

VIA CERTIFIED MAIL

Mr. Tim Sievers
Brooks Construction Company, Inc.
P.O. Box 9560
Fort Wayne, Indiana 46899

Re: Initial Site Approval (INDOT No. 5190)
F 003-10386, Plt ID 003-05190

Dear Mr. Sievers:

This letter grants approval to construct the portable drum mix asphalt plant, INDOT No. (5190), described in Federally Enforceable State Operating Permit (FESOP) No. 003-10386, to be initially located at 5536 Hoagland Road, Poe, Indiana, in Allen County.

A two-week advance notice of start-up is required in order for IDEM to perform an inspection. If the plant is not operating in compliance with all applicable regulations upon inspection, the plant must cease operation upon notification to you by IDEM staff of such non-compliance. Operations may only resume once remedial actions have been taken.

If you have any questions concerning this permit, please contact Kelly Metts, at the above address or via phone at 317/233-0182.

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Management

TE/EVP

cc: File - Allen County
Allen County Health Department
Air Compliance Inspector Jennifer Schick
Permit Tracking - Janet Mobley
Compliance Targeting - Wanda Stanfield
Air Programs Section - Nancy Landau
Data Support - Donna Dickison

**FEDERALLY ENFORCEABLE STATE
OPERATING PERMIT (FESOP)
and ENHANCED NEW SOURCE REVIEW
OFFICE OF AIR MANAGEMENT**

Brooks Construction Company, Inc.

(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.

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 and 326 IAC 2-1-3.2, 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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|---|----------------|
| Operation Permit No.: F003-10386-05190 | |
| Issued by: Paul Dubenetzky, Branch Chief Office of Air Management | Issuance Date: |

SECTION A SOURCE SUMMARY

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

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

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

Responsible Official: John R. Brooks, President
Initial Source Address: 5536 Hoagland Road, Poe, Indiana
Mailing Address: P.O. Box 9560, Fort Wayne, Indiana 46899
SIC Code: 2951
Initial County Location: Allen
County Status: Attainment for all criteria pollutants
Source Status: Federally Enforceable State Operating Permit (FESOP)
Minor Source, under PSD and Emission Offset Rules;

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

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

- (1) one (1) asphalt parallel flow drum mix dryer capable of processing 400 tons per hour of raw material, equipped with one (1) 120 million (MM) British thermal units (Btu) per hour No. 2 distillate fuel oil fired burner, with one (1) jet pulse baghouse for particulate matter (PM) control, exhausting at one (1) stack (ID No. S/V-1);
- (2) cold-mix (stockpile mix) asphalt storage piles; and
- (3) one (1) 30,000 gallon liquid asphalt storage tank (ID No. Tank 10), constructed in 1989.

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

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

- (1) Fuel oil-fired combustion sources with heat input equal to or less than two (2) million Btu per hour and firing fuel containing less than five-tenths (0.5) percent sulfur by weight including:
 - (a) one (1) hot oil heater, with a maximum rated capacity of 0.7 MMBtu per hour, exhausting through one (1) stack (ID No. S/V-2).
- (2) Combustion source flame safety purging on startup.
- (3) A petroleum fuel other than gasoline, dispensing facility, having a storage capacity of less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month.
- (4) Other categories with emissions below insignificant thresholds:
 - (a) cutting, welding, and grinding operations for repair and maintenance only;
 - (b) one (1) 8,000 gallon fuel oil storage tank (ID No. Tank 11);
 - (c) one (1) drag slat conveyor;
 - (d) one (1) cold feed system consisting of four (4) compartments with a total aggregate holding capacity of 100 tons;

- (e) one (1) hot mix storage silo with a maximum storage capacity of 100 tons; and
- (f) one (1) recycled asphalt pavement (RAP) feed bin with a maximum holding capacity of 25 tons.

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

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

A.5 Prior Permit Conditions

- (a) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits.
- (b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, including any term or condition from a previously issued construction or operation permit, IDEM, OAM shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued.

SECTION B GENERAL CONDITIONS

B.1 Permit No Defense [326 IAC 2-1-10] [IC 13]

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

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

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

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

This permit is issued for a fixed term of five (5) years from the effective date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3.

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

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

B.5 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.6 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.7 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.8 Duty to Supplement and Provide Information [326 IAC 2-8-3(f)] [326 IAC 2-8-4(5)(E)]

- (a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

- (b) The Permittee shall furnish to IDEM, OAM, within a reasonable time, any information that IDEM, OAM 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.
- (c) Upon request, the Permittee shall also furnish to IDEM, OAM, copies of records required to be kept by this permit. If the Permittee wishes to assert a claim of confidentiality over any of the furnished records, the Permittee must furnish such records to IDEM, OAM, along with a claim of confidentiality under 326 IAC 17. If requested by IDEM, OAM, or the U.S. EPA, to furnish copies of requested records directly to U. S. EPA, and if the Permittee is making a claim of confidentiality regarding the furnished records, the Permittee must furnish such confidential records directly to the U.S. EPA along with a claim of confidentiality under 40 CFR 2, Subpart B.

B.9 Compliance Order Issuance [326 IAC 2-8-5(b)]

IDEM, OAM 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.10 Compliance with Permit Conditions [326 IAC 2-8-4(5)(A)] [326 IAC 2-8-4(5)(B)]

- (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit constitutes a violation of the Clean Air Act and is grounds for:
- (1) Enforcement action;
 - (2) Permit termination, revocation and reissuance, or modification; and
 - (3) Denial of a permit renewal application.
- (b) 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.

B.11 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)]

- (a) Any application form, report, or compliance certification submitted under this permit shall contain certification by a responsible official of truth, accuracy, and completeness. This certification, and any other certification required under this permit, 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, on the attached Certification Form, with each submittal.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

B.12 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The certification shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than April 15 of each year to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

- (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, OAM, on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
 - (1) The identification of each term or condition of this permit that is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether compliance was based on continuous or intermittent data;
 - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-8-4(3); and
 - (5) Such other facts as specified in Sections D of this permit, IDEM, OAM may require to determine the compliance status of the source.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

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

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

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

- (b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that lack of proper maintenance does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) PMP's shall be submitted to IDEM, OAM, upon request and shall be subject to review and approval by IDEM, OAM.

B.14 Emergency Provisions [326 IAC 2-8-12]

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

Telephone No.: 1-800-451-6027 (ask for Office of Air Management, Compliance Section) or,
Telephone No.: 317-233-5674 (ask for Compliance Section)
Facsimile No.: 317-233-5967

Failure to notify IDEM, OAM, by telephone or facsimile within four (4) daytime business hours after the beginning of the emergency, or after the emergency is discovered or reasonably should have been discovered, shall constitute a violation of 326 IAC 2-8 and any other applicable rules. [326 IAC 2-8-12(f)]

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted notice either in writing or facsimile, of the emergency to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

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

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

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

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (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) for sources subject to this rule after the effective date of this rule. This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAM, 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, OAM by telephone or facsimile of an emergency lasting more than one (1) hour in compliance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
 - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
 - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
 - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and

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

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

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

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

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

within ten (10) calendar days from the date of the discovery of the deviation.

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:
- (1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or
 - (2) An emergency as defined in 326 IAC 2-7-1(12); or
 - (3) Failure to implement elements of the Preventive Maintenance Plan unless lack of maintenance has caused or contributed to a deviation.
 - (4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred is a deviation.

- (c) Written notification shall be submitted on the attached Emergency/Deviation Occurrence Reporting Form or its substantial equivalent. The notification does not need to be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) Proper notice submittal under 326 IAC 2-7-16 satisfies the requirement of this subsection.

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

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a FESOP modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)]

- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAM 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, OAM, 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, OAM, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAM, 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, OAM, 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).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, IN 46206-6015

- (b) Timely Submittal of Permit Renewal [326 IAC 2-8-3]
 - (1) A timely renewal application is one that is:
 - (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
 - (B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM on or before the date it is due. [326 IAC 2-5-3]
 - (2) If IDEM, OAM, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.

- (c) Right to Operate After Application for Renewal [326 IAC 2-8-9]
If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAM 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, OAM, any additional information identified as needed to process the application.

B.18 Permit Amendment or Modification [326 IAC 2-8-10] [326 IAC 2-8-11]

- (a) The Permittee must comply with the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11 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 Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34) only if a certification is required by the terms of the applicable rule.

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

B.19 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-8-11(b)(2)]

Notwithstanding 326 IAC 2-8-11(b)(1)(D)(i) and 326 IAC 2-8-11(c)(1), minor permit modification procedures may be used for modifications of this permit involving the use of economic incentives, marketable permits, emissions trading, and other similar approaches to the extent that such minor permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated by U.S. EPA.

B.20 Changes Under Section 502(b)(10) of the Clean Air Act [326 IAC 2-8-15(b)]

The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-8-15(a) and the following additional condition:

For each such change, the required written notification shall include a brief description of the change within the source, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change.

B.21 Operational Flexibility [326 IAC 2-8-15]

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

- (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
- (2) Any approval required by 326 IAC 2-1 has been obtained;

(3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

(4) The Permittee notifies the:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

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

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

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

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

(b) For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

(1) A brief description of the change within the source;

(2) The date on which the change will occur;

(3) Any change in emissions; and

(4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) Emission Trades [326 IAC 2-8-15(c)]

The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(c).

- (d) 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, OAM or U.S. EPA is required.
- (e) 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.22 Construction Permit Requirement [326 IAC 2]

Except as allowed by Indiana P.L. 130-1996 Section 12, as amended by P.L. 244-1997, modification, construction, or reconstruction shall be approved as required by and in accordance with 326 IAC 2.

B.23 Inspection and Entry [326 IAC 2-8-5(a)(2)]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, the Permittee shall allow IDEM, OAM, 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) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.
[326 IAC 2-8-5(a)(4)]
 - (1) The Permittee may assert a claim that, in the opinion of the Permittee, information removed or about to be removed from the source by IDEM, OAM, or an authorized representative, contains information that is confidential under IC 5-14-3-4(a). The claim shall be made in writing before or at the time the information is removed from the source. In the event that a claim of confidentiality is so asserted, neither IDEM, OAM, nor an authorized representative, may disclose the information unless and until IDEM, OAM, makes a determination under 326 IAC 17-1-7 through 326 IAC 17-1-9 that the information is not entitled to confidential treatment and that determination becomes final. [IC 5-14-3-4; IC 13-14-11-3; 326 IAC 17-1-7 through 326 IAC 17-1-9]
 - (2) The Permittee, and IDEM, OAM, acknowledge that the federal law applies to claims of confidentiality made by the Permittee with regard to information removed or about to be removed from the source by U.S. EPA. [40 CFR Part 2, Subpart B]

B.24 Transfer of Ownership or Operation [326 IAC 2-1-6][326 IAC 2-8-10]

Pursuant to 326 IAC 2-1-6 and 2-8-10:

- (a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAM, Permits Branch, within thirty (30) days of the change. Notification shall include a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current Permittee and the new owner.
- (b) The written notification shall be sufficient to transfer the permit to the new owner by an administrative amendment pursuant to 326 IAC 2-8-10. The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) IDEM, OAM shall reserve the right to issue a new permit.

B.25 Annual Fee Payment [326 IAC 2-8-4(6)][326 IAC 2-8-16]

- (a) The Permittee shall pay annual fees to IDEM, OAM, within thirty (30) calendar days of receipt of a billing. If the Permittee does not receive a bill from IDEM, OAM 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 317-233-0425 (ask for OAM, Technical Support and Modeling Section), to determine the appropriate permit fee.

B.26 Enhanced New Source Review [326 IAC 2]

The requirements of the construction permit rules in 326 IAC 2 are satisfied by this permit for any previously unpermitted facilities and such facilities to be constructed within eighteen (18) months after the date of issuance of this permit, as listed in Sections A.2 and A.3.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

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

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

- (a) Pursuant to 326 IAC 2-8:
 - (1) The potential to emit any regulated pollutant, except particulate matter (PM), from the entire source shall be limited to less than one-hundred (100) tons per three hundred sixty-five (365) consecutive day period. This limitation shall also satisfy the requirements of 326 IAC 2-3 (Emission Offset);
 - (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 three hundred sixty-five (365) consecutive day 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 three hundred sixty-five (365) consecutive day period.
- (b) Pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)), emissions of particulate matter (PM) from the entire source shall be limited to less than two hundred fifty (250) tons per three hundred sixty-five (365) consecutive day period.
- (c) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided the source's potential to emit does not exceed the above specified limits.
- (d) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

C.2 Opacity [326 IAC 5-1]

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

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

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

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3(a)(2)(A) and (B) are not federally enforceable.

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

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

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

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

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

Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions shall be controlled according to the plan submitted on November 17, 1998. The plan consists of:

- (a) Fugitive particulate matter emissions from paved roads, unpaved roads, and parking lots shall be controlled by one or more of the following methods:

Paved roads and parking lots:

- (1) cleaning by vacuum sweeping on an as needed basis (monthly at a minimum)
- (2) power brooming while wet either from rain or application of water.

Unpaved roads and parking lots:

- (1) paving with asphalt;
- (2) treating with emulsified asphalt on an as needed basis;
- (3) treating with water on an as needed basis;
- (4) double chip and seal the road surface and maintained on an as needed basis.

- (b) Fugitive particulate matter emissions from aggregate stockpiles shall be controlled by one or more of the following methods on an as needed basis:
 - (1) maintaining minimum size and number of stock piles of aggregate;
 - (2) treating around the stockpile area with emulsified asphalt;
 - (3) treating around the stockpile area with water;
 - (4) treating the stockpiles with water.
- (c) Fugitive particulate matter emissions from outdoor conveying of aggregates shall be controlled by the following method on an as needed basis:
 - (1) applying water at the feed and the intermediate points.
- (d) Fugitive particulate matter emissions from the transfer of aggregates shall be controlled by one of the following methods:
 - (1) minimize the vehicular distance between transfer points;
 - (2) enclose the transfer points;
 - (3) apply water on transfer points on an as needed basis.
- (e) Fugitive particulate matter emissions from transportation of aggregate by truck, front end loader, etc. shall be controlled by one of the following methods:
 - (1) tarping the aggregate hauling vehicles;
 - (2) maintain vehicle bodies in a condition to prevent leakage;
 - (3) spray the aggregates with water;
 - (4) maintain a 10 MPH speed limit in the yard.
- (f) Fugitive particulate matter emissions from the loading and unloading of aggregate shall be controlled by one of the following methods:
 - (1) reduce free fall distance to a minimum;
 - (2) reduce the rate of discharge of the aggregate;
 - (3) spray the aggregate with water on an as needed basis.

C.7 Operation of Equipment [326 IAC 2-8-5(a)(4)]

All air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission unit vented to the control equipment is in operation.

C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61.140]

- (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 Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (e) **Procedures for Asbestos Emission Control**
The Permittee shall comply with the emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4 emission control requirements are mandatory 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) **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. The requirement that the inspector be accredited is federally enforceable.

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

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

- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing methods approved by the IDEM, OAM.

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 Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

- (b) All test reports must be received by IDEM, OAM within forty-five (45) days after the completion of the testing. An extension may be granted by the Commissioner, if the source submits to IDEM, OAM, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

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

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment no more than ninety (90) days after receipt of this permit. If due to circumstances beyond its control, this schedule cannot be met, the Permittee may extend compliance schedule an additional ninety (90) days provided the Permittee notify:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

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

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

C.11 Maintenance of Monitoring Equipment [326 IAC 2-8-4(3)(A)(iii)]

- (a) In the event that a breakdown of the monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation.

In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less than one (1) hour until such time as the continuous monitor is back in operation.

- (b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

C.12 Monitoring Methods [326 IAC 3]

Any monitoring or testing performed to meet the applicable requirements of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

C.13 Pressure Gauge Specifications

Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ($\pm 2\%$) of full scale reading.

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

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

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

- (a) The Permittee shall 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 Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

within 180 days from the date on which this source commences operation.

The ERP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

C.15 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present in a process in more than the threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall:

- (a) Submit:
- (1) A compliance schedule for meeting the requirements of 40 CFR 68 by the date provided in 40 CFR 68.10(a); or
 - (2) As a part of the compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP); and
 - (3) A verification to IDEM, OAM, that a RMP or a revised plan was prepared and submitted as required by 40 CFR 68.
- (b) Provide annual certification to IDEM, OAM, that the Risk Management Plan is being properly implemented.

All documents submitted pursuant to this condition shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

C.16 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-8-4][326 IAC 2-8-5] [326 IAC 1-6]

- (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:
- (1) This condition;
 - (2) The Compliance Determination Requirements in Section D of this permit;
 - (3) The Compliance Monitoring Requirements in Section D of this permit;
 - (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and
 - (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAM upon request and shall be subject to review and approval by IDEM, OAM. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of :
 - (A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and

- (B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.
- (b) For each compliance monitoring condition of this permit, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the permit unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.
- (c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:
 - (1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied or;
 - (3) An automatic measurement was taken when the process was not operating; or
 - (4) The process has already returned to operating within "normal" parameters and no response steps are required.
- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

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

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAM, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected facility while the corrective actions are being implemented. IDEM, OAM shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAM within thirty (30) days of receipt of the notice of deficiency. IDEM, OAM reserves the authority to use enforcement activities to resolve noncompliant stack tests.
- (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, OAM that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAM may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate permit conditions may be grounds for immediate revocation of the permit to operate the affected facility.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

C.18 Emission Statement [326 IAC 2-6] [326 IAC 2-8-4(3)]

- (a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that meets the requirements of 326 IAC 2-6 (Emission Reporting). This annual statement must be received by April 15 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8) (Emission Statement Operating Year). The annual statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

- (b) The annual emission statement 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, OAM on or before the date it is due.

C.19 Monitoring Data Availability

- (a) With the exception of performance tests conducted in accordance with Section C- Performance Testing all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.
- (b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.
- (c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.
- (d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.
- (e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.
- (f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements in (a) above.

C.20 General Record Keeping Requirements [326 IAC 2-8-4(3)][326 IAC 2-8-5]

- (a) Records of all required monitoring data and support information 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 kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAM representative. 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 written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

- (b) Records of required monitoring information shall include, where applicable:
 - (1) The date, place, and time of sampling or measurements;
 - (2) The dates analyses were performed;
 - (3) The company or entity performing the analyses;
 - (4) The analytic techniques or methods used;
 - (5) The results of such analyses; and
 - (6) The operating conditions existing at the time of sampling or measurement.

- (c) Support information shall include, where applicable:
 - (1) Copies of all reports required by this permit;
 - (2) All original strip chart recordings for continuous monitoring instrumentation;
 - (3) All calibration and maintenance records;
 - (4) Records of preventive maintenance shall be sufficient to demonstrate that improper maintenance did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.

- (d) All record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.21 General Reporting Requirements [326 IAC 2-8-4(3)(C)]

- (a) To affirm that the source has met all the compliance monitoring requirements stated in this permit the source shall submit a Quarterly Compliance Monitoring Report. Any deviation from the requirements and the date(s) of each deviation must be reported.

- (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 Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

- (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, OAM on or before the date it is due.
- (d) Unless otherwise specified in this permit, any quarterly report shall be submitted within thirty (30) days of the end of the reporting period.
- (e) All instances of deviations as described in Section B- Deviations from Permit Requirements Conditions must be clearly identified in such reports.
- (f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.
- (g) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Portable Source Requirement

C.22 Relocation of Portable Sources [326 IAC 2-1-6(b)]

- (a) This permit is approved for operation in all areas of Indiana except in severe nonattainment areas for ozone (at the time of this permit's issuance these areas were Lake and Porter Counties). This determination is based on the requirements Prevention of Significant Deterioration in 326 IAC 2-2 and 40 CFR 52.21, and Emission Offset requirements in 326 IAC 2-3. A thirty (30) day advance notice of relocation must be given to IDEM, OAM and a "Relocation Site Approval" letter must be obtained before relocating.
- (b) The Permittee shall also notify the applicable local air pollution control agency when relocating to or from one of the following:
 - (1) Madison County - (Anderson Office of Air Management)
 - (2) City of Evansville plus four (4) miles beyond the corporate limits but not outside Vanderburgh County - (Evansville EPA)
 - (3) City of Gary - (Gary Division of Air Pollution)
 - (4) City of Hammond - (Hammond Department of Environmental Management)
 - (5) Marion County - (Indianapolis Air Pollution Control Agency)
 - (6) St. Joseph County - (St. Joseph County Health Department)

- (7) Vigo County - (Vigo County Air Pollution Department)
- (c) That a valid operation permit consists of this document and any subsequent "Relocation Site Approval" letter specifying the current location of the portable plant.

Stratospheric Ozone Protection

C.23 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)]

- (1) one (1) asphalt parallel flow drum mix dryer capable of processing 400 tons per hour of raw material, equipped with one (1) 120 million (MM) British thermal units (Btu) per hour No. 2 distillate fuel oil fired burner, with one (1) jet pulse baghouse for particulate matter (PM) control, exhausting at one (1) stack (ID No. S/V-1).

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

D.1.1 Particulate Matter (PM) [326 IAC 6-1-2] [326 IAC 12] [40 CFR 60.90, Subpart I]

- (a) Pursuant to 326 IAC 6-1-2 (Particulate Emissions Limitations), the particulate matter emissions from the mixing and drying operation shall be limited to 0.03 grains per dry standard cubic foot (gr/dscf). This is equivalent to a particulate matter emission rate of 13.2 pounds per hour. This limit will also render 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) and 326 IAC 2-3 (Emission Offset) not applicable.
- (b) Pursuant to 326 IAC 12, (40 CFR Part 60.90, Subpart I) "Standards of Performance for Hot Mix Asphalt Facilities", the particulate matter emissions from the mixing and drying operations shall be limited to 0.04 grains per dry standard cubic foot (gr/dscf). This is equivalent to a particulate matter emission rate of 17.6 pounds per hour.

Compliance with the PM emission limit pursuant to 326 IAC 6-1-2 will also satisfy the PM emission limit pursuant to 326 IAC 12, 40 CFR Part 60.90, Subpart I.

D.1.2 Opacity [326 IAC 12] [40 CFR 60.90, Subpart I]

Pursuant to 326 IAC 12, (40 CFR Part 60.92, Subpart I) "Standards of Performance for Hot Mix Asphalt Facilities", the mixing and drying operations shall not discharge or cause the discharge into the atmosphere any gases which exhibit 20% opacity or greater.

D.1.3 Particulate Matter 10 Microns (PM-10) [326 IAC 2-8-4]

Pursuant to 326 IAC 2-8-4, particulate matter 10 microns emissions from the aggregate mixing and drying operation shall not exceed 11.7 pounds per hour, including both filterable and condensable fractions. Compliance with this limit will satisfy 326 IAC 2-8-4. Therefore, the Part 70 rules (326 IAC 2-7) do not apply.

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

Pursuant to 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations), sulfur dioxide emissions from the 120.0 million Btu per hour burner for the aggregate dryer shall be limited to 0.5 pounds per million Btu heat input or a sulfur content of less than or equal to 0.5% when using distillate oil.

D.1.5 Fuel Usage [326 IAC 2-8-4]

Pursuant to 326 IAC 2-8-4(1), the input of No. 2 distillate fuel oil with a maximum sulfur content of 0.5% to the 120.0 MMBtu per hour burner for the aggregate dryer shall be limited to 2,745,000 U.S. gallons per twelve (12) consecutive month period, rolled on a monthly basis, so that SO₂ emissions are limited below 100 tons per year. The total for each month shall not exceed the difference between the annual usage limit minus the sum of actual usage from the previous eleven (11) months. During the first twelve (12) months of operation under this permit, the input of No. 2 distillate fuel oil shall be limited such that the total gallons divided by the accumulated months of operation shall not exceed 228,750 U.S. gallons per month. Therefore, the requirements of 326 IAC 2-7 will not apply.

D.1.6 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

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

Compliance Determination Requirements

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

During the period no later than 180 days after start-up, the Permittee shall perform PM and PM-10 testing utilizing Methods 5 or 17 (40 CFR 60, Appendix A) for PM and Methods 201 or 201A and 202 (40 CFR 51, Appendix M) for PM-10, or other 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. PM-10 includes filterable and condensable PM-10. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.

D.1.8 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 fuel oil sulfur content does not exceed five-tenths percent (0.5%) by weight by:
 - (1) Providing vendor analysis of fuel delivered, if accompanied by a certification;
 - (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; or
- (b) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from the thirteen (13) MMBtu per hour heater, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6.

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

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

D.1.9 Particulate Matter (PM)

The baghouse for PM control shall be in operation at all times when the aggregate dryer is in operation.

D.1.10 Visible Emissions Notations

- (a) Daily visible emission notations of the aggregate dryer baghouse stack exhaust 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) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

D.1.11 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the aggregate dryer, at least once daily when the aggregate dryer is in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 2.0 and 8.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAM, and shall be calibrated at least once every six (6) months.

D.1.12 Broken or Failed Bag Detection

In the event that bag failure has been observed.

- (a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
- (b) For single compartment baghouses, 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).

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

D.1.13 Record Keeping Requirements

- (a) To document compliance with Conditions D.1.4 and D.1.5, the Permittee shall maintain records in accordance with (1) through (6) below.
 - (1) Calendar dates covered in the compliance determination period;
 - (2) Actual No. 2 distillate fuel oil usage per month since last compliance determination period and equivalent sulfur dioxide emissions;
 - (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; and

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) To document compliance with Condition D.1.10, the Permittee shall maintain records of daily visible emission notations of the aggregate dryer baghouse stack exhaust.
- (c) To document compliance with Condition D.1.11, the Permittee shall maintain the following:

- (1) Daily records of the following operational parameters during normal operation when venting to the atmosphere:
 - (A) Inlet and outlet differential static pressure; and
 - (B) Cleaning cycle: frequency and differential pressure.
 - (2) Documentation of all response steps implemented, per event .
 - (3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.
 - (4) Quality Assurance/Quality Control (QA/QC) procedures.
 - (5) Operator standard operating procedures (SOP).
 - (6) Manufacturer's specifications or its equivalent.
 - (7) Equipment "troubleshooting" contingency plan.
 - (8) Documentation of the dates vents are redirected.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.14 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.5 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.

SECTION D.2 FACILITY OPERATION CONDITIONS

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

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

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:

- 1) penetrating prime coating
- 2) stockpile storage
- 3) 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]

- (a) The usage of diluent in the production of cold mix (stockpile mix) asphalt shall be limited to 92.26 tons per twelve (12) consecutive month period, rolled on a monthly basis.

The total for each month shall not exceed the difference between the annual usage limit minus the sum of actual usage from the previous eleven (11) months. This is equivalent to a VOC emission limit of 87.65 tons per twelve (12) consecutive month period in the production of cold mix (stockpile mix) asphalt. During the first twelve (12) months of operation under this permit, the usage of diluent shall be limited such that the total usage divided by the accumulated months of operation shall not exceed 7.68 tons per month.

- (b) The volume percent of diluent in the cutback asphalt shall not exceed 35%.
- (c) The VOC content of the diluent shall not exceed 95% by weight.

Compliance Determination Requirements

D.2.3 Testing Requirements [326 IAC 2-8-5(a)(1), (4)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the VOC limit specified in Condition D.2.2 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

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

D.2.4 Record Keeping Requirements

To document compliance with Condition D.2.2, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) 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.

- (1) diluent used in production of cold mix asphalt per month;
 - (2) amount of diluent used last twelve (12) months;
 - (3) type of liquid binder used; and
 - (4) percent diluent (oil distillate) in liquid binder.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.2.5 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.

SECTION D.3 FACILITY OPERATION CONDITIONS

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

(3) one (1) 30,000 gallon liquid asphalt storage tank (ID No. Tank 10), constructed in 1989.

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

D.3.1 Volatile Organic Compounds (VOCs) [326 IAC 12] [40 CFR 60.110b, Subpart Kb]

Pursuant to 40 CFR Part 60.110b, Subpart Kb (Standards of Performance for Volatile Organic Liquid Storage Vessels), the 30,000 gallon liquid asphalt cement storage tank, with a vapor pressure of less than 15.0 kPa, is subject to 40 CFR Part 60.116b, paragraphs (a), (b), and (d) which require record keeping.

D.3.2 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 device.

Compliance Determination Requirements

D.3.3 Testing Requirements [326 IAC 2-8-5(a)(1), (4)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the VOC limit specified in Condition D.3.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

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

D.3.4 Record Keeping Requirements

- (a) To document compliance with Condition D.3.1, the Permittee shall maintain permanent records at the source in accordance with (1) through (3) below:
- (1) the dimension of the storage vessel;
 - (2) an analysis showing the capacity of the storage vessel; and
 - (3) the true vapor pressure of each VOC stored, indicating that the maximum true vapor pressure of VOC is less than 15.0 kPa.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

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

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

Source Name: Brooks Construction Company, Inc.
Initial Source Address: 5536 Hoagland Road, Poe, Indiana
Mailing Address: P.O. Box 9560, Fort Wayne, Indiana 46899
FESOP No.: F003-10386-05190

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:

- 9 Annual Compliance Certification Letter
- 9 Test Result (specify) _____
- 9 Report (specify) _____
- 9 Notification (specify) _____
- 9 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 MANAGEMENT
COMPLIANCE DATA SECTION
P.O. Box 6015
100 North Senate Avenue
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967**

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

Source Name: Brooks Construction Company, Inc.
Initial Source Address: 5536 Hoagland Road, Poe, Indiana
Mailing Address: P.O. Box 9560, Fort Wayne, Indiana 46899
FESOP No.: F003-10386-05190

This form consists of 2 pages

Page 1 of 2

| |
|---|
| Check either No. 1 or No.2 |
| 9 1. This is an emergency as defined in 326 IAC 2-7-1(12) CThe Permittee must notify the Office of Air Management (OAM), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and CThe Permittee must submit notice in writing or by facsimile within two (2) days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16 |
| 9 2. This is a deviation, reportable per 326 IAC 2-7-5(3)(c) CThe Permittee must submit notice in writing within ten (10) calendar days |

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/Deviation: |
| Describe the cause of the Emergency/Deviation: |

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

Page 2 of 2

| |
|---|
| Date/Time Emergency/Deviation started: |
| Date/Time Emergency/Deviation was corrected: |
| Was the facility being properly operated at the time of the emergency/deviation? 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/deviation: |
| Describe the steps taken to mitigate the problem: |
| Describe the corrective actions/response steps taken: |
| Describe the measures taken to minimize emissions: |
| If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value: |

Form Completed by: _____
Title / Position: _____
Date: _____
Phone: _____

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

FESOP Quarterly Report

Source Name: Brooks Construction Company, Inc.
 Initial Source Address: 5536 Hoagland Road, Poe, Indiana
 Mailing Address: P.O. Box 9560, Fort Wayne, Indiana 46899
 FESOP No.: F003-10386-05190
 Facility: 120.0 MMBtu per hour burner for the aggregate dryer
 Parameter: Sulfur Dioxide (SO₂)
 Limit: the input of No. 2 distillate fuel oil with a maximum sulfur content of 0.5% to the 120.0 MMBtu per hour burner for the aggregate dryer shall be limited to 2,745,000 U.S. gallons per twelve (12) consecutive month period, rolled on a monthly basis. The total for each month shall not exceed the difference between the annual usage limit minus the sum of actual usage from the previous eleven (11) months. During the first twelve (12) months of operation under this permit, the input of No. 2 distillate fuel oil shall be limited such that the total gallons divided by the accumulated months of operation shall not exceed 228,750 U.S. gallons per month.

YEAR: _____

| Month | Column 1 | Column 2 | Column 1 + Column 2 |
|-------|---|---|---|
| | No. 2 Fuel Oil Usage This Month (gallons) | No. 2 Fuel Oil Usage Previous 11 Months (gallons) | 12 Month Total No. 2 Fuel Oil Usage (gallons) |
| | | | |
| | | | |
| | | | |

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

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

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

FESOP Quarterly Report

Source Name: Brooks Construction Company, Inc.
 Initial Source Address: 5536 Hoagland Road, Poe, Indiana
 Mailing Address: P.O. Box 9560, Fort Wayne, Indiana 46899
 FESOP No.: F003-10386-05190
 Facility: Cold-Mix (Stockpile Mix) Asphalt Storage piles
 Parameter: Volatile Organic Compounds (VOC)
 Limit: The VOC usage in the production of cold mix (stockpile mix) asphalt shall be limited to 87.65 tons per twelve (12) consecutive month period, rolled on a monthly basis. The total for each month shall not exceed the difference between the annual usage limit minus the sum of actual usage from the previous eleven (11) months. This is equivalent to 92.26 tons of diluent used per twelve (12) consecutive month period in the production of cold mix (stockpile mix) asphalt based on 95% volatilization. During the first twelve (12) months of operation under this permit, the usage of diluent shall be limited such that the total usage divided by the accumulated months of operation shall not exceed 7.68 tons per month.

YEAR: _____

| Month | Column 1 | Column 2 | Column 1 + Column 2 |
|-------|---------------------------------|---|-------------------------------------|
| | Diluent Usage This Month (tons) | Diluent Usage Previous 11 Months (tons) | 12 Month Total Diluent Usage (tons) |
| | | | |
| | | | |
| | | | |

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

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

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

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

Source Name: Brooks Construction Company, Inc.
 Initial Source Address: 5536 Hoagland Road, Poe, Indiana
 Mailing Address: P.O. Box 9560, Fort Wayne, Indiana 46899
 FESOP No.: F003-10386-05190

Months: _____ **to** _____ **Year:** _____

This report is an affirmation that the source has met all the compliance monitoring requirements stated in this permit. This report shall be submitted quarterly. Any deviation from the compliance monitoring requirements and the date(s) of each deviation must be reported. Additional pages may be attached if necessary. This form can be supplemented by attaching the Emergency/Deviation Occurrence Report. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD

9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD.

| Compliance Monitoring Requirement (eg. Permit Condition D.1.3) | Number of Deviations | Date of each Deviation |
|---|----------------------|------------------------|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

Form Completed By: _____
 Title/Position: _____
 Date: _____
 Phone: _____

Attach a signed certification to complete this report.

Indiana Department of Environmental Management Office of Air Management

Technical Support Document (TSD) for a Federally Enforceable State Operating Permit (FESOP) and Enhanced New Source Review (ENSR)

Source Background and Description

| | |
|---------------------------------|--|
| Source Name: | Brooks Construction Company, Inc. |
| Initial Source Location: | 5536 Hoagland Road, Poe, Indiana |
| County: | Allen |
| SIC Code: | 2951 |
| Operation Permit No.: | F003-10386-05190 |
| Permit Reviewer: | Trish Earls/EVP |

The Office of Air Management (OAM) has reviewed a Federally Enforceable State Operating Permit (FESOP) application from Brooks Construction Company, Inc. relating to the operation of a portable drum mix asphalt plant.

Unpermitted Emission Units and Pollution Control Equipment Requiring ENSR

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

New Emission Units and Pollution Control Equipment Requiring ENSR

The application includes information relating to the construction and operation of the following equipment:

- (1) one (1) asphalt parallel flow drum mix dryer capable of processing 400 tons per hour of raw material, equipped with one (1) 120 million (MM) British thermal units (Btu) per hour No. 2 distillate fuel oil fired burner, with one (1) jet pulse baghouse for particulate matter (PM) control, exhausting at one (1) stack (ID No. S/V-1);
- (2) cold-mix (stockpile mix) asphalt storage piles; and
- (3) one (1) 30,000 gallon liquid asphalt storage tank (ID No. Tank 10), constructed in 1989.

Insignificant Activities

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

- (1) Fuel oil-fired combustion sources with heat input equal to or less than two (2) million Btu per hour and firing fuel containing less than five-tenths (0.5) percent sulfur by weight including:
 - (a) one (1) hot oil heater, with a maximum rated capacity of 0.7 MMBtu per hour, exhausting through one (1) stack (ID No. S/V-2).

- (2) Combustion source flame safety purging on startup.
- (3) A petroleum fuel other than gasoline, dispensing facility, having a storage capacity of less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month.
- (4) Other categories with emissions below insignificant thresholds:
 - (a) cutting, welding, and grinding operations for repair and maintenance only;
 - (b) one (1) 8,000 gallon fuel oil storage tank (ID No. Tank 11);
 - (c) one (1) drag slat conveyor;
 - (d) one (1) cold feed system consisting of four (4) compartments with a total aggregate holding capacity of 100 tons;
 - (e) one (1) hot mix storage silo with a maximum storage capacity of 100 tons; and
 - (f) one (1) recycled asphalt pavement (RAP) feed bin with a maximum holding capacity of 25 tons.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the FESOP 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 incomplete FESOP application for the purposes of this review was received on November 17, 1998. Additional information received on December 2, 1998, makes the FESOP application administratively complete.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (7 pages).

Potential Emissions

Pursuant to 326 IAC 1-2-55, Potential Emissions are defined as “emissions of any one (1) pollutant which would be emitted from a facility, if that facility were operated without the use of pollution control equipment unless such control equipment is necessary for the facility to produce its normal product or is integral to the normal operation of the facility.”

| Pollutant | Potential Emissions (tons/year) |
|-----------------|---------------------------------|
| PM | 33,368.2 |
| PM-10 | 7,563.4 |
| SO ₂ | 268.1 |
| VOC | 58,879.0 |
| CO | 18.9 |
| NO _x | 75.5 |

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

| HAP's | Potential Emissions (tons/year) |
|---------------------|---------------------------------|
| Acetaldehyde | 2.28 |
| Acrolein | 0.05 |
| Arsenic | neg. |
| Benzene | 0.72 |
| Beryllium | neg. |
| Cadmium | neg. |
| Chromium | 0.04 |
| Ethylbenzene | 0.67 |
| Formaldehyde | 4.21 |
| Lead | neg. |
| Manganese | neg. |
| Mercury | neg. |
| Methyl Ethyl Ketone | 0.04 |
| Nickel | 0.01 |
| Propionaldehyde | 0.23 |
| Quinone | 0.28 |
| Toluene | 1.31 |
| POM | 1.02 |
| Xylene | 0.28 |
| TOTAL | 11.13 |

- (a) The potential emissions (as defined in 326 IAC 1-2-55) of PM-10, 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.
- (b) This source, otherwise required to obtain a Title V permit, has agreed to accept a permit with federally enforceable limits that restrict its PTE to below the Title V emission levels. Therefore, this source will be issued a Federally Enforceable State Operating Permit (FESOP), pursuant to 326 IAC 2-8.

Limited Potential to Emit

- (a) The source has accepted a federally enforceable limit on potential to emit PM-10 of less than 100 tons per year, consisting of:
 - (i) 73.0 tons per year for the significant activities; and
 - (ii) 26.0 tons per year for the insignificant activities.
- (b) The source has accepted a federally enforceable limit on potential to emit SO₂ of less than 100 tons per year, consisting of:
 - (i) 97.45 tons per year for the significant activities; and
 - (ii) 1.55 tons per year for the insignificant activities.
- (c) The source has accepted a federally enforceable limit on potential to emit VOC of less than 100 tons per year, consisting of:
 - (i) 98.99 tons per year for the significant activities; and
 - (ii) 0.01 tons per year for the insignificant activities.

- (d) The table below summarizes the total limited potential to emit of the significant and insignificant emission units.

| Process/facility | Limited Potential to Emit (tons/year) | | | | | | |
|--------------------------|--|-------------|-----------------|-------------|-------------|-----------------|--------------|
| | PM | PM-10 | SO ₂ | VOC | CO | NO _x | HAPs |
| Aggregate Drying | 57.83 | 73.0 | 97.45 | 11.34 | 6.86 | 27.45 | 11.07 |
| Conveying/Handling* | 4.70 | 2.22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Cold Mix Storage | 0.0 | 0.0 | 0.0 | 87.65 | 0.0 | 0.0 | 0.0 |
| Unpaved Roads* | 67.77 | 23.72 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Storage Piles* | 0.13 | 0.04 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Insignificant Activities | 0.04 | 0.02 | 1.55 | 0.01 | 0.11 | 0.44 | 0.0 |
| Total Emissions | 130.47 | 99.0 | 99.0 | 99.0 | 6.97 | 27.89 | 11.07 |

* Note: These facilities are also listed as Insignificant Activities.

County Attainment Status

The source is located in Allen County.

| Pollutant | Status |
|-----------------|------------|
| PM-10 | attainment |
| SO ₂ | attainment |
| NO ₂ | attainment |
| Ozone | attainment |
| CO | attainment |
| Lead | attainment |

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO_x) are precursors for the formation of ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to the ozone standards. Allen County has been designated as attainment or unclassifiable for ozone.

Portable Source

- (a) Initial Location
 This is a portable source and its initial location is 5536 Hoagland Road, Poe, Indiana.
- (b) PSD and Emission Offset Requirements
 The emissions from this portable source were reviewed under the requirements of the Prevention of Significant Deterioration (PSD), 326 IAC 2-2, 40 CFR 52.21, and Emission Offset, 326 IAC 2-3.

Federal Rule Applicability

- (a) This source is subject to the New Source Performance Standard, 326 IAC 12, (40 CFR 60.90, Subpart I) because it meets the definition of a hot mix asphalt facility pursuant to the rule and it was constructed after June 11, 1973. This rule limits particulate matter emissions to 0.04 grains per dry standard cubic foot (gr/dscf) and also limits visible emissions to 20% opacity. This is equivalent to a particulate matter emission rate of 17.6 pounds per hour. The source will comply with this rule by using a baghouse to limit particulate matter emissions to less than 0.03 gr/dscf (see Appendix A, page 7 of 7, for detailed calculations).
- (b) The one (1) 30,000 gallon liquid asphalt storage tank (Tank 10) is subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60.110b, Subpart Kb) because the tank was constructed after July 23, 1984, and has a storage capacity greater than 40 cubic meters. However, since the tank has a storage capacity greater than 75 cubic meters but less than 151 cubic meters, and the liquid stored in the tank has a maximum true vapor pressure of less than 15.0 kPa, it is not subject to 40 CFR 116b paragraph (c). Also, because the liquid stored in the tank has a maximum true vapor pressure less than 27.6 kPa, it is not subject to the requirements of 40 CFR 60.112b paragraphs (a) or (b). The tank is subject to only 40 CFR Part 60.116b, paragraphs (a), (b), and (d) which require record keeping.
- (c) The one (1) 8,000 gallon fuel oil storage tank (Tank 11) is not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60.110b, Subpart Kb) because the tank has a storage capacity less than 40 cubic meters.
- (d) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs), 40 CFR Part 63, applicable to this source.

State Rule Applicability - Entire Source

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 because it is a portable source and can be located in any of the counties listed in 326 IAC 2-6-1(a). The potential to emit any criteria pollutant, including federally enforceable limits, is less than 100 tons per year. However, this source still has the potential to emit NO_x and VOC into the air at levels greater than ten (10) tons per year, therefore, the source is subject to this rule. Pursuant to this rule, the owner/operator of this facility must annually submit an emission statement of the facility. The annual statement must be received by April 15 of each year and must contain the minimum requirements as specified in 326 IAC 2-6-4.

326 IAC 2-8-4 (FESOP)

This source is subject to 326 IAC 2-8-4 (FESOP). Pursuant to this rule, the usage of No. 2 distillate fuel oil with a sulfur content of 0.5% shall be limited to 2,745,000 U.S. gallons per twelve (12) consecutive month period, rolled on a monthly basis, so that SO₂ emissions are limited below 100 tons per year. The VOC usage in the production of cold mix (stockpile mix) asphalt shall be limited to 87.65 tons per twelve (12) consecutive month period, rolled on a monthly basis. This is equivalent to 92.26 tons of diluent used per twelve (12) month period in the production of cold mix (stockpile mix) asphalt based on 95% volatilization. Also, PM-10 emissions from the aggregate dryer shall be limited to 16.6 pounds per hour. The source will comply with the PM-10 emission limit by utilizing a baghouse for controlling PM-10 emissions to 1.7 pounds per hour from the aggregate dryer. Therefore, the requirements of 326 IAC 2-7 do not apply.

326 IAC 5-1 (Visible Emissions Limitations)

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

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

326 IAC 6-4 (Fugitive Dust Emissions)

This source is subject to 326 IAC 6-4 for fugitive dust emissions. Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions), fugitive dust shall not be visible crossing the boundary or property line of a source. Observances of visible emissions crossing property lines may be refuted by factual data expressed in 326 IAC 6-4-2(1), (2) or (3).

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

This source is subject to 326 IAC 6-5 for fugitive particulate matter emissions. Pursuant to 326 IAC 6-5, for any new source which has not received all the necessary preconstruction approvals before December 13, 1985, a fugitive dust control plan must be submitted, reviewed and approved. The fugitive dust control plan for this source includes the following:

- (a) Fugitive particulate matter emissions from paved roads, unpaved roads, and parking lots shall be controlled by one or more of the following methods:
 - Paved roads and parking lots:
 - (1) cleaning by vacuum sweeping on an as needed basis (monthly at a minimum)
 - (2) power brooming while wet either from rain or application of water.
 - Unpaved roads and parking lots:
 - (1) paving with asphalt;
 - (2) treating with emulsified asphalt on an as needed basis;
 - (3) treating with water on an as needed basis;
 - (4) double chip and seal the road surface and maintained on an as needed basis.
- (b) Fugitive particulate matter emissions from aggregate stockpiles shall be controlled by one or more of the following methods on an as needed basis:
 - (1) maintaining minimum size and number of stock piles of aggregate;
 - (2) treating around the stockpile area with emulsified asphalt;
 - (3) treating around the stockpile area with water;
 - (4) treating the stockpiles with water.
- (c) Fugitive particulate matter emissions from outdoor conveying of aggregates shall be controlled by the following method on an as needed basis:
 - (1) applying water at the feed and the intermediate points.
- (d) Fugitive particulate matter emissions from the transfer of aggregates shall be controlled by one of the following methods:

- (1) minimize the vehicular distance between transfer points;
 - (2) enclose the transfer points;
 - (3) apply water on transfer points on an as needed basis.
- (e) Fugitive particulate matter emissions from transportation of aggregate by truck, front end loader, etc. shall be controlled by one of the following methods:
- (1) tarping the aggregate hauling vehicles;
 - (2) maintain vehicle bodies in a condition to prevent leakage;
 - (3) spray the aggregates with water;
 - (4) maintain a 10 MPH speed limit in the yard.
- (f) Fugitive particulate matter emissions from the loading and unloading of aggregate shall be controlled by one of the following methods:
- (1) reduce free fall distance to a minimum;
 - (2) reduce the rate of discharge of the aggregate;
 - (3) spray the aggregate with water on an as needed basis.

State Rule Applicability - Individual Facilities

326 IAC 6-1-2 (Particulate Emissions Limitations)

The particulate matter emissions from the aggregate mixing and drying operation are subject to the requirements of 326 IAC 6-1-2 (Particulate Emissions Limitations). The rule requires that the particulate matter emissions be limited to 0.03 gr/dscf. This is equivalent to a particulate matter emission rate of 13.2 pounds per hour. The baghouse shall be in operation at all times the aggregate dryer is in operation, in order to comply with this limit.

326 IAC 6-3-2 (Process Operations)

The aggregate mixing and drying operation is not subject to the requirements of 326 IAC 6-3-2. This rule does not apply if the limitation established in the rule is not consistent with applicable limitations in 326 IAC 6-1 or 326 IAC 12. Since the applicable PM limits established by 326 IAC 6-1-2 and 326 IAC 12, 40 CFR 60, Subpart I, are each less than the PM limit that would be established by 326 IAC 6-3-2 (66.3 pounds per hour, see Appendix A, page 7 of 7), the more stringent limit applies and the limit pursuant to 326 IAC 6-3-2 does not apply.

326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)

The sulfur dioxide emissions from the 120 MMBtu/hr dryer burning No. 2 distillate fuel oil shall be limited to 0.5 lb/MMBtu heat input. This equates to a fuel oil sulfur content limit of 0.5%. Therefore, the sulfur content of the fuel must be less than or equal to 0.5% in order to comply with this rule (See Appendix A, Page 7 of 7 for detailed calculations). The source will comply with this rule by using No. 2 distillate fuel oil with a sulfur content of 0.5% or less.

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

This source is subject to 326 IAC 7-2-1 (Reporting Requirements). This rule requires the source to submit to the Office of Air Management upon request records of sulfur content, heat content, fuel consumption, and sulfur dioxide emission rates based on a calendar-month average.

326 IAC 8-5-2 (Miscellaneous Operations: Asphalt Paving)

No person shall cause or allow the use of cutback asphalt or asphalt emulsion containing more than seven percent (7%) oil distillate by volume of emulsion for any paving application except the following purposes:

- 1) penetrating prime coating
- 2) stockpile storage
- 3) application during the months of November, December, January, February and March.

This source manufactures stockpile mix for stockpile storage only, therefore, there is no limit on the % of oil distillate in the liquid asphalt used. The source is in compliance with 326 IAC 8-5-2.

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

The compliance monitoring requirements applicable to this source are as follows:

1. The combustion of No. 2 distillate fuel oil in the aggregate dryer burner has applicable compliance monitoring conditions as specified below:
 - (a) the consumption of No. 2 distillate fuel oil in the aggregate dryer burner must be limited to 2,745,000 U.S. gallons per twelve (12) consecutive month period, rolled on a monthly basis, based on a maximum sulfur content of 0.5% for No. 2 distillate fuel oil, in order to ensure compliance with 326 IAC 2-8 (FESOP).
 - (b) Quarterly reports shall be submitted to OAM Compliance Section. These reports shall include:
 - (1) the monthly usages of No. 2 distillate fuel oil in gallons for SO₂ emissions; and
 - (2) sulfur content and heating value of the fuel oil.

These monitoring conditions are necessary because SO₂ emissions from the combustion of No. 2 fuel oil must be limited such that source-wide SO₂ emissions are below the Title V major source level of 100 tons per year to comply with 326 IAC 2-8-4. Additionally, the sulfur content of the fuel oil must comply with 326 IAC 7-1.1.

2. The production of cold-mix (stockpile mix) asphalt has applicable compliance monitoring conditions as specified below:
 - (a) The VOC usage in the production of cold mix (stockpile mix) asphalt shall be limited to 87.65 tons per twelve (12) consecutive month period, rolled on a monthly basis.

This is equivalent to 92.26 tons of diluent used per twelve (12) month period in the production of cold mix (stockpile mix) asphalt based on 95% volatilization.

- (b) Quarterly reports shall be submitted to OAM Compliance Section. These reports shall include the amount of diluent used per year, rolled on a monthly basis.

These monitoring conditions are necessary because VOC emissions from the production of cold-mix (stockpile mix) asphalt concrete must be limited such that source-wide VOC emissions are below the Title V major source level of 100 tons per year to comply with 326 IAC 2-8-4. Additionally, the source must demonstrate compliance with 326 IAC 8-5-2.

- 3. The conveying, material transfer points, unpaved roads, storage piles, mixing and drying operation have applicable compliance monitoring conditions as specified below:
 - (a) Daily visible emissions notations of the aggregate dryer baghouse stack exhaust shall be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. 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. 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. 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. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed.
 - (b) The Permittee shall record the total static pressure drop across the baghouse controlling the aggregate dryer, at least once daily when the aggregate dryer is in operation. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 2.0 to 8.0 inches of water or a range established during the latest stack test. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when the pressure reading is outside of the above mentioned range for any one reading.

These monitoring conditions are necessary because the baghouse for the aggregate dryer must operate properly to ensure compliance with 326 IAC 6-1-2 (Particulate Emissions Limitations), 40 CFR Part 60.90 (Subpart I-Standards of Performance for Hot Mix Asphalt Facilities), and 326 IAC 2-8 (FESOP).

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 187 hazardous air pollutants (HAPs) set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) FESOP Application Form GSD-08.

- (a) This source will emit levels of air toxics less than those which constitute a major source according to Section 112 of the 1990 Clean Air Act Amendments.

- (b) See attached calculations for detailed air toxic calculations. (Appendix A, page 5 of 7)

Conclusion

The operation of this drum mix asphalt plant shall be subject to the conditions of the attached proposed **FESOP No. F003-10386-05190**.

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

Addendum to the
Technical Support Document for Federally Enforceable State Operating
Permit (FESOP) and Enhanced New Source Review (ENSR)

| | |
|---------------------------------|--|
| Source Name: | Brooks Construction Company, Inc. |
| Initial Source Location: | 5536 Hoagland Road, Poe, Indiana |
| SIC Code: | 2951 |
| County: | Allen |
| Operation Permit No.: | F003-10386-05190 |
| Permit Reviewer: | Trish Earls/EVP |

On January 28, 1999, the Office of Air Management (OAM) had a notice published in the Fort Wayne Journal Gazette, Fort Wayne, Indiana, stating that Brooks Construction Company, Inc. had applied for a Federally Enforceable State Operating Permit (FESOP) to operate a portable drum mix asphalt plant. The notice also stated that OAM 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.

On February 18, 1999, Sam Portanova submitted comments on behalf of the U.S. EPA, Region 5. The summary of the comments and responses is as follows:

Comment #1

Which emission units are new and which are existing units at this source? The liquid asphalt storage tank is listed as built in 1989, but page 1 of the Technical Support Document (TSD) lists this tank under "new emission units". Are the existing units previously permitted?

Response #1

The liquid asphalt storage tank listed under the New Emission Units section of the TSD was built in 1989, but was used at this site for the previously existing plant that was moved out. It will now be used for this new plant that is being constructed at the site. Since the tank by itself has potential emissions below exempt levels, which would not require a permit, and is now part of an entirely new plant, the tank will remain listed under the New Emission Units section of the TSD because it is subject to some of the requirements of the NSPS, 40 CFR 60.110b, Subpart Kb. However, a note will be added to clarify that the tank was used with the plant that was previously located at this site. The New Emission Units and Pollution Control Equipment Requiring ENSR section of the TSD is revised as follows (changes in bold):

New Emission Units and Pollution Control Equipment Requiring ENSR

The application includes information relating to the construction and operation of the following equipment:

- (1) one (1) asphalt parallel flow drum mix dryer capable of processing 400 tons per hour of raw material, equipped with one (1) 120 million (MM) British thermal units (Btu) per hour No. 2 distillate fuel oil fired burner, with one (1) jet pulse baghouse for particulate matter (PM) control, exhausting at one (1) stack (ID No. S/V-1);
- (2) cold-mix (stockpile mix) asphalt storage piles; and
- (3) one (1) 30,000 gallon liquid asphalt storage tank (ID No. Tank 10), constructed in 1989.

Note: This existing tank was also used for the previously existing asphalt plant that was moved from this site.

Comment #2

Condition D.1.4 of the FESOP says that SO₂ emissions shall be limited to 0.5 lb per million Btu heat input or a sulfur content of less than or equal to 0.5%. The 0.5% sulfur content limit does result in 97.45 tons per year, however, the source does have the option of using the 0.5 lb/MMBtu limit instead. Calculating 0.5 lb/MMBtu with 120 MMBtu/hr results in potential emissions of 262.8 tons per year, which exceeds the PSD and Title V thresholds.

Response #2

For fuel oil combustion, sulfur dioxide (SO₂) emissions are a function of the sulfur content of the fuel oil that is combusted. For distillate fuel oil combustion, the rule limits SO₂ emissions to 0.5 pounds per million Btu. This is equivalent to a fuel oil sulfur content of 0.5%. Converting the limit to an equivalent emission rate results in an allowable short term emission rate of 60 pounds per hour for the 120 MMBtu per hour burner. However, to comply with 326 IAC 2-8 (FESOP) and to avoid the requirements of 327 IAC 2-7 (Part 70) by limiting potential SO₂ emissions to less than 100 tons per year, the source has accepted a distillate fuel oil usage limitation in the 120 MMBtu per hour burner and a maximum fuel oil sulfur content limit of 0.5%. Therefore, as long as the source complies with all the requirements of the FESOP, they will not emit more than 100 tons per year of SO₂ and will not exceed the PSD or Title V thresholds. No changes were made to the FESOP or the TSD as a result of this comment.

Comment #3

Are the aggregate drying emissions for VOC, HAPs, NO_x, and CO listed on page 4 of the TSD the maximum potential for this process?

Response #3

The emissions listed in the Limited Potential to Emit table of the TSD represent the limited potential emissions from the aggregate dryer and burner after the limitations on fuel usage have been applied. No changes were made to the FESOP or the TSD as a result of this comment.

Comment #4

The calculations for the cold-mix storage piles show a maximum potential of 58,879 tons per year of VOC emissions, but the emissions are limited to 87 tons per year due to a restriction on the amount of diluent usage. Is the diluent the only source of VOCs from the storage piles?

Response #4

The diluent (oil distillate) in the asphalt binder is the only source of VOC emissions from stockpile storage. Therefore, limiting the diluent usage (of which a maximum of 95% evaporates as VOC) limits VOC emissions. There were no changes to the FESOP or TSD as a result of this comment.

Comment #5

The calculations and TSD list unpaved road emissions as 67.77 tons per year PM and 23.72 tons per year PM10. The total PM10 emissions are calculated to be 99 tons per year, just barely below the Title V threshold. How was 35% determined to be the maximum amount of PM10 in the total PM? Also, are the numbers in the calculations conservative, worst case estimates of the unpaved road emissions? That might be an issue since the source is limiting emissions so close to the major source threshold.

Response #5

The emission calculations for unpaved roadway emissions were originally done using the January, 1995 version of section 13.2.2 of AP-42. As of September, 1998, this section was revised to include new equations for determining particulate matter emissions. Because of this, the assumption that PM10 is 35% of PM emissions has been removed and the emission calculations for unpaved roadway emissions have been corrected using the updated section 13.2.2 of AP-42. Also, upon further review of form PI-22 from the FESOP application submitted by Brooks Construction Company, Inc. and the applicant's emission calculations, it was noted that the distance listed as the distance of a one way trip for the front end loader was actually the distance of a round trip. The emission calculations were also corrected using the correct one way distance. Therefore, as a result of the revised emission calculations, the PM-10 limit for the aggregate mixing and drying operation as listed in condition D.1.3 of the FESOP has been revised. The revised condition D.1.3 now reads as follows (changes in bold or strikeout):

D.1.3 Particulate Matter 10 Microns (PM-10) [326 IAC 2-8-4]

Pursuant to 326 IAC 2-8-4, particulate matter 10 microns emissions from the aggregate mixing and drying operation shall not exceed ~~16.6~~ **11.7** pounds per hour, including both filterable and condensable fractions. Compliance with this limit will satisfy 326 IAC 2-8-4. Therefore, the Part 70 rules (326 IAC 2-7) do not apply.

The portion of the Potential Emissions section of the TSD that lists potential emissions of the criteria pollutants from this source is revised as follows:

| Pollutant | Potential Emissions (tons/year) |
|-----------------|-------------------------------------|
| PM | 33,368.2 33,475.2 |
| PM-10 | 7,563.4 7,585.1 |
| SO ₂ | 268.1 |
| VOC | 58,879.0 |
| CO | 18.9 |
| NO _x | 75.5 |

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

Part (a) of the Limited Potential to Emit section of the TSD is revised to read as follows (changes in bold or strikeout):

- (a) The source has accepted a federally enforceable limit on potential to emit PM-10 of less than 100 tons per year, consisting of:
 - (i) ~~73.0~~ **51.3** tons per year for the significant activities; and
 - (ii) ~~26.0~~ **47.7** tons per year for the insignificant activities.

The Limited Potential to Emit table in the TSD is revised as follows (changes in bold or strikeout):

| Process/facility | Limited Potential to Emit (tons/year) | | | | | | |
|--------------------------|--|----------------------------------|-----------------|-------|------|-----------------|-------|
| | PM | PM-10 | SO ₂ | VOC | CO | NO _x | HAPs |
| Aggregate Drying | 57.83 | 73.0 51.3 | 97.45 | 11.34 | 6.86 | 27.45 | 11.07 |
| Conveying/Handling* | 4.70 | 2.22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Cold Mix Storage | 0.0 | 0.0 | 0.0 | 87.65 | 0.0 | 0.0 | 0.0 |
| Unpaved Roads* | 67.77 174.86 | 23.72 45.46 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Storage Piles* | 0.13 | 0.04 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Insignificant Activities | 0.04 | 0.02 | 1.55 | 0.01 | 0.11 | 0.44 | 0.0 |
| Total Emissions | 430.47 237.56 | 99.0 | 99.0 | 99.0 | 6.97 | 27.89 | 11.07 |

* Note: These facilities are also listed as Insignificant Activities.

Finally, the portion of the State Rule Applicability - Entire Source section of the TSD discussing the applicability of 326 IAC 2-8-4 (FESOP) is revised as follows (changes in bold or strikeout):

326 IAC 2-8-4 (FESOP)

This source is subject to 326 IAC 2-8-4 (FESOP). Pursuant to this rule, the usage of No. 2 distillate fuel oil with a sulfur content of 0.5% shall be limited to 2,745,000 U.S. gallons per twelve (12) consecutive month period, rolled on a monthly basis, so that SO₂ emissions are limited below 100 tons per year. The VOC usage in the production of cold mix (stockpile mix) asphalt shall be limited to 87.65 tons per twelve (12) consecutive month period, rolled on a monthly basis. This is equivalent to 92.26 tons of diluent used per twelve (12) month period in the production of cold mix (stockpile mix) asphalt based on 95% volatilization. Also, PM-10 emissions from the aggregate dryer shall be limited to ~~16.6~~ **11.7** pounds per hour. The source will comply with the PM-10 emission limit by utilizing a baghouse for controlling PM-10 emissions to 1.7 pounds per hour from the aggregate dryer. Therefore, the requirements of 326 IAC 2-7 do not apply.

Company Name:
Plant Location:
County:
Date Received:
Permit Reviewer:

Brooks Construction Company, Inc.
5536 Hoagland Road, Poe, Indiana
Allen
November 17, 1998
Trish Earls

**** aggregate dryer burner****

The following calculations determine the amount of emissions created by the combustion of #2 distillate :
@ 0.50 % 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 1.3-6.

$$\text{Criteria Pollutant:} \quad \frac{120 \text{ MMBtu/hr} * 8,760 \text{ hr/yr}}{140,000 \text{ Btu/gal} * 2,000 \text{ lb/ton}} * \text{Ef (lb/1,000 gal)} = (\text{ton/yr})$$

| | | |
|----------------|--------------------|----------------------|
| P M: | 2.0 lb/1000 gal : | 7.51 ton/yr |
| P M-10: | 1.0 lb/1000 gal : | 3.75 ton/yr |
| S O 2: | 71.0 lb/1000 gal : | 266.55 ton/yr |
| N O x: | 20.0 lb/1000 gal : | 75.09 ton/yr |
| V O C: | 0.20 lb/1000 gal : | 0.75 ton/yr |
| C O: | 5.0 lb/1000 gal : | 18.77 ton/yr |

****hot oil heater****

The following calculations determine the amount of emissions created by the combustion of #2 distillate :
@ 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 1.3-6.

$$\text{Criteria Pollutant:} \quad \frac{0.7 \text{ MMBtu/hr} * 8,760 \text{ hr/yr}}{140,000 \text{ Btu/gal} * 2,000 \text{ lb/ton}} * \text{Ef (lb/1,000 gal)} = (\text{ton/yr})$$

| | | |
|----------------|--------------------|--------------------|
| P M: | 2.0 lb/1000 gal : | 0.04 ton/yr |
| P M-10: | 1.1 lb/1000 gal : | 0.02 ton/yr |
| S O 2: | 71.0 lb/1000 gal : | 1.55 ton/yr |
| N O x: | 20.0 lb/1000 gal : | 0.44 ton/yr |
| V O C: | 0.34 lb/1000 gal : | 0.01 ton/yr |
| C O: | 5.0 lb/1000 gal : | 0.11 ton/yr |

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

The following calculations determine the amount of worst case emissions created by aggregate drying based on 8,760 hours of use and USEPA's AP-42, 5th Edition, Section 11.1 - Hot Mix Asphalt Plants, Tables 11.1-1 and 11.1-2 for a drum mix dryer which has the capability of combusting fuel oil:

$$\text{Pollutant:} \quad \frac{\text{Ef} \quad \text{lb/ton} \times \quad 400 \quad \text{ton/hr} \times \quad 8,760 \text{ hr/yr}}{2,000 \quad \text{lb/ton}}$$

| | | | |
|----------------------------|----------------|-------------------|-------------------------|
| Criteria Pollutant: | P M: | 19 lb/ton = | 33,288.00 ton/yr |
| | P M-10: | 4.3 lb/ton = | 7,533.60 ton/yr |
| | VOC: | 0.006317 lb/ton = | 11.07 ton/yr |

The VOC emission factor for aggregate drying includes HAP emissions which are assumed to be VOC.

**** conveying / handling ****

The following calculations determine the amount of emissions created by material handling, based on 8.7 and AP-42, Section 13.2.4, Equation 1. The emission factor for calculating PM emissions is calculated as follows:
 PM-10 Emissions:

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

= 1.27E-03 lb PM-10/ton
 2.68E-03 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 = 4.1 average material moisture content (%)

$$\frac{400 \text{ ton/hr} \cdot 8,760 \text{ hrs/yr} \cdot E_f \text{ (lb/ton of material)}}{2,000 \text{ lb/ton}} = \text{(ton/yr)}$$

Total PM 10 Emissions: 2.22 tons/yr
Total PM Emissions: 4.70 tons/yr

**** unpaved roads ****

The following calculations determine the amount of emissions created by vehicle traffic on unpaved roads, based on 8,760 hours of use and AP-42, Ch 13.2.2.

I. Front End Loader

$$48 \text{ trip/hr} \times 0.038 \text{ mile/trip} \times 2 \text{ (round trip)} \times 8,760 \text{ hr/yr} = 31956.48 \text{ miles per year}$$

$$E_f = \left(\frac{k \cdot (s/12)^{0.8} \cdot (W/3)^{0.5}}{(M/0.2)^{0.4}} \right) \cdot \left[\frac{365-p}{365} \right]$$

= 10.94 lb PM/mile
 = 2.85 lb PM-10/mile

where k = 10 (lb/VMT) for TSP emissions
 k = 2.6 (lb/VMT) for PM-10 emissions
 s = 4.8 % silt content of unpaved roads
 M = 0.2 surface material moisture content (%)
 p = 125 days of rain greater than or equal to 0.01 inches
 W = 36 tons average vehicle weight
 S = 9 miles/hr vehicle speed
 w = 4 wheels

$$\text{PM: } \frac{10.94 \text{ lb/mi} \times 31956.5 \text{ mi/yr}}{2000 \text{ lb/ton}} = 174.86 \text{ tons/yr}$$

$$\text{PM-10: } \frac{2.85 \text{ lb/mi} \times 31956.5 \text{ mi/yr}}{2000 \text{ lb/ton}} = 45.46 \text{ tons/yr}$$

Total PM Emissions From Unpaved Roads = 174.86 tons/yr
Total PM-10 Emissions From Unpaved Roads = 45.46 tons/yr

**** storage ****

The following calculations determine the amount of emissions created by wind erosion of storage stockpiles over 8,760 hours of use and USEPA'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) |
|--------------|---------------------|-------------------|-------------------------|------------------------|---------------------------|
| Slag | 1.0 | 0.200 | 1,000 | 0.04 | 0.01 |
| RAP | 0.8 | 0.500 | 20,000 | 0.08 | 0.03 |
| Total | | | | 0.13 | 0.04 |

Sample Calculation:

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

$$= 1.16 \text{ lb/acre/day}$$

where s = 1 % silt
 p = 125 days of rain greater than or equal to 0.01 inches
 f = 15 % of wind greater than or equal to 12 mph

Note: PM-10 emissions are approximately 35% of PM emissions

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

The following calculations determine the amount of worst case VOC emissions created by the application of a typical value of 35% by volume of diluent, based on 8,760 hours of use and USEPA's AP-42, 5th Edition, S

VOC Emission Factor = 1.7% weight percent flash-off of cold mix
 Potential Throughput (tons/yr) = 3,504,000 tons/yr stockpile mix

Potential VOC Emissions (tons/yr) = Potential Throughput (tons/yr) * wt percent flash-off
Potential VOC Emissions = 58,867.20 tons/yr

* Weight percent flash-off is based on a 7.0 percent by weight of cutback asphalt in stockpile mix, of which 35% is based on the cutback asphalt containing 35% by volume of diluent of which 95% evaporates (from Table 4.5)

**** summary of source emissions before controls ****

Criteria Pollutants:

| | | |
|----------------|-------------------------|---|
| P M: | 33,475.24 ton/yr | |
| P M-10: | 7,585.11 ton/yr | |
| S O 2: | 268.11 ton/yr | |
| N O x: | 75.52 ton/yr | |
| V O C: | 58,879.03 ton/yr | (VOCs include HAPs from aggregate drying operation) |
| C O: | 18.88 ton/yr | |

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

In order to qualify for the FESOP program, this facility must limit PM-10, SO₂, and VOC emissions to 99.0. Consequently, SO₂ emissions from the aggregate dryer must be limited to 97.45 tons per year (99.0 ton/yr - from the hot oil heater).

* Emissions of PM and PM-10 from aggregate drying operations are controlled at 99.900 % control efficiency.

The following calculations determine the amount of emissions created by No.2 distillate fuel oil @ 0.50 % sulfur based on a fuel usage limitation of 2,745,070 gal/yr:

$$\text{No. 2 Distillate Oil: } \frac{2,745,070 \text{ gal/yr}}{2,000 \text{ lb/ton}} \times \text{Ef (lb/1,000 gal)} = (\text{ton/yr})$$

| | | |
|-------------------|--------------------|-------------------|
| PM: | 2.0 lb/1000 gal : | 2.75E-03 ton/yr * |
| PM-10: | 1.0 lb/1000 gal : | 1.37E-03 ton/yr * |
| SO ₂ : | 71.0 lb/1000 gal : | 97.45 ton/yr |
| NO _x : | 20.0 lb/1000 gal : | 27.45 ton/yr |
| VOC: | 0.20 lb/1000 gal : | 0.27 ton/yr |
| CO: | 5.0 lb/1000 gal : | 6.86 ton/yr |

Primary Fuel Usage Limitations

Fuel Oil: #2 distillate fuel oil

$$\frac{97.45 \text{ tons SO}_2/\text{year limited}}{266.55 \text{ tons SO}_2/\text{year potential}} \times 7508.57 \frac{\text{Kgals}}{\text{year potential}} = 2745.07 \frac{\text{Kgals}}{\text{year limited}}$$

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

| | | | |
|-----------------------|--------------------|---|--------------|
| hot oil heater: | | nonfugitive | |
| PM: | 0.04 ton/yr x | 100.00% emitted after controls | 0.04 ton/yr |
| PM-10: | 0.02 ton/yr x | 100.00% emitted after controls | 0.02 ton/yr |
| aggregate drying: | | nonfugitive | |
| PM: | 33,288.00 ton/yr x | 0.10% emitted after controls | 33.29 ton/yr |
| PM-10: | 7,533.60 ton/yr x | 0.10% emitted after controls | 7.53 ton/yr |
| VOC: | 11.07 ton/yr x | 100.00% emitted after controls | 11.07 ton/yr |
| conveying/handling: | | fugitive | |
| PM: | 4.70 ton/yr x | 50% emitted after controls | 2.35 ton/yr |
| PM-10: | 2.22 ton/yr x | 50% emitted after controls | 1.11 ton/yr |
| unpaved roads: | | fugitive | |
| PM: | 174.86 ton/yr x | 50% emitted after controls | 87.43 ton/yr |
| PM-10: | 45.46 ton/yr x | 50% emitted after controls | 22.73 ton/yr |
| storage piles: | | fugitive | |
| PM: | 0.13 ton/yr x | 50% emitted after controls | 0.06 ton/yr |
| PM-10: | 0.04 ton/yr x | 50% emitted after controls | 0.02 ton/yr |
| cold mix VOC storage: | | fugitive | |
| VOC: | 58,867.20 ton/yr | 92.26 Limited Diluent Throughput (tons) | 87.65 ton/yr |

**** summary of source emissions after controls ****

| Criteria Pollutant: | Non-Fugitive | Fugitive | Total |
|---------------------|--------------|--------------|---------------|
| PM: | 33.33 ton/yr | 89.84 ton/yr | 123.17 ton/yr |
| PM-10: | 7.56 ton/yr | 23.87 ton/yr | 31.42 ton/yr |
| SO ₂ : | 99.00 ton/yr | 0.00 ton/yr | 99.00 ton/yr |
| NO _x : | 27.89 ton/yr | 0.00 ton/yr | 27.89 ton/yr |
| VOC: | 11.35 ton/yr | 87.65 ton/yr | 99.00 ton/yr |
| CO: | 6.97 ton/yr | 0.00 ton/yr | 6.97 ton/yr |

Hazardous Air Pollutants (HAPs)

**** aggregate dryer burner****

The following calculations determine the amount of HAP emissions created by the combustion of distillat & after controls 0.50 % 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 1.3-11.

| | | | |
|----------------------------------|-------------------------------|------------------------|---|
| Hazardous Air Pollutants (HAPs): | 120 MMBtu/hr * 8760 hr/yr | | * Ef (lb/10 ¹² Btu) = (ton/yr) |
| | 2,000 lb/ton | | |
| | | Potential To Emit | Limited Emissions |
| Arsenic: | 4.2 lb/10 ¹² Btu = | 2.21E-03 ton/yr | 2.21E-06 ton/yr |
| Beryllium: | 2.5 lb/10 ¹² Btu = | 1.31E-03 ton/yr | 1.31E-06 ton/yr |
| Cadmium: | 11 lb/10 ¹² Btu = | 5.78E-03 ton/yr | 5.78E-06 ton/yr |
| Chromium: | 67 lb/10 ¹² Btu = | 3.52E-02 ton/yr | 3.52E-05 ton/yr |
| Lead: | 8.9 lb/10 ¹² Btu = | 4.68E-03 ton/yr | 4.68E-06 ton/yr |
| Manganese: | 14 lb/10 ¹² Btu = | 7.36E-03 ton/yr | 7.36E-06 ton/yr |
| Mercury: | 3 lb/10 ¹² Btu = | 1.58E-03 ton/yr | 1.58E-06 ton/yr |
| Nickel: | 18 lb/10 ¹² Btu = | 9.46E-03 ton/yr | 9.46E-06 ton/yr |
| | <u>Total HAPs =</u> | <u>6.76E-02 ton/yr</u> | <u>6.76E-05 ton/yr</u> |

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

The following calculations determine the amount of HAP emissions created by aggregate drying before & based on 8,760 hours of use and USEPA's AP-42, 5th Edition, Section 11.1 - Hot Mix Asphalt Plants, Table drum mix dryer which can be fired with fuel oil.

| | | | | | | |
|---|-----------|----------|------|----------|---------------------|---------------------|
| Pollutant: | Ef | lb/ton x | 400 | ton/hr x | 8760 hr/yr | |
| | | | 2000 | lb/ton | | |
| Hazardous Air Pollutants (HAPs): | | | | | Potential To Emit | Limited Emissions |
| Acetaldehyde: | 1.30E-03 | lb/ton = | | | 2.28 ton/yr | 2.28 ton/yr |
| Acrolein: | 2.60E-05 | lb/ton = | | | 0.05 ton/yr | 0.05 ton/yr |
| Benzene: | 4.10E-04 | lb/ton = | | | 0.72 ton/yr | 0.72 ton/yr |
| Ethylbenzene: | 3.80E-04 | lb/ton = | | | 0.67 ton/yr | 0.67 ton/yr |
| Formaldehyde: | 2.40E-03 | lb/ton = | | | 4.20 ton/yr | 4.20 ton/yr |
| Methyl Ethyl Ketone: | 2.00E-05 | lb/ton = | | | 0.04 ton/yr | 0.04 ton/yr |
| Propionaldehyde: | 1.30E-04 | lb/ton = | | | 0.23 ton/yr | 0.23 ton/yr |
| Quinone: | 1.60E-04 | lb/ton = | | | 0.28 ton/yr | 0.28 ton/yr |
| Toluene: | 7.50E-04 | lb/ton = | | | 1.31 ton/yr | 1.31 ton/yr |
| **Total Polycyclic Organic Matter (POM): | 5.810E-04 | lb/ton = | | | 1.02 ton/yr | 1.02 ton/yr |
| Xylene: | 1.60E-04 | lb/ton = | | | 0.28 ton/yr | 0.28 ton/yr |
| | | | | | <u>Total HAPs =</u> | <u>11.07 ton/yr</u> |

** total POM includes 2-Methylnapthalene, Acenaphthylene, Anthracene, Fluorene, Naphthalene, Phenanthr

**** summary of source HAP emissions potential to emit ****

Hazardous Air Pollutants (HAPs):

| | |
|----------------------|---------------------|
| Acetaldehyde: | 2.278 ton/yr |
| Acrolein: | 0.046 ton/yr |
| Arsenic: | 0.002 ton/yr |
| Benzene: | 0.718 ton/yr |
| Beryllium: | 0.001 ton/yr |
| Cadmium: | 0.006 ton/yr |
| Chromium: | 0.035 ton/yr |
| Ethylbenzene: | 0.666 ton/yr |
| Formaldehyde: | 4.205 ton/yr |
| Lead: | 0.005 ton/yr |
| Manganese: | 0.007 ton/yr |
| Mercury: | 0.002 ton/yr |
| Methyl Ethyl Ketone: | 0.035 ton/yr |
| Nickel: | 0.009 ton/yr |
| Propionaldehyde: | 0.228 ton/yr |
| Quinone: | 0.280 ton/yr |
| Toluene: | 1.314 ton/yr |
| Total POM: | 1.018 ton/yr |
| Xylene: | 0.280 ton/yr |
| Total: | 11.13 ton/yr |

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

Hazardous Air Pollutants (HAPs):

| | |
|----------------------------------|---------------------|
| Acetaldehyde: | 2.278 ton/yr |
| Acrolein: | 0.046 ton/yr |
| Arsenic: | 0.000 ton/yr |
| Benzene: | 0.718 ton/yr |
| Beryllium: | 0.000 ton/yr |
| Cadmium: | 0.000 ton/yr |
| Chromium: | 0.000 ton/yr |
| Ethylbenzene: | 0.666 ton/yr |
| Formaldehyde: | 4.205 ton/yr |
| Lead: | 0.000 ton/yr |
| Manganese: | 0.000 ton/yr |
| Mercury: | 0.000 ton/yr |
| Methyl Ethyl Ketone: | 0.035 ton/yr |
| Nickel: | 0.000 ton/yr |
| Propionaldehyde: | 0.228 ton/yr |
| Quinone: | 0.280 ton/yr |
| Toluene: | 1.314 ton/yr |
| Total Polycyclic Organic Matter: | 1.018 ton/yr |
| Xylene: | 0.280 ton/yr |
| Total: | 11.07 ton/yr |

**** miscellaneous ****

326 IAC 7 Compliance Calculations:

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

$$\begin{array}{rcl} 0.5 \text{ lb/MMBtu} & : & 140,000 \text{ Btu/gal} = 70 \text{ lb/1000gal} \\ 70 \text{ lb/1000gal} & & 142 \text{ lb/1000 gal} = 0.5 \% \end{array}$$

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 process weight rates in excess of 3

$$\text{limit} = 55 * (400 ^{0.11}) - 40 = 66.31 \text{ lb/hr or } 290.45 \text{ ton/yr}$$

Since this emission limit exceeds the PSD source definition of 250 tons/yr, the Subpart I allowable emission and the 326 IAC 6-1-2 allowable emission limit of 53.22 tons/yr, compliance with the PM limit pursuant to 326 IAC 6-3-2 and will exempt the source from the requirements of 326 IAC 2-2 (PSD).

PM-10 Emission Limit for Aggregate Dryer:

$$\begin{array}{rcl} (99.0 \text{ tons PM-10/yr} - 47.74 \text{ tons PM-10/yr from other sources}) & & \\ = 51.3 \text{ tons PM-10/yr} & = & 11.70 \text{ lbs/hr} \end{array}$$

PM-10 emissions from the aggregate dryer are controlled to 1.72 lbs/hr < 11.7 lb/hr (Will comply)

Compliance with NSPS (326 IAC 12; 40 CFR 60.90 to 60.93, Subpart I) and 326 IAC 6-1-2

The following calculations determine compliance with 326 IAC 6-1-2 (for counties listed in 326 IAC 6-1-7) or limits stack emissions from asphalt plants to 0.03 gr/dscf (when in counties listed in 326 IAC 6-1-7), and 0.03 gr/dscf (when not located in those counties):

$$\frac{33.29 \text{ ton/yr} * 2000 \text{ lb/ton} * 7000 \text{ gr/lb}}{525,600 \text{ min/yr} * 51,348 \text{ dscf/min}} = 0.017 \text{ gr/dscf (will comply)}$$

| | | |
|---|-------------------------|---------------|
| Allowable particulate emissions under 326 IAC 6-1-2 equate to | 57.83 tons per year, or | 13.20 lbs/hr. |
| Allowable particulate emissions under NSPS equate to | 77.11 tons per year, or | 17.61 lbs/hr. |

Note:

$$\begin{array}{rcl} \text{SCFM} & = & 72,000 \text{ acfm} * (460 + 68) * (1 - 0.041) / (460 + 250) \\ & = & 51,348 \text{ dscfm} \end{array}$$

Assumes exhaust gas temperature of 250F, exhaust gas moisture content of 4.1% and exhaust gas flow of 7