



Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
(800) 451-6027
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TO: Interested Parties / Applicant
DATE: December 12, 2007
RE: Rieth-Riley Construction / 089-24305-00530
FROM: Matthew Stuckey, Deputy Branch Chief
Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

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

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

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

Enclosures
FNPER.dot12/03/07



Mitchell E. Daniels, Jr.
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100 North Senate Avenue
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Federally Enforceable State Operating Permit Renewal OFFICE OF AIR QUALITY AND GARY DEPARTMENT OF ENVIRONMENTAL AFFAIRS

**Rieth-Riley Construction Co., Inc.
301 North Cline Avenue
Gary, Indiana 46406**

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

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

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

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

Operation Permit No.: F 089-24305-00530	
Original signed by: Matthew Stuckey, Deputy Branch Chief Permits Branch Office of Air Quality	Issuance Date: December 12, 2007 Expiration Date: December 12, 2012

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SECTION A

SOURCE SUMMARY

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

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

The Permittee owns and operates a stationary hot mix asphalt plant.

Source Address:	301 North Cline Avenue, Gary, Indiana 46406
Mailing Address:	P.O. Box 477, Goshen, Indiana 46527-0477
General Source Phone Number:	574 - 875 - 5183
SIC Code:	2951
County Location:	Lake
Source Location Status:	Nonattainment for PM _{2.5} and 8-hour ozone Attainment for all other criteria pollutants
Source Status:	Federally Enforceable State Operating Permit Program Minor Source, under PSD, Emission Offset Rules and Nonattainment NSR Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

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

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

- (a) One (1) drum mixer, constructed in 1998, equipped with a baghouse for particulate control and exhausting to Stack SV1, capacity: 600 tons per hour.
- (b) One (1) dryer burner, constructed in 1998, equipped with a low NO_x burner, firing natural gas as primary fuel, using butane or propane gas as a backup fuel, exhausting to Stack SV1, rated at 200 million British thermal units per hour.
- (c) Two (2) hot oil heaters, firing natural gas as primary fuel, using No. 2 distillate oil and propane gas as backup fuels, exhausting to Stacks SV2 and SV3, capacity: 2.0 and 2.256 million British thermal units per hour, respectively.
- (d) One (1) hot oil heater, firing No. 4 distillate oil, rated at 1.5 million British thermal units per hour.
- (e) Four (4) tanks, identified as 13A, 13B, 13C and 13D, storing liquid asphalt, each constructed prior to July 23, 1984, exhausting to Stacks SV4, SV5, SV6 and SV7, capacity: 12,500 gallons, each.
- (f) One (1) tank, storing liquid asphalt, constructed in 1998, exhausting to Stack SV8, capacity: 25,000 gallons.
- (g) One (1) above ground horizontal fixed roof cone storage tank, identified as Tank 13G, storing liquid asphalt cement, constructed in 2004, capacity: 30,000 gallons.
- (h) One (1) tank, storing liquid asphalt, constructed in 2002, exhausting to Stack SV11, capacity: 30,000 gallons.

- (i) One (1) tank, storing No. 2 distillate oil, exhausting to Stack SV10, constructed in 1998, capacity: 10,000 gallons.
- (j) One (1) 5.5 feet by 1.5 feet above ground rectangular storage tank, identified as Tank 12B, storing No. 2 distillate fuel, constructed in 2004, capacity: 420 gallons.
- (k) Cold-mix cutback asphalt production.

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

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

- (a) A petroleum fuel, other than gasoline, dispensing facility, having a storage capacity of less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month.
- (b) Vessels storing lubricating oil, hydraulic oils, machining oils, and machining fluids.

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

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

SECTION B GENERAL CONDITIONS

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

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

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

- (a) This permit, F 089-24305-00530, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.
- (b) If IDEM, OAQ and GDEA, upon receiving a timely and complete renewal permit application, fail to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.

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

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

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

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

- (a) 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 and GDEA, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.
- (b) Unless otherwise stated, all terms and conditions in this permit that are local requirements, including any provisions designed to limit the source's potential to emit, are enforceable by the Gary Department of Environmental Affairs.

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

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

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

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

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

- (a) The Permittee shall furnish to IDEM, OAQ and GDEA, within a reasonable time, any information that IDEM, OAQ and GDEA may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1). Upon request, the Permittee shall also furnish to IDEM, OAQ and GDEA copies of records required to be kept by this permit.

- (b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U.S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.8 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.9 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

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

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

and

Gary Department of Environmental Affairs
839 Broadway, 2nd Floor NE
Gary, Indiana 46402

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

may require to determine the compliance status of the source.

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

B.10 Compliance Order Issuance [326 IAC 2-8-5(b)]

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

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

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

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

(b) A copy of the PMPs shall be submitted to IDEM, OAQ and GDEA upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ and GDEA. IDEM, OAQ and GDEA may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMPs do not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

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

(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation except as provided in 326 IAC 2-8-12.

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

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

after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

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

Telephone Number: 317-233-0178 (ask for Compliance Section)

Facsimile Number: 317-233-6865

Gary Department of Environmental Affairs phone: 219-882-3000; fax: 219-882-3012

Northwest Regional Office phone: 219-757-0265; fax: 219-757-0267

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

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

and

Gary Department of Environmental Affairs
839 Broadway, 2nd Floor NE
Gary, Indiana 46402

and

Northwest Regional Office
8315 Virginia Street, Suite 1
Merrillville, Indiana 46410-9201

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

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

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

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

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

available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ and GDEA 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 and GDEA by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
 - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
 - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
 - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
 - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

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

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

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

- (a) All terms and conditions of permits established prior to F 089-24305-00530 and issued pursuant to permitting programs approved into the state implementation plan have been either:
 - (1) incorporated as originally stated,
 - (2) revised, or
 - (3) deleted.
- (b) All previous registrations and permits are superseded by this permit.

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

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

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

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

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

and

Gary Department of Environmental Affairs
839 Broadway, 2nd Floor NE
Gary, Indiana 46402

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

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

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

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

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Federally Enforceable State Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)] The notification by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ or GDEA 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 or GDEA 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 or GDEA at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ or GDEA may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

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

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

Request for renewal shall be submitted to:

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

and

Gary Department of Environmental Affairs
839 Broadway, 2nd Floor NE
Gary, Indiana 46402

- (b) A timely renewal application is one that is:
- (1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
 - (2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ and GDEA on or before the date it is due.
- (c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAQ and GDEA 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 and GDEA any additional information identified as being needed to process the application.

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

- (a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this permit.

- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

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

and

Gary Department of Environmental Affairs
839 Broadway, 2nd Floor NE
Gary, Indiana 46402

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

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

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

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

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

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

and

Gary Department of Environmental Affairs
839 Broadway, 2nd Floor NE
Gary, Indiana 46402

and

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

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

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

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

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

- (c) Alternative Operating Scenarios [326 IAC 2-8-15(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, OAQ, or U.S. EPA is required.
- (d) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

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

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

B.21 Inspection and Entry [326 IAC 2-8-5(a)(2)] [IC 13-14-2-2] [IC 13-17-3-2] [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, and GDEA or an authorized representative to perform the following:

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

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

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

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

and

Gary Department of Environmental Affairs
839 Broadway, 2nd Floor NE
Gary, Indiana 46402

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

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

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

- (a) The Permittee shall pay annual fees to IDEM, OAQ and GDEA 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 or GDEA the applicable fee is due April 1 of each year.
- (b) Failure to pay may result in administrative enforcement action or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

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

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

SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

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

C.1 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 volatile organic compounds (VOCs) from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period. This limitation shall also satisfy the requirements of 326 IAC 2-3 (Emission Offset);
 - (2) The potential to emit any regulated pollutant from the entire source, except particulate matter (PM) and volatile organic compounds (VOCs), shall be limited to less than one hundred (100) tons per twelve (12) consecutive month period;
 - (3) 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
 - (4) 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) The 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. This limitation shall render 326 IAC 2-2 not applicable.
- (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. This limitation shall render 326 IAC 2-2 and 326 IAC 2-3 not applicable.
- (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 twenty percent (20%) 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]

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

C.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 Dust Emissions [326 IAC 6.8-10-3]

Pursuant to 326 IAC 6.8-10-3 (formerly 326 IAC 6-1-11.1) (Lake County Fugitive Particulate Matter Control Requirements), the particulate matter emissions from source wide activities shall meet the following requirements:

- (a) The average instantaneous opacity of fugitive particulate emissions from a paved road shall not exceed ten percent (10%).
- (b) The average instantaneous opacity of fugitive particulate emissions from an unpaved road shall not exceed ten percent (10%).
- (c) The average instantaneous opacity of fugitive particulate emissions from batch transfer shall not exceed ten percent (10%).
- (d) The opacity of fugitive particulate emissions from continuous transfer of material onto and out of storage piles shall not exceed ten percent (10%) on a three (3) minute average.
- (e) The opacity of fugitive particulate emissions from storage piles shall not exceed ten percent (10%) on a six (6) minute average.
- (f) There shall be a zero percent (0%) frequency of visible emission observations of a material during the inplant transportation of material by truck or rail at any time.
- (g) The opacity of fugitive particulate emissions from the inplant transportation of material by front end loaders and skip hoists shall not exceed ten percent (10%).
- (h) There shall be a zero percent (0%) frequency of visible emission observations from a building enclosing all or part of the material processing equipment, except from a vent in the building.
- (i) The PM₁₀ emissions from building vents shall not exceed twenty-two thousandths (0.022) grains per dry standard cubic foot and ten percent (10%) opacity.
- (j) The opacity of particulate emissions from dust handling equipment shall not exceed ten percent (10%).
- (k) Any facility or operation not specified in 326 IAC 6.8-10-3 shall meet a twenty percent (20%), three (3) minute average opacity standard.

The Permittee shall achieve these limits by controlling fugitive particulate matter emissions according to the Fugitive Dust Control Plan, submitted on September 4, 1997. The plan consists of:

- (a) adequate wet suppression of dust from unpaved roadways on an "as needed" basis; and
- (b) adequate wet suppression of dust from aggregate storage piles on an "as needed" basis.

C.7 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.8 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 two hundred sixty (260) linear feet on pipes or one hundred sixty (160) square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
 - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
 - (2) If there is a change in the following:
 - (A) Asbestos removal or demolition start date;
 - (B) Removal or demolition contractor; or
 - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue
MC 61-52 IGCN 1003
Indianapolis, Indiana 46204-2251

and

Gary Department of Environmental Affairs
839 Broadway, 2nd Floor NE
Gary, Indiana 46402

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

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

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

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

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

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

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

and

Gary Department of Environmental Affairs
839 Broadway, 2nd Floor NE
Gary, Indiana 46402

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

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ and GDEA not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ and GDEA 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.10 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.11 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]

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

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

and

Gary Department of Environmental Affairs
839 Broadway, 2nd Floor NE
Gary, Indiana 46402

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

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

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

C.12 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.13 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-8-4(3)] [326 IAC 2-8-5(1)]

- (a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale.
- (b) The Permittee may request that the IDEM, OAQ approve the use of an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative instrument specification will adequately ensure compliance with permit conditions requiring

the measurement of the parameters.

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

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

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

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

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

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

and

Gary Department of Environmental Affairs
839 Broadway, 2nd Floor NE
Gary, Indiana 46402

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

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

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

C.15 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68]

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

C.16 Response to Excursions or Exceedances [326 IAC 2-8-4] [326 IAC 2-8-5]

(a) Upon detecting an excursion or exceedance, the Permittee shall restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

(b) The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused

startup or shutdown conditions). Corrective actions may include, but are not limited to, the following:

- (1) initial inspection and evaluation;
 - (2) recording that operations returned to normal without operator action (such as through response by a computerized distribution control system); or
 - (3) any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
- (c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:
- (1) monitoring results;
 - (2) review of operation and maintenance procedures and records;
 - (3) inspection of the control device, associated capture system, and the process.
- (d) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (e) The Permittee shall maintain the following records:
- (1) monitoring data;
 - (2) monitor performance data, if applicable; and
 - (3) corrective actions taken.

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

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ and GDEA 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 twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

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

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

C.18 Emission Statement [326 IAC 2-6]

- (a) Pursuant to 326 IAC 2-6-3(a)(1), the Permittee shall submit an emission statement by July 1 following a calendar year when the source emits oxides of nitrogen into the ambient air equal

to or greater than twenty-five (25) tons. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4.

The statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue
MC 61-50 IGCN 1003
Indianapolis, Indiana 46204-2251

and

Gary Department of Environmental Affairs
839 Broadway, 2nd Floor NE
Gary, Indiana 46402

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

- (b) The emission statement required by this permit shall be considered timely if the date post-marked 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 and GDEA on or before the date it is due.

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 or GDEA makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner or GDEA within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

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

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

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

and

Gary Department of Environmental Affairs
839 Broadway, 2nd Floor NE
Gary, Indiana 46402

- (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 and GDEA on or before the date it is due.
- (d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (e) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

Stratospheric Ozone Protection

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

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

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

SECTION D.1

EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: Hot mix asphalt production

- (a) One (1) drum mixer, constructed in 1998, equipped with a baghouse for particulate control and exhausting to Stack SV1, capacity: 600 tons per hour.
- (b) One (1) dryer burner, constructed in 1998, equipped with a low NO_x burner, firing natural gas as primary fuel, using butane or propane gas as a backup fuel, exhausting to Stack SV1, rated at 200 million British thermal units per hour.
- (c) Two (2) hot oil heaters, firing natural gas as primary fuel, using No. 2 distillate oil and propane gas as backup fuels, exhausting to Stacks SV2 and SV3, capacity: 2.0 and 2.256 million British thermal units per hour, respectively.
- (d) One (1) hot oil heater, firing No. 4 distillate oil, rated at 1.5 million British thermal units per hour.
- (e) Four (4) tanks, identified as 13A, 13B, 13C and 13D, storing liquid asphalt, each constructed prior to July 23, 1984, exhausting to Stacks SV4, SV5, SV6 and SV7, capacity: 12,500 gallons, each.
- (f) One (1) tank, storing liquid asphalt, constructed in 1998, exhausting to Stack SV8, capacity: 25,000 gallons.
- (g) One (1) above ground horizontal fixed roof cone storage tank, identified as Tank 13G, storing liquid asphalt cement, constructed in 2004, capacity: 30,000 gallons.
- (h) One (1) tank, storing liquid asphalt, constructed in 2002, exhausting to Stack SV11, capacity: 30,000 gallons.
- (i) One (1) tank, storing No. 2 distillate oil, exhausting to Stack SV10, constructed in 1998, capacity: 10,000 gallons.
- (j) One (1) 5.5 feet by 1.5 feet above ground rectangular storage tank, identified as Tank 12B, storing No. 2 distillate fuel, constructed in 2004, capacity: 420 gallons.
- (k) Cold-mix cutback asphalt production.

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

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

D.1.1 Minor Source Limits [326 IAC 2-2] [326 IAC 2-3] [326 IAC 2-8-4]

- (a) The source shall produce less than 750,000 tons of asphalt per 365 consecutive day period, with compliance determined at the end of each day.
- (b) Particulate emissions from the aggregate dryer/mixer shall be limited to less than 0.2518 pounds per ton of asphalt produced. Compliance will limit source-wide PM emissions to less than two hundred fifty (250) tons per year and render the requirements of 326 IAC 2-2 not applicable.
- (c) PM₁₀ emissions from the aggregate dryer/mixer shall be limited to less than 0.127 pounds per ton of asphalt produced, including both filterable and condensable fractions. Compliance will limit source-wide PM₁₀ emissions to less than one hundred (100) tons per year and render the requirements of 326 IAC 2-7 not applicable.

- (d) VOC emissions from the aggregate dryer/mixer shall be limited to less than 0.032 pounds per ton of asphalt produced. Compliance will limit source-wide VOC emissions to less than twenty-five (25) tons per year and to render the requirements of 326 IAC 2-3 not applicable.
- (e) CO emissions from the aggregate dryer/mixer shall be limited to less than 0.130 pounds per ton of asphalt produced. Compliance will limit source-wide CO emissions to less than one hundred (100) tons per year and to render the requirements of 326 IAC 2-7 not applicable.

D.1.2 Particulate [326 IAC 6.8]

Pursuant to 326 IAC 6.8-1-2(a), the owner or operator 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.1.3 Nitrogen Oxides (NO_x) [326 IAC 2-8-4]

- (a) Pursuant to 326 IAC 2-8-4, the input of natural gas to the dryer/burner shall be limited to less than 1,214.0 million cubic feet 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_x emissions, each gallon of butane shall be equivalent to 0.00015 million cubic feet of natural gas, and each gallon of propane shall be equivalent to 0.00014 million cubic feet of natural gas.

D.1.4 Volatile Organic Compounds (VOC) [326 IAC 2-8-4] [326 IAC 2-3]

The VOC emissions from the use of liquid binders in cold mix asphalt production shall be limited to 6.34 tons per 365 consecutive day period, with compliance determined at the end of each day.

Therefore, the requirements of 326 IAC 2-7 (Part 70) and 326 IAC 2-3 (Emission Offset) are not applicable.

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

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

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

Compliance Determination Requirements

D.1.7 Particulate Control

- (a) In order to comply with Conditions D.1.1(b) and (c), and D.1.2, the baghouse for particulate control shall be in operation and control emissions from the aggregate dryer/mixer at all times that the aggregate dryer/mixer is in operation.
- (b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the

applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

D.1.8 Testing Requirements [326 IAC 2-8-5(a)(1), (4)] [326 IAC 2-1.1-11]

In order to demonstrate compliance with Conditions D.1.1(b) and (c), and D.1.2, the Permittee shall perform PM and PM₁₀ testing utilizing methods as approved by the Commissioner. These tests shall be conducted prior to August 14, 2008, and shall be repeated at least once every five (5) years from the date of the last valid compliance demonstration. PM₁₀ includes filterable and condensable PM₁₀. Testing shall be conducted in accordance with Section C- Performance Testing.

D.1.9 Volatile Organic Compounds (VOC)

- (a) In order to comply with Condition D.1.4, the Permittee shall limit the total VOC usage of any selected binder to less than or equal to the stated limit in (c) for that binder during the last 365 consecutive day period. When more than one binder is used, the formula in (c)(6) must be applied so that the total VOC emitted does not exceed 6.34 tons per 365 consecutive day period.
- (b) Liquid binders used in the production of cold mix asphalt shall be defined as follows:
- (1) Cut back asphalt rapid cure, containing a maximum of 25.3% of the liquid binder by weight of VOC solvent and 95% by weight of VOC solvent evaporating.
 - (2) Cut back asphalt medium cure, containing a maximum of 28.6% of the liquid binder by weight of VOC solvent and 70% by weight of VOC solvent evaporating.
 - (3) Cut back asphalt slow cure, containing a maximum of 20% of the liquid binder by weight of VOC solvent and 25% by weight of VOC solvent evaporating.
 - (4) Emulsified asphalt with solvent, containing a maximum of 15% of liquid binder by weight of VOC solvent and 46.4% by weight of the VOC solvent in the liquid blend evaporating. The percent oil distillate in emulsified asphalt with solvent liquid, as determined by ASTM, must be 7% or less of the total emulsion by volume
 - (5) Other asphalt with solvent binder, containing a maximum 25.9% of the liquid binder of VOC solvent and 2.5% by weight of the VOC solvent evaporating
- (c) The liquid binder used in cold mix asphalt production shall be limited as follows:
- (1) Cutback asphalt rapid cure liquid binder usage shall not exceed 6.67 tons of VOC solvent per 365 consecutive day period, with compliance determined at the end of each day.
 - (2) Cutback asphalt medium cure liquid binder usage shall not exceed 9.06 tons of VOC solvent per 365 consecutive day period, with compliance determined at the end of each day.
 - (3) Cutback asphalt slow cure liquid binder usage shall not exceed 25.36 tons of VOC solvent per 365 consecutive day period, with compliance determined at the end of each day.
 - (4) Emulsified asphalt with solvent liquid binder usage shall not exceed 13.66 tons of VOC solvent per 365 consecutive day period, with compliance determined at the end of each day.
 - (5) Other asphalt with solvent liquid binder shall not exceed 253.60 tons of VOC solvent per 365 consecutive day period, with compliance determined at the end of

each day.

- (6) When more than one type of binder is used per twelve (12) month consecutive period, the total usage of all binders shall be limited so that the total potential to emit VOC is less than or equal to 6.34 tons per 365 consecutive day period, with compliance determined at the end of each day.

In order to determine the tons of VOC emitted per year for each type of binder, use the following formula and divide the tons of VOC solvent used per year for each type of binder by the corresponding adjustment ratio listed in the table that follows.

$$\text{VOC emitted (tons/year)} = \frac{\text{VOC solvent used for each binder (tons/year)}}{\text{Adjustment Ratio}}$$

Type of binder	VOC solvent used (tons/year)	Adjustment Ratio	VOC emitted (tons/year)
cutback asphalt rapid cure		1.053	
cutback asphalt medium cure		1.429	
cutback asphalt slow cure		4.0	
emulsified asphalt		2.155	
other asphalt		40.0	

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

D.1.10 Visible Emissions Notations

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

D.1.11 Baghouse Parametric Monitoring

- (a) The Permittee shall record the pressure drop across the baghouse used in conjunction with the aggregate dryer/mixer at least once per day when the aggregate dryer/mixer is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 1.0 and 9.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.
- (b) The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and the Gary Department of Environmental Affairs, and shall be calibrated at least once every six (6) months.

D.1.12 Broken or Failed Bag Detection

- (a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has 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).
- (b) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the emissions unit. 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).

Bag failure can be indicated by a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks or dust traces.

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

D.1.13 Cutback Asphalt Production Rate

To document compliance with Condition D.1.4, the Permittee shall maintain daily records at the source 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.

D.1.14 Record Keeping Requirements

- (a) To document compliance with Condition D.1.1(a), the Permittee shall maintain records of the amount of asphalt produced per day.
- (b) To document compliance with Condition D.1.3, the Permittee shall maintain records in accordance with (1) and (2) below. Records maintained for (1) and (2) shall be taken daily and shall be complete and sufficient to establish compliance with the NO_x emission limit established in Condition D.1.3.
 - (1) Calendar dates covered in the compliance determination period; and
 - (2) Actual fuel usage of each fuel used since last compliance determination period and

equivalent NO_x emissions.

- (c) To document compliance with Condition D.1.10, the Permittee shall maintain a daily record of visible emission notations of the conveyers, material transfer points and the drum mixer/burner stack exhaust (SV1). The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g., the mixer did not operate that day).
- (d) To document compliance with Condition D.1.11, the Permittee shall maintain a daily record of the pressure drop across the baghouse controlling the aggregate dryer/mixer. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading, (e.g., the mixer did not operate that day).
- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.15 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.1.1(a), D.1.3(a) and D.1.4 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

SECTION E.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: NSPS Subpart I for Hot Mix Asphalt Plant

- (a) One (1) drum mixer, constructed in 1998, equipped with a baghouse for particulate control and exhausting to Stack SV1, capacity: 600 tons per hour.
- (b) One (1) dryer burner, constructed in 1998, equipped with a low NO_x burner, firing natural gas as primary fuel, using butane or propane gas as a backup fuel, exhausting to Stack SV1, rated at 200 million British thermal units per hour.
- (c) Two (2) hot oil heaters, firing natural gas as primary fuel, using No. 2 distillate oil and propane gas as backup fuels, exhausting to Stacks SV2 and SV3, capacity: 2.0 and 2.256 million British thermal units per hour, respectively.
- (d) One (1) hot oil heater, firing No. 4 distillate oil, rated at 1.5 million British thermal units per hour.
- (e) Four (4) tanks, identified as 13A, 13B, 13C and 13D, storing liquid asphalt, each constructed prior to July 23, 1984, exhausting to Stacks SV4, SV5, SV6 and SV7, capacity: 12,500 gallons, each.
- (f) One (1) tank, storing liquid asphalt, constructed in 1998, exhausting to Stack SV8, capacity: 25,000 gallons.
- (g) One (1) above ground horizontal fixed roof cone storage tank, identified as Tank 13G, storing liquid asphalt cement, constructed in 2004, capacity: 30,000 gallons.
- (h) One (1) tank, storing liquid asphalt, constructed in 2002, exhausting to Stack SV11, capacity: 30,000 gallons.
- (i) One (1) tank, storing No. 2 distillate oil, exhausting to Stack SV10, constructed in 1998, capacity: 10,000 gallons.
- (j) One (1) 5.5 feet by 1.5 feet above ground rectangular storage tank, identified as Tank 12B, storing No. 2 distillate fuel, constructed in 2004, capacity: 420 gallons.
- (k) Cold-mix cutback asphalt production.

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

New Source Performance Standards (NSPS) Requirements [326 IAC 2-8-4(1)]

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

- (a) Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60 Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1 for the hot mix asphalt facilities except as otherwise specified in 40 CFR Part 60, Subpart I.
- (b) Pursuant to 40 CFR 60.10, the Permittee shall submit all required notifications and reports to:

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

E.1.2 New Source Performance Standards for Hot Mix Asphalt Facilities Requirements [40 CFR Part 60, Subpart I] [326 IAC 12-1]

Pursuant to 40 CFR Part 60, Subpart I, the Permittee shall comply with the provisions of 40 CFR Part 60.90, which are incorporated by reference as 326 IAC 12-1 for the hot mix asphalt plant as specified as follows:

Subpart I—Standards of Performance for Hot Mix Asphalt Facilities

§ 60.90 Applicability and designation of affected facility.

(a) The affected facility to which the provisions of this subpart apply is each hot mix asphalt facility. For the purpose of this subpart, 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.

(b) Any facility under paragraph (a) of this section that commences construction or modification after June 11, 1973, is subject to the requirements of this subpart.

[42 FR 37936, July 25, 1977, as amended at 51 FR 12325, Apr. 10, 1986]

§ 60.91 Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given them in the Act and in subpart A of this part.

(a) *Hot mix asphalt facility* means any facility, as described in §60.90, used to manufacture hot mix asphalt by heating and drying aggregate and mixing with asphalt cements.

[51 FR 12325, Apr. 10, 1986]

§ 60.92 Standard for particulate matter.

(a) On and after the date on which the performance test required to be conducted by §60.8 is completed, no owner or operator subject to the provisions of this subpart shall discharge or cause the discharge into the atmosphere from any affected facility any gases which:

(1) Contain particulate matter in excess of 90 mg/dscm (0.04 gr/dscf).

(2) Exhibit 20 percent opacity, or greater.

[39 FR 9314, Mar. 8, 1974, as amended at 40 FR 46259, Oct. 6, 1975]

§ 60.93 Test methods and procedures.

(a) In conducting the performance tests required in §60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in §60.8(b).

(b) The owner or operator shall determine compliance with the particulate matter standards in §60.92 as follows:

(1) Method 5 shall be used to determine the particulate matter concentration. The sampling time and sample volume for each run shall be at least 60 minutes and 0.90 dscm (31.8 dscf).

(2) Method 9 and the procedures in §60.11 shall be used to determine opacity.

[54 FR 6667, Feb. 14, 1989]

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

and GDEA

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

Source Name: Rieth-Riley Construction Co., Inc.
Source Address: 301 North Cline Avenue, Gary, Indiana 46406
Mailing Address: P.O. Box 477, Goshen, Indiana 46527-0477
FESOP No.: F 089-24305-00530

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
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
Phone: 317-233-0178
Fax: 317-233-6865**

and GDEA

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

Source Name: Rieth-Riley Construction Co., Inc.
Source Address: 301 North Cline Avenue, Gary, Indiana 46406
Mailing Address: P.O. Box 477, Goshen, Indiana 46527-0477
FESOP No.: F 089-24305-00530

This form consists of 2 pages

Page 1 of 2

- | |
|---|
| <input type="checkbox"/> This is an emergency as defined in 326 IAC 2-7-1(12) <ul style="list-style-type: none">• The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and• The Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16 |
|---|

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

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

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

Page 2 of 2

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

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

A certification is not required for this report.

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

and GDEA

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

Source Name: Rieth Riley Construction Co., Inc.
 Source Address: 301 North Cline Avenue, Gary, Indiana 46406
 Mailing Address: P.O. Box 477, Goshen, Indiana 46527-0477
 FESOP No.: F 089-24305-00530
 Facility: Dryer/mixer
 Parameter: Amount of natural gas or equivalent burned in the aggregate dryer (NO_x)
 Limit: Less than 1,214.0 million cubic feet per 365 consecutive day period, with compliance determined at the end of each day, where each gallon of butane shall be equivalent to 0.00015 million cubic feet of natural gas, and each gallon of propane shall be equivalent to 0.00014 million cubic feet of natural gas, equivalent to NO_x emissions less than 85 tons per year.

Month: _____ Year: _____

Day	Million cubic feet of natural gas or equivalent burned (this day)	Million cubic feet of natural gas or equivalent burned (last 364 days)	Million cubic feet of natural gas or equivalent burned (365 day total)	Day	Million cubic feet of natural gas or equivalent burned (this day)	Million cubic feet of natural gas or equivalent burned (last 364 days)	Million cubic feet of natural gas 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**

and GDEA

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

Source Name: Rieth Riley Construction Co., Inc.
 Source Address: 301 North Cline Avenue, Gary, Indiana 46406
 Mailing Address: P.O. Box 477, Goshen, Indiana 46527-0477
 FESOP No.: F 089-24305-00530
 Facility: Dryer/mixer
 Parameter: Tons of asphalt produced
 Limit: Less than 750,000 tons of asphalt produced 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**

and GDEA

FESOP Quarterly Report

Source Name: Rieth Riley Construction Co., Inc.
 Source Address: 301 North Cline Avenue, Gary, Indiana 46406
 Mailing Address: P.O. Box 477, Goshen, Indiana 46527-0477
 FESOP No.: F 089-24305-00530
 Facility: Cutback asphalt production
 Parameter: VOC emissions from the use liquid binders in cold mix asphalt production
 Limit: Less than 6.34 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 quarter.
- Deviation/s occurred in this quarter.
 Deviation has been reported on:

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

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

and GDEA

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

Source Name: Rieth-Riley Construction Co., Inc.
Source Address: 301 North Cline Avenue, Gary, Indiana 46406
Mailing Address: P.O. Box 477, Goshen, Indiana 46527-0477
FESOP No.: F 089-24305-00530

Months: _____ to _____ Year: _____

Page 1 of 2

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

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

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

A certification is not required for this report.

Indiana Department of Environmental Management Office of Air Quality

Addendum to the
Technical Support Document for Federally Enforceable State Operating Permit (FESOP)
Renewal

Rieth-Riley Construction Co., Inc
301 North Cline Avenue
Gary, Indiana 46406

F 089-24305-00530

On November 2, 2007, the Office of Air Quality (OAQ) had a notice published in the *Gary Post Tribune*, Gary, Indiana and *The Times*, Munster, Indiana, stating that Rieth-Riley Construction Co., Inc. had applied for a Federally Enforceable State Operating Permit (FESOP) Renewal to operate a stationary hot mix asphalt plant with control. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed 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 as proposed.

On November 29, 2007, Ed Clements of Rieth-Riley Construction Co., Inc. submitted comments on the proposed FESOP Renewal. The comments and IDEM responses (with language added shown in bold and deleted language in strikethrough) are as follows:

Comment 1: Section D.1.4 in the draft FESOP Renewal limits the VOC emissions from the use of liquid binders in cold mix asphalt production to 0.666 tons per twelve (12) consecutive month period, with compliance determined at the end of each month. This limit is based on annual production of 1,000,000 tons of hot mix asphalt.

The allocation of 0.666 tons of VOC emissions to cold mix asphalt production does not allow us to meet the demands of our customers. Lowering the annual production limit from 1,000,000 to 750,000 tons of hot mix asphalt will allow more VOC emissions from the use of liquid binders in cold mix asphalt production.

The production should be per 365 days and not per twelve (12) consecutive month period.

Response 1: IDEM OAQ agrees to the decrease in annual production and reallocation of the VOC to allow more emissions from the use of liquid binders in cold mix asphalt. The following changes have been made to the permit:

D.1.1 Minor Source Limits [326 IAC 2-2] [326 IAC 2-3] [326 IAC 2-8-4]

- (a) The source shall produce less than ~~1,000,000~~ **750,000** tons of asphalt per 365 consecutive day period, with compliance determined at the end of each day.

D.1.4 Volatile Organic Compounds (VOC) [326 IAC 2-8-4] [326 IAC 2-3]

The VOC emissions from the use of liquid binders in cold mix asphalt production shall be limited to ~~0.666~~ **6.34** tons per ~~twelve (12) consecutive month period~~ **365 consecutive day period**, with compliance determined at the end of each ~~month~~ **day**.

D.1.9 Volatile Organic Compounds (VOC)

- (a) In order to comply with Condition D.1.4, the Permittee shall limit the total VOC usage of any selected binder to less than or equal to the stated limit in (c) for that binder during the last ~~twelve (12) months~~ **365 consecutive day period**. When more than one binder is used, the formula in (c)(6) must be applied so that the total VOC emitted does not exceed ~~0.666~~ **6.34** tons per ~~twelve (12) consecutive month period~~ **365 consecutive day period**.

(b) Liquid binders used in the production of cold mix asphalt shall be defined as follows:

- (1) Cut back asphalt rapid cure, containing a maximum of 25.3% of the liquid binder by weight of VOC solvent and 95% by weight of VOC solvent evaporating.
- (2) Cut back asphalt medium cure, containing a maximum of 28.6% of the liquid binder by weight of VOC solvent and 70% by weight of VOC solvent evaporating.
- (3) Cut back asphalt slow cure, containing a maximum of 20% of the liquid binder by weight of VOC solvent and 25% by weight of VOC solvent evaporating.
- (4) Emulsified asphalt with solvent, containing a maximum of 15% of liquid binder by weight of VOC solvent and 46.4% by weight of the VOC solvent in the liquid blend evaporating. The percent oil distillate in emulsified asphalt with solvent liquid, as determined by ASTM, must be 7% or less of the total emulsion by volume
- (5) Other asphalt with solvent binder, containing a maximum 25.9% of the liquid binder of VOC solvent and 2.5% by weight of the VOC solvent evaporating

(c) The liquid binder used in cold mix asphalt production shall be limited as follows:

- (1) Cutback asphalt rapid cure liquid binder usage shall not exceed ~~0.7043~~ **6.67** tons of VOC solvent per ~~twelve (12) months~~. **365 consecutive day period**, with compliance determined at the end of each ~~month~~ **day**.
- (2) Cutback asphalt medium cure liquid binder usage shall not exceed ~~0.952~~ **9.06** tons of VOC solvent per ~~twelve (12) months~~. **365 consecutive day period**, with compliance determined at the end of each ~~month~~ **day**.
- (3) Cutback asphalt slow cure liquid binder usage shall not exceed ~~2.664~~ **25.36** tons of VOC solvent per ~~twelve (12) months~~. **365 consecutive day period**, with compliance determined at the end of each ~~month~~ **day**.
- (4) Emulsified asphalt with solvent liquid binder usage shall not exceed ~~4.435~~ **13.66** tons of VOC solvent per ~~twelve (12) months~~. **365 consecutive day period**, with compliance determined at the end of each ~~month~~ **day**.
- (5) Other asphalt with solvent liquid binder shall not exceed ~~26.64~~ **353.60** tons of VOC solvent per ~~twelve (12) months~~. **365 consecutive day period**, with compliance determined at the end of each ~~month~~ **day**.
- (6) When more than one type of binder is used per twelve (12) month consecutive period, the total usage of all binders shall be limited so that the total potential to emit VOC is less than or equal to ~~0.666~~ **6.74** tons per ~~twelve (12) months~~. **365 consecutive day period**, with compliance determined at the end of each ~~month~~ **day**.

The following changes have been made to the quarterly report forms:

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

and GDEA

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

Source Name: Rieth Riley Construction Co., Inc.
 Source Address: 301 North Cline Avenue, Gary, Indiana 46406
 Mailing Address: P.O. Box 477, Goshen, Indiana 46527-0477
 FESOP No.: F 089-24305-00530
 Facility: Dryer/mixer
 Parameter: Tons of asphalt produced
 Limit: Less than ~~4,000,000~~ **750,000** tons of asphalt produced 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

and GDEA

FESOP Quarterly Report

Source Name: Rieth Riley Construction Co., Inc.
 Source Address: 301 North Cline Avenue, Gary, Indiana 46406
 Mailing Address: P.O. Box 477, Goshen, Indiana 46527-0477
 FESOP No.: F 089-24305-00530
 Facility: Cutback asphalt production
 Parameter: VOC emissions from the use liquid binders in cold mix asphalt production
 Limit: Less than ~~0.666~~ **6.34** tons per ~~twelve (12) consecutive month period~~ **365 consecutive day period**, with compliance determined at the end of each ~~month~~ **day**.

QUARTER Month:

YEAR:

Month	VOC Emissions (tons)	VOC Emissions (tons)	VOC Emissions (tons)
	This Month	Previous 11 Months	12 Month Total

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 quarter.
- Deviation/s occurred in this quarter.
 Deviation has been reported on:

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

Attach a signed certification to complete this report.

No change will be made to the original TSD. The OAQ prefers that the TSD reflect the permit that was on public notice. Changes to the permit or technical support material that occur after the public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision. The corrected calculations are as follows:

PM emissions:
 0.2518 pounds per ton of asphalt produced X 750,000 tons of asphalt per yr/ 2000 lbs per ton
 = 94.4 tpy

PM10 emissions:
 0.127 pounds per ton of asphalt produced X 750,000 tons of asphalt per yr / 2000 lbs per ton
 = 47.6 tpy

CO emissions:

0.130 pounds per ton of asphalt produced X 750,000 tons of asphalt per yr / 2000 lbs per ton
 = 48.8 tpy

VOC emissions:

Load out: 0.004159 pounds per ton of asphalt produced X 750,000 tons of asphalt per yr / 2000
 lbs per ton = 1.56 tpy

Silo filling: 0.012187 pounds per ton of asphalt produced X 750,000 tons of asphalt per yr / 2000
 lbs per ton = 4.57 tpy

Drum Mixer: 0.032 pounds per ton of asphalt produced X 750,000 tons of asphalt per yr / 2000
 lbs per ton = 12.0 tpy

Process/Emission Unit	Potential to Emit (tons/year)						
	PM	PM ₁₀	SO ₂	VOC	CO	NO _x	HAPs
Hot Oil Heater (Worst Case Fuel)	1.28	1.52	13.7	0.524	2.12	3.86	-
Drum Mixer including Burner (Worst Case)	125.9 ⁽¹⁾	Less than 63.5 ⁽²⁾	8.94	Less than 16.0 12 ⁽³⁾	Less than 65.0 ⁽⁴⁾	Less than 85 ⁽⁵⁾	8.15 Single 20.6 Combined
Conveying/ Handling	6.91	0.691	-	-	-	-	-
Screening	15.8	1.58	-	-	-	-	-
Storage Piles	0.567	0.199	-	-	-	-	-
Unpaved Roads	96.55	29.56	-	-	-	-	-
Cutback Asphalt	-	-	-	Less than 0.666 6.34 ⁽⁶⁾	-	-	-
Load Out	1.37	1.37	-	2.08 1.56	3.55	-	0.164
Silo Filling	1.54	1.54	-	5.73 4.57	3.10	-	0.416
Total	Less than 250	Less than 100	22.64	Less than 25	73.77	Less than 88.86	Single < 10 Total < 25
Major Source Threshold	250	100	100	25	100	100	

- (1) Limited to less than 0.2518 pounds per ton in conjunction with ~~1,000,000~~ **750,000** ton per year production limit, in order to render 326 IAC 2-2 not applicable.
- (2) Limited to less than 0.127 pounds per ton in conjunction with ~~1,000,000~~ **750,000** ton per year production limit, in order to render 326 IAC 2-7 not applicable.
- (3) Limited to less than 0.032 pounds per ton in conjunction with ~~1,000,000~~ **750,000** ton per year production limit, in order to render 326 IAC 2-3 not applicable. Pound per ton limit based on AP-42 emission factor in Chapter 11.1, Table 11.1-8.
- (4) The limited potential to emit of CO is ~~65.0~~ **48.8** tons per year, based on the 0.13 pound per ton emission factor in AP-42 Chapter 11.1, Table 11.1-7.
- (5) Input of natural gas to the dryer/burner limited to less than 1,214.0 million cubic feet per year, equivalent to NO_x emissions of less than 85 tons per year. The Permittee requested this limit in SPR 089-18838-03226, in order to avoid revising the emission limit for future insignificant activities.
- (6) Limited such that sourcewide VOC emissions are less than twenty-five (25) tons per year, in order to render 326 IAC 2-3 not applicable.

Indiana Department of Environmental Management
Office of Air Quality

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

Source Background and Description

Source Name:	Rieth-Riley Construction Co., Inc.
Source Location:	301 North Cline Avenue, Gary, Indiana 46406
County:	Lake
SIC Code:	2951
Permit Renewal No.:	F 089-24305-00530
Permit Reviewer:	Edward A. Longenberger

The Office of Air Quality (OAQ) has reviewed the operating permit renewal application from Rieth-Riley Construction Co., Inc. relating to the operation of a stationary hot mix asphalt plant.

History

On February 9, 2007, Rieth-Riley Construction Co., Inc. submitted applications to the OAQ requesting to renew its operating permit. Rieth-Riley Construction Co., Inc. was issued its first FESOP Renewal F 089-15623-03226 on November 7, 2002.

This is a stationary source that has been located at its current location, 301 North Cline Avenue, Gary, Indiana since the FESOP Renewal F 089-15623-03226 was issued on November 7, 2002. However, this source was previously permitted under portable source identification number 089-03226. Pursuant to 326 IAC 2-1.1-1(15), this source does not meet the definition of a portable source because it has not moved at least once in the last permit term. Therefore, the source identification number has been changed to the stationary source identification number 089-00530.

Permitted Emission Units and Pollution Control Equipment

- (a) One (1) drum mixer, constructed in 1998, equipped with a baghouse for particulate control and exhausting to Stack SV1, capacity: 600 tons per hour.
- (b) One (1) dryer burner, constructed in 1998, equipped with a low NO_x burner, firing natural gas as primary fuel, using butane or propane gas as a backup fuel, exhausting to Stack SV1, rated at 200 million British thermal units per hour.
- (c) Two (2) hot oil heaters, firing natural gas as primary fuel, using No. 2 distillate oil and propane gas as backup fuels, exhausting to Stacks SV2 and SV3, capacity: 2.0 and 2.256 million British thermal units per hour, respectively.
- (d) One (1) hot oil heater, firing No. 4 distillate oil, rated at 1.5 million British thermal units per hour.
- (e) Four (4) tanks, identified as 13A, 13B, 13C and 13D, storing liquid asphalt, each constructed prior to July 23, 1984, exhausting to Stacks SV4, SV5, SV6 and SV7, capacity: 12,500 gallons, each.
- (f) One (1) tank, storing liquid asphalt, constructed in 1998, exhausting to Stack SV8, capacity: 25,000 gallons.
- (g) One (1) above ground horizontal fixed roof cone storage tank, identified as Tank 13G, storing liquid asphalt cement, constructed in 2004, capacity: 30,000 gallons.

- (h) One (1) tank, storing liquid asphalt, constructed in 2002, exhausting to Stack SV11, capacity: 30,000 gallons.
- (i) One (1) tank, storing No. 2 distillate oil, exhausting to Stack SV10, constructed in 1998, capacity: 10,000 gallons.
- (j) One (1) 5.5 feet by 1.5 feet above ground rectangular storage tank, identified as Tank 12B, storing No. 2 distillate fuel, constructed in 2004, capacity: 420 gallons.
- (k) Cold-mix cutback asphalt production.

Insignificant Activities

- (a) A petroleum fuel, other than gasoline, dispensing facility, having a storage capacity of less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month.
- (b) Vessels storing lubricating oil, hydraulic oils, machining oils, and machining fluids.

Existing Approvals

Since the issuance of the FESOP 089-15623-03226 on November 7, 2002, the source has constructed or has been operating under the following approvals as well:

- (a) SPR No. 089-18838-03226, issued on July 8, 2004;
- (b) AA No. 089-18901-03226, issued on January 14, 2005; and
- (c) AA No. 089-22440-03226, issued on January 10, 2006.

All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either incorporated as originally stated, revised, or deleted by this permit. All previous registrations and permits are superseded by this permit.

The following terms and conditions from previous approvals have been revised in this FESOP Renewal:

- (a) Condition D.1.2(a) of FESOP 089-15623-03226, the condition that limited PM₁₀ emissions from the aggregate dryer/burner to less than 0.194 pounds per ton of asphalt.

Reason not incorporated: The limit has been changed to 0.127 pounds per ton of asphalt produced, because the IDEM, OAQ has determined that fugitive emissions from unpaved roads must be considered for 326 IAC 2-7 and 326 IAC 2-2 applicability. The revised emission limit ensures this source remains a minor source under 326 IAC 2-2 and 326 IAC 2-7.
- (b) Condition D.1.7 of FESOP 089-15623-03226, the condition that limited VOC emissions from the production of cutback asphalt to less than 20.8 tons per year.

Reason not incorporated: According to AP-42 Chapter 11.1, significant VOC emissions from Load Out and Silo Filling, along with higher emissions from the dryer burner, result in higher potential VOC emissions from these processes than previously estimated. Therefore, this limit was lowered to 0.666 tons of VOC per year, to ensure sourcewide VOC emissions remain below twenty-five (25) tons per year.
- (c) Condition D.1.19 of FESOP 089-15623-03226, the condition that required record keeping of some storage tanks.

Reason not incorporated: According to the revised 40 CFR 60, Subpart Kb, none of the tanks at this source are subject to the requirements of this rule. Therefore, this condition has been deleted. See the Federal Rule Applicability section of this TSD for more information.

Enforcement Issue

There are no enforcement actions pending.

Emission Calculations

See pages 1 through 7 of Appendix A of this document for detailed emission calculations.

County Attainment Status

The source is located in Lake County

Pollutant	Status
PM ₁₀	Attainment
PM _{2.5}	Basic nonattainment
SO ₂	Attainment
NO _x	Attainment
8-hour Ozone	Moderate nonattainment
CO	Maintenance attainment
Lead	Attainment

- (a) U.S. EPA in Federal Register Notice 70 FR 943 dated January 5, 2005 has designated Lake County as nonattainment for PM_{2.5}. On March 7, 2005 the Indiana Attorney General's Office on behalf of IDEM filed a lawsuit with the Court of Appeals for the District of Columbia Circuit challenging U.S. EPA's designation of non-attainment areas without sufficient data. However, in order to ensure that sources are not potentially liable for violation of the Clean Air Act, the OAQ is following the U.S. EPA's guidance to regulate PM₁₀ emissions as a surrogate for PM_{2.5} emissions pursuant to the Non-attainment New Source Review requirements. See the State Rule Applicability – Entire Source section.
- (b) Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone.
 - (1) On December 22, 2006 the United States Court of Appeals, District of Columbia issued a decision which served to partially vacate and remand the U.S. EPA's final rule for implementation of the 8-hour National Ambient Air quality Standard for ozone. *South Coast Air Quality Mgmt. Dist. v. EPA*, 472 F.3d 882 (D.C. Cir., December 22, 2006), *rehearing denied* 2007 U.S. App. LEXIS 13748 (D.C. Cir., June 8, 2007). The U.S. EPA has instructed IDEM to issue permits in accordance with its interpretation of the *South Coast* decision as follows: Gary-Lake-Porter County was previously designated as a severe non-attainment area prior to revocation of the one-hour ozone standard, therefore, pursuant to the anti-backsliding provisions of the Clean Air Act, any new or existing source must be subject to the major source applicability cut-offs and offset ratios under the area's previous one-hour standard designation. This means that a source must achieve the Lowest Achievable Emission Rate (LAER) if it exceeds 25 tons per year of VOC emissions and must offset any increase in VOC emissions by a decrease of 1.3 times that amount.

On January 26, 1996 in 40 CFR 52.777(i), the U.S. EPA granted a waiver of the requirements of Section 182(f) of the CAA for Lake and Porter Counties, including the lower NO_x threshold for nonattainment new source review. Therefore, VOC emissions alone are considered when evaluating the rule applicability relating to the 1-hour ozone standards. Therefore, VOC emissions were reviewed pursuant to the requirements for nonattainment new source review. See the State Rule Applicability for the source section.

- (2) VOC and NO_x emissions are considered when evaluating the rule applicability relating to the 8-hour ozone standard. Lake County has been designated as nonattainment for the 8-hour ozone standard. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3. See the State Rule Applicability – Entire Source section.
- (c) Lake 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 – Entire Source section.
- (d) On October 25, 2006, the Indiana Air Pollution Control Board finalized a rule revision to 326 IAC 1-4-1 revoking the one-hour ozone standard in Indiana.
- (e) Fugitive Emissions
 Although this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2, there are applicable New Source Performance Standards that were in effect on August 7, 1980 (40 CFR 60, Subpart I). Therefore, the fugitive emissions are counted toward determination of PSD and Emission Offset applicability.

Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source.

Pollutant	tons/year
PM	73,874
PM ₁₀	17,161
SO ₂	22.64
VOC	114.72
CO	346.86
NO _x	185.76

HAPs	tons/year
Single HAP (xylene)	8.15
Total HAPs	20.6

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of PM₁₀, VOC, CO and NO_x are each greater than one hundred (100) tons per year. The source is subject to the provisions of 326 IAC 2-7. However, the source has agreed to limit their PM₁₀, VOC, CO and NO_x emissions to less than Title V levels; therefore, the source will be issued a FESOP.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of all other criteria pollutants are less than one hundred (<100) tons per year.

- (c) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is less than twenty-five (25) tons per year.

Fugitive Emissions

Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-7, fugitive emissions are not counted toward the determination of Part 70 applicability.

Actual Emissions

No previous emission data has been received from the source.

Potential to Emit After Issuance

The source has opted to remain a FESOP source. The table below summarizes the potential to emit, reflecting all limits of the emission units. Any control equipment is considered enforceable only after issuance of this FESOP and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

Process/Emission Unit	Potential to Emit (tons/year)						
	PM	PM ₁₀	SO ₂	VOC	CO	NO _x	HAPs
Hot Oil Heater (Worst Case Fuel)	1.28	1.52	13.7	0.524	2.12	3.86	-
Drum Mixer including Burner (Worst Case)	125.9 ⁽¹⁾	Less than 63.5 ⁽²⁾	8.94	Less than 16.0 ⁽³⁾	Less than 65.0 ⁽⁴⁾	Less than 85 ⁽⁵⁾	8.15 Single 20.6 Combined
Conveying/ Handling	6.91	0.691	-	-	-	-	-
Screening	15.8	1.58	-	-	-	-	-
Storage Piles	0.567	0.199	-	-	-	-	-
Unpaved Roads	96.55	29.56	-	-	-	-	-
Cutback Asphalt	-	-	-	Less than 0.666 ⁽⁶⁾	-	-	-
Load Out	1.37	1.37	-	2.08	3.55	-	0.164
Silo Filling	1.54	1.54	-	5.73	3.10	-	0.416
Total	Less than 250	Less than 100	22.64	Less than 25	73.77	Less than 88.86	Single < 10 Total < 25
Major Source Threshold	250	100	100	25	100	100	

(1) Limited to less than 0.2518 pounds per ton in conjunction with 1,000,000 ton per year production limit, in order to render 326 IAC 2-2 not applicable.
 (2) Limited to less than 0.127 pounds per ton in conjunction with 1,000,000 ton per year production limit, in order to render 326 IAC 2-7 not applicable.
 (3) Limited to less than 0.032 pounds per ton in conjunction with 1,000,000 ton per year production limit, in order to render 326 IAC 2-3 not applicable. Pound per ton limit based on AP-42 emission factor in Chapter 11.1, Table 11.1-8.
 (4) The limited potential to emit of CO is 65.0 tons per year, based on the 0.13 pound per ton emission factor in AP-42 Chapter 11.1, Table 11.1-7.
 (5) Input of natural gas to the dryer/burner limited to less than 1,214.0 million cubic feet per year, equivalent to NO_x emissions of less than 85 tons per year. The Permittee requested this limit in SPR 089-18838-03226, in order to avoid revising the emission limit for future insignificant activities.

- (6) Limited such that sourcewide VOC emissions are less than twenty-five (25) tons per year, in order to render 326 IAC 2-3 not applicable.
- (a) This existing stationary source is not major for PSD because the emissions of each attainment criteria pollutant are less than two hundred fifty (<250) tons per year, and it is not one of the twenty-eight (28) listed source categories.
 - (b) This existing stationary source is not major for Emission Offset because the emissions of VOC are limited to less than twenty-five (25) tons per year.
 - (c) Fugitive Emissions
This type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 or 326 IAC 2-3, however, there is an applicable New Source Performance Standard that was in effect on August 7, 1980, therefore fugitive emissions are counted toward the determination of PSD and Emission Offset applicability.

Federal Rule Applicability

- (a) This hot mix asphalt plant is subject to the New Source Performance Standard for Hot Mix Asphalt Facilities (40 CFR Part 60.90, Subpart I) which is incorporated by reference as 326 IAC 12. This asphalt plant is subject to the requirements of Subpart I because the plant was constructed in 1998 which is after the Subpart I applicability date of June 11, 1973.

Nonapplicable portions of the NSPS will not be included in the permit. The hot mix asphalt plant is subject to the following portions of 40 CFR 60, Subpart I:

- (1) 40 CFR 60.90
- (2) 40 CFR 60.91
- (3) 40 CFR 60.92
- (4) 40 CFR 60.93

The provisions of 40 CFR Part 60, Subpart A – General Provisions, which are incorporated as 326 IAC 12, apply to the hot mix asphalt plant except when otherwise specified in 40 CFR Part 60, Subpart I.

- (b) The requirements of the New Source Performance Standard, 40 CFR Part 60.110b, Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels, apply to tanks constructed after July 23, 1984, with a storage capacity between 75 cubic meters (19,812.9 gallons) and 151 cubic meters (39,890 gallons) and that store a liquid with a maximum true vapor pressure greater than 15.0 kilopascals.

The only tanks at this source with storage capacities within this range are SV8, SV11, and 13G. However, these tanks do not store a liquid with a maximum true vapor pressure greater than 15 kilopascals. Therefore, the requirements of the NSPS, 40 CFR 60, Subpart Kb, are not included in the permit for this source.

- (c) There are still no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14 and 40 CFR Parts 61, 62 and 63) applicable to this source.

State Rule Applicability - Entire Source

326 IAC 2-1.1-5 Nonattainment New Source Review

Lake County has been designated as non-attainment for PM_{2.5} in 70 FR 943 dated January 5, 2005. According to the April 5, 2005 EPA memo titled "Implementation of New Source Review Requirements in PM_{2.5} Nonattainment Areas" authored by Steve Page, Director of OAQPS, until EPA promulgates the PM_{2.5} major NSR regulations, states should assume that a major stationary source's PM₁₀ emissions represent PM_{2.5} emissions. IDEM will use the PM₁₀ nonattainment major

NSR program as a surrogate to address the requirements of nonattainment major NSR for the PM_{2.5} NAAQS. A major source in a nonattainment area is a source that emits or has the potential to emit one hundred (100) tons per year of any regulated nonattainment pollutant. This source has a limited potential to emit of PM₁₀ below one hundred (100) tons per year. Therefore, assuming that PM₁₀ emissions represent PM_{2.5} emissions, the requirements of 326 IAC 2-3 do not apply.

326 IAC 2-2 (Prevention of Significant Deterioration)

This source was constructed in 1998, and is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2. The potential to emit of PM, PM₁₀, SO₂ and NO_x are each limited to less than two hundred fifty (250) tons per year. Therefore, the requirements of 326 IAC 2-2 are not applicable, and this source is a minor source with respect to this rule.

The PM emissions from the aggregate dryer/mixer shall be limited to less than 0.2518 pounds per ton of asphalt produced, equivalent to 125.9 tons per year, based on the 1,000,000 ton annual production limit. See the 326 IAC 2-8-4 section of this TSD.

326 IAC 2-3 (Emission Offset)

This source was constructed in 1998. Because this source is located in Lake County, VOC emissions alone are considered when evaluating the rule applicability relating to the 1-hour ozone standards. Therefore, VOC emissions were reviewed pursuant to the requirements for nonattainment new source review. The amount of VOC shall be limited to less than twenty-five (25) tons per year.

- (a) The VOC emissions from the use liquid binders in cold mix asphalt production shall be limited to 0.666 tons per twelve (12) consecutive month period, with compliance determined at the end of each month. The Permittee shall limit the total VOC usage of any selected binder to less than or equal to the stated limit in (c) for that binder during the last twelve (12) months. When more than one binder is used, the formula in (c)(6) must be applied so that the total VOC emitted does not exceed 0.666 tons per twelve (12) consecutive month period.
- (b) Liquid binders used in the production of cold mix asphalt shall be defined as follows:
 - (1) Cut back asphalt rapid cure, containing a maximum of 25.3% of the liquid binder by weight of VOC solvent and 95% by weight of VOC solvent evaporating.
 - (2) Cut back asphalt medium cure, containing a maximum of 28.6% of the liquid binder by weight of VOC solvent and 70% by weight of VOC solvent evaporating.
 - (3) Cut back asphalt slow cure, containing a maximum of 20% of the liquid binder by weight of VOC solvent and 25% by weight of VOC solvent evaporating.
 - (4) Emulsified asphalt with solvent, containing a maximum of 15% of liquid binder by weight of VOC solvent and 46.4% by weight of the VOC solvent in the liquid blend evaporating. The percent oil distillate in emulsified asphalt with solvent liquid, as determined by ASTM, must be 7% or less of the total emulsion by volume
 - (5) Other asphalt with solvent binder, containing a maximum 25.9% of the liquid binder of VOC solvent and 2.5% by weight of the VOC solvent evaporating
- (c) The liquid binder used in cold mix asphalt production shall be limited as follows:
 - (1) Cutback asphalt rapid cure liquid binder usage shall not exceed 0.7013 tons of VOC solvent per twelve (12) consecutive month period, with compliance determined at the end of each month.

- (2) Cutback asphalt medium cure liquid binder usage shall not exceed 0.952 tons of VOC solvent per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (3) Cutback asphalt slow cure liquid binder usage shall not exceed 2.664 tons of VOC solvent per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (4) Emulsified asphalt with solvent liquid binder usage shall not exceed 1.435 tons of VOC solvent per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (5) Other asphalt with solvent liquid binder shall not exceed 26.64 tons of VOC solvent per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (6) When more than one type of binder is used per twelve (12) month consecutive period, the total usage of all binders shall be limited so that the total potential to emit VOC is less than or equal to 0.666 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

In order to determine the tons of VOC emitted per year for each type of binder, use the following formula and divide the tons of VOC solvent used per year for each type of binder by the corresponding adjustment ratio listed in the table that follows.

$$\text{VOC emitted (tons/year)} = \frac{\text{VOC solvent used for each binder (tons/year)}}{\text{Adjustment Ratio}}$$

Type of binder	VOC solvent used (tons/year)	Adjustment Ratio	VOC emitted (tons/year)
cutback asphalt rapid cure		1.053	
cutback asphalt medium cure		1.429	
cutback asphalt slow cure		4.0	
emulsified asphalt		2.155	
other asphalt		40.0	

Compliance with the above limit will render the requirements of 326 IAC 2-3 not applicable.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting) because it is located in Lake County and has NO_x emissions greater than twenty-five (25) tons per year. Pursuant to this rule, the Permittee shall submit an emission statement certified pursuant to the requirements of 326 IAC 2-6. In accordance with the compliance schedule specified in 326 IAC 2-6-3, an emission statement must be submitted annually by July 1 and every year after. Therefore, the next emission statement for this source must be submitted by July 1, 2008. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4.

326 IAC 2-8-4 (FESOP)

Pursuant to 326 IAC 2-8-4, the amount of PM₁₀, CO and NO_x shall each be limited to less than one hundred (100) tons per year. Because this source is located in Lake County, the amount of VOC shall be limited to less than twenty-five (25) tons per year. The following limits shall apply:

- (a) 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.
- (b) PM₁₀ emissions from the aggregate dryer/mixer shall be limited to less than 0.127 pounds per ton of asphalt produced, including both filterable and condensable fractions, equivalent to 63.5 tons per year.
- (c) VOC emissions from the aggregate dryer/mixer shall be limited to less than 0.032 pounds per ton of asphalt produced, equivalent to 16.0 tons per year.

The applicant has also accepted a limit of less than 0.666 tons of VOC per year from cutback asphalt production.

The full VOC potential emissions of 0.524 tons per year from the three (3) hot oil heaters have been assumed in computing these limits.

- (d) The applicant has accepted a natural gas fuel limit to the dryer/burner of less than 1,214.0 million cubic feet per 365 consecutive day period which is equivalent to a NO_x limit of less than 85 tons per year. The full NO_x potential emissions of 3.86 tons per year from the three (3) hot oil heaters have been assumed in computing this limit. The applicant has also requested a ten (10) ton per year cushion for future expansion.

For purposes of determining compliance based on NO_x emissions, each gallon of butane shall be equivalent to 0.00015 million cubic feet of natural gas, and each gallon of propane shall be equivalent to 0.00014 million cubic feet of natural gas.

- (e) According to AP-42, Chapter 11.1, the CO emission rate from drum mix dryers is 0.130 pounds of CO per ton of asphalt produced. At the production limit of 1,000,000 tons of asphalt per year, the CO emissions are 65 tons per year.

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 twenty percent (20%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability – Individual Facilities

326 IAC 6.8 (Particulate Matter Limitations for Lake County)

This source is subject to the requirements of 326 IAC 6.8-1-2 because it is not specifically listed in 326 IAC 6.8-2. Pursuant to 326 IAC 6.8-1-2(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, equivalent to 21.63 pounds per hour at a flow rate of 119,086 acfm and a temperature of 250 degrees Fahrenheit. Compliance with this rule will ensure compliance with NSPS Subpart I.

326 IAC 6.8-10-3 (Lake County Fugitive Particulate Matter Control Requirements)

This source is located in Lake County and has the potential to emit fugitive particulate matter in excess of five (5) tons per year. Therefore, this source is subject to the requirements of 326 IAC 6.8-10-3. A summary of the requirements is as follows:

- (a) The average instantaneous opacity of fugitive particulate emissions from a paved road shall not exceed ten percent (10%).
- (b) The average instantaneous opacity of fugitive particulate emissions from an unpaved road shall not exceed ten percent (10%).
- (c) The average instantaneous opacity of fugitive particulate emissions from batch transfer shall not exceed ten percent (10%).
- (d) The opacity of fugitive particulate emissions from continuous transfer of material onto and out of storage piles shall not exceed ten percent (10%) on a three (3) minute average.
- (e) The opacity of fugitive particulate emissions from storage piles shall not exceed ten percent (10%) on a six (6) minute average.
- (f) There shall be a zero (0) percent frequency of visible emission observations of a material during the inplant transportation of material by truck or rail at any time.
- (g) The opacity of fugitive particulate emissions from the inplant transportation of material by front end loaders and skip hoists shall not exceed ten percent (10%).
- (h) There shall be a zero (0) percent frequency of visible emission observations from a building enclosing all or part of the material processing equipment, except from a vent in the building.
- (i) The PM₁₀ emissions from building vents shall not exceed twenty-two thousandths (0.022) grains per dry standard cubic foot and ten percent (10%) opacity.
- (j) The opacity of particulate emissions from dust handling equipment shall not exceed ten percent (10%).
- (k) Any facility or operation not specified in 326 IAC 6.8-10-3 shall meet a twenty percent (20%), three (3) minute average opacity standard.

The Permittee shall achieve these limits by controlling fugitive particulate matter emissions according to the Fugitive Dust Control Plan, submitted on September 4, 1997. The plan consists of:

- (a) adequate wet suppression of dust from unpaved roadways on an “as needed” basis; and

- (b) adequate wet suppression of dust from aggregate storage piles on an "as needed" basis.

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

This source is located in a nonattainment area for particular matter. However, 326 IAC 6-5 is not applicable to this source, because it is located in Lake County. The source must comply with 326 IAC 6.8-10-3 (Lake County Fugitive Particulate Matter Control Requirements).

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

This rule does not apply because no facility at this source has the potential to emit SO₂ greater than ten (10) pounds per hour or twenty-five (25) tons per year.

326 IAC 7-4-1.1 (Sulfur Dioxide Emission Limitations: Lake County)

This rule does not apply because no facility at this source has the potential to emit SO₂ greater than ten (10) pounds per hour or twenty-five (25) tons per year.

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

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

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

Compliance Determination and Monitoring Requirements

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance with all applicable state and federal rules on a continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a 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 Determination Requirements are included in the permit. The Compliance Determination Requirements in Section D of the permit are those conditions that are found directly within state and federal rules and the violation of which serves as grounds for enforcement action.

If the Compliance Determination Requirements 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.

- (a) The hot mix asphalt plant has applicable compliance determination conditions as specified below:

On August 14, 2003, PM and PM₁₀ testing was performed to demonstrate compliance with the requirements of 326 IAC 6.8-1-2(a), 40 CFR 60, Subpart I and 326 IAC 2-8-4. These tests showed that the asphalt plant is in compliance with these rules. These tests shall be repeated prior to August 14, 2008 (five years from the date of the compliant stack test).

Emission Unit	Control Device	Timeframe for Testing	Pollutants	Frequency of Testing	Limit or Requirement
Aggregate Dryer/Burner	Baghouse	Prior to August 14, 2008	PM and PM ₁₀	Once every 5 years	PM: 0.2518 lbs/ton asphalt (326 IAC 2-2) PM: 0.03 gr/dscf (326 IAC 6.8-1-2) PM: 0.04 gr/dscf (40 CFR 60, Subpart I) PM₁₀: 0.127 lbs/ton asphalt (326 IAC 2-8-4) Opacity: 20% (40 CFR 60, Subpart I)

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

Control or Emission Unit	Parameter	Frequency	Range	Excursions and Exceedances
Baghouse (SV1)	Water Pressure Drop	Daily	1.0 to 9.0 inches	Response Steps
	Visible Emissions		Normal-Abnormal	
Conveyors and material transfer points	Visible Emissions	Daily	Normal-Abnormal	Response Steps

These monitoring conditions are necessary because the baghouse for the one (1) drum mixer must operate properly to ensure compliance with 326 IAC 5-1 (Opacity), 326 IAC 6.8 (Particulate Matter Limitations for Lake County), 326 IAC 2-8 (FESOP) and 40 CFR 60, Subpart I.

Recommendation

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

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

An application for the purposes of this review was received on February 9, 2007.

Conclusion

The operation of this stationary hot mix asphalt plant shall be subject to the conditions of the attached FESOP Renewal No. 089-24305-00530.

Appendix A: Emission Calculations

Company Name: Rieth-Riley Construction Co., Inc.
 Plant Location: 301 North Cline Avenue, Gary, Indiana 46406
 County: Lake
 FESOP: F 089-24305-00530
 Date: 21-Sep-07
 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>5.756</u> MMBtu/hr * 8760 hrs/yr	* Ef (lbs/1000 gal) = (tons/yr)
	<u>138000</u> Btu/gal * 2000 lbs/ton	
PM:	7.0 lbs/1000 gal =	<u>1.28</u> tons/yr
PM-10:	8.3 lbs/1000 gal =	<u>1.52</u> tons/yr
SOx:	75.0 lbs/1000 gal =	<u>13.70</u> tons/yr
NOx:	20.0 lbs/1000 gal =	<u>3.65</u> tons/yr
VO C:	0.34 lbs/1000 gal =	<u>0.62</u> tons/yr
CO:	5.0 lbs/1000 gal =	<u>0.913</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>5.756</u> MMBtu/hr * 8760 hrs/yr	* Ef (lbs/MMcf) = (tons/yr)
	1000 Btu/cf * 2000 lbs/ton	
PM:	1.9 lbs/MMcf =	<u>0.048</u> tons/yr
PM-10:	7.6 lbs/MMcf =	<u>0.192</u> tons/yr
SOx:	0.6 lbs/MMcf =	<u>0.015</u> tons/yr
NOx:	100.0 lbs/MMcf =	<u>2.52</u> tons/yr
VO C:	5.5 lbs/MMcf =	<u>0.139</u> tons/yr
CO:	84.0 lbs/MMcf =	<u>2.12</u> tons/yr

Hot Oil Heater on Propane
 (propane/<100MMBTU/uncontrolled)

The following calculations determine the amount of emissions created by propane gas @ 0.18 grains sulfur per 100 cubic feet, based on 8760 hours of use and AP-42 Ch. 1.5, Table 1.5-1

Pollutant:	<u>5.756</u> MMBtu/hr * 8760 hrs/yr	* Ef (lbs/1000 gal) = (tons/yr)
	<u>91500.0</u> Btu/gal * 2000 lbs/ton	
PM:	0.4 lbs/1000 gal =	<u>0.110</u> tons/yr
PM-10:	0.4 lbs/1000 gal =	<u>0.110</u> tons/yr
SOx:	0.02 lbs/1000 gal =	<u>0.005</u> tons/yr
NOx:	14.0 lbs/1000 gal =	<u>3.86</u> tons/yr
VO C:	1.90 lbs/1000 gal =	<u>0.524</u> tons/yr
CO:	3.2 lbs/1000 gal =	<u>0.882</u> tons/yr

Dryer Burner (natural gas)

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>200.000</u> MMBtu/hr * 8760 hrs/yr	* Ef (lbs/MMcf) = (tons/yr)
	1000 Btu/cf * 2000 lbs/ton	
PM:	1.9 lbs/MMcf =	<u>1.66</u> tons/yr
PM-10:	7.6 lbs/MMcf =	<u>6.66</u> tons/yr
SOx:	0.6 lbs/MMcf =	<u>0.53</u> tons/yr
NOx:	140.0 lbs/MMcf =	<u>122.64</u> tons/yr
VO C:	5.5 lbs/MMcf =	<u>4.82</u> tons/yr
CO:	84.0 lbs/MMcf =	<u>73.58</u> tons/yr

If rating < 100 MMBtu, Nox = 100 lbs/mmcf
 If rating > 100 MMBtu, Nox = 190 lbs/mmcf
 If rating > 100 MMBtu and low Nox, Nox = 140 lbs/mmcf

Drum Mix Dryer (natural gas)

The following calculations determine the amount of emissions created by natural gas combustion and dryer, based on 8760 hours of use, AP-42 Ch. 11.1, Tables 11.1-7 and 8

Pollutant:	600 tons/hr * 8760 hrs/yr		* Ef (lbs/MMcf) = (tons/yr) (tons/yr)
	2000 lbs/ton		
S O x:	0.0034 lbs/ton =		8.935 tons/yr
N O x:	0.026 lbs/ton =		68.328 tons/yr
V O C:	0.032 lbs/ton =		84.096 tons/yr
C O:	0.130 lbs/ton =		341.640 tons/yr

Limited VOC due to production limit: **12.00**
Limited CO due to production limit: **48.80**

Dryer Burner (butane)

The following calculations determine the amount of emissions created by gas @ **0.18** grains sulfur per 100 cubic feet, based on 8760 hours of use and AP-42, Table 1.5-1

Pollutant:	200.000 MMBtu/hr * 8760 hrs/yr		* Ef (lbs/1000 gal) = (tons/yr)
	102000.0 Btu/gal * 2000 lbs/ton		
P M:	0.6 lbs/1000 gal =		5.153 tons/yr
PM-10:	0.6 lbs/1000 gal =		5.153 tons/yr
S O x:	0.02 lbs/1000 gal =		0.139 tons/yr
N O x:	21.0 lbs/1000 gal =		180.353 tons/yr
V O C:	0.26 lbs/1000 gal =		2.233 tons/yr
C O:	3.6 lbs/1000 gal =		30.918 tons/yr

Dryer Burner (propane)

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

Pollutant:	200.000 MMBtu/hr * 8760 hrs/yr		* Ef (lbs/1000 gal) = (tons/yr)
	91500.0 Btu/gal * 2000 lbs/ton		
P M:	0.6 lbs/1000 gal =		5.744 tons/yr
PM-10:	0.6 lbs/1000 gal =		5.744 tons/yr
S O x:	0.02 lbs/1000 gal =		0.191 tons/yr
N O x:	19.0 lbs/1000 gal =		181.902 tons/yr
V O C:	0.25 lbs/1000 gal =		2.393 tons/yr
C O:	3.2 lbs/1000 gal =		30.636 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	600 tons/hr x	8760 hrs/yr =	73584 tons/yr
		2000 lbs/ton		
P M-10:	6.5 lbs/ton x	600 tons/hr x	8760 hrs/yr =	17082 tons/yr
		2000 lbs/ton		
Lead:	0.000033 lbs/ton x	600 tons/hr x	8760 hrs/yr =	0.009 tons/yr
		2000 lbs/ton		
HAPs:	0.0076 lbs/ton x	600 tons/hr x	8760 hrs/yr =	19.97 tons/yr
		2000 lbs/ton		
Worst Case Individual HAP:	0.0031 lbs/ton x	600 tons/hr x	8760 hrs/yr =	8.15 tons/yr
		2000 lbs/ton		

	HAPs Emission Factors (lbs/ton)		
	Natural Gas	Fuel Oil	Waste Oil
Total	0.005	0.009	0.010
Worst Case Individual	0.0031	0.0031	0.0031
Lead	0.0000062	0.000015	0.000015

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

$Ef = .0032 * (U/5)^{1.3} * k =$ **0.003** lbs/ton
 where k = $(M/2)^{1.4}$ 1 (particle size multiplier)
 U = 12 mph mean wind speed (worst case)
 M = **5.0** % moisture

P M:	0.003 lbs/ton x	570.0 tons/hr x	8760 hrs/yr =	6.91 tons/yr
		2000 lbs/ton		
P M-10:	10% of PM =			0.691 tons/yr
Screening	PM: 570.0 tons/hr x	0.0315 lbs/ton	/ 2000 lbs/ton x	8760 hrs/yr = 78.6 tons/yr
	P M-10:	10% of PM =		7.86 tons/yr
Limited Screening	PM: 0.0315 lbs/ton x	1,000,000 tons/yr	/ 2000 lbs/ton =	15.75 tons/yr
	P M-10:	10% of PM =		1.58 tons/yr

**** unpaved roads ****

The following calculations determine the amount of emissions created by unpaved roads, based on 8,760 hours of use and AP-42, Ch 13.2.2 (12/2003).

A. Tri-axle Truck

$$7.25 \text{ trip/hr} \times 0.11 \text{ mile/trip} \times 2 \text{ (round trip)} \times 8760 \text{ hr/yr} = 13972.2 \text{ miles per year}$$

PM

Method 1a:

$$E_f = k \left[\frac{(s/12)^{0.7}}{(W/3)^b} \right] \text{ lb/mile}$$

= 5.16 lb/mile

where k = 4.9 (particle size multiplier for PM)
s = 4.8 mean % silt content of unpaved roads
b = 0.45 Constant for PM-10 and PM-30 or TSP
W = 21 tons average vehicle weight
M = 0.2 surface material moisture content, % (default is 0.2 for dry conditions)

$$E = \frac{5.16 \text{ lb/mi} \times 13972.2 \text{ mi/yr}}{2000 \text{ lb/ton}} = 36.02 \text{ tons/yr}$$

Taking natural mitigation due to precipitation into consideration:

$$E_{ext} = E \cdot [(365-p)/365] = 23.69 \text{ tons/yr}$$

where p = 125 days of rain greater than or equal to 0.01 inches (see Fig. 13.2.2-1)

PM-10

Method 1a:

$$E_f = k \left[\frac{(s/12)^{0.9}}{(W/3)^b} \right] \text{ lb/mile}$$

= 1.58 lb/mile

where k = 1.5 (particle size multiplier for PM-10)
s = 4.8 mean % silt content of unpaved roads
b = 0.45 Constant for PM-10 and PM-30 or TSP
W = 21 tons average vehicle weight
M = 0.2 surface material moisture content, % (default is 0.2 for dry conditions)

$$E = \frac{1.58 \text{ lb/mi} \times 13972.2 \text{ mi/yr}}{2000 \text{ lb/ton}} = 11.03 \text{ tons/yr}$$

Taking natural mitigation due to precipitation into consideration:

$$E_{ext} = E \cdot [(365-p)/365] = 7.25 \text{ tons/yr}$$

where p = 125 days of rain greater than or equal to 0.01 inches (see Fig. 13.2.2-1)

B. Front End Loader

$$70.36 \text{ trip/hr} \times 0.05 \text{ mile/trip} \times 2 \text{ (round trip)} \times 8760 \text{ hr/yr} = 61635.36 \text{ miles per year}$$

PM

Method 1a:

$$E_f = k \left[\frac{(s/12)^{0.7}}{(W/3)^b} \right] \text{ lb/mile}$$

= 6.49 lb/mile

where k = 4.9 (particle size multiplier for PM)
s = 4.8 mean % silt content of unpaved roads
b = 0.45 Constant for PM-10 and PM-30 or TSP
W = 35 tons average vehicle weight
M = 0.2 surface material moisture content, % (default is 0.2 for dry conditions)

$$E = \frac{6.49 \text{ lb/mi} \times 61635.36 \text{ mi/yr}}{2000 \text{ lb/ton}} = 199.98 \text{ tons/yr}$$

Taking natural mitigation due to precipitation into consideration:

$$E_{ext} = E \cdot [(365-p)/365] = 131.49 \text{ tons/yr}$$

where p = 125 days of rain greater than or equal to 0.01 inches (see Fig. 13.2.2-1)

PM-10

Method 1a:

$$E_f = k \left[\frac{(s/12)^{0.9}}{(W/3)^b} \right] \text{ lb/mile}$$

= 1.99 lb/mile

where k = 1.5 (particle size multiplier for PM-10)
s = 4.8 mean % silt content of unpaved roads
b = 0.45 Constant for PM-10 and PM-30 or TSP
W = 35 tons average vehicle weight
M = 0.2 surface material moisture content, % (default is 0.2 for dry conditions)

$$E = \frac{1.99 \text{ lb/mi} \times 61635.36 \text{ mi/yr}}{2000 \text{ lb/ton}} = 61.22 \text{ tons/yr}$$

Taking natural mitigation due to precipitation into consideration:

$$E_{ext} = E \cdot [(365-p)/365] = 40.25 \text{ tons/yr}$$

where p = 125 days of rain greater than or equal to 0.01 inches (see Fig. 13.2.2-1)

C. Tri-axle Truck

$$10.2 \text{ trip/hr} \times 0.11 \text{ mile/trip} \times 2 \text{ (round trip)} \times 8760 \text{ hr/yr} = 19657.44 \text{ miles per year}$$

PM

Method 1a:

$$E_f = \frac{k \cdot [(s/12)^{0.7}] \cdot [(W/3)^b]}{5.87} \text{ lb/mile}$$

where k = 4.9 (particle size multiplier for PM)
s = 4.8 mean % silt content of unpaved roads
b = 0.45 Constant for PM-10 and PM-30 or TSP
W = 28 tons average vehicle weight
M = 0.2 surface material moisture content, % (default is 0.2 for dry conditions)

$$E = \frac{5.87 \text{ lb/mi} \times 19657.44 \text{ mi/yr}}{2000 \text{ lb/ton}} = 57.69 \text{ tons/yr}$$

Taking natural mitigation due to precipitation into consideration:

$$E_{ext} = E \cdot [(365-p)/365] = 37.93 \text{ tons/yr}$$

where p = 125 days of rain greater than or equal to 0.01 inches (see Fig. 13.2.2-1)

PM-10

Method 1a:

$$E_f = \frac{k \cdot [(s/12)^{0.9}] \cdot [(W/3)^b]}{1.80} \text{ lb/mile}$$

where k = 1.5 (particle size multiplier for PM-10)
s = 4.8 mean % silt content of unpaved roads
b = 0.45 Constant for PM-10 and PM-30 or TSP
W = 28 tons average vehicle weight
M = 0.2 surface material moisture content, % (default is 0.2 for dry conditions)

$$E = \frac{1.80 \text{ lb/mi} \times 19657.44 \text{ mi/yr}}{2000 \text{ lb/ton}} = 17.66 \text{ tons/yr}$$

Taking natural mitigation due to precipitation into consideration:

$$E_{ext} = E \cdot [(365-p)/365] = 11.61 \text{ tons/yr}$$

where p = 125 days of rain greater than or equal to 0.01 inches (see Fig. 13.2.2-1)

All Trucking

Total PM: 193.11 tons/yr
Total PM-10: 59.11 tons/yr

**** storage ****

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

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

= 1.74 lbs/acre/day for sand
= 1.16 lbs/acre/day for stone
= 1.16 lbs/acre/day for slag
= 1.16 lbs/acre/day for gravel
= 1.16 lbs/acre/day for RAP

where s = 1.5 % silt for sand
s = 1.0 % silt of stone
s = 1.0 % silt of slag
s = 1.0 % silt of gravel
s = 1.0 % silt for RAP
p = 125 days of rain greater than or equal to 0.01 inches
f = 15 % of wind greater than or equal to 12 mph

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

= 0.204 tons/yr for sand
= 0.272 tons/yr for stone
= 0.233 tons/yr for slag
= 0.252 tons/yr for gravel
= 0.175 tons/yr for RAP

Total PM: 1.135 tons/yr

where sc = 35,000 tons storage capacity for sand
sc = 70,000 tons storage capacity for stone
sc = 60,000 tons storage capacity for slag
sc = 65,000 tons storage capacity for gravel
sc = 45,000 tons storage capacity for RAP

P M-10: 35% of PM = 0.071 tons/yr for sand
35% of PM = 0.095 tons/yr for stone
35% of PM = 0.081 tons/yr for slag
35% of PM = 0.088 tons/yr for gravel
35% of PM = 0.061 tons/yr for RAP

Total PM-10: 0.397 tons/yr

**** Load Out and Yard Silo Filling ****

The following calculations determine the amount of emissions created by material handling of liquid asphalt based on 8760 hours of use and AP-42, Ch 11.1, Table 11.1-14, 15 and 16

Load Out

PM Ef =	$0.000181 + 0.00141(-V)e^{-(0.0251)(T + 460) - 20.43}$	<u>0.000522</u> lbs/ton
TOC Ef =	$0.0172(-V)e^{-(0.0251)(T + 460) - 20.43}$	<u>0.004159</u> lbs/ton
CO Ef =	$0.00558(-V)e^{-(0.0251)(T + 460) - 20.43}$	<u>0.001349</u> lbs/ton
HAP Ef =	$((0.00141(-V)e^{-(0.0251)(T + 460) - 20.43})^{(5.93\%+1.18\%)}) + \text{TOC Ef} \times 1.5\%$	<u>0.000062</u> lbs/ton

where V = -0.5 (asphalt volatility)
 T = 325 (mix temperature in degrees Fahrenheit)

PM :	<u>0.000522</u> lbs/ton x	<u>600.0</u> tons/hr x	8760 hrs/yr =	<u>1.372</u> tons/yr
		2000 lbs/ton		
PM 10 :	<u>0.000522</u> lbs/ton x	<u>600.0</u> tons/hr x	8760 hrs/yr =	<u>1.372</u> tons/yr
		2000 lbs/ton		
VOC :	<u>0.004159</u> lbs/ton x	<u>600.0</u> tons/hr x	8760 hrs/yr =	<u>10.93</u> tons/yr
		2000 lbs/ton		
CO :	<u>0.001349</u> lbs/ton x	<u>600.0</u> tons/hr x	8760 hrs/yr =	<u>3.55</u> tons/yr
		2000 lbs/ton		
Total HAPs :	<u>0.000062</u> lbs/ton x	<u>600.0</u> tons/hr x	8760 hrs/yr =	<u>0.164</u> tons/yr
		2000 lbs/ton		

Limited VOC due to production limit: 1.56

Silo Filling

PM Ef =	$0.000332 + 0.00105(-V)e^{-(0.0251)(T + 460) - 20.43}$	<u>0.000586</u> lbs/ton
TOC Ef =	$0.0504(-V)e^{-(0.0251)(T + 460) - 20.43}$	<u>0.012187</u> lbs/ton
CO Ef =	$0.00488(-V)e^{-(0.0251)(T + 460) - 20.43}$	<u>0.001180</u> lbs/ton
HAP Ef =	$(0.00105(-V)e^{-(0.0251)(T + 460) - 20.43})^{*11.4\%} + \text{TOC Ef} \times 1.3\%$	<u>0.000158</u> lbs/ton

where V = -0.5 (asphalt volatility)
 T = 325 (mix temperature in degrees Fahrenheit)

PM :	<u>0.000586</u> lbs/ton x	<u>600.0</u> tons/hr x	8760 hrs/yr =	<u>1.540</u> tons/yr
		2000 lbs/ton		
PM 10 :	<u>0.000586</u> lbs/ton x	<u>600.0</u> tons/hr x	8760 hrs/yr =	<u>1.540</u> tons/yr
		2000 lbs/ton		
VOC :	<u>0.012187</u> lbs/ton x	<u>600.0</u> tons/hr x	8760 hrs/yr *	<u>94.0%</u>
		2000 lbs/ton		
CO :	<u>0.001180</u> lbs/ton x	<u>600.0</u> tons/hr x	8760 hrs/yr =	<u>3.10</u> tons/yr
		2000 lbs/ton		
Total HAPs :	<u>0.000158</u> lbs/ton x	<u>600.0</u> tons/hr x	8760 hrs/yr =	<u>0.416</u> tons/yr
		2000 lbs/ton		

30.11 tons/yr
 Limited VOC due to production limit: 4.57

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

Worst Case Fuel	
P M:	<u>73874</u> tons/yr
P M-10:	<u>17161</u> tons/yr
S O x:	<u>22.64</u> tons/yr
N O x:	<u>185.76</u> tons/yr
V O C:	<u>114.72</u> tons/yr
C O:	<u>346.86</u> tons/yr
Lead:	<u>0.009</u> tons/yr
Single HAP:	<u>8.147</u> tons/yr
Total HAPs:	<u>20.6</u> tons/yr

B. Source emissions after controls

dryer combustion: gas				
P M:	1.66 tons/yr x	0.00100	emitted after controls =	0.002 tons/yr
P M-10:	6.66 tons/yr x	0.00100	emitted after controls =	0.007 tons/yr
hot oil heater combustion: propane				
P M:	0.11 tons/yr x	1.00000	emitted after controls =	0.110 tons/yr
P M-10:	0.11 tons/yr x	1.00000	emitted after controls =	0.110 tons/yr
hot oil heater combustion: gas				
P M:	0.048 tons/yr x	1.00000	emitted after controls =	0.048 tons/yr
P M-10:	0.192 tons/yr x	1.00000	emitted after controls =	0.192 tons/yr
hot oil heater combustion: distillate oil				
P M:	1.279 tons/yr x	1.00000	emitted after controls =	1.279 tons/yr
P M-10:	1.516 tons/yr x	1.00000	emitted after controls =	1.516 tons/yr
dryer combustion: butane				
P M:	5.15 tons/yr x	0.00100	emitted after controls =	0.005 tons/yr
P M-10:	5.15 tons/yr x	0.00100	emitted after controls =	0.005 tons/yr
dryer combustion: propane				
P M:	5.74 tons/yr x	0.00100	emitted after controls =	0.006 tons/yr
P M-10:	5.74 tons/yr x	0.00100	emitted after controls =	0.006 tons/yr
aggregate drying:				
P M:	73584.00 tons/yr x	0.00100	emitted after controls =	73.6 tons/yr
P M-10:	17082.00 tons/yr x	0.00100	emitted after controls =	17.08 tons/yr
conveying/handling:				
P M:	6.91 tons/yr x	1.000	emitted after controls =	6.91 tons/yr
P M-10:	0.69 tons/yr x	1.000	emitted after controls =	0.691 tons/yr
screening				
P M:	15.75 tons/yr x	1.000	emitted after controls =	15.8 tons/yr
P M-10:	1.58 tons/yr x	1.000	emitted after controls =	1.58 tons/yr
unpaved roads:				
P M:	193.11 tons/yr x	50.00%	emitted after controls =	96.55 tons/yr
P M-10:	59.11 tons/yr x	50.00%	emitted after controls =	29.557 tons/yr
storage:				
P M:	1.135 tons/yr x	50.00%	emitted after controls =	0.567 tons/yr
P M-10:	0.397 tons/yr x	50.00%	emitted after controls =	0.199 tons/yr
Load Out:				
P M:	1.372 tons/yr x	100%	emitted after controls =	1.372 tons/yr
P M-10:	1.372 tons/yr x	100%	emitted after controls =	1.372 tons/yr
Silo Filling:				
P M:	1.540 tons/yr x	100%	emitted after controls =	1.540 tons/yr
P M-10:	1.540 tons/yr x	100%	emitted after controls =	1.540 tons/yr

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

	natural gas	butane	propane	
P M:	197.6	197.6	197.6	tons/yr
P M-10:	53.5	53.5	53.5	tons/yr

II. Allowable Emissions

A. The following calculations determine compliance with 326 IAC 6-1, which limits the stack emissions to 0.03 gr/dscf, and NSPS Subpart I, which limits stack emissions from asphalt plants to 0.04 gr/dscf:

$$\begin{aligned}
 & \frac{0.03 \text{ grains} \cdot \text{dscf}}{\text{dscf}} \cdot \frac{119086 \text{ acfm} \cdot \text{dscf}}{\text{dscf}} \cdot \frac{460}{460} + \frac{528}{528} \cdot \frac{250 \text{ Temp}}{\text{Temp}} \cdot \frac{100}{100} \cdot \frac{5 \text{ \% moisture}}{\text{\% moisture}} \\
 & \cdot \frac{525600 \text{ minutes} \cdot \text{year}}{\text{year}} \cdot \frac{1}{7000 \text{ grains}} \cdot \frac{1 \text{ ton}}{2000 \text{ lbs}} = \underline{94.8 \text{ tons/yr}} \\
 & \text{To meet NSPS Subpart I, the following value must be } < \text{ amount calculated above} \quad \underline{74.9 \text{ tons/yr}}
 \end{aligned}$$

III. Limited Potential Emissions

FUEL USAGE LIMITATION: BASED ON NOx

FUEL USAGE LIMITATION FOR BURNER (Natural Gas)

$$\begin{aligned}
 & \frac{122.64 \text{ tons NOx}}{\text{year}} \cdot \frac{2000 \text{ lbs}}{\text{ton}} = \frac{245280 \text{ lbs NOx}}{\text{year}} \\
 & \frac{245280 \text{ lbs NOx}}{\text{year}} / \frac{140.0 \text{ lbs NOx}}{\text{MMcf}} = \frac{1752.00 \text{ MMcf}}{\text{year}} \\
 & \frac{1752.00 \text{ MMcf}}{\text{year}} \cdot \frac{85.00 \text{ tons/yr}}{122.64 \text{ tons/yr}} = \underline{1,214 \text{ MMcf}} \text{ FESOP Limit}
 \end{aligned}$$

FUEL USAGE LIMITATION FOR BURNER (Butane)

$$\begin{aligned}
 & \frac{180.35 \text{ tons NOx}}{\text{year}} \cdot \frac{2000 \text{ lbs}}{\text{ton}} = \frac{360706.00 \text{ lbs NOx}}{\text{year}} \\
 & \frac{360706.00 \text{ lbs NOx}}{\text{year}} / \frac{21.0 \text{ lbs}}{1000 \text{ gal}} = \frac{17176.48 \text{ kgal}}{\text{year}} \\
 & \frac{17176.48 \text{ kgal}}{\text{year}} \cdot \frac{97.15 \text{ tons/yr}}{180.35 \text{ tons/yr}} = \underline{9252.4 \text{ kgal}} \text{ FESOP Limit}
 \end{aligned}$$

FUEL USAGE LIMITATION FOR BURNER (Propane)

$$\begin{aligned}
 & \frac{181.902 \text{ tons NOx}}{\text{year}} \cdot \frac{2000 \text{ lbs}}{\text{ton}} = \frac{363803.28 \text{ lbs NOx}}{\text{year}} \\
 & \frac{363803.28 \text{ lbs NOx}}{\text{year}} / \frac{19.0 \text{ lbs}}{1000 \text{ gal}} = \frac{19147.54 \text{ kgal}}{\text{year}} \\
 & \frac{19147.54 \text{ kgal}}{\text{year}} \cdot \frac{97.15 \text{ tons/yr}}{181.902 \text{ tons/yr}} = \underline{10226.3 \text{ kgal}} \text{ FESOP Limit}
 \end{aligned}$$