

**ENHANCED NEW SOURCE REVIEW and FEDERALLY ENFORCEABLE
STATE OPERATING PERMIT (FESOP)**

OFFICE OF AIR MANAGEMENT

**Rieth - Riley Construction Co., Inc.
(Portable)**

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

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 and 326 IAC 2-1-3.2, as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: F 145-9355-05166	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

SECTION A	SOURCE SUMMARY	5
A.1	General Information [326 IAC 2-8-3(b)]	5
A.2	Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]	5
A.3	Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]	6
A.4	FESOP Permit Applicability [326 IAC 2-8-2]	6
SECTION B	GENERAL CONDITIONS	7
B.1	Permit No Defense [326 IAC 2-1-10] [IC 13]	7
B.2	Definitions [326 IAC 2-8-1]	7
B.3	Permit Term [326 IAC 2-8-4(2)]	7
B.4	Enforceability [326 IAC 2-8-6]	7
B.5	Termination of Right to Operate [326 IAC 2-8-9][326 IAC 2-8-3 (h)]	7
B.6	Severability [326 IAC 2-8-4(4)] [326 IAC 2-8-7(a)(3)]	7
B.7	Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]	7
B.8	Duty to Supplement and Provide Information [326 IAC 2-8-3(f)] [326 IAC 2-8-4(5)(E)]	7
B.9	Compliance Order Issuance [326 IAC 2-8-5(b)]	8
B.10	Compliance with Permit Conditions [326 IAC 2-8-4(5)(A)] [326 IAC 2-8-4(5)(B)]	8
B.11	Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)]	8
B.12	Annual Compliance Certification [326 IAC 2-8-5(a)(1)]	8
B.13	Preventive Maintenance Plan [326 IAC 2-8-4(9)][326 IAC 2-8-5(a)(1)] [326 IAC 1-6-3]	9
B.14	Emergency Provisions [326 IAC 2-8-12]	9
B.15	Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]	11
B.16	Permit Modification, Reopening, Revocation and Reissuance, or Termination	12
B.17	Permit Renewal [326 IAC 2-8-3(h)]	12
B.18	Administrative Permit Amendment [326 IAC 2-8-10]	13
B.19	Minor Permit Modification [326 IAC 2-8-11(a)] [326 IAC 2-8-11(b)(1) and (2)]	13
B.20	Significant Permit Modification [326 IAC 2-8-11(d)]	14
B.21	Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-8-11(b)]	14
B.22	Changes Under Section 502(b)(10) of the Clean Air Act [326 IAC 2-8-15(b)]	14
B.23	Operational Flexibility [326 IAC 2-8-15]	14
B.24	Construction Permit Requirement [326 IAC 2]	16
B.25	Inspection and Entry [326 IAC 2-8-5(a)(2)]	16
B.26	Transfer of Ownership or Operation [326 IAC 2-1-6] [326 IAC 2-8-10]	16
B.27	Annual Fee Payment [326 IAC 2-8-4(6)] [326 IAC 2-8-16]	16
B.28	Enhanced New Source Review [326 IAC 2]	17
SECTION C	SOURCE OPERATION CONDITIONS	18
	Emission Limitations and Standards [326 IAC 2-8-4(1)]	
C.1	Overall Source Limit [326 IAC 2-8]	18
C.2	Opacity [326 IAC 5-1]	18
C.3	Open Burning [326 IAC 4-1][IC 13-17-9]	18
C.4	Incineration [326 IAC 4-2] [326 IAC 9-1-2(3)]	19
C.5	Fugitive Dust Emissions [326 IAC 6-4]	19
C.6	Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]	19
C.7	Operation of Equipment [326 IAC 2-8-5(a)(4)]	20
C.8	Stack Height [326 IAC 1-7]	20
C.9	Asbestos Abatement Projects - Accreditation [326 IAC 14-10] [326 IAC 18-1]	20

Testing Requirements [326 IAC 2-8-4(3)]	
C.10	Performance Testing [326 IAC 3-2.1] 20
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)] 21
C.12	Maintenance of Monitoring Equipment [326 IAC 2-8-4(3)(A)(iii)] 21
C.13	Monitoring Methods [326 IAC 3] 22
C.14	Pressure Gauge Specifications 22
C.15	Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18-1] [40 CFR 61.140] 22
Corrective Actions and Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5]	
C.16	Risk Management Plan [326 IAC 2-8-4] [40 CFR 68.215] 23
C.17	Compliance Monitoring Plan - Failure to Take Corrective Action [326 IAC 2-8-4(3)] .. 23
C.18	Actions Related to Noncompliance Demonstrated by a Stack Test 24
Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]	
C.19	Monitoring Data Availability 25
C.20	General Record Keeping Requirements [326 IAC 2-8-4(3)(B)] 25
C.21	General Reporting Requirements [326 IAC 2-8-4(3)(C)] 26
Portable Source Requirement	
C.22	Relocation of Portable Sources [326 IAC 2-1-6(b)] 27
Stratospheric Ozone Protection	
C.23	Compliance with 40 CFR 82 and 326 IAC 22-1 28
General Construction Conditions 28	
Effective Date of the Permit 28	
First Time Operation Permit 29	
SECTION D.1 FACILITY OPERATION CONDITIONS	
Asphalt drum mixer/dryer, hot oil heater and reciprocating engines 30	
Emission Limitations and Standards [326 IAC 2-8-4(1)]	
D.1.1	Sulfur Dioxide (SO ₂) [326 IAC 7-1.1-1] [326 IAC 12-1] 30
D.1.2	Nitrogen Oxides (NO _x) 31
D.1.3	Particulate Matter (PM) [326 IAC 6-1-2] 31
D.1.4	Particulate Matter (PM) [40 CFR 60.90 to 60.93, Subpart I] 32
D.1.5	Opacity [40 CFR 60.90 to 60.93, Subpart I] 32
D.1.6	Particulate Matter (PM ₁₀) 32
D.1.7	Volatile Organic Compounds (VOC) 32
D.1.8	Volatile Organic Compounds (VOC) [326 IAC 8-5-2] 32
D.1.9	Preventive Maintenance Plan [326 IAC 2-8-4(9)] 32
Compliance Determination Requirements	
D.1.10	Testing Requirements [326 IAC 2-8-5(1)] 32
D.1.11	Used Oil Requirements 33

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]	
D.1.12 Particulate Matter (PM)	33
D.1.13 Visible Emissions Notations	33
D.1.14 Parametric Monitoring	33
D.1.15 Baghouse Inspections	34
D.1.16 Broken Bag or Failure Detection	34
Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]	
D.1.17 Cutback Asphalt Production Rate	34
D.1.18 Operational Parameters	34
D.1.19 Quarterly Reporting	35
SECTION D.2 FACILITY OPERATION CONDITIONS	
Storage Tanks	36
Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]	
D.2.1 Record Keeping	36
Certification Form	37
Emergency/Deviation Form	38
Quarterly Report Form	40
Monthly Report Form(s)	41
Quarterly Report Form	43
Compliance Report Form	44

SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM), and presented in the permit application.

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

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

Responsible Official: Dean Logan
Source Address: Initially located at 7390 East County Road 650 South, Shelbyville, IN 46176
Mailing Address: P.O. Box 477, Goshen, Indiana 46527-0477
SIC Code: 2951
County Location: Shelby
County Status: Attainment for all criteria pollutants
Source Status: Federally Enforceable State Operating Permit (FESOP)
Minor Source, under PSD and Emission Offset Rules
Minor Source, Section 112 of the Clean Air Act

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

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

- (a) One (1) hot mix drum mixer, exhausting through stack SV-1, equipped with a baghouse for particulate matter control, capacity: 400 tons per hour.
- (b) One (1) 120 million British thermal units per hour burner firing waste oil as a primary fuel and #2 distillate oil, #4 distillate oil, natural gas and butane gas as backup fuels, exhausting through stack SV-1.
- (c) One (1) 2.15 million British thermal units per hour hot oil heater firing #2 fuel oil as a primary fuel with natural gas and propane gas as backup fuels, exhausting through stack SV-2.
- (d) Two (2) reciprocating internal combustion engines firing #2 fuel oil, exhausting through stacks SV-7 and SV-8, capacity: 545 and 50 kilowatts (5.473 and 0.505 million British thermal units per hour), respectively.
- (e) Two (2) liquid asphalt storage tanks, exhausting through stacks SV-3 and SV-4, capacity: 35,000 and 20,000 gallons, respectively.
- (f) One (1) waste oil storage tank for burner fuel, exhausting through stack SV-5, capacity: 15,000 gallons.
- (g) One (1) fuel oil storage tank for hot oil heater fuel, exhausting through stack SV-6, capacity: 420 gallons.
- (h) Two (2) storage tanks for the #2 distillate oil internal combustion engine fuel, exhausting through stacks SV-9 and SV-10, capacity: 160 and 224 gallons, respectively.
- (i) This portable hot mix drum asphalt manufacturing source also produces cold mix cutback asphalt.

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

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

- (a) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons.
- (b) 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.
- (c) The following VOC and HAP storage containers: Vessels storing lubricating oil, hydraulic oils, machining oils, and machining fluids.

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

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

SECTION B GENERAL CONDITIONS

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

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

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

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

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

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

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

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

B.5 Termination of Right to Operate [326 IAC 2-8-9] [326 IAC 2-8-3(h)]

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

B.6 Severability [326 IAC 2-8-4(4)]

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

B.7 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]

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

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

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

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

- (b) The Permittee shall furnish to IDEM, OAM, within a reasonable time, any information that IDEM, OAM, may request in writing to determine whether cause exists for modifying, revoke-

ing and reissuing, or terminating this permit, or to determine compliance with this permit.

- (c) Upon request, the Permittee shall also furnish to IDEM, OAM, copies of records required to be kept by this permit. For information claimed to be confidential, the Permittee shall furnish such records to IDEM, OAM, along with a claim of confidentiality under 326 IAC 17. If requested by IDEM, OAM, or the U.S. EPA, the Permittee shall furnish such confidential records directly to the U.S. EPA along with a claim of confidentiality under 40 CFR 2, Subpart B.

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

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

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

- (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit constitutes a violation of the Clean Air Act and is grounds for:
 - (1) Enforcement action;
 - (2) Permit termination, revocation and reissuance, or modification; and
 - (3) Denial of a permit renewal application.
- (b) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

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

- (a) Any application form, report, or compliance certification submitted under this permit shall contain certification by a responsible official of truth, accuracy, and completeness. This certification, and any other certification required under this permit, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, on the attached Certification Form, with each submittal.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

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

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

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

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

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

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

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) within ninety (90) days after issuance of this permit, including the following information on each:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission units and associated emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.
- (b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that lack of proper maintenance does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) PMP's shall be submitted to IDEM, OAM, upon request and shall be subject to review and approval by IDEM, OAM.

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

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

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

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

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

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

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

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

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

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

- (A) A description of the emergency;

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

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

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

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

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

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

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

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

- (b) Written notification shall be submitted on the attached Emergency/Deviation Occurrence Reporting Form or its substantial equivalent.
- (c) Proper notice submittal under 326 IAC 2-7-16 satisfies the requirement of this subsection.

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

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

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

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

Request for renewal shall be submitted to:

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

- (b) Timely Submittal of Permit Renewal [326 IAC 2-8-3]
- (1) A timely renewal application is one that is:
- (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
- (B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due. [326 IAC 2-5-3]
- (2) If IDEM, OAM upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.
- (c) Right to Operate After Application for Renewal [326 IAC 2-8-9]
If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAM takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAM, any additional information identified as needed to process the application.

B.18 Administrative Permit Amendment [326 IAC 2-8-10]

- (a) An administrative permit amendment is a FESOP revision that makes changes of the type specified under 326 IAC 2-8-10(a).
- (b) An administrative permit amendment may be made by IDEM, OAM, consistent with the procedures specified under 326 IAC 2-8-10(b).
- (c) The Permittee may implement the changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.19 Minor Permit Modification [326 IAC 2-8-11(a)] [326 IAC 2-8-11(b)(1) and (2)]

- (a) A permit modification is any revision to this permit that cannot be accomplished as an administrative permit amendment under 326 IAC 2-8-10.
- (b) Minor modification of this permit shall follow the procedures specified under 326 IAC 2-7-12(b), except as provided by 326 IAC 2-8-11(c).
- (c) An application requesting the use of minor modification procedures shall meet the require-

ments of 326 IAC 2-8-3(c) and shall include the information required in 326 IAC 2-8-11(b)(3) (A) through (D).

- (d) The Permittee may make the change proposed in its minor permit modification application immediately after it files such application provided that the change has received any approval required by 326 IAC 2-1. After the Permittee makes the change allowed under minor permit modification procedures, and until IDEM, OAM, takes any of the actions specified in 326 IAC 2-8-11(b)(5), the Permittee must comply with both the applicable requirements governing the change and the proposed permit terms and conditions. During this period, the Permittee need not comply with the existing permit terms and conditions it seeks to modify. If the Permittee fails to comply with its proposed permit terms and conditions during this time period, the existing permit terms and conditions it seeks to modify may be enforced against it. [326 IAC 2-8-11(b)(6)]

B.20 Significant Permit Modification [326 IAC 2-8-11(d)]

- (a) Significant modification procedures shall be used for applications requesting permit modifications that do not qualify as minor permit modifications or as administrative amendments.
- (b) Any significant change in existing monitoring permit terms or conditions and every relaxation of reporting or record keeping permit terms or conditions of this permit shall be considered significant.
- (c) Nothing in 326 IAC 2-8-11(d) shall be construed to preclude the Permittee from making changes consistent with 326 IAC 2-8 that would render existing permit compliance terms and conditions irrelevant.
- (d) Significant modifications of this permit shall meet all requirements of 326 IAC 2-8, including those for application, public participation, review by affected states and review by U.S. EPA, as they apply to permit issuance and renewal.

B.21 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-8-11(b)(2)]

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

B.22 Changes Under Section 502(b)(10) of the Clean Air Act [326 IAC 2-8-15(b)]

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

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

B.23 Operational Flexibility [326 IAC 2-8-15]

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

is met:

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

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

and

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

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

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

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

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

- (1) A brief description of the change within the source;
- (2) The date on which the change will occur;
- (3) Any change in emissions; and
- (4) Any permit term or condition that is no longer applicable as a result of the change.

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

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

B.24 Construction Permit Requirement [326 IAC 2]

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

B.25 Inspection and Entry [326 IAC 2-8-5(a)(2)]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, the Permittee shall allow IDEM, OAM, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a FESOP source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements. [326 IAC 2-8-5(a)(4)]

B.26 Transfer of Ownership or Operation [326 IAC 2-1-6] [326 IAC 2-8-10]

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

- (a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAM, Permits Branch, within thirty (30) days of the change. Notification shall include a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current Permittee and the new owner.
- (b) The written notification shall be sufficient to transfer the permit to the new owner by an administrative amendment pursuant to 326 IAC 2-8-10.

- (c) IDEM, OAM shall reserve the right to issue a new permit.

B.27 Annual Fee Payment [326 IAC 2-8-4(6)] [326 IAC 2-8-16]

- (a) The Permittee shall pay annual fees to IDEM, OAM, within thirty (30) calendar days of receipt of a billing, or in a time period consistent with the fee schedule established in 326 IAC 2-8-16.
- (b) Failure to pay may result in administrative enforcement action, or revocation of this permit.
- (c) If the Permittee does not receive a bill from IDEM, OAM, thirty (30) calendar days before the due date, the Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAM, Technical Support and Modeling Section), to determine the appropriate permit fee. The applicable fee is due April 1 of each year.

B.28 Enhanced New Source Review [326 IAC 2]

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

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

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

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

- (a) Pursuant to 326 IAC 2-8:
 - (1) The potential to emit any regulated pollutant from the entire source shall be limited to less than one-hundred (100) tons per three hundred sixty-five (365) consecutive day period. This limitation shall also make the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) and 326 IAC 2-3 (Emission Offset) not applicable;
 - (2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per three hundred sixty-five (365) consecutive day period; and
 - (3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per three hundred sixty-five (365) consecutive day period.
- (b) 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 that the source's potential to emit does not exceed the above specified limits.
- (c) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Visible Emissions Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions) and Section D of this permit, visible emissions shall meet the following, unless otherwise stated in this permit:

- (a) Visible emissions shall not exceed an average of thirty percent (30%) opacity in twenty-four (24) consecutive readings as determined by 326 IAC 5-1-4,
- (b) Visible emissions shall not exceed sixty percent (60%) opacity for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) 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 accord-

ance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3(a)(2)(A) and (B) are not federally enforceable.

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

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

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

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

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

Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions shall be controlled according to the plan submitted on January 8, 1998. The plan consists of:

This rule requires a fugitive dust plan to be submitted. The plan was submitted on January 8, 1998, was reviewed, and approved and consists of the following:

- (a) unpaved roads shall be controlled by one or more of the following:
 - (1) treating with water on an as-needed basis.
 - (2) paving with asphalt.
 - (3) treating with emulsified asphalt on an as-needed basis.
 - (4) double chip and seal the road surface on an as-needed basis.
- (b) dust from storage piles shall be controlled by one or more of the following measures:
 - (1) treating the stockpile area with water on an as-needed basis.
 - (2) treating the stockpiles with water on an as-needed basis.
 - (3) maintain minimum size and number of aggregate storage piles.
 - (4) treating stockpiles with emulsified asphalt on an as needed basis.
- (c) dust from outdoor conveying of aggregates shall be controlled by applying water at the feed and intermediate points on an as needed basis.
- (d) dust from the transferring of aggregates shall be controlled by one or more of the following measures:
 - (1) minimize the vehicular distance between transfer points and enclose transfer points.
 - (2) apply water to transfer points on an as-needed basis.

- (3) enclose the transfer points.
- (e) dust from the transportation of aggregate by truck, front end loader, etc., shall be controlled by one or more of the following measures:
 - (1) tarping aggregate hauling vehicles.
 - (2) maintain 10 mile per hour speed limits.
 - (3) maintain vehicle bodies in a condition that prevents leakage.
 - (4) spray aggregates with water.
- (f) dust from the loading and unloading of aggregates shall be controlled by one or more of the following measures:
 - (1) reduce free fall distance to a minimum.
 - (2) reduce the rate of discharge.
 - (3) spray water on aggregates on an as-needed basis.

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

All air pollution control equipment listed in this permit shall be operated at all times that the emission unit vented to the control equipment is in operation, as described in Section D of this permit.

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

- (a) The Permittee shall comply with the 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.
- (b) Any change in an applicable stack shall require prior approval from IDEM, OAM.

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

Prior to the commencement of any demolition or renovation activities, the Permittee shall use an Indiana accredited asbestos inspector to inspect thoroughly the affected facility or part of the facility where the demolition or renovation operation will occur for the presence of asbestos, including Category I and Category II nonfriable asbestos containing material. The requirement that the inspector be accredited is federally enforceable.

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

C.10 Performance Testing [326 IAC 3-2.1]

- (a) All testing shall be performed according to the provisions of 326 IAC 3-2.1 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing methods approved by the IDEM, OAM.

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

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

no later than thirty-five (35) days before the intended test date.

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

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)]

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

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

in writing no more than ninety (90) days after receipt of this permit, with full justification of the reasons for inability to meet this date and a schedule which it expects to meet. If a denial of the request is not received before the monitoring is fully implemented, the schedule shall be deemed approved.

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

C.12 Maintenance of Monitoring Equipment [326 IAC 2-8-4(3)(A)(iii)]

- (a) In the event that a breakdown of the monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less than one (1) hour until such time as the continuous monitor is back in operation.
- (b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

C.13 Monitoring Methods [326 IAC 3]

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

C.14 Pressure Gauge Specifications

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

C.15 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18-1] [40 CFR 61.140]

(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

(b) The Permittee shall insure 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

(3) Waste disposal site.

(c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).

(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

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

(e) Procedures for Asbestos Emission Control

The Permittee shall comply with the emission control procedures in 326 IAC 14-10-4 and

40 CFR 61.145(c). Per 326 IAC 14-10-4 emission control requirements are mandatory for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

- (f) Indiana Accredited Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement that the inspector be accredited is federally enforceable.

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

C.16 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68.215]

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

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

C.17 Compliance Monitoring Plan - Failure to Take Corrective Action [326 IAC 2-8-4(3)]

- (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:
- (1) This condition;
 - (2) The Compliance Determination Requirements in Section D of this permit;
 - (3) The Compliance Monitoring Requirements in Section D of this permit;
 - (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and
 - (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of

this permit. CRP's shall be submitted to IDEM, OAM upon request and shall be subject to review and approval by IDEM, OAM. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of:

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

C.18 Actions Related to Noncompliance Demonstrated by a Stack Test

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAM, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected facility while the corrective actions are being implemented. IDEM, OAM shall notify the Permittee within

thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAM within thirty (30) days of receipt of the notice of deficiency. IDEM, OAM reserves the authority to use enforcement activities to resolve noncompliant stack tests.

- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAM that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAM may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate permit conditions may be grounds for immediate revocation of the permit to operate the affected facility.

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

C.19 Monitoring Data Availability

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

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

- (a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location and available within one (1) hour upon verbal request of an IDEM, OAM representative, for a minimum of three (3) years. They may be stored elsewhere for the remaining two (2) years providing they are made available within thirty (30) days after written request.
- (b) Records of required monitoring information shall include, where applicable:

- (1) The date, place, and time of sampling or measurements;
 - (2) The dates analyses were performed;
 - (3) The company or entity performing the analyses;
 - (4) The analytic techniques or methods used;
 - (5) The results of such analyses; and
 - (6) The operating conditions existing at the time of sampling or measurement.
- (c) Support information shall include, where applicable:
- (1) Copies of all reports required by this permit;
 - (2) All original strip chart recordings for continuous monitoring instrumentation;
 - (3) All calibration and maintenance records;
 - (4) Records of preventive maintenance shall be sufficient to demonstrate that improper maintenance did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.
- (d) All record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

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

- (a) To affirm that the source has met all the requirements stated in this permit the source shall submit a Quality Compliance Report. Any deviation from the requirements and the date(s) of each deviation must be reported.
- (b) The report required in (a) of this condition and reports required by conditions in section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified

mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.

- (d) Unless otherwise specified in this permit, any quarterly report shall be submitted within thirty (30) days of the end of the reporting period.
 - (e) All instances of deviations must be clearly identified in such reports. A reportable deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:
 - (1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or
 - (2) An emergency as defined in 326 IAC 2-7-1(12); or
 - (3) Failure to implement elements of the Preventive Maintenance Plan unless lack of maintenance has caused or contributed to a deviation.
 - (4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.
- A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred or failure to monitor or record the required compliance monitoring is a deviation.
- (f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.
 - (g) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

Portable Source Requirement

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

- (a) This permit is approved for operation in all areas of Indiana except in severe nonattainment areas for ozone (i.e., Lake and Porter Counties). This determination is based on the requirements Prevention of Significant Deterioration in 326 IAC 2-2 and 40 CFR 52.21, and Emission Offset requirements in 326 IAC 2-3. A thirty (30) day advance notice of relocation must be given to IDEM, OAM and a "Relocation Site Approval" letter must be obtained before relocating.
- (b) The Permittee shall also notify the applicable local air pollution control agency when relocating to or from one of the following:
 - (1) Madison County - (Anderson Office of Air Management)
 - (2) City of Evansville plus four (4) miles beyond the corporate limits but not outside

- Vanderburgh County - (Evansville EPA)
- (3) City of Gary - (Gary Division of Air Pollution)
 - (4) City of Hammond - (Hammond Department of Environmental Management)
 - (5) Marion County - (Indianapolis Air Pollution Control Agency)
 - (6) St. Joseph County - (St. Joseph County Health Department)
 - (7) Vigo County - (Vigo County Air Pollution Department)
- (c) That a valid operation permit consists of this document and any subsequent "Relocation Site Approval" letter specifying the current location of the portable plant.

Stratospheric Ozone Protection

C.23 Compliance with 40 CFR 82 and 326 IAC 22-1

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

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

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

Construction Conditions [326 IAC 2-1-3.2]

General Construction Conditions

- C.24 This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

Effective Date of the Permit

- C.25 Pursuant to IC 13-15-5-3, this section of this permit becomes effective upon its issuance.

- C.26 Pursuant to 326 IAC 2-1-9(b) (Revocation of Permits), IDEM, OAM may revoke this section of the approved permit if construction is not commenced within eighteen (18) months after receipt of this permit or if construction is suspended for a continuous period of one (1) year or more.
- C.27 All requirements of these construction conditions shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

First Time Operation Permit

- C.28 This document shall also become the first-time operation permit for the facilities under this section of this permit, pursuant to 326 IAC 2-1-4 (Operating Permits) when, prior to start of operation, the following requirements are met:

- (a) The attached affidavit of construction shall be submitted to:

Indiana Department of Environmental Management
Permit Administration & Development Section, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

verifying that the facilities were constructed as proposed in the application. The facilities covered in this section of this permit may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM.

- (b) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.
- (c) The Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section and attach it to this permit.

SECTION D.1 FACILITY CONDITIONS

- (a) One (1) hot mix drum mixer, exhausting through stack SV-1, equipped with a baghouse for particulate matter control, capacity: 400 tons per hour.
 - (b) One (1) 120 million British thermal units per hour burner firing waste oil as a primary fuel and #2 distillate oil, #4 distillate oil, natural gas and butane gas as backup fuels, exhausting through stack SV-1.
 - (c) One (1) 2.15 million British thermal units per hour hot oil heater firing #2 fuel oil as a primary fuel with natural gas and propane gas as backup fuels, exhausting through stack SV-2.
 - (d) Two (2) reciprocating internal combustion engines firing #2 fuel oil, exhausting through stacks SV-7 and SV-8, capacity: 545 and 50 kilowatts (5.473 and 0.505 million British thermal units per hour), respectively.
- This portable hot mix drum asphalt manufacturing source also produces cold mix cutback asphalt.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Sulfur Dioxide (SO₂) [326 IAC 7-1.1-1] [326 IAC 12-1]

- (a) The input of waste oil to the aggregate dryer burner shall be limited to 1,281,088 gallons per 365-day period, rolled on a daily basis. During the first twelve (12) months of operation, the input of waste oil or its equivalent shall be limited as specified in the table below. This fuel limit is equivalent to 94.16 tons per year of SO₂.

Month	Usage Limit (Gallons per month)
January	20,000
February	0
March	49,000
April	110,000
May	160,000
June	200,000
July	200,000
August	160,000
September	160,000
October	120,000
November	52,088
December	50,000
Total	1,281,088

- (b) The sulfur content of the waste oil shall not exceed 1.0% by weight.

- (c) For purposes of determining compliance based on SO₂ emissions each gallon of #2 distillate oil shall be equivalent to 0.4830 gallons of waste oil, each gallon of #4 distillate oil burned shall be equivalent to 0.5102 gallons of waste oil, each hour of operation of the 0.505 million British thermal units per hour engine shall be equivalent to 0.995 gallons of waste oil and each hour of operation of the 5.473 million British thermal units per hour engine shall be equivalent to 18.79 gallons of waste oil.
- (d) The sulfur content of the #2 and #4 distillate oils shall not exceed 0.5 percent by weight.

D.1.2 Nitrogen Oxides (NO_x)

- (a) The input of natural gas to the aggregate dryer burner shall be limited to 352.9 million cubic feet per 365-day period, rolled on a daily basis. During the first twelve (12) months of operation, the input of natural gas or its equivalent shall be limited as specified in the table below. This fuel limit is equivalent to 97.05 tons per year of NO_x.

Month	Usage Limit (Million Cubic Feet Per Month)
January	5.5
February	0.0
March	13.5
April	30.3
May	44.1
June	55.1
July	55.1
August	44.1
September	44.1
October	33.0
November	14.3
December	13.8
Total	352.9

- (b) For purposes of determining compliance based on NO_x emissions every 1,000 gallons of butane shall be equivalent to 0.0382 million cubic feet of natural gas, every 1,000 gallons of waste oil shall be equivalent to 0.0345 million cubic feet of natural gas, every 1,000 gallons of #2 distillate oil shall be equivalent to 0.0364 million cubic feet of natural gas, every 1,000 gallons of #4 distillate oil shall be equivalent to 0.1218 million cubic feet of natural gas and each hour of operation of the 0.505 million British thermal units per hour engine shall be equivalent to 0.004 million cubic feet of natural gas and each hour of operation of the 5.473 million British thermal units per hour engine shall be equivalent to 0.0308 million cubic feet of natural gas.

D.1.3 Particulate Matter (PM) [326 IAC 6-1-2]

- (a) Pursuant to 326 IAC 6-1-2 (Nonattainment Area Particulate Limitations), the PM from the asphalt plant shall not exceed 0.03 grains per dry standard cubic foot. This emission

limitation is equivalent to 13.2 pounds per hour at a flow rate of 70,000 actual cubic feet per minute and an exhaust temperature of 260 degrees Fahrenheit.

- (b) Pursuant to 326 IAC 2-3, the particulate matter emissions from the dryer burner shall be limited to 42.9 tons per year.

D.1.4 Particulate Matter (PM) [40 CFR 60.90 to 60.93, Subpart I]
Pursuant to the New Source Performance Standards, 326 IAC 12 (40 CFR 60.90 to 60.93, Subpart I), particulate matter emissions from the aggregate dryer/mixer shall not exceed 0.040 grains per dry standard cubic foot equivalent to 16.8 pounds per hour at a flow rate of 70,000 actual cubic feet per minute and an exhaust temperature of 260 degrees Fahrenheit. Compliance with this limit will also satisfy 326 IAC 6-3-2.

D.1.5 Opacity [40 CFR 60.90 to 60.93, Subpart I]
Pursuant to the New Source Performance Standards, 326 IAC 12 (40 CFR 60.90 to 60.93, Subpart I), visible emissions from the plant shall not exceed 20 percent opacity. Compliance with this limit will also satisfy 326 IAC 5-1.

D.1.6 Particulate Matter (PM₁₀)
Pursuant to 326 IAC 2-8-4, PM₁₀ emissions from the aggregate dryer/mixer shall not exceed 17.8 pounds per hour (78.2 tons per year). Compliance with this limit will satisfy 326 IAC 2-8-4. Therefore, the Part 70 rules (326 IAC 2-7) do not apply.

D.1.7 Volatile Organic Compounds (VOC)
The VOC usage in the production of cold mix cutback asphalt shall be limited to 94.9 tons per year. This is equivalent to 2,187 tons of liquid binder used per year in the production of cold mix asphalt based upon seven (7.0) percent diluent present in the asphalt. Due to the above limit 325 IAC 2-3 (Emission Offset) and the Part 70 rules (326 IAC 2-7) do not apply.

D.1.8 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.1.9 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 aggregate dryer and its baghouse control device.

Compliance Determination Requirements

D.1.10 Testing Requirements [326 IAC 2-8-5(1)]
During the period between 60 and 180 days after issuance of this permit, the Permittee shall perform PM and PM₁₀ testing utilizing Methods 5 or 17 (40 CFR 60, Appendix A) for PM and Methods 201

or 201A and 202 (40 CFR 51, Appendix M) for PM_{10} , or other methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. PM_{10} includes filterable and condensable PM_{10} .

D.1.11 Used Oil Requirements

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

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

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

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

D.1.12 Particulate Matter (PM)

The baghouse for PM control shall be in operation at all times when the aggregate drum dryer and/or aggregate dryer burner are in operation and exhausting to the outside atmosphere.

D.1.13 Visible Emissions Notations

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

D.1.14 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouse used in conjunction

with the aggregate dryer, at least once daily when the aggregate drying process is in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 1.0 and 9.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

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

D.1.15 Baghouse Inspections

An inspection shall be performed each calendar quarter of all bags controlling the aggregate drying operation when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting indoors. All defective bags shall be replaced.

D.1.16 Broken Bag or Failure Detection

In the event that bag failure has been observed:

- (a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced.
- (b) Based upon the findings of the inspection, any additional response steps will be devised within eight (8) hours of discovery and will include a timetable for completion.

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

D.1.17 Cutback Asphalt Production Rate

The Permittee shall maintain monthly 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.1.18 Operational Parameters

The Permittee shall maintain daily records at the stationary source of the following values:

- (a) Amount of each fuel used;
- (b) The records for fuel oil shall contain a minimum of the following:
 - (1) Average sulfur content of any fuel oil used;
 - (2) Average higher heating value of any fuel oil used;
 - (3) Average sulfur dioxide emission rate (expressed in pounds per million British thermal unit);

- (4) A certification, signed by the owner or operator, that the records of the fuel supplier certifications represent all of the fuel combusted during the period; and
 - (5) Regular fuel sampling and analysis performed as specified in 326 IAC 3-3-4, or fuel supplier certifications containing, as a minimum, the following:
 - (A) The name of the oil supplier;
 - (B) A statement from the oil supplier that certifies the sulfur content of the fuel oil; and
 - (C) The Permittee shall retain records of all recording/monitoring data and support information for a period of five (5) years, or longer if specified elsewhere in this permit, from the date of the monitoring sample, measurement, or report. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit.
- (c) Amount of hours of operation of each of the two (2) reciprocating internal combustion engines.

D.1.19 Quarterly Reporting

Quarterly summary to document compliance with operation condition numbers D.1.1, D1.2 and D.1.7 shall be submitted to the address listed in Section C - General Reporting Requirements, using the enclosed forms or their equivalent, within thirty (30) days after the end of the quarter being reported. These reports shall include the amounts of each fuel used each month and the fuel oil's average sulfur content in the quarter. All records and reports shall use calendar months. Records of sulfur content and higher heating value shall be determined by information as obtained by the vendor.

SECTION D.2 FACILITY OPERATION CONDITIONS

- (e) Two (2) liquid asphalt storage tanks, exhausting through stacks SV-3 and SV-4, capacity: 35,000 and 20,000 gallons, respectively.
- (f) One (1) waste oil storage tank for burner fuel, exhausting through stacks SV-5, capacity: 15,000 gallons.
- (g) One (1) fuel oil storage tank for hot oil heater fuel, exhausting through stacks SV-6, capacity: 420 gallons.
- (h) Two (2) storage tanks for the #2 distillate oil internal combustion engine fuel, exhausting through stacks SV-9 and SV-10, capacity: 160 and 224 gallons, respectively.

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

D.2.1 Record Keeping

The two (2) liquid asphalt storage tanks and one (1) 15,000 gallon fuel oil storage tank shall comply with the New Source Performance Standard, 326 IAC 12, (40 CFR Part 60.110b, Subpart Kb). These tanks are subject to only 40 CFR Part 60.116b, paragraphs (a) and (b) which requires the Permittee to maintain accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. Records shall be kept for the life of the storage tanks.

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

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

Source Name: Rieth-Riley Construction Co., Inc.
Source Address: Portable
Mailing Address: P.O. Box 477, Goshen, IN 46527-0477
FESOP No.: F 145-9355-05166

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

Please check what document is being certified:

- 9 Annual Compliance Certification Letter
- 9 Emergency/Deviation Occurrence Reporting Form
- 9 Test Result (specify) _____
- 9 Report (specify) _____
- 9 Notification (specify) _____
- 9 Other (specify) _____

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

Signature:

Printed Name:

Title/Position:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION
P.O. Box 6015
100 North Senate Avenue
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967**

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

Source Name: Rieth-Riley Construction Co., Inc.
Source Address: Portable
Mailing Address: P.O. Box 477, Goshen, IN 46527-0477
FESOP No.: F 145-9355-05166

This form consists of 2 pages

Page 1 of 2

Check either No. 1 or No.2	
9	1. This is an emergency as defined in 326 IAC 2-7-1(12) <ul style="list-style-type: none">c The Permittee must notify the Office of Air Management (OAM), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); andc The Permittee must submit notice in writing or by facsimile within two (2) days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16
9	2. This is a deviation, reportable per 326 IAC 2-7-5(3)(c) <ul style="list-style-type: none">c The Permittee must submit notice in writing within ten (10) calendar days

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

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

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

Page 2 of 2

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

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

Rieth - Riley Construction Co., Inc.
Portable
Permit Reviewer:MES

Page 40 of 44
OP No. F 145-9355-05166

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF AIR MANAGEMENT
 COMPLIANCE DATA SECTION
 FESOP Quarterly Report**

Source Name: Rieth-Riley Construction Co., Inc.
 Source Address: Portable
 Mailing Address: P.O. Box 477, Goshen, IN 46527-0477
 FESOP No.: F 145-9355-05166
 Facilities: One (1) 120 million British thermal units per hour dryer/burner and two (2) engines
 Parameter: SO₂ and NO_x
 Limit: First 365-day fuel limits as specified below with equivalency as noted: 1 gallon #2 oil = 0.483 gallons of waste oil, 1 gallon #4 oil = 0.5102 gallon of waste oil, 1 hour of 0.505 MMBtu/hr engine operation = 0.995 gallon of waste oil and 1 hour of 5.473 MMBtu/hr engine operation = 18.79 gallons of waste oil. Also, 1 kilogallon #2 oil = 0.0364 MMCF of natural gas, 1 kilogallon #4 oil = 0.1218 MMCF of natural gas, 1 kilogallon of butane = 0.0382 MMCF of natural gas, 1 hour of 0.505 MMBtu/hr engine operation = 0.004 MMCF of natural gas, and 1 hour of 5.473 MMBtu/hr engine operation = 0.0308 MMCF of natural gas.

Month	Natural Gas or Equivalent (MMCF)		Waste Oil or Equivalent (gallons)	
	Limit	Usage	Limit	Usage
January	5.5		20,000	
February	0.0		0	
March	13.5		49,000	
April	30.3		110,000	
May	44.1		160,000	
June	55.1		200,000	
July	55.1		200,000	
August	44.1		160,000	
September	44.1		160,000	
October	33.0		120,000	
November	14.3		52,088	
December	13.8		50,000	

- 9 No deviation occurred in this quarter.
- 9 Deviation/s occurred in this quarter.

Deviation has been reported on: _____
 Submitted by: _____
 Title/Position: _____
 Signature: _____
 Date: _____

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF AIR MANAGEMENT
 COMPLIANCE DATA SECTION
 FESOP Monthly Report Submitted Quarterly**

Source Name: Rieth-Riley Construction Co., Inc.
 Source Address: Portable
 Mailing Address: P.O. Box 477, Goshen, IN 46527-0477
 FESOP No.: F 145-9355-05166
 Facilities: One (1) 120 million British thermal units per hour dryer/burner & two (2) engines
 Parameters: Sulfur dioxide
 Limits: Waste oil = 1,281,088 gallons per 365-day rolling total. Equivalent to an SO₂ emission limit of 94.16 tons per year. 1 gallon #2 oil = 0.483 gallons of waste oil, 1 gallon #4 oil = 0.5102 gallon of waste oil, 1 hour of 0.505 MMBtu/hr engine operation = 0.995 gallon of waste oil and 1 hour of 5.473 MMBtu/hr engine operation = 18.79 gallons of waste oil.

Month _____

Day	Waste Oil Equivalent This Day (Gallons)	Waste Oil Equivalent Last 365 Days (Gallons)	Average Sulfur Content (%)	Day	Waste Oil Equivalent This Day (Gallons)	Waste Oil Equivalent Last 365 Days (Gallons)	Average Sulfur Content (%)
1				16			
2				17			
3				18			
4				19			
5				20			
6				21			
7				22			
8				23			
9				24			
10				25			
11				26			
12				27			
13				28			
14				29			
15				30			
16				31			

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

Submitted by: _____

Title/Position: _____

Rieth - Riley Construction Co., Inc.
Portable
Permit Reviewer:MES

Page 43 of 44
OP No. F 145-9355-05166

Signature: _____
Date: _____

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

FESOP Monthly Report Submitted Quarterly

Source Name: Rieth-Riley Construction Co., Inc.
 Source Address: Portable
 Mailing Address: P.O. Box 477, Goshen, IN 46527-0477
 FESOP No.: F 145-9355-05166
 Facilities: One (1) 120 million British thermal units per hour dryer/burner and two (2) engines
 Parameters: NOx
 Limits: Natural Gas = 352.9 per 365-day rolling total. Equivalent to an NOx emission limit of 97.05 tons per year. 1 kilogallon #2 oil = 0.0364 MMCF of natural gas, 1 kilogallon #4 oil = 0.1218 MMCF of natural gas, 1 kilogallon of butane = 0.0382 MMCF of natural gas, 1 hour of 0.505 MMBtu/hr engine operation = 0.004 MMCF of natural gas, and 1 hour of 5.473 MMBtu/hr engine operation = 0.0308 MMCF of natural gas.

Month _____

Day	Natural Gas Equivalent This Day (MMCF)	Natural Gas Equivalent Last 365 Days (MMCF)	Day	Natural Gas Equivalent This Day (MMCF)	Natural Gas Equivalent Last 365 Days (MMCF)
1			16		
2			17		
3			18		
4			19		
5			20		
6			21		
7			22		
8			23		
9			24		
10			25		
11			26		
12			27		
13			28		
14			29		
15			30		
16			31		

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by:

Title/Position: _____

Signature: _____

Date: _____

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

FESOP Quarterly Report

Source Name: Rieth-Riley Construction Co., Inc.
Source Address: Portable
Mailing Address: P.O. Box 477, Goshen, IN 46527-0477
FESOP No.: F 145-9355-05166
Facility: Production of cutback asphalt
Parameter: VOC
Limit: 2,187 tons per year of liquid binder
Equivalent to total source VOC emission of 94.9 tons per year

Year: _____

Month	Liquid Binder (tons)
January	
February	
March	
April	
May	
June	
July	
August	
September	
October	
November	
December	

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by: _____

Rieth - Riley Construction Co., Inc.
Portable
Permit Reviewer:MES

Page 46 of 44
OP No. F 145-9355-05166

Title/Position: _____
Signature: _____
Date: _____

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

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

Source Background And Description

Source Name: Rieth - Riley Construction Co., Inc.
Source Location: Initially located at 7390 East County Road 650 South, Shelbyville, IN 46176
County: Shelby
SIC Code: 2951
Operation Permit No.: F 145-9355-05166
Permit Reviewer: Frank P. Castelli

The Office of Air Management (OAM) has reviewed a Federally Enforceable State Operating Permit (FESOP) application from Rieth - Riley Construction Co., Inc. relating to the operation of a portable hot mix drum asphalt manufacturing source. This portable plant is scheduled to be initially located at 7390 East County Road 650 South, Shelbyville, Indiana 46176. The plant is scheduled to be constructed during April 1998. This proposed permit contains fuel use limits as well as limits on the production of cut-back asphalt. These limits are necessary to comply with the emission limits of the FESOP. The applicant has agreed not to relocate the proposed portable asphalt manufacturing source to Lake or Porter Counties.

Permitted Emission Units and Pollution Control Equipment

There are no permitted emission units and pollution control devices at this source during this review.

Unpermitted Emission Units and Pollution Control Equipment

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

Emission Units and Pollution Control Equipment Under Enhanced New Source Review (ENSR)

The application includes information relating to the construction and operation of a portable hot mix drum asphalt manufacturing source, consisting of the following equipment:

- (a) One (1) hot mix drum mixer, exhausting through stack SV-1, equipped with a baghouse for particulate matter control, capacity: 400 tons per hour.
- (b) One (1) 120 million British thermal units per hour burner firing waste oil as a primary fuel and #2 distillate oil, #4 distillate oil, natural gas and butane gas as backup fuels, exhausting through stack SV-1.
- (c) One (1) 2.15 million British thermal units per hour hot oil heater firing #2 fuel oil as a primary fuel with natural gas and propane gas as backup fuels, exhausting through stack SV-2.
- (d) Two (2) reciprocating internal combustion engines firing #2 fuel oil, exhausting through stacks SV-7 and SV-8, capacity: 545 and 50 kilowatts (5.473 and 0.505 million British

thermal units per hour), respectively.

- (e) Two (2) liquid asphalt storage tanks, exhausting through stacks SV-3 and SV-4, capacity: 35,000 and 20,000 gallons, respectively.
- (f) One (1) waste oil storage tank for burner fuel, exhausting through stack SV-5, capacity: 15,000 gallons.
- (g) One (1) fuel oil storage tank for hot oil heater fuel, exhausting through stack SV-6, capacity: 420 gallons.
- (h) Two (2) storage tanks for the #2 distillate oil internal combustion engine fuel, exhausting through stacks SV-9 and SV-10, capacity: 160 and 224 gallons, respectively.

This portable hot mix batch asphalt manufacturing source also produces cold mix cutback asphalt.

Insignificant Activities

- (a) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons.
- (b) 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.
- (c) The following VOC and HAP storage containers: Vessels storing lubricating oil, hydraulic oils, machining oils, and machining fluids.

Enforcement Issue

There are no Enforcement actions pending.

Recommendation

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

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

An administratively complete FESOP application for the purposes of this review was received on January 8, 1998. Additional information regarding the change of the initial location of the plant from Elkhart County to Shelby County was received on February 2, 1998.

Emissions Calculations

See Appendix A: Emissions Calculations for detailed calculations see pages 1 through 14 of 14 of Appendix A.

Potential Emissions

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

Pollutant	Potential Emissions (tons/year)
PM	33,750
PM ₁₀	7,980
SO ₂	570
VOC	745
CO	62.4
NO _x	375

Note: For the purpose of determining Title V applicability for particulates, PM₁₀, not PM, is the regulated pollutant in consideration.

See attached spreadsheets for detailed calculations.

HAP	PTE (tons per year)
TOTAL HAPs	10.2

See attached spreadsheets for detailed calculations, page 5 of 13 of Appendix A.

- (a) The potential emissions (as defined in the Indiana Rule) of PM₁₀, NO_x, SO₂ and VOC are equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) This source, otherwise required to obtain a Title V permit, has agreed to accept a permit with federally enforceable limits that restrict its PTE to below the Title V emission levels. Therefore, this source will be issued a Federally Enforceable State Operating Permit (FESOP), pursuant to 326 IAC 2-8.
- (c) Therefore, this source is subject to 326 IAC 2-1 and this permit satisfies these Construction Permit requirements.

Limited Potential To Emit

- (a) The source has accepted federally enforceable limits on the potential to emit sulfur dioxide, nitrogen oxides and volatile organic compounds of 99 tons per year and has also accepted a limit of 99.0 tons per year of PM₁₀.

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

Process/facility	Limited PTE (tons per year)						
	PM	PM ₁₀	SO ₂	VOC	CO	NO _x	HAPS
Drum dryer/burner	42.9	9.91	94.16 *	0.640	7.06	97.05 *	10.2
Two (2) reciprocating engines	2.36	2.06	*included in above limit	2.89	21.5	*included in above limit	0.00
Hot oil heater	0.136	0.129	4.85	0.031	0.341	1.96	0.00
Conveying, handling	4.92	0.492	0.00	0.00	0.00	0.00	0.00
Unpaved Roads	42.6	14.9	0.00	0.00	0.00	0.00	0.00
Storage piles	0.423	0.148	0.00	0.00	0.00	0.00	0.00
Cutback asphalt	0.00	0.00	0.00	94.9	0.00	0.00	0.00
Insignificant activities	5.0	3.0	0.00	0.500	0.00	0.00	0.500
Total Emissions	98.4 (99.0)	30.9 (99.0)	99.0	99.0	28.9	99.0	10.7

- (1) The applicant has accepted a waste oil fuel limit to the dryer/burner of 1,281,088 gallons per year which is equivalent to an SO₂ limit of 94.16 tons per year (see page 14 of 14 in Appendix A). The SO₂ emissions from the two (2) engines have been accounted for in the limit by equivalency by the number of hours of operation. The applicant has stated that keeping track of the number of hours of operation of the engines is preferable to keeping track of amount of the #2 distillate oil fired by the engines. The full SO₂ potential emission rate of 4.85 tons per year from the hot oil heater has been assumed in computing the limits (see page 1 of 14 in Appendix A).
- (2) Similarly, the applicant has accepted a natural gas fuel limit to the dryer/burner of 352.9 million cubic feet per year which is equivalent to an NO_x limit of 97.05 tons per year (see page 12 of 14 in Appendix A). The NO_x emissions from the two (2) engines have been accounted for in the limit by equivalency by the number of hours of operation and CO, VOC, PM and PM₁₀ have had the full potential emissions listed for the engines. The full NO_x potential emission rate of 1.96 tons per year from the hot oil heater has been assumed in computing the limits (see page 2 of 14 in Appendix A).
- (3) The applicant has also acceptable a liquid binder usage limit for the production of cold mix cutback asphalt of 2,187 tons per year which is equivalent to VOC emissions of 94.9 tons per year (see page 14 of 14 in Appendix A).
- (4) Due to these limits, the Part 70 Permit Program (326 IAC 2-7) rules do not apply.

- (5) The overall source PM and PM₁₀ emission limits (in parentheses) are 99.0 tons per year to allow relocation of this portable asphalt manufacturing source to any area designated as non-attainment for total suspended particulate.

County Attainment Status

The source is initially located in Shelby County.

Pollutant	Status
TSP	attainment
PM ₁₀	attainment
SO ₂	attainment
NO ₂	attainment
Ozone	attainment
CO	attainment
Lead	attainment

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

Portable Source

- (a) Initial Location

This is a portable source, and its initial location will be at 7390 East County Road 650 South, Shelbyville, IN 46176.

- (b) PSD and Emission Offset Requirements

The emissions from this portable source were reviewed both under the requirements of the Prevention of Significant Deterioration (PSD), 326 IAC 2-2, 40 CFR 52.21, and Emission Offset, 326 IAC 2-3.

- (c) Fugitive Emissions

Since there is an applicable New Source Performance Standards that was in effect on August 7, 1980, the fugitive particulate emissions are counted toward determination of PSD and Emission Offset applicability.

Federal Rule Applicability

- (a) The hot mix drum asphalt manufacturing source is subject to the New Source Performance Standard, 326 IAC 12, (40 CFR Part 60.90, Subpart I. Attached is a copy of the federal

rule. Pursuant to NSPS, the following apply to this facility:

- (1) performance tests required as specified in this Subpart and as outlined in Part 60.8 (copy enclosed).
- (2) on or after the date on which the performance tests are completed, no owner or operator subject to the provisions of Subpart I shall discharge into the atmosphere from any affected facility any gases which:
 - (i) contain particulate matter in excess of 0.04 grains per dry standard cubic foot.
 - (ii) exhibit 20 percent opacity, or greater.
- (b) The 35,000 gallon and 20,000 gallon asphalt storage tanks , known as Tanks 1 and 2, as well as the 15,000 gallon waste oil storage tank, known as Tank 3 proposed to be constructed in 1998, are all subject to the New Source Performance Standard, 326 IAC 12, (40 CFR Part 60.110b, Subpart Kb) since their capacities are greater than 40 cubic meters and they are proposed to be constructed after the July 23, 1984 applicability date. Since the materials to be stored in these tanks have a vapor pressures less than 15.0 kiloPascals, these tanks are subject to only 40 CFR Part 60.116b, paragraphs (a) and (b) which requires record keeping.
- (c) The 420 gallon fuel oil storage tank and the two (2) storage tanks for generator fuel with capacities of 160 and 224 gallons, respectively, are exempt from the requirements of NSPS Subpart Kb since their individual capacities are less than 40 cubic meters.
- (d) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP), 40 CFR Part 63, applicable to this source.

State Rule Applicability - Entire Source

326 IAC 2-1-3.4 (New Source Air Toxics Control)

This source is not a major source of HAPs because the potential emission rates of individual HAPs do not exceed 10 tons per year and potential emission rate of the total HAPs does not exceed 25 tons per year. Therefore, the requirements of 326 IAC 2-1-3.4 do not apply.

326 IAC 2-6 (Emission Reporting)

Since this source is portable, this source is subject to 326 IAC 2-6 (Emission Reporting), because it does emit more than ten (10) tons per year of VOC or NO_x.

326 IAC 5-1-2 (Visible Emission Limitations)

This rule requires the visible emissions from all operations not subject to NSPS Subpart I to meet the following since it is a portable source:

- (a) visible emissions shall not exceed an average of 30% opacity in 24 consecutive readings,

- (b) visible emissions shall not exceed 60% opacity for more than a cumulative total of 15 minutes (60 readings) in a 6 hour period.

326 IAC 6-4 (Fugitive Dust Emissions Limitations)

This rule requires that the source not generate fugitive dust to the extent that some portion of the material escapes beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located.

326 IAC 6-5 (Fugitive Particulate Emissions Limitations)

This rule requires a fugitive dust plan to be submitted. The plan was submitted on January 8, 1998, was reviewed, and approved and consists of the following:

- (a) unpaved roads shall be controlled by one or more of the following:
 - (1) treating with water on an as-needed basis.
 - (2) paving with asphalt.
 - (3) treating with emulsified asphalt on an as-needed basis.
 - (4) double chip and seal the road surface on an as-needed basis.
- (b) dust from storage piles shall be controlled by one or more of the following measures:
 - (1) treating the stockpile area with water on an as-needed basis.
 - (2) treating the stockpiles with water on an as-needed basis.
 - (3) maintain minimum size and number of aggregate storage piles.
 - (4) treating stockpiles with emulsified asphalt on an as needed basis.
- (c) dust from outdoor conveying of aggregates shall be controlled by applying water at the feed and intermediate points on an as needed basis.
- (d) dust from the transferring of aggregates shall be controlled by one or more of the following measures:
 - (1) minimize the vehicular distance between transfer points and enclose transfer points.
 - (2) apply water to transfer points on an as-needed basis.
 - (3) enclose the transfer points.
- (e) dust from the transportation of aggregate by truck, front end loader, etc., shall be controlled by one or more of the following measures:

- (1) tarping aggregate hauling vehicles.
 - (2) maintain 10 mile per hour speed limits.
 - (3) maintain vehicle bodies in a condition that prevents leakage.
 - (4) spray aggregates with water.
- (f) dust from the loading and unloading of aggregates shall be controlled by one or more of the following measures:
- (1) reduce free fall distance to a minimum.
 - (2) reduce the rate of discharge.
 - (3) spray water on aggregates on an as-needed basis.

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

This rule requires levels of sulfur dioxide emissions from the combustion of fuel oil not to exceed 0.5 pounds per million British thermal units heat input (the equivalent of 0.5 percent sulfur content at a higher heating value of 138,000 British thermal units per gallon) for distillate oils and not to exceed 1.6 pounds per million British thermal units heat input (the equivalent of 2.24 percent sulfur content at a higher heating value of 140,000 British thermal units per gallon) for residual oils. This source has agreed to limit the sulfur content of the distillate oils to 0.5% and the sulfur content of the residual oil to 1.0%, therefore complying with this rule.

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

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

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

No person shall cause or allow the use of asphalt emulsion containing more than seven 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

The applicant has agreed to limit the percent diluent in the liquid asphalt binder to seven (7) percent and therefore, the source will comply with this rule.

State Rule Applicability - Individual Facilities

326 IAC 6-1-2 (Particulate Emissions Limitations for Asphalt Concrete Plants constructed after June 11, 1973)

This rule requires that particulate matter emissions from the asphalt plant not exceed 0.03 grains per dry standard cubic foot. This equates to 57.8 tons per year of PM for the aggregate dryer. The controlled potential emission rate of the dryer is 42.9 tons per year and therefore this plant complies with this rule.

Compliance Requirements

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

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

The aggregate dryer/burner has applicable compliance monitoring conditions as specified below:

- (a) The total static pressure drop across the baghouse must be measured and recorded once per shift. The pressure drop for the unit shall be maintained within the range of 1.0 and 9.0 inches of water. If the pressure drop is outside this range for more than two consecutive readings, corrective action shall be taken in accordance with the Preventive Maintenance Plan.
- (b) Quarterly reports shall be submitted to OAM. These reports shall include the amounts of waste oil input to the aggregate dryer/burner per day as well as the waste oil equivalent of #2 and #4 distillate oils; and the amount natural gas input to the aggregate dryer/burner per day as well as the natural gas equivalent of waste oil, #2 and #4 distillate oils and butane.

These monitoring conditions are necessary because the baghouse for the aggregate dryer/burner must operate properly to ensure compliance with 326 IAC 12, (40 CFR Part 60.90, Subpart I) and 326 IAC 2-8 (FESOP), and the input fuels to the dryer/burner must be limited in order to ensure compliance with 326 IAC 2-8 (FESOP).

Air Toxic Emissions

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

- (a) This source will emit levels of air toxics less than those which constitute a major source

according to Section 112 of the 1990 Amendments to Clean Air Act.

- (b) See attached calculations for detailed air toxic calculations on page 5 of 13 of Appendix A.

Conclusion

The operation of this portable hot mix drum asphalt manufacturing source will be subject to the conditions of the attached proposed **FESOP No. F 145-9355-05166**.

Appendix A: FESOP Emission Calculations

Company Name: Rieth - Riley Construction Co., Inc.
 Plant Location: Portable
 County: Shelby
 FESOP No.: F 145-9355
 Plt. ID: 145-05166
 Date Received: January 8, 1998
 Permit Reviewer: Frank P. Castelli

I. Potential Emissions

A. Source emissions before controls

Hot Oil Heater on Oil

The following calculations determine the amount of emissions created by #2 & #1 distillate fuel oil @ 0.500 % sulfur, based on 8760 hours of use and EPA SCC #3-05-002-08:

			Fuel Usage (kgal/yr)	136.48
Pollutant:	<u>2.150</u> MMBtu/hr * 8760 hrs/yr	* Ef (lbs/1000 gal) = (tons/yr)		
	<u>138000.0</u> Btu/gal * 2000 lbs/ton			
P M:	2.0 lbs/1000 gal =	<u>0.136</u> tons/yr		
P M-10:	1.0 lbs/1000 gal =	<u>0.068</u> tons/yr		
S O x:	71.0 lbs/1000 gal =	<u>4.845</u> tons/yr *		
N O x:	20.0 lbs/1000 gal =	<u>1.365</u> tons/yr		
V O C:	0.2 lbs/1000 gal =	<u>0.014</u> tons/yr		
C O:	5.0 lbs/1000 gal =	<u>0.341</u> tons/yr		

***Worst Case Oil Heater So2 Emissions
 Subtract from 99.0 TPY FESOP Limits**

Hot Oil Heater on Natural 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, and EPA SCC #3-05-002-06:

			Fuel Usage (MMCF)/yr	18.83
Pollutant:	<u>2.150</u> MMBtu/hr * 8760 hrs/yr	* Ef (lbs/MMcf) = (tons/yr)		
	<u>1000</u> Btu/cf * 2000 lbs/ton			
P M:	13.7 lbs/MMcf =	<u>0.129</u> tons/yr		
P M-10:	13.7 lbs/MMcf =	<u>0.129</u> tons/yr		
S O x:	0.6 lbs/MMcf =	<u>0.006</u> tons/yr		
N O x:	140.0 lbs/MMcf =	<u>1.318</u> tons/yr		
V O C:	2.8 lbs/MMcf =	<u>0.026</u> tons/yr		
C O:	35.0 lbs/MMcf =	<u>0.330</u> tons/yr		

Hot Oil Heater on Propane

The following calculations determine the amount of emissions created by propane combustion, based on 8760 hours of use, AP-42 Ch. 1.4, and EPA SCC #3-05-002-06:

Pollutant:	<u>2.150 MMBtu/hr * 8760 hrs/yr * 1000000B * Ef (lb/kgal)</u>	= (tons/yr)	Sulfur content (gr/100cuft)	0.18
	91500 Btu/gal * 2000 lbs/ton * 1000 gal/kgal		Fuel Usage (kgal/yr)	205.84
P M:	0.6 lbs/kgal=	<u>0.062</u> tons/yr		
P M-10:	0.6 lbs/kgal=	<u>0.062</u> tons/yr		
S O x:	0.0 lbs/kgal=	<u>0.000</u> tons/yr		
N O x:	19.0 lbs/kgal=	<u>1.955</u> tons/yr *		
V O C:	0.3 lbs/kgal=	<u>0.031</u> tons/yr		
C O:	3.2 lbs/kgal=	<u>0.329</u> tons/yr		

***Worst Case Oil Heater NOx Emissions
 Subtract from 99.0 TPY FESOP Limits**

Dryer Burner (gas/<100MMBTU/low nox)

The following calculations determine the amount of emissions created by natural gas combustion, based on 8760 hours of use, AP-42 Ch. 1.4, and EPA SCC #3-05-002-06:

Pollutant:	<u>0.000 MMBtu/hr * 8760 hrs/yr</u>	* Ef (lbs/MMcf) = (tons/yr)	Fuel Usage (MMCF)/yr	0.00
	1000 Btu/cf * 2000 lbs/ton			
P M:	13.7 lbs/MMcf =	<u>0.0000</u> tons/yr		
P M-10:	13.7 lbs/MMcf =	<u>0.000</u> tons/yr		
S O x:	0.6 lbs/MMcf =	<u>0.000</u> tons/yr		
N O x:	81.0 lbs/MMcf =	<u>0.0000</u> tons/yr		
V O C:	2.8 lbs/MMcf =	<u>0.000</u> tons/yr		
C O:	61.0 lbs/MMcf =	<u>0.000</u> tons/yr		

Dryer Burner (gas/>100MMBTU/uncontrolled)

The following calculations determine the amount of emissions created by natural gas combustion, based on 8760 hours of use, AP-42 Ch. 1.4, and EPA SCC #3-05-002-06:

Pollutant:	<u>120.000 MMBtu/hr * 8760 hrs/yr</u>	* Ef (lbs/MMcf) (tons/yr)	Fuel Usage (MMCF)/yr	1051.20
	1000 Btu/cf * 2000 lbs/ton			
P M:	13.7 lbs/MMcf =	<u>7.20</u> tons/yr		
P M-10:	13.7 lbs/MMcf =	<u>7.20</u> tons/yr		
S O x:	0.6 lbs/MMcf =	<u>0.315</u> tons/yr		
N O x:	550.0 lbs/MMcf =	<u>289.08</u> tons/yr		
V O C:	2.8 lbs/MMcf =	<u>1.47</u> tons/yr		
C O:	40.0 lbs/MMcf =	<u>21.02</u> tons/yr		

Dryer Burner (gas/>100MMBTU/low nox)

The following calculations determine the amount of emissions created by natural gas combustion, based on 8760 hours of use, AP-42 Ch. 1.4, and EPA SCC #3-05-002-06:

Pollutant:	<u>0.000</u> MMBtu/hr * 8760 hrs/yr	* Ef (lbs/MMcf) (tons/yr)	Fuel Usage (MMCF/yr)	0.00
	1000 Btu/cf * 2000 lbs/ton			
P M:	13.7 lbs/MMcf =	<u>0.000</u> tons/yr		
P M-10:	13.7 lbs/MMcf =	<u>0.000</u> tons/yr		
S O x:	0.6 lbs/MMcf =	<u>0.000</u> tons/yr		
N O x:	81.0 lbs/MMcf =	<u>0.000</u> tons/yr		
V O C:	2.8 lbs/MMcf =	<u>0.000</u> tons/yr		
C O:	40.0 lb/MMcf =	<u>0.000</u> tons/yr		

(#2 & #1 oil) Dryer Burner

Fuel Usage (kgal/yr) 7617.39

The following calculations determine the amount of emissions created by #2 & #1 distillate fuel oil @ 0.500 % sulfur, based on 8760 hours of use and EPA SCC #3-05-002-08:

Pollutant:	<u>120.0</u> MMBtu/hr * 8760 hrs/yr	* Ef (lbs/1000 gal) = (tons/yr)
	138000.0 Btu/gal * 2000 lbs/ton	
P M:	2.0 lbs/1000 gal =	<u>7.62</u> tons/yr
P M-10:	1.0 lbs/1000 gal =	<u>3.81</u> tons/yr
S O x:	71.0 lbs/1000 gal =	<u>270.4</u> tons/yr
N O x:	20.0 lbs/1000 gal =	<u>76.2</u> tons/yr
V O C:	0.2 lbs/1000 gal =	<u>0.762</u> tons/yr
C O:	5.0 lbs/1000 gal =	<u>19.0</u> tons/yr

(#4 oil/ <100MMBTU)

The following calculations determine the amount of emissions created by #4 distillate fuel oil @ 0.500 % sulfur, based on 8760 hours of use and EPA SCC #3-05-002-08:

Pollutant:	<u>0.000</u> MMBtu/hr * 8760 hrs/yr	* Ef (lbs/1000 gal) = (tons/yr)	Fuel Usage (kgal/yr)	0.00
	146000.0 Btu/gal * 2000 lbs/ton			
P M:	7.0 lbs/1000 gal =	<u>0.000</u> tons/yr		
P M-10:	6.0 lbs/1000 gal =	<u>0.000</u> tons/yr		
S O x:	72.0 lbs/1000 gal =	<u>0.000</u> tons/yr		
N O x:	20.0 lbs/1000 gal =	<u>0.000</u> tons/yr		
V O C:	0.2 lbs/1000 gal =	<u>0.000</u> tons/yr		
C O:	5.0 lbs/1000 gal =	<u>0.000</u> tons/yr		

(#4 oil/ >100MMBTU)

The following calculations determine the amount of emissions created by #4 distillate fuel oil @ 0.500 % sulfur, based on 8760 hours of use and EPA SCC #3-05-002-08:

Pollutant:	<u>120.0</u> MMBtu/hr * 8760 hrs/yr	* Ef (lbs/1000 gal) = (tons/yr)	Fuel Usage (kgal/yr)	7617.39
	<u>138000.0</u> Btu/gal * 2000 lbs/ton			
P M:	7.0 lbs/1000 gal =	<u>26.7</u> tons/yr		
P M-10:	5.0 lbs/1000 gal =	<u>19.0</u> tons/yr		
S O x:	75.0 lbs/1000 gal =	<u>285.7</u> tons/yr		
N O x:	67.0 lbs/1000 gal =	<u>255.2</u> tons/yr		
V O C:	0.1 lbs/1000 gal =	<u>0.343</u> tons/yr		
C O:	0.6 lbs/1000 gal =	<u>2.29</u> tons/yr		

(waste oil/small boiler)

The following calculations determine the amount of emissions created by waste fuel oil @ 1.000 % sulfur, based on 8760 hours of use and EPA SCC #3-05-002-08:

Pollutant:	<u>120.0</u> MMBtu/hr * 8760 hrs/yr	* Ef (lbs/1000 gal) = (tons/yr)	Fuel Usage (kgal/yr)	7508.57
	<u>140000.0</u> Btu/gal * 2000 lbs/ton			
P M:	61.0 lbs/1000 gal =	<u>229.0</u> tons/yr		
P M-10:	51.0 lbs/1000 gal =	<u>191.5</u> tons/yr		
S O x:	147.0 lbs/1000 gal =	<u>551.9</u> tons/yr		
N O x:	19.0 lbs/1000 gal =	<u>71.3</u> tons/yr		
V O C:	1.0 lbs/1000 gal =	<u>3.75</u> tons/yr		
C O:	5.0 lbs/1000 gal =	<u>18.8</u> tons/yr		

(waste oil/atomizing burner)

The following calculations determine the amount of emissions created by waste fuel oil @ 1.000 % sulfur, based on 8760 hours of use and EPA SCC #3-05-002-08:

Pollutant:	<u>0.000</u> MMBtu/hr * 8760 hrs/yr	* Ef (lbs/1000 gal) = (tons/yr)	Fuel Usage (kgal/yr)	0.00
	<u>140000.000</u> Btu/gal * 2000 lbs/ton			
P M:	7.0 lbs/1000 gal =	<u>0.000</u> tons/yr		
P M-10:	6.0 lbs/1000 gal =	<u>0.000</u> tons/yr		
S O x:	144.0 lbs/1000 gal =	<u>0.000</u> tons/yr		
N O x:	16.0 lbs/1000 gal =	<u>0.000</u> tons/yr		
V O C:	0.1 lbs/1000 gal =	<u>0.000</u> tons/yr		
C O:	2.1 lbs/1000 gal =	<u>0.000</u> tons/yr		

Dryer Burner

Butane/industrial boiler

Fuel Usage (kgal/yr) 10305.88

The following calculations determine the amount of emissions created by butane combustion, based on 8760 hours of use, AP-42 Ch. 1.4, and EPA SCC #3-05-002-06:

$$\text{Pollutant: } \frac{120.000 \text{ MMBtu/hr} * 8760 \text{ hrs/yr} * 1000000 \text{ B} * \text{Ef (lb/kgal)}}{102000 \text{ Btu/gal} * 2000 \text{ lbs/ton} * 1000 \text{ gal/kgal}} = \text{(tons/yr)}$$

P M:	0.6 lbs/kgal =	<u>3.09</u> tons/yr
P M-10:	0.6 lbs/kgal =	<u>3.09</u> tons/yr
S O x:	0.02 lbs/kgal =	<u>0.103</u> tons/yr
N O x:	21.0 lbs/kgal =	<u>108.2</u> tons/yr
V O C:	0.4 lbs/kgal =	<u>2.06</u> tons/yr
C O:	3.6 lbs/kgal =	<u>18.6</u> tons/yr

**** Reciprocating Internal Combustion Engines ****

The following calculations determine the amount of emissions created by #2 distillate fuel oil based on 8760 hours of use, AP-42 Ch. 3.3 and EPA SCC #2-03-001-01: 138,000 Btu/gal

$$\text{Pollutant: } \frac{0.505 \text{ MMBtu/hr} * 8760 \text{ hr/yr}}{2000 \text{ lbs/ton}} * \text{Ef (lbs/MMBtu)} = \text{(tons/yr)}$$

P M:	0.31 lbs/MMBtu =	<u>0.686</u> tons/yr
P M-10:	0.31 lbs/MMBtu =	<u>0.686</u> tons/yr
S O x:	0.29 lbs/MMBtu =	<u>0.641</u> tons/yr
N O x:	4.41 lbs/MMBtu =	<u>9.75</u> tons/yr
V O C:	0.40 lbs/MMBtu =	<u>0.885</u> tons/yr
C O:	0.95 lbs/MMBtu =	<u>2.10</u> tons/yr

The following calculations determine the amount of emissions created by #2 distillate fuel oil based on 8760 hours of use, AP-42 Ch. 3.3 and EPA SCC #2-03-001-01: 138,000 Btu/gal

$$\text{Pollutant: } \frac{5.473 \text{ MMBtu/hr} * 8760 \text{ hr/yr}}{2000 \text{ lbs/ton}} * \text{Ef (lbs/MMBtu)} = \text{(tons/yr)}$$

P M:	0.0697 lbs/MMBtu =	<u>1.67</u> tons/yr
P M-10:	0.0573 lbs/MMBtu =	<u>1.37</u> tons/yr
S O x:	0.505 lbs/MMBtu =	<u>12.1</u> tons/yr
N O x:	3.10 lbs/MMBtu =	<u>74.3</u> tons/yr
V O C:	0.10 lbs/MMBtu =	<u>2.40</u> tons/yr
C O:	0.81 lbs/MMBtu =	<u>19.4</u> tons/yr

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

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

P M:	19.0 lbs/ton x	<u>400.0</u>	tons/hr x	8760 hrs/yr =	<u>33288.000</u>	tons/yr
		2000	lbs/ton			
P M-10:	4.40 lbs/ton x	<u>400</u>	tons/hr x	8760 hrs/yr =	<u>7708.800</u>	tons/yr
		2000	lbs/ton			
Lead:	0.0000033 lbs/ton x	<u>400</u>	tons/hr x	8760 hrs/yr =	<u>0.006</u>	tons/yr
		2000	lbs/ton			
HAPs:	0.0058 lbs/ton x	<u>400</u>	tons/hr x	8760 hrs/yr =	<u>10.2</u>	tons/yr
		2000	lbs/ton			

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

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

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

P M:	32 lbs/ton x	<u>0.0</u>	tons/hr x	8760 hrs/yr =	<u>0.0</u>	tons/yr
		2000	lbs/ton			
P M-10:	4.5 lbs/ton x	<u>0</u>	tons/hr x	8760 hrs/yr =	<u>0.0</u>	tons/yr
		2000	lbs/ton			
Lead:	3.30000000E-06 lbs/ton x	<u>0</u>	tons/hr x	8760 hrs/yr =	<u>0.000</u>	tons/yr
		2000	lbs/ton			
HAPs:	0.0058 lbs/ton x	<u>0</u>	tons/hr x	8760 hrs/yr =	<u>0.000</u>	tons/yr
		2000	lbs/ton			

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

**** conveying / handling ****

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

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

where k= 1 (particle size multiplier)
 U = 12 mph mean wind speed (worst case)
 M = 4.7 % moisture

P M :	<u>0.003</u> lbs/ton x	<u>372.0</u>	tons/hr x	8760 hrs/yr =	<u>4.920</u>	tons/yr
		2000	lbs/ton			
P M-10:	10% of PM =				<u>0.492</u>	tons/yr
Screening	PM: <u>0</u> tons/hr x	0.0315 lbs/ton	/ 2000 lbs/ton x	8760 hrs/yr =	<u>0.000</u>	tons/yr
P M-10:	10% of PM =				<u>0.000</u>	tons/yr

AP-42 Ch.11.19.2

**** unpaved roads ****

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

Euclid Off-Road Truck

$$\frac{11.8 \text{ trips/hr} \times 0.25 \text{ miles/roundtrip} \times 8760 \text{ hrs/yr}}{1} = \underline{25842.0} \text{ miles per year}$$

$$E_f = k \cdot 5.9 \cdot (s/12)^2 \cdot (S/30)^2 \cdot (W/3)^{0.7} \cdot (w/4)^{0.5} \cdot ((365-p)/365)$$

$$= 3.68 \text{ lbs/mile}$$

- where k = 0.8 (particle size multiplier)
- s = 4.8 % silt content of unpaved roads
- p = 125 days of rain greater than or equal to 0.01 inches
- S = 10.0 miles/hr vehicle speed
- W = 51.00 tons average vehicle weight
- w = 6 wheels

$$\text{PM: } \frac{3.68 \text{ lbs/mi} \times 25842 \text{ miles/yr}}{2000 \text{ lbs/ton}} = \underline{47.6} \text{ tons/yr}$$

$$\text{P M-10: } 35\% \text{ of PM} = \underline{16.7} \text{ tons/yr}$$

B. Front End Loader

$$\frac{46.7 \text{ trips/hr} \times 0.080 \text{ miles/roundtrip} \times 8760 \text{ hrs/yr}}{1} = \underline{32727.4} \text{ miles per year}$$

$$E_f = k \cdot 5.9 \cdot (s/12)^2 \cdot (S/30)^2 \cdot (W/3)^{0.7} \cdot (w/4)^{0.5} \cdot ((365-p)/365)$$

$$= 2.30 \text{ lbs/mile}$$

- where k = 0.8 (particle size multiplier)
- s = 4.8 % silt content of unpaved roads
- p = 125 days of rain greater than or equal to 0.01 inches
- S = 10.0 miles/hr vehicle speed
- W = 34.80 tons average vehicle weight
- w = 4 wheels

$$\text{PM: } \frac{2.30 \text{ lbs/mi} \times 32727.36 \text{ miles/yr}}{2000 \text{ lbs/ton}} = \underline{37.7} \text{ tons/yr}$$

$$\text{P M-10: } 35\% \text{ of PM} = \underline{13.2} \text{ tons/yr}$$

C. Semi Truck Red River Trailer and Tractor

$$\frac{0.0 \text{ trips/hr} \times 0.00 \text{ miles/roundtrip} \times 8760 \text{ hrs/yr}}{0.0 \text{ miles per year}}$$

$$E_f = k \cdot 5.9 \cdot (s/12)^2 \cdot (S/30) \cdot (W/3)^2 \cdot 0.7 \cdot (w/4)^{0.5} \cdot ((365-p)/365)$$

= 1.21 lbs/mile

where k = 0.8 (particle size multiplier)

s = 0.8 % silt content of unpaved roads

p = 125 days of rain greater than or equal to 0.01 inches

S = 10.0 miles/hr vehicle speed

W = 53.0 tons average vehicle weight

w = 22 wheels

$$PM: \frac{1.21 \text{ lbs/mi} \times 0 \text{ miles/yr}}{2000 \text{ lbs/ton}} = 0.000 \text{ tons/yr}$$

P M-10: 35% of PM = 0.000 tons/yr

Total PM: 85.2 tons/yr

Total PM-10: 29.8 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.

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

= 1.27 lbs/acre/day for sand

= 1.39 lbs/acre/day for stone

= 0.93 lbs/acre/day for slag

= 1.16 lbs/acre/day for gravel

= 0.93 lbs/acre/day for RAP

where s = 1.1 % silt for sand

s = 1.2 % silt of stone

s = 0.8 % silt of slag

s = 1.0 % silt of gravel

s = 0.8 % silt for RAP

p = 125 days of rain greater than or equal to 0.01 inches

f = 15 % of wind greater than or equal to 12 mph

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

= 0.10 tons/yr for sand

= 0.28 tons/yr for stone

= 0.15 tons/yr for slag

= 0.19 tons/yr for gravel

= 0.12 tons/yr for RAP

Total PM: 0.846 tons/yr

where sc = 24 ,000 tons storage capacity for sand

sc = 60 ,000 tons storage capacity for stone

sc = 49 ,000 tons storage capacity for slag

sc = 49 ,000 tons storage capacity for gravel

sc = 40 ,000 tons storage capacity for RAP

P M-10:	35% of PM =	<u>0.036</u> tons/yr for sand
	35% of PM =	<u>0.098</u> tons/yr for stone
	35% of PM =	<u>0.053</u> tons/yr for slag
	35% of PM =	<u>0.067</u> tons/yr for gravel
	35% of PM =	<u>0.043</u> tons/yr for RAP
Total PM-10:		<u>0.296</u> tons/yr

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

natural gas	#2 oil	#4 oil	waste oil
P M: 33386 tons/yr	P M: 33389.1 tons/yr	P M: 33405.663 tons/yr	P M: 33608.014 tons/yr
P M-10: 7747 tons/yr	P M-10: 7745.4 tons/yr	P M-10: 7758.464 tons/yr	P M-10: 7930.889 tons/yr
S O x: 0.321 tons/yr	S O x: 288.0 tons/yr	S O x: 285.652 tons/yr	S O x: 551.880 tons/yr
N O x: 290.4 tons/yr	N O x: 161.6 tons/yr	N O x: 255.183 tons/yr	N O x: 71.331 tons/yr
V O C: 1.50 tons/yr	V O C: 4.1 tons/yr	V O C: 0.343 tons/yr	V O C: 3.754 tons/yr
C O: 21.4 tons/yr	C O: 40.9 tons/yr	C O: 2.285 tons/yr	C O: 18.771 tons/yr
Lead: 0.006 tons/yr	Lead: 0.006 tons/yr	Lead: 0.006 tons/yr	Lead: 0.006 tons/yr
HAPs: 10.16 tons/yr	HAPs: 10.16 tons/yr	HAPs: 10.162 tons/yr	HAPs: 10.162 tons/yr

butane	propane
P M: 33382 tons/yr	P M: 33379 tons/yr
P M-10: 7736 tons/yr	P M-10: 7733 tons/yr
S O x: 0.103 tons/yr	S O x: 0.000 tons/yr
N O x: 108.212 tons/yr	N O x: 1.955 tons/yr
V O C: 2.061 tons/yr	V O C: 0.031 tons/yr
C O: 18.551 tons/yr	C O: 0.329 tons/yr
Lead: 0.006 tons/yr	Lead: 0.006 tons/yr
HAPs: 10.16 tons/yr	HAPs: 10.16 tons/yr

B. Source emissions after controls

dryer combustion: gas

P M:	7.20 tons/yr x	<u>0.00128</u> emitted after controls =	<u>0.009</u> tons/yr
P M-10:	7.20 tons/yr x	<u>0.00128</u> emitted after controls =	<u>0.009</u> tons/yr

dryer combustion: #2 oil

P M:	7.62 tons/yr x	<u>0.00128</u> emitted after controls =	<u>0.010</u> tons/yr
P M-10:	3.81 tons/yr x	<u>0.00128</u> emitted after controls =	<u>0.005</u> tons/yr

hot oil heater combustion: gas

P M:	0.129 tons/yr x	<u>1.00000</u> emitted after controls =	<u>0.129</u> tons/yr
P M-10:	0.129 tons/yr x	<u>1.00000</u> emitted after controls =	<u>0.129</u> tons/yr

hot oil heater combustion: #2 oil

P M:	0.136 tons/yr x	<u>1.00000</u> emitted after controls =	<u>0.136</u> tons/yr
P M-10:	0.068 tons/yr x	<u>1.00000</u> emitted after controls =	<u>0.068</u> tons/yr

hot oil heater combustion: propane

P M:	0.062 tons/yr x	<u>1.00000</u> emitted after controls =	<u>0.062</u> tons/yr
P M-10:	0.062 tons/yr x	<u>1.00000</u> emitted after controls =	<u>0.062</u> tons/yr

dryer combustion: #4 oil

P M: 26.66 tons/yr x 0.00128 emitted after controls = 0.034 tons/yr
 P M-10: 19.04 tons/yr x 0.00128 emitted after controls = 0.024 tons/yr

dryer combustion: waste oil

P M: 229.01 tons/yr x 0.00128 emitted after controls = 0.293 tons/yr
 P M-10: 191.47 tons/yr x 0.00128 emitted after controls = 0.245 tons/yr

dryer combustion: butane

P M: 3.09 tons/yr x 0.00128 emitted after controls = 0.004 tons/yr
 P M-10: 3.09 tons/yr x 0.00128 emitted after controls = 0.004 tons/yr

reciprocating engines: #2 oil

P M: 2.36 tons/yr x 1.00000 emitted after controls = 2.36 tons/yr
 P M-10: 2.06 tons/yr x 1.00000 emitted after controls = 2.06 tons/yr

aggregate drying: process

P M: 33288.00 tons/yr x 0.00128 emitted after controls = 42.609 tons/yr
 P M-10: 7708.80 tons/yr x 0.00128 emitted after controls = 9.867 tons/yr

conveying/handling:

P M: 4.92 tons/yr x 1.000 emitted after controls = 4.920 tons/yr
 P M-10: 0.49 tons/yr x 1.000 emitted after controls = 0.492 tons/yr

screening

P M: 0.00 tons/yr x 1.000 emitted after controls = 0.000 tons/yr
 P M-10: 0.00 tons/yr x 1.000 emitted after controls = 0.000 tons/yr

unpaved roads:

P M: 85.24 tons/yr x 0.50 emitted after controls = 42.618 tons/yr
 P M-10: 29.83 tons/yr x 0.50 emitted after controls = 14.916 tons/yr

storage:

P M: 0.846 tons/yr x 0.50 emitted after controls = 0.423 tons/yr
 P M-10: 0.296 tons/yr x 0.50 emitted after controls = 0.148 tons/yr

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

	Gas	#2 Oil	#4 Oil	Waste Oil	Butane	Propane	
P M:	90.7	93.1	90.604	90.863	90.574	90.631	tons/yr
P M-10:	25.6	27.6	25.448	25.669	25.428	25.485	tons/yr

II. Allowable Emissions

A1. The following calculations determine compliance with NSPS Subpart I, which limits stack emissions from asphalt plants to 0.04 gr/dscf:

$$\frac{0.04 \text{ grains}^*}{\text{dscf}} \times \frac{70000.000 \text{ acfm}^*}{525600 \frac{\text{minutes}^*}{\text{year}}} \times \frac{1}{7000 \text{ grains}} \times \frac{1 \text{ ton}}{2000 \text{ lbs}} = \frac{73.465 \text{ tons/yr}}{460 \frac{528}{+} \frac{260}{\text{Temp}} \times \frac{100}{100} \times \frac{100}{100} \times 4.7 \% \text{ moisture}}$$

To meet NSPS Subpart I, the following value must be < amount calculated above

43.0 tons/yr

A2. The following calculations determine compliance with 326 IAC 6-1, which limits stack emissions from asphalt plants to 0.03 gr/dscf:

$$\frac{0.03 \text{ grains}^*}{\text{dscf}} \times \frac{70000.000 \text{ acfm}^*}{525600 \frac{\text{minutes}^*}{\text{year}}} \times \frac{1}{7000 \text{ grains}} \times \frac{1 \text{ ton}}{2000 \text{ lbs}} = \frac{57.816 \text{ tons/yr}}{460 \frac{528}{+} \frac{260}{\text{Temp}} \times \frac{100}{100} \times \frac{100}{100} \times 0 \% \text{ moisture}}$$

To meet 326 IAC 6-1, the following value must be < amount calculated above

42.9 tons/yr

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

limit: 0.5 lbs/MMBtu

$$\frac{0.5 \text{ lbs/MMBtu} \times 138000.0 \text{ Btu/gal} = 69.0 \text{ lbs/1000gal}}{69 \text{ lbs/1000gal} / 144.0 \text{ lb/1000 gal} = 0.479}$$

Sulfur content must be less than or equal to 0.5 % to comply with 326 IAC 7 and to limit SO2 emissions to 99 tons per year or less.

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

limit: 1.6 lbs/MMBtu

$$\frac{1.6 \text{ lbs/MMBtu} \times 140000.000 \text{ Btu/gal} = 224 \text{ lbs/1000gal}}{224 \text{ lbs/1000gal} / 100.0 \text{ lbs/1000 gal} = 2.240}$$

(check burner type)
Sulfur content must be less than or equal to 2.240 % to comply with 326 IAC 7 and to limit SO2 emissions to 99 tons per year or less.

Portable

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

$$\begin{array}{rclcl}
 \text{limit:} & 0.5 \text{ lbs/MMBtu} & & & \\
 & 0.5 \text{ lbs/MMBtu} \times & \underline{138000.000} \text{ Btu/gal=} & 69 \text{ lbs/1000gal} & \\
 & 69 \text{ lbs/1000gal} / & \underline{150.0} \text{ lbs/1000 gal} = & \underline{0.460} & \\
 & & & & \underline{0.5} \% \text{ to comply with 326 IAC 7}
 \end{array}$$

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

III. Limited Potential Emissions

Note: Full Potential Emissions From Oil Heater Subtracted Out From Limited Emissions
Therefore Fuel From Oil Heater is not Limited!

FUEL USAGE LIMITATION: BASED ON NOx

FUEL USAGE LIMITATION FOR HOT OIL HEATER ALONE (OIL)

$$\begin{array}{rclcl}
 \underline{1.36 \text{ tons NOx}} & * & \underline{2000 \text{ lbs}} & = & \underline{2729.57 \text{ lbs NOx}} \\
 \text{year} & & \text{ton} & & \text{year} \\
 \\
 \underline{2729.57 \text{ lbs NOx}} & / & \underline{20 \text{ lbs NOx}} & = & \underline{136.48 \text{ kgal}} \\
 \text{year} & & \text{kgal} & & \text{year} \\
 \\
 \underline{136.48 \text{ kgal}} & * & \underline{99.00 \text{ tons/year}} & = & \underline{0.0 \text{ kgal fuel}} \\
 \text{year} & & \underline{1.36 \text{ tons/year}} & & \text{year}
 \end{array}$$

FUEL USAGE LIMITATION FOR BURNER (Gas)

$$\begin{array}{rclcl}
 \underline{289.08 \text{ tons NOx}} & * & \underline{2000 \text{ lbs}} & = & \underline{578160 \text{ lbs NOx}} \\
 \text{year} & & \text{ton} & & \text{year} \\
 \\
 \underline{578160 \text{ lbs NOx}} & / & \underline{550.0 \text{ lbs NOx}} & = & \underline{1051.20 \text{ MMcf}} \\
 \text{year} & & \text{MMcf} & & \text{year} \\
 \\
 \underline{1051.20 \text{ MMcf}} & * & \underline{97.05 \text{ tons/yr}} & = & \underline{352.9 \text{ MMcf}} \text{ FESOP Limit} \\
 \text{year} & & \underline{289.08 \text{ tons/yr}} & & \text{year}
 \end{array}$$

FUEL USAGE LIMITATION FOR BURNER and Reciprocating Engines (#2 Oil)

$$\begin{array}{rclcl}
 \underline{160.24 \text{ tons NOx}} & * & \underline{2000 \text{ lbs}} & = & \underline{320481.57 \text{ lbs NOx}} \\
 \text{year} & & \text{ton} & & \text{year} \\
 \\
 \underline{320481.57 \text{ lbs NOx}} & / & \underline{20 \text{ lbs}} & = & \underline{16024.08 \text{ kgal}} \\
 \text{year} & & \underline{1000 \text{ gal}} & & \text{year} \\
 \\
 \underline{16024.08 \text{ kgal}} & * & \underline{97.05 \text{ tons/yr}} & = & \underline{9705.0 \text{ kgal}} \text{ FESOP Limit} \\
 \text{year} & & \underline{160.24 \text{ tons/yr}} & & \text{year}
 \end{array}$$

FUEL USAGE LIMITATION FOR BURNER (#4 Oil)

$$\begin{array}{rclcl}
 255.18 \frac{\text{tons NOx}}{\text{year}} & * & 2000 \frac{\text{lbs}}{\text{ton}} & = & 510365.22 \frac{\text{lbs NOx}}{\text{year}} \\
 510365.22 \frac{\text{lbs NOx}}{\text{year}} & / & 67.0 \frac{\text{lbs}}{1000 \text{ gal}} & = & 7617.39 \frac{\text{kgal}}{\text{year}} \\
 7617.39 \frac{\text{kgal}}{\text{year}} & * & \frac{97.64 \text{ tons/yr}}{255.18 \text{ tons/yr}} & = & 2914.6 \frac{\text{kgal}}{\text{year}} \text{ FESOP Limit}
 \end{array}$$

FUEL USAGE LIMITATION FOR BURNER (Waste Oil)

$$\begin{array}{rclcl}
 71.33 \frac{\text{tons NOx}}{\text{year}} & * & 2000 \frac{\text{lbs}}{\text{ton}} & = & 142662.86 \frac{\text{lbs NOx}}{\text{year}} \\
 142662.86 \frac{\text{lbs NOx}}{\text{year}} & / & 0.0 \frac{\text{lbs}}{1000 \text{ gal}} & = & 0.00 \frac{\text{kgal}}{\text{year}} \\
 0.00 \frac{\text{kgal}}{\text{year}} & * & \frac{97.64 \text{ tons/yr}}{71.33 \text{ tons/yr}} & = & 0.0 \frac{\text{kgal}}{\text{year}} \text{ FESOP Limit}
 \end{array}$$

FUEL USAGE LIMITATION: BASED ON SO2

FUEL USAGE LIMITATION FOR HOT OIL HEATER ON OIL

$$\begin{array}{rclcl}
 4.84 \frac{\text{tons SO2}}{\text{year}} & * & 2000 \frac{\text{lbs}}{\text{ton}} & = & 9689.9565217 \frac{\text{lbs SO2}}{\text{year}} \\
 9690.0 \frac{\text{lbs}}{\text{year}} & / & 70.0 \frac{\text{lbs SO2}}{\text{kgal}} & = & 138.43 \frac{\text{kgal}}{\text{year}} \\
 138.43 \frac{\text{kgal}}{\text{year}} & * & \frac{99.00 \text{ tons/year}}{4.84 \text{ tons/year}} & = & 0.0 \frac{\text{kgal fuel}}{\text{year}}
 \end{array}$$

FUEL USAGE LIMITATION FOR BURNER (Gas)

$$\begin{array}{rclcl}
 0.315 \frac{\text{tons SO2}}{\text{year}} & * & 2000 \frac{\text{lbs}}{\text{ton}} & = & 630.72 \frac{\text{lbs SO2}}{\text{year}} \\
 630.72 \frac{\text{lbs SO2}}{\text{year}} & / & 0.6 \frac{\text{lbs SO2}}{\text{MMcf}} & = & 1051.20 \frac{\text{MMcf}}{\text{year}} \\
 1051.20 \frac{\text{MMcf}}{\text{year}} & * & \frac{94.16 \text{ tons/yr}}{0.32 \text{ tons/yr}} & = & 0.0 \frac{\text{MMcf}}{\text{year}} \text{ FESOP Limit}
 \end{array}$$

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

$$\frac{283.2 \text{ tons SO}_2}{\text{year}} \times \frac{2000 \text{ lbs}}{\text{ton}} = 566329.14 \frac{\text{lbs SO}_2}{\text{year}}$$

$$\frac{566329.14 \text{ lbs SO}_2}{\text{year}} / \frac{70.0 \text{ lbs}}{1000 \text{ gal}} = 8090416.3144 \frac{\text{gal}}{\text{year}}$$

$$8090416.31 \frac{\text{gal}}{\text{year}} \times \frac{94.16 \text{ tons/yr}}{283.16 \text{ tons/yr}} = 2690285.7 \frac{\text{gal}}{\text{year}} \text{ FESOP Limit}$$

FUEL USAGE LIMITATION FOR BURNER (#4 Oil)

$$\frac{285.7 \text{ tons SO}_2}{\text{year}} \times \frac{2000 \text{ lbs}}{\text{ton}} = 571304.34783 \frac{\text{lbs SO}_2}{\text{year}}$$

$$\frac{571304.35 \text{ lbs SO}_2}{\text{year}} / \frac{75.0 \text{ lbs}}{1000 \text{ gal}} = 7617391.3043 \frac{\text{gal}}{\text{year}}$$

$$7617391.30 \frac{\text{gal}}{\text{year}} \times \frac{94.16 \text{ tons/yr}}{285.65 \text{ tons/yr}} = 2510933.3 \frac{\text{gal}}{\text{year}} \text{ FESOP Limit}$$

FUEL USAGE LIMITATION FOR BURNER (Waste Oil)

$$\frac{551.9 \text{ tons SO}_2}{\text{year}} \times \frac{2000 \text{ lbs}}{\text{ton}} = 1103760.00 \frac{\text{lbs SO}_2}{\text{year}}$$

$$\frac{1103760.00 \text{ lbs SO}_2}{\text{year}} / \frac{147.0 \text{ lbs}}{1000 \text{ gal}} = 7508571.43 \frac{\text{gal}}{\text{year}}$$

$$7508571.43 \frac{\text{gal}}{\text{year}} \times \frac{94.16 \text{ tons/yr}}{551.88 \text{ tons/yr}} = 1281088.4 \frac{\text{gal}}{\text{year}} \text{ FESOP Limit}$$

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

Assume rapid cure and 95% evaporative loss of diluent. Percent diluent in liquid binder = 7%
 Average Density Diluent = 5.84 lbs/gal Average Density of Asphalt Cement = 9.18 lbs/gal

The FESOP VOC emission limit of 99.0 tons per year minus the worst case sum of emissions from combustion and production = **94.94 tons/yr**

Limited tons of liquid binder = (limited VOC emission rate/95%)/density of diluent * 2,000 lbs/ton *(density of diluent + ((1 - %diluent)/%diluent) * density of asphalt cement) / 2000 lbs/ton)

LIQUID BINDER USAGE LIMITATION = 2187 tons/yr

Indiana Department of Environmental Management Office of Air Management

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

Source Name: Rieth - Riley Construction Co., Inc.
 Source Location: Initially located at 7390 East County Road 650 South, Shelbyville, IN 46176
 County: Shelby
 FESOP: F 145-9355-05166
 SIC Code: 2951
 Permit Reviewer: Frank P. Castelli

On February 19, 1998, the Office of Air Management (OAM) had a notice published in the Shelbyville News, Shelbyville, Indiana, stating that Rieth - Riley Construction Co., Inc. had applied for a Federally Enforceable State Operating Permit (FESOP) to operate a portable hot mix drum asphalt manufacturing source with control. The notice also stated that OAM proposed to issue a FESOP for this operation and provided information on how the public could review the proposed FESOP and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this FESOP should be issued as proposed.

On March 18, 1998, the applicant was contacted and offered the opportunity to change the compliance time period for the emission limits in the proposed permit from a 365-day rolling total to a 12 consecutive month period. The applicant has agreed to retain the proposed wording in the permit, i.e., 365-day rolling total, since the company's computer data base has already been formatted in the daily rolling basis. Therefore there is no change in the proposed permit.

Upon further review, the OAM has decided to make the following changes to the FESOP:

1. The time limit for stack testing in Condition D.1.10 of the permit has been changed from within 18 to 36 months of permit issuance to within 60 to 180 days of permit issuance as required by New Source Performance Standard (NSPS) Subpart I. The condition now reads:

D.1.10 Testing Requirements [326 IAC 2-8-5(1)]

During the period ~~within 18 to 36 months~~ **between 60 and 180 days** after issuance of this permit, the Permittee shall perform PM and PM₁₀ testing utilizing Methods 5 or 17 (40 CFR 60, Appendix A) for PM and Methods 201 or 201A and 202 (40 CFR 51, Appendix M) for PM₁₀, or other methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. PM₁₀ includes filterable and condensable PM₁₀.

On February 23, 1998, Dean Logan of Rieth Riley Construction Co., Inc. submitted comments on the proposed FESOP. The comments are as follows:

Comment 1:

Item (i) on page 5 of 44, of the permit, remove the word batch from the sentence. If it is necessary to have the type of plant in this sentence then put hot mix asphalt drum-mix plant.

Response 1:

"Batch" was stated in error and has been removed. Item (i) of Condition A.2 and Section D.1 now reads as follows:

- (i) This portable hot mix ~~batch~~ **drum** asphalt manufacturing source also produces cold mix cutback asphalt.

Comment 2:

In the record keeping portion there is not any language about recording the hours for the generator. I like the idea of not having to keep these records; however, I am sure that there may be a problem down the road if there is not any records of the hours of generator running time.

Response 2:

Condition D.1.18 of the permit has been revised to include a recordkeeping requirement for the hours of operation of the two (2) engines. The requirement has been added as item (c) to this condition. The revised condition is as follows:

D.1.18 Operational Parameters

The Permittee shall maintain daily records at the stationary source of the following values:

- (c) **Amount of hours of operation of each of the two (2) reciprocating internal combustion engines.**

Comment 3:

On page 4 of 10 of the TSD, in the Limited PTE table you have a number of 9.91 tons/year for PM₁₀ for the drum/dryer/burner. You have used this number to calculate the pounds per hour of PM₁₀ on page 32 of 44 of the permit. IDEM calculates the PM₁₀ tons/year for PM₁₀ for the drum/dryer/burner by adding up all of the PM₁₀ emissions from all of the other facilities and subtracting the result from 99 tons/year. If you were to do this for this permit the PM₁₀ limit for the drum/dryer/burner would be 78.27 tons per year or 17.87 tons per hour. If this number exceeds any thresholds then a production limit would be in order. I have sent along with this fax pages 31 of 51 and 4 of 8 from a draft copy of a permit, currently being reviewed by IDEM, to show how IDEM calculates PTE for PM₁₀ for the drum/dryer/burner. 2.26 pounds/hour is too limiting.

Response 3:

Condition D.1.6 of the permit has been revised to allow the full, source wide, FESOP PM₁₀ limit of 99.0 tons per year. Therefore, the revised PM₁₀ limit for the aggregate dryer is 17.8 pounds per hour which is equivalent to 78.3 tons per year. The overall PM₁₀ limit is now 99.0 tons per year for the entire source. The revised condition is as follows:

D.1.6 Particulate Matter (PM₁₀)

Pursuant to 326 IAC 2-8-4, PM₁₀ emissions from the aggregate dryer/mixer shall not exceed **17.8** ~~2.26~~ pounds per hour (**78.2** ~~9.91~~ tons per year). Compliance with this limit will satisfy 326 IAC 2-8-4. Therefore, the Part 70 rules (326 IAC 2-7) do not apply.