



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: May 10, 2005  
RE: Rieth Riley Construction Company, Inc / 063-20330-05267  
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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**NEW SOURCE CONSTRUCTION and  
FEDERALLY ENFORCEABLE STATE  
OPERATING PERMIT (FESOP)  
OFFICE OF AIR QUALITY**

**Rieth Riley Construction Company, Inc.  
Portable**

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

**The Permittee must comply with all conditions of this permit. Noncompliance with any 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. This permit also addresses new source review requirements and is intended to fulfill the new source review procedures and permit revision requirements pursuant to 326 IAC 2-8-11.1, applicable to those conditions.

Operation Permit No.: F 063-20330-05267	
Issued by: ORIGINAL SIGNED BY Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: May 10, 2005  Expiration Date: May 10, 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)]

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The Permittee owns and operates a portable hot mix asphalt manufacturing source.

Authorized individual:	Asphalt Plant Specialist
Source Address:	Portable
Mailing Address:	P.O. Box 477, Goshen, Indiana 46527
General Source Phone:	574 - 875 - 5183 x 20226
SIC Code:	2951
Source Location Status:	Hendricks
	Nonattainment for 8-hour ozone, and PM <sub>2.5</sub>
	Attainment for all other criteria pollutants
Source Status:	Federally Enforceable State Operating Permit (FESOP)
	Minor Source, under PSD and Emission Offset Rules
	Minor Source, Section 112 of the Clean Air Act

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

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

- (a) One (1) drum mixer, identified as 2, equipped with a baghouse for particulate control, exhausting to Stack SV1, capacity: 450 tons per hour.
- (b) One (1) dryer burner, identified as 3, firing re-refined oil, natural gas, No. 2 fuel oil, No. 4 fuel oil, propane gas or butane gas, exhausting to Stack SV1, rated at 150 million British thermal units per hour.
- (c) One (1) diesel fired generator, identified as 16, exhausting to Stack SV-13, rated at 680 kilowatts output and 9.176 million British thermal units per hour heat input.
- (d) One (1) diesel fired generator, identified as 17, exhausting to Stack SV-14, rated at 85 kilowatts output and 1.049 million British thermal units per hour heat input.
- (e) Two (2) hot oil heaters, identified as 14A and 14B, firing No. 2 fuel oil or propane gas, exhausting to Stacks SV2 and SV3, capacity: 2.15 million British thermal units per hour, each.
- (f) One (1) tank, identified as 13A, storing liquid asphalt, exhausting to Stack SV4, capacity: 30,000 gallons.
- (g) One (1) tank, identified as 13B, storing liquid asphalt, exhausting to Stack SV5, capacity: 25,000 gallons.
- (h) One (1) tank, identified as 13C, storing liquid asphalt, exhausting to Stack SV6, capacity: 15,000 gallons.
- (i) One (1) tank, identified as 13D, storing liquid asphalt, exhausting to Stack SV7, capacity: 10,000 gallons.

- (j) One (1) tank, identified as 11A, storing No. 2 fuel oil, No. 4 fuel oil or re-refined oil, exhausting to Stack SV8, capacity: 10,000 gallons.
- (k) One (1) tank, identified as 11B, storing No. 2 fuel oil, No. 4 fuel oil or re-refined oil, exhausting to Stack SV9, capacity: 10,000 gallons.
- (l) One (1) tank, identified as 12A, storing No. 2 fuel oil, exhausting to Stack SV10, capacity: 420 gallons.
- (m) One (1) tank, identified as 12B, storing No. 2 fuel oil, exhausting to Stack SV11, capacity: 420 gallons.
- (n) One (1) tank, identified as 12C, storing No. 2 fuel oil, exhausting to Stack SV12, capacity: 8,000 gallons.
- (o) One (1) portable recycled asphalt crusher, identified as 10, capacity: 225 tons of asphalt per hour.
- (p) Cold-mix cutback asphalt production.

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

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

The following VOC and HAP storage containers:

- (1) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons.
- (2) Vessels storing lubricating oil, hydraulic oils, machining oils, and machining fluids.

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

This portable source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) for 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. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than July 1 of each year to:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue  
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 prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:

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

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

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

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

- (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] [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 respon-

sibility, 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 Advanced Source Modification Approval [326 IAC 2-8-4(11)] [326 IAC 2-1.1-9]

- (a) The requirements to obtain a permit revision under 326 IAC 2-8-11.1 are satisfied by this permit for the proposed emission units, control equipment or insignificant activities in Sections A.2 and A.3.
- (b) Pursuant to 326 IAC 2-1.1-9 any permit authorizing construction may be revoked if construction of the emission unit has not commenced within eighteen (18) months from the date of issuance of the permit, or if during the construction work is suspended for a continuous period of one (1) year or more.

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

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



**SECTION C SOURCE OPERATION CONDITIONS**

Entire Source

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

**C.1 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 satisfy the requirements of 326 IAC 2-2 (PSD);
  - (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.2 Opacity [326 IAC 5-1]**

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

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

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

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

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

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

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

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

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

Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions shall be controlled according to the plan submitted on November 1, 2004. The plan is included as Attachment A. All roads and other traffic areas must be paved.

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

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

C.9 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

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

All required notifications shall be submitted to:

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

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.10 Performance Testing [326 IAC 3-6]**

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

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

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

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

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

by IDEM, OAQ if the Permittee submits to IDEM, OAQ a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

**Compliance Requirements [326 IAC 2-1.1-11]**

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

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

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

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

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

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

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

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

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

**C.13 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]**

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

**C.14 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-8-4(3)] [326 IAC 2-8-5(1)]**

(a) 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 temperature or 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.15 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]**

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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 180 days from the date on which this source commences operation).
- 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.16 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68]**

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

**C.17 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-8-4] [326 IAC 2-8-5]**

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- (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.18 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.19 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]**

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

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

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

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue  
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) The first report covered the period commencing on the date of issuance of the original FESOP and ended on the last day of the reporting period. All subsequent reporting periods shall be based on calendar years.

### Portable Source Requirement

#### C.21 Relocation of Portable Sources [326 IAC 2-14-4]

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- (a) This permit is approved for operation in all areas of Indiana except in severe non-attainment areas for ozone (at the time of this permit's issuance these areas were Lake and Porter Counties). This determination is based on the requirements of Prevention of Significant Deterioration in 326 IAC 2-2, and Emission Offset requirements in 326 IAC 2-3. Prior to locating in any severe nonattainment area, the Permittee must submit a request and obtain a permit modification.
- (b) A request to relocate shall be submitted to IDEM, OAQ at least thirty (30) days prior to the intended date of relocation. This submittal shall include the following:
  - (1) A list of governmental officials entitled to receive notice of application to relocate. IC 13-15-3-1
  - (2) A list of adjacent landowners that the Permittee will send written notice to not more than ten (10) days after submission of the request to relocate. IC 13-15-8

The notification by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) A "Relocation Site Approval" letter shall be obtained prior to relocating.
- (d) The Permittee shall also notify the applicable local air pollution control agency when relocating to, or from, one the following:
  - (1) Madison County - (Anderson Office of Air Management)
  - (2) City of Evansville plus four (4) miles beyond the corporate limits but not outside Vanderburgh County - (Evansville EPA)
  - (3) City of Gary - (Gary Department of Environmental Affairs)
  - (4) City of Hammond - (Hammond Department of Environmental Management)
  - (5) Marion County - (Indianapolis Office of Environmental Services)
  - (6) Vigo County - (Vigo County Air Pollution Control)
- (e) A valid operation permit consists of this document and any subsequent "Relocation Site Approval" letter specifying the current location of the portable plant.



### **Stratospheric Ozone Protection**

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

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

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

**SECTION D.1**

**FACILITY OPERATION CONDITIONS**

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

- (a) One (1) drum mixer, identified as 2, equipped with a baghouse for particulate control, exhausting to Stack SV1, capacity: 450 tons per hour.
- (b) One (1) dryer burner, identified as 3, firing re-refined oil, natural gas, No. 2 fuel oil, No. 4 fuel oil, propane gas or butane gas, exhausting to Stack SV1, rated at 150 million British thermal units per hour.
- (c) One (1) diesel fired generator, identified as 16, exhausting to Stack SV-13, rated at 680 kilowatts output and 9.176 million British thermal units per hour heat input.
- (d) One (1) diesel fired generator, identified as 17, exhausting to Stack SV-14, rated at 85 kilowatts output and 1.049 million British thermal units per hour heat input.
- (e) Two (2) hot oil heaters, identified as 14A and 14B, firing No. 2 fuel oil or propane gas, exhausting to Stacks SV2 and SV3, capacity: 2.15 million British thermal units per hour, each.
- (f) One (1) portable recycled asphalt crusher, identified as 10, capacity: 225 tons of asphalt per hour.

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

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

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

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

D.1.2 Particulate Matter (PM and PM<sub>10</sub>) [326 IAC 2-8-4] [326 IAC 2-2]

- (a) PM emissions from the aggregate dryer/mixer shall be limited to 0.428 pounds per ton of asphalt produced.
- (b) Pursuant to 326 IAC 2-8-4, emissions of particulate matter 10 microns or less in diameter (PM<sub>10</sub>) from the aggregate dryer/mixer shall be limited to 0.1224 pounds per ton of asphalt produced, including both filterable and condensable fractions.
- (c) The source shall produce less than 1,000,000 tons of asphalt per 365 consecutive day period, with compliance determined at the end of each day.

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

D.1.3 Particulate Matter (PM) [326 IAC 12] [40 CFR 60.90]

Pursuant to the New Source Performance Standard, 326 IAC 12, (40 CFR Part 60.90, Subpart I), the Permittee shall not discharge into the atmosphere from any affected facility any gases which:

- (a) Contain particulate matter in excess of 0.04 grains per dry standard cubic foot.
- (b) Exhibit twenty (20%) percent opacity, or greater.

D.1.4 Particulate Matter (PM) [326 IAC 6-1]

Pursuant to 326 IAC 6-1-2(a), the Permittee shall not allow or permit discharge to the atmosphere of any gases from the one (1) drum mixer which contain particulate matter in excess of 0.03 grains per dry standard cubic foot.

D.1.5 Nitrogen Oxides (NO<sub>x</sub>) [326 IAC 2-8-4]

(a) Pursuant to 326 IAC 2-8-4, the input of propane to the dryer/burner shall be limited to less than 10,223,158 gallons per 365 consecutive day period, with compliance determined at the end of each day. Therefore, the Part 70 rules (326 IAC 2-7), do not apply.

(b) For purposes of determining compliance based on NO<sub>x</sub> emissions, each gallon of No. 2 distillate oil shall be equivalent to 1.263 gallons of propane, each gallon of No. 4 distillate oil shall be equivalent to 1.263 gallons of propane, each gallon of butane shall be equivalent to 1.105 gallons of propane, each gallon of re-refined oil shall be equivalent to 0.8421 gallons of propane, and each million cubic feet of natural gas shall be equivalent to 9,047 gallons of propane.

Furthermore, each hour of operation of the 680 kilowatt generator (16) shall be equivalent to 2,129.8 gallons of propane, and each hour of operation of the 85 kilowatt generator (17) shall be equivalent to 243.45 gallons of propane.

D.1.6 Sulfur Dioxide (SO<sub>2</sub>) [326 IAC 2-8-4]

(a) Pursuant to 326 IAC 2-8-4, the input of re-refined oil to the dryer/burner shall be limited to less than 1,783,178 gallons per 365 consecutive day period, with compliance determined at the end of each day. Therefore, the Part 70 rules (326 IAC 2-7), do not apply.

(b) Pursuant to 326 IAC 7-1.1-2, the SO<sub>2</sub> emissions from the dryer burner shall not exceed one and six tenths (1.6) pounds per million British thermal units heat input when burning re-refined oil. Compliance with this limit shall be achieved by limiting the sulfur content of the re-refined oil to one percent (1.0%) by weight or less. Pursuant to 326 IAC 7-2-1, compliance shall be demonstrated on a calendar month average. 326 IAC 7-1.1 and 326 IAC 7-2-1 are not federally enforceable.

(c) For purposes of determining compliance based on SO<sub>2</sub> emissions, each gallon of No. 2 distillate oil shall be equivalent to 0.6636 gallons of re-refined oil, each gallon of No. 4 distillate oil shall be equivalent to 0.7010 gallons of re-refined oil, each gallon of propane shall be equivalent to 0.000187 gallons of re-refined oil, each gallon of butane shall be equivalent to 0.000187 gallons of re-refined oil, and each million cubic feet of natural gas shall be equivalent to 5.607 gallons of re-refined oil.

Furthermore, each hour of operation of the 680 kilowatt generator (16) shall be equivalent to 24.88 gallons of re-refined oil, and each hour of operation of the 85 kilowatt generator (17) shall be equivalent to 2.838 gallons of re-refined oil.

(d) Pursuant to 326 IAC 7-1.1-2, the SO<sub>2</sub> emissions from the dryer burner shall not exceed five tenths (0.5) pounds per million British thermal units heat input when burning No. 2 and No. 4 distillate oils. Compliance with this limit shall be achieved by limiting the sulfur content of the No. 2 and No. 4 distillate oils to five tenth percent (0.5%) by weight or less. Pursuant to 326 IAC 7-2-1, compliance shall be demonstrated on a calendar month average. 326 IAC 7-1.1 and 326 IAC 7-2-1 are not federally enforceable.

D.1.7 Hazardous Air Pollutants [326 IAC 2-4.1][326 IAC 2-8-4]

In order that the requirements of 326 IAC 2-4.1 and 326 IAC 2-7 do not apply, the emissions of HCl from the use of re-refined oil in the dryer/burner shall not exceed 5.88 tons per year. Compliance with this limit shall be achieved by limiting the chlorine content of the re-refined oil to

one thousand (1,000) parts per million (ppm) and by limiting the annual re-refined oil usage as required by Condition D.1.6. Compliance shall be demonstrated on a calendar month average.

**D.1.8 Volatile Organic Compounds (VOC) [326 IAC 8-5-2]**

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Pursuant to 326 IAC 8-5-2 (Miscellaneous Operations: asphalt paving), the owner or operator shall not cause or allow the use of asphalt emulsion containing more than seven (7.0) percent oil distillate by volume of emulsion for any paving application except the following purposes:

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

**D.1.9 Preventive Maintenance Plan [326 IAC 2-8-4(9)]**

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A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the drum mixer/dryer burner and any control devices.

**Compliance Determination Requirements**

**D.1.10 Testing Requirements [326 IAC 2-8-5(1), (4)] [326 IAC 2-1.1-11]**

---

Prior to October 1, 2005, the Permittee shall perform PM and PM<sub>10</sub> testing in order to demonstrate compliance with Conditions D.1.2, D.1.3 and D.1.4, 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. PM<sub>10</sub> includes filterable and condensable PM<sub>10</sub>. Testing shall be conducted in accordance with Section C- Performance Testing. Testing shall be conducted by an independent testing firm, and not an employee of Rieth Riley.

**D.1.11 Sulfur Dioxide Emissions and Sulfur Content**

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Compliance shall be determined utilizing one of the following options.

- (a) Pursuant to 326 IAC 3-7-4, the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed five-tenths (0.5) pounds per million British thermal 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 150 million British thermal units per hour burner, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6.

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

#### D.1.12 Used Oil Requirements [326 IAC 2-8-4(i)]

The re-refined oil burned in the aggregate dryer shall comply with the used oil requirements specified in 329 IAC 13 (Used Oil Management). Pursuant to 329 IAC 13-3-2 (Used Oil Specifications), used oil burned for energy recovery that is classified as off-specification used oil fuel shall comply with the provisions of 329 IAC 13-8 (Used Oil Burners Who Burn Off-specification Used Oil For Energy Recovery), including:

- (a) Receipt of an EPA identification number as outlined in 329 IAC 13-8-3 (Notification),
- (b) Compliance with the used oil storage requirements specified in 329 IAC 13-8-5 (Used Oil Storage), and
- (c) Maintaining records pursuant to 329 IAC 13-8-6 (Tracking).

The burning of mixtures of used oil and hazardous waste that is regulated under 329 IAC 3.1 is prohibited at this source.

#### D.1.13 Particulate Matter (PM)

In order to comply with Conditions D.1.2, D.1.3 and D.1.4, the baghouse for PM and PM<sub>10</sub> control shall be in operation and control emissions from the drum mixer/dryer at all times that the drum mixer/dryer is in operation and exhausting to the outside atmosphere.

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

#### D.1.14 Visible Emissions Notations

- (a) Visible emission notations of the conveyers, material transfer points and the drum mixer/burner stack exhaust shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. 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.1.15 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the mixer/dryer, at least once per shift when the drying/mixing process is in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal range of 2.0 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C-Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to

take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

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

#### D.1.16 Baghouse Inspections

An inspection shall be performed each calendar quarter that the plant is in operation of all bags controlling the drying/mixing process when venting to the atmosphere. Inspections required by this condition shall not be performed in consecutive months. All defective bags shall be replaced.

#### D.1.17 Broken or Failed Bag Detection

In the event that bag failure has been observed:

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have 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.
- (b) For single compartment baghouses, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

#### D.1.18 Record Keeping Requirements

- (a) To document compliance with Condition D.1.2(c), the Permittee shall maintain records of the amount of asphalt produced per day.
- (b) To document compliance with Conditions D.1.5, D.1.6, and D.1.7, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken daily and shall be complete and sufficient to establish compliance with the NO<sub>x</sub>, SO<sub>2</sub>, and HCl emission limits established in Conditions D.1.5, D.1.6, and D.1.7. For the annual fuel limits, the compliance determination period is the most recent 365 day period. For the sulfur content limit, the compliance determination period is each calendar month.
  - (1) Calendar dates covered in the compliance determination period;

- (2) Actual fuel usage of each fuel used since last compliance determination period and equivalent sulfur dioxide, nitrogen oxide, and HCl emissions;
- (3) A certification, signed by the owner or operator, that the records of the fuel supplier certifications represent all of the fuel combusted during the period; and

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

- (4) Fuel supplier certifications;
  - (5) The name of the fuel supplier; and
  - (6) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.
- (c) To document compliance with Condition D.1.14, the Permittee shall maintain records of the visible emission notations once per shift.
  - (d) To document compliance with Condition D.1.15, the Permittee shall maintain once per shift records of the total static pressure drop during normal operation.
  - (e) To document compliance with Condition D.1.16, the Permittee shall maintain records of the results of the inspections required under Condition D.1.16.
  - (f) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

#### D.1.19 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.1.2(c), D.1.5 and D.1.6 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within 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).

#### D.1.20 NSPS Reporting Requirement

Pursuant to the New Source Performance Standards (NSPS), 40 CFR Part 60.90, Subpart I, the Permittee is hereby advised of the requirement to report the date of performance testing (at least 30 days prior to such date), when required by a condition elsewhere in this permit.

Reports are to be sent to:

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

The application and enforcement of these standards have been delegated to the IDEM OAQ. The requirements of 40 CFR Part 60 are also federally enforceable.

**SECTION D.2**

**FACILITY OPERATION CONDITIONS**

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

- (g) One (1) tank, identified as 13A, storing liquid asphalt, exhausting to Stack SV4, capacity: 30,000 gallons.
- (h) One (1) tank, identified as 13B, storing liquid asphalt, exhausting to Stack SV5, capacity: 25,000 gallons.
- (i) One (1) tank, identified as 13C, storing liquid asphalt, exhausting to Stack SV6, capacity: 15,000 gallons.
- (j) One (1) tank, identified as 13D, storing liquid asphalt, exhausting to Stack SV7, capacity: 10,000 gallons.
- (k) One (1) tank, identified as 11A, storing No. 2 fuel oil, No. 4 fuel oil or re-refined oil, exhausting to Stack SV8, capacity: 10,000 gallons.
- (l) One (1) tank, identified as 11B, storing No. 2 fuel oil, No. 4 fuel oil or re-refined oil, exhausting to Stack SV9, capacity: 10,000 gallons.
- (m) One (1) tank, identified as 12A, storing No. 2 fuel oil, exhausting to Stack SV10, capacity: 420 gallons.
- (n) One (1) tank, identified as 12B, storing No. 2 fuel oil, exhausting to Stack SV11, capacity: 420 gallons.
- (o) One (1) tank, identified as 12C, storing No. 2 fuel oil, exhausting to Stack SV12, capacity: 8,000 gallons.
- (p) Cold-mix cutback asphalt production.

(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 General Provisions Relating to NSPS [326 IAC 12-1] [40 CFR 60, Subpart A]**

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

**D.2.2 Volatile Organic Compounds (VOC) [326 IAC 2-8-4] [326 IAC 2-3]**

Pursuant to 326 IAC 2-8-4, the total amount of liquid binder used in the production of cold mix cutback asphalt shall be limited to less than 307.2 tons of liquid binder per 365 consecutive day period, with compliance determined at the end of each day, and the daily average diluent content of the liquid binder shall not exceed twenty seven (27.0%) percent. Therefore, the requirements of 326 IAC 2-7 and 326 IAC 2-3 are not applicable.



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

**D.2.3 Record Keeping [326 IAC 12] [40 CFR 60.110b, Subpart Kb]**

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The three (3) tanks, identified as 13A, 13B and 13C, shall comply with the New Source Performance Standard, 326 IAC 12, (40 CFR Part 60.110b, Subpart Kb). These tanks are subject to only 40 CFR Part 60.116b, paragraphs (a) and (b), which require the Permittee to maintain accessible records showing the dimensions of the storage vessels and an analysis showing the capacity of the storage vessels. Records shall be kept for the life of the storage tanks.

**D.2.4 Record Keeping Requirements**

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To document compliance with Condition D.2.2, the Permittee shall maintain daily records of the following values:

- (a) Amount of liquid binder used in the production of cold mix cutback asphalt; and
- (b) Average diluent content of the liquid binder.

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

**D.2.5 Reporting Requirements**

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A quarterly summary of the information to document compliance with Condition D.2.2 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

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

Source Name: Rieth Riley Construction Company, Inc.  
Source Address: Portable  
Mailing Address: P.O. Box 477, Goshen, Indiana 46527  
FESOP No.: 063-20330-05267

**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: Rieth Riley Construction Company, Inc.  
Source Address: Portable  
Mailing Address: P.O. Box 477, Goshen, Indiana 46527  
FESOP No.: 063-20330-05267

**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"><li>• 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</li><li>• 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</li></ul>
---

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 <sub>2</sub> , VOC, NO <sub>x</sub> , 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 Usage Report  
 (Submit Report Quarterly)**

Source Name: Rieth Riley Construction Company, Inc.  
 Source Address: Portable  
 Mailing Address: P.O. Box 477, Goshen, Indiana 46527  
 FESOP No.: F 063-20330-05267  
 Facility: Dryer/mixer  
 Parameter: Gallons of re-refined oil burned in the aggregate dryer (SO<sub>2</sub>)  
 Limit: Less than 1,783,178 gallons of re-refined oil per 365 consecutive day period, with compliance determined at the end of each day, where each gallon of No. 2 distillate oil shall be equivalent to 0.6636 gallons of re-refined oil, each gallon of No. 4 distillate oil shall be equivalent to 0.7010 gallons of re-refined oil, each gallon of propane shall be equivalent to 0.000187 gallons of re-refined oil, each gallon of butane shall be equivalent to 0.000187 gallons of re-refined oil, each million cubic feet of natural gas shall be equivalent to 5.607 gallons of re-refined oil, each hour of operation of the 680 kilowatt generator (16) shall be equivalent to 24.88 gallons of re-refined oil, and each hour of operation of the 85 kilowatt generator (17) shall be equivalent to 2.838 gallons of re-refined oil.

Month: \_\_\_\_\_ Year: \_\_\_\_\_

Day	Gallons of re-refined oil or equivalent burned (this day)	Gallons of re-refined oil or equivalent burned (last 364 days)	Gallons of re-refined oil or equivalent burned (365 day total)	Day	Gallons of re-refined oil or equivalent burned (this day)	Gallons of re-refined oil or equivalent burned (last 364 days)	Gallons of re-refined oil or equivalent burned (365 day total)
1				17			
2				18			
3				19			
4				20			
5				21			
6				22			
7				23			
8				24			
9				25			
10				26			
11				27			
12				28			
13				29			
14				30			
15				31			
16							

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**

**FESOP Usage Report  
 (Submit Report Quarterly)**

Source Name: Rieth Riley Construction Company, Inc.  
 Source Address: Portable  
 Mailing Address: P.O. Box 477, Goshen, Indiana 46527  
 FESOP No.: F 063-20330-05267  
 Facility: Dryer/mixer  
 Parameter: Gallons of propane burned in the aggregate dryer (NO<sub>x</sub>)  
 Limit: Less than 10,223,158 gallons of propane per 365 consecutive day period, with compliance determined at the end of each day, where each gallon of No. 2 distillate oil shall be equivalent to 1.263 gallons of propane, each gallon of No. 4 distillate oil shall be equivalent to 1.263 gallons of propane, each gallon of butane shall be equivalent to 1.105 gallons of propane, each gallon of re-refined oil shall be equivalent to 0.8421 gallons of propane, each million cubic feet of natural gas shall be equivalent to 9,047 gallons of propane, each hour of operation of the 680 kilowatt generator (16) shall be equivalent to 2,129.8 gallons of propane, and each hour of operation of the 85 kilowatt generator (17) shall be equivalent to 243.45 gallons of propane.

Month: \_\_\_\_\_ Year: \_\_\_\_\_

Day	Gallons of propane oil or equivalent burned (this day)	Gallons of propane oil or equivalent burned (last 364 days)	Gallons of propane oil or equivalent burned (365 day total)	Day	Gallons of propane oil or equivalent burned (this day)	Gallons of propane oil or equivalent burned (last 364 days)	Gallons of propane oil or equivalent burned (365 day total)
1				17			
2				18			
3				19			
4				20			
5				21			
6				22			
7				23			
8				24			
9				25			
10				26			
11				27			
12				28			
13				29			
14				30			
15				31			
16							

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**

**FESOP Usage Report  
 (Submit Report Quarterly)**

Source Name: Rieth Riley Construction Company, Inc.  
 Source Address: Portable  
 Mailing Address: P.O. Box 477, Goshen, Indiana 46527  
 FESOP No.: F 063-20330-05267  
 Facility: Entire plant  
 Parameter: Tons of asphalt produced  
 Limit: Less than 1,000,000 tons per 365 consecutive day period, with compliance determined at the end of each day.

Month: \_\_\_\_\_ Year: \_\_\_\_\_

Day	Tons of asphalt produced (this day)	Tons of asphalt produced (last 364 days)	Tons of asphalt produced (365 day total)	Day	Tons of asphalt produced (this day)	Tons of asphalt produced (last 364 days)	Tons of asphalt produced (365 day total)
1				17			
2				18			
3				19			
4				20			
5				21			
6				22			
7				23			
8				24			
9				25			
10				26			
11				27			
12				28			
13				29			
14				30			
15				31			
16							

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**

**FESOP Usage Report**  
 (Submit Report Quarterly)

Source Name: Rieth Riley Construction Company, Inc.  
 Source Address: Portable  
 Mailing Address: P.O. Box 477, Goshen, Indiana 46527  
 FESOP No.: F 063-20330-05267  
 Facility: Cold-mix cutback asphalt production  
 Parameter: Amount of liquid binder used  
 Limit: Less than 307.2 tons of liquid binder per 365 consecutive day period, with compliance demonstrated at the end of each day. The daily average diluent content of the liquid binder shall not exceed twenty seven (27%) percent.

Month: \_\_\_\_\_ Year: \_\_\_\_\_

Day	Tons of liquid binder used (this day)	Diluent content (%)	Tons of liquid binder used (last 364 days)	Tons of liquid binder used (365 day total)	Day	Tons of liquid binder used (this day)	Diluent content (%)	Tons of liquid binder used (last 364 days)	Tons of liquid binder used (365 day total)
1					17				
2					18				
3					19				
4					20				
5					21				
6					22				
7					23				
8					24				
9					25				
10					26				
11					27				
12					28				
13					29				
14					30				
15					31				
16									

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: Rieth Riley Construction Company, Inc.  
 Source Address: Portable  
 Mailing Address: P.O. Box 477, Goshen, Indiana 46527  
 FESOP No.: F 063-20330-05267

Months: \_\_\_\_\_ to \_\_\_\_\_ Year: \_\_\_\_\_

Page 1 of 2

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

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

Form Completed by: \_\_\_\_\_

Title / Position: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

A certification is not required for this report.

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

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

**Source Background and Description**

<b>Source Name:</b>	<b>Rieth Riley Construction Company, Inc.</b>
<b>Source Location:</b>	<b>Portable (initial location will be the west side of County Road 200 East, just south of U.S. 36, Danville, Indiana 46122)</b>
<b>County:</b>	<b>Hendricks</b>
<b>SIC Code:</b>	<b>2951</b>
<b>Operation Permit No.:</b>	<b>F 063-20330-05267</b>
<b>Permit Reviewer:</b>	<b>Edward A. Longenberger</b>

The Office of Air Quality (OAQ) has reviewed a FESOP application from Rieth Riley Construction Company, Inc. relating to the construction and operation of a portable hot mix asphalt manufacturing source.

**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**

The application includes information relating to the prior approval for the construction and operation of the following equipment pursuant to 326 IAC 2-8-4(11):

- (a) One (1) drum mixer, identified as 2, equipped with a baghouse for particulate control, exhausting to Stack SV1, capacity: 450 tons per hour.
- (b) One (1) dryer burner, identified as 3, firing re-refined oil, natural gas, No. 2 fuel oil, No. 4 fuel oil, propane gas or butane gas, exhausting to Stack SV1, rated at 150 million British thermal units per hour.
- (c) One (1) diesel fired generator, identified as 16, exhausting to Stack SV-13, rated at 680 kilowatts output and 9.176 million British thermal units per hour heat input.
- (d) One (1) diesel fired generator, identified as 17, exhausting to Stack SV-14, rated at 85 kilowatts output and 1.049 million British thermal units per hour heat input.
- (e) Two (2) hot oil heaters, identified as 14A and 14B, firing No. 2 fuel oil or propane gas, exhausting to Stacks SV2 and SV3, capacity: 2.15 million British thermal units per hour, each.
- (f) One (1) portable recycled asphalt crusher, identified as 10, capacity: 225 tons of asphalt per hour.
- (g) One (1) tank, identified as 13A, storing liquid asphalt, exhausting to Stack SV4, capacity: 30,000 gallons.
- (h) One (1) tank, identified as 13B, storing liquid asphalt, exhausting to Stack SV5, capacity: 25,000 gallons.

- (i) One (1) tank, identified as 13C, storing liquid asphalt, exhausting to Stack SV6, capacity: 15,000 gallons.
- (j) One (1) tank, identified as 13D, storing liquid asphalt, exhausting to Stack SV7, capacity: 10,000 gallons.
- (k) One (1) tank, identified as 11A, storing No. 2 fuel oil, No. 4 fuel oil or re-refined oil, exhausting to Stack SV8, capacity: 10,000 gallons.
- (l) One (1) tank, identified as 11B, storing No. 2 fuel oil, No. 4 fuel oil or re-refined oil, exhausting to Stack SV9, capacity: 10,000 gallons.
- (m) One (1) tank, identified as 12A, storing No. 2 fuel oil, exhausting to Stack SV10, capacity: 420 gallons.
- (n) One (1) tank, identified as 12B, storing No. 2 fuel oil, exhausting to Stack SV11, capacity: 420 gallons.
- (o) One (1) tank, identified as 12C, storing No. 2 fuel oil, exhausting to Stack SV12, capacity: 8,000 gallons.
- (p) Cold-mix cutback asphalt production.

### **Insignificant Activities**

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

The following VOC and HAP storage containers:

- (1) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons.
- (2) Vessels storing lubricating oil, hydraulic oils, machining oils, and machining fluids.

### **Existing Approvals**

This source has no previous IDEM, OAQ approvals.

### **Enforcement Issue**

There are no enforcement actions pending.

### **Recommendation**

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

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

An administratively complete FESOP renewal application for the purposes of this review was received on November 1, 2004.

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

### Emission Calculations

See pages 1 through 12 of Appendix A of this document for detailed emission calculations.

### Potential to Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U.S. EPA, the department, or the appropriate local air pollution control agency.”

Pollutant	Potential to Emit (tons/yr)
PM	56,150
PM <sub>10</sub>	13,122
SO <sub>2</sub>	520
VOC	Greater than 100
CO	98.4
NO <sub>x</sub>	337

  

HAPs	Potential to Emit (tons/yr)
Total HAPs*	14.98

\* HAPs include benzene, ethyl benzene, formaldehyde, methyl chloroform, naphthalene, toluene, xylene; arsenic, cadmium, chromium, manganese, mercury and nickel compounds. No single HAP exceeds a potential to emit of greater than ten (10) tons per year.

The potential to emit (as defined in 326 IAC 2-7-1(29)) of PM<sub>10</sub>, SO<sub>2</sub> and NO<sub>x</sub> are each 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.

### Potential to Emit After Issuance

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.

Process/Emission Unit	Potential To Emit (tons/yr)						
	PM	PM <sub>10</sub>	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	HAPs
Drum mixer including burner (worst case)	Less than 214	Less than 61.2	Less than 95.4	4.69	55.19	Less than 97.12	14.98
Two generators	13.88	13.88		16.12	42.55		
Two hot oil heaters (worst case)	0.127	0.209	4.51	0.391	0.659	2.88	
Conveying/handling	5.18	0.518	-	-	-	-	
Screening	15.8	1.58	-	-	-	-	
Storage piles	0.509	0.178	-	-	-	-	
Unpaved roads	572.79	22.38	-	-	-	-	
Cold mix asphalt	-	-	-	Less than 78.8	-	-	
<b>Total Emissions</b>	<b>Less than 250*</b>	<b>Less than 100</b>	<b>Less than 100</b>	<b>Less than 100</b>	<b>98.4</b>	<b>Less than 100</b>	<b>14.98</b>

\* Excluding fugitive emissions from unpaved roads.

### County Attainment Status

This is a portable source and its initial location is Hendricks County. The source can operate in all areas of the state except any county classified as severe or extreme nonattainment for ozone.

Pollutant	Status
PM <sub>10</sub>	Attainment
SO <sub>2</sub>	Attainment
NO <sub>2</sub>	Attainment
1-Hour Ozone	Attainment
8-Hour Ozone	Basic nonattainment
CO	Attainment
Lead	Attainment

- (a) Volatile organic compounds (VOC) and nitrogen oxides (NO<sub>x</sub>) 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<sub>x</sub> emissions are considered when evaluating the rule applicability relating to the ozone standards. Hendricks County has been designated as nonattainment for the 8-hour ozone standard. Therefore, VOC and NO<sub>x</sub> emissions were reviewed pursuant to the requirements of 326 IAC 2-3 (Emission Offset).

- (b) Hendricks County has been classified as attainment or unclassifiable in Indiana for all 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 for the source section.

### Portable Source

- (a) Initial Location  
This is a portable source and its initial location is the west side of County Road 200 East, just south of U.S. 36, Danville, Indiana 46122.
- (b) PSD and Emission Offset Requirements  
The emissions from this portable source were reviewed under the requirements of the Prevention of Significant Deterioration (PSD) 326 IAC 2-2 and Emission Offset 326 IAC 2-3.
- (c) Fugitive Emissions

Although this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2, there is an applicable New Source Performance Standard that was in effect on August 7, 1980 (40 CFR 60, Subpart I). Therefore, the fugitive emissions, except those from unpaved roads, are counted toward determination of PSD and Emission Offset applicability.

Pursuant to 40 CFR 60.90(a), the affected facility to which the provisions of Subpart I apply is each hot mix asphalt facility. For the purpose of Subpart I, a hot mix asphalt facility is comprised only of any combination of the following: dryers; systems for screening, handling, storing, and weighing hot aggregate; systems for loading, transferring, and storing mineral filler, systems for mixing hot mix asphalt; and the loading, transfer, and storage systems associated with emission control systems. Since unpaved roads are not an affected facility of the applicable NSPS, fugitive particulate emissions resulting from unpaved roads are not counted toward determination of PSD and Emission Offset applicability.

### Federal Rule Applicability

- (a) This portable asphalt plant is subject to the New Source Performance Standard, 326 IAC 12, (40 CFR Part 60.90, Subpart I), because it was constructed after June 11, 1973. Pursuant to this rule, the Permittee shall not discharge into the atmosphere from any affected facility any gases which:
  - (1) contain particulate matter in excess of 0.04 grains per dry standard cubic foot, equivalent to 22.28 pounds per hour at a flow rate of 92,000 acfm and a temperature of 250 degrees Fahrenheit.
  - (2) exhibit 20 percent opacity, or greater.
- (b) On October 15, 2003, revisions to 40 CFR 60, Subpart Kb, became effective. As of the date this permit is being issued these revisions have not been incorporated into the Indiana state rules. Therefore, the requirements from the previous version of 40 CFR 60, Subpart Kb, published in the federal register on August 8, 1987, which is referenced by 326 IAC 12, will remain applicable until the revisions are incorporated into the Indiana State Implementation Plan (SIP) and the condition is modified in a subsequent permit action.

The six (6) tanks, identified as 13D, 11A, 11B, 12A, 12B and 12C, are not subject to the New Source Performance Standard, 326 IAC 12, (40 CFR Part 60.110b, Subpart Kb), because the tanks each have a capacity less than forty (40) cubic meters.

Pursuant to 40 CFR 52 Subpart P and 326 IAC 12, the one (1) tank, identified as 13C, is subject to the New Source Performance Standard, 326 IAC 12, (40 CFR Part 60.110b, Subpart Kb), because the tank was constructed after July 23, 1984. Since the tank has a capacity greater than forty (40) cubic meters but less than seventy-five (75) cubic meters, the tank is only subject to 40 CFR Part 60.116b, paragraphs (a) and (b), which require record keeping. Pursuant to 40 CFR 60.110b, the requirements of 40 CFR 60, Subpart Kb, will not be applicable after the state rule revision because the tank has a capacity less than seventy-five (75) cubic meters.

Pursuant to 40 CFR 52 Subpart P and 326 IAC 12, the two (2) tanks, identified as 13A and 13B, are subject to the New Source Performance Standard, 326 IAC 12, (40 CFR Part 60.110b, Subpart Kb), because the tanks were constructed after July 23, 1984 and have capacities greater than seventy-five (75) cubic meters but less than 151 cubic meters. Since the material stored in these tanks has a maximum true vapor pressure less than fifteen (15) kiloPascals, the tanks are only subject to 40 CFR Part 60.116b, paragraphs (a) and (b), which require record keeping. Pursuant to 40 CFR 60.110b, the requirements of 40 CFR 60, Subpart Kb, will not be applicable after the state rule revision because the tank has a capacity greater than seventy-five (75) cubic meters, but less than 151 cubic meters, and a maximum true vapor pressure less than 15.0 kiloPascals.

- (c) Pursuant to 40 CFR 60.670(b), the one (1) portable asphalt crusher is not subject to the New Source Performance Standard, 326 IAC 12, (40 CFR 60, Subpart OOO) because it follows in the plant process a facility that is subject to the provisions of 40 CFR 60, Subpart I.
- (d) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14 and 40 CFR Parts 61 and 63) included in this permit.

### **State Rule Applicability – Entire Source**

#### **326 IAC 2-3 (Emission Offset)**

The potential VOC and NO<sub>x</sub> emissions are each limited to less than one hundred (100) tons per year. Therefore, this source is a minor source pursuant to 326 IAC 2-3 (Emission Offset).

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

The potential PM<sub>10</sub>, VOC and SO<sub>2</sub> emissions are each limited to less than one hundred (100) tons per year, in order to comply with the requirements of 326 IAC 2-8 (FESOP). The potential PM emissions, except the fugitive emissions from unpaved roads, shall be limited to less than 250 tons per year. Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable.

In order to limit the potential to emit PM from the entire source to less than 250 tons per year, the PM emissions from the drum mixer (including the burner) will be limited to 214 tons per year. The source has requested a production limit of 1,000,000 tons of asphalt produced per 365 consecutive day period, with compliance determined at the end of each day. This production limit, combined with an emission limit of 0.428 pounds of PM per ton of asphalt produced, is equivalent to 214 tons of PM per year.



### 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<sub>x</sub>, 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)

- (a) In order to limit the potential to emit PM<sub>10</sub> from the entire source to less than one hundred (100) tons per year, the PM<sub>10</sub> emissions from the drum mixer (including the burner) will be limited to 61.2 tons per year. The source has requested a production limit of 1,000,000 tons of asphalt produced per 365 consecutive day period, with compliance determined at the end of each day. This production limit, combined with an emission limit of 0.1224 pounds of PM<sub>10</sub> per ton of asphalt produced, is equivalent to 61.2 tons of PM<sub>10</sub> per year.
- (b) The applicant has accepted a re-refined oil limit to the dryer/burner and the generators of less than 1,783,178 gallons per 365 consecutive day period, with compliance determined at the end of each day. This limit is equivalent to an SO<sub>2</sub> limit of less than 95.4 tons per year (see page 11 of Appendix A). The full SO<sub>2</sub> potential emission rate of 4.51 tons per year from the two (2) hot oil heaters has been assumed in computing this limit.

For purposes of determining compliance based on SO<sub>2</sub> emissions, each gallon of No. 2 distillate oil shall be equivalent to 0.6636 gallons of re-refined oil, each gallon of No. 4 distillate oil shall be equivalent to 0.7010 gallons of re-refined oil, each gallon of propane shall be equivalent to 0.000187 gallons of re-refined oil, each gallon of butane shall be equivalent to 0.000187 gallons of re-refined oil, and each million cubic feet of natural gas shall be equivalent to 5.607 gallons of re-refined oil.

Furthermore, each hour of operation of the 680 kilowatt generator (16) shall be equivalent to 24.88 gallons of re-refined oil, and each hour of operation of the 85 kilowatt generator (17) shall be equivalent to 2.838 gallons of re-refined oil.

- (c) Similarly, the applicant has accepted a propane fuel limit to the dryer/burner and the generators of less than 10,223,158 gallons per 365 consecutive day period, with compliance determined at the end of each day. This limit is equivalent to an NO<sub>x</sub> limit of less than 97.1 tons per year (see page 10 of Appendix A). The full NO<sub>x</sub> potential emission rate of 2.88 tons per year from the two (2) hot oil heaters has been assumed in computing this limit.

For purposes of determining compliance based on NO<sub>x</sub> emissions, each gallon of No. 2 distillate oil shall be equivalent to 1.263 gallons of propane, each gallon of No. 4 distillate oil shall be equivalent to 1.263 gallons of propane, each gallon of butane shall be equivalent to 1.105 gallons of propane, each gallon of re-refined oil shall be equivalent to 0.8421 gallons of propane, and each million cubic feet of natural gas shall be equivalent to 9,047 gallons of propane.

Furthermore, each hour of operation of the 680 kilowatt generator (16) shall be equivalent to 2,129.8 gallons of propane, and each hour of operation of the 85 kilowatt generator (17) shall be equivalent to 243.45 gallons of propane.

- (d) The applicant has also accepted a liquid binder usage limit for the production of cold mix cutback asphalt of less than 307.2 tons per year which is equivalent to VOC emissions of 78.8 tons per year based on 27.0 percent diluent present in the liquid binder.

Compliance with the above limits will render the requirements of 326 IAC 2-7 not applicable.

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

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

This rule requires a fugitive dust plan to be submitted. The plan was submitted on November 1, 2004, and is included as Attachment A. The source shall comply with all dust abatement measures contained therein.

### **State Rule Applicability – Individual Facilities**

#### 326 IAC 6-1-2 (Particulate Matter; Non-attainment Area Limitations)

This source is not subject to the emission limitation in 326 IAC 6-1-2(c) (Nonattainment Area Particulate Limitations for Asphalt Concrete Plants), because it was constructed after June 11, 1973. Therefore, the source is subject to the particulate limitation contained in 326 IAC 6-1-2(a).

Pursuant to 326 IAC 6-1-2(a), particulate matter emissions from this portable asphalt plant shall not exceed 0.03 grains per dry standard cubic foot, equivalent to 16.71 pounds per hour at a flow rate of 92,000 actual cubic feet per minute and a temperature of 250 degrees Fahrenheit. Compliance with this limit will ensure compliance with the 0.04 grains per dry standard cubic foot limit prescribed by NSPS Subpart I.

#### 326 IAC 6-3-2 (Process Operations)

Pursuant to 326 IAC 6-3-1(c)(5), if a limit is established by 326 IAC 12 concerning New Source Performance Standards and is more stringent than the limit established by 326 IAC 6-3, then the limitation contained in 326 IAC 6-3 shall not apply. Therefore, since the asphalt plant is subject to the New Source Performance Standard, 326 IAC 12, (40 CFR Part 60.90, Subpart I), the requirements of 326 IAC 6-3-2 are not applicable to the aggregate mixer/dryer.

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

This rule requires that the sulfur dioxide emissions from the combustion of No. 2 distillate and 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 150 million British thermal units per hour).

This rule also requires that the sulfur dioxide emissions from the combustion of re-refined oil not exceed 1.6 pounds per million British thermal units of heat input (the equivalent of 1.047% sulfur content at a higher heating value of 0.140 million British thermal units per gallon and a maximum heat input rate of 150 million British thermal units per hour). The source has requested a voluntary limit of 1.0% sulfur content.

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

This source was constructed after January 1, 1980, therefore, pursuant to 326 IAC 8-5-1(2), the requirements of 326 IAC 8-5-2 are applicable. 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.

### Testing Requirements

PM and PM<sub>10</sub> testing is required for the drum mixer and dryer/burner stack exhaust SV1 in order to assure compliance with 326 IAC 2-2, 326 IAC 2-8-4, 326 IAC 6-1 and NSPS Subpart I as shown in Appendix A. Stack testing will determine if the actual control efficiencies for both PM and PM<sub>10</sub> are adequate to demonstrate compliance with the PM and PM<sub>10</sub> emission limits.

### 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 emission notations of the conveyers, material transfer points and the drum mixer/burner stack exhaust shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal. For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance

and characteristics of normal visible emissions for that specific process. The 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.

- (b) The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the mixer/dryer, at least once per shift when the drying/mixing process is in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal range of 2.0 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

The instrument used for determining the pressure 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 inspection shall be performed each calendar quarter of all bags controlling the drying/mixing process when venting to the atmosphere. Inspections required by this condition shall not be performed in consecutive months. All defective bags shall be replaced.
- (d) In the event that bag failure has been observed:
- (1) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have 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.
- (2) For single compartment baghouses, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or tribo-flows, then 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).

These monitoring conditions are necessary because the baghouse for the mixer/dryer must operate properly to ensure compliance with 326 IAC 2-2, 326 IAC 6-1, 326 IAC 2-8, and NSPS Subpart I.

### **Conclusion**

The construction and operation of this portable hot mix asphalt manufacturing source shall be subject to the conditions of the **FESOP 063-20330-05267**.

## Indiana Department of Environmental Management Office of Air Quality

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

#### Source Background and Description

<b>Source Name:</b>	<b>Rieth Riley Construction Company, Inc.</b>
<b>Source Location:</b>	<b>Portable (initial location will be the west side of County Road 200 East, just south of U.S. 36, Danville, Indiana 46122)</b>
<b>County:</b>	<b>Hendricks</b>
<b>SIC Code:</b>	<b>2951</b>
<b>Operation Permit No.:</b>	<b>F 063-20330-05267</b>
<b>Permit Reviewer:</b>	<b>Angelique C. Oliger</b>

On February 18, 2005, the Office of Air Quality (OAQ) had a notice published in The Hendricks County Weekend Flyer, Danville, Indiana, stating that Rieth Riley Construction Company, Inc. (Rieth Riley) had applied for a Federally Enforceable State Operating Permit (FESOP) to construct and operate a portable hot mix asphalt manufacturing source.

The notice also stated that the OAQ proposed to issue a permit for this source and provided information on how the public could review the draft permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued.

On April 7, 2005, the Office of Air Quality (OAQ) had a notice published in the in The Hendricks County Weekend Flyer, Danville, Indiana, stating that a public hearing would be held to receive comments from citizens. On April 19, 2005, a public hearing was held at the Hendricks County Government Center, Danville, Indiana. Paul Dubenetzky was the hearing officer, and a transcript was made of the hearing by Accurate Reporting of Indiana. Comments were heard from Martha Crosley, Mike Connelly, Robert Thompson, Peggy Spence, Tom Doty, Jim Owens, Betty Conklin, Bill Miller, Judy Madsen, Robert Greenstreet, Mike Nielson, Paul Robbins, and Jim Graber.

Comments from the hearing have been summarized when possible are addressed below:

#### **Comment 1:**

The permit that Rieth Riley is requesting is a Federally Enforceable State Operating Permit (FESOP). This type of permit allows sources to limit their air emission below the major source threshold. What are the major source threshold criteria and has Rieth Riley limited their emissions below these criteria? How can the public know if this has been done?

#### **Response to Comment 1:**

The major source thresholds for a facility operating in Hendricks County are shown in the following table. Also shown are the limited emissions for the Rieth Riley plant. This table shows that the emissions from this plant are limited to less than the major source thresholds. These and other supporting calculations are provided on Pages 3 and 4 of the TSD, and on Pages 1 through 12 of Appendix A to the TSD along with Pages 1 through 4 of Appendix B to the TSD.

Process/Emission Unit	Potential To Emit (tons/yr)						HAPs
	PM	PM <sub>10</sub>	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	
Drum mixer including burner (worst case)	Less than 214	Less than 61.2	Less than 95.4	4.69	55.19	Less than 97.12	Single (HCl) 5.88 Total 14.98
Two generators	13.88	13.88		16.12	42.55		
Two hot oil heaters (worst case)	0.127	0.209	4.51	0.391	0.659	2.88	
Conveying/handling	5.18	0.518	-	-	-	-	
Screening	15.8	1.58	-	-	-	-	
Storage piles	0.509	0.178	-	-	-	-	
Paved roads	50.40	9.81	-	-	-	-	
Load Out/Silo Filling	-	-	-	-	-	-	Single (2-Methylnaphthalene) 0.0067 Total 0.135
Cold mix asphalt	-	-	-	Less than 78.8	-	-	-
Total Emissions	Less than 250*	Less than 100	Less than 100	Less than 100	98.4	Less than 100	Single (xylene) 5.32 Total 15.11
Major Source Thresholds	250	100	100	100	100	100	Single <10 Total <25

\* Excluding fugitive PM emissions from paved roads. Pursuant to 40 CFR 60.90(a), the affected facility to which the provisions of Subpart I apply is each hot mix asphalt facility. For the purpose of Subpart I, a hot mix asphalt facility is comprised only of any combination of the following: dryers; systems for screening, handling, storing, and weighing hot aggregate; systems for loading, transferring, and storing mineral filler, systems for mixing hot mix asphalt; and the loading, transfer, and storage systems associated with emission control systems. Since paved roads are not an affected facility of the applicable NSPS, fugitive PM emissions resulting from paved roads are not counted toward determination of PSD and Emission Offset applicability.

The permit requires Rieth Riley to keep a variety of records and to report on how it operates on a day-to-day basis. For example, Condition D.1.6 (a) limits the input of re-refined oil to the dryer/burner to less than 1,783,178 gallons per 365 consecutive day period. To demonstrate compliance with this requirement, the source will submit quarterly reports indicating that the source was in compliance for each day during that quarter. These reports are available for public review. Falsification of records is a criminal offense.

Compliance monitoring conditions, such as once-per-shift visible emissions notations and pressure drop readings of the baghouse are included in the permit to document that the control equipment is operating properly at all times. This is intended to ensure that the plant is in continuous compliance with the permit limitations.

The permit also requires that Rieth Riley conduct emissions testing prior to October 1, 2005. This is a test that involves using scientific instruments to measure the amount of particulate (PM and

PM<sub>10</sub>) actually being released from that stack on that day. This test is required to ensure compliance with the PM and PM<sub>10</sub> limits. The stack test results will be available for public review after it is completed.

Both the quarterly reports and the stack test results can be obtained by contacting the OAQ Compliance Branch at 1-800-452-6027 ext. 3-0178.

**Comment 2:**

How does IDEM determine the emissions of the source? Does IDEM calculate emissions based on verifiable assumptions or are standard emission rates applied based on the type of industry?

**Response to Comment 2:**

The potential to emit of a FESOP source is the maximum capacity to emit a pollutant under its physical and operational design. A physical or operational limitation on the capacity of the source to emit a pollutant includes air pollution control equipment and restrictions on the type or amount of material processed. This type of limitation shall be treated as part of its design if the limitation or the effect it would have on emissions is enforceable as a practical matter. The intent of a FESOP is to enforce such limitations as a practical matter.

The table above 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. IDEM uses the maximum capacity of the source under its physical and operational design in conjunction with emission factors as approved by the EPA to calculate emissions for specific processes.

See Appendix A and Appendix B of the TSD for calculations which include references to sources for emission factors. For more information regarding EPA approved emission factors visit [www.epa.gov/ttn/chief](http://www.epa.gov/ttn/chief). These emission factors are most often based on direct measurements of emissions at similar sources. When direct measurement is not possible, mass balances or engineering calculations form the basis for the emission factor.

**Comment 3:**

Citizens of Hendricks County are concerned about the health effects from the high levels of hazardous air pollutants (HAPs) which could potentially be emitted from Rieth Riley. According to reports from the National Emissions Inventory (NEI), existing Rieth Riley plants in Marion County emitted high levels of HAPs with levels greater than ten (10) tons per year of HCl in 1999. Does this mean that the Rieth Riley plant to be located in Hendricks County will be a major source of hazardous air pollutants?

Rieth Riley will be located adjacent to another facility which emits a large portion of the total HAPs emitted in Hendricks County creating a high concentration of HAPs in a small area. Does IDEM consider the existing emissions of HAPs when issuing approvals to sources that emit HAPs? Is there any action that citizens can take to prevent sources emitting HAPs from locating near each other in their area? Is there any action that citizens can take to prevent sources emitting HAPs from locating near hospitals, nursing homes, and daycare centers?

**Response to Comment 3:**

In response to the health concerns expressed from the citizens of Hendricks County, IDEM has conducted predictive air modeling utilizing sophisticated computer programs to determine the impact of HAPs resulting from Rieth Riley operating an asphalt plant under the conditions established in the final air permit. IDEM, OAQ performed this risk assessment using methods recommended in the U.S. EPA's Risk Assessment Library. A risk analysis of the predicted exposure to all HAPs based on the results of the air modeling was performed and is attached as page one of three of Appendix C to the TSD.



Any risk determination is based on the idea that the exposure would be to sensitive subpopulations. That is, the risk assessment was performed assuming that all exposed individuals fall into some sort of a sensitive subpopulation category (elderly, children, individuals with compromised immune systems, etc.) and are continuously exposed to the maximum predicted concentration of HAPs at the fence-line of Rieth Riley for seventy (70) years. This is a conservative assumption to take into account those subpopulations mixed within the general population:

The analysis concluded that:

- (a) There is no reasonable expectation of acute health effects due to HAPs exposure resulting from the operation of this new asphalt plant. The acute hazard quotient is less than one (1).
- (b) There is no reasonable expectation of chronic non-cancer health effects due to HAPs exposure resulting from the operation of this new asphalt plant. The chronic hazard quotient is less than one (1).
- (c) The maximum probabilistic cancer risk assessment is less than two (2) in one million (1,000,000). The risks calculated at the other sites are much lower. For example,  $1.0E-7$  is less than one (1) in one million (1,000,000).

A major source of HAPs is one that has the potential to emit of any single HAP of greater than or equal to ten (10) tons per year or the potential to emit of a combination HAPs of greater than or equal to twenty-five (25) tons per year. As shown in the table above and in Appendices A and B of this Addendum to the Technical Support Document, the new Rieth Riley plant to be located in Hendricks County will not be a major source of HAPs based on the potential to emit of HAPs. The emission factor used for HCl in the 1999 NEI has been revoked and replaced with a more accurate methodology for calculating HCl emissions as shown on page 1 of 4 of Appendix B. The method used for calculating 1999 NEI reports was not as accurate as the method used in this permit, and those reports do not affect the potential to emit of the new Rieth Riley plant to be located in Hendricks County. Furthermore, Federal Register, Volume 67, Number 29, of February 12, 2002, de-listed asphalt concrete manufacturing plants from National Emission Standards for Hazardous Air Pollutants (NESHAPs) because EPA has not identified any asphalt plants that are major sources of HAPs.

IDEM is delegated only to enforce laws approved by the U.S. EPA and the Indiana Air Pollution Control Board as they currently exist. At this time, the only applicable requirements for asphalt plants as minor sources of HAPs are those requirements that prevent the source from becoming major. IDEM does not have the sole authority to change them. Citizens can participate in the process for creating new laws or amending existing laws that govern air pollution by becoming involved with the Air Pollution Control Board meetings. Citizens can request to be informed of the agenda for board meetings by contacting the OAQ Rules Section at 1-800-451-6027 ext. 3-0426. The Board Meeting agenda and materials are available on line for viewing at: [www.in.gov/idem/rules/](http://www.in.gov/idem/rules/). Any citizen can also request the Air Pollution Control Board to initiate a rulemaking by providing a petition, which is supported by reasons, accompanied with at least two hundred (200) signatures (*IC 13-14-8-5*). To make arrangements to present a citizen petition to the Air Pollution Control Board, please contact the OAQ Rules Section at 1-800-451-6027 ext. 3-0426.

IDEM, OAQ does not have jurisdiction in specifying and implementing requirements for zoning. For such issues, please contact your local officials.

Emissions calculations for HCl from burning re-refined (waste) oil have been added as Appendix B to the TSD. To ensure that HCl emissions are less than major source thresholds, Condition D.1.7 has been added to place an additional restriction on the dryer/burner. Condition D.1.6 has also been revised for clarity as follows:

#### D.1.6 Sulfur Dioxide (SO<sub>2</sub>) [326 IAC 2-8-4]

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- (a) Pursuant to 326 IAC 2-8-4, the input of re-refined oil to the dryer/burner shall be limited to less than 1,783,178 gallons per 365 consecutive day period, with compliance determined at the end of each day. Therefore, the Part 70 rules (326 IAC 2-7), do not apply.
- (b) Pursuant to 326 IAC 7-1.1-2, the SO<sub>2</sub> emissions from the dryer burner shall not exceed one and six tenths (1.6) pounds per million British thermal units heat input **when burning re-refined oil**. Compliance with this limit shall be achieved by limiting the sulfur content of the re-refined oil to one percent (1.0%) by weight or less. Pursuant to 326 IAC 7-2-1, compliance shall be demonstrated on a calendar month average. 326 IAC 7-1.1 and 326 IAC 7-2-1 are not federally enforceable.
- (c) For purposes of determining compliance based on SO<sub>2</sub> emissions, each gallon of No. 2 distillate oil shall be equivalent to 0.6636 gallons of re-refined oil, each gallon of No. 4 distillate oil shall be equivalent to 0.7010 gallons of re-refined oil, each gallon of propane shall be equivalent to 0.000187 gallons of re-refined oil, each gallon of butane shall be equivalent to 0.000187 gallons of re-refined oil, and each million cubic feet of natural gas shall be equivalent to 5.607 gallons of re-refined oil.

Furthermore, each hour of operation of the 680 kilowatt generator (16) shall be equivalent to 24.88 gallons of re-refined oil, and each hour of operation of the 85 kilowatt generator (17) shall be equivalent to 2.838 gallons of re-refined oil.

- (d) Pursuant to 326 IAC 7-1.1-2, the SO<sub>2</sub> emissions from the dryer burner shall not exceed five tenths (0.5) pounds per million British thermal units heat input **when burning No. 2 and No. 4 distillate oils**. Compliance with this limit shall be achieved by limiting the sulfur content of the No. 2 and No. 4 distillate oils to five tenth percent (0.5%) by weight or less. Pursuant to 326 IAC 7-2-1, compliance shall be demonstrated on a calendar month average. 326 IAC 7-1.1 and 326 IAC 7-2-1 are not federally enforceable.

#### D.1.7 Hazardous Air Pollutants [326 IAC 2-4.1][326 IAC 2-8-4]

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**In order that the requirements of 326 IAC 2-4.1 and 326 IAC 2-7 do not apply, the emissions of HCl from the use of re-refined oil in the dryer/burner shall not exceed 5.88 tons per year. Compliance with this limit shall be achieved by limiting the chlorine content of the re-refined oil to one thousand (1,000) parts per million (ppm) and by limiting the annual re-refined oil usage as required by Condition D.1.6. Compliance shall be demonstrated on a calendar month average.**

Condition D.1.18 (renumbered from D.1.17) has been revised accordingly:

#### D.1.17 18 Record Keeping Requirements

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...

- (b) To document compliance with Conditions D.1.5, ~~and~~ D.1.6, **and D.1.7**, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken daily and shall be complete and sufficient to establish compliance with the NO<sub>x</sub>,~~and~~ SO<sub>2</sub>, **and HCl** emission limits established in Conditions D.1.5, ~~and~~ D.1.6, **and D.1.7**. For the annual fuel limits, the compliance determination period is the most recent 365 day period. For the sulfur content limit, the compliance determination period is each calendar month.
  - (1) Calendar dates covered in the compliance determination period;
  - (2) Actual fuel usage of each fuel used since last compliance determination period and equivalent sulfur dioxide, ~~and~~ nitrogen oxide, **and HCl** emissions;

- (3) A certification, signed by the owner or operator, that the records of the fuel supplier certifications represent all of the fuel combusted during the period; and

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

- (4) Fuel supplier certifications;
- (5) The name of the fuel supplier; and
- (6) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.
- (c) To document compliance with Condition D.1.43 **14**, the Permittee shall maintain records of the visible emission notations once per shift.
- (d) To document compliance with Condition D.1.44 **15**, the Permittee shall maintain once per shift records of the total static pressure drop during normal operation.
- (e) To document compliance with Condition D.1.45 **16**, the Permittee shall maintain records of the results of the inspections required under Condition D.1.45 **16**.

**Comment 4:**

Can IDEM require that Rieth Riley install a particulate monitoring system before and after construction of the plant at the expense of the plant? Can IDEM require Rieth Riley to install an air monitoring site upwind and downwind of the plant? Can IDEM require Rieth Riley to install a water monitoring system to ensure that enough water is being used to keep fugitive dust at a minimum in the area?

**Response to Comment 4:**

IDEM does not have the authority to require Rieth Riley to install a particulate monitoring system without justification. However, Rieth Riley has agreed to pave the main haul road and all other traffic areas. The applicable portions of the fugitive dust control plan remain in force. The permit also requires that the Permittee perform PM and PM<sub>10</sub> emissions testing prior to October 1, 2005. These tests shall be repeated at least once every five (5) years. These tests will indicate the actual level of emissions from the Permittee. The testing condition D.1.10 has been revised to require that testing occur prior to October 1, 2005 as follow:

**D.1.10 Testing Requirements [326 IAC 2-8-5(1), (4)] [326 IAC 2-1.1-11]**

~~Within one hundred and eighty (180) days after initial startup~~ **Prior to October 1, 2005**, the Permittee shall perform PM and PM<sub>10</sub> testing in order to demonstrate compliance with Conditions D.1.2, D.1.3 and D.1.4, 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. PM<sub>10</sub> includes filterable and condensable PM<sub>10</sub>. Testing shall be conducted in accordance with Section C- Performance Testing. Testing shall be conducted by an independent testing firm, and not an employee of Rieth Riley.

Additionally, Condition C.5 states that 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. In the case that IDEM suspects a dust problem but never actually witnesses dust crossing the property line, IDEM will set up monitors and measure the concentration of dust upstream (upwind) and downstream (downwind) of the source to determine if a violation has occurred.

IDEM does not have the authority to require Rieth Riley to install ambient air monitors upwind and downwind of their operation. IDEM currently operates an air monitoring site at 7203 East U.S. Highway 36, Avon, Indiana for ozone (O<sub>3</sub>). For additional information about the monitoring program, please contact Richard Zeiler, Chief of the Air Monitoring Branch, 1-800-451-6027 (ext. 308-3238) or [dzeiler@idem.IN.gov](mailto:dzeiler@idem.IN.gov).

IDEM does not see a benefit to installing a water monitoring system. The fugitive dust plan contains requirements to apply water on "an as needed basis." The amount of water needed to control dust is variable and depends on humidity, rain, wind, and other parameters. The fugitive dust plan specifies that "an as-needed basis" means the frequency or quantity of application necessary to minimize visible particulate matter emissions. Therefore, the visible emissions notations requirement is a more appropriate indicator of whether the Permittee is complying with the fugitive dust plan. The requirement for all roads and other traffic areas to be paved has been added to Condition C.6 in order to further minimize fugitive particulate emissions.

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

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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 1, 2004. The plan is included as Attachment A. **All roads and other traffic areas must be paved.**

**Comment 5:**

Who will conduct the PM and PM<sub>10</sub> testing? Can IDEM require that the test be conducted by someone who is not a Rieth Riley employee? Does IDEM verify that the test is done correctly? How does IDEM verify that results are accurate? What happens if a test shows that the source is out of compliance?

**Response to Comment 5:**

To verify that the test will be performed correctly, pursuant to 326 IAC 3-6-2, the source must complete a test protocol form and submit the form to the department not later than thirty-five (35) days prior to the intended test date unless more notice is required under the applicable program. Also to verify that the test is performed correctly and that results are accurate, department staff may and often do observe field test procedures and source operation during the emission test. To ensure accurate representation of emissions under normal operating scenarios, IDEM requires, pursuant to 326 IAC 3-6-3, that all emission tests be conducted as follows:

- (a) While the facility being tested is operating at ninety-five percent (95%) to one hundred percent (100%) of its permitted operating capacity.
- (b) Under conditions representative of normal operations.
- (c) Under other capacities or conditions specified and approved by the department, where capacity means the design capacity of the facility or other operating capacities agreed to by the source and IDEM.

If a test shows a violation, the source is required to correct the problem and retest to ensure that the problem has been corrected.

As a result of concerns expressed by citizens, Condition D.1.9 has been revised to clarify that the testing is conducted by an independent testing firm as follows:

**D.1.9 Testing Requirements [326 IAC 2-8-5(1), (4)] [326 IAC 2-1.1-11]**

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Within one hundred and eighty (180) days after initial startup, the Permittee shall perform PM and PM<sub>10</sub> testing in order to demonstrate compliance with Conditions D.1.2, D.1.3 and D.1.4, 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. PM<sub>10</sub> includes filterable and condensable PM<sub>10</sub>. Testing shall be conducted in accordance with Section C- Performance Testing. **Testing shall be conducted by an independent testing firm, and not an employee of Rieth Riley.**

**Comment 6:**

Condition C.5 states that the Permittee shall not allow fugitive dust to escape beyond the property line. Does this mean that stack emissions can not cross the property line?

**Response to Comment 6:**

Visible stack emissions crossing the property line at ground-level would be a violation of 326 IAC 6-4 and Condition C.5. However, this situation is unlikely, and would be the result of unusual meteorological conditions or low stack height.

**Comment 7:**

Citizens of Hendricks County are concerned that the visible emissions notations are not enough to ensure compliance with particulate standards. Why doesn't the requirement specify Method 9 training? Can IDEM enforce violations of opacity standards reported by citizens certified in Method 9? Is photograph or video evidence considered enforceable? Can IDEM require Rieth Riley to install a continuous opacity monitor?

**Response to Comment 7:**

The requirement for visible emissions notations is intended to ensure compliance with the particulate matter requirements and that the baghouse for particulate control is operating correctly. This requirement is designed as a trigger that the source perform some corrective action on the facility if visible emissions are abnormal, to ensure continuous compliance with emission limitations. The observer shall be an employee of Rieth Riley who must be trained and able to determine whether the visible emissions are "normal" or "abnormal." As the condition states, 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. This training does not need to include Method 9 Certification. Requiring the employee to be Method 9 certified would be resource intensive for the source, and would not provide much benefit because the purpose of specifying that a "trained employee" perform the visible emissions notations is to ensure that the employee would know the difference between "normal" and "abnormal" visible emissions from the particular process.

Indiana state law places the responsibility on IDEM to gather the information necessary to initiate an enforcement action. While citizen gathered information may be useful in the total context of a case, that information alone would generally not be enough to support a contested case. The information is very useful for providing documentation that a problem should be addressed by IDEM stepping up the inspection or surveillance activities, including during early mornings or evenings and on weekends.

Citizens also have the ability to pursue action under Section 304 of the federal Clean Air Act if they believe that the state is not properly addressing a compliance issue.

While IDEM does have the authority to require that opacity be measured by a certified continuous opacity monitor, this requirement when unnecessary would be an abuse of IDEM's discretion in using that authority, and unduly expensive and burdensome to the source. With such a requirement, IDEM would be treating this plant differently than any other asphalt plant in the state without any history of operational problems as justification for doing so. In addition, IDEM does not require visible emissions notations for sources that use continuous opacity monitors to comply with the 20% opacity limit as required by New Source Performance Standard, 326 IAC 12, (40 CFR Part 60.90, Subpart I). The "normal" visible emissions from the process will be well below the 20% opacity limit. Therefore, the requirement to measure opacity by a certified continuous opacity monitor would allow for greater opacity without corrective action than would the current visible emissions notations requirement.

**Comment 8:**

Why hasn't EPA established more stringent standards for ozone? The California EPA and the World Health Organization have recommended lower limits on ozone. The EPA's interests lie with the industry and aim to reduce and relax regulations when they should be based on health.

**Response to Comment 8:**

The U.S. Environmental Protection Agency (EPA) has set National Ambient Air Quality Standard (NAAQS) for ozone (O<sub>3</sub>) based on health, which is why NAAQS are often referred to as the federal health standards for outdoor air. The Clean Air Act requires EPA to set NAAQS for pollutants that cause adverse effects to public health and the environment. The Clean Air Act established primary and secondary air quality standards. Primary standards protect public health, including the health of "sensitive" populations such as asthmatics, children, and the elderly. The primary standard is often referred to as the health standard. Secondary standards protect public welfare, including protection against decreased visibility, damage to animals, crops, vegetation and buildings. EPA does not base NAAQS standards on the needs of industry.

EPA technical staff drafts the air quality standards after extensive review of scientific, health and technical data to determine the level of the pollutant below which human health effects are unlikely. Congress decided, and the Supreme Court upheld, that EPA may not consider cost when setting or revising air quality standards.

EPA then obtains input from people with interest and experience in air quality and public health. Representatives of the scientific community, industry, public interest groups, the public, and the Clean Air Scientific Advisory Committee – a congressionally-mandated group of independent scientific and technical experts – conduct reviews of any standards proposed by EPA staff.

Before the EPA Administrator announces a final decision on the standards, the proposed standards are published in the Federal Register for public review and comments. EPA reviews the standards periodically to ensure that they include the most recent scientific information.

**Comment 9:**

Hendricks County is one of the counties in violation of the NAAQS. Rieth Riley has filed an air quality permit application to locate in Hendricks County because it emits toxic materials into the air. Why does IDEM allow Rieth Riley to construct in a nonattainment area? Is Rieth Riley unaffected by the nonattainment designation? Does IDEM consider the particular locale, in this case Hendricks County, when assessing the safety of emissions from Rieth Riley, factoring in data from the air quality in this area where Rieth Riley plans to locate?

**Response to Comment 9:**

Permits require sources to comply with all health- and technology-based standards established by the U.S. EPA and the Indiana Air Pollution Control Board, including the NAAQS. If an applicant demonstrates that they will be able to comply with all Federal and State laws regarding air pollution, IDEM is required by law to issue an air permit. IDEM has evaluated the air quality impact of the emissions from this source and has determined that no health-based standards established by the Clean Air Act will be violated.

Recently the EPA developed new NAAQS standards fine particulates (PM 2.5), and designated Hendricks County as "nonattainment" for PM 2.5 effective April 5, 2005. A nonattainment designation means that the U.S. EPA believes that state rules need to be made more strict in order to bring air pollution levels into compliance with health-based air quality standards. While the Hendricks County designation is one of several that Indiana is challenging in federal court, the designation does not affect this permit. If further air quality planning efforts determine that it is necessary to require additional air pollution controls on asphalt plants in Hendricks County, then those requirements will be established by a rule adopted by the Air Pollution Control Board.

EPA also recently re-validated the ozone standard, and designated Hendricks County as non-attainment for the 8-hour ozone standard on April 15, 2004. Indiana must develop a plan detailing steps that will bring Hendricks County into attainment with the 8-hour ozone standard by 2010.

As a result of public concern, The OAQ performed computer modeling of the SO<sub>2</sub>, PM, and Oxides of Nitrogen (NO<sub>x</sub>) emissions and compared the results to the corresponding health-based standards (National Ambient Air Quality Standards or NAAQS) established by the U.S. EPA and adopted by Indiana. IDEM, OAQ performed this risk assessment using methods recommended in the U.S. EPA's Risk Assessment Library. While the permitting thresholds for major source exclude fugitive PM emissions from applicability, those emissions were included in the air quality analysis. These results are attached as pages two and three of three of Appendix C to the TSD.

The impacts of SO<sub>2</sub> and NO<sub>x</sub> emissions are very much below their corresponding NAAQS. There are no significant sources of these emissions that would cause Rieth Riley's emissions to cause or contribute to a violation of these NAAQS.

The U.S. EPA recommends that states use PM-10 analyses as a surrogate for PM-2.5 emissions until final requirements have been established at the federal level. Because the impact of the PM-10 emissions are somewhat closer to the NAAQS, the OAQ used air quality data collected at the southwest Indianapolis Mann Road site as a conservative estimate of existing air quality in Danville. Adding those "background concentrations" to the maximum impacts expected from Rieth Riley demonstrates that no violations of the NAAQS will result from issuing this permit.

**Comment 10:**

Rieth Riley will be an oil-fired plant, which will emit high levels of sulfur dioxide. Sulfur dioxide produces hydrogen sulfide, which can do damage to the neurological systems of children and adults by irreversibly poisoning the brain. Other places in the world, like Canada, have standards for hydrogen sulfide. Can IDEM require Rieth Riley to install controls on hydrogen sulfide?

**Response to Comment 10:**

IDEM does not have the authority to regulate hydrogen sulfide emissions from asphalt plants. IDEM is delegated only to enforce laws approved by the U.S. EPA and the Indiana Air Pollution control Board as they currently exist. See Response to Comment 3 for information on how citizens can participate in the process for creating new laws or amending existing laws that govern air pollution.

**Comment 11:**

Citizens of Hendricks County are concerned about the emissions from mobile sources as a result of Rieth Riley's operation. Up to forty (40) additional trucks per hour could be traveling the streets of Danville. Scientists throughout the world have been pushing for many years to have diesel emissions regulated, and trucks will be idling in the area as a result of Rieth Riley's operation. Does IDEM have the authority to regulate mobile sources of emissions or "tail-pipe" emissions from vehicles used by Rieth Riley through the permit?

**Response to Comment 11:**

The federal Clean Air Act pre-enacts states from regulating the "tail-pipe emissions" from mobile sources of emissions through the permit (Section 209 of the Clean Air Act). The EPA regulates mobile sources on the federal level by adopting standards for automobile manufacturers, not through the air permitting program. The Air Pollution Control Board has limited authority to adopt rules if necessary during nonattainment plan development (Section 213 of the Clean Air Act). IDEM has programs which aim to reduce emissions from diesel vehicles. For additional information on such programs visit <http://www.in.gov/idem/air/dieselwise/index.html>.

**Comment 12:**

How does permitting sources that emit air pollution make Indiana a “cleaner, healthier place to live” like IDEM’s letterhead claims?

**Response to Comment 12:**

IDEM is dedicated to making Indiana a cleaner, healthier place to live. The OAQ Permits Branch issues air pollution control permits to facilities that release pollutants to the air. Permits require sources to comply with all health- and technology-based standards established by the U.S. Environmental Protection Agency (U.S. EPA) and the Indiana Air Pollution Control Board. If an applicant demonstrates that they will be able to comply with all Federal and State laws regarding air pollution, IDEM is required by law to issue an air permit. The permit includes detailed information about which pollutants are being released, how much may be released, how the facility will comply with the air pollution control rules, and how they will monitor the pollutants being released. The permit is a tool to ensure that the source is in compliance with all applicable requirements. Violation of the permit can result in enforcement action.

**Comment 13:**

How often do inspections occur? Is the source notified before an inspection or are they unannounced? How many inspectors does IDEM currently employ?

**Response to Comment 13:**

Inspections are unannounced and typically occur once per year and upon receipt of even a single complaint. Full inspections include both an observation of emissions from the plant, and a complete review of all required records. In addition to full inspections, the inspector will also conduct surveillance of plant emissions to determine if there are any violations of opacity or fugitive dust rules. Surveillances differ from full inspections because surveillances do not always require the inspector to enter the plant, and surveillances do not include a review of the plant’s required records. IDEM can conduct additional inspections or surveillances if compliance problems are suspected or if IDEM receives citizen complaints regarding excess emissions. IDEM responds to all complaints.

IDEM has 26 air inspectors. The inspector for Hendricks County is Vaughn Ison, who can be reached at 317-233-0423.

**Comment 14:**

The source failed to fulfill their notification requirements as specified in their application and by IC 13-15-3-1.

**Response to Comment 14:**

Indiana code does require IDEM to notify government officials when an application is received. Specifically, IC 13-15-3-1 states that:

- (a) Whenever the department receives a permit application, the department shall send notice that the permit application has been received by the department to the following:
  - (1) The county executive of a county that is affected by the permit application.
  - (2) The executive of a city that is affected by the permit application.
  - (3) The executive of a town council of a town that is affected by the permit application.
- (b) The department may require a person who submits a permit application to the department to provide information on the application necessary for the department to implement subsection (a).

Under this statute, IDEM asks the applicant to provide, on their application form, the names of the appropriate officials to notify. Rieth Riley’s application, received on November 11, 2004, identified the following four people:



Linda Palmer-Ryser, President of the Hendricks County Commissioners  
Sonya Cleveland, Vice Present of Hendricks County Commissioners  
Steve Ostermier, Member of Hendricks County Commissioners  
Gary Eakin, Town Manager of Danville

During the public notice period, it came to IDEM's attention that while we had notified the Hendricks County Commissioners, we had not notified Gary Eakin, the Town Manager, of receipt of the application. To correct this oversight, IDEM notified Mr. Eakin of receipt of the application on March 15, 2005. Additionally, IDEM notified Mr. Myron Anderson, the President of the Danville Town Council, that an application had been received.

IDEM's records also indicate that Rieth Riley had separately notified the local officials. Our records show that on October 29, 2004, Rieth Riley notified, via certified mail, the four individuals listed on their application, that they had applied to IDEM for an air permit to construct and operate this facility.

IDEM believes that requirements of this statute have been fulfilled because the Town Manager was notified by Rieth Riley in October 2004, and by IDEM in March 2005.

**Comment 15:**

Can sources intentionally limit their emissions from several individual plants to FESOP levels and then construct more than one facility in close proximity in an effort to keep them all below major source levels instead of constructing one major source?

**Response to Comment 15:**

In order to determine whether the sources would be considered one major source, IDEM would evaluate three criteria. The first is whether they have the same owner or are under the control of the same person or company. The second is whether they have the same standard industrial classification code or have a support relationship. The third is whether they are located on contiguous or adjacent property. Contiguous properties share a property line and are right next to each other. Adjacent means that the sources are near each other and is determined on a case by case basis.

If a company wanted to operate two or more asphalt plants at the same location or adjacent locations, the plants would be considered one major source. The company would either have to have a Title V Operating Permit that regulated all the plants or have separate FESOPs whose combined limits would be below the major source levels. Plants that are more than one mile apart are not considered "adjacent" under most circumstances.

**Comment 16:**

Existing Rieth Riley plants, particularly the one located at 2506 South Kentucky Avenue, Indianapolis, Indiana, create dust and odor problems for their neighbors. Citizens of Hendricks County are concerned about experiencing these problems as a result of this plant.

**Response to Comment 16:**

The City of Indianapolis, Office of Environmental Services (OES) is the primary regulatory authority for the plant mentioned above. OES is unaware of any dust complaints for this facility. To report such complaints for the Indianapolis facility please contact Cheryl Carlson of OES at (317) 327-2234. To report such complaints for the new Rieth Riley plant to be located in Danville please contact the IDEM inspector for Hendricks County, Vaughn Ison, who can be reached at 317-233-0423.

IDEM does not have direct authority to regulate issues such as odor or traffic. Those issues should be directed to local officials.

**Comment 17:**

Citizens of Hendricks County are concerned that Rieth Riley will pump too much well water affecting the water level in the community.

**Response to Comment 17:**

The Indiana Department of Natural Resources (DNR) has a statutory role regarding water usage issues. Domestic well owners are protected against the impacts of high capacity ground water pumpage in accordance with Indiana Code 14-25-4: Water Rights Emergency Regulation. For additional information, please contact the DNR's Water Rights and Use Section of the Division at (317) 232-4160 or toll free at 1-877-928-3755.

**Comment 18:**

Citizens of Hendricks County are concerned that soil contamination will occur as a result of the HAP emissions from Rieth Riley. Can IDEM include a condition in the permit that would require Rieth Riley to compensate citizens for soil contamination?

**Response to Comment 18:**

IDEM does not have the authority to include such a condition in the permit.

**Comment 19:**

Can the permit require Rieth Riley to cease operation on days when ozone advisories are issued?

**Response to Comment 19:**

Actions in response to ozone advisories are voluntary. IDEM does not have the authority to require Rieth Riley to cease operation on those days. Rieth Riley voluntarily may cease operation on days when ozone advisories are issued.

**Comment 20:**

Rieth Riley's draft permit allows it to operate 24 hours a day, 7 days a week. Can the permit limit the hours of operation?

**Response to Comment 20:**

The unrestricted potential emissions represent the absolute worst case situation, that is, if the plant operated every hour of the year and used no pollution control equipment. However, asphalt plants do not operate 24 hours a day 7 days a week. Asphalt plants do not operate in the winter months, for example. Also, the permit does require that Rieth Riley operate their pollution control device at all times. The baghouse systems used at asphalt plants similar to Rieth Riley are very effective at removing particulate matter from the plant exhaust gas stream before the stream is released into the atmosphere.

Although the permit does not include a specific limit on hours of operation, it does include an annual production limit of 1,000,000 tons of asphalt. To put that number into perspective, at Rieth Riley's maximum hourly production rate of 450 tons per hour, this plant would reach its limit after 2,222 hours, which is equivalent to approximately 93 days. This production limitation, along with the use of pollution control equipment, is designed to ensure that the actual emissions from this plant are maintained below major source thresholds and therefore below the unrestricted potential emissions.

**Comment 21:**

If Rieth Riley were to modify the plant, would they need to modify the permit as well? Would such a modification go through the same public notice period as this initial permit?

**Response to Comment 21:**

If the modification would add emission units, modify existing emission units, or otherwise modify the source as described in 326 IAC 2-8-11.1 (Permit revisions), a permit revision would be required. Depending on the modification, the permit revision could be minor and subject to 326 IAC 2-8-11.1 (e) or significant and subject to 326 IAC 2-8-11.1 (f)(2). Administrative changes to the permit would be carried out through an administrative amendment as described in 326 IAC 2-8-10 (Administrative Permit Amendments). A minor permit revision and an administrative amendment do not require a public notice period. However, a significant permit revision, including the removal of conditions that would make this plant a "major source," would require a public notice period.

**Comment 22:**

Is Rieth Riley required to obtain a storm water permit from the IDEM, Office of Water Quality (OWQ)? If so, has Rieth Riley taken the appropriate steps in obtaining such a permit?

**Response to Comment 22:**

Rieth Riley has submitted information to OWQ. OWQ has not yet determined what type of storm water permit will be required. For more information regarding the storm water permitting requirements for Rieth Riley, contact Cyndi Wagner at (317) 233-0473 or cwagner@idem.in.gov.

Numerous other comments and concerns related a variety of issues, including odor, effects on vegetation, vehicle emission testing, and quality of life issues were raised at the public hearing. OAQ recognizes that these concerns are important to those who expressed them; however, they do not have a direct impact on how the Office of Air Quality reviews and makes decisions on air permit applications. The OAQ advises residents to contact their local officials regarding these issues. OAQ's permit review by law cannot address issues for which it does not have direct regulatory authority.

Upon further review, the OAQ has decided to make the following changes to the FESOP. The permit language is changed to read as follows (deleted language appears as strikeouts, new language is bolded):

**Change 1:**

Recently, the US EPA adopted a PM<sub>2.5</sub> standard, and has designated Hendricks County as nonattainment. Therefore, the following changes have been made to Section A.1:

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

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The Permittee owns and operates a portable hot mix asphalt manufacturing source.

Authorized individual:	Asphalt Plant Specialist
Source Address:	Portable
Mailing Address:	P.O. Box 477, Goshen, Indiana 46527
General Source Phone:	574 - 875 - 5183 x 20226
SIC Code:	2951
Source Location Status:	Hendricks Nonattainment for 8-hour ozone, <b>and PM<sub>2.5</sub></b> Attainment for all other criteria pollutants
Source Status:	Federally Enforceable State Operating Permit (FESOP) Minor Source, under PSD and Emission Offset Rules Minor Source, Section 112 of the Clean Air Act

**Change 2:**

Condition B.24 has been revised in order to reflect the rule 326 IAC 1-1-6, which became effective March 16, 2005:

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

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~~Notwithstanding the conditions of this permit that state specific methods that may be used to demonstrate compliance with, or a violation of, applicable requirements, any person (including the Permittee) may also use other credible evidence to demonstrate compliance with, or a violation of, any term or condition of this permit.~~ **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.**

**Change 3:**

Condition D.1.12 has been revised as follows for clarity:

**D.1.12 Used Oil Requirements [326 IAC 2-8-4(i)]**

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The re-refined oil burned in the aggregate dryer shall comply with the used oil requirements specified in 329 IAC 13 (Used Oil Management). Pursuant to 329 IAC 13-3-2 (Used Oil Specifications), used oil burned for energy recovery that is classified as off-specification used oil fuel shall comply with the provisions of 329 IAC 13-8 (Used Oil Burners Who Burn Off-specification Used Oil For Energy Recovery), including:

- (a) Receipt of an EPA identification number as outlined in 329 IAC 13-8-3 (Notification),
- (b) Compliance with the used oil storage requirements specified in 329 IAC 13-8-5 (Used Oil Storage), and
- (c) Maintaining records pursuant to 329 IAC 13-8-6 (Tracking).

The burning of mixtures of used oil and hazardous waste that is regulated under 329 IAC 3.1 is prohibited at this source.

**Appendix A: Emission Calculations**

**Company Name:** Rieth Riley Construction Co., Inc.  
**Plant Location:** West side of County Road 200 East, just south of U.S. 36, Danville, Indiana 46122  
**County:** Hendricks  
**FESOP:** F 063-20330  
**Plt. ID:** 063-05267  
**Date:** November 1, 2004  
**Permit Reviewer:** Edward A. Longenberger

**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>138000.0</u> Btu/gal * 2000 lbs/ton	
P M:	2.0 lbs/1000 gal =	<u>0.127</u> tons/yr
PM-10:	3.3 lbs/1000 gal =	<u>0.209</u> tons/yr
S O x:	71.0 lbs/1000 gal =	<u>4.507</u> tons/yr
N O x:	20.0 lbs/1000 gal =	<u>1.270</u> tons/yr
V O C:	0.34 lbs/1000 gal =	<u>0.022</u> tons/yr
C O:	5.0 lbs/1000 gal =	<u>0.317</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

**Hot Oil Heater on Butane**

The following calculations determine the amount of emissions created by butane gas @ 0.20 grains sulfur per 100 cubic feet, based on 8760 hours of use and AP-42 Ch. 1.5, Table 1.5-1

Pollutant:	<u>0.000</u> MMBtu/hr * 8760 hrs/yr	* Ef (lbs/1000 gal) = (tons/yr)
	<u>102600.0</u> Btu/gal * 2000 lbs/ton	
P M:	0.5 lbs/1000 gal =	<u>0.000</u> tons/yr
PM-10:	0.5 lbs/1000 gal =	<u>0.000</u> tons/yr
S O x:	0.02 lbs/1000 gal =	<u>0.000</u> tons/yr
N O x:	15.0 lbs/1000 gal =	<u>0.000</u> tons/yr
V O C:	0.60 lbs/1000 gal =	<u>0.000</u> tons/yr
C O:	2.1 lbs/1000 gal =	<u>0.000</u> tons/yr

**Hot Oil Heater on Propane**

The following calculations determine the amount of emissions created by propane gas @ 0.20 grains sulfur per 100 cubic feet, based on 8760 hours of use and AP-42 Ch. 1.5, Table 1.5-1

Pollutant:	<u>4.300</u> MMBtu/hr * 8760 hrs/yr	* Ef (lbs/1000 gal) = (tons/yr)
	<u>91500.0</u> Btu/gal * 2000 lbs/ton	
P M:	0.4 lbs/1000 gal =	<u>0.082</u> tons/yr
PM-10:	0.4 lbs/1000 gal =	<u>0.082</u> tons/yr
S O x:	0.02 lbs/1000 gal =	<u>0.004</u> tons/yr
N O x:	14.0 lbs/1000 gal =	<u>2.882</u> tons/yr
V O C:	1.90 lbs/1000 gal =	<u>0.391</u> tons/yr
C O:	3.2 lbs/1000 gal =	<u>0.659</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 MMBtu/hr * 8760 hrs/yr</u>	* 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>150.000 MMBtu/hr * 8760 hrs/yr</u>	* Ef (lbs/MMcf) (tons/yr)
	1000 Btu/cf * 2000 lbs/ton	
P M:	1.9 lbs/MMcf =	<u>1.248</u> tons/yr
P M-10:	7.6 lbs/MMcf =	<u>4.993</u> tons/yr
S O x:	0.6 lbs/MMcf =	<u>0.394</u> tons/yr
N O x:	190.0 lbs/MMcf =	<u>124.83</u> tons/yr
V O C:	5.5 lbs/MMcf =	<u>3.614</u> tons/yr
C O:	84.0 lbs/MMcf =	<u>55.188</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:	<u>0.000 MMBtu/hr * 8760 hrs/yr</u>	* 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:	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

**Dryer Burner (#2 oil) >100 MMbtu/hr**

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>150.0 MMBtu/hr * 8760 hrs/yr</u>	* Ef (lbs/1000 gal) = (tons/yr)
	138000.0 Btu/gal * 2000 lbs/ton	
P M:	2.0 lbs/1000 gal =	<u>9.522</u> tons/yr
PM-10:	3.3 lbs/1000 gal =	<u>15.711</u> tons/yr
S O x:	71.0 lbs/1000 gal =	<u>338.022</u> tons/yr
N O x:	24.0 lbs/1000 gal =	<u>114.261</u> tons/yr
V O C:	0.20 lbs/1000 gal =	<u>0.952</u> tons/yr
C O:	5.0 lbs/1000 gal =	<u>23.804</u> tons/yr

**Dryer Burner (#4 oil/ <100MMBTU)**

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:	<u>0.000</u> MMBtu/hr * 8760 hrs/yr	* Ef (lbs/1000 gal) = (tons/yr)
	<u>138000.0</u> 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:	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

**Dryer Burner (#4 oil/ >100MMBTU)**

The following calculations determine the amount of emissions created by #4 distillate fuel oil @ 0.500 % sulfur, based on 8760 hours of use and AP-42, Tables 1.3-1, 1.3-2, 1.3-3

Pollutant:	<u>150.0</u> MMBtu/hr * 8760 hrs/yr	* Ef (lbs/1000 gal) = (tons/yr)
	<u>138000.0</u> Btu/gal * 2000 lbs/ton	
P M:	2.0 lbs/1000 gal =	<u>9.522</u> tons/yr
PM-10:	3.3 lbs/1000 gal =	<u>15.711</u> tons/yr
S O x:	75.0 lbs/1000 gal =	<u>357.065</u> tons/yr
N O x:	24.0 lbs/1000 gal =	<u>114.261</u> tons/yr
V O C:	0.20 lbs/1000 gal =	<u>0.952</u> tons/yr
C O:	5.0 lbs/1000 gal =	<u>23.804</u> tons/yr

**Dryer Burner (re-refined 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

Pollutant:	<u>0.0</u> MMBtu/hr * 8760 hrs/yr	* Ef (lbs/1000 gal) = (tons/yr)	<u>0.000</u> % Ash
	<u>0.0</u> Btu/gal * 2000 lbs/ton		<u>0.000</u> % Lead
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	

**Dryer Burner (re-refined oil/atomizing burner)**

The following calculations determine the amount of emissions created by waste fuel oil @ 1.000 % sulfur, based on 8760 hours of use and AP-42 Chapter 1.11

Pollutant:	<u>150.000</u> MMBtu/hr * 8760 hrs/yr	* Ef (lbs/1000 gal) = (tons/yr)	<u>1.000</u> % Ash
	<u>140000.0</u> Btu/gal * 2000 lbs/ton		<u>0.100</u> % Lead
P M:	66.0 lbs/1000 gal =	<u>309.729</u> tons/yr	
P M-10:	57.0 lbs/1000 gal =	<u>267.493</u> tons/yr	
S O x:	107.0 lbs/1000 gal =	<u>502.136</u> tons/yr	
N O x:	16.0 lbs/1000 gal =	<u>75.086</u> tons/yr	
VOC	1.0 lbs/1000 gal =	<u>4.693</u> tons/yr	
C O:	2.10 lbs/1000 gal =	<u>9.855</u> tons/yr	
Pb:	5.00 lbs/1000 gal =	<u>23.464</u> tons/yr	

**Dryer Burner (butane)**

The following calculations determine the amount of emissions created by butane gas @ 0.20 grains sulfur per 100 cubic feet, based on 8760 hours of use and AP-42, Table 1.5-1

Pollutant:	<u>150.000</u> MMBtu/hr * 8760 hrs/yr	* Ef (lbs/1000 gal) = (tons/yr)
	<u>102600.0</u> Btu/gal * 2000 lbs/ton	
P M:	0.6 lbs/1000 gal =	<u>3.842</u> tons/yr
PM-10:	0.6 lbs/1000 gal =	<u>3.842</u> tons/yr
S O x:	0.02 lbs/1000 gal =	<u>0.115</u> tons/yr
N O x:	21.0 lbs/1000 gal =	<u>134.474</u> tons/yr
V O C:	0.26 lbs/1000 gal =	<u>1.665</u> tons/yr
C O:	3.6 lbs/1000 gal =	<u>23.053</u> tons/yr

**Dryer Burner (propane)**

The following calculations determine the amount of emissions created by propane gas @ 0.20 grains sulfur per 100 cubic feet, based on 8760 hours of use and AP-42, Table 1.5-1

Pollutant:	<u>150.000</u> MMBtu/hr * 8760 hrs/yr	* Ef (lbs/1000 gal) = (tons/yr)
	<u>91500.0</u> Btu/gal * 2000 lbs/ton	
P M:	0.6 lbs/1000 gal =	<u>4.308</u> tons/yr
PM-10:	0.6 lbs/1000 gal =	<u>4.308</u> tons/yr
S O x:	0.02 lbs/1000 gal =	<u>0.144</u> tons/yr
N O x:	19.0 lbs/1000 gal =	<u>136.426</u> tons/yr
V O C:	0.25 lbs/1000 gal =	<u>1.795</u> tons/yr
C O:	3.2 lbs/1000 gal =	<u>22.977</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>450.0</u> tons/hr x	8760 hrs/yr =	<u>55188.00</u> tons/yr
		2000 lbs/ton		
P M-10:	6.5 lbs/ton x	<u>450</u> tons/hr x	8760 hrs/yr =	<u>12811.50</u> tons/yr
		2000 lbs/ton		
Lead:	3.30E-06 lbs/ton x	<u>450</u> tons/hr x	8760 hrs/yr =	<u>0.007</u> tons/yr
		2000 lbs/ton		
HAPs:	0.0076 lbs/ton x	<u>450</u> tons/hr x	8760 hrs/yr =	<u>14.980</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>0.0</u> tons/hr x	8760 hrs/yr =	<u>0.0</u> tons/yr
		2000 lbs/ton		
P M-10:	4.5 lbs/ton x	<u>0</u> tons/hr x	8760 hrs/yr =	<u>0.0</u> tons/yr
		2000 lbs/ton		
Lead:	3.30E-06 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.

**\*\* 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

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

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

P M : 0.003 lbs/ton x 427.50 tons/hr x 8760 hrs/yr = 5.185 tons/yr  
 2000 lbs/ton

P M-10: 10% of PM = 0.518 tons/yr

**Screening** PM: 427.50 tons/hr x 0.0315 lbs/ton / 2000 (lbs/ton) x 8760 hrs/yr = 58.98 tons/yr AP-42 Ch.11.19.2

P M-10: 10% of PM = 5.898 tons/yr

**Limited Screening:**

PM: 0.0315 lbs/ton x 1,000,000 ton/year (limit) / 2000 (lbs/ton) = 15.75 tons/yr

PM-10: 10% of PM = 1.58 tons/yr

**\*\* unpaved roads \*\***

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 13.2.2.

**A. Tri-axle Truck**

21.38 trips/hr x  
0.631 miles/roundtrip x  
 8760 hrs/yr = 118179.2 miles per year

For PM	For PM-10			
	$E_f = \{k^*[(s/12)^a]^{(W/3)^b}\}$			
7.38	=	0.29	lb/mile	
4.9	where k =	0.23	(particle size multiplier for PM-10) (k=4.9 for PM-30 or TSP)	
4.8	s =	4.8	mean % silt content of unpaved roads	
0.45	b =	0.45	Constant for PM-30 and PM-10	
0.7	a =	0.9	Constant for PM-10 (a = 0.7 for PM-30 or TSP)	
31	W =	31	tons average vehicle weight	
0.2	Mdry =	0.2	surface material moisture content, % (default is 0.2 for dry conditions)	
125	p =	125	number of days with at least 0.254mm of precipitation (See Figure 13.2.2-1)	
	<u>7.38 lb/mi x</u>	<u>118179.2328 mi/yr =</u>	PM	<u>436.07</u> tons/yr
		2000 lb/ton		
	<u>0.29 lb/mi x</u>	<u>118179.2328 mi/yr =</u>	PM-10	<u>17.04</u> tons/yr
		2000 lb/ton		

**B. Front End Loader**

52.78 trips/hr x  
0.072 miles/roundtrip x  
 8760 hrs/yr = 33474.3 miles per year

For PM	For PM-10			
	$E_f = \{k^*[(s/12)^a]^{(W/3)^b}\}$			
8.17	=	0.32	lb/mile	
4.9	where k =	0.23	(particle size multiplier for PM-10) (k=4.9 for PM-30 or TSP)	
4.8	s =	4.8	mean % silt content of unpaved roads	
0.45	b =	0.45	Constant for PM-30 and PM-10	
0.7	a =	0.9	Constant for PM-10 (a = 0.7 for PM-30 or TSP)	
39	W =	39	tons average vehicle weight	
0.2	Mdry =	0.2	surface material moisture content, % (default is 0.2 for dry conditions)	
125	p =	125	number of days with at least 0.254mm of precipitation (See Figure 13.2.2-1)	
	<u>8.17 lb/mi x</u>	<u>33474.34272 mi/yr =</u>	PM	<u>136.72</u> tons/yr
		2000 lb/ton		
	<u>0.32 lb/mi x</u>	<u>33474.34272 mi/yr =</u>	PM-10	<u>5.34</u> tons/yr
		2000 lb/ton		

**C. Semi Truck**

0.0 trips/hr x  
0.000 miles/roundtrip x  
 8760 hrs/yr = 0.0 miles per year

For PM	For PM-10			
	$E_f = \{k^*[(s/12)^a]^{(W/3)^b}\}$			
6.76	=	0.26	lb/mile	
4.9	where k =	0.23	(particle size multiplier for PM-10) (k=4.9 for PM-30 or TSP)	
4.8	s =	4.8	mean % silt content of unpaved roads	
0.45	b =	0.45	Constant for PM-30 and PM-10	
0.7	a =	0.9	Constant for PM-10 (a = 0.7 for PM-30 or TSP)	
25.5	W =	25.5	tons average vehicle weight	
0.2	Mdry =	0.2	surface material moisture content, % (default is 0.2 for dry conditions)	
125	p =	125	number of days with at least 0.254mm of precipitation (See Figure 13.2.2-1)	
	<u>6.76 lb/mi x</u>	<u>0 mi/yr =</u>	PM	<u>0.00</u> tons/yr
		2000 lb/ton		
	<u>0.26 lb/mi x</u>	<u>0 mi/yr =</u>	PM-10	<u>0.00</u> tons/yr
		2000 lb/ton		

**All Trucking**

Total PM: 572.79 tons/yr  
 Total PM-10: 22.38 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.

$$\begin{aligned}
 E_f &= 1.7 \cdot (s/1.5) \cdot (365-p) / 235 \cdot (f/15) \\
 &= 1.74 \text{ lbs/acre/day for sand} \\
 &= 1.16 \text{ lbs/acre/day for stone} \\
 &= 1.16 \text{ lbs/acre/day for slag} \\
 &= 1.16 \text{ lbs/acre/day for gravel} \\
 &= 1.16 \text{ lbs/acre/day for RAP} \\
 \text{where } s &= 1.5 \% \text{ silt for sand} \\
 s &= 1.0 \% \text{ silt of stone} \\
 s &= 1.0 \% \text{ silt of slag} \\
 s &= 1.0 \% \text{ silt of gravel} \\
 s &= 1.0 \% \text{ silt for RAP} \\
 p &= 125 \text{ days of rain greater than or equal to 0.01 inches} \\
 f &= 15 \% \text{ of wind greater than or equal to 12 mph}
 \end{aligned}$$

$$\begin{aligned}
 E_p (\text{storage}) &= \frac{E_f \cdot sc \cdot (20 \text{ cuft/ton}) \cdot (365 \text{ days/yr})}{(2000 \text{ lbs/ton}) \cdot (43560 \text{ sqft/acre}) \cdot (25 \text{ ft})} \\
 &= 0.157 \text{ tons/yr for sand} \\
 &= 0.260 \text{ tons/yr for stone} \\
 &= 0.213 \text{ tons/yr for slag} \\
 &= 0.213 \text{ tons/yr for gravel} \\
 &= 0.175 \text{ tons/yr for RAP} \\
 \text{Total PM:} &= \underline{\underline{1.018}} \text{ tons/yr}
 \end{aligned}$$

$$\begin{aligned}
 \text{where } sc &= \underline{\underline{27}} \text{ ,000 tons storage capacity for sand} \\
 sc &= \underline{\underline{67}} \text{ ,000 tons storage capacity for stone} \\
 sc &= \underline{\underline{55}} \text{ ,000 tons storage capacity for slag} \\
 sc &= \underline{\underline{55}} \text{ ,000 tons storage capacity for gravel} \\
 sc &= \underline{\underline{45}} \text{ ,000 tons storage capacity for RAP}
 \end{aligned}$$

$$\begin{aligned}
 \text{P M-10:} \quad 35\% \text{ of PM} &= \underline{\underline{0.055}} \text{ tons/yr for sand} \\
 35\% \text{ of PM} &= \underline{\underline{0.091}} \text{ tons/yr for stone} \\
 35\% \text{ of PM} &= \underline{\underline{0.075}} \text{ tons/yr for slag} \\
 35\% \text{ of PM} &= \underline{\underline{0.075}} \text{ tons/yr for gravel} \\
 35\% \text{ of PM} &= \underline{\underline{0.061}} \text{ tons/yr for RAP} \\
 \text{Total PM-10:} &= \underline{\underline{0.356}} \text{ tons/yr}
 \end{aligned}$$

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

natural gas	#2 oil	#4 oil	re-refined oil
P M: <u>55827.35</u> tons/yr	P M: <u>55835.63</u> tons/yr	P M: <u>55835.63</u> tons/yr	P M: <u>56135.83</u> tons/yr
P M-10: <u>12845.86</u> tons/yr	P M-10: <u>12856.58</u> tons/yr	P M-10: <u>12856.58</u> tons/yr	P M-10: <u>13108.36</u> tons/yr
S O x: <u>4.90</u> tons/yr	S O x: <u>342.53</u> tons/yr	S O x: <u>361.57</u> tons/yr	S O x: <u>506.64</u> tons/yr
N O x: <u>127.71</u> tons/yr	N O x: <u>115.53</u> tons/yr	N O x: <u>117.14</u> tons/yr	N O x: <u>77.97</u> tons/yr
V O C: <u>4.00</u> tons/yr	V O C: <u>1.34</u> tons/yr	V O C: <u>1.34</u> tons/yr	V O C: <u>5.08</u> tons/yr
C O: <u>55.85</u> tons/yr	C O: <u>24.46</u> tons/yr	C O: <u>24.46</u> tons/yr	C O: <u>10.51</u> tons/yr
Lead: <u>0.01</u> tons/yr	Lead: <u>0.01</u> tons/yr	Lead: <u>0.01</u> tons/yr	Lead: <u>23.47</u> tons/yr
HAPs: <u>14.98</u> tons/yr	HAPs: <u>14.98</u> tons/yr	HAPs: <u>14.98</u> tons/yr	HAPs: <u>14.98</u> tons/yr

  

butane	propane
P M: <u>55829.95</u> tons/yr	P M: <u>55830.41</u> tons/yr
P M-10: <u>12844.71</u> tons/yr	P M-10: <u>12845.18</u> tons/yr
S O x: <u>4.62</u> tons/yr	S O x: <u>4.65</u> tons/yr
N O x: <u>137.36</u> tons/yr	N O x: <u>139.31</u> tons/yr
V O C: <u>2.06</u> tons/yr	V O C: <u>2.19</u> tons/yr
C O: <u>23.71</u> tons/yr	C O: <u>23.64</u> tons/yr
Lead: <u>0.01</u> tons/yr	Lead: <u>0.01</u> tons/yr
HAPs: <u>14.98</u> tons/yr	HAPs: <u>14.98</u> tons/yr

**B. Source emissions after controls**

**dryer combustion: gas**

P M:	1.25 tons/yr x	<u>0.00128</u> emitted after controls =	<u>0.002</u> tons/yr
P M-10:	4.99 tons/yr x	<u>0.00128</u> emitted after controls =	<u>0.006</u> tons/yr

**dryer combustion: #2 oil**

P M:	9.52 tons/yr x	<u>0.00128</u> emitted after controls =	<u>0.012</u> tons/yr
P M-10:	15.71 tons/yr x	<u>0.00128</u> emitted after controls =	<u>0.020</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:	0.127 tons/yr x	<u>1.00000</u> emitted after controls =	<u>0.127</u> tons/yr
P M-10:	0.209 tons/yr x	<u>1.00000</u> emitted after controls =	<u>0.209</u> tons/yr

**hot oil heater combustion: butane**

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: propane**

P M:	0.082 tons/yr x	<u>1.00000</u> emitted after controls =	<u>0.082</u> tons/yr
P M-10:	0.082 tons/yr x	<u>1.00000</u> emitted after controls =	<u>0.082</u> tons/yr

**dryer combustion: #4 oil**

P M:	9.52 tons/yr x	<u>0.00128</u> emitted after controls =	<u>0.012</u> tons/yr
P M-10:	15.71 tons/yr x	<u>0.00128</u> emitted after controls =	<u>0.020</u> tons/yr

**dryer combustion: re-refined oil**

P M:	309.73 tons/yr x	<u>0.00128</u> emitted after controls =	<u>0.396</u> tons/yr
P M-10:	267.49 tons/yr x	<u>0.00128</u> emitted after controls =	<u>0.342</u> tons/yr

**dryer combustion: butane**

P M:	3.84 tons/yr x	<u>0.00128</u> emitted after controls =	<u>0.005</u> tons/yr
P M-10:	3.84 tons/yr x	<u>0.00128</u> emitted after controls =	<u>0.005</u> tons/yr

**dryer combustion: propane**

P M:	4.31 tons/yr x	<u>0.00128</u> emitted after controls =	<u>0.006</u> tons/yr
P M-10:	4.31 tons/yr x	<u>0.00128</u> emitted after controls =	<u>0.006</u> tons/yr

**aggregate drying:**

P M:	55188.00 tons/yr x	<u>0.00128</u> emitted after controls =	<u>70.641</u> tons/yr
P M-10:	12811.50 tons/yr x	<u>0.00128</u> emitted after controls =	<u>16.399</u> tons/yr

**conveying/handling:**

P M:	5.18 tons/yr x	<u>1.000</u> emitted after controls =	<u>5.185</u> tons/yr
P M-10:	0.52 tons/yr x	<u>1.000</u> emitted after controls =	<u>0.518</u> tons/yr

**screening:**

P M:	15.75 tons/yr x	<u>1.000</u> emitted after controls =	<u>15.750</u> tons/yr
P M-10:	1.58 tons/yr x	<u>1.000</u> emitted after controls =	<u>1.575</u> tons/yr

**unpaved roads:**

P M:	572.79 tons/yr x	50.00% emitted after controls =	<u>286.397</u> tons/yr
P M-10:	22.38 tons/yr x	50.00% emitted after controls =	<u>11.192</u> tons/yr

**storage:**

P M:	1.018 tons/yr x	50.00% emitted after controls =	<u>0.509</u> tons/yr
P M-10:	0.356 tons/yr x	50.00% emitted after controls =	<u>0.178</u> tons/yr

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

	Butane	Propane	Gas	#2 Oil	#4 Oil	re-refined oil	
P M:	<b>378.61</b>	<b>378.61</b>	<b>378.61</b>	<b>378.62</b>	<b>378.62</b>	<b>379.00</b>	tons/yr
P M-10:	<b>30.08</b>	<b>30.08</b>	<b>30.08</b>	<b>30.09</b>	<b>30.09</b>	<b>30.41</b>	tons/yr

## II. Allowable Emissions

A. The following calculations determine compliance with 326 IAC 6-1, which limits stack emissions from this plant to 0.03 gr/dscf:

$$\begin{array}{r}
 0.03 \text{ grains}^* \\
 \text{dscf}
 \end{array}
 \times
 \begin{array}{r}
 92000 \\
 \text{acfm}^*
 \end{array}
 \times
 \begin{array}{r}
 528 \\
 460 + 250 \text{ Temp}^*
 \end{array}
 \times
 \begin{array}{r}
 100 \\
 100
 \end{array}
 \times
 \begin{array}{r}
 5 \\
 \% \text{ moisture}^*
 \end{array}
 =
 \begin{array}{r}
 73.204 \\
 \text{tons/yr}
 \end{array}$$

To meet the requirements of 326 IAC 6-1, the following value must be less than the amount calculated above: 71.16 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

$$\begin{array}{r}
 0.5 \text{ lbs/MMBtu} \times \\
 69 \text{ lbs/1000gal} /
 \end{array}
 \times
 \begin{array}{r}
 138000.0 \text{ Btu/gal=} \\
 142.0 \text{ lb/1000 gal} =
 \end{array}
 \begin{array}{r}
 69.0 \text{ lbs/1000gal} \\
 0.486
 \end{array}$$

Sulfur content must be less than or equal to 0.486 % 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 re-refined fuel oil allowable by 326-IAC 7:

limit: 1.6 lbs/MMBtu

$$\begin{array}{r}
 1.6 \text{ lbs/MMBtu} \times \\
 224 \text{ lbs/1000gal} /
 \end{array}
 \times
 \begin{array}{r}
 140000.0 \text{ Btu/gal=} \\
 214.0 \text{ lbs/1000 gal} = \\
 \text{(check burner type)}
 \end{array}
 \begin{array}{r}
 224 \text{ lbs/1000gal} \\
 1.047
 \end{array}$$

Sulfur content must be less than or equal to 1.047 % 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:

limit: 0.5 lbs/MMBtu

$$\begin{array}{r}
 0.5 \text{ lbs/MMBtu} \times \\
 69 \text{ lbs/1000gal} /
 \end{array}
 \times
 \begin{array}{r}
 138000.0 \text{ Btu/gal=} \\
 150.0 \text{ lbs/1000 gal} =
 \end{array}
 \begin{array}{r}
 69 \text{ lbs/1000gal} \\
 0.460
 \end{array}$$

Sulfur content must be less than or equal to 0.460 % to comply with 326 IAC 7 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 BURNER (Gas)

$$\begin{array}{lclclcl}
 124.83 \frac{\text{tons NOx}}{\text{year}} & * & 2000 \frac{\text{lbs}}{\text{ton}} & = & 249660 \frac{\text{lbs NOx}}{\text{year}} \\
 249660 \frac{\text{lbs NOx}}{\text{year}} & / & 190.0 \frac{\text{lbs NOx}}{\text{MMcf}} & = & 1314.00 \frac{\text{MMcf}}{\text{year}} \\
 1314.00 \frac{\text{MMcf}}{\text{year}} & * & \frac{97.1 \text{ tons/yr}}{124.83 \text{ tons/yr}} & = & 1022.3 \frac{\text{MMcf}}{\text{year}} \text{ FESOP Limit}
 \end{array}$$

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

$$\begin{array}{lclclcl}
 114.26 \frac{\text{tons NOx}}{\text{year}} & * & 2000 \frac{\text{lbs}}{\text{ton}} & = & 228521.74 \frac{\text{lbs NOx}}{\text{year}} \\
 228521.74 \frac{\text{lbs NOx}}{\text{year}} & / & 24 \frac{\text{lbs}}{1000 \text{ gal}} & = & 9521739.13 \frac{\text{gal}}{\text{year}} \\
 9521739.13 \frac{\text{gal}}{\text{year}} & * & \frac{97.1 \text{ tons/yr}}{114.26 \text{ tons/yr}} & = & 8093333 \frac{\text{gal}}{\text{year}} \text{ FESOP Limit}
 \end{array}$$

##### FUEL USAGE LIMITATION FOR BURNER (#4 Oil)

$$\begin{array}{lclclcl}
 114.26 \frac{\text{tons NOx}}{\text{year}} & * & 2000 \frac{\text{lbs}}{\text{ton}} & = & 228521.74 \frac{\text{lbs NOx}}{\text{year}} \\
 228521.74 \frac{\text{lbs NOx}}{\text{year}} & / & 24.0 \frac{\text{lbs}}{1000 \text{ gal}} & = & 9521739.13 \frac{\text{gal}}{\text{year}} \\
 9521739.13 \frac{\text{gal}}{\text{year}} & * & \frac{97.1 \text{ tons/yr}}{114.26 \text{ tons/yr}} & = & 8093333 \frac{\text{gal}}{\text{year}} \text{ FESOP Limit}
 \end{array}$$

##### FUEL USAGE LIMITATION FOR BURNER (Re-refined oil)

$$\begin{array}{lclclcl}
 75.09 \frac{\text{tons NOx}}{\text{year}} & * & 2000 \frac{\text{lbs}}{\text{ton}} & = & 150171.43 \frac{\text{lbs NOx}}{\text{year}} \\
 150171.43 \frac{\text{lbs NOx}}{\text{year}} & / & 16.0 \frac{\text{lbs}}{1000 \text{ gal}} & = & 9385714.29 \frac{\text{gal}}{\text{year}} \\
 9385714.29 \frac{\text{gal}}{\text{year}} & * & \frac{97.1 \text{ tons/yr}}{75.09 \text{ tons/yr}} & = & 0 \frac{\text{gal}}{\text{year}} \text{ FESOP Limit}
 \end{array}$$

##### FUEL USAGE LIMITATION FOR BURNER (Propane)

$$\begin{array}{lclclcl}
 136.43 \frac{\text{tons NOx}}{\text{year}} & * & 2000 \frac{\text{lbs}}{\text{ton}} & = & 272852.46 \frac{\text{lbs NOx}}{\text{year}} \\
 272852.46 \frac{\text{lbs NOx}}{\text{year}} & / & 19.0 \frac{\text{lbs}}{1000 \text{ gal}} & = & 14360655.74 \frac{\text{gal}}{\text{year}} \\
 14360655.74 \frac{\text{gal}}{\text{year}} & * & \frac{97.1 \text{ tons/yr}}{136.43 \text{ tons/yr}} & = & 10223158 \frac{\text{gal}}{\text{year}} \text{ FESOP Limit}
 \end{array}$$

##### FUEL USAGE LIMITATION FOR BURNER (Butane)

$$\begin{array}{lclclcl}
 134.47 \frac{\text{tons NOx}}{\text{year}} & * & 2000 \frac{\text{lbs}}{\text{ton}} & = & 268947.37 \frac{\text{lbs NOx}}{\text{year}} \\
 268947.37 \frac{\text{lbs NOx}}{\text{year}} & / & 21.0 \frac{\text{lbs}}{1000 \text{ gal}} & = & 12807017.54 \frac{\text{gal}}{\text{year}} \\
 12807017.54 \frac{\text{gal}}{\text{year}} & * & \frac{97.1 \text{ tons/yr}}{134.47 \text{ tons/yr}} & = & 9249524 \frac{\text{gal}}{\text{year}} \text{ FESOP Limit}
 \end{array}$$

**FUEL USAGE LIMITATION: BASED ON SO2**

**FUEL USAGE LIMITATION FOR BURNER (Gas)**

$$\begin{aligned}
 & \frac{0.394 \text{ tons SO}_2}{\text{year}} \times \frac{2000 \text{ lbs}}{\text{ton}} = 788.40 \frac{\text{lbs SO}_2}{\text{year}} \\
 & \frac{788.40 \text{ lbs SO}_2}{\text{year}} \div \frac{0.6 \text{ lbs SO}_2}{\text{MMcf}} = 1314.00 \frac{\text{MMcf}}{\text{year}} \\
 & \frac{1314.00 \text{ MMcf}}{\text{year}} \times \frac{0.39 \text{ tons/yr}}{0.39 \text{ tons/yr}} = \mathbf{0.0 \text{ MMcf}} \text{ FESOP Limit}
 \end{aligned}$$

**FUEL USAGE LIMITATION FOR BURNER (#2 Oil)**

$$\begin{aligned}
 & \frac{338.0 \text{ tons SO}_2}{\text{year}} \times \frac{2000 \text{ lbs}}{\text{ton}} = 676043.48 \frac{\text{lbs SO}_2}{\text{year}} \\
 & \frac{676043.48 \text{ lbs SO}_2}{\text{year}} \div \frac{71.0 \text{ lbs}}{1000 \text{ gal}} = 9521739.13 \frac{\text{gal}}{\text{year}} \\
 & \frac{9521739.13 \text{ gal}}{\text{year}} \times \frac{95.4 \text{ tons/yr}}{338.02 \text{ tons/yr}} = \mathbf{2687324 \text{ gal}} \text{ FESOP Limit}
 \end{aligned}$$

**FUEL USAGE LIMITATION FOR BURNER (#4 Oil)**

$$\begin{aligned}
 & \frac{357.1 \text{ tons SO}_2}{\text{year}} \times \frac{2000 \text{ lbs}}{\text{ton}} = 714130.4348 \frac{\text{lbs SO}_2}{\text{year}} \\
 & \frac{714130.43 \text{ lbs SO}_2}{\text{year}} \div \frac{75.0 \text{ lbs}}{1000 \text{ gal}} = 9521739.13 \frac{\text{gal}}{\text{year}} \\
 & \frac{9521739.13 \text{ gal}}{\text{year}} \times \frac{95.4 \text{ tons/yr}}{357.07 \text{ tons/yr}} = \mathbf{2544000 \text{ gal}} \text{ FESOP Limit}
 \end{aligned}$$

**FUEL USAGE LIMITATION FOR BURNER (Re-refined oil)**

$$\begin{aligned}
 & \frac{502.1 \text{ tons SO}_2}{\text{year}} \times \frac{2000 \text{ lbs}}{\text{ton}} = 1004271.43 \frac{\text{lbs SO}_2}{\text{year}} \\
 & \frac{1004271.43 \text{ lbs SO}_2}{\text{year}} \div \frac{107.0 \text{ lbs}}{1000 \text{ gal}} = 9385714.3 \frac{\text{gal}}{\text{year}} \\
 & \frac{9385714.29 \text{ gal}}{\text{year}} \times \frac{95.4 \text{ tons/yr}}{502.14 \text{ tons/yr}} = \mathbf{1783178 \text{ gal}} \text{ FESOP Limit}
 \end{aligned}$$

**FUEL USAGE LIMITATION FOR BURNER (Propane)**

$$\begin{aligned}
 & \frac{0.14 \text{ tons SO}_2}{\text{year}} \times \frac{2000 \text{ lbs}}{\text{ton}} = 287.21 \frac{\text{lbs SO}_2}{\text{year}} \\
 & \frac{287.21 \text{ lbs SO}_2}{\text{year}} \div \frac{0.02 \text{ lbs}}{1000 \text{ gal}} = 14360656 \frac{\text{gal}}{\text{year}} \\
 & \frac{14360655.74 \text{ gal}}{\text{year}} \times \frac{95.4 \text{ tons/yr}}{0.14 \text{ tons/yr}} = \mathbf{0 \text{ gal}} \text{ FESOP Limit}
 \end{aligned}$$

**FUEL USAGE LIMITATION FOR BURNER (Butane)**

$$\begin{aligned}
 & \frac{0.115 \text{ tons SO}_2}{\text{year}} \times \frac{2000 \text{ lbs}}{\text{ton}} = 230.53 \frac{\text{lbs SO}_2}{\text{year}} \\
 & \frac{230.53 \text{ lbs SO}_2}{\text{year}} \div \frac{0.02 \text{ lbs}}{1000 \text{ gal}} = 12807018 \frac{\text{gal}}{\text{year}} \\
 & \frac{12807017.54 \text{ gal}}{\text{year}} \times \frac{95.4 \text{ tons/yr}}{0.115 \text{ tons/yr}} = \mathbf{0 \text{ gal}} \text{ FESOP Limit}
 \end{aligned}$$

**LIQUID BINDER USAGE LIMITATION: BASED ON VOC EMISSIONS FROM CUTBACK ASPHALT**

Assume 95% evaporative loss of diluent.      Weight percent diluent in liquid binder = 27%      Average density of liquid binder = 8.53 lbs/gal  
 Average density of diluent = 6.5 lbs/gal

The FESOP VOC emission limit of 100 tons per year minus the worst case sum of VOC emissions from other operations = **78.8 tons/yr**

Limited tons of liquid binder = limited VOC emission rate (tons per year) / diluent loss (95% by weight) / weight % diluent in liquid binder

**LIQUID BINDER USAGE LIMITATION = 307.2 tons/yr**

**Appendix A: Emission Calculations**  
**Internal Combustion Engines - Diesel Fuel**  
**Turbine <600 HP**  
**Reciprocating**

**Company Name:** Rieth Riley Construction Co., Inc.  
**Plant Location:** West side of County Road 200 East, just south of U.S. 36, Danville, Indiana 46122  
**County:** Hendricks  
**FESOP:** F 063-20330  
**Plt. ID:** 063-05267  
**Date:** November 1, 2004  
**Permit Reviewer:** Edward A. Longenberger

**Generator #16 (680 KW Output):**

Heat Input Capacity                      Potential Throughput  
MM Btu/hr                                      gal/yr

9.176    582,477

Emission Factor in lb/gallon	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
0.04278	0.04278	0.04278	0.040	0.6086	0.0497	0.1311
Potential Emission in tons/yr	12.46	12.46	11.66	177.24	14.47	38.18

**Generator #17 (85 KW Output):**

Heat Input Capacity                      Potential Throughput  
MM Btu/hr                                      gal/yr

1.049    66,589

Emission Factor in lb/gallon	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
0.04278	0.04278	0.04278	0.040	0.6086	0.0497	0.1311
Potential Emission in tons/yr	1.42	1.42	1.33	20.26	1.65	4.36

**Methodology**

Emission Factors are from AP42 (Supplement B 10/96), Table 3.3-1  
Emission Factor (lb/gallon) = AP-42 Emission Factor (lb/MMBtu) \* heat content of fuel (0.138MMBtu/gallon diesel fuel)  
Potential throughput (gallons/year) = Heat Input Capacity (MMBtu/hr) / heat content of fuel (0.138 MMBtu/gallon) \* 8,760 hours/year  
Potential Emissions (tons/yr) = [Potential throughput (gallons/year) x Emission Factor (lb/gallon)] / (2,000 lb/ton )

\*PM emission factors are assumed to be equivalent to PM10 emission factors. No information was given regarding which method was used to determine the factor or the fraction of PM10 which is condensable.



**Appendix B: Additional Emission Calculations**

**Company Name:** Rieth Riley Construction Co., Inc.  
**Plant Location:** West side of County Road 200 East, just south of U.S. 36, Danville, Indiana 4612:  
**County:** Hendricks  
**FESOP:** F 063-20330  
**Plt. ID:** 063-05267  
**Date:** November 1, 2004  
**Permit Reviewer:** Edward A. Longenberger

**1.) HCl emissions from waste oil**

**POTENTIAL EMISSIONS FROM BURNING RE-REFINED OIL @ 1,000 ppm HALOGENS (CHLORINE)**

	<b>Dryer Burner</b>	<b>(re-refined oil/atomizing burner)</b>		
The following calculations determine the amount of emissions created by waste				
fuel oil @	<u>1.000</u>	% sulfur, based on 8760 hours of use and AP-42 Chapter 1.11		1.000 % Ash
				<u>0.100</u> % Lead
				<u>0.100</u> % Chlorine
Pollutant:	<b>150.000</b>	MMBtu/hr * 8760 hrs/yr	* Ef (lbs/1000 gal) = (tons/yr)	
	<b>140000.0</b>	Btu/gal * 2000 lbs/ton		
P M:	66.0	lbs/1000 gal =	<b>309.729</b>	tons/yr
P M-10:	57.0	lbs/1000 gal =	<b>267.493</b>	tons/yr
S O x:	107.0	lbs/1000 gal =	<b>502.136</b>	tons/yr
N O x:	16.0	lbs/1000 gal =	<b>75.086</b>	tons/yr
VOC:	1.0	lbs/1000 gal =	<b>4.693</b>	tons/yr
C O:	2.10	lbs/1000 gal =	<b>9.855</b>	tons/yr
Pb:	5.00	lbs/1000 gal =	<b>23.464</b>	tons/yr
HCl:	6.60	lbs/1000 gal =	<b>30.973</b>	tons/yr

**LIMITED HCL EMISSIONS:**

Annual re-refined oil limit:	<b>1,783,178</b>	gal/year	*	HCl emission factor	<b>6.60</b>	lbs/1000 gal	=	Limited HCl emissions <b>5.88</b> tons/year
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2.) Organic PM and VHAP fugitive emissions from Load Out and Silo Filling

2a.) TOC and VHAP emissions from Load Out and Silo Filling

Load out emission factor:  $EF = 0.0172(-V)e^{(0.0251)(T+460)-20.43}$   
 Silo filling emission factor:  $EF = 0.0504(-V)e^{(0.0251)(T+460)-20.43}$

where: V = **-0.5** Percent loss on h  
 T = **325** Asphalt temperat

Load out emission factor: **0.00416** lbs TOC/ton asphalt produced  
 Silo filling emission factor: **0.01219** lbs TOC/ton asphalt produced  
 Annual asphalt limit: **1,000,000.00** tons per year

EFs from AP-42 Tables 11.1-14 ar

Pollutant	Load Out/Yard		Silo Filling	
	VHAP Specification Profile	Limited Emissions (tons/year)	VHAP Specification Profile	Limited Emissions (tons/year)
<b>TOC</b>	<b>NA</b>	<b>2.079</b>	<b>NA</b>	<b>6.093</b>
<b>VHAPs</b>				
Benzene	0.0520%	0.0011	0.0320%	0.0019
Bromomethane	0.0096%	0.0002	0.0049%	0.0003
2-Butanone	0.0490%	0.0010	0.0390%	0.0024
Carbon Disulfide	0.0130%	0.0003	0.0160%	0.0010
Chloroethane	0.0000%	0.0000	0.0040%	0.0002
Chloromethane	0.0150%	0.0003	0.0230%	0.0014
Cumene	0.1100%	0.0023	ND	0.0000
Ethylbenzene	0.2800%	0.0058	0.0380%	0.0023
Formaldehyde	0.0880%	0.0018	0.6900%	0.0420
n-Hexane	0.1500%	0.0031	0.1000%	0.0061
Isooctane	0.0018%	0.0000	0.0003%	0.0000
Methylene Chloride	0.0000%	0.0000	0.0003%	0.0000
MTBE	0.0000%	0.0000	ND	0.0000
Styrene	0.0073%	0.0002	0.0054%	0.0003
Tetrachloroethene	0.0077%	0.0002	ND	0.0000
Toluene	0.2100%	0.0044	0.0620%	0.0038
1,1,1-Trichloroethane	0.0000%	0.0000	ND	0.0000
Trichloroethene	0.0000%	0.0000	ND	0.0000
Trichlorofluoromethane	0.0013%	0.0000	ND	0.0000
m-/p-Xylene	0.4100%	0.0085	0.2000%	0.0122
o-Xylene	0.0800%	0.0017	0.0570%	0.0035
<b>Total VHAPs</b>	<b>1.48%</b>	<b>0.031</b>	<b>1.27%</b>	<b>0.078</b>

**2b.) Organic PM and PAH HAP emissions from Load Out and Silo Filling**

Load out emission factor:  $EF = 0.00141(-V)e^{((0.0251)(T+460)-20.43)}$

where: V = **-0.5** Percent loss on h

Silo filling emission factor:  $EF = 0.00105(-V)e^{((0.0251)(T+460)-20.43)}$

T = **325** Asphalt temperat

Load out emission factor: **0.00034** lbs organic PM/ton asphalt produced

EFs from AP-42 Tables 11.1-14 ar

Silo filling emission factor: **0.00025** lbs organic PM/ton asphalt produced

Annual asphalt limit: **1,000,000.00** tons per year

Pollutant	Load Out/Yard		Silo Filling	
	PAH HAP Specification Profile	Limited Emissions (tons/year)	PAH HAP Specification Profile	Limited Emissions (tons/year)
<b>Total organic PM</b>	<b>NA</b>	<b>0.170</b>	<b>NA</b>	<b>0.127</b>
<b>PAH HAPs</b>				
Acenaphthene	0.26%	0.0004	0.47%	0.0006
Acenaphthylene	0.03%	0.0000	0.01%	0.0000
Anthracene	0.07%	0.0001	0.13%	0.0002
Benzo(a)anthracene	0.02%	0.0000	0.06%	0.0001
Benzo(b)fluoranthene	0.01%	0.0000	ND	0.0000
Benzo(k)fluoranthene	0.00%	0.0000	ND	0.0000
Benzo(g,h,i)perylene	0.00%	0.0000	ND	0.0000
Benzo(a)pyrene	0.00%	0.0000	ND	0.0000
Benzo(e)pyrene	0.01%	0.0000	0.01%	0.0000
Chrysene	0.10%	0.0002	0.21%	0.0003
Dibenz(a,h)anthracene	0.00%	0.0000	ND	0.0000
Fluoranthene	0.05%	0.0001	0.15%	0.0002
Fluorene	0.77%	0.0013	1.01%	0.0013
Indeno(1,2,3-cd)pyrene	0.00%	0.0000	ND	0.0000
2-Methylnaphthalene	2.38%	0.0041	5.27%	0.0067
Naphthalene	1.25%	0.0021	1.82%	0.0023
Perylene	0.02%	0.0000	0.03%	0.0000
Phenanthrene	0.81%	0.0014	1.80%	0.0023
Pyrene	0.15%	0.0003	0.44%	0.0006
<b>Total PAH HAPs</b>	<b>5.93%</b>	<b>0.010</b>	<b>11.41%</b>	<b>0.014</b>
<b>Semi-volatile HAPs</b>				
Phenol	1.18%	0.0020	ND	0.0000

**Total HAPs**

Load Out	0.0430
Silo Filling	0.0920
Overall Total	0.1350

**\*\* paved roads \*\***

The following calculations determine the amount of emissions created by vehicle traffic on paved roads, based on 8760 hours of use and AP-42, Ch 13.2.1.

**A. Tri-axle Truck**

21.38 trips/hr x  
0.631 miles/roundtrip x  
 8760 hrs/yr = 118179.2 miles per year

**Using the worst-case default silt loading value for a limited access road (0.2 g/m<sup>2</sup>)**

**For PM**

**For PM-10**

$E_f = \{k \cdot [(sL/2)^{0.65}] \cdot [(W/3)^{1.5}]\} - C$   
 0.61 = 0.12 lb/mile  
 0.082 where k = 0.016 particle size multiplier for PM-10 (k=0.082 for PM-30 or TSP)  
 0.2 sL = 0.2 road surface silt loading (g/m<sup>2</sup>)  
 31 W = 31 tons average vehicle weight  
 0.00047 C = 0.00047 Emission factor for 1980's vehicle fleet exhaust, brake wear and tire wear (lb/VMT)

0.61 lb/mi x 118179.2 mi/yr = PM 36.00 tons/yr  
 2000 lb/ton

0.12 lb/mi x 118179.2 mi/yr = PM-10 7.00 tons/yr  
 2000 lb/ton

**B. Front End Loader**

52.78 trips/hr x  
0.072 miles/roundtrip x  
 8760 hrs/yr = 33474.3 miles per year

**For PM**

**For PM-10**

$E_f = \{k \cdot [(sL/2)^{0.65}] \cdot [(W/3)^{1.5}]\} - C$   
 0.86 = 0.17 lb/mile  
 0.082 where k = 0.016 particle size multiplier for PM-10 (k=0.082 for PM-30 or TSP)  
 0.2 sL = 0.2 road surface silt loading (g/m<sup>2</sup>)  
 39 W = 39 tons average vehicle weight  
 0.00047 C = 0.00047 Emission factor for 1980's vehicle fleet exhaust, brake wear and tire wear (lb/VMT)

0.86 lb/mi x 33474.34272 mi/yr = PM 14.39 tons/yr  
 2000 lb/ton

0.17 lb/mi x 33474.34272 mi/yr = PM-10 2.80 tons/yr  
 2000 lb/ton

**All Trucking**

Total PM: 50.40 tons/yr  
 Total PM-10: 9.81 tons/yr



heating  
ture (deg.F)

rd 11.1-16

heating  
ture (deg.F)

rd 11.1-15

^2)



Appendix C: Air Modeling and Risk Assessment

Company Name: Rieth Riley Construction Co., Inc.  
 Plant Location: West side of County Road 200 East, just south of U.S. 36, Danville, Indiana 46122  
 County: Hendricks  
 FESOP: F 063-20330  
 Plt. ID: 063-05267

Annual

X	Y	Location	Total Cancer Risk	Hazard Quotient
541973.0625	4401111.5	Hendricks Regional Hospital	2.62077E-07	0.010478666
544025.75	4400013	Dr. Jon Erickson	3.2449E-07	0.012825004
544017.4375	4401462	Danville Friends Church (Day Care)	6.31133E-07	0.024919164
543423	4401397	Dr. Ted Huppert	4.09076E-07	0.015727751
546517.0625	4401261	Avon Healthcare	2.00928E-07	0.008183888
532645.1875	4401189.5	Family Medical Center	2.89525E-08	0.001186607
542520	4401176.5	Dr. Sam Wentworth	2.52645E-07	0.009745781
541543.9375	4401263.5	Ellis Park	2.36517E-07	0.009543456
544327.125	4401402.5	Calvary Chapel	6.67835E-07	0.026766088
545445.25	4401439.5	Church of Christ of Danville	3.60275E-07	0.014574738
542850.375	4401671.5	Danville Regional Rehab	2.37764E-07	0.009286089
544041.625	4401400.5	Hendricks Co. Fair Grounds	6.60398E-07	0.026059732
544327.125	4401402.5	Dr. Mike Beatty	6.67835E-07	0.026766088
544041.625	4401400.5	Partners In Care	6.60398E-07	0.026059732
548990.875	4401400	Hearth at Prestwick	1.15226E-07	0.004707392
549790.875	4401400	Avon Ball Fields	9.92399E-08	0.004056294
542571.5625	4400467.5	Twin Bridges Soccer Fields	1.98718E-07	0.007634202
544272.625	4402604.5	William Schoeneman	3.49972E-07	0.014208417
543333.5	4400475.5	Fence line	7.00378E-07	0.012807503
543333.5	4400574	Fence line	<b>1.97442E-06</b>	0.02779916
543333.5	4400672.5	Fence line	<b>1.01344E-06</b>	0.019611446
543249.6875	4400663	Fence line	7.37857E-07	0.013914446
543165.8125	4400653	Fence line	5.31602E-07	0.010440402
543082	4400643.5	Fence line	2.75061E-07	0.006499696
543082	4400559.5	Fence line	1.93929E-07	0.005041295
543082	4400475.5	Fence line	2.50609E-07	0.005995486
543165.8125	4400475.5	Fence line	4.25319E-07	0.009672904
543249.6875	4400475.5	Fence line	5.63934E-07	0.011938121

24-hour

X	Y	Location	Acute HQ
541973.0625	4401111.5	Hendricks Regional Hospital	0.022404073
544025.75	4400013	Dr. Jon Erickson	0.028988584
544017.4375	4401462	Danville Friends Church (Day Care)	0.024184359
543423	4401397	Dr. Ted Huppert	0.020611024
546517.0625	4401261	Avon Healthcare	0.014300064
532645.1875	4401189.5	Family Medical Center	0.002494858
542520	4401176.5	Dr. Sam Wentworth	0.018265855
541543.9375	4401263.5	Ellis Park	0.019337329
544327.125	4401402.5	Calvary Chapel	0.024722173
545445.25	4401439.5	Church of Christ of Danville	0.013810736
542850.375	4401671.5	Danville Regional Rehab	0.015084231
544041.625	4401400.5	Hendricks Co. Fair Grounds	0.025438616
544327.125	4401402.5	Dr. Mike Beatty	0.024722173
544041.625	4401400.5	Partners In Care	0.025438616
548990.875	4401400	Hearth at Prestwick	0.006876044
549790.875	4401400	Avon Ball Fields	0.005749111
542571.5625	4400467.5	Twin Bridges Soccer Fields	0.01975017
544272.625	4402604.5	William Schoeneman	0.01590484
543333.5	4400475.5	Fence line	0.019891913
543333.5	4400574	Fence line	0.031385923
543333.5	4400672.5	Fence line	0.022912839
543249.6875	4400663	Fence line	0.02111132
543165.8125	4400653	Fence line	0.021534662
543082	4400643.5	Fence line	0.017508427
543082	4400559.5	Fence line	0.01792678
543082	4400475.5	Fence line	0.014125646
543165.8125	4400475.5	Fence line	0.020994622

**Appendix C: Air Modeling and Risk Assessment**

**Company Name: Rieth Riley Construction Co., Inc.**

**Plant Location: West side of County Road 200 East, just south of U.S. 36, Danville, Indiana 46122**

**County: Hendricks**

**FESOP: F 063-20330**

**Pit. ID: 063-05267**

			24	5	radius of impact	annual	1	radius of impact
			fenceline	residence	(KM)	fenceline	residence	(KM)
PM10 paved roads								
1990			73.1	14.3	2.4	9.87	1.58	1.1
1991			56.2	12.79	2.4	9.82	1.52	1.1
1992			52.14	13.65	1.8	9.32	1.41	1.1
1993			55.02	21.88	2.8	8.88	1.25	0.9
1994			80.9	20.08	2.3	8.92	1.43	1

Appendix C: Air Modeling and Risk Assessment

Company Name: Rieth Riley Construction Co., Inc  
 Plant Location: West side of County Road 200 East, just south of U.S. 36, Danville, Indiana 4612  
 County: Hendricks  
 FESOP: F 063-20330  
 Plt. ID: 063-05267

Averaging period	3-hour				24-hour				Annual			
Pollutants	fenceline	750m away from fenceline	Significant Impact level	Radius of impact	fenceline	750m away from fenceline	Significant Impact level	Radius of impact	fenceline	750m away from fenceline	Significant Impact level	Radius of impact
	ug/m3	ug/m3	ug/m3	Km	ug/m3	ug/m3	ug/m3	Km	ug/m3	ug/m3	ug/m3	Km
SO2	199	29.8	25	0.8	77.68	8.56	5	2.1	8.33	1.15	1	0.8
NOX									8.34	3.05	1	2.2
PM10-point sources					6.67	4.21	5	0.3	0.59	0.53	1	
PM10-Fugitives(unpaved roads 4/14)					2221	59.47	5	12.5	518	3.04	1	1.5
<b>PM10-Fugitives(paved Roads 5/6)</b>					<b>80.9</b>	<b>21.88</b>	<b>5</b>	<b>2.8</b>	<b>9.87</b>	<b>1.58</b>	<b>1</b>	<b>1.1</b>

NAAQS	24-hour	Background	Total	NAAQS Limit
PM10 Paved Roads	80.9	34.7	115.6	150
Mann Road				

NAAQS	Annual	Background	Total	NAAQS Limit
PM10 Paved Roads	9.87	18	27.9	50
Mann Road				

NAAQS	3-hour	Background	Total	NAAQS Limit
SO2	199	149	348	1300
Mann Road				

NAAQS	24-hour	Background	Total	NAAQS Limit
SO2	77.7	51.6	129.5	365
Mann Road				

NAAQS	Annual	Background	Total	NAAQS Limit
SO2	8.33	11	19.3	80
Mann Road				

NAAQS	Annual	Background	Total	NAAQS Limit
NOX	8.34	32.9	41.2	100
Naval Avionics				

**Rieth Riley Construction Company, Inc.**

**F 063-20330-05267**

**ATTACHMENT A**

**Page 1**

**ASPHALT PLANT SITE FUGITIVE DUST CONTROL PLAN**

1. Fugitive particulate matter (dust) emissions from paved roads, unpaved roads, and parking lots shall be controlled by one or more of the following measures:
  - A. Paved roads and parking lots:
    - i. Cleaning by vacuum sweeping on an as-needed basis (monthly at a minimum).
    - ii. Power brooming while wet either from rain or application of water.
  - B. Unpaved roads and parking lots:
    - i. Paving with asphalt.
    - ii. Treating with emulsified asphalt on an as-needed basis.
    - iii. Treating with water on an as-needed basis.
    - iv. Double chip and seal the road surface and maintained on an as-needed basis.
2. Fugitive particulate matter (dust) emissions from aggregate stockpiles shall be controlled by one or more of the following measures:
  - A. Maintain minimum size and number of stock piles of aggregate.
  - B. Treating around the stockpile area with emulsified asphalt on an as-needed basis.
  - C. Treating around the stockpile area with water on an as-needed basis.
  - D. Treating the stockpiles with water on an as-needed basis.
3. Fugitive particulate matter (dust) emission from outdoor conveying of aggregates shall be controlled by the following measure:
  - A. Apply water at the feed and the intermediate points on an as-needed basis.
4. Fugitive particulate matter (dust) emissions resulting from the transferring of aggregates shall be controlled by one or more of the following measures:
  - A. Minimize the vehicular distance between the transfer points.
  - B. Enclose the transfer points.
  - C. Apply water on transfer points on an as-needed basis.
5. Fugitive particulate matter (dust) emissions from the transportation of aggregate by truck, front end loader, etc., shall be controlled by one or more of the following measures:

- A. Tarping the aggregate hauling vehicles.
  - B. Maintain vehicle bodies in a condition to prevent leakage.
  - C. Spray the aggregates with water.
  - D. Maintain a 10-mph speed limit in the yard.
6. Fugitive particulate matter (dust) emissions from the loading and unloading of aggregates shall be controlled by one or more of the following measures:
- A. Reduce free fall distance to a minimum.
  - B. Reduce the rate of discharge of the aggregate.
  - C. Spray the aggregate with water on an as-needed basis.

"An as-needed basis" means the frequency or quantity of application necessary to minimize visible particulate matter emissions.