POM	Organic PM	1.25%	1.82%	2.1E-03	2.3E-03	NA	4.4E-03
Perylene	198-55-0	PM/HAP	POM	Organic PM	0.022%	0.03%	3.8E-05	3.8E-05	NA	7.6E-05
Phenanthrene	85-01-8	PM/HAP	POM	Organic PM	0.81%	1.80%	1.4E-03	2.3E-03	NA	3.7E-03
Pyrene	129-00-0	PM/HAP	POM	Organic PM	0.15%	0.44%	2.6E-04	5.6E-04	NA	8.1E-04
Total PAH HAPs							0.010	0.014	NA	0.025
Other semi-volatile HAPs										
Phenol		PM/HAP	---	Organic PM	1.18%	0	2.0E-03	0	0	2.0E-03

NA = Not Applicable (no AP-42 Emission Factor)

Methodology

Limited Potential to Emit (tons/yr) = [Speciation Profile (%)] * [Organic PM (tons/yr)]
 Speciation Profiles from AP-42 Chapter 11.1 (dated 3/04), Tables 11.1-15 and 11.1-16

Abbreviations

PM = Particulate Matter
 HAP = Hazardous Air Pollutant
 POM = Polycyclic Organic Matter

**Appendix A.2: Limited Emissions Calculations
Asphalt Load-Out, Silo Filling, and Yard Emissions (continued)**

Organic Volatile-Based Compounds (Table 11.1-16)

Pollutant	CASRN	Category	HAP Type	Source	Speciation Profile		Limited Potential to Emit (tons/yr)			
					Load-out and Onsite Yard (% by weight of TOC)	Silo Filling and Asphalt Storage Tank (% by weight of TOC)	Load-out	Silo Filling	Onsite Yard	Total
VOC		VOC	---	TOC	94%	100%	1.95	6.09	0.52	8.57
non-VOC/non-HAPS										
Methane	74-82-8	non-VOC/non-HAP	---	TOC	6.50%	0.26%	1.4E-01	1.6E-02	3.6E-02	0.187
Acetone	67-64-1	non-VOC/non-HAP	---	TOC	0.046%	0.055%	9.6E-04	3.4E-03	2.5E-04	0.005
Ethylene	74-85-1	non-VOC/non-HAP	---	TOC	0.71%	1.10%	1.5E-02	6.7E-02	3.9E-03	0.086
Total non-VOC/non-HAPS					7.30%	1.40%	0.152	0.085	0.040	0.28
Volatile organic HAPs										
Benzene	71-43-2	VOC/HAP	---	TOC	0.052%	0.032%	1.1E-03	1.9E-03	2.9E-04	3.3E-03
Bromomethane	74-83-9	VOC/HAP	---	TOC	0.0096%	0.0049%	2.0E-04	3.0E-04	5.3E-05	5.5E-04
2-Butanone	78-93-3	VOC/HAP	---	TOC	0.049%	0.039%	1.0E-03	2.4E-03	2.7E-04	3.7E-03
Carbon Disulfide	75-15-0	VOC/HAP	---	TOC	0.013%	0.016%	2.7E-04	9.7E-04	7.2E-05	1.3E-03
Chloroethane	75-00-3	VOC/HAP	---	TOC	0.00021%	0.004%	4.4E-06	2.4E-04	1.2E-06	2.5E-04
Chloromethane	74-87-3	VOC/HAP	---	TOC	0.015%	0.023%	3.1E-04	1.4E-03	8.3E-05	1.8E-03
Cumene	92-82-8	VOC/HAP	---	TOC	0.11%	0	2.3E-03	0	6.1E-04	2.9E-03
Ethylbenzene	100-41-4	VOC/HAP	---	TOC	0.28%	0.038%	5.8E-03	2.3E-03	1.5E-03	0.010
Formaldehyde	50-00-0	VOC/HAP	---	TOC	0.088%	0.69%	1.8E-03	4.2E-02	4.8E-04	0.044
n-Hexane	100-54-3	VOC/HAP	---	TOC	0.15%	0.10%	3.1E-03	6.1E-03	8.3E-04	0.010
Isooctane	540-84-1	VOC/HAP	---	TOC	0.0018%	0.00031%	3.7E-05	1.9E-05	9.9E-06	6.6E-05
Methylene Chloride	75-09-2	non-VOC/HAP	---	TOC	0	0.00027%	0	1.6E-05	0	1.6E-05
MTBE	1634-04-4	VOC/HAP	---	TOC	0	0	0	0	0	0
Styrene	100-42-5	VOC/HAP	---	TOC	0.0073%	0.0054%	1.5E-04	3.3E-04	4.0E-05	5.2E-04
Tetrachloroethene	127-18-4	non-VOC/HAP	---	TOC	0.0077%	0	1.6E-04	0	4.2E-05	2.0E-04
Toluene	100-88-3	VOC/HAP	---	TOC	0.21%	0.062%	4.4E-03	3.8E-03	1.2E-03	0.009
1,1,1-Trichloroethane	71-55-6	VOC/HAP	---	TOC	0	0	0	0	0	0
Trichloroethene	79-01-6	VOC/HAP	---	TOC	0	0	0	0	0	0
Trichlorofluoromethane	75-69-4	VOC/HAP	---	TOC	0.0013%	0	2.7E-05	0	7.2E-06	3.4E-05
m-/p-Xylene	1330-20-7	VOC/HAP	---	TOC	0.41%	0.20%	8.5E-03	1.2E-02	2.3E-03	0.023
o-Xylene	95-47-6	VOC/HAP	---	TOC	0.08%	0.057%	1.7E-03	3.5E-03	4.4E-04	5.6E-03
Total volatile organic HAPs					1.50%	1.30%	0.031	0.079	0.008	0.119

Methodology

Limited Potential to Emit (tons/yr) = [Speciation Profile (%)] * [TOC (tons/yr)]

Speciation Profiles from AP-42 Chapter 11.1 (dated 3/04), Tables 11.1-15 and 11.1-16

Abbreviations

TOC = Total Organic Compounds

HAP = Hazardous Air Pollutant

VOC = Volatile Organic Compound

MTBE = Methyl tert butyl ether

**Appendix A.2: Limited Emissions Calculations
Material Storage Piles**

Company Name: Dave O'Mara Contractor, Inc.
Source Address: New Point Stone at 992 South County Road 800 East, Greensburg, Indiana
Permit Number: 031-28784-05047
Reviewer: Brian Williams

Note: Since the emissions from the storage piles are minimal, the limited emissions are equal to the unlimited emissions.

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

$E_f = 1.7 \cdot (s/1.5) \cdot (365-p)/235 \cdot (f/15)$ <p>where E_f = emission factor (lb/acre/day) s = silt content (wt %) p = 125 days of rain greater than or equal to 0.01 inches f = 15 % of wind greater than or equal to 12 mph</p>

Material	Silt Content (wt %)*	Emission Factor (lb/acre/day)	Maximum Anticipated Pile Size (acres)**	PTE of PM (tons/yr)	PTE of PM10/PM2.5 (tons/yr)
Sand	2.6	3.01	0.75	0.412	0.144
Limestone	1.6	1.85	0.75	0.253	0.089
RAP	0.5	0.58	0.75	0.079	0.028
Gravel	1.6	1.85	0.75	0.253	0.089
Slag	3.8	4.40	0.75	0.602	0.211
Totals				1.60	0.56

Methodology

PTE of PM (tons/yr) = (Emission Factor (lb/acre/day)) * (Maximum Pile Size (acres)) * (ton/2000 lbs) * (8760 hours/yr)

PTE of PM10/PM2.5 (tons/yr) = (Potential PM Emissions (tons/yr)) * 35%

*Silt content values obtained from AP-42 Table 13.2.4-1 (dated 1/95)

**Maximum anticipated pile size (acres) provided by the source.

RAP = recycled asphalt pavement

Abbreviations

PM = Particulate Matter

PM10 = Particulate Matter (<10 um)

PM2.5 = Particulate Matter (<2.5 um)

PM2.5 = PM10

PTE = Potential to Emit

Appendix A.2: Limited Emissions Calculations
Material Processing, Handling, Crushing, Screening, and Conveying

Company Name: Dave O'Mara Contractor, Inc.
Source Address: New Point Stone at 992 South County Road 800 East, Greensburg, Indiana
Permit Number: 031-28784-05047
Reviewer: Brian Williams

Batch or Continuous Drop Operations (AP-42 Section 13.2.4)

To estimate potential fugitive dust emissions from processing and handling of raw materials (batch or continuous drop operations), AP-42 emission factors for Aggregate Handling, Section 13.2.4 (fifth edition, 1/95) are utilized.

$$E_f = k \cdot (0.0032)^U \cdot (U/5)^{1.3} / (M/2)^{1.4}$$

where: E_f = Emission factor (lb/ton)

k (PM) = 0.74	= particle size multiplier (0.74 assumed for aerodynamic diameter <=100 um)
k (PM10) = 0.35	= particle size multiplier (0.35 assumed for aerodynamic diameter <=10 um)
k (PM2.5) = 0.053	= particle size multiplier (0.053 assumed for aerodynamic diameter <=2.5 um)
U = 10.2	= worst case annual mean wind speed (Source: NOAA, 2006*)
M = 4.0	= material % moisture content of aggregate (Source: AP-42 Section 11.1.1.1)
E_f (PM) = 2.27E-03	lb PM/ton of material handled
E_f (PM10) = 1.07E-03	lb PM10/ton of material handled
E_f (PM2.5) = 1.62E-04	lb PM2.5/ton of material handled

Annual Asphalt Production Limitation = 1,000,000 tons/yr
 Percent Asphalt Cement/Binder (weight %) = 5.0%
 Maximum Material Handling Throughput = 950,000 tons/yr

Type of Activity	Limited PTE of PM (tons/yr)	Limited PTE of PM10 (tons/yr)	Limited PTE of PM2.5 (tons/yr)
Truck unloading of materials into storage piles	1.08	0.51	0.08
Front-end loader dumping of materials into feeder bins	1.08	0.51	0.08
Conveyor dropping material into dryer/mixer or batch tower	1.08	0.51	0.08
Total (tons/yr)	3.23	1.53	0.23

Methodology

The percent asphalt cement/binder provided by the source.
 Maximum Material Handling Throughput (tons/yr) = [Annual Asphalt Production Limitation (tons/yr)] * [1 - Percent Asphalt Cement/Binder (weight %)]
 Limited Potential to Emit (tons/yr) = (Maximum Material Handling Throughput (tons/yr)) * (Emission Factor (lb/ton)) * (ton/2000 lbs)
 Raw materials may include limestone, sand, recycled asphalt pavement (RAP), gravel, slag, and other additives
 *Worst case annual mean wind speed (Indianapolis, IN) from "Comparative Climatic Data", National Climatic Data Center, NOAA, 2006

Material Screening and Conveying (AP-42 Section 19.2.2)

To estimate potential fugitive dust emissions from raw material crushing, screening, and conveying, AP-42 emission factors for Crushed Stone Processing Operations, Section 19.2.2 (dated 8/04) are utilized.

Operation	Uncontrolled Emission Factor for PM (lbs/ton)*	Uncontrolled Emission Factor for PM10 (lbs/ton)*	Limited PTE of PM (tons/yr)	Limited PTE of PM10/PM2.5 (tons/yr)**
Crushing	0.0054	0.0024	2.57	1.14
Screening	0.025	0.0087	11.88	4.13
Conveying	0.003	0.0011	1.43	0.52
Limited Potential to Emit (tons/yr) =			15.87	5.80

Methodology

Maximum Material Handling Throughput (tons/yr) = [Annual Asphalt Production Limitation (tons/yr)] * [1 - Percent Asphalt Cement/Binder (weight %)]
 Limited Potential to Emit (tons/yr) = [Maximum Material Handling Throughput (tons/yr)] * [Emission Factor (lb/ton)] * [ton/2000 lbs]
 Raw materials may include stone/gravel, slag, and recycled asphalt pavement (RAP)
 Emission Factors from AP-42 Chapter 11.19.2 (dated 8/04), Table 11.19.2-2
 *Uncontrolled emissions factors for PM/PM10 represent tertiary crushing of stone with moisture content ranging from 0.21 to 1.3 percent by weight (Table 11.19.2-2). The bulk moisture content of aggregate in the storage piles at a hot mix asphalt production plant typically stabilizes between 3 to 5 percent by weight (Source: AP-42 Section 11.1.1.1).
 **Assumes PM10 = PM2.5

Abbreviations

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

**Appendix A.2: Limited Emissions Calculations
Unpaved Roads**

Company Name: Dave O'Mara Contractor, Inc.
Source Address: New Point Stone at 992 South County Road 800 East, Greensburg, Indiana
Permit Number: 031-28784-05047
Reviewer: Brian Williams

Unpaved Roads at Industrial Site

The following calculations determine the amount of emissions created by unpaved roads, based on 8,760 hours of use and AP-42, Ch 13.2.2 (12/2003).

Annual Asphalt Production Limitation	1,000,000	tons/yr
Percent Asphalt Cement/Binder (weight %)	5.0%	
Maximum Material Handling Throughput	950,000	tons/yr
Maximum Asphalt Cement/Binder Throughput	50,000	tons/yr
No. 2 Fuel Oil Limitation	2,626,479	gallons/yr

Process	Vehicle Type	Maximum Weight of Vehicle (tons)	Maximum Weight of Load (tons)	Maximum Weight of Vehicle and Load (tons/trip)	Maximum trips per year (trip/yr)	Total Weight driven per year (ton/yr)	Maximum one-way distance (feet/trip)	Maximum one-way distance (mi/trip)	Maximum one-way miles (miles/yr)
Aggregate/RAP Truck Enter Full	Dump truck (16 CY)	17.0	22.4	39.4	4.2E+04	1.7E+06	300	0.057	2409.7
Aggregate/RAP Truck Leave Empty	Dump truck (16 CY)	17.0	0	17.0	4.2E+04	7.2E+05	300	0.057	2409.7
Asphalt Cement/Binder Truck Enter Full	Tanker truck (6000 gal)	12.0	36.0	48.0	1.4E+03	6.7E+04	300	0.057	78.9
Asphalt Cement/Binder Truck Leave Empty	Tanker truck (6000 gal)	12.0	0	12.0	1.4E+03	1.7E+04	300	0.057	78.9
Fuel Oil Truck Enter Full	Tanker truck (6000 gal)	12.0	32.0	44.0	2.8E+02	1.2E+04	300	0.057	15.8
Fuel Oil Truck Leave Empty	Tanker truck (6000 gal)	12.0	0	12.0	2.8E+02	3.3E+03	300	0.057	15.8
Aggregate/RAP Loader Full	Front-end loader (3 CY)	15.0	4.2	19.2	2.3E+05	4.3E+06	300	0.057	12851.7
Aggregate/RAP Loader Empty	Front-end loader (3 CY)	15.0	0	15.0	2.3E+05	3.4E+06	300	0.057	12851.7
Asphalt Concrete Truck Leave Full	Dump truck (16 CY)	17.0	24.0	41.0	4.2E+04	1.7E+06	300	0.057	2367.4
Asphalt Concrete Truck Enter Empty	Dump truck (16 CY)	17.0	0	17.0	4.2E+04	7.1E+05	300	0.057	2367.4
Total					6.2E+05	1.3E+07			3.5E+04

Average Vehicle Weight Per Trip	20.3	tons/trip
Average Miles Per Trip	0.057	miles/trip

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

	PM	PM10	PM2.5	
where k =	4.9	1.5	0.15	lb/mi = particle size multiplier (AP-42 Table 13.2.2-2 for Industrial Roads)
s =	4.8	4.8	4.8	% = mean % silt content of unpaved roads (AP-42 Table 13.2.2-3 Sand/Gravel Processing Plant Road)
a =	0.7	0.9	0.9	= constant (AP-42 Table 13.2.2-2)
W =	20.3	20.3	20.3	tons = average vehicle weight (provided by source)
b =	0.45	0.45	0.45	= constant (AP-42 Table 13.2.2-2)

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, $E_{ext} = E_f \cdot [(365 - P)/365]$

Mitigated Emission Factor, E_{ext}	$E_f \cdot [(365 - P)/365]$
where P =	125
	days of rain greater than or equal to 0.01 inches (see Fig. 13.2.2-1)

	PM	PM10	PM2.5	
Unmitigated Emission Factor, E_f	6.10	1.55	0.16	lb/mile
Mitigated Emission Factor, E_{ext}	4.01	1.02	0.10	lb/mile
Dust Control Efficiency =	50%	50%	50%	(pursuant to control measures outlined in fugitive dust control plan)

Process	Vehicle Type	Unmitigated PTE of PM (tons/yr)	Unmitigated PTE of PM10 (tons/yr)	Unmitigated PTE of PM2.5 (tons/yr)	Mitigated PTE of PM (tons/yr)	Mitigated PTE of PM10 (tons/yr)	Mitigated PTE of PM2.5 (tons/yr)	Controlled PTE of PM (tons/yr)	Controlled PTE of PM10 (tons/yr)	Controlled PTE of PM2.5 (tons/yr)
Aggregate/RAP Truck Enter Full	Dump truck (16 CY)	7.34	1.87	0.19	4.83	1.23	0.12	2.41	0.62	0.06
Aggregate/RAP Truck Leave Empty	Dump truck (16 CY)	7.34	1.87	0.19	4.83	1.23	0.12	2.41	0.62	0.06
Asphalt Cement/Binder Truck Enter Full	Tanker truck (6000 gal)	0.240	0.061	0.01	0.158	0.040	4.0E-03	0.079	0.020	2.0E-03
Asphalt Cement/Binder Truck Leave Empty	Tanker truck (6000 gal)	0.240	0.061	0.01	0.158	0.040	4.0E-03	0.079	0.020	2.0E-03
Fuel Oil Truck Enter Full	Tanker truck (6000 gal)	0.048	0.012	1.2E-03	0.032	0.008	8.1E-04	0.016	0.004	4.0E-04
Fuel Oil Truck Leave Empty	Tanker truck (6000 gal)	0.048	0.012	1.2E-03	0.032	0.008	8.1E-04	0.016	0.004	4.0E-04
Aggregate/RAP Loader Full	Front-end loader (3 CY)	39.17	9.98	1.00	25.75	6.56	0.66	12.88	3.28	0.33
Aggregate/RAP Loader Empty	Front-end loader (3 CY)	39.17	9.98	1.00	25.75	6.56	0.66	12.88	3.28	0.33
Asphalt Concrete Truck Leave Full	Dump truck (16 CY)	7.21	1.84	0.18	4.74	1.21	0.12	2.37	0.60	0.06
Asphalt Concrete Truck Enter Empty	Dump truck (16 CY)	7.21	1.84	0.18	4.74	1.21	0.12	2.37	0.60	0.06
Totals		108.03	27.53	2.75	71.03	18.10	1.81	35.52	9.05	0.91

Methodology

Maximum Material Handling Throughput = [Annual Asphalt Production Limitation (tons/yr)] * [1 - Percent Asphalt Cement/Binder (weight %)]
 Maximum Asphalt Cement/Binder Throughput = [Annual Asphalt Production Limitation (tons/yr)] * [Percent Asphalt Cement/Binder (weight %)]
 Maximum Weight of Vehicle and Load (tons/trip) = [Maximum Weight of Vehicle (tons/trip)] + [Maximum Weight of Load (tons/trip)]
 Maximum trips per year (trip/yr) = [Throughput (tons/yr)] / [Maximum Weight of Load (tons/trip)]
 Total Weight driven per year (ton/yr) = [Maximum Weight of Vehicle and Load (tons/trip)] * [Maximum trips per year (trip/yr)]
 Maximum one-way distance (mi/trip) = [Maximum one-way distance (feet/trip)] / [5280 ft/mile]
 Maximum one-way miles (miles/yr) = [Maximum trips per year (trip/yr)] * [Maximum one-way distance (mi/trip)]
 Average Vehicle Weight Per Trip (ton/trip) = SUM[Total Weight driven per year (ton/yr)] / SUM[Maximum trips per year (trip/yr)]
 Average Miles Per Trip (miles/trip) = SUM[Maximum one-way miles (miles/yr)] / SUM[Maximum trips per year (trip/yr)]
 Unmitigated PTE (tons/yr) = (Maximum one-way miles (miles/yr)) * (Unmitigated Emission Factor (lb/mile)) * (ton/2000 lbs)
 Mitigated PTE (tons/yr) = (Maximum one-way miles (miles/yr)) * (Mitigated Emission Factor (lb/mile)) * (ton/2000 lbs)
 Controlled PTE (tons/yr) = (Mitigated PTE (tons/yr)) * (1 - Dust Control Efficiency)

Abbreviations

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

Appendix A.2: Limited Emissions Calculations
Paved Roads

Company Name: Dave O'Mara Contractor, Inc.
Source Address: New Point Stone at 992 South County Road 800 East, Greensburg, Indiana
Permit Number: 031-28784-05047
Reviewer: Brian Williams

Paved Roads at Industrial Site

The following calculations determine the amount of emissions created by paved roads, based on 8,760 hours of use and AP-42, Ch 13.2.1 (12/2003).

Annual Asphalt Production Limitation	=	1,000,000	tons/yr
Percent Asphalt Cement/Binder (weight %)	=	5.0%	
Maximum Material Handling Throughput	=	950,000	tons/yr
Maximum Asphalt Cement/Binder Throughput	=	50,000	tons/yr
No. 2 Fuel Oil Limitation	=	2,626,479	gallons/yr

Process	Vehicle Type	Maximum Weight of Vehicle (tons)	Maximum Weight of Load (tons)	Maximum Weight of Vehicle and Load (tons/trip)	Maximum trips per year (trip/yr)	Total Weight driven per day (ton/yr)	Maximum one-way distance (feet/trip)	Maximum one-way distance (mi/trip)	Maximum one-way miles (miles/yr)
Aggregate/RAP Truck Enter Full	Dump truck (16 CY)	17.0	22.4	39.40	4.2E+04	1.7E+06	300	0.057	2409.7
Aggregate/RAP Truck Leave Empty	Dump truck (16 CY)	17.0	0	17.00	4.2E+04	7.2E+05	300	0.057	2409.7
Asphalt Cement/Binder Truck Enter Full	Tanker truck (6000 gal)	12.0	36.0	48.00	1.4E+03	6.7E+04	300	0.057	78.9
Asphalt Cement/Binder Truck Leave Empty	Tanker truck (6000 gal)	12.0	0	12.00	1.4E+03	1.7E+04	300	0.057	78.9
Fuel Oil Truck Enter Full	Tanker truck (6000 gal)	12.0	32.0	44.00	2.8E+02	1.2E+04	300	0.057	15.8
Fuel Oil Truck Leave Empty	Tanker truck (6000 gal)	12.0	0	12.00	2.8E+02	3.3E+03	300	0.057	15.8
Aggregate/RAP Loader Full	Front-end loader (3 CY)	15.0	4.2	19.20	2.3E+05	4.3E+06	300	0.057	12851.7
Aggregate/RAP Loader Empty	Front-end loader (3 CY)	15.0	0	15.00	2.3E+05	3.4E+06	300	0.057	12851.7
Asphalt Concrete Truck Leave Full	Dump truck (16 CY)	17.0	24.0	41.00	4.2E+04	1.7E+06	300	0.057	2367.4
Asphalt Concrete Truck Enter Empty	Dump truck (16 CY)	17.0	0	17.00	4.2E+04	7.1E+05	300	0.057	2367.4
Total					6.2E+05	1.3E+07			3.5E+04

Average Vehicle Weight Per Trip = $\frac{20.3}{1}$ tons/trip
 Average Miles Per Trip = $\frac{0.057}{1}$ miles/trip

Unmitigated Emission Factor, $E_f = [k * (sL/2)^{0.65} * (W/3)^{1.5} - C]$ (Equation 1 from AP-42 13.2.1)

	PM	PM10	PM2.5	
where k =	0.082	0.016	0.0024	lb/mi = particle size multiplier (AP-42 Table 13.2.1-1)
W =	20.3	20.3	20.3	tons = average vehicle weight (provided by source)
C =	0.00047	0.00047	0.00038	lb/mi = emission factor for vehicle exhaust, brake wear, and tire wear (AP-42 Table 13.2.1-2)
sL =	0.6	0.6	0.6	g/m ² = Ubiquitous Baseline Silt Loading Values of paved roads (Table 13.2.1-3 for summer months)

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, $E_{ext} = E_f * [1 - (p/4N)]$

Mitigated Emission Factor, $E_{ext} = E_f * [1 - (p/4N)]$
 where p = $\frac{125}{365}$ days of rain greater than or equal to 0.01 inches (see Fig. 13.2.1-2)
 N = 365 days per year

	PM	PM10	PM2.5	
Unmitigated Emission Factor, E_f =	0.66	0.13	0.02	lb/mile
Mitigated Emission Factor, E_{ext} =	0.60	0.12	0.02	lb/mile
Dust Control Efficiency =	50%	50%	50%	(pursuant to control measures outlined in fugitive dust control plan)

Process	Vehicle Type	Unmitigated PTE of PM (tons/yr)	Unmitigated PTE of PM10 (tons/yr)	Unmitigated PTE of PM2.5 (tons/yr)	Mitigated PTE of PM (tons/yr)	Mitigated PTE of PM10 (tons/yr)	Mitigated PTE of PM2.5 (tons/yr)	Controlled PTE of PM (tons/yr)	Controlled PTE of PM10 (tons/yr)	Controlled PTE of PM2.5 (tons/yr)
Aggregate/RAP Truck Enter Full	Dump truck (16 CY)	0.79	0.15	0.02	0.72	0.14	0.02	0.36	0.07	0.01
Aggregate/RAP Truck Leave Empty	Dump truck (16 CY)	0.79	0.15	0.02	0.72	0.14	0.02	0.36	0.07	0.01
Asphalt Cement/Binder Truck Enter Full	Tanker truck (6000 gal)	0.026	0.005	7.5E-04	0.024	0.005	6.8E-04	0.012	2.3E-03	3.4E-04
Asphalt Cement/Binder Truck Leave Empty	Tanker truck (6000 gal)	0.026	0.005	7.5E-04	0.024	0.005	6.8E-04	0.012	2.3E-03	3.4E-04
Fuel Oil Truck Enter Full	Tanker truck (6000 gal)	5.2E-03	1.0E-03	1.5E-04	4.7E-03	9.2E-04	1.4E-04	2.4E-03	4.6E-04	6.8E-05
Fuel Oil Truck Leave Empty	Tanker truck (6000 gal)	5.2E-03	1.0E-03	1.5E-04	4.7E-03	9.2E-04	1.4E-04	2.4E-03	4.6E-04	6.8E-05
Aggregate/RAP Loader Full	Front-end loader (3 CY)	4.23	0.82	0.12	3.87	0.75	0.11	1.93	0.38	0.06
Aggregate/RAP Loader Empty	Front-end loader (3 CY)	4.23	0.82	0.12	3.87	0.75	0.11	1.93	0.38	0.06
Asphalt Concrete Truck Leave Full	Dump truck (16 CY)	0.78	0.15	0.02	0.71	0.14	0.02	0.36	0.07	0.01
Asphalt Concrete Truck Enter Empty	Dump truck (16 CY)	0.78	0.15	0.02	0.71	0.14	0.02	0.36	0.07	0.01
Totals		11.66	2.27	0.34	10.66	2.07	0.31	5.33	1.04	0.15

Methodology

Maximum Material Handling Throughput = [Annual Asphalt Production Limitation (tons/yr)] * [1 - Percent Asphalt Cement/Binder (weight %)]
 Maximum Asphalt Cement/Binder Throughput = [Annual Asphalt Production Limitation (tons/yr)] * [Percent Asphalt Cement/Binder (weight %)]
 Maximum Weight of Vehicle and Load (tons/trip) = [Maximum Weight of Vehicle (tons/trip)] + [Maximum Weight of Load (tons/trip)]
 Maximum trips per year (trip/yr) = [Throughput (tons/yr)] / [Maximum Weight of Load (tons/trip)]
 Total Weight driven per year (ton/yr) = [Maximum Weight of Vehicle and Load (tons/trip)] * [Maximum trips per year (trip/yr)]
 Maximum one-way distance (mi/trip) = [Maximum one-way distance (feet/trip)] / [5280 ft/mile]
 Maximum one-way miles (miles/yr) = [Maximum trips per year (trip/yr)] * [Maximum one-way distance (mi/trip)]
 Average Vehicle Weight Per Trip (ton/trip) = SUM[Total Weight driven per year (ton/yr)] / SUM[Maximum trips per year (trip/yr)]
 Average Miles Per Trip (miles/trip) = SUM[Maximum one-way miles (miles/yr)] / SUM[Maximum trips per year (trip/yr)]
 Unmitigated PTE (tons/yr) = (Maximum one-way miles (miles/yr)) * (Unmitigated Emission Factor (lb/mile)) * (ton/2000 lbs)
 Mitigated PTE (tons/yr) = (Maximum one-way miles (miles/yr)) * (Mitigated Emission Factor (lb/mile)) * (ton/2000 lbs)
 Controlled PTE (tons/yr) = (Mitigated PTE (tons/yr)) * (1 - Dust Control Efficiency)

Abbreviations

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

**Appendix A.2: Limited Emissions Calculations
Cold Mix Asphalt Production and Stockpiles**

Company Name: Dave O'Mara Contractor, Inc.
Source Address: New Point Stone at 992 South County Road 800 East, Greensburg, Indiana
Permit Number: 031-28784-05047
Reviewer: Brian Williams

The following calculations determine the amount of VOC and HAP emissions created from volatilization of solvent used as diluent in the liquid binder for cold mix asphalt production

Cold Mix Asphalt VOC Usage Limitation = tons/yr

Volatile Organic Compounds

	Maximum weight % of VOC solvent in binder	Weight % VOC solvent in binder that evaporates	VOC Solvent Usage Limitation (tons/yr)	Limited PTE of VOC (tons/yr)	Liquid Binder Adjustment Ratio
Cut back asphalt rapid cure (assuming gasoline or naphtha solvent)	25.3%	95.0%	70.3	66.8	1.053
Cut back asphalt medium cure (assuming kerosene solvent)	28.6%	70.0%	95.5	66.8	1.429
Cut back asphalt slow cure (assuming fuel oil solvent)	20.0%	25.0%	267.3	66.8	4.000
Emulsified asphalt with solvent (assuming water, emulsifying agent, and 15% fuel oil solvent)	15.0%	46.4%	144.0	66.8	2.155
Other asphalt with solvent binder	25.9%	2.5%	2672.8	66.8	40.0
Worst Case Limited PTE of VOC =				66.8	

Hazardous Air Pollutants

Worst Case Total HAP Content of VOC solvent (weight %) =	26.08%
Worst Case Single HAP Content of VOC solvent (weight %) =	9.0% Xylenes
Limited PTE of Total HAPs (tons/yr) =	17.43
Limited PTE of Single HAP (tons/yr) =	6.01 Xylenes

Hazardous Air Pollutant (HAP) Content (% by weight) For Various Petroleum Solvents*

Volatile Organic HAP	CAS#	Hazardous Air Pollutant (HAP) Content (% by weight)* For Various Petroleum Solvents				
		Gasoline	Kerosene	Diesel (#2) Fuel Oil	No. 2 Fuel Oil	No. 6 Fuel Oil
1,3-Butadiene	106-99-0	3.70E-5%				
2,2,4-Trimethylpentane	540-84-1	2.40%				
Acenaphthene	83-32-9		4.70E-5%		1.80E-4%	
Acenaphthylene	208-96-8		4.50E-5%		6.00E-5%	
Anthracene	120-12-7		1.20E-6%	5.80E-5%	2.80E-5%	5.00E-5%
Benzene	71-43-2	1.90%		2.90E-4%		
Benzo(a)anthracene	56-55-3			9.60E-7%	4.50E-7%	5.50E-4%
Benzo(a)pyrene	50-32-8			2.20E-6%	2.10E-7%	4.40E-5%
Benzo(g,h,i)perylene	191-24-2			1.20E-7%	5.70E-8%	
Biphenyl	92-52-4			6.30E-4%	7.20E-5%	
Chrysene	218-01-9			4.50E-7%	1.40E-6%	6.90E-4%
Ethylbenzene	100-41-4	1.70%		0.07%	3.40E-4%	
Fluoranthene	206-44-0		7.10E-6%	5.90E-5%	1.40E-5%	2.40E-4%
Fluorene	86-73-7		4.20E-5%	8.60E-4%	1.90E-4%	
Indeno(1,2,3-cd)pyrene	193-39-5			1.60E-7%		1.00E-4%
Methyl-tert-butylether	1634-04-4	0.33%				
Naphthalene	91-20-3	0.25%	0.31%	0.26%	0.22%	4.20E-5%
n-Hexane	110-54-3	2.40%				
Phenanthrene	85-01-8		8.60E-6%	8.80E-4%	7.90E-4%	2.10E-4%
Pyrene	129-00-0		2.40E-6%	4.60E-5%	2.90E-5%	2.30E-5%
Toluene	108-88-3	8.10%		0.18%	6.20E-4%	
Total Xylenes	1330-20-7	9.00%		0.50%	0.23%	
Total Organic HAPs		26.08%	0.33%	1.29%	0.68%	0.19%
Worst Single HAP		9.00%	0.31%	0.50%	0.23%	0.07%
		Xylenes	Naphthalene	Xylenes	Xylenes	Chrysene

Methodology

Limited PTE of VOC (tons/yr) = [Weight % VOC solvent in binder that evaporates] * [VOC Solvent Usage Limitation (tons/yr)]
 Limited PTE of Total HAPs (tons/yr) = [Worst Case Total HAP Content of VOC solvent (weight %)] * [Worst Case Limited PTE of VOC (tons/yr)]
 Limited PTE of Single HAP (tons/yr) = [Worst Case Single HAP Content of VOC solvent (weight %)] * [Worst Case Limited PTE of VOC (tons/yr)]
 *Source: Petroleum Liquids. Potter, T.L. and K.E. Simmons. 1998. Total Petroleum Hydrocarbon Criteria Working Group Series, Volume 2. Composition of Petroleum Mixtures. The Association for Environmental Health and Science. Available on the Internet at: <http://www.aehs.com/publications/catalog/contents/tp.htm>

Abbreviations

VOC = Volatile Organic Compounds
 PTE = Potential to Emit

**Appendix A.2: Limited Emissions Calculations
Gasoline Fuel Transfer and Dispensing Operation**

Company Name: Dave O'Mara Contractor, Inc.
Source Address: New Point Stone at 992 South County Road 800 East, Greensburg, Indiana
Permit Number: 031-28784-05047
Reviewer: Brian Williams

Note: Since the emissions from the gasoline fuel transfer and dispensing operation are minimal, the limited emissions are equal to the unlimited emissions.

To calculate evaporative emissions from the gasoline dispensing fuel transfer and dispensing operation handling emission factors from AP-42 Table 5.2-7 were used. The total potential emission of VOC is as follows:

$$\begin{aligned} \text{Gasoline Throughput} &= 0 \text{ gallons/day} \\ &= 0.0 \text{ kgal/yr} \end{aligned}$$

Volatile Organic Compounds

Emission Source	Emission Factor (lb/kgal of throughput)	PTE of VOC (tons/yr)*
Filling storage tank (balanced submerged filling)	0.3	0.00
Tank breathing and emptying	1.0	0.00
Vehicle refueling (displaced losses - controlled)	1.1	0.00
Spillage	0.7	0.00
Total		0.00

Hazardous Air Pollutants

Worst Case Total HAP Content of VOC solvent (weight %)* =	26.08%	
Worst Case Single HAP Content of VOC solvent (weight %)* =	9.0%	Xylenes
Limited PTE of Total HAPs (tons/yr) =	0.00	
Limited PTE of Single HAP (tons/yr) =	0.00	Xylenes

Methodology

The gasoline throughput was provided by the source.

Gasoline Throughput (kgal/yr) = [Gasoline Throughput (lbs/day)] * [365 days/yr] * [kgal/1000 gal]

PTE of VOC (tons/yr) = [Gasoline Throughput (kgal/yr)] * [Emission Factor (lb/kgal)] * [ton/2000 lb]

PTE of Total HAPs (tons/yr) = [Worst Case Total HAP Content of VOC solvent (weight %)] * [PTE of VOC (tons/yr)]

PTE of Single HAP (tons/yr) = [Worst Case Single HAP Content of VOC solvent (weight %)] * [PTE of VOC (tons/yr)]

*Source: Petroleum Liquids. Potter, T.L. and K.E. Simmons. 1998. Total Petroleum Hydrocarbon Criteria Working Group Series, Volume 2. Composition of Petroleum Mixtures. The Association for Environmental Health and Science. Available on the Internet at: <http://www.aehs.com/publications/catalog/contents/tph.htm>

Abbreviations

VOC = Volatile Organic Compounds

PTE = Potential to Emit



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
Toll Free (800) 451-6027
www.idem.IN.gov

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

TO: Amy Boswell
Dave O'Mara Contractor, Inc.
1100 East O & M Ave
North Vernon, IN 47265

DATE: May 12, 2010

FROM: Matt Stuckey, Branch Chief
Permits Branch
Office of Air Quality

SUBJECT: Final Decision
Significant Permit Revision
031-28784-05047

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

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

A copy of the final decision and supporting materials has also been sent via standard mail to:
Mac Overton - Astbury Environmental Engineering
OAQ Permits Branch Interested Parties List

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

Final Applicant Cover letter.dot 11/30/07



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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May 12, 2010

TO: Greensburg Decatur County Public Library

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

Subject: **Important Information for Display Regarding a Final Determination**

Applicant Name: Dave O'Mara Contractor, Inc.
Permit Number: 031-28784-05047

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

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

Enclosures
Final Library.dot 11/30/07

Mail Code 61-53

IDEM Staff	GHOTOPP 5/12/2010 Dave OMara Contractor 031-28784-05047 Final		CERTIFICATE OF MAILING ONLY	AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender		Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204		

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2		Greensburg Decatur Co Public Library 1110 East Main Greensburg IN 47240 (Library)										
3		Decatur County Commissioners 150 Courthouse Square Greensburg IN 47240 (Local Official)										
4		Decatur County Health Department 801 N. Lincoln St Greensburg IN 47240-1397 (Health Department)										
5		Mr. Leonard Rohls 8504 North County Road 300 West Batesville IN 47006 (Affected Party)										
6		Mr. Mack Overton Astbury Environmental Engineering 5757 W 74th St Indianapolis IN 46278 (Consultant)										
7		Melanie Brassell 606 Nelsons Parkway, P.O. Box 465 Wakarusa IN 46573 (Affected Party)										
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