



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: June 18, 2008

RE: R-Mix / 177-26290-05220

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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Mr. Randall Powell
R-Mix, LLC
2583 S. State Road #1
Cambridge City, Indiana 47327

June 18, 2008

Re: 177-26290-05220
First Significant Revision to
F177-18049-05220

Dear Mr. Powell

R-Mix, LLC was issued a Federally Enforceable State Operating Permit (FESOP) No. F177-18049-05220 on July 6, 2004 for a stationary drum mix asphalt plant located at 2583 South State Road #1, Cambridge City, IN 47327. On March 24, 2008 the Office of Air Quality (OAQ) received an application from the source requesting the installation of one (1) 15,000 gallon recycled oil storage tank to supply an alternate source of fuel for use in the existing dryer/mixer emission unit. 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).

1. General Construction Conditions

The data and information supplied with the application shall be considered part of this source modification approval. Prior to any proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Quality (OAQ).

2. This approval to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated there under, as well as other applicable local, state, and federal requirements.

3. Effective Date of the Permit

Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

4. Pursuant to 326 IAC 2-1.1-9 (Revocation), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

5. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.

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 Jason R. Krawczyk, of my staff, at 317-234-5175 or 1-800-451-6027, and ask for extension 4-5175.

Sincerely,

Original Signed By:
Iryn Calilung, Section Chief
Permits Branch
Office of Air Quality

Attachments: Technical Support Document and revised permit

IC/JRK

cc: File - Wayne County
Wayne County Health Department
U.S. EPA, Region V
Air Compliance Section
Compliance Data Section
Technical Support and Modeling
Permits Administrative and Development
Billing, Licensing and Training Section



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FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) OFFICE OF AIR QUALITY

R-Mix, LLC
2583 South State Road #1
Cambridge City, Indiana 47327

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

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

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.

Operation Permit No.: F177-18049-05220	
Issued by: Original Signed by: Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: July 6, 2004 Expiration Date: July 6, 2009

First Significant Permit Revision No.: F177-26290-05220	
Issued by/ Original Signed by: Iryn Calilung, Section Chief Permits Branch Office of Air Quality	Issuance Date: June 18, 2008 Expiration Date: July 6, 2009

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SECTION A SOURCE SUMMARY

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

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

The Permittee owns and operates a stationary asphalt manufacturing plant.

Source Address:	2583 South State Road #1, Cambridge City, Indiana 47327
Mailing Address:	2583 South State Road #1, Cambridge City, Indiana 47327
General Source Phone:	(765) 478-6139
SIC Code:	2951
County Location:	Wayne County
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Federally Enforceable State Operating Permit (FESOP) Minor Source, under PSD Rules Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

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

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

- (a) One (1) aggregate dryer/mixer, constructed in 2002, with a maximum capacity of 110 tons per hour, having a burner with a maximum heat input rate of 40.1 million British thermal units per hour (MMBtu/hr), using No. 2 distillate fuel oil as its primary fuel, as well as recycled fuel oil and natural gas as backup fuel, exhausting through a venturi scrubber, used for particulate control, at stack SV-1.
- (b) One (1) natural gas-fired heater, constructed in 2002, with a maximum heat input capacity of 0.45 MMBtu/hr.
- (c) Three (3) cold feed bins, constructed in 2002, each with a maximum capacity of 20 tons.
- (d) One (1) silo, constructed in 2002, with a maximum capacity of 100 tons.
- (e) One (1) drag conveyor, constructed in 2002, with a maximum capacity of 150 tons per hour.

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

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21).

- (a) One (1) AC oil storage tank, constructed in 2003, with a maximum capacity of 9,000 gallons.
- (b) One (1) No. 2 fuel oil storage tank, constructed in 2003, with a maximum capacity of 15,000 gallons. [326 IAC 12]
- (c) One (1) Recycled fuel oil storage tank, approved for construction in 2008, with a maximum capacity of 15,000 gallons.

(d) Paved roads and parking lots with public access. [326 IAC 6-4]

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

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

SECTION B GENERAL CONDITIONS

B.1 Permit No Defense [IC 13]

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.

B.2 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.3 Permit Term [326 IAC 2-8-4(2)][326 IAC 2-1.1-9.5]

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

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 Prior Permits Superseded [326 IAC 2-1.1-9.5]

(a) All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either

- (1) incorporated as originally stated,
- (2) revised, or
- (3) deleted

by this permit.

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

B.6 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.7 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.8 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.9 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 the "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.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 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.
- (c) An authorized individual is defined at 326 IAC 2-1.1-1(1).

B.12 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. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form 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, IDEM, OAQ, may require to determine the compliance status of the source.

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

B.13 Preventive Maintenance Plan [326 IAC 1-6-3] [326 IAC 2-8-4(9)] [326 IAC 2-8-5(a)(1)]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

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

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

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

- (b) A copy of the PMPs shall be submitted to IDEM, OAQ, 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 PMP does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation, Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

B.14 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 describes the following:

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

Telephone No.: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section) or,
Telephone No.: 317-233-0178 (ask for Compliance Section)
Facsimile No.: 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 46204-2251

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 the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
 - (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

- (e) 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.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 Provision), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

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

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 need to be included in this report.

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

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

B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination
[326 IAC 2-8-4(5)(C)] [326 IAC 2-8-7(a)] [326 IAC 2-8-8]

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a FESOP modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)] The notification by the Permittee does require the certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if 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 the “authorized individual” as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

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

- (b) Timely Submittal of Permit Renewal [326 IAC 2-8-3]
 - (1) A timely renewal application is one that is:
 - (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
 - (B) 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.

- (2) If IDEM, OAQ upon receiving a timely and complete 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.

- (c) Right to Operate After Application for Renewal [326 IAC 2-8-9]
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 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
Indianapolis, Indiana 46204-2251

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

- (c) The Permittee may implement the administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]
- (d) No permit amendment or modification is required for the addition, operation or removal of a nonroad engine, as defined in 40 CFR 89.2.

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 this source that are described in 326 IAC 2-8-15(b) through (d), without prior permit revision, if each of the following conditions is met:

- (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
- (2) Any approval required by 326 IAC 2-8-11.1 has been obtained;
- (3) The changes do not result in emissions which exceed the emissions allowable under 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 which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-8-15(b) through (d) and makes such records available, upon reasonable request, to 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 increases and decreases in emissions in 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.

B.20 Permit Revision 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][IC13-30-3-1]

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 46204-2251

The application which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16][326 IAC 2-1.1-7]

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

B.24 Credible Evidence [326 IAC 2-8-4(3)][326 IAC 2-8-5][62 FR 8314] [326 IAC 1-1-6]

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

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [40 CFR 52 Subpart P][326 IAC 6-3-2]

- (1) Pursuant to 40 CFR 52 Subpart P, particulate matter emissions from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.
- (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. This limitation shall also make the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD) not applicable.
 - (2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and
 - (3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.
- (b) 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.
- (c) 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 5-1-3 (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(3)]

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

C.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 May 24, 2004. The plan is included as 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]

- (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 46204-2251

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

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

C.10 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 46204-2251

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

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ 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, 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 inability to meet this date.

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

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

C.13 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.14 Pressure Gauge and Other 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.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 and 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 the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

C.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 source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "authorized individual" as defined by 326 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 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) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (e) The first report covered the period commencing on the date of issuance of the original FESOP and ended on the last day of the reporting period. All subsequent reporting periods shall be based on calendar years.

Stratospheric Ozone Protection

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

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

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

SECTION D.1

FACILITY OPERATION CONDITIONS

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

- (a) One (1) aggregate dryer/mixer, constructed in 2002, with a maximum capacity of 110 tons per hour, having a burner with a maximum heat input rate of 40.1 million British thermal units per hour (MMBtu/hr), using No. 2 distillate fuel oil as its primary fuel, as well as recycled fuel oil and natural gas as backup fuel, exhausting through a venturi scrubber, used for particulate control, at stack SV-1.
- (b) One (1) natural gas-fired heater, constructed in 2002, with a maximum heat input capacity of 0.45 MMBtu/hr.
- (c) Three (3) cold feed bins, constructed in 2002, each with a maximum capacity of 20 tons.
- (d) One (1) silo, constructed in 2002, with a maximum capacity of 100 tons.
- (e) One (1) drag conveyor, constructed in 2002, with a maximum capacity of 150 tons per hour.

(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 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 facility described in this section except when otherwise specified in 40 CFR 60 Subpart I.

D.1.2 Particulate Matter (PM) [40 CFR 60, Subpart I] [326 IAC 12-1]

Pursuant to 40 CFR 60, Subpart I:

- (a) Particulate matter emissions from the asphalt plant shall not exceed 0.04 grains per dry standard cubic foot (gr/dscf), and
- (b) The visible emissions from the plant shall not exceed 20 percent opacity.

D.1.3 Particulate Matter (PM) [326 IAC 6.5-1-2(a)] [326 IAC 2-2]

Pursuant to 326 IAC 6.5-1-2(a) (Particulate Emissions Limitations), particulate matter (PM) emissions from the aggregate dryer/mixer shall be limited to 0.03 grains per dry standard cubic foot (gr/dscf). Compliance with this requirement ensures compliance with Condition D.1.2 and makes 326 IAC 2-2 (PSD) not applicable.

D.1.4 Particulate Matter 10 Micron (PM₁₀) [326 IAC 2-8-4] [326 IAC 2-2] [326 IAC 2-7]

Pursuant to 326 IAC 2-8-4, particulate matter 10 microns (PM₁₀) emissions from the aggregate dryer/mixer shall not exceed 0.195 pounds of PM₁₀ per ton of asphalt produced when operating at a maximum process rate of 110 tons of asphalt per hour. This is equivalent to less than 93.73 tons of PM₁₀ per year. Compliance with this limit makes the Part 70 rules (326 IAC 2-7) and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.1.5 Volatile Organic Compound (VOC) [326 IAC 8-5-2]

Pursuant to 326 IAC 8-5-2, the Permittee shall not cause or allow the use of cutback asphalt or asphalt emulsion containing more than seven percent (7%) oil distillate by volume of emulsion for any paving application except the following purposes:

- (a) Penetrating prime coating
- (b) Stockpile storage
- (c) Application during the months of November, December, January, February and March.

D.1.6 Volatile Organic Compound (VOC) [326 IAC 2-2] [326 IAC 2-8]

Pursuant to 326 IAC 2-8 (FESOP), the Permittee shall not manufacture or otherwise handle cut back asphalt or cold-mix asphalt at this asphalt plant. If after issuance of this permit, the Permittee decides to manufacture or handle cold mix asphalt, the Permittee shall obtain approval from IDEM, OAQ before any such operations begin.

D.1.7 Sulfur Dioxide (SO₂) [326 IAC 7-1.1-2] [326 IAC 7-2-1]

Pursuant to 326 IAC 7-1.1 (SO₂ Emissions Limitations), the SO₂ emissions from the aggregate dryer/mixer at the asphalt plant shall not exceed five-tenths (0.5) pound per million Btu heat input while combusting fuel oil. Pursuant to 326 IAC 7-2-1, compliance shall be demonstrated on a calendar month average.

D.1.8 Fuel Usage [326 IAC 2-8-4] [326 IAC 2-2]

Pursuant to 326 IAC 2-8-4(1), the following limits shall apply:

- (a) The sulfur content of the recycled fuel oil used in the 40.1 MMBtu per hour burner for the aggregate dryer shall not exceed 0.5 percent.
- (b) The usage of recycled fuel fuel oil in the 40.1 MMBtu per hour aggregate dryer burner shall be limited to 2,625,937 U.S. gallons per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (c) The usage of No. 2 fuel oil in the 40.1 MMBtu per hour aggregate dryer burner shall be limited to 2,718,400 U.S. gallons per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (d) The usage of natural gas in the 40.1 MMBtu per hour aggregate dryer burner shall be limited to 351.3 million cubic feet per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (e) For the purposes of determining compliance, every 1,000 gallons of No. 2 distillate fuel oil burned shall be equivalent to 966 gallons of recycled fuel oil based on SO₂ emissions, such that the total gallons of recycled fuel oil input does not exceed the limit specified.

Compliance with these limits will limit the source wide SO₂ emissions to less than 100 ton/yr and satisfy 326 IAC 2-8-4 and render the requirements of Part 70 (326 IAC 2-7) and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.1.9 Fuel Usage (HAPs) [326 IAC 2-8-4] [326 IAC 2-2]

Pursuant to 326 IAC 2-8-4(1), the following limits shall apply:

- (a) The chlorine content of the recycled fuel oil used in the 40.1 MMBtu per hour burner for the aggregate dryer shall not exceed 0.06 percent.

- (b) The HCl emissions from the 40.1 MMBtu per hour burner for the aggregate dryer shall be limited to less than 4.0 pounds of HCl per 1,000 gallons of waste oil burned, based on a chlorine content limit of 0.06 percent.

Compliance with these limits will satisfy 326 IAC 2-8-4 and render the requirements of Part 70 (326 IAC 2-7) and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.1.10 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.

Compliance Determination Requirements

D.1.11 Particulate Emissions

In order to comply with Conditions D.1.2, D.1.3 and D.1.4, the venturi scrubber controlling PM and PM10 emissions from the aggregate dryer/mixer and/or dryer burner shall be in operation at all times that the aggregate dryer/mixer and/or dryer burner are in operation.

D.1.12 Testing Requirements [326 IAC 2-8-5(a)(1), (4)]

- (a) Pursuant to 40 CFR 60, Subpart I and to demonstrate compliance with Conditions D.1.2 and D.1.3, the Permittee shall conduct stack testing for particulate matter and opacity within sixty (60) days of achieving the maximum production rate, but not later than 180 days after initial startup using the test procedures specified in 40 CFR 60.93.
- (b) To demonstrate compliance with Condition D.1.4, the Permittee shall conduct stack testing for PM10 using methods approved by the Commissioner. PM10 includes filterable and condensable PM10.
- (c) The Permittee shall repeat stack tests for PM and PM10 at least once every five (5) years from the date of the first valid compliance demonstration test using methods approved by the Commissioner. All testing shall be conducted in accordance with Section C - Performance Testing.

D.1.13 Sulfur Dioxide (SO₂) Emissions and Sulfur Content

Compliance with Condition D.1.8 shall be determined by 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 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) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from the 84 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) or (b) above shall not be refuted by evidence of compliance pursuant to the other method.

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

D.1.14 Visible Emissions Notations

- (a) Visible emission notations of the dryer/mixer burner stack, the transfer points, and the conveyor exhausts 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.

D.1.15 Parametric Monitoring

- (a) The Permittee shall record the scrubber flow rate and the total static pressure drop across the scrubber used in conjunction with the aggregate dryer/mixer at least once per day when the aggregate dryer is in operation. When for any one reading, the pressure drop across the scrubber is outside the normal range of 10.0 and 20.0 inches of water or a range established during the latest stack test, 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 in accordance with Section C Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range or a flow rate that is below the above mentioned minimum is not a deviation from this permit.
- (b) The instrument used for determining the pressure and flow rate shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.1.16 Malfunction Detection

In the event that a scrubber malfunction has been observed:

Failed units and the associated processes shall be shut down immediately until the failed units have 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).

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

D.1.17 Record Keeping Requirements

- (a) To document compliance with Condition D.1.14, the Permittee shall maintain records of visible emission notations of the aggregate mixer dryer and dryer burner venturi scrubber stack, the transfer points, and the conveyor exhausts once per day.
- (b) To document compliance with Condition D.1.15, the Permittee shall maintain weekly records of the following operational parameters during normal operation:

- (1) Pressure drop across the scrubber; and
 - (2) Scrubbant and blow-down flow rate.
- (c) To document compliance with Conditions D.1.8, D.1.9, and D.1.13, the Permittee shall maintain records in accordance with (1) through (10) below. Records maintained for (1) through (10) shall be taken monthly and shall be complete and sufficient to establish compliance with the SO₂ emission limits established in Condition D.1.8.
- (1) Calendar dates covered in the compliance determination period;
 - (2) Actual No. 2 oil usage per month since the last compliance determination period;
 - (3) Actual Recycled Fuel Oil usage per month since the last compliance determination period;
 - (4) Average heating value of the No. 2 oil;
 - (5) Average heating value of the Recycled Fuel Oil;
 - (6) Average sulfur dioxide (SO₂) emission rate (pounds per million Btu);
 - (7) A certification, signed by the owner or operator, that the records of the fuel 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:
 - (8) Fuel supplier certifications;
 - (9) The name of the fuel supplier; and
 - (10) 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) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY**

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

Source Name: R-Mix, LLC
Source Address: 2583 South State Road #1, Cambridge City, Indiana 47327
Mailing Address: 2583 South State Road #1, Cambridge City, Indiana 47327
FESOP No.: 177-26290-05220

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 BRANCH
P.O. Box 6015
100 North Senate Avenue
Indianapolis, Indiana 46204-2251
Phone: 317-233-0178
Fax: 317-233-6865**

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

Source Name: R-Mix, LLC
Source Address: 2583 South State Road #1, Cambridge City, Indiana 47327
Mailing Address: 2583 South State Road #1, Cambridge City, Indiana 47327
FESOP No.: 177-26290-05220

This form consists of 2 pages

Page 1 of 2

- This is an emergency as defined in 326 IAC 2-7-1(12)
- The Permittee must notify the Office of Air Quality (OAQ), within four (4) 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: _____

A certification is not required for this report.

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

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

Source Name: R-Mix, LLC
Source Address: 2583 South State Road #1, Cambridge City, Indiana 47327
Mailing Address: 2583 South State Road #1, Cambridge City, Indiana 47327
FESOP No.: 177-26290-05220

Months: _____ to _____ Year: _____

Page 1 of 2

This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do 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".	
<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: _____

Attach a signed certification to complete this report.

Attachment A

**Fugitive Particulate Matter
Emissions Control Plan
for R-Mix, LLC**

Submitted May 24, 2002

- (a) Truck cargoes will be covered during transit to reduce fugitive dust emissions from paved roadways. If fugitive dust emissions from any paved roadways are observed, R-Mix, LLC will use wet suppression or other methods to control these emissions.
- (b) Fugitive particulate matter emissions from parking lots and yards shall be controlled by applying water when necessary.
- (c) Fugitive particulate matter emissions from storage piles and the conveying/handling of raw materials shall be controlled by applying water when necessary.

**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: R-Mix, LLC
Source Location: 2583 South State Road #1, Cambridge City, IN 47327
County: Wayne
SIC Code: 2951
Operation Permit No.: F 177-18049-05220
Operation Permit Issuance Date: August, 12, 2002
Significant Permit Revision No.: 177-26290-05220
Permit Reviewer: Jason R. Krawczyk

On March 24, 2008 the Office of Air Quality (OAQ) received an application from R-Mix, LLC related to the addition of one (1) 15,000 gallon recycled fuel oil storage tank to supply an alternate fuel for their existing stationary drum mix asphalt plant.

Existing Approvals

The source was issued FESOP No. 177-18049-05220 on July 6, 2004.

County Attainment Status

The source is located in Wayne 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 PM _{2.5} .	

(a) Ozone Standards

- (1) On October 25, 2006, the Indiana Air Pollution Control Board finalized a rule revision to 326 IAC 1-4-1 revoking the one-hour ozone standard in Indiana.
- (2) On September 6, 2007, the Indiana Air Pollution Control Board finalized a temporary emergency rule to re-designate Allen, Clark, Elkhart, Floyd, LaPorte, St. Joseph as attainment for the 8-hour ozone standard.
- (3) On November 9, 2007, the Indiana Air Pollution Control Board finalized a temporary emergency rule to re-designate Boone, Clark, Elkhart, Floyd, LaPorte, Hamilton, Hancock, Hendricks, Johnson, Madison, Marion, Morgan, Shelby, and St. Joseph as attainment for the 8-hour ozone standard.

- (4) 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. Wayne 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**
 Wayne County has been classified as attainment for PM2.5. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM2.5 emissions. Therefore, until the U.S. EPA adopts specific provisions for PSD review for PM2.5 emissions, it has directed states to regulate PM10 emissions as a surrogate for PM2.5 emissions.
- (c) **Other Criteria Pollutants**
 Wayne County has been classified as attainment or unclassifiable in Indiana for SO2, CO, PM10, NO2, and Pb. 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	SO ₂	NOx	VOC	CO	Total HAPs
40.1 MMBtu/hr Asphalt Dryer Burner	-	-	96.5	0.97	14.8	30.1	0.02
Aggregate Dryer/Mixer and Storage Silo ^{a,b}	23.6	Less than 94.6	-	17.8	-	-	4.19
0.45 MMBtu/hr Heater	-	-	-	-	0.17	0.20	-
Handling and Conveying	8.66	3.03	-	-	-	-	-
Storage Piles	1.38	0.48	-	-	-	-	-
Paved Roads	9.68	1.89	-	-	-	-	-
Total PTE of Entire Source	43.4	Less than 100	96.5	18.7	14.9	30.3	4.21
Title V Major Source Thresholds	NA	100	100	100	100	100	25
PSD Major Source Thresholds	250	250	250	250	250	250	NA

“-“ Emissions of this pollutant are negligible (less than 0.10 tons per year).
^a The listed emissions of VOC and HAPs from the Aggregate Dryer/Mixer and Storage Silo represent emissions of these pollutants from the hot mix asphalt material during and immediately after its production.
^b The PTE for PM and PM10 reflects the limits imposed by 326 IAC 6-1-2 and FESOP conditions in this permit.

- (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 unlimited potential to emit HAPs are less than ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year of a combination of HAPs. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA).

Description of Proposed Revision

The Office of Air Quality (OAQ) has reviewed an application, submitted by R-Mix, LLC on March 24, 2008 relating to the addition of one (1) 15,000 gallon recycled oil storage tank to supply an alternate source of fuel for combustion and use in the aggregate dryer/mixer.

The following is a list of the new emission unit:

- (a) One (1) Recycled oil storage tank, approved for construction in 2008, with a maximum capacity of 15,000 gallons.

In addition, the dryer/mixer will be able to use recycled oil as a fuel in addition to No. 2 distillate and natural gas.

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*	SO ₂	NO _x	VOC	CO	Total HAPs	Worst Single HAP
40.1 MMBtu/hr Asphalt Dryer Burner	1.26	1.00	96.5	27.18	1.31	14.75	6.10	5.20 HCl
Aggregate Dryer/Mixer and Storage Silo	21.68	93.73	27.94	26.50	17.83	62.63	5.14	1.49 HCOH
0.45 MMBtu/hr Heater	0.0	0.0	0.0	0.0	5.1E-05	0.02	5.1E-05	5.1E-05 Naphthalene
Handling and Conveying ^a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Asphalt Load-Out, Silo Filling & On-Yard Site	0.37	0.37	0.0	0.0	3.72	0.68	0.06	0.02 HCOH
Material Processing and Handling	1.56	0.74	0.0	0.0	0.0	0.0	0.0	0.0
Material Crushing, Screening, & Conveying	7.64	2.79	0.0	0.0	0.0	0.0	0.0	0.0
Volatile Organic Liquid Storage Vessels	0.0	0.0	0.0	0.0	1.00	0.0	negl.	negl.

Process/Emission Unit	Potential To Emit of the Entire Source to accommodate the Proposed Revision (tons/year)							
	PM	PM10*	SO ₂	NO _x	VOC	CO	Total HAPs	Worst Single HAP
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". US EPA has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions. α The previously identified process/emission unit "handling and conveying" was separated into the process emission units "asphalt load-out, silo filling & on-yard site", "material processing and handling", and "material crushing screening, & conveying". The emissions to these processes are not affected due to the use of recycled oil; rather they incorporate a more comprehensive emission determination than was included in the original permit.								

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*	SO ₂	NO _x	VOC	CO	Total HAPs	Worst Single HAP
40.1 MMBtu/hr Asphalt Dryer Burner	1.26	1.00	96.50	27.18	1.31	14.75	6.10	5.20 HCl
Aggregate Dryer/Mixer and Storage Silo	21.68	93.73	27.94	26.50	17.83	62.63	5.14	1.49 HCOH
0.45 MMBtu/hr Heater	0.0	0.0	0.0	0.0	5.1E-05	0.02	5.1E-05	5.1E-05 Naphthalene
Asphalt Load-Out, Silo Filling & On-Yard Site	0.37	0.37	0.0	0.0	3.72	0.68	0.06	0.02 HCOH
Material Processing and Handling	1.56	0.74	0.0	0.0	0.0	0.0	0.0	0.0
Material Crushing, Screening, & Conveying	7.64	2.79	0.0	0.0	0.0	0.0	0.0	0.0
Storage Piles	1.38	0.48	0.0	0.0	0.0	0.0	0.0	0.0
Paved Roads	9.68	1.89	0.0	0.0	0.0	0.0	0.0	0.0
Volatile Organic Liquid Storage Vessels	0.0	0.0	0.0	0.0	1.00	0.0	negl.	negl.
Total PTE of Entire Source	42.31	Less than 100	96.50	27.18	22.55	63.33	6.16	5.20 HCl
Title V Major Source Thresholds	NA	100	100	100	100	100	25	10
PSD Major Source Thresholds	250	250	250	250	250	250	NA	NA
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". US EPA has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions.								

(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) The sulfur content of the recycled fuel oil used in the 40.1 MMBtu per hour burner for the aggregate dryer shall not exceed 0.5 percent.
- (2) The chlorine content of the recycled fuel oil used in the 40.1 MMBtu per hour burner for the aggregate dryer shall not exceed 0.06 percent.
- (3) The HCl emissions from the 40.1 MMBtu per hour burner for the aggregate dryer shall be limited to less than 4.0 pounds of HCl per 1,000 gallons of waste oil burned, based on a chlorine content limit of 0.06 percent.
- (4) The usage of recycled fuel oil with a limited sulfur content of 0.5% and a maximum chlorine content of 0.06% in the 40.1 MMBtu per hour aggregate dryer burner shall be limited to 2,625,937 U.S. gallons per twelve (12) consecutive month period, with compliance determined at the end of each month, so that source-wide SO₂ emissions are limited to less than 100 tons per year and source-wide HCl emissions are limited to less than 10 tons per year.
- (5) The usage of No. 2 fuel oil with a limited sulfur content of 0.5% in the 40.1 MMBtu per hour aggregate dryer burner shall be limited to 2,718,400 U.S. gallons per twelve (12) consecutive month period, with compliance determined at the end of each month, so that source-wide SO₂ emissions are limited to less than 100 tons per year and source-wide HCl emissions are limited to less than 10 tons per year.
- (6) The usage of natural gas in the 40.1 MMBtu per hour aggregate dryer burner shall be limited to 351.3 million cubic feet per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (7) For the purposes of determining compliance, every 1,000 gallons of No. 2 distillate fuel oil with a maximum sulfur content of 0.5% burned shall be equivalent to 966 gallons of recycled fuel oil based on SO₂ emissions, such that the total gallons of recycled fuel oil input does not exceed the limit specified.

Compliance with these limits, combined with the potential to emit PM, PM₁₀, SO₂, NO_x, VOC, CO, and HCl from all other emission units at this source, shall limit the source-wide total potential to emit of PM, PM₁₀, SO₂, NO_x, VOC, CO to less than 100 tons per 12 consecutive month period, each, any single HAP to less than ten (10) tons per 12 consecutive month period, and total HAPs to less than twenty-five (25) tons per 12 consecutive month period and shall render 326 IAC 2-7 (Part 70 Permits), and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)).

(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 source is subject to 326 IAC 6.5-1-2(a) because it is an asphalt plant constructed after June 11, 1973. Pursuant to 326 IAC 6.5-1-2(a), the PM emissions from the aggregate dryer/mixer shall not exceed 0.03 grain per dry standard cubic foot (dscf). This is

equivalent to 5.4 pounds per hour (or 23.65 tons per year) at a flow rate of 21,000 acfm. Compliance with 326 IAC 6.5-1-2(a) makes 326 IAC 2-2 not applicable.

- (2) Pursuant to 326 IAC 2-8 (FESOP), the PM10 emissions from the entire source are limited to less than 100 tons per twelve (12) consecutive month period with compliance determined at the end of each month. Compliance with the requirements of 326 IAC 2-8 will limit emissions of all criteria pollutants to less than 100 tons per year and make the source a minor source with regards to 326 IAC 2-2 (PSD).

Compliance with these limits, combined with the potential to emit PM from all other emission units at this source, shall limit the source-wide total potential to emit of PM to less than 250 tons per 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)(40 CFR Part 60) included for this proposed revision.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

- (b) 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)

- (c) 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) There are no state rules applicable to the proposed revision.

Compliance Determination, Monitoring and Testing Requirements

The existing compliance requirements will not change as a result of this revision. The source shall continue to comply with the applicable requirements and permit conditions as contained in FESOP No: 177-18049-05220, issued on July 6, 2004.

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:

...

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

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

- (a) One (1) aggregate dryer/mixer, constructed in 2002, with a maximum capacity of 110 tons per hour, having a burner with a maximum heat input rate of 40.1 million British thermal

units per hour (MMBtu/hr), using No. 2 distillate fuel oil as its primary fuel, **as well as recycled fuel oil** and natural gas as backup fuel, exhausting through a venturi scrubber, **used for particulate control**, at stack SV-1.

- (b) One (1) natural gas-fired heater, constructed in 2002, with a maximum heat input capacity of 0.45 MMBtu/hr.
- (c) Three (3) cold feed bins, constructed in 2002, each with a maximum capacity of 20 tons.
- (d) One (1) silo, constructed in 2002, with a maximum capacity of 100 tons.
- (e) One (1) drag conveyor, constructed in 2002, with a maximum capacity of 150 tons per hour.

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

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21).

- (a) One (1) AC oil storage tank, constructed in 2003, with a maximum capacity of 9,000 gallons.
- (b) One (1) No. 2 fuel oil storage tank, constructed in 2003, with a maximum capacity of 15,000 gallons. ~~[326 IAC 12]~~
- (c) One (1) Recycled fuel oil storage tank, approved for construction in 2008, with a maximum capacity of 15, 000 gallons.**
- ~~(d)~~ Paved roads and parking lots with public access. [326 IAC 6-4]

...

SECTION D.1 FACILITY OPERATION CONDITIONS

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

- (a) One (1) aggregate dryer/mixer, constructed in 2002, with a maximum capacity of 110 tons per hour, having a burner with a maximum heat input rate of 40.1 million British thermal units per hour (MMBtu/hr), using No. 2 distillate fuel oil as its primary fuel, **as well as recycled fuel oil** and natural gas as backup fuel, exhausting through a venturi scrubber, **used for particulate control**, at stack SV-1.
- (b) One (1) natural gas-fired heater, constructed in 2002, with a maximum heat input capacity of 0.45 MMBtu/hr.
- (c) Three (3) cold feed bins, constructed in 2002, each with a maximum capacity of 20 tons.
- (d) One (1) silo, constructed in 2002, with a maximum capacity of 100 tons.
- (e) One (1) drag conveyor, constructed in 2002, with a maximum capacity of 150 tons per hour.

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

...

D.1.3 Particulate Matter (PM) [326 IAC ~~6-1-2~~ 6.5-1-2(a)] [326 IAC 2-2]

Pursuant to 326 IAC ~~6-1-2~~ 6.5-1-2(a) (Particulate Emissions Limitations), particulate matter (PM) emissions from the aggregate dryer/mixer shall be limited to 0.03 grains per dry standard cubic foot

(gr/dscf). This is equivalent to 5.4 pounds per hour (or 23.65 tons per year) at an exhaust flow rate of 21,000 acfm. Compliance with this requirement ensures compliance with Condition D.1.2 and makes 326 IAC 2-2 (PSD) not applicable.

D.1.4 Particulate Matter 10 Micron (PM10) [326 IAC 2-8-4] [326 IAC 2-2] [326 IAC 2-7]

Pursuant to 326 IAC 2-8-4, particulate matter 10 microns (PM₁₀) emissions from the aggregate dryer/mixer shall not exceed ~~0.496~~ **0.195** pounds of PM₁₀ per ton of asphalt produced when operating at a maximum process rate of 110 tons of asphalt per hour. This is equivalent to less than ~~94.6~~ **93.73** tons of PM10 per year. Compliance with this limit makes the Part 70 rules (326 IAC 2-7) and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

...

D.1.7 Sulfur Dioxide (SO₂) [326 IAC 7-1.1-2] [326 IAC 7-2-1]

Pursuant to 326 IAC 7-1.1 (SO₂ Emissions Limitations), the SO₂ emissions from the aggregate dryer/mixer at the asphalt plant shall not exceed five-tenths (0.5) pound per million Btu heat input while combusting fuel oil. This is equivalent to a maximum fuel oil sulfur content of five one-hundredths percent (0.5%) while combusting No. 2 fuel oil. Pursuant to 326 IAC 7-2-1, compliance shall be demonstrated on a calendar month average.

D.1.8 Fuel Usage [326 IAC 2-8-4] [326 IAC 2-2]

Pursuant to 326 IAC 2-8-4(1), the following limits shall apply:

- (a) The sulfur content of the recycled fuel oil used in the 40.1 MMBtu per hour burner for the aggregate dryer shall not exceed 0.5 percent.
- (b) The usage of recycled fuel fuel oil in the 40.1 MMBtu per hour aggregate dryer burner shall be limited to 2,625,937 U.S. gallons per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (c) The usage of No. 2 fuel oil in the 40.1 MMBtu per hour aggregate dryer burner shall be limited to 2,718,400 U.S. gallons per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (d) The usage of natural gas in the 40.1 MMBtu per hour aggregate dryer burner shall be limited to 351.3 million cubic feet per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (e) For the purposes of determining compliance, every 1,000 gallons of No. 2 distillate fuel oil burned shall be equivalent to 966 gallons of recycled fuel oil based on SO₂ emissions, such that the total gallons of recycled fuel oil input does not exceed the limit specified.

Compliance with these limits will limit the source wide SO₂ emissions to less than 100 ton/yr and satisfy 326 IAC 2-8-4 and render the requirements of Part 70 (326 IAC 2-7) and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.1.9 Fuel Usage (HAPs) [326 IAC 2-8-4] [326 IAC 2-2]

Pursuant to 326 IAC 2-8-4(1), the following limits shall apply:

- (a) The chlorine content of the recycled fuel oil used in the 40.1 MMBtu per hour burner for the aggregate dryer shall not exceed 0.06 percent.
- (b) The HCl emissions from the 40.1 MMBtu per hour burner for the aggregate dryer shall be limited to less than 4.0 pounds of HCl per 1,000 gallons of waste oil burned,

based on a chlorine content limit of 0.06 percent.

Compliance with these limits will satisfy 326 IAC 2-8-4 and render the requirements of Part 70 (326 IAC 2-7) and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.1.8 10 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.

Compliance Determination Requirements

D.1.9 11 Particulate Emissions

In order to comply with Conditions D.1.2, D.1.3 and D.1.4, the venturi scrubber controlling PM and PM10 emissions from the aggregate dryer/mixer and/or dryer burner shall be in operation at all times that the aggregate dryer/mixer and/or dryer burner are in operation.

D.1.10 12 Testing Requirements [326 IAC 2-8-5(a)(1), (4)]

- (a) Pursuant to 40 CFR 60, Subpart I and to demonstrate compliance with Conditions D.1.2 and D.1.3, the Permittee shall conduct stack testing for particulate matter and opacity within sixty (60) days of achieving the maximum production rate, but not later than 180 days after initial startup using the test procedures specified in 40 CFR 60.93.
- (b) To demonstrate compliance with Condition D.1.4, the Permittee shall conduct stack testing for PM10 ~~within 180 days of the issuance of this permit~~ using methods approved by the Commissioner. PM10 includes filterable and condensable PM10.
- (c) The Permittee shall repeat stack tests for PM and PM10 at least once every five (5) years from the date of the first valid compliance demonstration test using methods approved by the Commissioner. All testing shall be conducted in accordance with Section C - Performance Testing.

D.1.14 13 Sulfur Dioxide (SO₂) Emissions and Sulfur Content

Compliance with Condition D.1.8 shall be determined by 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 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) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from the 84 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) or (b) above

shall not be refuted by evidence of compliance pursuant to the other method.

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

D.1.12 14 Visible Emissions Notations

- (a) Visible emission notations of the dryer/mixer burner stack, the transfer points, and the conveyor exhausts shall be performed once per ~~shift~~ **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) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records and Reports shall be considered a deviation from this permit.~~

D.1.13 15 Parametric Monitoring

- (a) The Permittee shall record the scrubber flow rate and the total static pressure drop across the scrubber used in conjunction with the aggregate dryer/mixer at least once per ~~shift~~ **day** when the aggregate dryer is in operation. When for any one reading, the pressure drop across the scrubber is outside the normal range of 10.0 and 20.0 inches of water or a range established during the latest stack test, the Permittee shall ~~take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records and Reports.~~ **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 in accordance with Section C Response to Excursions or Exceedances.** A pressure reading that is outside the above mentioned range or a flow rate that is below the above mentioned minimum is not a deviation from this permit. ~~Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records and Reports shall be considered a deviation from this permit.~~
- (b) The instrument used for determining the pressure and flow rate shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.1.14 Scrubber Inspections

~~An inspection shall be performed each calendar quarter of all scrubbers controlling the aggregate dryer/mixer. The inspections required by this condition shall not be performed in consecutive months.~~

D.1.15 16 Malfunction Detection

In the event that a scrubber malfunction has been observed:

Failed units and the associated processes shall be shut down immediately until the failed units have 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). ~~Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.~~

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

D.1.16 17 Record Keeping Requirements

- (a) To document compliance with Condition D.1.42 **14**, the Permittee shall maintain records of visible emission notations of the aggregate mixer dryer and dryer burner ~~baghouse~~ **venturi scrubber** stack, the transfer points, and the conveyor exhausts once per ~~shift~~ **day**.
- (b) To document compliance with Condition D.1.43 **15**, the Permittee shall maintain weekly records of the following operational parameters during normal operation:
- (1) Pressure drop across the scrubber; and
 - (2) Scrubbant and blow-down flow rate.
- ~~(c) To document compliance with Condition D.1.14, the Permittee shall maintain records of the results of the inspections required under Condition D.1.14.~~
- ~~(d)~~**(c)** To document compliance with Conditions D.1.78, **D.1.9**, and D.1.44 **13**, the Permittee shall maintain records in accordance with (1) through ~~(8)~~**(10)** below. Records maintained for (1) through ~~(8)~~**(10)** shall be taken monthly and shall be complete and sufficient to establish compliance with the SO₂ emission limits established in Condition D.1.78.
- (1) Calendar dates covered in the compliance determination period;
 - (2) Actual No. 2 oil usage per month since the last compliance determination period;
 - (3) Actual Recycled Fuel Oil usage per month since the last compliance determination period;**
 - ~~(3)~~**(4)** Average heating value of the No. 2 oil;
 - (5) Average heating value of the Recycled Fuel Oil;**
 - ~~(4)~~**(6)** Average sulfur dioxide (SO₂) emission rate (pounds per million Btu);
 - ~~(5)~~**(7)** A certification, signed by the owner or operator, that the records of the fuel 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:
 - ~~(6)~~**(8)** Fuel supplier certifications;
 - ~~(7)~~**(9)** The name of the fuel supplier; and
 - ~~(8)~~**(10)** 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.

- (e)(d) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.
- (f) ~~All records shall be maintained in accordance with Section C – General Record Keeping Requirements, of this permit.~~

SECTION D.2 FACILITY OPERATION CONDITIONS

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

- (g) ~~One (1) No. 2 fuel oil storage tank, constructed in 2003, with a maximum capacity of 15,000 gallons. [326 IAC 12]~~

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

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

D.2.1 ~~Record Keeping Requirements [326 IAC 12]~~

~~Pursuant to New Source Performance Standard (NSPS), 326 IAC 12, the Permittee shall maintain accessible records for the life of the 15,000 gallon No. 2 fuel oil storage tank.~~

~~The records for each tank shall include:~~

- (a) ~~The dimensions of the tank; and~~
- (b) ~~An analysis showing the capacity of the tank.~~

~~The records shall be maintained for the life of the storage tank.~~

- (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:

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

The Permittee owns and operates a grain terminal and an ethanol production plant.

Authorized Individual:	President
Source Address:	2583 South State Road #1, Cambridge City, Indiana 47327
Mailing Address:	2583 South State Road #1, Cambridge City, Indiana 47327
General Source Phone:	(765) 478-6139
SIC Code:	2951
County Location:	Wayne County
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Federally Enforceable State Operating Permit (FESOP)
	Minor Source, under PSD Rules
	Minor Source, Section 112 of the Clean Air Act
	Not 1 of 28 Source Categories

2. Condition A.5 - Prior Permits Superseded has been removed from Section A and incorporated into the B Section as condition B.5 - Prior Permits Superseded.
3. All references to IDEM, OAQ's mailing address have been revised as follows:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
MC 61-53 IGCN 1003
Indianapolis, Indiana ~~46206-6015~~ **46204-2251**
4. All occurrences of the Compliance Data Branch telephone and facsimile numbers have been revised from 317-233-5674 and 317-233-5967 to 317-233-0178 and 317-233-6865.
5. The phone number for the OAQ, Billing, Licensing, and Training Section (BLT) is revised from 317-233-4320 to 317-233-4230.
6. IDEM has determined that the Permittee is not required to keep records of all preventative maintenance. Therefore, IDEM has deleted paragraph (b) of Condition B.12 - Preventative Maintenance Plan.
7. Indiana has incorporated the credible evidence provision in 326 IAC 1-1-6. This rule became effective on March 16, 2005; therefore the condition reflecting this rule has been incorporated into the permit as Condition B.24.
8. In order to avoid duplication of requirements which may be included in D sections, Condition C.8 has been removed from the permit.
9. Condition C.9(g) has been revised to replace "Accredited" with "Licensed" and to remove the statement that the requirement to use an Indiana Accredited Asbestos inspector is not federally enforceable, since all conditions in a FESOP are federally enforceable.
10. IDEM realizes that the specifications of Condition C.14 - Pressure Gauge and Other Instrument Specifications, can only be practically applied to analog units, and has therefore clarified the condition to state that the condition only applies to analog units. Upon further review, IDEM has also determined that the accuracy of the instruments is not nearly as important as whether the instrument has a range that is approved for the normal expected reading of the parameter. Therefore the language in C.14 has been revised.
11. IDEM has reconsidered the requirement to develop and follow a Compliance Response Plan (Condition C.16). The Permittee will still be required to take reasonable response steps when a compliance monitoring parameter is determined to be out of range or abnormal. Replacing the requirement to develop and follow a Compliance Response Plan with a requirement to take reasonable response steps will ensure that the control equipment is retuned to proper operation as soon as practicable, while still allowing the Permittee the flexibility to respond to situations that were not anticipated. Therefore, the condition for "Compliance Response Plan - Preparation, Implementation, Records, and Reports" has been replaced by the condition for "Response to Excursions or Exceedances".
12. IDEM has determined that once per day visible emission notations and once per day and once per day monitoring of the control device is generally sufficient to ensure proper operation of the emission units and control devices. Therefore, the monitoring frequency has been changed from once per shift to once per day in the revised permit.

Conclusion and Recommendation

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant. An application for the purposes of this review was received on March 24, 2008.

The construction and operation of this proposed revision shall be subject to the conditions of the attached proposed FESOP Significant Revision No. 177-26290-05220. 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 Jason R. Krawczyk 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) 234-5175 or toll free at 1-800-451-6027 extension 4-5175.
- (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: Emissions Calculations
Limited Emission Summary**

Company Name: R-Mix, LLC
Source Address: 2583 South State Road 1, Cambridge City, IN 47327
Significant Permit Revision No.: 177-26290-05220
Reviewer: Jason R. Krawczyk

Asphalt Plant Limitations

Annual Asphalt Production Limitation =	963,600	ton/yr								
Natural Gas Limitation =	351	MMCF/yr								
No. 2 Fuel Oil Limitation =	2,718,400	gal/yr, and	0.50	% sulfur						
Used/Waste Oil Limitation =	2,625,937	gal/yr, and	0.50	% sulfur	1.50	% ash	0.060	% chlorine,	0.002	% lead
PM Dryer/Mixer Limitation =	0.045	lb/ton of asphlt production								
PM10 Dryer/Mixer Limitation =	0.045	lb/ton of asphlt production								
CO Dryer/Mixer Limitation =	0.130	lb/ton of asphlt production								
VOC Dryer/Mixer Limitation =	0.037	lb/ton of asphlt production								

Limited/Controlled Emissions

Process Description	Limited/Controlled Potential Emissions (tons/year)								
	Criteria Pollutants						Hazardous Air Pollutants		
	PM	PM10	SO2	NOx	VOC	CO	Total HAPs	Worst Case HAP	
Ducted Emissions									
Fuel Combustion (worst case)	1.26	1.00	96.50	27.18	1.31	14.75	6.10	5.20	(hydrogen chloride)
Dryer/Mixer	21.68	21.68	27.94	26.50	17.83	62.63	5.14	1.49	(formaldehyde)
Worst Case Emissions	21.68	21.68	96.50	27.18	17.83	62.63	6.10	5.20	(hydrogen chloride)
Fugitive Emissions									
Asphalt Load-Out, Silo Filling, On-Site Yard	0.37	0.37	0	0	3.72	0.68	0.06	0.02	(formaldehyde)
Natural Gas Heater	0	0	0	0	5.1E-05	0.02	5.1E-05	5.1E-05	(naphthalene)
Material Storage Piles	1.38	0.48	0	0	0	0	0	0	
Material Processing and Handling	1.56	0.74	0	0	0	0	0	0	
Material Crushing, Screening, and Conveying	7.64	2.79	0	0	0	0	0	0	
Paved Roads (worst case)	9.68	1.89	0	0	0	0	0	0	
Volatile Organic Liquid Storage Vessels*	0	0	0	0	1.00	0	negl.	negl.	
Total Fugitive Emissions	20.63	6.27	0	0	4.72	0.69	0.06	0.02	(xylenes)
Totals Limited/Controlled Emissions	42.31	27.95	96.50	27.18	22.55	63.33	6.16	5.20	(hydrogen chloride)

negl = negligible

* It is assumed that the VOC emissions from the three storage tanks combined is below 1 ton per year and the combined HAP emissions are negligible

Appendix A: Emissions Calculations

**Limited Emissions
Dryer/Mixer Fuel Combustion with Maximum Capacity < 100 MMBtu/hr**

Company Name: R-Mix, LLC
Source Address: 2583 South State Road 1, Cambridge City, IN 47327
Significant Permit Revision No.: 177-26290-05220
Reviewer: Jason R. Krawczyk

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 combustion sources at the source.

Production and Fuel Limitations

Annual Asphalt Production Limitation =	963,600	ton/yr					
Natural Gas Limitation =	351	MMCF/yr					
No. 2 Fuel Oil Limitation =	2,718,400	gal/yr, and	0.50	% sulfur			
Used/Waste Oil Limitation =	2,625,937	gal/yr, and	0.50	% sulfur	1.50	% ash	0.060 % chlorine, 0.002 % lead

Limited Emissions

Criteria Pollutant	Emission Factor (units)			Limited / Controlled Potential to Emit (tons/yr)			Worst Case Fuel (tons/yr)
	Natural Gas (lb/MMCF)	No. 2 Fuel Oil (lb/kgal)	Used/Waste Oil (lb/kgal)	Natural Gas (tons/yr)	No. 2 Fuel Oil (tons/yr)	Used/Waste Oil (tons/yr)	
PM ⁽¹⁾	1.9	2.0	96.0	0.00	0.03	1.26	1.26
PM10 ⁽¹⁾	7.6	3.3	76.5	0.01	0.04	1.00	1.00
SO2	0.6	71.0	73.5	0.11	96.50	96.50	96.50
NOx	100	20.0	19.0	17.57	27.18	24.95	27.18
VOC	5.5	0.20	1.0	0.97	0.27	1.31	1.31
CO	84	5.0	5.0	14.75	6.80	6.56	14.75
Hazardous Air Pollutant							
HCl			4.0			5.20	5.20
Antimony			negl			negl	0.0E+00
Arsenic	2.0E-04	5.6E-04	1.1E-01	3.5E-05	7.61E-04	1.44E-01	1.4E-01
Beryllium	1.2E-05	4.2E-04	negl	2.1E-06	5.71E-04	negl	5.7E-04
Cadmium	1.1E-03	4.2E-04	9.3E-03	1.9E-04	5.71E-04	1.22E-02	1.2E-02
Chromium	1.4E-03	4.2E-04	2.0E-02	2.5E-04	5.71E-04	2.63E-02	2.6E-02
Cobalt	8.4E-05		2.1E-04	1.5E-05		2.76E-04	2.8E-04
Lead	5.0E-04	1.3E-03	0.11	8.8E-05	1.71E-03	1.4E-01	0.14
Manganese	3.8E-04	8.4E-04	6.8E-02	6.7E-05	1.14E-03	8.93E-02	0.09
Mercury	2.6E-04	4.2E-04		4.6E-05	5.71E-04		5.7E-04
Nickel	2.1E-03	4.2E-04	1.1E-02	3.7E-04	5.71E-04	1.44E-02	0.014
Selenium	2.4E-05	2.1E-03	negl	4.2E-06	2.85E-03	negl	2.9E-03
1,1,1-Trichloroethane							0.0E+00
1,3-Butadiene							0.0E+00
Acetaldehyde							0.0E+00
Acrolein							0.0E+00
Benzene	2.1E-03			3.7E-04			3.7E-04
Bis(2-ethylhexyl)phthalate			2.2E-03			2.89E-03	2.9E-03
Dichlorobenzene	1.2E-03		8.0E-07	2.1E-04		1.05E-06	2.1E-04
Ethylbenzene							0.0E+00
Formaldehyde	7.5E-02	6.10E-02		1.3E-02	8.29E-02		0.083
Hexane	1.8E+00			0.32			0.316
Phenol			2.4E-03			3.15E-03	3.2E-03
Toluene	3.4E-03			6.0E-04			6.0E-04
Total PAH Haps	negl		3.9E-02	negl		5.13E-02	5.1E-02
Polycyclic Organic Matter		3.30E-03			4.49E-03		4.5E-03
Xylene							0.0E+00
Total HAPs				0.33	0.10	5.69	6.10

(1) Combustion exhausts through a venturi scrubber with an 99% PM / PM10 control efficiency through vent SV-1

Methodology

PM / PM10

Natural Gas: Limited / Controlled PM / PM10 Potential to Emit (tons/yr) = (Natural Gas Limitation (MMCF/yr)) * (Emission Factor (lb/MMCF)) * (ton/2000 lbs)*(1-.99)
 All Other Fuels: Limited / Controlled PM / PM10 Potential to Emit (tons/yr) = (Fuel Limitation (gals/yr)) * (Emission Factor (lb/kgal)) * (kgal/1000 gal) * (ton/2000 lbs)*(1)

All Other Pollutants

Natural Gas: Limited / Controlled PM / PM10 Potential to Emit (tons/yr) = (Natural Gas Limitation (MMCF/yr)) * (Emission Factor (lb/MMCF)) * (ton/2000 lbs)
 All Other Fuels: Limited / Controlled PM / PM10 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
- 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)
- 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: Emissions Calculations

Limited Emissions

Dryer/Mixer

Volatile Organic Compounds and Hazardous Air Pollutants

Company Name: R-Mix LLC
 Source Address: 2583 South State Road 1, Cambridge City, IN 47327
 Significant Permit Revision No.: 177-26290-05220
 Reviewer: Jason R. Krawczyk

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

Annual Asphalt Production Limitation =	963,600	ton/yr
PM Dryer/Mixer Limitation =	0.045	lb/ton of asphalt production
PM10 Dryer/Mixer Limitation =	0.045	lb/ton of asphalt production
CO Dryer/Mixer Limitation =	0.130	lb/ton of asphalt production
VOC Dryer/Mixer Limitation =	0.037	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	0.045	0.045	0.045	21.7	21.7	21.7	21.7
PM10	0.045	0.045	0.045	21.7	21.7	21.7	21.7
SO2	0.0034	0.011	0.058	1.6	5.3	27.9	27.9
NOx	0.026	0.055	0.055	12.5	26.5	26.5	26.5
VOC	0.037	0.037	0.037	17.8	17.8	17.8	17.8
CO	0.13	0.13	0.13	62.6	62.6	62.6	62.6
Hazardous Air Pollutant							
HCl			2.10E-04			0.10	0.10
Antimony	1.80E-07	1.80E-07	1.80E-07	8.67E-05	8.67E-05	8.67E-05	8.67E-05
Arsenic	5.60E-07	5.60E-07	5.60E-07	2.70E-04	2.70E-04	2.70E-04	2.70E-04
Beryllium	negl	negl	negl	negl	negl	negl	0.00E+00
Cadmium	4.10E-07	4.10E-07	4.10E-07	1.98E-04	1.98E-04	1.98E-04	1.98E-04
Chromium	5.50E-06	5.50E-06	5.50E-06	2.65E-03	2.65E-03	2.65E-03	2.65E-03
Cobalt	2.60E-08	2.60E-08	2.60E-08	1.25E-05	1.25E-05	1.25E-05	1.25E-05
Lead	6.20E-07	1.50E-05	1.50E-05	2.99E-04	7.23E-03	7.23E-03	7.23E-03
Manganese	7.70E-06	7.70E-06	7.70E-06	3.71E-03	3.71E-03	3.71E-03	3.71E-03
Mercury	2.40E-07	2.60E-06	2.60E-06	1.16E-04	1.25E-03	1.25E-03	1.25E-03
Nickel	6.30E-05	6.30E-05	6.30E-05	3.04E-02	3.04E-02	3.04E-02	3.04E-02
Selenium	3.50E-07	3.50E-07	3.50E-07	1.69E-04	1.69E-04	1.69E-04	1.69E-04
2,2,4 Trimethylpentane	4.00E-05	4.00E-05	4.00E-05	1.93E-02	1.93E-02	1.93E-02	1.93E-02
Acetaldehyde			1.30E-03			0.63	0.63
Acrolein			2.60E-05			1.25E-02	1.25E-02
Benzene	3.90E-04	3.90E-04	3.90E-04	0.19	0.19	0.19	0.19
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	1.49	1.49	1.49	1.49
Hexane	9.20E-04	9.20E-04	9.20E-04	0.44	0.44	0.44	0.44
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			0.06	0.06
Quinone			1.60E-04			0.08	0.08
Toluene	1.50E-04	2.90E-03	2.90E-03	0.07	1.40	1.40	1.40
Total PAH Haps	1.90E-04	8.80E-04	8.80E-04	0.09	0.42	0.42	0.42
Xylene	2.00E-04	2.00E-04	2.00E-04	0.10	0.10	0.10	0.10

Total HAPs 5.14

Methodology Worst Single HAP 1.49358 (formaldehyde)

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, 11.1-7, 11.1-8, 11.1-10, and 11.1-11)

Abbreviations

VOC - Volatile Organic Compounds
 HCl = Hydrogen Chloride
 SO2 = Sulfur Dioxide

HAP = Hazardous Air Pollutant
 PAH = Polyaromatic Hydrocarbon

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

**Company Name: R-Mix, LLC
Source Address: 2583 South State Road 1, Cambridge City, IN 47327
Significant Permit Revision No.: 177-26290-05220
Reviewer: Jason R. Krawczyk**

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

Asphalt Temperature, T =	290	F
Asphalt Volatility Factor, V =	-0.5	
Annual Asphalt Production Limitation =	963,600	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	3.2E-04	4.4E-04	NA	0.16	0.21	NA	0.37
Organic PM	1.4E-04	1.1E-04	NA	0.07	0.051	NA	0.12
TOC	0.002	0.005	0.001	0.83	2.44	0.530	3.80
CO	0.001	0.000	3.5E-04	0.27	0.236	0.170	0.68

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

PM/HAPs	0.005	0.006	0	0.011
VOC/HAPs	0.012	0.031	0.008	0.051
non-VOC/HAPs	6.4E-05	6.6E-06	4.1E-05	1.1E-04
non-VOC/non-HAPs	0.06	0.03	0.04	0.13

Total VOCs	0.78	2.44	0.5	3.7
Total HAPs	0.02	0.04	0.008	0.06
Worst Single HAP				0.018
				(formaldehyde)

Methodology

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

Abbreviations

TOC = Total Organic Compounds

CO = Carbon Monoxide

PM = Particulate Matter

HAP = Hazardous Air Pollutant

VOC = Volatile Organic Compound

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

Company Name: R-Mix, LLC
 Source Address: 2583 South State Road 1, Cambridge City, IN 47327
 Significant Permit Revision No.: 177-26290-05220
 Reviewer: Jason R. Krawczyk

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%	1.8E-04	2.4E-04	NA	4.2E-04
Acenaphthylene	208-96-8	PM/HAP	POM	Organic PM	0.028%	0.014%	1.9E-05	7.1E-06	NA	2.6E-05
Anthracene	120-12-7	PM/HAP	POM	Organic PM	0.07%	0.13%	4.8E-05	6.6E-05	NA	1.1E-04
Benzo(a)anthracene	56-55-3	PM/HAP	POM	Organic PM	0.019%	0.056%	1.3E-05	2.8E-05	NA	4.1E-05
Benzo(b)fluoranthene	205-99-2	PM/HAP	POM	Organic PM	0.0076%	0	5.2E-06	0	NA	5.2E-06
Benzo(k)fluoranthene	207-08-9	PM/HAP	POM	Organic PM	0.0022%	0	1.5E-06	0	NA	1.5E-06
Benzo(g,h,i)perylene	191-24-2	PM/HAP	POM	Organic PM	0.0019%	0	1.3E-06	0	NA	1.3E-06
Benzo(a)pyrene	50-32-8	PM/HAP	POM	Organic PM	0.0023%	0	1.6E-06	0	NA	1.6E-06
Benzo(e)pyrene	192-97-2	PM/HAP	POM	Organic PM	0.0078%	0.0095%	5.3E-06	4.8E-06	NA	1.0E-05
Chrysene	218-01-9	PM/HAP	POM	Organic PM	0.103%	0.21%	7.0E-05	1.1E-04	NA	1.8E-04
Dibenz(a,h)anthracene	53-70-3	PM/HAP	POM	Organic PM	0.00037%	0	2.5E-07	0	NA	2.5E-07
Fluoranthene	206-44-0	PM/HAP	POM	Organic PM	0.05%	0.15%	3.4E-05	7.6E-05	NA	1.1E-04
Fluorene	86-73-7	PM/HAP	POM	Organic PM	0.77%	1.01%	5.3E-04	5.1E-04	NA	1.0E-03
Indeno(1,2,3-cd)pyrene	193-39-5	PM/HAP	POM	Organic PM	0.00047%	0	3.2E-07	0	NA	3.2E-07
2-Methylnaphthalene	91-57-6	PM/HAP	POM	Organic PM	2.38%	5.27%	1.6E-03	2.7E-03	NA	0.004
Naphthalene	91-20-3	PM/HAP	POM	Organic PM	1.25%	1.82%	8.5E-04	9.2E-04	NA	1.8E-03
Perylene	198-55-0	PM/HAP	POM	Organic PM	0.022%	0.03%	1.5E-05	1.5E-05	NA	3.0E-05
Phenanthrene	85-01-8	PM/HAP	POM	Organic PM	0.81%	1.80%	5.5E-04	9.1E-04	NA	1.5E-03
Pyrene	129-00-0	PM/HAP	POM	Organic PM	0.15%	0.44%	1.0E-04	2.2E-04	NA	3.3E-04
Total PAH HAPs							0.004	0.006	NA	0.010
Other semi-volatile HAPs										
Phenol		PM/HAP	---	Organic PM	1.18%	0	8.1E-04	0	0	8.1E-04

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: General Asphalt FESOP Emissions Calculations
Limited Emissions
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%	0.78	2.44	0.50	3.72
non-VOC/non-HAPS										
Methane	74-82-8	non-VOC/non-HAP	---	TOC	6.50%	0.26%	5.4E-02	6.3E-03	3.4E-02	0.095
Acetone	67-64-1	non-VOC/non-HAP	---	TOC	0.046%	0.055%	3.8E-04	1.3E-03	2.4E-04	0.002
Ethylene	74-85-1	non-VOC/non-HAP	---	TOC	0.71%	1.10%	5.9E-03	2.7E-02	3.8E-03	0.037
Total non-VOC/non-HAPS					7.30%	1.40%	0.146	0.082	0.039	0.27
Volatile organic HAPs										
Benzene	71-43-2	VOC/HAP	---	TOC	0.052%	0.032%	4.3E-04	7.8E-04	2.8E-04	1.5E-03
Bromomethane	74-83-9	VOC/HAP	---	TOC	0.0096%	0.0049%	8.0E-05	1.2E-04	5.1E-05	2.5E-04
2-Butanone	78-93-3	VOC/HAP	---	TOC	0.049%	0.039%	4.1E-04	9.5E-04	2.6E-04	1.6E-03
Carbon Disulfide	75-15-0	VOC/HAP	---	TOC	0.013%	0.016%	1.1E-04	3.9E-04	6.9E-05	5.7E-04
Chloroethane	75-00-3	VOC/HAP	---	TOC	0.00021%	0.004%	1.7E-06	9.8E-05	1.1E-06	1.0E-04
Chloromethane	74-87-3	VOC/HAP	---	TOC	0.015%	0.023%	1.2E-04	5.6E-04	7.9E-05	7.7E-04
Cumene	92-82-8	VOC/HAP	---	TOC	0.11%	0	9.2E-04	0	5.8E-04	1.5E-03
Ethylbenzene	100-41-4	VOC/HAP	---	TOC	0.28%	0.038%	2.3E-03	9.3E-04	1.5E-03	0.005
Formaldehyde	50-00-0	VOC/HAP	---	TOC	0.088%	0.69%	7.3E-04	1.7E-02	4.7E-04	0.018
n-Hexane	100-54-3	VOC/HAP	---	TOC	0.15%	0.10%	1.2E-03	2.4E-03	7.9E-04	0.004
Isooctane	540-84-1	VOC/HAP	---	TOC	0.0018%	0.00031%	1.5E-05	7.6E-06	9.5E-06	3.2E-05
Methylene Chloride	75-09-2	non-VOC/HAP	---	TOC	0	0.00027%	0	6.6E-06	0	6.6E-06
MTBE	1634-04-4	VOC/HAP	---	TOC	0	0	0	0	0	0
Styrene	100-42-5	VOC/HAP	---	TOC	0.0073%	0.0054%	6.1E-05	1.3E-04	3.9E-05	2.3E-04
Tetrachloroethene	127-18-4	non-VOC/HAP	---	TOC	0.0077%	0	6.4E-05	0	4.1E-05	1.0E-04
Toluene	100-88-3	VOC/HAP	---	TOC	0.21%	0.062%	1.7E-03	1.5E-03	1.1E-03	0.004
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	1.1E-05	0	6.9E-06	1.8E-05
m-/p-Xylene	1330-20-7	VOC/HAP	---	TOC	0.41%	0.20%	3.4E-03	4.9E-03	2.2E-03	0.010
o-Xylene	95-47-6	VOC/HAP	---	TOC	0.08%	0.057%	6.7E-04	1.4E-03	4.2E-04	2.5E-03
Total volatile organic HAPs					1.50%	1.30%	0.012	0.032	0.008	0.052

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: Emission Calculations
Fugitive PM and PM10 Emissions from Storage Piles**

Company Name: R-Mix, LLC
Source Address: 2583 South State Road 1, Cambridge City, IN 47327
Significant Permit Revision No.: 177-26290-05220
Reviewer: Jason R. Krawczyk

1. Emission Factors: AP-42

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

where:

- s = 1 % silt for sand
- s = 0.5 % silt for stone
- s = 1 % silt for slag
- s = 1 % silt for gravel
- s = 0.8 % silt for RAP
- p = 125 days of rain greater than or equal to 0.01 inches
- f = 15 % of wind greater than or equal to 12 mph

Emission Factors	
E _f =	32.9 lb/acre/day for sand
E _f =	16.5 lb/acre/day for stone

2. Potential To Emit (PTE):

$$PTE = \frac{E_f \cdot sc \cdot (20 \text{ cuft/ton}) \cdot (365 \text{ day/yr})}{(2000 \text{ lb/ton}) \cdot (43560 \text{ sqft/acre}) \cdot (25 \text{ ft})}$$

where:

- sc = 10,000 tons storage capacity for sand
- sc = 5,000 tons storage capacity for stone
- and PM10 = 35% of PM (AP-42, Chapter 13.2.4 - Aggregate Handling and Storage Piles)

Potential To Emit (tons/yr)			
PTE PM =	1.10 tons/yr for sand	PTE PM10 =	0.39 tons/yr for sand
PTE PM =	0.28 tons/yr for stone	PTE PM10 =	0.10 tons/yr for stone
PTE PM Total =	1.38	PTE PM10 Total =	0.48

The source uses wet suppression to reduce PM and PM10 emissions from the storage piles on an as-needed basis

Methodology:

PTE for PM (tons/yr) = Emission Factor (lb/acre/day) x Storage Capacity (tons) x 20 cubic feet/ton x 365 (days/yr) / (2000 (lb/ton) x 43560 (sqft/acre) x 25 (ft))

PTE for PM10 (tons/yr) = PTE for PM (tons/yr) x 35% (AP-42, 13.2.4 (1/95))

**Appendix A: Emissions Calculations
Limited Emissions**

Fugitive Dust Emissions - Material Processing and Handling

Company Name: R-Mix, LLC
Source Address: 2583 South State Road 1, Cambridge City, IN 47327
Significant Permit Revision No.: 177-26290-05220
Reviewer: Jason R. Krawczyk

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.

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

where: E_f = Emission factor (lb/ton)

k (PM) = 0.74 = particle size multiplier (0.74 assumed for aerodynamic diameter ≤ 100 μ m)
 k (PM10) = 0.35 = particle size multiplier (0.35 assumed for aerodynamic diameter ≤ 10 μ m)
 U = 10.2 = worst case annual mean wind speed (Source: NOAA, 2005*)
 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

Annual Asphalt Production Limitation = 963,600 tons/yr
 Percent Asphalt Cement/Binder (weight %) = 5.0%
 Maximum Material Handling Throughput = 915,420 tons/yr

Type of Activity	Limited ⁽¹⁾ PTE of PM (tons/yr)	Limited ⁽¹⁾ PTE of PM10 (tons/yr)
Truck unloading of materials into storage piles	0.52	0.25
Front-end loader dumping of materials into feeder bins	0.52	0.25
Conveyor dropping material into dryer/mixer or batch tower	0.52	0.25
Total (tons/yr)	1.56	0.74

Notes:

(1) The source uses wet suppression to control fugitive dust emissions. The control efficiency from wet suppression is assumed to be 50%.

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 limestone, sand, recycled asphalt pavement (RAP), gravel, slag, and other additives
 *Worst case annual mean wind speed (South Bend, IN) from "Comparative Climatic Data", National Climatic Data Center, NOAA, 2005

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 ⁽¹⁾ PTE of PM (tons/yr)	Limited ⁽¹⁾ PTE of PM10 (tons/yr)
Crushing	0.0054	0.0024	1.24	0.55
Screening	0.025	0.0087	5.72	1.99
Conveying	0.003	0.0011	0.69	0.25
Limited Potential to Emit (tons/yr) =			7.64	2.79

Notes:

(1) The source uses wet suppression to control fugitive dust emissions. The control efficiency from wet suppression is assumed to be 50%.

**Appendix A: Emission Calculations
Fugitive PM Emissions from Paved Roads**

Company Name: R-Mix, LLC
Source Address: 2583 South State Road 1, Cambridge City, IN 47327
Significant Permit Revision No.: 177-26290-05220
Reviewer: Jason R. Krawczyk

1. Emission Factors: AP-42

According to AP-42, Chapter 13.2.1 - Paved Roads (12/03), the PM/PM10 emission factors for paved roads can be estimated from the following equation:

$$E = (k \times (sL/2)^a \times (w/3)^b - C) \times (1 - p/(4 \times 365))$$

where:

E = emission factor (lb/vehicle mile traveled)
sL = road surface silt loading (g/m²) = 7.4 (g/m²) (AP-42, Table 13.2.1-4)
w = mean vehicle weight (tons) = 20.0 tons
k = empirical constant = 0.082 for PM and 0.016 for PM10
a = empirical constant = 0.65
b = empirical constant = 1.5
C = emission factor for exhaust, brake and tire wear = 0.00047 for PM and PM10
p = number of days per year with 0.01 inches precipitation = 120

PM Emission Factor = $(0.082 \times (7.4/2)^{0.65} \times (20.0/3)^{1.5} - 0.00047) \times (1 - 120/1460) = 3.03$ lbs/mile

PM10 Emission Factor = $(0.016 \times (7.4/2)^{0.65} \times (20.0/3)^{1.5} - 0.00047) \times (1 - 120/1460) = 0.59$ lbs/mile

Length of Paved Roads in One Direction = 0.13 miles

2. Potential to Emit (PTE) of PM/PM10 Before Control from Paved Roads:

Vehicle Type	Trucks per day	Average Vehicle Weight (tons)	Total Trip Number (trips/yr)	Traffic Component (%)	Component Vehicle Weight (tons)	Vehicle Mile Traveled (VMT) (miles/yr)	PTE of PM (tons/yr)	PTE of PM10 (tons/yr)
Triaxial Dump Truck	132	20	48,180	100%	20.0	12,777	19.4	3.78
Total	132			100%	20.0	12,777	19.4	3.78

Assume truck capacity of 20 tons of asphalt, loaded truck weight of 30 tons and unloaded truck weight of 10 tons. Based on 8760 hours of operation per year.

Methodology

Trucks per day = Drum mixer/dryer capacity (110 tons/hr) / truck load capacity (20 tons/truck) x 24 hrs/day

Average Vehicle Weight (ton) = (Weight of Unloaded Vehicles + Weight of Loaded Vehicles) / 2

Total Trip Number (trips/yr) = Trucks per day x 365 (days/yr)

Traffic Component (%) = Trucks per Day (by type) / Total Trucks per Day

Component Vehicle Weight = Avg. Vehicle Weight (tons) x Traffic Component (%)

(Note that the summation of the component vehicle weight equals the Mean Vehicle Weight.)

VMT(miles/yr) = Length of Paved Roads in One Direction (miles) x 2 x Total Trip Numbers (trips/yr)

PTE of PM/PM10 (tons/yr) = VMT (miles/yr) x PM/PM10 Emission Factors (lbs/mile) x 1 tons/ 2000 lbs

3. Potential to Emit (PTE) of PM/PM10 after Control from Paved Roads:

The source uses wet suppression to control fugitive dust emissions. The control efficiency from wet suppression is assumed to be 50%

PTE of PM after Control = 19.4 tons/yr x (1-50%) = 9.68 tons/yr

PTE of PM10 after Control = 3.78 tons/yr x (1-50%) = 1.89 tons/yr

Appendix A: Emissions Calculations
Fuel Equivalency Calculations
Fuel Combustion Units with Maximum Capacity < 100 MMBtu/hr

Company Name: R-Mix, LLC
Address City IN Zip: 2583 South State Road 1, Cambridge City, IN 47327
Permit Number: 177-26290-05220
Reviewer: Jason R. Krawczyk

*Note: these equivalencies are related back to the No. 2 Fuel Oil (assumed to be the predominant fuel used at this source).

Fuel Type	SO2 Equivalency					NOx Equivalency				
	Limited Sulfur Content	Limited Sulfur Content Units	AP-42 Emission Factor	Emission Factor Units	Fuel Equivalency	Fuel Equivalency Units	AP-42 Emission Factor	Emission Factor Units	Fuel Equivalency	Fuel Equivalency Units
Natural Gas	NA	NA	0.6	lb/MMCF	118.3	MMCF natural gas / 1000 gal No. 2 fuel oil	100	lb/MMCF	0.200	MMCF natural gas / 1000 gal No. 2 fuel oil
No. 2 Fuel Oil	0.50	% by weight	71.00	lb/kgal	1.00	gal No. 2 fuel oil / gal No. 2 fuel oil	20.0	lb/kgal	1.00	gal No. 2 fuel oil / gal No. 2 fuel oil
Waste Oil	0.50	% by weight	73.50	lb/kgal	0.97	gal waste oil / gal No. 2 fuel oil	19.0	lb/kgal	1.05	gal waste oil / gal No. 2 fuel oil

Methodology

Fuel Equivalency = [AP-42 Emission Factor for No. 2 fuel oil (lb/kgal)] / [AP-42 Emission Factor for any fuel type (lb/kgal or lb/MMCF)]

Sources of AP-42 Emission Factors for fuel combustion:

- Natural Gas (boiler < 100 MMBtu/hr): AP-42 Chapter 1.4 (dated 7/98), Tables 1.4-1 and 1.4-2
- No. 2 fuel oil (industrial boiler < 100 MMBtu/hr): AP-42 Chapter 1.3 (dated 9/98), Table 1.3-1
- Waste Oil (small boiler): AP-42 Chapter 1.11 (dated 10/96), Table 1.11-2