



Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant
DATE: April 5, 2007
RE: Irving Materials / 035-23565-00081
FROM: Nisha Sizemore
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, Room 1049, 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.dot 03/23/06



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FEDERALLY ENFORCEABLE STATE OPERATING PERMIT RENEWAL OFFICE OF AIR QUALITY

**Irving Materials Inc. – DBA Park Asphalt
2925 S. Hoyt Ave
Muncie, Indiana 47302**

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

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

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

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

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Original Signed by: Nisha Sizemore, Chief Permits Branch Office of Air Quality	Issuance Date: April 5, 2007 Expiration Date: April 5, 2012

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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 hot mix asphalt plant

Source Address:	2925 S. Hoyt Ave, Muncie, IN 47302
Mailing Address:	286 W. 300 N, Anderson, IN 46012
General Source Phone Number:	(765) 643-5358
SIC Code:	2951
County Location:	Delaware
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Federally Enforceable State Operating Permit Program Minor Source, under PSD Minor Source, Section 112 of the Clean Air Act

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

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

- (a) one (1) aggregate drum mix dryer, identified as emission unit No. 2, constructed in 1971, with a maximum capacity of 170 tons per hour, equipped with one (1) No. 2 distillate fuel oil fired aggregate dryer burner with a maximum rated capacity of 75.6 million (MM) British thermal units (Btu) per hour using natural gas as a back-up fuel and one (1) wet scrubber for air pollution control, exhausting at one (1) stack, identified as SV-1;
- (b) one (1) drag slat conveyor, two (2) feeder conveyors, one (1) Reclaimed Asphalt Pavement (RAP) feeder conveyor, and one (1) screen; and
- (c) cold mix (stockpile mix) asphalt storage piles and manufacturing operations.

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) No. 2 distillate fuel oil fired hot oil heater, identified as emission unit No. 9, rated at 2.353 MMBtu per hour using natural gas as back-up fuel, exhausting at one (1) stack, identified as SV-2;
- (b) one (1) cold feed system consisting of five (5) bins with a total aggregate holding capacity of 150 tons;
- (c) one (1) mix storage bin with a maximum storage capacity of 90 tons;
- (d) one (1) Reclaimed Asphalt Pavement (RAP) feed system;
- (e) one (1) No. 2 distillate fuel oil storage tank, identified as Tank 11, installed in 1960, with a

- maximum storage capacity of 10,000 gallons, exhausting at one stack, identified as SV-4;
- (f) one (1) asphalt cement storage tank, identified as Tank 12, installed in 1960, with a maximum storage capacity of 18,000 gallons, exhausting at one stack, identified as SV-3;
 - (g) aggregate storage piles, with a maximum storage capacity of 13,000 tons;
 - (h) paved and unpaved roadways [326 IAC 6-4];
 - (i) RAP storage piles, with a maximum storage capacity of 5,000 tons; and
 - (j) one (1) materials testing lab.

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 Definitions [326 IAC 2-8-1]

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

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

-
- (a) This permit, F035-23565-00081, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.
- (b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, until the renewal permit has been issued or denied.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

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

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

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

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall maintain and implement Preventive Maintenance Plans (PMPs) including the following information on each facility:
- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.
- (b) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMPs do not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

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

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

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality,
Compliance Section), or
Telephone Number: 317-233-0178 (ask for Compliance Section)
Facsimile Number: 317-233-6865

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

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
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 an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

- (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

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

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

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

- (a) All terms and conditions of permits established prior to F035-23565-00081 and issued pursuant to permitting programs approved into the state implementation plan have been either:

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

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

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

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

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

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

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

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.

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

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

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

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

B.17 Permit Renewal [326 IAC 2-8-3(h)]

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

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

- (b) A timely renewal application is one that is:
 - (1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
 - (2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

- (c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.18 Permit Amendment or Revision [326 IAC 2-8-10][326 IAC 2-8-11.1]

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

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

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

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

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

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

and

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

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

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

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

- (b) **Emission Trades [326 IAC 2-8-15(c)]**
The Permittee may trade emissions increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(c).
- (c) **Alternative Operating Scenarios [326 IAC 2-8-15(d)]**
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, OAQ, or U.S. EPA is required.
- (d) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

B.20 Source Modification Requirement [326 IAC 2-8-11.1]

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

B.21 Inspection and Entry [326 IAC 2-8-5(a)(2)][IC 13-14-2-2][IC 13-17-3-2][IC 13-30-3-1]

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

- (a) Enter upon the Permittee's premises where a FESOP source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

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

B.22 Transfer of Ownership or Operational Control [326 IAC 2-8-10]

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

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

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

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

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

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

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

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

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

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

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

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

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

(a) Pursuant to 326 IAC 2-8:

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

(b) 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 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]

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

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 December 31, 1996. 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
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 an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

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

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

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

Compliance Requirements [326 IAC 2-1.1-11]

C.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
Indianapolis, Indiana 46204-2251

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

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

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

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

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

(a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.

(b) These ERPs shall be submitted for approval to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

within ninety (90) days after the date of issuance of this permit.

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

(c) If the ERP is disapproved by IDEM, OAQ, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.

(d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.

(e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.

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

C.16 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.17 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;
 - (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.18 Actions Related to Noncompliance Demonstrated by a Stack Test

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

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

C.19 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.20 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

- (a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
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 an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (e) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

Stratospheric Ozone Protection

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

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with 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 drum mix dryer, identified as emission unit No. 2, constructed in 1971, with a maximum capacity of 170 tons per hour, equipped with one (1) No. 2 distillate fuel oil fired aggregate dryer burner with a maximum rated capacity of 75.6 million (MM) British thermal units (Btu) per hour using natural gas as a back-up fuel and one (1) wet scrubber for air pollution control, exhausting at one (1) stack, identified as SV-1;
- (b) one (1) drag slat conveyor, two (2) feeder conveyors, one (1) Reclaimed Asphalt Pavement (RAP) feeder conveyor, and one (1) screen; and

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

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

D.1.1 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from aggregate mixing and drying operation shall not exceed 56.76 pounds per hour when operating at a process weight rate of 170 tons per hour.

The pounds per hour limitation was calculated with the following equation:

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

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

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

Pursuant to 326 IAC 2-8-4, the PM₁₀ emissions from the aggregate dryer and mixer shall not exceed 0.109 pounds of PM₁₀ per ton of asphalt mix produced, based on a maximum throughput of 170 tons of asphalt mix per hour. This will limit the total source wide potential to emit of PM₁₀ to less than 100 tons per year. Therefore, the requirements of 326 IAC 2-7, Part 70, do not apply.

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

Pursuant to 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations), sulfur dioxide emissions from the 75.6 million British thermal units per hour burner for the aggregate drum mix dryer shall be limited to 0.5 pound per MMBtu heat input when using distillate oils. This is equivalent to a maximum allowable sulfur content of (0.5%) for No. 2 distillate fuel oil.

Pursuant to 326 IAC 7-1.1-2, this sulfur dioxide limit applies at all times including periods of startup, shutdown, and malfunction. Pursuant to 326 IAC 7-2-1, compliance shall be demonstrated on a calendar month average, with compliance determined at the end of each month.

D.1.4 No. 2 Fuel Usage and Equivalents, Sulfur Dioxide (SO₂) [326 IAC 2-8-4]

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

- (a) The sulfur content of the No. 2 fuel oil used in the 75.6 MMBtu per hour burner for the aggregate dryer shall not exceed 0.5 percent.
- (b) The input of No. 2 distillate fuel oil with a maximum sulfur content of 0.5% to the 75.6 MMBtu per hour burner for the aggregate dryer shall be limited to 2,666,854 gallons per twelve (12) consecutive month period, with compliance determined at the end of each month. Therefore, the SO₂ emissions are limited to less than 100 tons per year.
- (c) For purposes of determining compliance based on SO₂ emissions, the following shall apply:

every million cubic feet (MMCF) of natural gas burned shall be equivalent to 8.0 gallons of No. 2 distillate fuel oil based on SO₂ emissions, such that the total input of No. 2 distillate fuel oil and No. 2 distillate fuel oil equivalent input does not exceed the limit specified.

Compliance with the above limits shall render the requirements of 326 IAC 2-7 (Part 70) not applicable.

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

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and any control devices.

Compliance Determination Requirements

D.1.6 Testing Requirements [326 IAC 2-8-5(a)(1), (4)] [326 IAC 2-1.1-11]

No later than five (5) years from August 5, 2004, in order to demonstrate compliance with Condition D.1.2, the Permittee shall perform PM and PM₁₀ testing for the aggregate dryer/mixer, utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. PM₁₀ includes filterable and condensable particulate matter. Testing shall be conducted in accordance with Section C - Performance Testing.

D.1.7 Sulfur Dioxide Emissions and Sulfur Content

Compliance shall be determined utilizing one of the following options.

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

- (b) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from the aggregate dryer and mixer using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6.
- (c) In order to demonstrate compliance with Conditions D.1.3 and D.1.4 the Permittee shall demonstrate that weight percent sulfur dioxide in the fuels used does not exceed one half of a percent (0.5%) by weight when operating on No. 2 distillate fuel oil using the methods described in (a) of this condition.

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.

D.1.8 Particulate Matter (PM and PM₁₀)

In order to comply with Conditions D.1.1 and D.1.2, the baghouse for particulate control shall be in operation and control emissions from the aggregate dryer/mixer at all times that the aggregate dryer/mixer is in operation.

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

D.1.9 Visible Emissions Notations

- (a) Daily visible emission notations of the aggregate dryer, mixer, and wet scrubber stack exhaust and the conveying, material transfer points, and screening shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

D.1.10 Parametric Monitoring

The Permittee shall record the pressure drop and scrubbing liquid (water) flow rate readings from the wet scrubber used in controlling the mixing and drying operations, at least once per day when the mixing and drying process is in operation. When for any one reading, the pressure drop across the wet scrubber is outside the normal range of 5 and 15 inches of water or the flow rate for scrubbing liquid is outside the normal range of 310 and 360 gallons of water per minute or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit. The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.1.11 Scrubber Failure Detection

In the event that scrubber failure has been observed:

Failed units and the associated process will 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 - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

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

D.1.12 Record Keeping Requirements

(a) To document compliance with Conditions D.1.3 and D.1.4, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) below shall be complete and sufficient to establish compliance with the SO₂ emission limits established in Conditions D.1.3 and D.1.4.

- (1) Calendar dates covered in the compliance determination period;
- (2) Actual No. 2 fuel oil and equivalent usage per month since last compliance determination period and equivalent SO₂ emissions; and
- (3) 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.

If the fuel supplier certification is used to demonstrate compliance the following, as a minimum shall be maintained:

- (4) Fuel supplier certifications.
- (5) The name of the fuel supplier; and
- (6) 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.

- (b) The Permittee shall maintain records sufficient to verify compliance with the procedures specified in Condition D.1.7. Records shall be maintained for a period of five (5) years and shall be made available upon request by IDEM, OAQ.
- (c) To document compliance with Condition D.1.9, the Permittee shall maintain daily records of visible emission notations of the aggregate dryer and drum mixer stack exhaust (SV1) the conveying, material transfer points, and screening. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation, (i.e. the process did not operate that day).
- (d) To document compliance with Condition D.1.10, the Permittee shall maintain daily records of the scrubbing liquid flow rate and pressure drop across the wet scrubber controlling the mixing and/or drying operations. The Permittee shall include in its daily record when a pressure drop and/or scrubbing liquid flow rate reading is not taken and the reason for the lack of a pressure drop and/or scrubbing liquid flow rate reading, (i.e. the process did not operate that day).

- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.13 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.4 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by an “authorized individual” as defined by 326 IAC 2-1.1-1(1).

SECTION D.2 FACILITY OPERATION CONDITIONS

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

- (a) cold mix (stockpile mix) asphalt storage piles and manufacturing operations.

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

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

D.2.1 Volatile Organic Compounds (VOC) [326 IAC 8-5-2]

Pursuant to 326 IAC 8-5-2 (Miscellaneous Operations: Asphalt Paving), the use of cutback asphalt or asphalt emulsion shall not contain 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.2.2 Cold-Mix (Stockpile Mix) VOC Usage [326 IAC 2-8-4]

Emulsified asphalt with VOC solvent liquid binder used in the production of cold mix asphalt shall be limited to 138.00 tons of VOC solvent per twelve (12) consecutive month period, with compliance determined at the end of each month. This is necessary to limit VOC emissions to less than 64.03 tons per 12 consecutive month period, based on the following definition:

Emulsified asphalt with solvent - contains a maximum of 15 percent (%) of liquid binder by weight of VOC solvent and 46.4% by weight of the VOC solvent in the liquid blend evaporating. The percent oil distillate in emulsified asphalt with solvent liquid, as determined by ASTM, shall be 7% or less of the total emulsion by volume.

Compliance with this condition will limit source-wide VOC to less than 100 tons per 12 consecutive month period. Therefore, the requirements of 326 IAC 2-7 (Part 70) are not applicable.

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

D.2.3 Record Keeping Requirements

To document compliance with Condition D.2.2, the Permittee shall maintain records in accordance with (a) through (d) below. Records maintained for (a) through (d) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.2.2.

- (a) Calendar dates covered in the compliance determination period;
- (b) Emulsified asphalt binder usage per month since the last compliance determination period;
- (c) VOC solvent content by weight of the emulsified asphalt binder used each month; and

- (d) Amount of VOC solvent used in the production of cold mix asphalt, and the amount of VOC emitted each month.

All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.2.4 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.2.2 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does not require the certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1).

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) CERTIFICATION

Source Name: Irving Materials Inc. – DBA Park Asphalt
Source Address: 2925 S. Hoyt Ave, Muncie, IN 47302
Mailing Address: 286 W. 300 N, Anderson, IN 46012
FESOP No.: F035-23565-00081

**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
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: Irving Materials Inc. – DBA Park Asphalt
Source Address: 2925 S. Hoyt Ave, Muncie, IN 47302
Mailing Address: 286 W. 300 N, Anderson, IN 46012
FESOP No.: F035-23565-00081

This form consists of 2 pages

Page 1 of 2

<input type="checkbox"/> This is an emergency as defined in 326 IAC 2-7-1(12) <ul style="list-style-type: none">• The Permittee must notify the Office of Air Quality (OAQ), within four (4) 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

FESOP Quarterly Report

Source Name: Irving Materials Inc. – DBA Park Asphalt
Source Address: 2925 S. Hoyt Ave, Muncie, IN 47302
Mailing Address: 286 W. 300 N, Anderson, IN 46012
FESOP No.: F035-23565-00081
Facility: 75.6 MMBtu per hour burner for the aggregate dryer
Parameter: No. 2 distillate fuel oil usage to limit SO₂ emissions
Limit: The usage of No. 2 distillate fuel oil with a maximum sulfur content of 0.5% and No. 2 distillate fuel oil equivalents in the 75.6 MMBtu per hour burner for the aggregate dryer shall be limited to 2,666,854 gallons per twelve (12) consecutive month period, with compliance determined at the end of each month, every million cubic feet (MMCF) of natural gas burned shall be equivalent to 8.0 gallons of No. 2 distillate fuel oil based on SO₂ emissions. This limit is equivalent to SO₂ emissions of less than 100 tons per year.

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	No. 2 fuel oil and equivalent usage This Month (gallons)	No. 2 fuel oil and equivalent usage Previous 11 Months (gallons)	12 Month Total No. 2 fuel oil and equivalent usage (gallons)
Month 1			
Month 2			
Month 3			

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

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

Attach a signed certification to complete this report.

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

FESOP Quarterly Report

Source Name: Irving Materials Inc. – DBA Park Asphalt
Source Address: 2925 S. Hoyt Ave, Muncie, IN 47302
Mailing Address: 286 W. 300 N, Anderson, IN 46012
FESOP No.: F035-23565-00081
Facility: Cold-mix (stockpile mix) asphalt manufacturing operations
Parameter: VOC solvent in emulsified asphalt binder used in the production of cold mix asphalt
Limit: Emulsified asphalt with VOC solvent liquid binder used in the production of cold mix asphalt shall be limited to 138.00 tons of VOC solvent per twelve (12) consecutive month period, with compliance determined at the end of each month.

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	VOC solvent usage This Month (ton)	VOC solvent usage Previous 11 Months (ton)	12 Month Total VOC solvent usage (ton)
Month 1			
Month 2			
Month 3			

No deviation occurred in this quarter.

Deviation/s occurred in this quarter.

Deviation has been reported on: _____

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

Attach a signed certification to complete 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: Irving Materials Inc. – DBA Park Asphalt
Source Address: 2925 S. Hoyt Ave, Muncie, IN 47302
Mailing Address: 286 W. 300 N, Anderson, IN 46012
FESOP No.: F035-23565-00081

Months: _____ to _____ Year: _____

Page 1 of 2

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

ASPHALT PLANT SITE FUGITIVE DUST CONTROL PLAN

1. Fugitive particulate matter (dust) emissions from interior roads and parking lots shall be controlled by one or more of the following measures:
 - A. Paving with asphalt.
 - B. Treating with emulsified asphalt on an as needed basis.
 - C. Treating with calcium chloride on an as needed basis.
 - D. Treating with water on an as needed basis.
2. Fugitive particulate matter (dust) emissions from aggregate stockpiles shall be controlled by one or more of the following measures:
 - A. Clean and maintain stockpile areas.
 - B. Treating around the stockpile areas with water on an as needed basis.
 - C. Treating the stockpiles with water on an as needed basis.
3. Fugitive particulate matter (dust) emissions from conveying of aggregates shall be controlled by treating with water on an as needed basis.
4. Fugitive particulate matter (dust) emissions from the transferring of aggregates shall be controlled by one of the following measures:
 - A. Locate stockpiles as close as possible to feed bins.
 - B. Limit transfer points to three foot drops or less.
 - C. Apply water on an as needed basis.
5. Fugitive particulate matter (dust) emissions from transporting of aggregates shall be controlled by one of the following measures:
 - A. Tarping the aggregate hauling vehicles.
 - B. Ensure tailgates are tight and do not leak.
 - C. Maintain a 10 MPH speed limit on site.
6. Fugitive particulate matter (dust) emissions from the loading and unloading of aggregates shall be controlled by one or more of the following measures:
 - A. Limit free fall distance.
 - B. Limit the rate of discharge of the aggregate.
 - C. Apply water on an as needed basis.
7. **Material Handling Operations**
The size of the aggregate stockpiles will vary. Materials delivered to the plant site will be kept reasonably balanced with plant production. The actual drying and mixing of the aggregate mixture is done inside the asphalt plant. Emissions are controlled, at this point, by plant dust control systems.

Irving Materials, Inc. dba Park Asphalt Plant



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

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

Source Background and Description

Source Name:	Irving Materials Inc. – DBA Park Asphalt
Source Location:	2925 S. Hoyt Ave, Muncie, IN 47302
County:	Delaware
SIC Code:	2951
Operation Permit No.:	F035-23565-00081
Permit Reviewer:	Julia Handley/EVP

On February 23, 2007, the IDEM, Office of Air Quality (OAQ) had a notice published in the Muncie Star Press, Muncie, Indiana, stating that Irving Materials Inc. - DBA Park Asphalt, had applied for a Federally Enforceable State Operating Permit (FESOP) to continue to operate a stationary hot mix asphalt plant. The notice also stated that IDEM, OAQ proposed to issue a FESOP for this operation and provided information on how the public could review the proposed FESOP and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this FESOP should be issued as proposed.

Upon further review IDEM, OAQ has made the following changes to the FESOP (additions in bold, deletions in ~~strikeout~~):

Revision 1:

This is a stationary source that has been located at its current location, 2925 S. Hoyt Ave, Muncie, IN 47302, since initial permitting. However, this source was previously permitted and placed on public notice under portable source ID number 035-03252. Pursuant to 326 IAC 2-1.1-1(15), this source does not meet the definition of portable source because it has not moved at least once in the last permit term. Therefore, the source ID number has been changed to the stationary source ID number 003-00081. This change has been made throughout the permit.

Revision 2:

IDEM has determined that it is no longer necessary to include name and/or title of the authorized individual in the permit. Therefore, Condition A.1 - General Information has been revised.

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

The Permittee owns and operates a stationary hot mix asphalt plant

Authorized Individual:	Steve Henderson, Regulatory Affairs Director
Source Address:	2925 S. Hoyt Ave, Muncie, IN 47302
Mailing Address:	286 W. 300 N, Anderson, IN 46012
General Source Phone Number:	(765) 643-5358
SIC Code:	2951
County Location:	Delaware
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Federally Enforceable State Operating Permit Program Minor Source, under PSD Minor Source, Section 112 of the Clean Air Act

Revision 3:

Condition D.1.12 has been revised to clarify the record keeping requirements associated with visible emission notations and wet scrubber parametric monitoring.

D.1.12 Record Keeping Requirements

- (c) To document compliance with Condition D.1.9, the Permittee shall maintain daily records of visible emission notations of the aggregate dryer and drum mixer stack exhaust (SV1) the conveying, material transfer points, and screening ~~or maintain a record of the reason why the visible emission notations were not taken.~~ **The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation, (i.e. the process did not operate that day).**
- (d) To document compliance with Condition D.1.10, the Permittee shall maintain daily records of the **scrubbing liquid** flow rate ~~during normal operation when venting to the atmosphere.~~ **and pressure drop across the wet scrubber controlling the mixing and/or drying operations. The Permittee shall include in its daily record when a pressure drop and/or scrubbing liquid flow rate reading is not taken and the reason for the lack of a pressure drop and/or scrubbing liquid flow rate reading, (i.e. the process did not operate that day).**

Revision 4:

Condition D.2.2 has been revised to clarify the cold-mix (stockpile mix) VOC usage limit.

D.2.2 Cold-Mix (Stockpile Mix) VOC Usage [326 IAC 2-8-4]

Emulsified asphalt with VOC solvent liquid binder used in the production of cold mix asphalt shall be limited to 138.00 tons of VOC solvent per twelve (12) consecutive month period, with compliance determined at the end of each month. This is ~~equivalent to VOC emissions of~~ **necessary to limit VOC emissions to** less than 64.03 tons per 12 consecutive month period, based on the following definition:

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

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

Source Background and Description

Source Name:	Irving Materials Inc. – DBA Park Asphalt
Source Location:	2925 S. Hoyt Ave, Muncie, IN 47302
County:	Delaware
SIC Code:	2951
Operation Permit No.:	F035-14779-03252
Operation Permit Issuance Date:	September 6, 2002
Permit Renewal No.:	F035-23565-03252
Permit Reviewer:	Julia Handley/EVP

The Office of Air Quality (OAQ) has reviewed a FESOP renewal application from Irving Materials Inc. – DBA Park Asphalt relating to the operation of a stationary hot mix asphalt plant.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

- (a) one (1) aggregate drum mix dryer, identified as emission unit No. 2, constructed in 1971, with a maximum capacity of 170 tons per hour, equipped with one (1) No. 2 distillate fuel oil fired aggregate dryer burner with a maximum rated capacity of 75.6 million (MM) British thermal units (Btu) per hour using natural gas as a back-up fuel and one (1) wet scrubber for air pollution control, exhausting at one (1) stack, identified as SV-1;
- (b) one (1) drag slat conveyor, two (2) feeder conveyors, one (1) Reclaimed Asphalt Pavement (RAP) feeder conveyor, and one (1) screen; and
- (c) cold mix (stockpile mix) asphalt storage piles and manufacturing operations.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted emission units operating at this source during this review process.

Insignificant Activities

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) one (1) No. 2 distillate fuel oil fired hot oil heater, identified as emission unit No. 9, rated at 2.353 MMBtu per hour using natural gas as back-up fuel, exhausting at one (1) stack, identified as SV-2;
- (b) one (1) cold feed system consisting of five (5) bins with a total aggregate holding capacity of 150 tons;

- (c) one (1) mix storage bin with a maximum storage capacity of 90 tons;
- (d) one (1) Reclaimed Asphalt Pavement (RAP) feed system;
- (e) one (1) No. 2 distillate fuel oil storage tank, identified as Tank 11, installed in 1960, with a maximum storage capacity of 10,000 gallons, exhausting at one stack, identified as SV-4;
- (f) one (1) asphalt cement storage tank, identified as Tank 12, installed in 1960, with a maximum storage capacity of 18,000 gallons, exhausting at one stack, identified as SV-3;
- (g) aggregate storage piles, with a maximum storage capacity of 13,000 tons;
- (h) paved and unpaved roadways [326 IAC 6-4];
- (i) RAP storage piles, with a maximum storage capacity of 5,000 tons; and
- (j) one (1) materials testing lab.

Existing Approvals

The source has been operating under the previous FESOP 035-14779-03252 issued on September 6, 2002, and the following amendments and revisions:

- (a) First Administrative Amendment 035-16892-03252 issued on April 8, 2003.

All conditions from previous approvals were incorporated into this FESOP.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the FESOP renewal be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively complete FESOP renewal application for the purposes of this review was received on August 25, 2006.

There was no notice of completeness letter mailed to the source.

Emission Calculations

See Appendix A, pages 1 through 9, of this document for detailed emission calculations.

Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source, excluding the emission limits that were contained in the previous FESOP.

Pollutant	Unrestricted Potential Emissions (tons/yr)
PM	Greater than 250
PM ₁₀	Greater than 250
SO ₂	Less than 250, greater than 100
VOC	Greater than 250
CO	Less than 100
NO _x	Less than 100

HAPs	Unrestricted Potential Emissions (tons/yr)
Acetaldehyde	Less than 10
Acrolein	Less than 10
Benzene	Less than 10
Beryllium	Less than 10
Cadmium	Less than 10
Chromium	Less than 10
Ethyl benzene	Less than 10
Formaldehyde	Less than 10
Hexane	Less than 10
Lead	Less than 10
Manganese	Less than 10
Methyl chloroform	Less than 10
Mercury	Less than 10
Nickel	Less than 10
Propionaldehyde	Less than 10
Phenol	Less than 10
Quinone	Less than 10
Selenium	Less than 10
2,2,4 Trimethylpentane	Less than 10
Toluene	Less than 10
Total PAH HAPs	Less than 10
Xylene	Less than 10
Total	Less than 25

- (a) The unrestricted potential emissions of PM₁₀, SO₂, and VOC are equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7. The source will be issued a FESOP because the source will limit its emissions below the Title V levels.

(b) Fugitive Emissions

This type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2. Since this source is part of a source category regulated by a New Source Performance Standard that was in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are counted toward determination of PSD applicability.

Potential to Emit After Issuance

The source has opted to remain a FESOP source. The table below summarizes the potential to emit, reflecting all limits of the emission units. Any control equipment is considered enforceable only after issuance of this FESOP and only to the extent that the effect of the control equipment is made practically enforceable in the permit. Since the source has not constructed any new emission units, the source’s potential to emit is based on the emission units included in the original FESOP.

Process/emission unit	Potential To Emit (tons/year)							
	PM	PM ₁₀	SO ₂	VOC	CO	NO _x	Ind HAPs	Combined HAPs
aggregate drum mix dryer and burner ⁽¹⁾	62.55	80.97 ⁽²⁾	94.67	23.83	96.80	33.11	2.31 ⁽³⁾	6.58
hot oil heater	0.15	0.24	5.23	0.06	0.87	1.47	Negl.	Negl.
conveying / handling	4.12	3.89	--	--	--	--	--	--
unpaved roads	54.47	13.88	--	--	--	--	--	--
storage piles	0.12	0.08	--	--	--	--	--	--
load-out & silo-filling	0.82	0.82	--	11.99	1.88	--	0.06 ⁽⁴⁾	0.17
cold mix VOC storage	--	--	--	64.03	--	--	--	--
Total Emissions	122.23	99.90	99.90	99.90	99.55	34.58	<10	<25

- (1) Limited PTE for aggregate mixer and burner reflects fuel usage limitation to comply with 326 IAC 2-8 (FESOP).
- (2) Maximum allowable PM₁₀ emissions in order to comply with 326 IAC 2-8 (FESOP).
- (3) Largest single HAP is Formaldehyde with a PTE of 2.31 tons per year.
- (4) Largest single HAP is Formaldehyde with a PTE of 0.06 tons per year.

County Attainment Status

The source is located in Delaware County.

Pollutant	Status
PM2.5	Attainment
PM-10	Attainment
SO ₂	Attainment
NO ₂	Attainment
8-hour Ozone	Attainment
CO	Attainment
Lead	Attainment

- (a) Volatile organic compounds (VOC) and Nitrogen Oxides (NO_x) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC emissions and NO_x emissions are considered when evaluating the rule applicability relating to ozone. Delaware County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability for the source section.
- (b) On October 25, 2006, the Indiana Air Pollution Control Board finalized a rule revision to 326 IAC 1-4-1 redesignating Delaware, Greene, Jackson, Vanderburgh, Vigo and Warrick Counties to attainment for the eight-hour ozone standard, redesignating Lake County to attainment for the sulfur dioxide standard, and revoking the one-hour ozone standard in Indiana.
- (c) Delaware County has been classified as attainment for PM_{2.5}. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM_{2.5} emissions. Therefore, until the U.S. EPA adopts specific provisions for PSD review for PM_{2.5} emissions, it has directed states to regulate PM₁₀ emissions as a surrogate for PM_{2.5} emissions.
- (d) Delaware County has been classified as attainment or unclassifiable for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Source Status

Existing Source FESOP Definition (emissions after controls, based on 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/yr)
PM	<250
PM ₁₀	<100
SO ₂	<100
VOC	<100
CO	<100
NO _x	<100
Single HAP	<10
Combination HAPs	<25

- (a) This existing source is not a major source under 326 IAC 2-2 (PSD) because no attainment regulated pollutant is emitted at a rate of 250 tons per year or greater.

Federal Rule Applicability

- (a) This stationary hot mix asphalt plant constructed in 1971 is not subject to the New Source Performance Standard, 326 IAC 12, (40 CFR 60.90, Subpart I) because it was constructed prior to the rule applicability date of June 11, 1973 and there were no modifications made to the source after the rule applicability date. Therefore the requirements of NSPS Subpart I are not included in this permit.

- (b) The 10,000 gallon fuel oil storage tank (# 11) and 18,000 gallon asphalt cement storage tank (#12) are not subject to the requirements of 326 IAC 12, (40 CFR 60, Subparts K, Ka, and Kb) since the storage tank was constructed in 1960, before the earliest rule applicability date of June 11, 1973. Therefore NSPS Subpart K, Ka or Kb are not included in this permit.
- (c) The requirements of the New Source Performance Standard 326 IAC 12 (40 CFR 60.670 through 60.676, Subpart OOO) “Standards of Performance for Nonmetallic Mineral Processing Plants” will not be included in this permit for recycled asphalt pavement (RAP) usage since the RAP is received onsite ready-to-use, and there is no crushing or grinding of the RAP prior to loading into the first storage silo/bin. Therefore, the requirements of NSPS Subpart OOO are not included in this permit.
- (d) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20, 40 CFR Part 61 and 40 CFR Part 63) applicable to this source, because it is not a major source of HAP emissions. Therefore, these requirements are not included in this permit.
- (e) The requirements of 40 CFR Part 64, Compliance Assurance Monitoring, are not included in this permit. These requirements apply to a Part 70 source that involves a pollutant-specific emissions unit (PSEU), as defined in 40 CFR 64.1, which meets the following criteria:
 - (1) The unit is subject to an emission limitation or standard for an applicable regulated air pollutant;
 - (2) The unit uses a control device as defined in 40 CFR 64.1 to comply with that emission limitation or standard; and
 - (3) The unit has a potential to emit before controls equal to or greater than the applicable Part 70 major source threshold for the regulated pollutant.

As a FESOP source, this source has accepted federally enforceable limits such that the requirements of 326 IAC 2-7 (Part 70) do not apply. Therefore, the requirements of 40 CFR 64, Compliance Assurance Monitoring, are not applicable to this source.

State Rule Applicability – Entire Source

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

This source, constructed in 1970, before the applicability date of August 7, 1977, is not subject to the requirements of this rule. This source is not one of the 28 listed source categories and no major modifications have been done at this source. Therefore, this source is not subject to the requirements of this rule. Based on the potential to emit of all criteria pollutants after issuance, this is a minor source for PSD.

326 IAC 2-6 (Emission Reporting)

Pursuant to 326 IAC 2-6-1, this source is not subject to this rule because it is complying with 326 IAC 2-8 (FESOP) and is not required to have an operating permit under 326 IAC 2-7 (Part 70). In addition, the source is not located in Lake or Porter counties, and it does not emit lead into the ambient air at levels equal to or greater than 5 tons per year. Therefore, 326 IAC 2-6 does not apply.

326 IAC 2-8-4 (FESOP)

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

- (a) The input of No. 2 distillate fuel oil with a maximum sulfur content of 0.5% to the 75.6 MMBtu per hour burner for the aggregate dryer shall be limited to 2,666,854 gallons per twelve (12) consecutive month period, with compliance determined at the end of each month. Therefore, the SO₂ emissions are limited to less than 100 tons per year.

For purposes of determining compliance based on SO₂ emissions (See calculations within Appendix A page 6 of 9), the following shall apply:

- (1) every million cubic feet (MMCF) of natural gas burned shall be equivalent to 8.0 gallons of No. 2 distillate fuel oil based on SO₂ emissions, such that the total input of No. 2 distillate fuel oil and No. 2 distillate fuel oil equivalent input does not exceed the limit specified;

This limit will render the requirements of 326 IAC 2-7 (Part 70) are not applicable.

- (b) Emulsified asphalt with VOC solvent liquid binder used in the production of cold mix asphalt shall be limited to 138.00 tons of VOC solvent per twelve (12) consecutive month period, with compliance determined at the end of each month. This is equivalent to VOC emissions of less than 64.03 tons per 12 consecutive month period, based on the following definition:

Emulsified asphalt with solvent - contains a maximum of 15 percent (%) of liquid binder by weight of VOC solvent and 46.4% by weight of the VOC solvent in the liquid blend evaporating. The percent oil distillate in emulsified asphalt with solvent liquid, as determined by ASTM, shall be 7% or less of the total emulsion by volume.

Compliance with this condition will limit source wide VOC to less than 100 tons per 12 consecutive month period. Therefore, the requirements of 326 IAC 2-7 (Part 70) are not applicable.

- (c) PM₁₀ emissions from the aggregate dryer shall be limited to 0.109 pounds of PM₁₀ emitted per ton of asphalt produced, based on a maximum throughput of 170 tons of asphalt mix per hour. The source will be able to comply with the PM₁₀ emission limit by utilizing a wet scrubber for controlling PM₁₀ emissions from the aggregate dryer to less than 0.109 pounds per ton of asphalt produced. Operation of the wet scrubber is required at all times for the source to be able to comply with this limit. Compliance with this limit shall limit the source's potential to emit of PM₁₀ to less than 100 tons per twelve (12) consecutive month period. Therefore, the requirements of 326 IAC 2-7 (Part 70) are not applicable.
- (d) The potential to emit of CO from the 170 ton per hour aggregate drum mixer based upon 8,760 hours per year of operation is less than 100 tons per year (96.80 tons per year). Therefore, limiting hot mix asphalt production to limit CO emissions is not necessary.
- (e) The potential to emit NO_x from the combustion of natural gas and No. 2 distillate fuel oil in the 75.6 MMBtu per hour burner for the aggregate dryer based upon 8,760 hours per year of operation is less than 100 tons per year (47.64 tons per year, Appendix A. page 1 of 9). Therefore, limiting fuel input to the aggregate burner based upon NO_x emissions is not necessary.

326 IAC 5-1 (Opacity Limitations)

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

- (a) Opacity shall not exceed an average of 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.

326 IAC 6-4 (Fugitive Dust Emissions)

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

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

This source is subject to 326 IAC 6-5, for fugitive particulate matter emissions. Pursuant to the rule, fugitive particulate matter emissions shall be controlled according to the dust control plan submitted on December 31, 1996. The source shall continue to comply with all the dust abatement measures of the dust control plan which consists of the following:

- (a) Fugitive particulate matter (dust) emissions from interior roads and parking lots shall be controlled by one or more of the following measures:
 - (1) Paving with asphalt.
 - (2) Treating with emulsified asphalt on an as needed basis.
 - (3) Treating with calcium chloride on an as needed basis.
 - (4) Treating with water on an as needed basis.
- (b) Fugitive particulate matter (dust) emissions from aggregate stockpiles shall be controlled by one or more of the following measures:
 - (1) Clean and maintain stockpile areas.
 - (2) Treating around the stockpile areas with water on an as needed basis.
 - (3) Treating the stockpiles with water on an as needed basis.
- (c) Fugitive particulate matter (dust) emissions from conveying of aggregates shall be controlled by treating with water on an as needed basis.
- (d) Fugitive particulate matter (dust) emissions from the transferring of aggregates shall be controlled by one of the following measures:
 - (1) Locate stockpiles as close as possible to feed bins.
 - (2) Limit transfer points to three foot drops or less.
 - (3) Apply water on an as needed basis.
- (e) Fugitive particulate matter (dust) emissions from transporting of aggregates shall be controlled by one of the following measures:
 - (1) Tarping the aggregate hauling vehicles.
 - (2) Ensure tailgates are tight and do not leak.
 - (3) Maintain a 10 MPH speed limit on site.

- (f) Fugitive particulate matter (dust) emissions from the loading and unloading of aggregates shall be controlled by one or more of the following measures:
- (1) Limit free fall distance.
 - (2) Limit the rate of discharge of the aggregate.
 - (3) Apply water on an as needed basis.

- (g) Material Handling Operations
The size of the aggregate stockpiles will vary. Materials delivered to the plant site will be kept reasonably balanced with plant production. The actual drying and mixing of the aggregate mixture is done inside the asphalt plant. Emissions are controlled, at this point, by plant dust control systems.

326 IAC 2-4.1-1 (New Source Toxics Control)

Pursuant to 326 IAC 2-4.1-1 (New Source Toxics Control), any new process or production unit, which in and of itself emits or has the potential to emit 10 tons per year of a single HAP or 25 tons per year of the combination of HAPs, and is constructed or reconstructed after July 27, 1997, must be controlled using technologies consistent with Maximum Achievable Control Technology (MACT). This source has potential single HAP and combined HAP emissions of less than 10 and 25 tons per year, respectively, therefore, this rule does not apply.

State Rule Applicability - Individual Facilities

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

The particulate from the aggregate mixing and drying operation shall be limited by the following:

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

$$E = 55.0 P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$
$$E = 55.0 * (170^{0.11}) - 40 = 56.76 \text{ lbs/hr}$$

Based on the emission calculations (see Appendix A, Page 9 of 9), the controlled potential PM emissions of 14.28 lbs/hr from the permanent crushing operation are less than the allowable emissions of 56.76 lbs/hr. The wet scrubber shall be in operation at all times the aggregate mixing and drying process is in operation, in order to comply with this limit.

326 IAC 6.5-1-2 (Particulate Emissions Limitations)

The requirements of this rule apply to stationary sources located in the counties listed in 326 IAC 6.5-1-1. This source is located in Delaware County which is not one of the specifically listed counties in 326 IAC 6.5-1-1(a). Therefore, this rule is not applicable to this source.

326 IAC 7-1.1 (Sulfur Dioxide Emissions Limitations)

The drum mix dryer (ID No. EU-02) is subject to 326 IAC 7-1.1 because it has potential SO₂ emissions of greater than 25 tons per year (limited potential emissions are 94.78 tons per year). Pursuant to this rule, sulfur dioxide emissions from the dryer burner shall be limited to 0.5 pounds per MMBtu for distillate oil combustion. This equates to a maximum allowable sulfur content of 0.5% for No. 2 distillate fuel oil. (See Appendix A: Emission Calculations, page 9 of 9.)

326 IAC 7-2-1 (Sulfur Dioxide Reporting Requirements)

Pursuant to this rule, the source shall submit reports of calendar month average sulfur content, heat content, fuel consumption, and sulfur dioxide emission rate (pounds SO₂ per MMBtu), to the OAQ upon request.

326 IAC 8-5-2 (Asphalt paving rules)

This rule applies to any paving application constructed after January 1, 1980 located anywhere in the state. Pursuant to this rule, the source 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 in the following purposes:

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

This source uses stockpile mix containing 7% (wt) emulsified asphalt binder, which contains 1% (wt) fuel oil, for a net fuel oil content in the stockpile mix of 0.07% (wt), which equates to less than 7% (by vol). The operation is able to comply with 326 IAC 8-5-2.

326 IAC 8-4-3 (Petroleum Liquid Storage Facilities)

Pursuant to 326 IAC 8-4-1 (Applicability) and 326 IAC 8-4-3 (Petroleum Liquid Storage Facilities), all petroleum liquid storage vessels with capacities greater than one hundred fifty thousand (150,000) liters (39,000 gallons) containing VOC whose true vapor pressure is greater than 10.5 kPa (1.52 psi) shall comply with the requirements for external fixed and floating roof tanks and the specified record keeping and reporting requirements. The 10,000 gallon fuel oil storage tank (No. 11) and 18,000 gallon asphalt cement storage tank (No 12) are not subject to IAC 8-4-3 because their capacities are less than the rule applicability threshold capacity of 39,000 gallons.

326 IAC 8-7 (Specific VOC Reduction Requirements for Lake, Porter, Clark and Floyd Counties)

The requirements of this rule apply to stationary sources located in Lake, Porter, Clark and Floyd Counties that emit or have the potential to emit VOCs at levels equal to or greater than 25 tons per year in Lake and Porter Counties; 100 tons per year in Clark and Floyd Counties; and to any coating facility that emits or has the potential to emit 10 tons per year or greater in Lake, Porter, Clark or Floyd County. This source is located in Delaware County. Therefore, this rule is not applicable to this source.

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

Pursuant to 326 IAC 8-9-1, on and after October 1, 1995 stationary vessels used to store volatile organic liquids (VOL) must comply with the requirement of the rule if located in Clark, Floyd, Lake or Porter Counties. Stationary vessels with capacities less than 39,000 gallons are only subject to the reporting and record keeping requirements of the rule. Stationary storage vessels subject to any provision of 40 CFR Part 60.110b, New Source Performance Standard for Volatile Organic Liquid Storage, are exempt from this rule. The storage tanks (Nos. 11 and 12), are not subject to IAC 8-9 because they are not located in a specified county.

326 IAC 10-1 (Nitrogen Oxides Control in Clark and Floyd Counties)

The source is not located in Clark or Floyd Counties, therefore, the requirements of 326 IAC 10-1 are not applicable.

326 IAC 10-3 (Nitrogen Oxide Reduction Program for Specific Source Category)

This source does not operate a Portland cement kiln or a blast furnace gas boiler with a heat input greater than two hundred fifty million (250,000,000) British thermal units per hour. The one 75.6 million Btu dryer burner is not subject to this rule, therefore the requirements of 326 IAC 10-3 are not applicable.

Compliance Requirements

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-8-4. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

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

This plant has applicable compliance monitoring conditions as specified below:

- (a) Daily visible emission notations of the aggregate dryer, mixer, and wet scrubber stack exhaust and the conveying, material transfer points, and screening shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.
- (f) The Permittee shall record the pressure drop and scrubbing liquid (water) flow rate readings from the wet scrubber used in controlling the mixing and drying operations, at least once per day when the mixing and drying process is in operation. When for any one reading, the pressure drop across the wet scrubber is outside the normal range of 5 and 15 inches of water or the flow rate for scrubbing liquid is outside the normal range of 310 and 360 gallons of water per minute or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit. The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

(g) In the event that scrubber failure has been observed:

Failed units and the associated process will 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 - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

These monitoring conditions are necessary because the wet scrubber for the aggregate mixing and drying process must operate properly to be able to comply with 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes) and 326 IAC 2-8 (FESOP) .

Conclusion

The operation of this stationary hot mix asphalt plant shall be subject to the conditions of the FESOP 035-23565-03252.

Company Name:
Plant Location:
County:
Permit Reviewer:

Irving Materials, Inc. - DBA Park Asphalt
2725 S. Hoyt Ave, Muncie, IN 47302
Delaware
Julia Handley/EVP

**** aggregate dryer burner****

The following calculations determine the amount of emissions created by natural gas combustion, from the aggregate dryer burner, based on 8,760 hours of operation and US EPA's AP-42, 5th Edition, Section 1.4 - Natural Gas Combustion, Tables 1.4-1 and 1.4-2.

Criteria Pollutant:	75.6 MMBtu/hr * 8,760 hr/yr	* Ef (lb/MMcf) = (ton/yr)
	1000 Btu/cf * 2,000 lb/ton	
P M:	1.9 lb/MMcf =	0.63 ton/yr
P M-10:	7.6 lb/MMcf =	2.52 ton/yr
S O 2:	0.6 lb/MMcf =	0.20 ton/yr
N O x:	100.0 lb/MMcf =	33.11 ton/yr
V O C:	5.5 lb/MMcf =	1.82 ton/yr
C O:	84.0 lb/MMcf =	27.81 ton/yr

The following calculations determine the amount of emissions created by the combustion of # 2 distillate fuel oil @ **0.5 % sulfur**, from the aggregate dryer burner, based on 8,760 hours of use and US EPA's AP-42, 5th Edition, Section 1.3 - Fuel Oil Combustion, Tables 1.3-1, 1.3-2, and 1.3-3.

Criteria Pollutant:	75.6 MMBtu/hr * 8,760 hr/yr	* Ef (lb/1,000 gal) = (ton/yr)
	139,000 Btu/gal * 2,000 lb/ton	
P M:	2.0 lb/1000 gal =	4.76 ton/yr
P M-10:	3.3 lb/1000 gal =	7.86 ton/yr
S O 2:	71.0 lb/1000 gal =	169.14 ton/yr
N O x:	20.0 lb/1000 gal =	47.64 ton/yr
V O C:	0.34 lb/1000 gal =	0.81 ton/yr
C O:	5.0 lb/1000 gal =	11.91 ton/yr

The maximum potential emissions from the aggregate dryer burner due to fuel combustion are the following:

Criteria Pollutant:		Worst Case Fuel
P M:	4.76 ton/yr	No. 2 Fuel oil
P M-10:	7.86 ton/yr	No. 2 Fuel oil
S O 2:	169.14 ton/yr	No. 2 Fuel oil
N O x:	47.64 ton/yr	No. 2 Fuel oil
V O C:	1.82 ton/yr	Natural Gas
C O:	27.81 ton/yr	Natural Gas

****hot oil heater****

The following calculations determine the amount of emissions created by natural gas combustion, from hot oil heating, based on 8,760 hours of operation and US EPA's AP-42, 5th Edition, Section 1.4 - Natural Gas Combustion, Tables 1.4-1, 1.4-2, and 1.4-3.

Criteria Pollutant:	<u>2.353 MMBtu/hr * 8,760 hr/yr</u>	* Ef (lb/MMcf) = (ton/yr)
	1000 Btu/cf * 2,000 lb/ton	
P M:	1.9 lb/MMcf =	0.02 ton/yr
P M-10:	7.6 lb/MMcf =	0.08 ton/yr
S O 2:	0.6 lb/MMcf =	0.006 ton/yr
N O x:	100.0 lb/MMcf =	1.03 ton/yr
V O C:	5.5 lb/MMcf =	0.06 ton/yr
C O:	84.0 lb/MMcf =	0.87 ton/yr

The following calculations determine the amount of emissions created by the combustion of #2 distillate fuel oil, from the hot oil heater, @ 0.50 % sulfur, from hot oil heater, based on 8760 hours of use and US EPA's AP-42, 5th Edition, Section 1.3 - Fuel Oil Combustion, Tables 1.3-1, 1.3-2, and 1.3-3.

Criteria Pollutant:	<u>2.353 MMBtu/hr * 8,760 hr/yr</u>	* Ef (lb/1,000 gal) = (ton/yr)
	140,000 Btu/gal * 2,000 lb/ton	
P M:	2.0 lb/1000 gal =	0.15 ton/yr
P M-10:	3.3 lb/1000 gal =	0.24 ton/yr
S O 2:	71.0 lb/1000 gal =	5.23 ton/yr
N O x:	20.0 lb/1000 gal =	1.47 ton/yr
V O C:	0.34 lb/1000 gal =	0.03 ton/yr
C O:	5.0 lb/1000 gal =	0.37 ton/yr

The maximum potential emissions from the aggregate dryer burner due to fuel combustion are the following:

Criteria Pollutant:		Worst Case Fuel
P M:	0.15 ton/yr	No. 2 Fuel oil
P M-10:	0.24 ton/yr	No. 2 Fuel oil
S O 2:	5.23 ton/yr	No. 2 Fuel oil
N O x:	1.47 ton/yr	No. 2 Fuel oil
V O C:	0.06 ton/yr	Natural Gas
C O:	0.87 ton/yr	Natural Gas

**** aggregate drying: drum-mix plant ****

The following calculations determine the amount of worst case emissions created by aggregate drying before controls, based on 8,760 hours of use and US EPA's AP-42, 5th Edition, Section 11.1 - Hot Mix Asphalt Plants, Tables 11.1-5 and 11.1-10 for a drum mix dryer which has the capability of combusting either fuel oil, natural gas, or re-refined waste oil:

Pollutant:	Ef	lb/ton x	<u>170</u>	ton/hr x	8,760	hr/yr
			2,000	lb/ton		
Criteria Pollutant:						
P M:	28	lb/ton =				20,848.80 ton/yr
P M-10:	6.5	lb/ton =				4,839.90 ton/yr
VOC:	0.032	lb/ton =				23.83 ton/yr
CO:	0.13	lb/ton =				96.80 ton/yr
NOx:	0.055	lb/ton =				40.95 ton/yr
Pb:	0.0000033	lb/ton =				2.46E-03 ton/yr

**** conveying / handling ****

The following calculations determine the amount of emissions created by material handling, based on 8,760 hours of use and AP-42, Section 13.2.4, Equation 1. The emission factor for calculating PM emissions is calculated as follows:

PM-10 Emissions:

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

= 5.23E-03 lb PM-10/ton
1.11E-02 lb PM/ton

where k = 0.35 (particle size multiplier for <10um)
0.74 (particle size multiplier for <30um)

U = 12 mph mean wind speed

M = 1.5 material moisture content (%)

$$\frac{170 \text{ ton/hr} \cdot 8,760 \text{ hrs/yr} \cdot E_f \text{ (lb/ton of material)}}{2,000 \text{ lb/ton}} = (\text{ton/yr})$$

Total PM 10 Emissions: 3.89 tons/yr
Total PM Emissions: 8.23 tons/yr

**** unpaved roads ****

The following calculations determine the amount of emissions created by vehicle traffic on unpaved industrial roads, based on 8,760 hours of use and AP-42, Section 13.2.2.2, 13.2.2-2, 13.2.2-1 (1/2006)

I. Triaxle Dump Truck

$$17.5 \text{ trip/hr} \times 0.04 \text{ mile/trip} \times 2 \text{ (round trip)} \times 8,760 \text{ hr/yr} = 12,264 \text{ mile/yr}$$

$$E_f = k \cdot (s/12)^a \cdot (W/3)^b \cdot [(365-P)/365]$$

= 1.10 lb PM-10/mile
4.32 lb PM/mile

where k = 1.5 (particle size multiplier for PM-10)

k = 4.9 (particle size multiplier for PM)

s = 4.8 mean % silt content of unpaved roads

a = 0.9 Constant for PM-10

a = 0.7 Constant for PM

b = 0.45 Constant for PM and PM-10

W = 24 tons average vehicle weight

P = 125 number of days with at least 0.01 in of precipitation

$$\text{PM-10: } \frac{1.10 \text{ lb/mi} \times 12,264 \text{ mi/yr}}{2000 \text{ lb/ton}} = 6.76 \text{ tons/yr}$$

$$\text{PM: } \frac{4.32 \text{ lb/mi} \times 12,264 \text{ mi/yr}}{2000 \text{ lb/ton}} = 26.52 \text{ tons/yr}$$

II. Front End Loader

$$27 \text{ trip/hr} \times 0.068 \text{ mile/trip} \times 2 \text{ (round trip)} \times 8,760 \text{ hr/yr} = 32,167 \text{ mile/yr}$$

$$E_f = k \cdot (s/12)^a \cdot (W/3)^b \cdot [(365-P)/365]$$

= 1.31 lb PM-10/mile
5.12 lb PM/mile

where k = 1.5 (particle size multiplier for PM-10)

k = 4.9 (particle size multiplier for PM)

s = 4.8 mean % silt content of unpaved roads

a = 0.9 Constant for PM-10

a = 0.7 Constant for PM

b = 0.45 Constant for PM and PM-10

W = 35 tons average vehicle weight

P = 125 number of days with at least 0.01 in of precipitation

$$\text{PM-10: } \frac{1.31 \text{ lb/mi} \times 32,167 \text{ mi/yr}}{2000 \text{ lb/ton}} = 21.01 \text{ tons/yr}$$

$$\text{PM: } \frac{5.12 \text{ lb/mi} \times 32,167 \text{ mi/yr}}{2000 \text{ lb/ton}} = 82.43 \text{ tons/yr}$$

**** storage ****

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

Material	Silt Content (wt %)	Pile Size (acres)	Storage Capacity (tons)	PM Emissions tons/yr	PM-10 Emissions tons/yr
Sand	1.0	0.5	8,000	0.11	0.04
Stone	1.5	0.250	5,000	0.08	0.03
RAP	1.0	0.250	5,000	0.053	0.02
Total				0.24	0.08

Sample Calculation:

$$\text{Emissions (storage)} = \text{Ef} * (\text{Pile Size in acres}) * (365 \text{ day/yr})$$

$$\begin{aligned} & \text{(2,000 lb/ton)} \\ \text{Ef} &= 1.7 * (\text{s}/1.5) * (365 - \text{p}) / 235 * (\text{f}/15) \\ &= 1.16 \text{ lb/acre/day} \\ \text{where s} &= 1.0 \% \text{ silt} \\ \text{p} &= 125 \text{ days of rain greater than or equal to 0.01 inches} \\ \text{f} &= 15 \% \text{ of wind greater than or equal to 12 mph} \end{aligned}$$

**** load-out ****

The following calculations determine the amount of emissions created by plant load-out, based on 8,760 hours of use and US EPA's AP-42, Section 11.1, Tables 11.1-14 through 11.1-16.

$$\begin{aligned} \text{PM/PM10 Ef} &= 0.000181 + 0.00141(-V)e^{((0.0251)(T+460)-20.43)} \\ &= 5.22\text{E-}04 \text{ lb PM or PM-10 per ton of asphalt mix produced} \\ \text{where V} &= -0.5 \text{ asphalt volatility (default value of -0.5 used per AP-42)} \\ \text{T} &= 325 \text{ hot mix asphalt (HMA)} \end{aligned}$$

PM/PM10 = 0.39 tons/yr
Total PAH HAPs = 0.02 tons/yr (5.93% of Organic PM emissions per AP-42)*
Phenol = 0.00 tons/yr (1.18% of Organic PM emissions per AP-42)*

$$\begin{aligned} \text{TOC Ef} &= 0.0172(-V)e^{((0.0251)(T+460)-20.43)} \\ &= 4.16\text{E-}03 \text{ lb TOC per ton of asphalt mix produced} \\ \text{where V} &= -0.5 \text{ asphalt volatility (default value of -0.5 used per AP-42)} \\ \text{T} &= 325 \text{ hot mix asphalt (HMA)} \end{aligned}$$

VOC = 2.91 tons/yr (94% of TOC emissions per AP-42)
Worst Case Single HAP (Xylenes) = 0.02 tons/yr (0.49% of TOC emissions per AP-42)
Total Volatile HAPs = 0.05 tons/yr (1.5% of TOC emissions per AP-42)

$$\begin{aligned} \text{CO Ef} &= 0.00558(-V)e^{((0.0251)(T+460)-20.43)} \\ &= 1.35\text{E-}03 \text{ lb CO per ton of asphalt mix produced} \\ \text{where V} &= -0.5 \text{ asphalt volatility (default value of -0.5 used per AP-42)} \\ \text{T} &= 325 \text{ hot mix asphalt (HMA)} \end{aligned}$$

CO = 1.00 tons/yr

**** silo filling ****

The following calculations determine the amount of emissions created by silo filling, based on 8,760 hours of use and US EPA's AP-42, Section 11.1, Tables 11.1-14 through 11.1-16.

$$\begin{aligned} \text{PM/PM10 Ef} &= 0.000332 + 0.00105(-V)e^{(0.0251)(T+460)-20.43} \\ &= 5.86E-04 \text{ lb PM or PM-10 per ton of asphalt mix produced} \\ \text{where V} &= -0.5 \text{ asphalt volatility (default value of -0.5 used per AP-42)} \\ \text{T} &= 325 \text{ hot mix asphalt (HMA)} \end{aligned}$$

PM/PM10 = 0.44 tons/yr
Total PAH HAPs = 0.03 tons/yr (11.40% of Organic PM emissions per AP-42)*

$$\begin{aligned} \text{TOC Ef} &= 0.0504(-V)e^{(0.0251)(T+460)-20.43} \\ &= 1.22E-02 \text{ lb TOC per ton of asphalt mix produced} \\ \text{where V} &= -0.5 \text{ asphalt volatility (default value of -0.5 used per AP-42)} \\ \text{T} &= 325 \text{ hot mix asphalt (HMA)} \end{aligned}$$

VOC = 9.07 tons/yr (100% of TOC emissions per AP-42)
Worst Case Single HAP (Formaldehyde) = 0.06 tons/yr (0.69% of TOC emissions per AP-42)
Total Volatile HAPs = 0.12 tons/yr (1.3% of TOC emissions per AP-42)

$$\begin{aligned} \text{CO Ef} &= 0.00488(-V)e^{(0.0251)(T+460)-20.43} \\ &= 1.18E-03 \text{ lb CO per ton of asphalt mix produced} \\ \text{where V} &= -0.5 \text{ asphalt volatility (default value of -0.5 used per AP-42)} \\ \text{T} &= 325 \text{ hot mix asphalt (HMA)} \end{aligned}$$

CO = 0.88 tons/yr

* Organic PM emissions are calculated using the equation from Table 11.1-14.

$$\begin{aligned} \text{Organic PM Ef} &= 0.00141(-V)e^{(0.0251)(T+460)-20.43} \\ &= 3.41E-04 \text{ lb PM or PM-10 per ton of asphalt mix produced} \\ \text{where V} &= -0.5 \text{ asphalt volatility (default value of -0.5 used per AP-42)} \\ \text{T} &= 325 \text{ hot mix asphalt (HMA)} \end{aligned}$$

**** cold mix VOC storage emissions ****

Emulsified Asphalt with Solvent.

The following calculations determine the amount of VOC emissions created by the application of stockpile mix containing emulsified asphalt of which 46.4% by weight of VOC is evaporated, based on 8,760 hours of operation.

VOC Emission Factor = **0.0696 weight percent of Solvent in stockpile***
Potential Throughput (tons/yr) = **1,489,200 tons/yr stockpile mix**

Potential VOC Emissions (tons/yr) = Potential Throughput (tons/yr) * VOC Emission Factor (wt% flash-off)
Potential VOC Emissions = **1,036.48 tons/yr**

* Weight percent flash-off is based on use of emulsified asphalt containing a maximum of 15% of the liquid binder by weight of VOC solvent and 46.4% by weight of VOC solvent evaporating.

Criteria Pollutants:		** summary of source emissions before controls **	
	P M:	20,971.82	ton/yr
	P M-10:	4,880.41	ton/yr
	S O 2:	174.36	ton/yr
	N O x:	49.12	ton/yr
	V O C:	1,072.35	ton/yr
	C O:	99.55	ton/yr
	HCl:	0.2	ton/yr

**** source emissions after controls ****

In order to qualify for the FESOP program, this source must limit SO2 emissions to 99.9 tons per year. Consequently, SO2 emissions from the aggregate dryer must be limited as follows:

SO2 limited emissions= 99.9 tons per year - 5.23 tpy from the hot oil heater = 94.67 tons per year

* Emissions of PM and PM-10 from aggregate drying operations are controlled with a 99.700 % control efficiency.

The following calculations determine the amount of emissions created by natural gas combustion, from the aggregate dryer, based on a maximum fuel usage of 662.26 MMcf

Criteria Pollutant:	<u>662.26</u>	MMcf/yr	* Ef (lb/MMcf) = (ton/yr)
	2,000	lb/ton	
P M:	1.9	lb/MMcf =	1.89E-03 ton/yr *
P M-10:	7.6	lb/MMcf =	7.55E-03 ton/yr *
S O 2:	0.6	lb/MMcf =	0.20 ton/yr
N O x:	100.0	lb/MMcf =	33.11 ton/yr
V O C:	5.5	lb/MMcf =	1.82 ton/yr
C O:	84.0	lb/MMcf =	27.81 ton/yr

The following calculations determine the amount of emissions created by the combustion of No. 2 distillate fuel oil @ 0.5 % sulfur, from the aggregate dryer burner, based on a fuel usage limitation of 2,666.854 gal/yr:

Criteria Pollutant:	<u>2,667</u>	Kgal/yr:	* Ef (lb/1,000 gal) = (ton/yr)
	2,000	lb/ton	
P M:	2.0	lb/1000 gal =	8.00E-03 ton/yr
P M-10:	3.3	lb/1000 gal =	1.32E-02 ton/yr
S O 2:	71.0	lb/1000 gal =	94.67 ton/yr
N O x:	20.0	lb/1000 gal =	26.67 ton/yr
V O C:	0.34	lb/1000 gal =	0.45 ton/yr
C O:	5.0	lb/1000 gal =	6.67 ton/yr

Criteria Pollutant:		Worst Case Fuel
P M:	8.00E-03 ton/yr *	No. 2 Fuel oil
P M-10:	1.32E-02 ton/yr *	No. 2 Fuel oil
S O 2:	94.67 ton/yr	No. 2 Fuel oil
N O x:	33.11 ton/yr	Natural Gas
V O C:	1.82 ton/yr	Natural Gas
C O:	27.81 ton/yr	Natural Gas

**** Aggregate Burner Fuel Usage Limitations ****

Fuel: Natural Gas

No fuel usage limit is needed for natural gas in the aggregate burner because the potential to emit of NOx and SO2 is less than the limit necessary to limit source wide emissions to 100tpy, as shown below:

SO2: 0.20 tons SO2/year potential < 94.67 tons SO2/year limited

Fuel: #2 distillate oil

$$\frac{94.67 \text{ tons SO}_2/\text{year limited}}{169.14 \text{ tons SO}_2/\text{year potential}} \times 4,764.43 \frac{\text{Kgals}}{\text{year potential}} = 2,666.854 \frac{\text{Kgals}}{\text{year limited}}$$

**** Fuel Equivalence Limitations ****

Fuel: Natural Gas

Fuel equivalence limit for natural gas based on SO2 emissions from #2 distillate fuel oil:

$$\frac{169.14 \text{ #2 F.O. potential emissions (ton/yr)}}{4764.43 \text{ #2 F.O. potential usage (kgal/yr)}} / \frac{0.20 \text{ n.g. potential emissions (ton/yr)}}{662.26 \text{ n.g. potential usage (MMCF/yr)}}$$

$$= 118.33 \frac{\text{MMCF n.g. burned}}{\text{Kgal #2 F.O. burned}} \text{ or } 0.008 \frac{\text{Kgal #2 F.O. burned}}{\text{MMCF n.g. burned}}$$

****cold mix VOC storage limitations ****

The following calculations determine the amount of VOC emissions created by the application of liquid binder for cold mix stockpiles, based on the source's use of emulsified asphalt with solvent as the liquid binder type. Emulsified asphalt with solvent is defined with the following properties:

Emulsified asphalt:

Maximum weight % of VOC solvent in binder 15.0%
Weight % VOC solvent in binder that evaporates: 46.4%
Volume % of diluent allowed = 7% (per 326 IAC 8-5-2)

In order to qualify for the FESOP program, this source must limit VOC emissions to less than 99.90 tons per year. Deducting the VOC emitted from other activities, VOC solvent usage as diluent in the liquid binder used in the production of cold mix asphalt from the plant shall be limited as follows:

(99.90 tons VOC/yr - 35.87 tons VOC/yr from other sources after controls = **64.03 tons of VOC emitted per year**)

This is equivalent to limiting the usage of emulsified asphalt with solvent liquid binder to less than the following:
138.00 tons of VOC solvent per 12 consecutive month period for emulsified asphalt.

**** source emissions after controls ****

aggregate drying/dryer burner combustion	nonfugitive		
P M: 62.55 ton/yr x			62.55 ton/yr
P M-10: 14.53 ton/yr x			14.53 ton/yr
S O 2: 94.67 ton/yr x			94.67 ton/yr
N O x: 33.11 ton/yr x			33.11 ton/yr
V O C: 23.83 ton/yr x			23.83 ton/yr
C O: 96.80 ton/yr x			96.80 ton/yr
HCl: 0.16 ton/yr x			0.16 ton/yr
hot oil heater:	nonfugitive		
P M: 0.15 ton/yr x	100.00% emitted after controls =		0.15 ton/yr
P M-10: 0.24 ton/yr x	100.00% emitted after controls =		0.24 ton/yr
S O 2: 5.23 ton/yr x	100.00% emitted after controls =		5.23 ton/yr
N O x: 1.47 ton/yr x	100.00% emitted after controls =		1.47 ton/yr
V O C: 0.06 ton/yr x	100.00% emitted after controls =		0.06 ton/yr
C O: 0.87 ton/yr x	100.00% emitted after controls =		0.87 ton/yr
conveying/handling:	fugitive		
P M: 8.23 ton/yr x	50% emitted after controls =		4.12 ton/yr
P M-10: 3.89 ton/yr x	50% emitted after controls =		1.95 ton/yr
unpaved roads	fugitive		
P M: 108.94 ton/yr x	50% emitted after controls =		54.47 ton/yr
P M-10: 27.77 ton/yr x	50% emitted after controls =		13.88 ton/yr
storage piles:	fugitive		
P M: 0.24 ton/yr x	50% emitted after controls =		0.12 ton/yr
P M-10: 0.08 ton/yr x	50% emitted after controls =		0.04 ton/yr
load-out & silo filling	fugitive		
P M: 0.82 ton/yr x	100% emitted after controls =		0.82 ton/yr
P M-10: 0.82 ton/yr x	100% emitted after controls =		0.82 ton/yr
V O C: 11.99 ton/yr x	100% emitted after controls =		11.99 ton/yr
C O: 1.88 ton/yr x	100% emitted after controls =		1.88 ton/yr
Cold mix storage:	fugitive		
V O C: 64.03 ton/yr x			64.03 ton/yr

**** summary of source emissions after limitation and controls ****

Criteria Pollutant:	Non-Fugitive	Fugitive	Total
PM:	62.70 ton/yr	59.53 ton/yr	122.23 ton/yr
PM-10:	14.78 ton/yr	16.70 ton/yr	31.47 ton/yr
S O 2:	99.90 ton/yr	0.00 ton/yr	99.90 ton/yr
N O x:	34.59 ton/yr	0.00 ton/yr	34.59 ton/yr
V O C:	23.88 ton/yr	76.02 ton/yr	99.90 ton/yr
C O:	97.66 ton/yr	1.88 ton/yr	99.55 ton/yr
HCl:	0.16 ton/yr	0.00 ton/yr	0.16 ton/yr

Hazardous Air Pollutants (HAPs)

**** aggregate dryer burner****

The following calculations determine the amount of HAP emissions created by the combustion of distillate fuel oil before & after controls @ 0.5 % sulfur, from the aggregate dryer burner, based on 8,760 hours of use and US EPA's AP-42, 5th Edition, Section 1.3 - Fuel Oil Combustion, Table 1.3-10.

Hazardous Air Pollutants (HAPs):

		75.6 MMBtu/hr * 8760 hr/yr 2,000 lb/ton	* Ef (lb/10 ¹² Btu) = (ton/yr)	
			Potential To Emit	Limited Emissions
Arsenic:	4 lb/10 ¹² Btu =		1.32E-03 ton/yr	3.97E-06 ton/yr
Beryllium:	3 lb/10 ¹² Btu =		9.93E-04 ton/yr	2.98E-06 ton/yr
Cadmium:	3 lb/10 ¹² Btu =		9.93E-04 ton/yr	2.98E-06 ton/yr
Chromium:	3 lb/10 ¹² Btu =		9.93E-04 ton/yr	2.98E-06 ton/yr
Lead:	9 lb/10 ¹² Btu =		2.98E-03 ton/yr	8.94E-06 ton/yr
Manganese:	6 lb/10 ¹² Btu =		1.99E-03 ton/yr	5.96E-06 ton/yr
Mercury:	3 lb/10 ¹² Btu =		9.93E-04 ton/yr	2.98E-06 ton/yr
Nickel:	3 lb/10 ¹² Btu =		9.93E-04 ton/yr	2.98E-06 ton/yr
Selenium:	15 lb/10 ¹² Btu =		4.97E-03 ton/yr	1.49E-05 ton/yr
Total HAPs =			1.62E-02 ton/yr	4.87E-05 ton/yr

**** aggregate drying: drum-mixer ****

The following calculations determine the amount of HAP emissions created by aggregate drying before & after controls, based on 8,760 hours of use and US EPA's AP-42, 5th Edition, Section 11.1 - Hot Mix Asphalt Plants, Table 11.1-10 for a drum mix dryer which can be fired with either fuel oil or natural gas. The HAP emission factors represent the worst case emissions (fuel oil combustion).

Uncontrolled:

Ef	lb/ton x	170	ton/hr x	8760 hr/yr
		2000	lb/ton	

Hazardous Air Pollutants (HAPs):

		Potential To Emit		Limited Emissions
Acetaldehyde	3.20E-04 lb/ton =	0.24	ton/yr	0.24 ton/yr
Acrolein	2.60E-05 lb/ton =	0.02	ton/yr	0.02 ton/yr
Benzene:	3.90E-04 lb/ton =	0.29	ton/yr	0.29 ton/yr
Ethyl benzene:	2.40E-04 lb/ton =	0.18	ton/yr	0.18 ton/yr
Formaldehyde:	3.10E-03 lb/ton =	2.31	ton/yr	2.31 ton/yr
Hexane:	9.20E-04 lb/ton =	0.69	ton/yr	0.69 ton/yr
2,2,4 Trimethylpentane:	4.00E-05 lb/ton =	0.03	ton/yr	0.03 ton/yr
Methyl chloroform:	4.8E-05 lb/ton =	0.04	ton/yr	0.04 ton/yr
Propionaldehyde	1.30E-04 lb/ton =	0.10	ton/yr	0.10 ton/yr
Quinone	1.60E-04 lb/ton =	0.12	ton/yr	0.12 ton/yr
Toluene:	2.90E-03 lb/ton =	2.16	ton/yr	2.16 ton/yr
Total PAH HAPs:	1.100E-04 lb/ton =	0.08	ton/yr	0.08 ton/yr
Xylene:	2.00E-04 lb/ton =	0.15	ton/yr	0.15 ton/yr
Total HAPs =		6.39	ton/yr	6.39 ton/yr

**** summary of source HAP emissions ****

potential to emit Hazardous Air Pollutants (HAPs):		limited emissions Hazardous Air Pollutants (HAPs):	
Acetaldehyde:	0.238 ton/yr	Acetaldehyde:	0.238 ton/yr
Acrolein:	0.019 ton/yr	Acrolein:	0.019 ton/yr
Benzene:	0.290 ton/yr	Benzene:	0.290 ton/yr
Beryllium:	0.001 ton/yr	Beryllium:	0.000 ton/yr
Cadmium:	0.001 ton/yr	Cadmium:	0.000 ton/yr
Chromium:	0.001 ton/yr	Chromium:	0.000 ton/yr
Ethyl benzene:	0.179 ton/yr	Ethyl benzene:	0.179 ton/yr
Formaldehyde:	2.371 ton/yr	Formaldehyde:	2.371 ton/yr
Hexane:	0.685 ton/yr	Hexane:	0.685 ton/yr
Lead:	0.003 ton/yr	Lead:	0.000 ton/yr
Manganese:	0.002 ton/yr	Manganese:	0.000 ton/yr
Methyl chloroform:	0.036 ton/yr	Methyl chloroform:	0.036 ton/yr
Mercury:	0.001 ton/yr	Mercury:	0.000 ton/yr
Nickel:	0.001 ton/yr	Nickel:	0.000 ton/yr
Propionaldehyde:	0.097 ton/yr	Propionaldehyde:	0.097 ton/yr
Phenol:	0.005 ton/yr	Phenol:	0.005 ton/yr
Quinone:	0.119 ton/yr	Quinone:	0.119 ton/yr
Selenium:	0.005 ton/yr	Selenium:	0.000 ton/yr
2,2,4 Trimethylpentane:	0.030 ton/yr	2,2,4 Trimethylpentane:	0.030 ton/yr
Toluene:	2.159 ton/yr	Toluene:	2.159 ton/yr
Total PAH HAPs:	0.134 ton/yr	Total PAH HAPs:	0.134 ton/yr
Xylene:	0.164 ton/yr	Xylene:	0.164 ton/yr
Total:	6.54 ton/yr	Total:	6.53 ton/yr

**** miscellaneous ****

326 IAC 7 Compliance Calculations:

The following calculations determine the maximum sulfur content of distillate # 2 fuel oil allowable by 326 IAC 7:

$$0.5 \text{ lb/MMBtu} \times 139,000 \text{ Btu/gal} = 69.5 \text{ lb/1000gal}$$

$$69.5 \text{ lb/1000gal} / 142 \text{ lb/1000 gal} = 0.5 \%$$

Sulfur content must be less than or equal to 0.5% to comply with 326 IAC 7.

326 IAC 6-3-2 Compliance Calculations:

The following calculations determine compliance with 326 IAC 6-3-2 for the aggregate drying process with a process weight rates in excess of 30 tons per hour:

$$\text{limit} = 55 * (170^{0.11}) - 40 = 56.76 \text{ lb/hr or } 248.62 \text{ ton/yr}$$

Controlled PM emissions from the aggregate dryer are 0.00 lbs/hr < 56.76 lbs/hr

PM-10 Emission Limit for Aggregate Dryer:

$$(99.90 \text{ tons PM-10/yr} - 18.93 \text{ tons PM-10/yr from other sources}) = 80.97 \text{ tons PM-10/yr} = 18.49 \text{ lbs/hr}$$

Controlled PM-10 emissions from the aggregate dryer are 0.00 lbs/hr < 18.49 lbs/hr

Based on a asphalt mix throughput max of 170 tons/hr, this emission limit is equivalent to 0.109 lb PM-10 per ton of asphalt mix. (Will be able to comply)

40 CFR Part 60.90, Subpart I (Standards of Performance for Hot Mix Asphalt Plants) Compliance Calculations:

This asphalt plant was constructed in 1971, which was prior to June 11, 1973, therefore 40 CFR Part 60.90, Subpart I does not apply.