



Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant
DATE: September 7, 2005
RE: Wallace Construction, Inc dba Wap Company / 109-20545-03229
FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

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

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures
FNPER.dot 1/10/05



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

**Wallace Construction, Inc. dba WAP Company
9790 Old State Road 37 North
Martinsville, Indiana 46151**

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

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

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

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|--|--|
| Operation Permit No.: F 109-20545-03229 | |
| Original signed by: Paul Dubenetzky, Chief Permits Branch Office of Air Quality | Issuance Date: September 7, 2005 Expiration Date: September 7, 2010 |

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SECTION A SOURCE SUMMARY

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

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

The Permittee owns and operates a stationary hot mix asphalt production source.

| | |
|-------------------------|--|
| Authorized individual: | President |
| Source Address: | 9790 Old State Road 37 North, Martinsville, Indiana 46151 |
| Mailing Address: | P.O. Box 1432, Martinsville, Indiana 46151 |
| General Source Phone: | 317 422-5356 |
| SIC Code: | 2951 |
| Source Location Status: | Morgan Nonattainment for 8-hour ozone and PM _{2.5} . Attainment for all other 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 stationary source consists of the following emission units and pollution control devices:

- (a) One (1) batch mixer, identified as EU B-1, installed in 1965, equipped with a cyclone and a wet scrubber, connected in series, installed in 1965, exhausted through Stack S-1, capacity 250 tons of hot mix asphalt per hour.
- (b) One (1) No. 4 distillate oil-fired dryer/burner, identified as EU B-2, installed in 1965 and replaced in kind in 1999 due to age, exhausted through Stack S-1, rated at 75.0 million British thermal units per hour.
- (c) One (1) No. 2 distillate oil-fired hot oil heater, installed in 1999, rated at 2.0 million British thermal units per hour.
- (d) One (1) storage tank, identified as V-4, installed in the 1970's in Coral 2, capacity: 20,000 gallons of liquid asphalt.

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

- (a) Propane for liquefied petroleum gas, or butane-fired combustion sources with heat input equal to or less than six million (6,000,000) British thermal units per hour.
- (b) Fuel oil-fired combustion sources with heat input equal to or less than two million (2,000,000) British thermal units per hour and firing fuel containing less than five-tenths (0.5) percent sulfur by weight.
- (c) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons: one (1) storage tank, known as V-3, installed 1998 in Coral 1, capacity: 500 gallons of gasoline and two (2) storage tanks, known as V-5 and V-6, installed in 1970's in Coral 2, capacity: 7,000 gallons of diesel oil and 6,000

gallons of No. 4 refined fuel oil, respectively.

- (d) 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: two (2) storage tanks, known as V-1 and V-2, installed 1998 in Coral 1, capacity: 2,000 gallons of diesel oil and 1,000 gallons of diesel oil, respectively.
- (e) The following VOC and HAP storage containers: vessels storing lubricating oil, hydraulic oils, machining oils, and machining fluids.
- (f) Application of oils, greases lubricants or other nonvolatile materials applied as temporary protective coatings.
- (g) Degreasing operations, consisting of two (2) open top degreasers, installed in 1998, that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6. [326 IAC 8-3-3] [326 IAC 8-3-6]
- (h) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment. [326 IAC 6-3-2]
- (i) Paved roads and parking lots with public access.

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

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

A.5 Prior Permits Superseded [326 IAC 2-1.1-9.5]

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

SECTION B GENERAL CONDITIONS

B.1 Permit No Defense [IC 13]

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

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

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

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

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

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

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

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

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

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

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

B.10 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)]

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

B.11 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

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

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

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

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

B.12 Preventive Maintenance Plan [326 IAC 1-6-3] [326 IAC 2-8-4(9)] [326 IAC 2-8-5(a)(1)]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall maintain and implement Preventive Maintenance Plans (PMPs), including the following information on each facility:

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

B.13 Emergency Provisions [326 IAC 2-8-12]

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

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

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

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

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

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

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

The notification which shall be submitted by the Permittee does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

investment, or loss of product or raw material of substantial economic value.

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

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

B.14 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]

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

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

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

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

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

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

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a FESOP modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)] The notification by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

- (1) That this permit contains a material mistake.
- (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
- (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]

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

- (d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

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

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

Request for renewal shall be submitted to:

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

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

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

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

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

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

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

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

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

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

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

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

and

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

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

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

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

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

B.19 Permit Revision Requirement [326 IAC 2-8-11.1]

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

B.20 Inspection and Entry [326 IAC 2-8-5(a)(2)] [IC 13-14-2-2] [IC 13-17-3-2] [IC13-30-3-1]

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

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

B.21 Transfer of Ownership or Operational Control [326 IAC 2-8-10] [IC 13-17-3-2]

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

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

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

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

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

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

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

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

SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

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

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

- (a) Pursuant to 40 CFR 52 Subpart P, particulate matter emissions from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than one hundred (100) pounds per hour shall not exceed 0.551 pounds per hour.
- (b) Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than one hundred (100) pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

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

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

- (a) Pursuant to 326 IAC 2-8:
 - (1) The potential to emit any regulated pollutant, except particulate matter (PM), from the entire source shall be limited to less than one hundred (100) tons per twelve (12) consecutive month period. This limitation shall also 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 twelve (12) consecutive month period; and
 - (3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.
- (b) Pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)), potential to emit particulate matter (PM) from the entire source shall be limited to less than two hundred fifty (250) tons per twelve (12) consecutive month period.
- (c) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided the source's potential to emit does not exceed the above specified limits.
- (d) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

C.3 Opacity [326 IAC 5-1]

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

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

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

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

C.5 Incineration [326 IAC 4-2] [326 IAC 9-1-2(3)]

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

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

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

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

Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions shall be controlled according to the plan submitted on November 15, 1999. The plan is included as Attachment A.

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

Except as otherwise provided by statute, rule or in this permit, 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 units vented to the control equipment are in operation.

C.9 Stack Height [326 IAC 1-7]

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

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

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
 - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
 - (2) If there is a change in the following:

- (A) Asbestos removal or demolition start date;
 - (B) Removal or demolition contractor; or
 - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204

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

- (e) **Procedures for Asbestos Emission Control**
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1 emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Demolition and renovation**
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).
- (g) **Indiana 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 to use an Indiana Accredited Asbestos inspector is not federally enforceable.

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

C.11 Performance Testing [326 IAC 3-6]

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

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

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

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

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

Compliance Requirements [326 IAC 2-1.1-11]

C.12 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U.S. EPA.

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

C.13 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented upon issuance of this permit. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment.

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

C.14 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

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

C.15 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-8-4(3)] [326 IAC 2-8-5(1)]

- (a) 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.
- (b) Whenever a condition in this permit requires the measurement of a flow rate, the instrument 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.

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

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

C.16 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

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

- (a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.
- (b) These ERPs shall be submitted for approval to:

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

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

The ERP does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) If the ERP is disapproved by IDEM, OAQ, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.
- (d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.
- (e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.
- (f) Upon direct notification by IDEM, OAQ that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

C.17 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68]

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

C.18 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-8-4] [326 IAC 2-8-5]

- (a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP shall be submitted to IDEM, OAQ upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and is comprised of:
 - (1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an

expected time frame for taking reasonable response steps.

- (2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan to include such response steps taken.
- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:
- (1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or
 - (2) If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.
 - (3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, and it will be ten (10) days or more until the unit or device will be shut down, then the Permittee shall promptly notify the IDEM, OAQ of the expected date of the shut down. The notification shall also include the status of the applicable compliance monitoring parameter with respect to normal, and the results of the response actions taken up to the time of notification.
 - (4) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (c) The Permittee is not required to take any further response steps for any of the following reasons:
- (1) A false reading occurs due to the malfunction of the monitoring equipment and 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.
 - (3) An automatic measurement was taken when the process was not operating.
 - (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.

- (e) The Permittee shall record all instances when response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-8-12 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- (f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

C.19 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4] [326 IAC 2-8-5]

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

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

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

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

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

C.21 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

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

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

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (e) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

Stratospheric Ozone Protection

C.22 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)]: Asphalt Production

- (a) One (1) batch mixer, identified as EU B-1, installed in 1965, equipped with a cyclone and a wet scrubber, connected in series, installed in 1965, exhausted through Stack S-1, capacity 250 tons of hot mix asphalt per hour.
- (b) One (1) No. 4 distillate oil-fired dryer/burner, identified as EU B-2, installed in 1965 and replaced in kind in 1999 due to age, exhausted through Stack S-1, rated at 75.0 million British thermal units per hour.
- (c) One (1) No. 2 distillate oil-fired hot oil heater, installed in 1999, rated at 2.0 million British thermal units per hour.
- (d) One (1) storage tank, identified as V-4, installed in the 1970's in Coral 2, capacity: 20,000 gallons of liquid asphalt.

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

D.1.1 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the batch mixer, identified as EU B-1, shall not exceed 61.0 pounds per hour when operating at a process weight rate of 250 tons per hour.

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

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

D.1.2 Particulate Matter (PM and PM₁₀) [326 IAC 2-8-4] [326 IAC 2-2] [326 IAC 2-3]

- (a) PM emissions from the batch mixer, identified as EU B-1, exhausted through Stack S-1 shall be limited to 48.6 pounds per hour.
- (b) Pursuant to 326 IAC 2-8-4, emissions of particulate matter 10 microns or less in diameter (PM₁₀) from the batch mixer, identified as EU B-1, exhausted through Stack S-1 shall be limited to 21.7 pounds per hour, including both filterable and condensable fractions.

Therefore, the Part 70 rules (326 IAC 2-7), the requirements of 326 IAC 2-2 (PSD) and 326 IAC 2-3 do not apply.

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

Pursuant to 326 IAC 2-8-4, the input of No. 4 fuel oil to the dryer/burner, identified as EU B-2, shall be limited to 2,536,000 gallons per twelve (12) consecutive month period with compliance determined at the end of each month. Therefore, the Part 70 rules (326 IAC 2-7), do not apply.

D.1.4 Volatile Organic Compounds [326 IAC 8-5-2]

Pursuant to 326 IAC 8-5-2, the Permittee 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:

- (a) penetrating prime coating
- (b) stockpile storage
- (c) application during the months of November, December, January, February and March.
- (d) Any change or modification which adds the use of cold mix asphalt, requires prior IDEM, OAQ approval.

D.1.5 Sulfur Dioxide [326 IAC 7-1] [326 IAC 7-2-1] [326 IAC 2-8-4]

- (a) Pursuant to 326 IAC 7-1.1-2, the SO₂ emissions from the dryer/burner, identified as EU B-2, shall not exceed five tenths (0.5) pounds per million British thermal units heat input.
- (b) The sulfur content of the No. 4 distillate oil shall not exceed five tenths percent (0.5%) by weight. Pursuant to 326 IAC 7-2-1, compliance shall be demonstrated on a calendar month average. Compliance with this limit shall satisfy the requirements of 326 IAC 2-8-4.
- (c) Pursuant to 326 IAC 7-2-1, compliance with the limits in paragraphs (a) and (b) shall be demonstrated on a calendar month average. 326 IAC 7-1.1 and 326 IAC 7-2-1 are not federally enforceable.

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 batch mixer, identified as EU B-1, and its control devices.

Compliance Determination Requirements

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

Prior to August 18, 2009, which is five (5) years from the last valid compliance demonstration, in order to demonstrate compliance with Conditions D.1.1 and D.1.2, the Permittee shall perform PM and PM₁₀ testing of the batch mixer stack exhaust S-1 utilizing methods as approved by the Commissioner. These tests shall be repeated at least once every five (5) years from the date of the last valid compliance demonstration. PM₁₀ includes filterable and condensable PM₁₀. Testing shall be conducted in accordance with Section C - Performance Testing.

D.1.8 Sulfur Dioxide Emissions and Sulfur Content

Compliance with Condition D.1.5 shall be determined utilizing one (1) of the following options.

- (a) Pursuant to 326 IAC 3-7-4, the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed five-tenths (0.5) pounds per million British thermal units heat input by:
 - (1) Providing vendor analysis of fuel delivered, if accompanied by a vendor certification; or
 - (2) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.
 - (A) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and
 - (B) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling.

- (b) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from the 75 million British thermal units per hour dryer/burner, identified as EU B-2, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6.

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

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

D.1.9 Particulate Control

In order to comply with Conditions D.1.1 and D.1.2, the cyclone and scrubber for particulate control shall be in operation and control emissions from the batch mixer, identified as EU B-1, at all times that the batch mixer processes are in operation.

D.1.10 Visible Emissions Notations

- (a) Visible emission notations of the batch mixer stack exhaust S-1 shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan – Preparation, Implementation, Records and Reports shall be considered a deviation from this permit.

D.1.11 Parametric Monitoring

The Permittee shall record the flow rate and total static pressure drop across the scrubber used in conjunction with the batch mixer, identified as EU B-1, at least once per day when the asphalt production process is in operation. When for any one reading, the pressure drop across the scrubber is outside the normal range of 2.0 and 6.0 inches of water or the flow rate is outside a range of 350 to 450 gallons per minute or ranges established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan – Preparation, Implementation, Records and Reports. A flow rate or a pressure reading that are outside the above mentioned ranges is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records and Reports shall be considered a deviation from this permit.

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

D.1.12 Scrubber Inspections

An external inspection shall be performed quarterly of the scrubber for the batch mixer. Inspections required shall not be performed in consecutive months. Defective scrubber parts shall be

replaced. A record shall be kept of the results of the inspection.

D.1.13 Scrubber Failure Detection

In the event that the scrubber failure for the batch mixer has been observed, the affected scrubber will be shut down immediately until the failed unit has been repaired or replaced.

Within eight (8) business 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) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit. If operations continue after bag failure is observed and it will be ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

D.1.14 Cyclone Inspections

An external inspection shall be performed each calendar quarter of the cyclone controlling the batch mixer. Inspections required by this condition shall not be performed in consecutive months.

D.1.15 Cyclone Failure Detection

In the event that cyclone failure has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions). Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

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

D.1.16 Record Keeping Requirements

(a) To document compliance with Conditions D.1.3 and D.1.5 the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken monthly and shall be complete and sufficient to establish compliance with the No. 4 fuel oil usage limit and the No. 4 fuel oil sulfur content limit established in Conditions D.1.3 and D.1.5.

- (1) Calendar dates covered in the compliance determination period;
- (2) Actual fuel oil usage 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. The natural gas-fired boiler certification does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1); 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.
- (b) To document compliance with Condition D.1.10, the Permittee shall maintain once per day records of the visible emission notations of the batch mixer stack exhaust S-1.
 - (c) To document compliance with Condition D.1.11, the Permittee shall maintain once per day records of the total static pressure drop and the liquid flow rate of the scrubber associated with the batch mixer drop during normal operation.
 - (d) To document compliance with Conditions D.1.12 and D.1.14, the Permittee shall maintain records of the results of the inspections required under Conditions D.1.12 and D.1.14.
 - (e) To document compliance with Condition D.1.6, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.
 - (f) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.17 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.3 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

SECTION D.2

FACILITY OPERATION CONDITIONS

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

- (g) Degreasing operations, consisting of two (2) open top degreasers, installed in 1998, that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6. [326 IAC 8-3-3] [326 IAC 8-3-6]
- (h) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment. [326 IAC 6-3-2]

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

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

D.2.1 Volatile Organic Compounds (VOC) [326 IAC 8-3-3]

Pursuant to 326 IAC 8-3-3 (Open Top Vapor Degreasing Operations) for open top vapor degreasing operations constructed after January 1, 1980, the Permittee shall:

- (a) equip the open top vapor degreaser with a cover that can be opened and closed easily without disturbing the vapor zone;
- (b) keep the cover closed at all times except when processing workloads through the degreaser;
- (c) minimize solvent carry-out by:
 - (1) Racking parts to allow complete drainage;
 - (2) Moving parts in and out of the degreaser at less than eleven (11) feet per minute;
 - (3) Degreasing the workload in the vapor zone at least thirty (30) seconds or until condensation ceases;
 - (4) Tipping out any pools of solvent on the cleaned parts before removal;
 - (5) Allowing parts to dry within the degreaser for at least fifteen (15) seconds or until visually dry;
- (d) not degrease porous or absorbent materials, such as cloth, leather, wood or rope;
- (e) not occupy more than half of the degreaser's open top area with the workload;
- (f) not load the degreaser such that the vapor level drops more than fifty percent (50%) of the vapor depth when the workload is removed;
- (g) never spray above the vapor level;
- (h) repair solvent leaks immediately, or shut down the degreaser;
- (i) store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, such that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere;

- (j) not use workplace fans near the degreaser opening;
- (k) not allow visually detectable water in the solvent exiting the water separator; and
- (l) provide a permanent, conspicuous label summarizing the operating requirements.

D.2.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-6]

Pursuant to 326 IAC 8-3-6 (Open Top Vapor Degreaser Operation and Control Requirements), for open top vapor degreasing operations with an air to solvent interface of ten and eight-tenths (10.8) square feet or greater and constructed after July 1, 1990,

- (a) The Permittee shall ensure that the following control equipment requirements are met:
 - (1) Equip the degreaser with a cover that can be opened and closed easily without disturbing the vapor zone;
 - (2) Equip the degreaser with the following switches:
 - (A) A condenser flow switch and thermostat which shuts off sump heat if condenser coolant stops circulating or becomes too warm.
 - (B) A spray safety switch shuts off spray pump if the vapor level drops more than four (4) inches.
 - (3) Equip the degreaser with a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).
 - (4) Equip the degreaser with one (1) of the following control devices:
 - (A) A freeboard ratio of seventy-five hundredths (0.75) or greater and a powdered cover if the degreaser opening is greater than ten and eight-tenths (10.8) square feet; or
 - (B) A refrigerated chiller; or
 - (C) An enclosed design in which the cover opens only when the article is actually entering or exiting the degreaser; or
 - (D) A carbon adsorption system with ventilation which, with the cover open, achieves a ventilation rate of greater than or equal to fifty (50) cubic feet per minute per square foot of air to vapor interface area and an average of less than twenty-five parts per million of solvent is exhausted over one (1) complete adsorption cycle; or
 - (E) Other systems of demonstrated equivalent or better control as those outlined in (A) through (D). Such systems shall be submitted to the U.S.EPA as a SIP revision.
- (b) The Permittee shall ensure that the following operating requirements are met:
 - (1) Keep the cover closed at all times except when processing workloads through the degreaser;
 - (2) Minimize solvent carryout emissions by:

- (A) racking articles to allow complete drainage;
 - (B) moving articles in and out of the degreaser at less than eleven feet per minute;
 - (C) degreasing the workload in the vapor zone at least thirty (30) seconds or until condensation ceases;
 - (D) tipping out any pools of solvent on the cleaned articles before removal; and
 - (E) allowing articles to dry within the degreaser for at least fifteen (15) seconds or until visually dry;
- (3) Prohibit the entrance into the degreaser of porous or absorbent materials such as, but not limited to, cloth, leather, wood or rope;
 - (4) Prohibit occupation of more than one half ($\frac{1}{2}$) of the degreaser's open top area with the workload;
 - (5) Prohibit the loading of the degreaser to the point where the vapor level would drop more than four (4) inches when the workload is removed;
 - (6) Prohibit solvent spraying above the vapor level;
 - (7) Repair solvent leaks immediately or shut down the degreaser if leaks cannot be repaired immediately;
 - (8) Store waste solvent only in covered containers and prohibit the disposal transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent (by weight) could evaporate;
 - (9) Prohibit the exhaust ventilation rate from exceeding sixty-five cubic feet per minute per square foot of degreaser open area unless a greater ventilation rate is necessary to meet Occupational Safety and Health Administration (OSHA) requirements;
 - (10) Prohibit the use of workplace fans near the degreaser opening;
 - (11) Prohibit visually detectable water in the solvent exiting the water separator.

D.2.3 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate emission limitations, work practices, and control technologies), the allowable particulate emission rate from the brazing equipment, cutting torches, soldering equipment, and welding equipment shall not exceed pound per hour emission rate established as E in the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

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

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

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

Source Name: Wallace Construction, Inc. dba WAP Company
Source Address: 9790 Old State Road 37 North, Martinsville, Indiana 46151
Mailing Address: P.O. Box 1432, Martinsville, Indiana 46151
FESOP No.: F 109-20545-03229

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.

Please check what document is being certified:

- Annual Compliance Certification Letter
- Test Result (specify) _____
- Report (specify) _____
- Notification (specify) _____
- Affidavit (specify) _____
- Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH
100 North Senate Avenue
Indianapolis, Indiana 46204
Phone: 317-233-5674
Fax: 317-233-5967**

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

Source Name: Wallace Construction, Inc. dba WAP Company
Source Address: 9790 Old State Road 37 North, Martinsville, Indiana 46151
Mailing Address: P.O. Box 1432, Martinsville, Indiana 46151
FESOP No.: F 109-20545-03229

This form consists of 2 pages

Page 1 of 2

- | |
|---|
| <input type="checkbox"/> This is an emergency as defined in 326 IAC 2-7-1(12) <ul style="list-style-type: none">• The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and• The Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16 |
|---|

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

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

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

Page 2 of 2

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

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

A certification is not required for this report.

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

FESOP Quarterly Report

Source Name: Wallace Construction, Inc. dba WAP Company
Source Address: 9790 Old State Road 37 North, Martinsville, Indiana 46151
Mailing Address: P.O. Box 1432, Martinsville, Indiana 46151
FESOP No.: F 109-20545-03229
Facility: Dryer/Burner (EU B-2)
Parameter: No. 4 Distillate Fuel Oil
Limit: 2,536,000 gallons per twelve (12) consecutive month period with compliance determined at the end of each month

YEAR: _____

| Month | No. 4 Fuel Oil Usage (gallons) | No. 4 Fuel Oil Usage (gallons) | No. 4 Fuel Oil Usage (gallons) |
|-------|--------------------------------|--------------------------------|--------------------------------|
| | This Month | Previous 11 Months | 12 Month Total |
| | | | |
| | | | |
| | | | |

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

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

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

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

Source Name: Wallace Construction, Inc. dba WAP Company
Source Address: 9790 Old State Road 37 North, Martinsville, Indiana 46151
Mailing Address: P.O. Box 1432, Martinsville, Indiana 46151
FESOP No.: F 109-20545-03229

Months: _____ to _____ Year: _____

Page 1 of 2

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

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

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

A certification is not required for this report.

Attachment A

Fugitive Particulate Plan

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 15, 1999. The plan does not require the certification by the authorized individual as defined by 326 IAC 2-1.1-1(1). The plan consists of:

- (a) Applying water to stockpiles, feed and intermediate points and at loading and unloading points on an as-needed basis,
- (b) Minimizing the distance between transfer points and minimizing the fall distances and discharge rates in loading and unloading of aggregate,
- (c) Maintaining a minimum size and number of stock piles, and
- (d) Tarping of material during transportation.
- (e) The requirement from OP 99-07-90-03229 issued October 26, 1986, Condition 7, requiring that the plant road be paved is not applicable since all plant roads have been paved.

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

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

Source Background and Description

| | |
|--|--|
| Source Name: | Wallace Construction, Inc. dba WAP Company |
| Source Location: | 9790 Old State Road 37 North, Martinsville, Indiana 46151 |
| County: | Morgan |
| SIC Code: | 2951 |
| Operation Permit No.: | F 109-11546-03229 |
| Operation Permit Issuance Date: | July 21, 2000 |
| Permit Renewal No.: | F 109-20545-03229 |
| Permit Reviewer: | Frank P. Castelli |

The Office of Air Quality (OAQ) has reviewed a FESOP renewal application from Wallace Construction, Inc. dba WAP Company relating to the operation of a hot mix asphalt production source.

Permitted Emission Units and Pollution Control Equipment

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

- (a) One (1) batch mixer, identified as EU B-1, installed in 1965, equipped with a cyclone and a wet scrubber, connected in series, installed in 1965, exhausted through Stack S-1, capacity 250 tons of hot mix asphalt per hour.
- (b) One (1) No. 4 distillate oil-fired dryer/burner, identified as EU B-2, installed in 1965 and replaced in kind in 1999 due to age, exhausted through Stack S-1, rated at 75.0 million British thermal units per hour.
- (c) One (1) No. 2 distillate oil-fired hot oil heater, installed in 1999, rated at 2.0 million British thermal units per hour.
- (d) One (1) storage tank, identified as V-4, installed in the 1970's in Coral 2, capacity: 20,000 gallons of liquid asphalt.

Unpermitted Emission Units and Pollution Control Equipment

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

New Emission Units and Pollution Control Equipment Receiving Advanced Source Modification Approval

There are no new emission units proposed at this source during this review process.

Insignificant Activities

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

- (a) Propane for liquefied petroleum gas, or butane-fired combustion sources with heat input equal to or less than six million (6,000,000) British thermal units per hour.

- (b) Fuel oil-fired combustion sources with heat input equal to or less than two million (2,000,000) British thermal units per hour and firing fuel containing less than five-tenths (0.5) percent sulfur by weight.
- (c) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons: one (1) storage tank, known as V-3, installed 1998 in Coral 1, capacity: 500 gallons of gasoline and two (2) storage tanks, known as V-5 and V-6, installed in 1970's in Coral 2, capacity: 7,000 gallons of diesel oil and 6,000 gallons of No. 4 refined fuel oil, respectively.
- (d) 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: two (2) storage tanks, known as V-1 and V-2, installed 1998 in Coral 1, capacity: 2,000 gallons of diesel oil and 1,000 gallons of diesel oil, respectively.
- (e) The following VOC and HAP storage containers: vessels storing lubricating oil, hydraulic oils, machining oils, and machining fluids.
- (f) Application of oils, greases lubricants or other nonvolatile materials applied as temporary protective coatings.
- (g) Degreasing operations, consisting of two (2) open top degreasers, installed in 1998, that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6. [326 IAC 8-3-3] [326 IAC 8-3-6]
- (h) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment. [326 IAC 6-3-2]
- (i) Paved roads and parking lots with public access.

Existing Approvals

The source has been operating under the previous FESOP 109-11546-03229, issued on July 21, 2000, and the following amendments and revisions:

Reopening 109-13089-03229 issued on September 20, 2001.

All conditions from previous approvals were incorporated into this FESOP except the following:

F 109-11546-03229, issued on July 21, 2000

Condition D.1.1: Limited the No. 4 distillate fuel oil burner in the dryer/burner to 2,678,873 gallons per twelve (12) consecutive month period.

Reason not incorporated: Due to a change in the emission factor for sulfur dioxide in AP-42 from 142S to 150S, the No. 4 distillate fuel oil limit for the dryer/burner has been reduced to 2,536,000 gallons per twelve (12) consecutive month period with compliance determined at the end of each month. This fuel use limit maintains the 95.1 tons per year SO₂ emission limit for the dryer/burner.

Enforcement Issue

- (a) IDEM is aware that the source did not submit a timely application by October 21, 2004 which was within nine (9) months of the expiration date of the FESOP (July 21, 2005).
- (b) IDEM is aware that the source did not complete a required stack test by July 21, 2003 which was within 36 months of the issuance date of the original FESOP (July 21, 2000) and no extension was requested and/or granted by IDEM.
- (c) IDEM is reviewing these matters and will take appropriate action. This proposed permit is intended to satisfy the requirements of the operation permit rules.

Recommendation

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

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

An administratively complete FESOP renewal application for the purposes of this review was received on January 24, 2005. Additional information was received on June 9, 2005.

Emission Calculations

See pages 1 - 11 of Appendix A of this document for detailed emission calculations.

Unrestricted Potential Emissions

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

| Pollutant | Unrestricted Potential Emissions (tons/yr) |
|------------------|--|
| PM | 35,082 |
| PM ₁₀ | 4,940 |
| SO ₂ | 171 |
| VOC | 3.82 |
| CO | 13.0 |
| NO _x | 50.2 |

| HAPs | Unrestricted Potential Emissions (tons/yr) |
|---------------------|--|
| 2 | 0.008 |
| All Others Combined | 6.35 |
| Total | Single less than 10 and combination less than 25 |

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of PM₁₀ and SO₂ are equal to or greater than one hundred (100) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7. The source will be issued a FESOP because the source will limit its emissions below the Title V levels.
- (b) Fugitive Emissions
 Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Potential to Emit After Issuance

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

| Process/emission unit | Potential To Emit (tons/year) | | | | | | |
|--------------------------|-------------------------------|------------------|-----------------|-------|-------|-----------------|------------|
| | PM | PM ₁₀ | SO ₂ | VOC | CO | NO _x | HAPs |
| Dryer/Burner | 77.2 | 14.7 | 95.1 | 0.431 | 6.34 | 25.4 | 8.32 |
| Hot Oil Heater | 0.124 | 0.204 | 4.39 | 0.021 | 0.309 | 1.24 | Negligible |
| Screening | 32.8 | 3.28 | - | - | - | - | - |
| Conveying | 2.89 | 0.289 | - | - | - | - | - |
| Storage | 0.014 | 0.005 | - | - | - | - | - |
| Insignificant Activities | 1.00 | 1.00 | 0.400 | 3.00 | 1.00 | 2.00 | 1.00 |
| Total Emissions | 114 | 19.5 | 99.9 | 3.45 | 7.65 | 28.6 | 9.32 |

The No. 4 distillate oil delivered to the dryer/burner has been limited to 2,536,000 gallons per year which is equivalent to SO₂ emissions of 95.1 tons per year. The potential to emit of all the other pollutants released from the dryer/burner have been adjusted to reflect this fuel usage limit. See page 2 of 11 of Appendix A for the calculations of the limited emissions from the dryer/burner on No. 4 distillate oil.

The potential to emit PM and PM₁₀ from the dryer/burner reflect the sum of the potential to emit from the aggregate drying process and the fuel oil combustion after the 99.6% control efficiency of the cyclone and wet scrubber. These potential emissions have also been adjusted to reflect the fuel oil usage limit as shown on pages 2 and 7 of 11 of Appendix A.

County Attainment Status

The source is located in Morgan County.

| Pollutant | Status |
|-------------------|---------------------|
| PM _{2.5} | nonattainment |
| PM ₁₀ | attainment |
| SO ₂ | maintenance |
| NO ₂ | attainment |
| 1-Hour Ozone | attainment |
| 8-Hour Ozone | basic nonattainment |
| CO | nonattainment |
| Lead | attainment |

- (a) Volatile organic compounds (VOC) and nitrogen oxides (NO_x) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to the ozone standards. Morgan County has been designated as nonattainment for the 8-hour ozone standard. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements of 326 IAC 2-3, Emission Offset. See the State Rule Applicability - Entire Source section of this document.
- (b) U.S.EPA in Federal Register Notice 70 FR 943 dated January 5, 2005 has designated Morgan County as nonattainment for PM_{2.5}. On March 7, 2005 the Indiana Attorney General's Office on behalf of IDEM filed a lawsuit with the Court of Appeals for the District of Columbia Circuit challenging U.S. EPA's designation of nonattainment areas without sufficient data. However, in order to ensure that sources are not potentially liable for violation of the Clean Air Act, the OAQ is following the U.S. EPA's guidance to regulate PM₁₀ emissions as surrogate for PM_{2.5} emissions pursuant to the Nonattainment New Source Review requirements. See the State Rule Applicability for the source section.
- (c) Morgan County has been classified as attainment or unclassifiable in Indiana for remaining criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability - Entire Source section of this document.
- (d) Fugitive Emissions
Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2 or 2-3 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Portable Source

This is not a portable source.

Source Status

Existing Source PSD, Part 70, or FESOP Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/or as otherwise limited):

| Pollutant | Emissions (tons/yr) |
|------------------|--------------------------------|
| PM | less than 250 |
| PM ₁₀ | less than 100 |
| SO ₂ | less than 100 |
| VOC | 3.48 |
| CO | 8.01 |
| NO _x | 30.0 |
| Single HAP | less than 10.0 |
| Combination HAPs | less than 25.0 |

This existing source is **not** a major stationary source because it is not in one of the twenty-eight (28) listed source categories and no attainment regulated pollutant is emitted at a rate of two-hundred fifty (250) tons per year or greater and no nonattainment regulated pollutant is emitted at a rate of one hundred (100) tons per year or greater.

Federal Rule Applicability

- (a) The requirements of 40 CFR 60.90, Subpart I are not included in the permit for this source. As determined in the FESOP 109-11546-03229, issued on July 21, 2000, this source is not subject to this rule because the batch mixer, identified as EU B-1, was constructed prior to the June 11, 1973 applicability date of this rule.
- (b) The requirements of 40 CFR 60.110, Subpart K and 40 CFR 60.110a, Subpart Ka, are not included in the permit for the 20,000 gallon liquid asphalt cement storage tank, identified as V-4, because this tank has a capacity less than the 40,000 gallon applicability level of both Subparts K and Ka.
- (c) The requirements of 40 CFR 60.110b, Subpart Kb are not included in the permit for the 20,000 gallon liquid asphalt cement storage tank, identified as V-4, because this tank was constructed prior to the July 23, 1984 applicability date of this rule.
- (d) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP), Subpart T, are not included in the permit for this source. The two (2) open top degreasers, installed in 1998 do not use halogenated solvents.

State Rule Applicability – Entire Source

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

In order to assure that this source does not exceed the major source level of 250 tons per year, the hourly PM emission rate from the batch mixer, identified as EU B-1, will be limited to 48.6 pounds per hour, equivalent to 213 tons per year (250 minus the potential PM emissions from the oil heater, screening, conveying, storage and insignificant activities (36.8 tons per year) allowing for future insignificant activities).

In order to assure that this source does not exceed the major source level of 250 tons per year, for PM₁₀, the hourly PM₁₀ emission rate from the batch mixer, identified as EU B-1, shall be limited to 21.7 pounds per hour, equivalent to 95.2 tons per year (100 minus the potential PM₁₀

emissions from the oil heater, screening, conveying, storage and insignificant activities (4.78 tons per year) allowing for future insignificant activities).

In addition, in order to assure that this source does not exceed the major source level of 250 tons per year for SO₂, the No. 4 distillate oil delivered to the dryer/burner shall be limited to 2,536,000 gallons per year, equivalent to SO₂ emissions of 95.1 tons per year. Compliance with this limit makes the requirements of 326 IAC 2-7 not applicable as well as maintaining the source's minor source status with regard to SO₂.

326 IAC 2-3 (Emission Offset)

The unrestricted potential VOC emissions and the unrestricted potential NO_x emissions are each less than one hundred (100) tons per year. Therefore, this source is a minor source pursuant to 326 IAC 2-3.

In order to assure that this source does not exceed the major source level of 100 tons per year, for PM_{2.5}, the hourly PM₁₀ (used as a surrogate for PM_{2.5}) emission rate from the batch mixer, identified as EU B-1, shall be limited to 21.7 pounds per hour, equivalent to 95.2 tons per year (100 minus the potential PM₁₀ emissions from the oil heater, screening, conveying, storage and insignificant activities (4.78 tons per year) allowing for future insignificant activities).

326 IAC 2-6 (Emission Reporting)

This source is not located in Lake or Porter County with the potential to emit greater than twenty-five (25) tons per year of NO_x, does not emit five (5) tons per year or more of lead and does not require a Part 70 Operating Permit. Therefore, the requirements of 326 IAC 2-6 do not apply.

326 IAC 2-8-4 (FESOP)

The potential SO₂ and PM₁₀ emissions from the entire source before controls exceed one hundred (100) tons per year. Therefore, SO₂ and PM₁₀ emissions from the dryer/mixer need to be limited such that the entire source's potential SO₂ and PM₁₀ emissions after control and limits are less than one hundred (100) tons per year to comply with the requirements of 326 IAC 2-8-4 year.

- (a) PM₁₀ emissions from from the dryer/mixer, identified as EU B-1, exhausted through Stack S-1 shall be limited to 21.7 pounds per hour, equivalent to 95.2 tons per year. Compliance with this limit makes the requirements of 326 IAC 2-7 not applicable.
- (b) The No. 4 distillate oil delivered to the dryer/burner shall be limited to 2,536,000 gallons per year, equivalent to SO₂ emissions of 95.1 tons per year. Compliance with this limit makes the requirements of 326 IAC 2-7 not applicable.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

The operation of this hot mix asphalt production source will emit less than ten (10) tons per year of a single HAP and twenty-five (25) tons per year of a combination of HAPs. Therefore, the requirement of 326 IAC 2-4.1 does not apply.

326 IAC 5-1 (Opacity Limitations)

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

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

State Rule Applicability – Individual Facilities

326 IAC 7-1.1-2 (Sulfur Dioxide Emission Limitations)

This rule requires that the sulfur dioxide emissions from the combustion of No. 4 distillate fuel oils not exceed 0.5 pounds per million British thermal units of heat input (the equivalent of 0.5% sulfur content at a higher heating value of 0.138 million British thermal units per gallon and a maximum heat input rate of 75.0 million British thermal units per hour).

326 IAC 7-2-1 (Sulfur Dioxide Compliance: reporting and methods to determine compliance)

Reports of calendar month or annual average sulfur content, heat content, fuel consumption, and sulfur dioxide emission rate shall be provided upon request to the Office of Air Quality.

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

On June 12, 2002, revisions to 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes) became effective; this rule was previously referred to as 326 IAC 6-3 (Process Operations).

The particulate from the hot mix asphalt production operation, exhausted to a cyclone and wet scrubber shall not exceed 61.0 pounds per hour when operating at the specified process weight rate of 250 tons per hour.

This limitation is based upon the following:

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

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

The cyclone and wet scrubber shall be in operation at all times that the hot mix asphalt production process is in operation, in order to comply with this limit.

326 IAC 8-5-2 (Miscellaneous operations: asphalt paving)

Any paving application made after January 1, 1980, is subject to the requirements of 326 IAC 8-5-2. Pursuant to this rule, 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:

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

State Rule Applicability – Insignificant Activities

326 IAC 6-3-2 (Particulate emission limitations, work practices, and control technologies)

Pursuant to 326 IAC 6-3-2, the allowable particulate emission rate from the brazing equipment, cutting torches, soldering equipment, and welding equipment shall not exceed pound per hour emission rate established as E in the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

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

326 IAC 8-3-3 (Open Top Vapor Degreasing Operations)

Pursuant to 326 IAC 8-3-3 (Open Top Vapor Degreasing Operations) for open top vapor degreasing operations constructed after January 1, 1980, the Permittee shall:

- (a) equip the open top vapor degreaser with a cover that can be opened and closed easily without disturbing the vapor zone;
- (b) keep the cover closed at all times except when processing workloads through the degreaser;
- (c) minimize solvent carry-out by:
 - (1) Racking parts to allow complete drainage;
 - (2) Moving parts in and out of the degreaser at less than eleven (11) feet per minute;
 - (3) Degreasing the workload in the vapor zone at least thirty (30) seconds or until condensation ceases;
 - (4) Tipping out any pools of solvent on the cleaned parts before removal;
 - (5) Allowing parts to dry within the degreaser for at least fifteen (15) seconds or until visually dry;
- (d) not degrease porous or absorbent materials, such as cloth, leather, wood or rope;
- (e) not occupy more than half of the degreaser's open top area with the workload;
- (f) not load the degreaser such that the vapor level drops more than fifty percent (50%) of the vapor depth when the workload is removed;
- (g) never spray above the vapor level;
- (h) repair solvent leaks immediately, or shut down the degreaser;
- (i) store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, such that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere;

- (j) not use workplace fans near the degreaser opening;
- (k) not allow visually detectable water in the solvent exiting the water separator; and
- (l) provide a permanent, conspicuous label summarizing the operating requirements.

326 IAC 8-3-6 (Open Top Vapor Degreaser Operation and Control Requirements)

Pursuant to 326 IAC 8-3-6 (Open Top Vapor Degreaser Operation and Control Requirements), for open top vapor degreasing operations with an air to solvent interface of ten and eight-tenths (10.8) square feet or greater and constructed after July 1, 1990,

- (a) The Permittee shall ensure that the following control equipment requirements are met:
 - (1) Equip the degreaser with a cover that can be opened and closed easily without disturbing the vapor zone;
 - (2) Equip the degreaser with the following switches:
 - (A) A condenser flow switch and thermostat which shuts off sump heat if condenser coolant stops circulating or becomes too warm.
 - (B) A spray safety switch shuts off spray pump if the vapor level drops more than four (4) inches.
 - (3) Equip the degreaser with a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).
 - (4) Equip the degreaser with one (1) of the following control devices:
 - (A) A freeboard ratio of seventy-five hundredths (0.75) or greater and a powdered cover if the degreaser opening is greater than ten and eight-tenths (10.8) square feet; or
 - (B) A refrigerated chiller; or
 - (C) An enclosed design in which the cover opens only when the article is actually entering or exiting the degreaser; or
 - (D) A carbon adsorption system with ventilation which, with the cover open, achieves a ventilation rate of greater than or equal to fifty (50) cubic feet per minute per square foot of air to vapor interface area and an average of less than twenty-five parts per million of solvent is exhausted over one (1) complete adsorption cycle; or
 - (E) Other systems of demonstrated equivalent or better control as those outlined in (A) through (D). Such systems shall be submitted to the U.S. EPA as a SIP revision.
- (b) The Permittee shall ensure that the following operating requirements are met:
 - (1) Keep the cover closed at all times except when processing workloads through the degreaser;

- (2) Minimize solvent carryout emissions by:
 - (A) racking articles to allow complete drainage;
 - (B) moving articles in and out of the degreaser at less than eleven feet per minute;
 - (C) degreasing the workload in the vapor zone at least thirty (30) seconds or until condensation ceases;
 - (D) tipping out any pools of solvent on the cleaned articles before removal; and
 - (E) allowing articles to dry within the degreaser for at least fifteen (15) seconds or until visually dry;
- (3) Prohibit the entrance into the degreaser of porous or absorbent materials such as, but not limited to, cloth, leather, wood or rope;
- (4) Prohibit occupation of more than one half ($\frac{1}{2}$) of the degreaser's open top area with the workload;
- (5) Prohibit the loading of the degreaser to the point where the vapor level would drop more than four (4) inches when the workload is removed;
- (6) Prohibit solvent spraying above the vapor level;
- (7) Repair solvent leaks immediately or shut down the degreaser if leaks cannot be repaired immediately;
- (8) Store waste solvent only in covered containers and prohibit the disposal transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent (by weight) could evaporate;
- (9) Prohibit the exhaust ventilation rate from exceeding sixty-five cubic feet per minute per square foot of degreaser open area unless a greater ventilation rate is necessary to meet Occupational Safety and Health Administration (OSHA) requirements;
- (10) Prohibit the use of workplace fans near the degreaser opening;
- (11) Prohibit visually detectable water in the solvent exiting the water separator.

Testing Requirements

Condition D.1.8 of FESOP 109-11546-03229, issued on July 21, 2000, required PM and PM₁₀ stack testing of the batch mixer exhaust to be performed within 30 to 36 months of issuance of the permit. Therefore, stack testing was required to be performed by July 21, 2003.

PM and PM₁₀ testing of the batch mixer exhaust was performed on August 18, 2004, approximately one (1) year after the stipulated deadline in the FESOP and did not obtain an extension to this deadline. The testing was done at an asphalt production capacity of 160 tons per hour while the full capacity of the batch mixer is 250 tons per hour.

The PM stack test indicated an hourly PM emission rate of 6.22 pounds per hour which is equivalent to 9.72 pounds of PM per hour when adjusted up to the full capacity of 250 tons of asphalt per

hour. This is in compliance with the PM emission limits of 52.1 pounds per hour (326 IAC 2-2) and 61.0 pounds per hour (326 IAC 6-3-2) contained in the FESOP and also complies with the PM emission limits in this proposed permit.

The PM₁₀ stack test indicated an hourly PM₁₀ emission rate of 8.16 pounds per hour which is equivalent to 12.75 pounds of PM₁₀ per hour when adjusted up to the full capacity of 250 tons of asphalt per hour. This is in compliance with the PM₁₀ emission limits of 22.1 pounds per hour (326 IAC 2-8-4) contained in the FESOP and also complies with the PM₁₀ emission limit in this proposed permit.

PM and PM₁₀ stack testing shall be required to be performed by August 18, 2009 which is five (5) years from the previous valid PM and PM₁₀ stack test.

Compliance Requirements

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

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

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

- (a) Visible emissions notations of the batch mixer exhaust S-1 shall be performed once per day 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 start up 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 Compliance Response Plan for this unit shall contain troubleshooting contingency and corrective actions for when an abnormal emissions is observed.
- (b) The Permittee shall record the flow rate and total static pressure drop across the scrubber used in conjunction with the batch mixer, at least once per day when the asphalt production process is in operation. When for any one reading, the pressure drop across the scrubber is outside the normal range of 2.0 and 6.0 inches of water or the flow rate is outside a range of 350 to 450 gallons per minute or ranges established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan – Preparation, Implementation, Records and Reports. A flow rate or a pressure reading that are outside the above mentioned ranges

is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records and Reports shall be considered a deviation from this permit.

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

- (c) An external inspection shall be performed quarterly of the scrubber for the batch mixer. Inspections required shall not be performed in consecutive months. Defective scrubber parts shall be replaced. A record shall be kept of the results of the inspection.
- (d) In the event that the scrubber failure for the batch mixer has been observed, the affected scrubber will be shut down immediately until the failed unit has been repaired or replaced.

Within eight (8) business 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) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit. If operations continue after bag failure is observed and it will be ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

- (e) An external inspection shall be performed each calendar quarter of the cyclone controlling the batch mixer. Inspections required by this condition shall not be performed in consecutive months.
- (f) In the event that cyclone failure has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions). Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

These monitoring conditions are necessary because the scrubber and cyclone for the batch mixer must operate properly to ensure compliance with 326 IAC 2-2, 326 IAC 2-3, 326 IAC 5-1 and 326 IAC 2-8.

Conclusion

The operation of this hot mix asphalt production source shall be subject to the conditions of the **FESOP 109-20545-03229**.

Appendix A: Emission Calculations

Company Name: Wallace Construction, Inc. d/b/a WAP Company
Plant Location: 9790 Old State Road 37 North, Martinsville, Indiana 46151
County: Morgan
FESOP: F 109-20545
Plt. ID: 109-03229
Application Date: January 24, 2005
Permit Reviewer: Frank P. Castelli

I. Potential Emissions

A. Source emissions before controls

**Hot Oil Heater on Oil
(oil/<100MMBTU/uncontrolled)**

The following calculations determine the amount of emissions created by #2 & #1 distillate fuel oil @ 0.5 % sulfur, based on 8760 hours of use and AP-42, Tables 1.3-1, 1.3-2, 1.3-3

| | | |
|------------|--|---------------------------------|
| Pollutant: | <u>2.000</u> MMBtu/hr * 8760 hrs/yr | * Ef (lbs/1000 gal) = (tons/yr) |
| | <u>141800.0</u> Btu/gal * 2000 lbs/ton | |
| | | |
| P M: | 2.0 lbs/1000 gal = | <u>0.124</u> tons/yr |
| PM-10 | 3.3 lbs/1000 gal = | <u>0.204</u> tons/yr |
| S O x: | 71.0 lbs/1000 gal = | <u>4.386</u> tons/yr |
| N O x: | 20.0 lbs/1000 gal = | <u>1.236</u> tons/yr |
| V O C: | 0.34 lbs/1000 gal = | <u>0.021</u> tons/yr |
| C O: | 5.0 lbs/1000 gal = | <u>0.309</u> tons/yr |

**Hot Oil Heater on Gas
(gas/<100MMBTU/uncontrolled)**

The following calculations determine the amount of emissions created by natural gas combustion, based on 8760 hours of use, AP-42 Ch. 1.4, Tables 1.4-1, 1.4-2, 1.4-3

| | | |
|------------|-------------------------------------|-----------------------------|
| Pollutant: | <u>0.000</u> MMBtu/hr * 8760 hrs/yr | * Ef (lbs/MMcf) = (tons/yr) |
| | 1000 Btu/cf * 2000 lbs/ton | |
| | | |
| P M: | 1.9 lbs/MMcf = | <u>0.000</u> tons/yr |
| P M-10: | 7.6 lbs/MMcf = | <u>0.000</u> tons/yr |
| S O x: | 0.6 lbs/MMcf = | <u>0.000</u> tons/yr |
| N O x: | 100.0 lbs/MMcf = | <u>0.000</u> tons/yr |
| V O C: | 5.5 lbs/MMcf = | <u>0.000</u> tons/yr |
| C O: | 84.0 lbs/MMcf = | <u>0.000</u> tons/yr |

Dryer Burner (gas/<100MMBTU/uncontrolled)

The following calculations determine the amount of emissions created by natural gas combustion, based on 8760 hours of use, AP-42 Ch. 1.4, Tables 1.4-1, 1.4-2, 1.4-3

| | | |
|------------|-------------------------------------|-----------------------------|
| Pollutant: | <u>0.000</u> MMBtu/hr * 8760 hrs/yr | * Ef (lbs/MMcf) = (tons/yr) |
| | 1000 Btu/cf * 2000 lbs/ton | |
| | | |
| P M: | 1.9 lbs/MMcf = | <u>0.0000</u> tons/yr |
| P M-10: | 7.6 lbs/MMcf = | <u>0.000</u> tons/yr |
| S O x: | 0.6 lbs/MMcf = | <u>0.000</u> tons/yr |
| N O x: | 100.0 lbs/MMcf = | <u>0.0000</u> tons/yr |
| V O C: | 5.5 lbs/MMcf = | <u>0.000</u> tons/yr |
| C O: | 84.0 lbs/MMcf = | <u>0.000</u> tons/yr |

Dryer Burner

(gas/>100MMBTU/uncontrolled)

The following calculations determine the amount of emissions created by natural gas combustion, based on 8760 hours of use, AP-42 Ch. 1.4, Tables 1.4-1, 1.4-2, 1.4-3

Pollutant: 0.000 MMBtu/hr * 8760 hrs/yr * Ef (lbs/MM (tons/yr)
 1000 Btu/cf * 2000 lbs/ton

| | | | |
|-----------------|---------|------------------|----------------------|
| | P M: | 1.9 lbs/MMcf = | <u>0.000</u> tons/yr |
| | P M-10: | 7.6 lbs/MMcf = | <u>0.000</u> tons/yr |
| | S O x: | 0.6 lbs/MMcf = | <u>0.000</u> tons/yr |
| Post-NSPS = 190 | N O x: | 280.0 lbs/MMcf = | <u>0.00</u> tons/yr |
| | V O C: | 5.5 lbs/MMcf = | <u>0.000</u> tons/yr |
| | C O: | 84.0 lbs/MMcf = | <u>0.000</u> tons/yr |

Dryer Burner

(gas/>100MMBTU/low nox)

The following calculations determine the amount of emissions created by natural gas combustion, based on 8760 hours of use, AP-42 Ch. 1.4, Tables 1.4-1, 1.4-2, 1.4-3 (low NOx burner = 140, flue gas recirculation = 100)

Pollutant: 0.000 MMBtu/hr * 8760 hrs/yr * Ef (lbs/MM (tons/yr)
 1000 Btu/cf * 2000 lbs/ton

| | | | |
|--|---------|------------------|----------------------|
| | P M: | 1.9 lbs/MMcf = | <u>0.000</u> tons/yr |
| | P M-10: | 7.6 lbs/MMcf = | <u>0.000</u> tons/yr |
| | S O x: | 0.6 lbs/MMcf = | <u>0.000</u> tons/yr |
| | N O x: | 140.0 lbs/MMcf = | <u>0.000</u> tons/yr |
| | V O C: | 5.5 lbs/MMcf = | <u>0.000</u> tons/yr |
| | C O: | 84.0 lb/MMcf = | <u>0.000</u> tons/yr |

(#2 & #1 oil) Dryer Burner

<100

The following calculations determine the amount of emissions created by #2 & #1 distillate fuel oil @ 0.5 % sulfur, based on 8760 hours of use and AP-42, Tables 1.3-1, 1.3-2, 1.3-3

Pollutant: 0.0 MMBtu/hr * 8760 hrs/yr * Ef (lbs/1000 gal) = (tons/yr)
 139000.0 Btu/gal * 2000 lbs/ton

| | |
|------------------|-------------|
| If Rating >100 m | |
| N O x: | 24.0 |
| V O C: | 0.20 |

| | | | |
|--|--------|---------------------|----------------------|
| | P M: | 2.0 lbs/1000 gal = | <u>0.000</u> tons/yr |
| | PM-10: | 3.3 lbs/1000 gal = | <u>0.000</u> tons/yr |
| | S O x: | 71.0 lbs/1000 gal = | <u>0.000</u> tons/yr |
| | N O x: | 20.0 lbs/1000 gal = | <u>0.000</u> tons/yr |
| | V O C: | 0.34 lbs/1000 gal = | <u>0.000</u> tons/yr |
| | C O: | 5.0 lbs/1000 gal = | <u>0.000</u> tons/yr |

(#4 oil/ <100MMBTU)

Dryer Burner

The following calculations determine the amount of emissions created by #4 distillate fuel oil @ 0.5 % sulfur, based on 8760 hours of use and AP-42, Tables 1.3-1, 1.3-2, 1.3-3

Pollutant: 75.000 MMBtu/hr * 8760 hrs/yr * Ef (lbs/1000 gal) = (tons/yr)
 138000.0 Btu/gal * 2000 lbs/ton

| | | | | | |
|--|--------|---------------------|----------------------|----------------|----------------------|
| | P M: | 2.0 lbs/1000 gal = | <u>4.76</u> tons/yr | Limited | 2.54 tons/yr |
| | PM-10: | 3.3 lbs/1000 gal = | <u>7.86</u> tons/yr | | 4.18 tons/yr |
| | S O x: | 75.0 lbs/1000 gal = | <u>178.5</u> tons/yr | | 95.1 tons/yr |
| | N O x: | 20.0 lbs/1000 gal = | <u>47.6</u> tons/yr | | 25.4 tons/yr |
| | V O C: | 0.34 lbs/1000 gal = | <u>0.809</u> tons/yr | | 0.431 tons/yr |
| | C O: | 5.0 lbs/1000 gal = | <u>11.9</u> tons/yr | | 6.34 tons/yr |

(#4 oil/ >100MMBTU)

Dryer Burner

The following calculations determine the amount of emissions created by #4 distillate fuel oil @ 0.000 % sulfur, based on 8760 hours of use and AP-42, Tables 1.3-1, 1.3-2, 1.3-3

Pollutant: 0.0 MMBtu/hr * 8760 hrs/yr * Ef (lbs/1000 gal) = (tons/yr)
0.0 Btu/gal * 2000 lbs/ton

| | | |
|--------|---------------------|----------------------|
| P M: | 2.0 lbs/1000 gal = | <u>0.000</u> tons/yr |
| PM-10: | 3.3 lbs/1000 gal = | <u>0.000</u> tons/yr |
| S O x: | 0.0 lbs/1000 gal = | <u>0.000</u> tons/yr |
| N O x: | 24.0 lbs/1000 gal = | <u>0.000</u> tons/yr |
| V O C: | 0.20 lbs/1000 gal = | <u>0.000</u> tons/yr |
| C O: | 5.0 lbs/1000 gal = | <u>0.000</u> tons/yr |

(waste oil/ vaporizing burner)

The following calculations determine the amount of emissions created by waste fuel oil @ 0.500 % sulfur, based on 8760 hours of use and AP-42, Chapter 1.11 0.000 % Ash
0.000 % Lead

Pollutant: 0.0 MMBtu/hr * 8760 hrs/yr * Ef (lbs/1000 gal) = (tons/yr)
0.0 Btu/gal * 2000 lbs/ton

| | | |
|---------|---------------------|----------------------|
| P M: | 0.0 lbs/1000 gal = | <u>0.000</u> tons/yr |
| P M-10: | 0.0 lbs/1000 gal = | <u>0.000</u> tons/yr |
| S O x: | 50.0 lbs/1000 gal = | <u>0.000</u> tons/yr |
| N O x: | 11.0 lbs/1000 gal = | <u>0.000</u> tons/yr |
| VOC: | 1.0 lbs/1000 gal = | <u>0.000</u> tons/yr |
| C O: | 1.7 lbs/1000 gal = | <u>0.000</u> tons/yr |
| Pb: | 0.0 lbs/1000 gal = | <u>0.000</u> tons/yr |

(waste oil/atomizing burner)

The following calculations determine the amount of emissions created by waste fuel oil @ 0.000 % sulfur, based on 8760 hours of use and AP-42 Chapter 1.11 0.000 % Ash
0.000 % Lead

Pollutant: 0.000 MMBtu/hr * 8760 hrs/yr * Ef (lbs/1000 gal) = (tons/yr)
0.000 Btu/gal * 2000 lbs/ton

| | | |
|---------|---------------------|----------------------|
| P M: | 0.0 lbs/1000 gal = | <u>0.000</u> tons/yr |
| P M-10: | 0.0 lbs/1000 gal = | <u>0.000</u> tons/yr |
| S O x: | 0.0 lbs/1000 gal = | <u>0.000</u> tons/yr |
| N O x: | 16.0 lbs/1000 gal = | <u>0.000</u> tons/yr |
| VOC: | 1.0 lbs/1000 gal = | <u>0.000</u> tons/yr |
| C O: | 2.10 lbs/1000 gal = | <u>0.000</u> tons/yr |
| Pb: | 0.00 lbs/1000 gal = | <u>0.000</u> tons/yr |

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

The following calculations determine the amount of emissions created by aggregate drying, based on 8760 hours of use and AP-42, Chapter 11.1, Table 11.1-3, rev. 12/00

| | | | | | | |
|---------|---------------------|------------|-----------|---------------|--------------|---------|
| P M: | 28 lbs/ton x | <u>0.0</u> | tons/hr x | 8760 hrs/yr = | <u>0.000</u> | tons/yr |
| | | 2000 | lbs/ton | | | |
| P M-10: | 6.5 lbs/ton x | <u>0</u> | tons/hr x | 8760 hrs/yr = | <u>0.000</u> | tons/yr |
| | | 2000 | lbs/ton | | | |
| Lead: | 0.0000033 lbs/ton x | <u>0</u> | tons/hr x | 8760 hrs/yr = | <u>0.000</u> | tons/yr |
| | | 2000 | lbs/ton | | | |
| HAPs: | 0.0076 lbs/ton x | <u>0</u> | tons/hr x | 8760 hrs/yr = | <u>0.000</u> | tons/yr |
| | | 2000 | lbs/ton | | | |

HAPs include benzene, ethylbenzene, formaldehyde, methyl chloroform, naphthalene, toluene, xylene; arsenic, cadmium, chromium, manganese, mercury, and nickel compounds.

**** aggregate drying: batch-mix plant ****

The following calculations determine the amount of emissions created by aggregate drying, based on 8760 hours of use and EPA SCC #3-05-002-05:

| | | | | | | |
|---------|---------------------|--------------|-----------|---------------|----------------|---------|
| P M: | 32 lbs/ton x | <u>250.0</u> | tons/hr x | 8760 hrs/yr = | <u>35040.0</u> | tons/yr |
| | | 2000 | lbs/ton | | | |
| P M-10: | 4.5 lbs/ton x | <u>250</u> | tons/hr x | 8760 hrs/yr = | <u>4927.5</u> | tons/yr |
| | | 2000 | lbs/ton | | | |
| Lead: | 0.0000033 lbs/ton x | <u>250</u> | tons/hr x | 8760 hrs/yr = | <u>0.004</u> | tons/yr |
| | | 2000 | lbs/ton | | | |
| HAPs: | 0.0076 lbs/ton x | <u>250</u> | tons/hr x | 8760 hrs/yr = | <u>8.322</u> | tons/yr |
| | | 2000 | lbs/ton | | | |

HAPs include benzene, ethylbenzene, formaldehyde, methyl chloroform, naphthalene, toluene, xylene; arsenic, cadmium, chromium, manganese, mercury, and nickel compounds.

**** conveying / handling ****

The following calculations determine the amount of emissions created by material handling of aggregate, based on 8760 hours of use and AP-42, Ch 11.19.2

$$E_f = .0032^* \frac{(U/5)^{1.3} * k}{(M/2)^{1.4}} = \underline{0.003} \text{ lbs/ton}$$

where k= 1 (particle size multiplier)
 U = 12 mph mean wind speed (worst case)
 M = 5.0 % moisture

| | | | | |
|------------------|--------------------------|----------------------|----------------|-------------------------------------|
| P M : | <u>0.003</u> lbs/ton x | <u>238</u> tons/hr x | 8760 hrs/yr = | <u>2.886</u> tons/yr |
| | | 2000 lbs/ton | | |
| P M-10: | 10% of PM = | | | <u>0.289</u> tons/yr |
| Screening | PM: <u>238</u> tons/hr x | 0.0315 lbs/ton | / 2000 lbs/ton | 8760 hrs/yr = <u>32.837</u> tons/yr |
| | P M-10: | 10% of PM = | | <u>3.284</u> tons/yr |

AP-42 Ch.11.19.2

**** unpaved roads ****

No unpaved roads at this source

The following calculations determine the amount of emissions created by vehicle traffic on unpaved roads, based on 8760 hours of use and AP-42, Ch 11.2.1.

A. Tri-axle Truck

| | | | | | |
|-------------------------------|---|------------------|---|-------|---------------------------|
| <u>0.0</u> trips/hr x | | | | | |
| <u>0.00</u> miles/roundtrip x | | | | | |
| 8760 hrs/yr = | | | <u>0.0</u> miles per year | | |
| For PM | | For PM-10 | | | |
| | $E_f = \{k \cdot [(s/12)^{0.8}] \cdot [(W/3)^b] / [(Mdry/0.2)^c] \cdot [(365-p)/365]$ | | | | |
| 11.24 | = | 2.27 lb/mile | | | |
| 10 | where k = | 2.6 | plier for PM-10) (k=10 for PM-30 or TSP) | | |
| 4.8 | s = | 4.8 | silt content of unpaved roads | | |
| 0.5 | b = | 0.4 | PM-10 (b = 0.5 for PM-30 or TSP) | | |
| 0.4 | c = | 0.3 | PM-10 (c = 0.4 for PM-30 or TSP) | | |
| 38 | W = | 38 | s average vehicle weight | | |
| 0.2 | Mdry = | 0.2 | e content, % (default is 0.2 for dry conditions) | | |
| 125 | p = | 125 | it 0.254mm of precipitation (See Figure 13.2.2-1) | | |
| <hr/> 11.24 lb/mi x | | <hr/> 0 mi/yr = | | PM | <hr/> <u>0.00</u> tons/yr |
| | | 2000 lb/ton | | | |
| <hr/> 2.27 lb/mi x | | <hr/> 0 mi/yr = | | PM-10 | <hr/> <u>0.00</u> tons/yr |
| | | 2000 lb/ton | | | |

B. Front End Loader

| | | | | | |
|--------------------------------|---|------------------|---|-------|---------------------------|
| <u>0.0</u> trips/hr x | | | | | |
| <u>0.000</u> miles/roundtrip x | | | | | |
| 8760 hrs/yr = | | | <u>0.0</u> miles per year | | |
| For PM | | For PM-10 | | | |
| | $E_f = \{k \cdot [(s/12)^{0.8}] \cdot [(W/3)^b] / [(Mdry/0.2)^c] \cdot [(365-p)/365]$ | | | | |
| 11.24 | = | 2.27 lb/mile | | | |
| 10 | where k = | 2.6 | plier for PM-10) (k=10 for PM-30 or TSP) | | |
| 4.8 | s = | 4.8 | silt content of unpaved roads | | |
| 0.5 | b = | 0.4 | PM-10 (b = 0.5 for PM-30 or TSP) | | |
| 0.4 | c = | 0.3 | PM-10 (c = 0.4 for PM-30 or TSP) | | |
| 38 | W = | 38 | s average vehicle weight | | |
| 0.2 | Mdry = | 0.2 | e content, % (default is 0.2 for dry conditions) | | |
| 125 | p = | 125 | it 0.254mm of precipitation (See Figure 13.2.2-1) | | |
| <hr/> 11.24 lb/mi x | | <hr/> 0 mi/yr = | | PM | <hr/> <u>0.00</u> tons/yr |
| | | 2000 lb/ton | | | |
| <hr/> 2.27 lb/mi x | | <hr/> 0 mi/yr = | | PM-10 | <hr/> <u>0.00</u> tons/yr |
| | | 2000 lb/ton | | | |

C. Semi Truck

$$\frac{0.0 \text{ trips/hr} \times 0.0 \text{ miles/roundtrip} \times 8760 \text{ hrs/yr}}{1} = \underline{0.0} \text{ miles per year}$$

| | | | |
|---------------|--|-------|---------------------|
| For PM | For PM-10 | | |
| | $E_f = \{k \cdot [(s/12)^{0.8}] \cdot [(W/3)^b] / [(M_{dry}/0.2)^c] \cdot [(365-p)/365]\}$ | | |
| 11.24 | = 2.27 lb/mile | | |
| 10 | where k = 2.6 lbier for PM-10) (k=10 for PM-30 or TSP) | | |
| 4.8 | s = 4.8 silt content of unpaved roads | | |
| 0.5 | b = 0.4 PM-10 (b = 0.5 for PM-30 or TSP) | | |
| 0.4 | c = 0.3 PM-10 (c = 0.4 for PM-30 or TSP) | | |
| 38 | W = 38 s average vehicle weight | | |
| 0.2 | Mdry = 0.2 e content, % (default is 0.2 for dry conditions) | | |
| 125 | p = 125 it 0.254mm of precipitation (See Figure 13.2.2-1) | | |
| | $11.24 \text{ lb/mi} \times \underline{0} \text{ mi/yr} =$ | PM | <u>0.00</u> tons/yr |
| | 2000 lb/ton | | |
| | $2.27 \text{ lb/mi} \times \underline{0} \text{ mi/yr} =$ | PM-10 | <u>0.00</u> tons/yr |
| | 2000 lb/ton | | |

All Trucking

| | |
|--------------|---------------------|
| Total PM: | <u>0.00</u> tons/yr |
| Total PM-10: | <u>0.00</u> tons/yr |

**** storage ****

The following calculations determine the amount of emissions created by wind erosion of storage stockpiles, based on 8760 hours of use and AP-42, Ch 11.2.3.

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

| | |
|-----------|---|
| = | 1.74 lbs/acre/day for sand |
| = | 1.16 lbs/acre/day for stone |
| = | 1.16 lbs/acre/day for slag |
| = | 1.16 lbs/acre/day for gravel |
| = | 1.16 lbs/acre/day for RAP |
| where s = | 1.5 % silt for sand |
| s = | 1.0 % silt of stone |
| s = | 1.0 % silt of slag |
| s = | 1.0 % silt of gravel |
| s = | 1.0 % silt for RAP |
| p = | 125 days of rain greater than or equal to 0.01 inches |
| f = | 15 % of wind greater than or equal to 12 mph |

$$E_p (\text{storage}) = \frac{E_f \cdot sc \cdot (20 \text{ cuft/ton}) \cdot (365 \text{ days/yr})}{(2000 \text{ lbs/ton}) \cdot (43560 \text{ sqft/acre}) \cdot (25 \text{ ft})}$$

| | |
|-----------|--------------------------|
| = | 0.009 tons/yr for sand |
| = | 0.019 tons/yr for stone |
| = | 0.000 tons/yr for slag |
| = | 0.000 tons/yr for gravel |
| = | 0.000 tons/yr for RAP |
| Total PM: | <u>0.028</u> tons/yr |

| | |
|------------|---|
| where sc = | <u>1.5</u> ,000 tons storage capacity for sand |
| sc = | <u>5.0</u> ,000 tons storage capacity for stone |
| sc = | <u>0</u> ,000 tons storage capacity for slag |
| sc = | <u>0</u> ,000 tons storage capacity for gravel |
| sc = | <u>0</u> ,000 tons storage capacity for RAP |

| | | |
|---------|-------------|---------------------------------|
| P M-10: | 35% of PM = | <u>0.003</u> tons/yr for sand |
| | 35% of PM = | <u>0.007</u> tons/yr for stone |
| | 35% of PM = | <u>0.000</u> tons/yr for slag |
| | 35% of PM = | <u>0.000</u> tons/yr for gravel |
| | 35% of PM = | <u>0.000</u> tons/yr for RAP |

Total PM-10:

0.010 tons/yr

Emissions before controls (combustion plus production) are as follows:

| natural gas | #2 oil | #4 oil | Plus Hot Oil Heater on # | waste oil |
|-----------------------------|-------------------------------|---------------------------------|------------------------------|------------------------------|
| P M: <u>0</u> tons/yr | P M: <u>35075.9</u> tons/yr | P M: <u>35080.636</u> tons/yr | P M: <u>0.000</u> tons/yr | P M: <u>0.000</u> tons/yr |
| P M-10: <u>0</u> tons/yr | P M-10: <u>4931.3</u> tons/yr | P M-10: <u>4939.141</u> tons/yr | P M-10: <u>0.000</u> tons/yr | P M-10: <u>0.000</u> tons/yr |
| S O x: <u>0.000</u> tons/yr | S O x: <u>4.4</u> tons/yr | S O x: <u>182.919</u> tons/yr | S O x: <u>0.000</u> tons/yr | S O x: <u>0.000</u> tons/yr |
| N O x: <u>0.0</u> tons/yr | N O x: <u>1.2</u> tons/yr | N O x: <u>48.844</u> tons/yr | N O x: <u>0.000</u> tons/yr | N O x: <u>0.000</u> tons/yr |
| V O C: <u>0.000</u> tons/yr | V O C: <u>0.021</u> tons/yr | V O C: <u>0.830</u> tons/yr | V O C: <u>0.000</u> tons/yr | V O C: <u>0.000</u> tons/yr |
| C O: <u>0.0</u> tons/yr | C O: <u>0.3</u> tons/yr | C O: <u>12.211</u> tons/yr | C O: <u>0.000</u> tons/yr | C O: <u>0.000</u> tons/yr |
| Lead: <u>0.004</u> tons/yr | Lead: <u>0.004</u> tons/yr | Lead: <u>0.004</u> tons/yr | Lead: <u>0.004</u> tons/yr | Lead: <u>0.004</u> tons/yr |
| HAPs: <u>0.00</u> tons/yr | HAPs: <u>8.32</u> tons/yr | HAPs: <u>8.322</u> tons/yr | HAPs: <u>0.000</u> tons/yr | HAPs: <u>0.000</u> tons/yr |

B. Source emissions after controls

dryer combustion: gas

| | | | |
|---------|----------------|---|----------------------|
| P M: | 0.00 tons/yr x | <u>0.00000</u> emitted after controls = | <u>0.000</u> tons/yr |
| P M-10: | 0.00 tons/yr x | <u>0.00000</u> emitted after controls = | <u>0.000</u> tons/yr |

dryer combustion: #2 oil

| | | | |
|---------|----------------|---|----------------------|
| P M: | 0.00 tons/yr x | <u>1.00000</u> emitted after controls = | <u>0.000</u> tons/yr |
| P M-10: | 0.00 tons/yr x | <u>1.00000</u> emitted after controls = | <u>0.000</u> tons/yr |

hot oil heater combustion: gas

| | | | |
|---------|-----------------|---|----------------------|
| P M: | 0.000 tons/yr x | <u>1.00000</u> emitted after controls = | <u>0.000</u> tons/yr |
| P M-10: | 0.000 tons/yr x | <u>1.00000</u> emitted after controls = | <u>0.000</u> tons/yr |

hot oil heater combustion: #2 oil

| | | | |
|---------|-----------------|---|----------------------|
| P M: | 0.124 tons/yr x | <u>1.00000</u> emitted after controls = | <u>0.124</u> tons/yr |
| P M-10: | 0.204 tons/yr x | <u>1.00000</u> emitted after controls = | <u>0.204</u> tons/yr |

dryer combustion: #4 oil

| | | | |
|---------|----------------|--|----------------------|
| P M: | 4.76 tons/yr x | <u>0.0040</u> emitted after controls = | <u>0.019</u> tons/yr |
| P M-10: | 7.86 tons/yr x | <u>0.0040</u> emitted after controls = | <u>0.031</u> tons/yr |

dryer combustion: waste oil

| | | | |
|---------|----------------|---------------------------------------|----------------------|
| P M: | 0.00 tons/yr x | <u>0.000</u> emitted after controls = | <u>0.000</u> tons/yr |
| P M-10: | 0.00 tons/yr x | <u>0.000</u> emitted after controls = | <u>0.000</u> tons/yr |

aggregate drying:

| | | | | |
|---------|--------------------|---|----------------------|----------------|
| P M: | 35040.00 tons/yr x | <u>0.00400</u> emitted after controls = | <u>140.2</u> tons/yr | Limited |
| P M-10: | 4927.50 tons/yr x | <u>0.00400</u> emitted after controls = | <u>19.7</u> tons/yr | 74.7 |

conveying/handling:

| | | | |
|---------|----------------|---------------------------------------|----------------------|
| P M: | 2.89 tons/yr x | <u>1.000</u> emitted after controls = | <u>2.886</u> tons/yr |
| P M-10: | 0.29 tons/yr x | <u>1.000</u> emitted after controls = | <u>0.289</u> tons/yr |

screening

P M: 32.84 tons/yr x 1.000 emitted after controls = 32.837 tons/yr
 P M-10: 3.28 tons/yr x 1.000 emitted after controls = 3.284 tons/yr

unpaved roads:

P M: 0.00 tons/yr x 50.00% emitted after controls = 0.000 tons/yr
 P M-10: 0.00 tons/yr x 50.00% emitted after controls = 0.000 tons/yr

storage:

P M: 0.028 tons/yr x 50.00% emitted after controls = 0.014 tons/yr
 P M-10: 0.010 tons/yr x 50.00% emitted after controls = 0.005 tons/yr

Emissions after controls (combustion plus production) are as follows:

| | Gas | #2 Oil | #4 Oil | Waste Oil | |
|---------|------------|------------|----------------|--------------|---------|
| P M: | 0.0 | 0.0 | 175.916 | 0.000 | tons/yr |
| P M-10: | 0.0 | 0.0 | 23.319 | 0.000 | tons/yr |

II. Allowable Emissions

A. The following calculations determine compliance with NSPS Subpart I, which limits stack emissions from asphalt plants to 0.04 gr/dscf:

Source not subject to Subpart I

$$\frac{0.04 \text{ grains}^*}{\text{dscf}} \times \frac{0.000 \text{ acfm}^*}{460} \times \frac{528}{260 \text{ Temp}} \times \frac{100}{100} \times \frac{5\% \text{ moisture}^*}{100}$$

$$\frac{525600 \text{ minutes}^*}{\text{year}} \times \frac{1^*}{7000 \text{ grains}} \times \frac{1 \text{ ton}}{2000 \text{ lbs}} = \underline{0.000} \text{ tons/yr}$$

To meet NSPS Subpart I, the following value must be < amount calculated above 140.3 tons/yr

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

limit: 0.5 lbs/MMBtu

$$\frac{0.5 \text{ lbs/MMBtu} \times 141800.0 \text{ Btu/gal} = 70.9 \text{ lbs/1000gal}}{70.9 \text{ lbs/1000gal} / 142.0 \text{ lb/1000 gal} = \underline{0.499}}$$

Sulfur content must be less than or equal to 0.499 % to comply with 326 IAC 7 and to limit SO2 emissions to 99 tons per year or less.

C. The following calculations determine the maximum sulfur content of residual waste fuel oil allowable by 326-IAC 7:

limit: 1.6 lbs/MMBtu

$$\frac{1.6 \text{ lbs/MMBtu} \times 0.000 \text{ Btu/gal} = 0 \text{ lbs/1000gal}}{0 \text{ lbs/1000gal} / 100.0 \text{ lbs/1000 gal} = \underline{0.000}}$$

(check burner type)
 Sulfur content must be less than or equal to 0.000 % to comply with 326 IAC 7 and to limit SO2 emissions to 99 tons per year or less.

D. The following calculations determine the maximum sulfur content of distillate #4 fuel oil allowable by 326-IAC 7:

$$\begin{array}{rcl}
 \text{limit:} & 0.5 \text{ lbs/MMBtu} & \\
 & 0.5 \text{ lbs/MMBtu} \times & \underline{139000.000} \text{ Btu/gal} = & 69.5 \text{ lbs/1000gal} \\
 & 69.5 \text{ lbs/1000gal} / & \underline{150.0} \text{ lbs/1000 gal} = & \underline{0.463} \\
 & & \underline{0.463} \% \text{ to comply with 326 IAC 7} &
 \end{array}$$

Sulfur content must be less than or equal to and to limit SO2 emissions to 99 tons per year or less.

III. Limited Potential Emissions

FUEL USAGE LIMITATION: BASED ON NOx

FUEL USAGE LIMITATION FOR HOT OIL HEATER ALONE (OIL)

$$\begin{array}{rcl}
 1.24 \frac{\text{tons NOx}}{\text{year}} & * & 2000 \frac{\text{lbs}}{\text{ton}} = & 2471.09 \frac{\text{lbs NOx}}{\text{year}} \\
 2471.086037 \frac{\text{lbs NOx}}{\text{year}} & / & 20 \frac{\text{lbs NOx}}{\text{kgal}} = & 123.55 \frac{\text{kgal}}{\text{year}} \\
 123.55 \frac{\text{kgal}}{\text{year}} & * & \frac{99.00 \text{ tons/year}}{1.235543018 \text{ tons/year}} = & \underline{0.0} \frac{\text{gal fuel}}{\text{year}}
 \end{array}$$

FUEL USAGE LIMITATION FOR BURNER & HEATER (Gas)

$$\begin{array}{rcl}
 0.00 \frac{\text{tons NOx}}{\text{year}} & * & 2000 \frac{\text{lbs}}{\text{ton}} = & 0 \frac{\text{lbs NOx}}{\text{year}} \\
 0 \frac{\text{lbs NOx}}{\text{year}} & / & 100.0 \frac{\text{lbs NOx}}{\text{MMcf}} = & 0.00 \frac{\text{MMcf}}{\text{year}} \\
 0.00 \frac{\text{MMcf}}{\text{year}} & * & \frac{99.0 \text{ tons/yr}}{0.00 \text{ tons/yr}} = & \underline{0.0} \frac{\text{MMcf}}{\text{year}} \text{ FESOP Limit}
 \end{array}$$

FUEL USAGE LIMITATION FOR BURNER & HEATER (#2 Oil)

$$\begin{array}{rcl}
 1.24 \frac{\text{tons NOx}}{\text{year}} & * & 2000 \frac{\text{lbs}}{\text{ton}} = & 2471.09 \frac{\text{lbs NOx}}{\text{year}} \\
 2471.09 \frac{\text{lbs NOx}}{\text{year}} & / & 20 \frac{\text{lbs}}{1000 \text{ gal}} = & 123.55 \frac{\text{kgal}}{\text{year}} \\
 123.55 \frac{\text{kgal}}{\text{year}} & * & \frac{99.0 \text{ tons/yr}}{1.24 \text{ tons/yr}} = & \underline{0.0} \frac{\text{kgal}}{\text{year}} \text{ FESOP Limit}
 \end{array}$$

FUEL USAGE LIMITATION FOR BURNER (#4 Oil)

$$\begin{aligned}
 & 48.84 \frac{\text{tons NOx}}{\text{year}} \quad * \quad 2000 \frac{\text{lbs}}{\text{ton}} \quad = \quad 97688.48 \frac{\text{lbs NOx}}{\text{year}} \\
 & 97688.48 \frac{\text{lbs NOx}}{\text{year}} \quad / \quad 0.0 \frac{\text{lbs}}{1000 \text{ gal}} \quad = \quad 0.00 \frac{\text{kgal}}{\text{year}} \\
 & 0.00 \frac{\text{kgal}}{\text{year}} \quad * \quad \frac{99.0 \text{ tons/yr}}{48.84 \text{ tons/yr}} \quad = \quad 0.0 \frac{\text{kgal}}{\text{year}} \quad \text{FESOP Limit}
 \end{aligned}$$

FUEL USAGE LIMITATION FOR BURNER (Waste Oil)

$$\begin{aligned}
 & 0.00 \frac{\text{tons NOx}}{\text{year}} \quad * \quad 2000 \frac{\text{lbs}}{\text{ton}} \quad = \quad 0.00 \frac{\text{lbs NOx}}{\text{year}} \\
 & 0.00 \frac{\text{lbs NOx}}{\text{year}} \quad / \quad 0.0 \frac{\text{lbs}}{1000 \text{ gal}} \quad = \quad 0.00 \frac{\text{kgal}}{\text{year}} \\
 & 0.00 \frac{\text{kgal}}{\text{year}} \quad * \quad \frac{99.0 \text{ tons/yr}}{0.00 \text{ tons/yr}} \quad = \quad 0.0 \frac{\text{kgal}}{\text{year}} \quad \text{FESOP Limit}
 \end{aligned}$$

FUEL USAGE LIMITATION: BASED ON SO2

FUEL USAGE LIMITATION FOR HOT OIL HEATER ON OIL

$$\begin{aligned}
 & 4.39 \frac{\text{tons SO2}}{\text{year}} \quad * \quad 2000 \frac{\text{lbs}}{\text{ton}} \quad = \quad 8772.35543 \frac{\text{lbs SO2}}{\text{year}} \\
 & 8772.35543 \frac{\text{lbs SO2}}{\text{year}} \quad / \quad 70.0 \frac{\text{lbs SO2}}{\text{kgal}} \quad = \quad 125.32 \frac{\text{kgal}}{\text{year}} \\
 & 125.3193633 \frac{\text{kgal}}{\text{year}} \quad * \quad \frac{99.0 \text{ tons/year}}{4.386177715 \text{ tons/year}} \quad = \quad 0.0 \frac{\text{gal fuel}}{\text{year}}
 \end{aligned}$$

FUEL USAGE LIMITATION FOR BURNER AND HOT OIL HEATER (Gas)

$$\begin{aligned}
 & 0.000 \frac{\text{tons SO2}}{\text{year}} \quad * \quad 2000 \frac{\text{lbs}}{\text{ton}} \quad = \quad 0.00 \frac{\text{lbs SO2}}{\text{year}} \\
 & 0.00 \frac{\text{lbs SO2}}{\text{year}} \quad / \quad 0.6 \frac{\text{lbs SO2}}{\text{MMcf}} \quad = \quad 0.00 \frac{\text{MMcf}}{\text{year}} \\
 & 0.00 \frac{\text{MMcf}}{\text{year}} \quad * \quad \frac{99.0 \text{ tons/yr}}{0.00 \text{ tons/yr}} \quad = \quad 0.0 \frac{\text{MMcf}}{\text{year}} \quad \text{FESOP Limit}
 \end{aligned}$$

FUEL USAGE LIMITATION FOR BURNER & HEATER (#2 Oil)

$$\frac{4.4 \text{ tons SO}_2}{\text{year}} \times \frac{2000 \text{ lbs}}{\text{ton}} = 8772.36 \frac{\text{lbs SO}_2}{\text{year}}$$

$$\frac{8772.36 \text{ lbs SO}_2}{\text{year}} / \frac{70.0 \text{ lbs}}{1000 \text{ gal}} = 125319.3633 \frac{\text{gal}}{\text{year}}$$

$$\frac{125319.36 \text{ gal}}{\text{year}} \times \frac{99.0 \text{ tons/yr}}{4.39 \text{ tons/yr}} = 0.0 \frac{\text{gal}}{\text{year}} \text{ FESOP Limit}$$

FUEL USAGE LIMITATION FOR BURNER (#4 Oil) See Below for calculation of #4 oil limit

$$\frac{182.9 \text{ tons SO}_2}{\text{year}} \times \frac{2000 \text{ lbs}}{\text{ton}} = 365837.5728 \frac{\text{lbs SO}_2}{\text{year}}$$

$$\frac{365837.57 \text{ lbs SO}_2}{\text{year}} / \frac{75.0 \text{ lbs}}{1000 \text{ gal}} = 4877834.304 \frac{\text{gal}}{\text{year}}$$

$$\frac{4877834.30 \text{ gal}}{\text{year}} \times \frac{95.1 \text{ tons/yr}}{182.92 \text{ tons/yr}} = 2536000.0 \frac{\text{gal}}{\text{year}} \text{ FESOP Limit}$$

FUEL USAGE LIMITATION FOR BURNER (Waste Oil)

$$\frac{0.0 \text{ tons SO}_2}{\text{year}} \times \frac{2000 \text{ lbs}}{\text{ton}} = 0.00 \frac{\text{lbs SO}_2}{\text{year}}$$

$$\frac{0.00 \text{ lbs SO}_2}{\text{year}} / \frac{0.0 \text{ lbs}}{1000 \text{ gal}} = 0.00 \frac{\text{gal}}{\text{year}}$$

$$\frac{0.00 \text{ gal}}{\text{year}} \times \frac{99.0 \text{ tons/yr}}{0.00 \text{ tons/yr}} = 0.0 \frac{\text{gal}}{\text{year}} \text{ FESOP Limit}$$