INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

NOTICE OF 30-DAY PERIOD FOR PUBLIC COMMENT

Preliminary Findings Regarding a
Significant Revision to a
Federally Enforceable State Operating Permit (FESOP)

for J H Rudolph & Company, Inc. in Vanderburgh County

Significant Permit Revision No. 163-31195-00186

The Indiana Department of Environmental Management (IDEM) has received an application from J H Rudolph & Company, Inc. located at 3300 S. Green River Road, Evansville, Indiana for a significant revision of its FESOP issued on January 12, 2007. If approved by IDEM's Office of Air Quality (OAQ), this proposed modification would allow J H Rudolph & Company, Inc. to make certain changes at its existing source. J H Rudolph & Company, Inc. has applied to change the current asphalt production levels from 1,440,000 tons per year to 750,000 tons per year and the use of asbestos-free shingles from 200 tons per year to 15,000 tons per year.

This draft FESOP does not contain any new equipment that would emit air pollutants; however, some conditions from previously issued permits/approvals have been corrected, changed or removed. These corrections, changes, and removals may include Title I changes (exchanges that add or modify synthetic minor emission limits). This notice fulfills the public notice procedures to which those conditions are subject. IDEM has reviewed this application, and has developed preliminary findings, consisting of a draft permit and several supporting documents, that would allow for these changes.

A copy of the permit application and IDEM's preliminary findings are available at:

Evansville-Vanderburgh Public Library
Central Library 22 SE 5th Street
Evansville, IN 47708

and

Southwest Regional Office
1120 N. Vincennes Ave.
Petersburg, IN 47567

A copy of the preliminary findings is available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/.

How can you participate in this process?

The date that this notice is published in a newspaper marks the beginning of a 30-day public comment period. If the 30th day of the comment period falls on a day when IDEM offices are closed for business, all comments must be postmarked or delivered in person on the next business day that IDEM is open.

You may request that IDEM hold a public hearing about this draft permit. If adverse comments concerning the **air pollution impact** of this draft permit are received, with a request for a public hearing,

IDEM will decide whether or not to hold a public hearing. IDEM could also decide to hold a public meeting instead of, or in addition to, a public hearing. If a public hearing or meeting is held, IDEM will make a separate announcement of the date, time, and location of that hearing or meeting. At a hearing, you would have an opportunity to submit written comments and make verbal comments. At a meeting, you would have an opportunity to submit written comments, ask questions, and discuss any air pollution concerns with IDEM staff.

Comments and supporting documentation, or a request for a public hearing should be sent in writing to IDEM at the address below. If you comment via e-mail, please include your full U.S. mailing address so that you can be added to IDEM's mailing list to receive notice of future action related to this permit. If you do not want to comment at this time, but would like to receive notice of future action related to this permit application, please contact IDEM at the address below. Please refer to permit number 163-31195-00186 in all correspondence.

Comments should be sent to:

Bruce Farrar
IDEM, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
(800) 451-6027, ask for extension 4-5401
Or dial directly: (317) 234-5401
Fax: (317)-232-6749 attn: Bruce Farrar
E-mail: bfarrar@idem.in.gov

All comments will be considered by IDEM when we make a decision to issue or deny the permit. Comments that are most likely to affect final permit decisions are those based on the rules and laws governing this permitting process (326 IAC 2), air quality issues, and technical issues. IDEM does not have legal authority to regulate zoning, odor or noise. For such issues, please contact your local officials.

For additional information about air permits and how you can participate, please see IDEM's **Guide for Citizen Participation** and **Permit Guide** on the Internet at: www.idem.in.gov.

What will happen after IDEM makes a decision?

Following the end of the public comment period, IDEM will issue a Notice of Decision stating whether the permit has been issued or denied. If the permit is issued, it may be different than the draft permit because of comments that were received during the public comment period. If comments are received during the public notice period, the final decision will include a document that summarizes the comments and IDEM's response to those comments. If you have submitted comments or have asked to be added to the mailing list, you will receive a Notice of the Decision. The notice will provide details on how you may appeal IDEM's decision, if you disagree with that decision. The final decision will also be available on the Internet at the address indicated above, at the local library indicated above, and the IDEM public file room on the 12th floor of the Indiana Government Center North, 100 N. Senate Avenue, Indianapolis, Indiana 46204-2251 Southwest Regional Office, 1120 N. Vincennes Ave., Petersburg, IN 47567.

If you have any questions please contact Bruce Farrar of my staff at the above address.

Iryn Calilung, Section Chief
Permits Branch
Office of Air Quality

bf

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Mr. Brian Peters
J H Rudolph & Company, Inc.
534 Mozart St
Tell City, IN 47586

Re: 163-31195-00186
Second Significant Revision to
F163-23182-00186

Dear Mr. Peters:

J H Rudolph & Company, Inc. was issued a Federally Enforceable State Operating Permit (FESOP) Renewal No. F163-23182-00186 on January 12, 2007 for a stationary located at stationary drum-mix asphalt plant, located at 3300 S. Green River Road, Evansville, Indiana. On November 30, 2011, the Office of Air Quality (OAQ) received an application from the source requesting to change the current asphalt production limits from 1,440,00 tons per year to 750,000 tons per year and the current asphalt roofing shingles from 200 tons per year to 15,000 tons per year. The attached Technical Support Document (TSD) provides additional explanation of the changes to the source/permit. Pursuant to the provisions of 326 IAC 2-8-11.1, these changes to the permit are required to be reviewed in accordance with the Significant Permit Revision (SPR) procedures of 326 IAC 2-8-11.1(f). Pursuant to the provisions of 326 IAC 2-8-11.1, a significant permit revision to this permit is hereby approved as described in the attached Technical Support Document (TSD).

Pursuant to 326 IAC 2-8-11.1, this permit shall be revised by incorporating the significant permit revision into the permit. All other conditions of the permit shall remain unchanged and in effect. Attached please find the entire revised permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Bruce Farrar, of my staff, at 317-234-5401 or 1-800-451-6027, and ask for extension 4-5401.

Sincerely,

Iryn Calilung, Section Chief
Permits Branch
Office of Air Quality

Attachments: Technical Support Document and revised permit

IC/bf

cc: File - Vanderburgh County
Vanderburgh County Health Department
U.S. EPA, Region V
Compliance and Enforcement Branch
Billing, Licensing and Training Section

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NEW SOURCE REVIEW AND FEDERALLY ENFORCEABLE STATE OPERATING PERMIT RENEWAL
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

J.H. Rudolph & Company, Inc.
3300 S. Green River Road
Evansville, Indiana 47715

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

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

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17. This permit also addresses certain new source review requirements for existing equipment and is intended to fulfill the new source review procedures pursuant to 326 IAC 2-8-11.1, applicable to those conditions

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.

Operation Permit No.: F163-23182-00186 (formerly plant ID 163-03408)	
Original signed by: Nisha Sizemore, Chief Permits Branch Office of Air Quality	Issuance Date: January 12, 2007 Expiration Date: January 12, 2017

First Administrative Amendment No.: F163-26043-00186, Issued February 19, 2008
First Significant Permit Revision No.: F163-27958-00186, Issued September 16, 2009
Second Administrative Amendment No.: F163-28549-00186, Issued November 18, 2009
Third Administrative Amendment No.: F163-29055-00186, Issued May 7, 2010
Fourth Administrative Amendment No.: F163-29299-00186, issued on September 21, 2010
Fifth Administrative Amendment No.: F163-30567-00186, issued on July 27, 2011
Sixth Administrative Amendment No 163-30830-00186, issued on October 19, 2011

Second Significant Permit Revision No 163-31195-00186	
Issued by: Iryn Calilung, Section Chief Permits Branch Office of Air Quality	Issuance Date: Expiration Date: January 12, 2017

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Attachment D: NSPS Subpart OOO - Standards of Performance for Nonmetallic Mineral Processing Plants [40 CFR Part 60, Subpart OOO] [326 IAC 12-1]

SECTION A SOURCE SUMMARY

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

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

The Permittee owns and operates a stationary drum-mix asphalt plant (formerly identified under plant ID 163-03408), with the capability of producing both hot-mix and warm-mix asphalt, a cold-mix asphalt, and magnetite production operation. This source processes steel slag and certified ground asbestos-free shingles in its aggregate mix.

Source Address:	3300 S. Green River Road, Evansville, Indiana 47715
General Source Phone Number:	(812) 547-1400
SIC Code:	2951 (Asphalt Paving Mixtures and Blocks)
County Location:	Vanderburgh
Source Location Status:	Attainment for all other criteria pollutants
Source Status:	Federally Enforceable State Operating Permit Program Minor Source, under PSD and Emission Offset Rules Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

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

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

(a) One (1) six hundred fifty (650) tons per hour aggregate dryer, installed in June 1990, processing steel slag and certified ground asbestos-free shingles*, in the aggregate mix, with a burner capacity of 116 million British thermal units per hour, and exhausting through a baghouse at stack SV1. This dryer is fired by natural gas, #2 fuel oil, #4 fuel oil, #4 waste oil, and biodiesel, as available. This unit has the capability of processing both hot-mix and warm-mix asphalt;

[Note: *approved to process certified asbestos-free shingles in 2011 and no grinding of shingles occurs at this source.]

Under 40 CFR 60.90, Subpart I - New Source Performance Standards for Hot Mix Asphalt Facilities, this is considered an affected hot-mix asphalt facility.

(b) A drying process, used to dry magnetite, with a maximum capacity of 75,000 tons per year, exhausting through a baghouse at stack SV1;

(c) One (1) baghouse with a total filter area of 13,149 ft^2, exhausting at stack SV1;

(d) One (1) RAP feed bin with a maximum holding capacity of 25 tons.

(e) One (1) recycled asphalt pavement (RAP) crusher, rated at 150 ton per hour, approved for construction in 2011;

Note: This RAP crusher will replace the existing crusher that was constructed in 1990. The former RAP crusher remains on site but is not operable.

Under 40 CFR 60, Subpart OOO, New Source Performance Standards for Nonmetallic Mineral Processing Plants, this is considered an affected facility.

(f) One (1) 20,000 gallon liquid storage tank (ID # 12A) for PG 64-34, installed in 1996;

(g) One (1) 30,000 gallon liquid asphalt storage tank (ID # 12B) for AC-10, installed in June 1990;

(h) One (1) 30,000 gallon liquid asphalt storage tank (ID # 12C) for AC-20, installed in June 1990;

(i) Two (2) 18,000 gallon tanks (ID # 16) for #2 fuel storage, installed in 1990; and

(j) Cold-mix (stockpile mix) asphalt manufacturing operations and storage piles.

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

This stationary source also includes the following insignificant activities:

(a) Natural gas-fired combustion sources with a heat input equal to or less than 10 million British thermal units per hour;

(1) One (1) hot oil heater, fired by natural gas and rated at 2.10 million British thermal units per hour, and exhausting to stack SV2, installed in June 1990;

(b) Propane or liquefied petroleum gas, or butane-fired combustion sources with heat input equal to or less than 6 million British thermal units per hour;

(c) Replacement of repair of electrostatic precipitators, bags in baghouses, and filters in other air filtration equipment;

(d) A laboratory as defined in 326 IAC 2-7-1(21)(D);

(e) paved roadways;

(f) Two (2) storage silos, each with a maximum storage capacity of 200 tons, installed in May, 2002;

(g) Three (3) storage silos, each with a maximum storage capacity of 300 tons, installed in June 1990;

(h) Four (4) storage silos, each with a maximum storage capacity of 400 tons, installed in June 1990; and

(i) One (1) 500 gallon gasoline storage tank, installed in 1990.

Under 40 CFR 63, Subpart CCCCCC: National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities, the 500 gallon gasoline storage tank, and associated gasoline fuel transfer and dispensing operations, is considered an affected facility.

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

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

SECTION B GENERAL CONDITIONS

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

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

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

(a) This permit, F163-23182-00186 (formerly plant ID 163-03408), is issued for a fixed term of ten (10) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.

(b) If IDEM, OAQ, upon receiving a timely and complete renewal 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.

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

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

(a) the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or

(b) the emission unit to which the condition pertains permanently ceases operation.

B.4 Enforceability [326 IAC 2-8-6] [IC 13-17-12]

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

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

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

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

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

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

(a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.

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

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

(a) A certification required by this permit meets the requirements of 326 IAC 2-8-5(a)(1) if:

(i) it contains a certification by an "authorized individual", as defined by 326 IAC 2-1.1-1(1), and

(ii) the certification is based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) The Permittee may use the attached Certification Form, or its equivalent, with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.

(c) An "authorized individual" is defined at 326 IAC 2-1.1-1(1).

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

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

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

(b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

(c) The annual compliance certification report shall include the following:

(1) The appropriate identification of each term or condition of this permit that is the basis of the certification;

(2) The compliance status;

(3) Whether compliance was continuous or intermittent;

(4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-8-4(3); and

(5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ may require to determine the compliance status of the source.

The submittal by the Permittee does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

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

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

(a) A Preventive Maintenance Plan meets the requirements of 326 IAC 1-6-3 if it includes, at a minimum:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

The Permittee shall implement the PMPs.

(b) If required by specific condition(s) in Section D of this permit where no PMP was previously required, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) no later than ninety (90) days after issuance of this permit or ninety (90) days after initial start-up, whichever is later, including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

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

Indiana Department of Environmental Management
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The PMP extension notification does not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

The Permittee shall implement the PMPs.

(c) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions.

The PMPs and their submittal do not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

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

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

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

(1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;

(2) The permitted facility was at the time being properly operated;

(3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, SWRO within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance and Enforcement Branch), or
Telephone Number: 317-233-0178 (ask for Office of Air Quality, Compliance and Enforcement Branch)
Facsimile Number: 317-233-6865

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

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
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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 a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(6) The Permittee immediately took all reasonable steps to correct the emergency.

(c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

(d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

(e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.

(f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.

(g) Operations may continue during an emergency only if the following conditions are met:

(1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

(2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:

(A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and

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

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

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

(a) All terms and conditions of permits established prior to F163-23182-00186 (formerly plant ID 163-03408) and issued pursuant to permitting programs approved into the state implementation plan have been either:

(1) incorporated as originally stated,

(2) revised, or

(3) deleted.

(b) All previous registrations and permits are superseded by this permit.

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

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

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

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

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

(1) That this permit contains a material mistake.

(2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.

(3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]

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

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

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

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
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(b) A timely renewal application is one that is:

(1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and

(2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

(c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAQ 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, pursuant to 326 IAC 2-8-3(g), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

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

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

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

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

Any such application does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

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

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

(1) The changes are not modifications under any provision of Title I of the Clean Air Act;

(2) Any approval required by 326 IAC 2-8-11.1 has been obtained;

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

(4) The Permittee notifies the:

Indiana Department of Environmental Management

Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
and

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

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

(5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-8-15(b)(1) and (c). The Permittee shall make such records available, upon reasonable request, for public review.

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

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

(c) Alternative Operating Scenarios [326 IAC 2-8-15(c)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, OAQ, or U.S. EPA is required.

(d) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

B.19 Source Modification Requirement [326 IAC 2-8-11.1]

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

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

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

(a) Enter upon the Permittee's premises where a FESOP source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

(c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

(d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

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

(a) The Permittee must comply with the requirements of 326 IAC 2-8-10 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.

(b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

Any such application does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

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

(a) The Permittee shall pay annual fees to IDEM, OAQ no later than thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.

(b) Failure to pay may result in administrative enforcement action or revocation of this permit.

(c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

B.23 Advanced Source Modification Approval [326 IAC 2-8-4(11)] [326 IAC 2-1.1-9]

(a) The requirements to obtain a permit modification under 326 IAC 2-8-11.1 are satisfied by this permit for the proposed emission units, control equipment or insignificant activities in Sections A.2 and A.3.

(b) Pursuant to 326 IAC 2-1.1-9 any permit authorizing construction may be revoked if construction of the emission unit has not commenced within eighteen (18) months from

the date of issuance of the permit, or if during the construction, work is suspended for a continuous period of one (1) year or more.

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

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

SECTION C **SOURCE OPERATION CONDITIONS**

Entire Source

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

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

Pursuant to 326 IAC 6 3 2(e)(2), particulate emissions from any process not exempt under 326 IAC 6 3 1(b) or (c) which has a maximum process weight rate less than one hundred (100) pounds per hour and the methods in 326 IAC 6 3 2(b) through (d) do not apply shall not exceed five hundred fifty-one thousandths (0.551) pounds per hour.

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

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

(a) Pursuant to 326 IAC 2-8:

(1) The potential to emit any regulated pollutant, except particulate matter (PM) and green house gases, from the entire source shall be limited to less than one hundred (100) tons per twelve (12) consecutive month period.

(2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and

(3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.

(4) The potential to emit greenhouse gases (GHGs) from the entire source shall be limited to less than one hundred thousand (100,000) tons of CO2 equivalent emissions (CO2e) per twelve (12) consecutive month period.

(b) Pursuant to 326 IAC 2-2 (PSD), potential to emit particulate matter (PM) from the entire source shall be limited to less than two hundred fifty (250) tons per twelve (12) consecutive month period.

(c) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided that the source's potential to emit does not exceed the above specified limits.

(d) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

C.3 Opacity [326 IAC 5-1]

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

(a) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

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

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

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

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

The Permittee shall not operate an incinerator except as provided in 326 IAC 4-2 or in this permit. The Permittee shall not operate a refuse incinerator or refuse burning equipment except as provided in 326 IAC 9-1-2 or in this permit.

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

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

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

Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions shall be controlled according to the attached plan as in Attachment A.

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

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

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

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

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

(1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

(2) If there is a change in the following:

(A) Asbestos removal or demolitions start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

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

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

All required notifications shall be submitted to:

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

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(e) Procedures for Asbestos Emission Control
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

(f) Demolition and Renovation
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).

(g) Indiana Licensed 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 Licensed Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos.

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

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

(a) For performance testing required by this permit, a test protocol, except as provided elsewhere in this permit, shall be submitted to:

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

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require

a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the Permittee submits to IDEM, OAQ a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

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

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

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

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

Unless otherwise specified in this permit, for all monitoring requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or of initial start-up, whichever is later, to begin such monitoring. If due to circumstances beyond the Permittee's control, any monitoring equipment required by this permit cannot be installed and operated no later than ninety (90) days after permit issuance or the date of initial startup, whichever is later, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

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

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

The notification which shall be submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

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

(a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale.

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

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

C.14 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68]

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

C.15 Response to Excursions or Exceedances [326 IAC 2-8-4] [326 IAC 2-8-5]

Upon detecting an excursion where a response step is required by the D Section or an exceedance of a limitation in this permit:

(a) The Permittee shall take reasonable response steps to restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing excess emissions.

(b) The response shall include minimizing the period of any startup, shutdown or malfunction. The response may include, but is not limited to, the following:

(1) initial inspection and evaluation;

(2) recording that operations returned or are returning to normal without operator action (such as through response by a computerized distribution control system); or

(3) any necessary follow-up actions to return operation to normal or usual manner of operation.

(c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:

(1) monitoring results;

(2) review of operation and maintenance procedures and records; and/or

(3) inspection of the control device, associated capture system, and the process.

(d) Failure to take reasonable response steps shall be considered a deviation from the permit.

(e) The Permittee shall record the reasonable response steps taken.

C.16 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4][326 IAC 2-8-5]

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall submit a description of its response actions to IDEM, OAQ, no later than seventy-five (75) days after the date of the test.

(b) A retest to demonstrate compliance shall be performed no later than one hundred eighty (180) days after the date of the test. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred eighty (180) days is not practicable, IDEM, OAQ may extend the retesting deadline

(c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

C.17 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]

(a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. Support information includes the following:

(AA) All calibration and maintenance records.

(BB) All original strip chart recordings for continuous monitoring instrumentation.

(CC) Copies of all reports required by the FESOP.

Records of required monitoring information include the following:

(AA) The date, place, as defined in this permit, and time of sampling or measurements.

(BB) The dates analyses were performed.

(CC) The company or entity that performed the analyses.

(DD) The analytical techniques or methods used.

(EE) The results of such analyses.

(FF) The operating conditions as existing at the time of sampling or measurement.

These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, for all record keeping requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or the date of initial start-up, whichever is later, to begin such record keeping.

(c) If there is a reasonable possibility (as defined in 40 CFR 51.165(a)(6)(vi)(A), 40 CFR 51.165(a)(6)(vi)(B), 40 CFR 51.166(r)(6)(vi)(a), and/or 40 CFR 51.166(r)(6)(vi)(b)) that a “project” (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(ll)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a “major modification” (as defined in 326 IAC 2-2-1(ee) and/or 326 IAC 2-3-1(z)) may result in significant emissions increase and the Permittee elects to utilize the “projected actual emissions” (as defined in 326 IAC 2-2-1(rr) and/or 326 IAC 2-3-1(mm)), the Permittee shall comply with following:

(1) Before beginning actual construction of the “project” (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(ll)) at an existing emissions unit, document and maintain the following records:

(A) A description of the project.

(B) Identification of any emissions unit whose emissions of a regulated new source review pollutant could be affected by the project.

(C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:

(i) Baseline actual emissions;

(ii) Projected actual emissions;

(iii) Amount of emissions excluded under section 326 IAC 2-2-1(rr)(2)(A)(iii) and/or 326 IAC 2-3-1 (mm)(2)(A)(iii); and

(iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.

(d) If there is a reasonable possibility (as defined in 40 CFR 51.165(a)(6)(vi)(A) and/or 40 CFR 51.166(r)(6)(vi)(a)) that a "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(ll)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(ee) and/or 326 IAC 2-3-1(z)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(rr) and/or 326 IAC 2-3-1(mm)), the Permittee shall comply with following:

(1) Monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any existing emissions unit identified in (1)(B) above; and

(2) Calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five (5) years following resumption of regular operations after the change, or for a period of ten (10) years following resumption of regular operations after the change if the project increases the design capacity of or the potential to emit that regulated NSR pollutant at the emissions unit.

C.18 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

(a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. . Proper notice submittal under Section B –Emergency Provisions satisfies the reporting requirements of this paragraph. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported except that a deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. This report shall be submitted not later than thirty (30) days after the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1). A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

(b) The address for report submittal is:

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

(c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or

before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

(d) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit, "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

(e) If the Permittee is required to comply with the recordkeeping provisions of (d) in Section C - General Record Keeping Requirements for any "project" (as defined in 326 IAC 2-2-1 (qq) and/or 326 IAC 2-3-1 (ll)) at an existing emissions unit, and the project meets the following criteria, then the Permittee shall submit a report to IDEM, OAQ:

(1) The annual emissions, in tons per year, from the project identified in (c)(1) in Section C- General Record Keeping Requirements exceed the baseline actual emissions, as documented and maintained under Section C- General Record Keeping Requirements (c)(1)(C)(i), by a significant amount, as defined in 326 IAC 2-2-1 (xx) and/or 326 IAC 2-3-1 (qq), for that regulated NSR pollutant, and

(2) The emissions differ from the preconstruction projection as documented and maintained under Section C - General Record Keeping Requirements (c)(1)(C)(ii).

(f) The report for project at an existing emissions unit shall be submitted no later than sixty (60) days after the end of the year and contain the following:

(1) The name, address, and telephone number of the major stationary source.

(2) The annual emissions calculated in accordance with (d)(1) and (2) in Section C - General Record Keeping Requirements.

(3) The emissions calculated under the actual-to-projected actual test stated in 326 IAC 2-2-2(d)(3) and/or 326 IAC 2-3-2(c)(3).

(4) Any other information that the Permittee wishes to include in this report such as an explanation as to why the emissions differ from the preconstruction projection.

Reports required in this part shall be submitted to:

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

(g) The Permittee shall make the information required to be documented and maintained in accordance with (c) in Section C- General Record Keeping Requirements available for review upon a request for inspection by IDEM, OAQ. The general public may request this information from the IDEM, OAQ under 326 IAC 17.1.

Stratospheric Ozone Protection

C.19 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 applicable standards for recycling and emissions reduction.

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

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

(a) One (1) six hundred fifty (650) tons per hour aggregate dryer, installed in June 1990, processing steel slag and certified ground asbestos-free shingles*, in the aggregate mix, with a burner capacity of 116 million British thermal units per hour, and exhausting through a baghouse at stack SV1. This dryer is fired by natural gas, #2 fuel oil, #4 fuel oil, #4 waste oil, and biodiesel, as available. This unit has the capability of processing both hot-mix and warm-mix asphalt;

[Note: *approved to process certified asbestos-free shingles in 2011 and no grinding of shingles occurs at this source.]

Under 40 CFR 60.90, Subpart I - New Source Performance Standards for Hot Mix Asphalt Facilities, this is considered an affected hot-mix asphalt facility.

(b) A drying process, used to dry magnetite, with a maximum capacity of 75,000 tons per year, exhausting through a baghouse at stack SV1;

(c) One (1) baghouse with a total filter area of 13,149 ft^2, exhausting at stack SV1;

(d) One (1) RAP feed bin with a maximum holding capacity of 25 tons.

(e) One (1) recycled asphalt pavement (RAP) crusher, rated at 150 ton per hour, approved for construction in 2011.

Note: This RAP crusher will replace the existing crusher that was constructed in 1990. The former RAP crusher remains on site but is not operable.

Under 40 CFR 60, Subpart OOO, New Source Performance Standards for Nonmetallic Mineral Processing Plants, this is considered an affected facility.

Insignificant Activities:

(a) Natural gas-fired combustion sources with a heat input equal to or less than 10 million British thermal units per hour;

(1) One (1) hot oil heater, fired by natural gas and rated at 2.10 million British thermal units per hour, and exhausting to stack SV2, installed in June 1990;

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

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

D.1.1 PSD Minor Limit [326 IAC 2-2]]

In order to render 326 IAC 2-2 not applicable;

(a) The amount of hot-mix asphalt processed shall not exceed 750,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

(b) PM emissions from the dryer/mixer shall not exceed 0.544 pounds per ton of asphalt processed.

(c) The annual throughput to the magnetite drying operation shall not exceed 75,000 tons of magnetite per twelve (12) consecutive month period, with compliance determined at the end of each month.

(d) PM emissions from the magnetite drying operation shall not exceed 0.040 pounds PM per ton of magnetite.

Compliance with these limits, combined with the potential to emit PM from all other emission units at this source, shall limit the source-wide total potential to emit of PM to less than 250 tons per 12 consecutive month period and shall render 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.1.2 FESOP Limits: PM10, PM2.5, VOC, and CO [326 IAC 2-8-4][326 IAC 2-2][326 IAC 8-1-6]

Pursuant to 326 IAC 2-8-4, the Permittee shall comply with the following:

(a) The amount of hot-mix and warm-mix asphalt processed shall not exceed 750,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

(b) The annual throughput to the magnetite drying operation shall not exceed 75,000 tons of magnetite per twelve (12) consecutive month period, with compliance determined at the end of each month.

(c) The Permittee shall use only certified asbestos-free shingles.

(d) The maximum asbestos-free shingles usage shall not exceed 20,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

(e) The PM10 emissions from the dryer/mixer shall not exceed 0.223 pounds per ton of asphalt processed.

(f) PM10 emissions from the magnetite drying operation shall be limited to 0.04 pounds per ton of magnetite.

(g) The PM2.5 emissions from the dryer/mixer shall not exceed 0.242 pounds per ton of asphalt processed.

(h) PM2.5 emissions from the magnetite drying operation shall be limited to 0.04 pounds per ton of magnetite.

(i) The VOC emissions from the dryer/mixer shall not exceed 0.032 pounds per ton of asphalt processed.

(j) The CO emissions from the dryer/mixer shall not exceed 0.130 pounds per ton of asphalt processed.

Compliance with these limits, combined with the potential to emit PM10, PM2.5, VOC, and CO from all other emission units at this source, shall limit the source-wide total potential to emit of PM10, PM2.5, NOx, VOC, and CO to less than 100 tons per 12 consecutive month period, each, and shall render 326 IAC 2-7 (Part 70 Permits), and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)), not applicable.

Additionally, compliance with the limit in condition D.1.2(i) shall limit the VOC emissions from the dryer/mixer to less than twenty-five (25) tons per twelve (12) consecutive month period and shall render 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities) not

applicable.

D.1.3 FESOP Limits: SO2 and HAPs [326 IAC 2-8-4][326 IAC 2-2][326 IAC 2-4.1]

Pursuant to 326 IAC 2-8-4, and in order to render 326 IAC 2-2 and 326 IAC 2-4.1 not applicable, the Permittee shall comply with the following:

(a) Fuel and Slag Specifications

(1) The sulfur content of the No. 2 distillate fuel oil and biodiesel shall not exceed 0.50% by weight.

(2) The sulfur content of the No. 4 distillate fuel oil shall not exceed 1.00% by weight.

(3) The sulfur content of the waste oil shall not exceed 0.70% by weight.

(4) The waste oil combusted in the dryer burner shall not contain more than 0.50% ash, 0.10% chlorine, and 0.003% lead.

(5) The HCl emissions shall not exceed 6.6 pounds of HCl per 1,000 gallons of waste oil burned.

(6) The sulfur content of the steel slag shall not exceed 0.66% by weight.

(7) The SO2 emissions from the dryer/mixer shall not exceed 0.0014 pounds per ton of Steel slag processed in the aggregate mix.

(b) Single Fuel and Slag Usage Limitations:

(1) When combusting only one type of fuel per twelve (12) consecutive month period in the dryer/mixer burner, the usage of fuel shall be limited as follows:

(A) Natural Gas usage shall not exceed 987.59 MMCF per twelve (12) consecutive month period, with compliance determined at the end of each month.

(B) No. 2 fuel oil usage shall not exceed 2,653,909 gallons per twelve (12) consecutive month period, with compliance determined at the end of each month;

(C) No. 4 fuel oil usage shall not exceed 1,256,184 gallons per twelve (12) consecutive month period, with compliance determined at the end of each month;

(D) Waste oil usage shall not exceed 1,831,171 gallons per twelve (12) consecutive month period, with compliance determined at the end of each month; and

(E) Biodiesel usage shall not exceed 2,452,079 gallons per twelve (12) consecutive month period, with compliance determined at the end of each month;

(F) The steel slag usage shall not exceed 100,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

Note: The source is only permitted to burn the above-mentioned fuels in the dryer/mixer burner.

(c) Multiple Fuel and Slag Usage Limitation:
When combusting more than one fuel per twelve (12) consecutive month period in the dryer/mixer burner, in conjunction with the use of slag in the aggregate mix, emissions from the dryer/mixer shall be limited as follows:

(1) SO_2 emissions shall not exceed 94.21 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

(2) NOx emissions from the dryer/mixer shall not exceed 93.82 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

(3) HCl emissions shall not exceed 9.9 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

(d) Asphalt Shingle Usage Limitation
Pursuant to 326 IAC 2-8-4 (FESOP), and in order to render the requirements of 326 IAC 2-2 (PSD) and 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAPs)) not applicable, the Permittee shall not grind recycled asphalt shingles on-site and shall only use certified asbestos-free recycled shingles, post consumer waste and/or factory seconds, as an additive in its aggregate mix.

Compliance with these limits, combined with the potential to emit SO2 and HAPs from all other emission units at this source, shall limit the source-wide total potential to emit of SO2 to less than 100 tons per twelve (12) consecutive month period, any single HAP to less than ten (10) tons per twelve (12) consecutive month period, and total HAPs to less than twenty-five (25) tons per twelve (12) consecutive month period and shall render the requirements of 326 IAC 2-7 (Part 70 Permits), 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)), and 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP) not applicable.

D.1.4 Particulate Emission Limits [326 IAC 6-2]

Pursuant to 326 IAC 6-2-4, the particulate emissions from the hot oil heater, shall not exceed six tenths (0.6) pounds of particulate matter per MMBtu heat input.

D.1.5 Particulate Matter (PM) [326 IAC 6.5-1-2]

(a) Pursuant to 326 IAC 6.5-1-2(a) (Particulate Matter Limitations Except Lake County), particulate matter (PM) emissions from the aggregate mixing and drying operation and magnetite drying operation shall be limited to 0.03 grains per dry standard cubic foot (gr/dscf) for particulate matter.

(b) Pursuant to 326 IAC 6.5-1-2(a) (Particulate Matter Limitations Except Lake County), particulate matter (PM) emissions from the RAP crusher operation shall be limited to 0.03 grains per dry standard cubic foot (gr/dscf) for particulate matter.

D.1.6 Sulfur Dioxide (SO2) [326 IAC 7-1.1-1] [326 IAC 7-2-1]

(a) Pursuant to 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations), the Permittee shall comply with the following:

(1) The sulfur dioxide (SO2) emissions from the dryer/mixer burner, and diesel fuel-fired portable RAP crusher and screener, each, shall not exceed five tenths (0.5) pounds per MMBtu when using distillate oil.

(2) The sulfur dioxide (SO2) emissions from the dryer/mixer burner shall not exceed

one and six tenths (1.6) pounds per MMBtu heat input when using residual oil.

Note: No. 2 fuel oil, No. 4 fuel oil, diesel fuel oil and Biodiesel are considered distillate oils, and waste oil is considered residual oil.

(b) Pursuant to 326 IAC 7-2-1, compliance shall be demonstrated on a calendar month average.

D.1.7 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan is required for these facilities and any corresponding control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.1.8 Particulate Control (PM/PM10/PM2.5)

(a) In order to comply with Conditions D.1.1(b), D.1.1(d), D.1.2(e), D.1.2(f), D.1.2(g) and D.1.2(h), the baghouse for particulate control shall be in operation and control emissions from the dryer/mixer at all times when the dryer/mixer is in operation.

(b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

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

Not later than five (5) years from October 26, 2004, in order to demonstrate compliance with Conditions D.1.1(b), D.1.1(d), D.1.2(e), D.1.2(f), D.1.2(g) and D.1.2(h),the Permittee shall perform PM, PM10, and PM2.5 testing of the dryer/mixer not later than five (5) years from the most recent valid compliance demonstration, utilizing methods approved by the Commissioner. These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition. PM10 and PM2.5 includes filterable and condensable particulate matter.

D.1.10 Sulfur Dioxide (SO_2) Emissions and Sulfur Content

Fuel Oil

(a) Compliance with the fuel limitations established in Conditions D.1.3(a)(1) through D.1.3(a)(4) shall be determined utilizing one of the following options. Pursuant to 326 IAC 7-2-1 (Sulfur Dioxide Reporting Requirements), compliance shall be demonstrated on a thirty (30) day calendar-month average.

(1) Providing vendor analysis of fuel delivered, if accompanied by a vendor certification; or

(2) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.

(A) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and

(B) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling.

(3) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from the burner, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6.

A determination of noncompliance pursuant to any of the methods specified in (1) or (2) above shall not be refuted by evidence of compliance pursuant to the other method.

Steel Slag

(b) Compliance with the Steel slag limitations established in Condition D.1.3(a)(7) shall be determined utilizing one of the following options. Pursuant to 326 IAC 7-2-1 (Sulfur Dioxide Reporting Requirements), compliance shall be demonstrated on a thirty (30) day calendar-month average.

(1) Maintaining all records of vendor analyses or certifications of slag delivered; or

(2) Analyzing a sample of the Steel slag delivery if no vendor analyses or certifications are available, at least once per quarter, to determine the sulfur content of the Steel slag, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

(3) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from the burner, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6, or other procedures approved by IDEM, OAQ.

A determination of noncompliance pursuant to any of the methods specified in (1) or (2) above shall not be refuted by evidence of compliance pursuant to the other method.

D.1.11 Hydrogen Chloride (HCl) Emissions and Ash, Chlorine, and Lead Content

The Permittee shall demonstrate compliance with the waste oil ash, chlorine, and lead content limits established in Condition D.1.3(a)(5), by providing a vendor analysis of each fuel delivery accompanied by a vendor certification.

D.1.12 Multiple Fuel and Slag Usage Limitations

(a) In order to comply with the Condition D.1.3(c) when combusting more than one fuel per twelve (12) consecutive month period in the dryer/mixer burner, the Permittee shall limit fuel usage according to the following formulas:

Sulfur Dioxide (SO2) Emission Calculation

$$S = \frac{G(E_G) + O(E_O) + F(E_F)\ W(E_W) + D(E_D) + T(E_T)}{2{,}000 \text{ lbs/ton}}$$

where:

S = tons of sulfur dioxide emissions for a 12-month consecutive period
G = million cubic feet of natural gas used in the last 12 months
O = gallons of No. 2 fuel oil used in the last 12 months
F = gallons of No. 4 fuel oil used in the last 12 months
W = gallons of waste oil used in the last 12 months
D = gallons of Biodiesel used in the last 12 months
T = tons of steel slag used in the last 12 months

E_G = 0.6 lb/MMCF of natural gas

E_O = 71.0 lb/1000 gallons of No. 2 fuel oil
E_F = 75.0 lb/1000 gallons of No. 4 fuel oil
E_W = 147.0 lb/1000 gallons of waste oil
E_D = 71.0 lb/1000 gallons of Biodiesel
E_T = 0.0014 lb/ton of steel slag used

(b) In order to comply with the Condition D.1.3(c) when combusting more than one fuel per twelve (12) consecutive month period in the dryer/mixer burner, the Permittee shall limit fuel usage according to the following formulas:

Nitrogen Oxides (NOx) Emission Calculation

$$N = \frac{G(E_G) + O(E_O) + F(E_F)\ W(E_W) + D(E_D)}{2{,}000 \text{ lbs/ton}}$$

where:

N = tons of nitrogen oxide emissions for twelve (12) month consecutive period
G = million cubic feet of natural gas used in the last 12 months
O = gallons of No. 2 fuel oil used in the last 12 months
F = gallons of No. 4 fuel oil used in the last 12 months
W = gallons of waste oil used in the last 12 months
D = gallons of Biodiesel used in the last 12 months

E_G = 190 lb/MMCF of natural gas
E_O = 24.0 lb/1000 gallons of No. 2 fuel oil
E_F = 47.0 lb/1000 gallons of No. 4 fuel oil
E_W = 19.0 lb/1000 gallons of waste oil
E_D = 26.4 lb/1000 gallons of Biodiesel

(c) In order to comply with the Condition D.1.3(c) when combusting more than one fuel per twelve (12) consecutive month period in the dryer/mixer burner, the Permittee shall limit fuel usage according to the following formulas:

HCl Emission Calculation

$$HCl = \frac{W(E_W)}{2{,}000 \text{ lbs/ton}}$$

where:

HCl = tons of Hydrogen Chloride emissions for twelve (12) month consecutive period
W = gallons of waste oil used in the last 12 months
E_W = 6.6/1000 gallons of waste oil

D.1.13 Shingle Asbestos Content

Pursuant to 326 IAC 2-8-4, compliance with Condition D.1.3(d) shall be determined utilizing one of the following options:

(1) Providing shingle supplier certification that the factory second shingles do not contain asbestos; or

(2) Analyzing a sample of the factory second shingles delivery to determine the asbestos content of the factory second shingles, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or

other procedures approved by IDEM, OAQ.

A determination of noncompliance pursuant to any of the methods specified above shall not be refuted by evidence of compliance pursuant to the other method.

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

D.1.14 Visible Emissions Notations

(a) Visible emission notations from the conveyors, screens, material transfer points, crusher, and dryer/mixer stack (SV-1) exhaust shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) If abnormal emissions are observed, the Permittee shall take reasonable response steps. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. An abnormal visible emission notation is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

D.1.15 Parametric Monitoring

The Permittee shall record the pressure drop across the baghouse used in conjunction with the dryer/mixer, at least once per day when the dryer/mixer is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of one-half (0.5) and six (6.0) inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps. Section C - Response to Excursions or Exceedances contains the Permittee’s obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above-mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months, or other time period specified by the manufacturer. The Permittee shall maintain records of the manufacturer specifications, if used.

D.1.16 Broken or Failed Bag Detection

In the event that bag failure has been observed:

(a) For a single compartment baghouses controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

(b) For a single compartment baghouse controlling emissions from a batch process, the feed

to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the emissions unit. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

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

D.1.17 Record Keeping Requirements

(a) To document the compliance status with Conditions D.1.1(a), D.1.1(b), D.1.2(a) and D.1.2(b) the Permittee shall keep monthly records of the amount of asphalt processed through the dryer/mixer.

(b) To document the compliance status with Conditions D.1.3 and D.1.6, the Permittee shall maintain records in accordance with (1) through (10) below. Records maintained for (1) through (10) below shall be taken monthly and shall be complete and sufficient to establish compliance with the limits established in Conditions D.1.3 and D.1.6.

(1) Calendar dates covered in the compliance determination period;

(2) Actual fuel usage, sulfur content, heat content, and equivalent sulfur dioxide, emission rates for each fuel used at the source since the last compliance determination period;

(3) Actual waste oil usage, ash, chlorine, and lead content, and equivalent hydrogen chloride emission rate for waste oil used at the source since the last compliance determination period;

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

(i) Fuel supplier certifications;

(ii) The name of the fuel supplier; and

(iii) A statement from the fuel supplier that certifies the sulfur content of the No. 2 fuel oil, No. 4 fuel oil, waste oil and Biodiesel, and the chlorine content of waste oil.

(6) Actual steel slag usage, sulfur content and equivalent sulfur dioxide emission rates for all steel slag used at the source since the last compliance determination period;

(7) A certification, signed by the owner or operator, that the records of the steel slag supplier certifications represent all of the steel slag used during the period; and

(8) If the slag supplier certification is used to demonstrate compliance the following, as a minimum, shall be maintained:

(i) Steel slag supplier certifications;

(ii) The name of the steel slag supplier; and

(iii) A statement from the steel slag supplier that certifies the sulfur content of the steel slag.

(9) A certification, signed by the owner or operator, that the records of the shingle supplier certifications represent all of the shingles used during the period; and

(10) If the shingle supplier certification is used to demonstrate compliance the following, as a minimum, shall be maintained:

(A) Shingle supplier certifications;

(B) The name of the shingle supplier(s); and

(C) A statement from the shingle supplier(s) that certifies the asbestos content of the shingles from their company.

(d) To document the compliance status with Condition D.1.15, the Permittee shall maintain records of visible emission notations of the dryer/mixer stack (SV-1) exhaust once per day. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g., the process did not operate that day).

(e) To document the compliance status with Condition D.1.16, the Permittee shall maintain records once per day of the pressure drop during normal operation. The Permittee shall include in its daily record when the pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g., the process did not operate that day).

(f) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

D.1.18 Reporting Requirements

A quarterly summary of the information to document compliance status with Conditions D.1.1(a), D.1.2(a), and D.1.3, shall be submitted using the reporting forms located at the end of this permit, or their equivalent, not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee’s obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1)by the “authorized individual” as defined by 326 IAC 2-1.1-1(1).

SECTION D.2 FACILITY OPERATION CONDITIONS – COLD MIX ASPHALT

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

(a) cold-mix (stockpile mix) asphalt manufacturing operations and storage piles.

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

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

D.2.1 Volatile Organic Compounds (VOC) [326 IAC 8-5-2][326 IAC 2-8-4][326 IAC 2-2]

(a) Pursuant to 326 IAC 8-5-2 (Miscellaneous Operations: Asphalt Paving), the use of cutback asphalt or asphalt emulsion shall not contain more than seven percent (7%) oil distillate by volume of emulsion for any paving application except the following purposes:

(a) Penetrating prime coating

(b) Stockpile storage

(c) Application during the months of November, December, January, February and March.

(b) The VOC solvent used as diluent in the liquid binder used in cold mix asphalt production from the plant shall be limited such that no more than 66.1 tons of VOC emissions emitted per twelve (12) consecutive months. This shall be achieved by limiting the total VOC solvent of any one selected binder to not exceed the stated limit for that binder during the last twelve (12) months. When more than one binder is used, the formula below must be applied so that the total VOC emitted does not exceed 56.62 tons per twelve (12) consecutive month period rolled on a monthly basis.

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

(1) Cut back asphalt rapid cure, containing a maximum of 25.3% of the liquid binder by weight of VOC solvent and 95% by weight of VOC solvent evaporating.

(2) Cut back asphalt medium cure, containing a maximum of 28.6% of the liquid binder by weight of VOC solvent and 70% by weight of VOC solvent evaporating.

(3) Cut back asphalt slow cure, containing a maximum of 20% of the liquid binder by weight of VOC solvent and 25% by weight of VOC solvent evaporating.

(4) Emulsified asphalt with solvent, containing a maximum of 15% of liquid binder by weight of VOC solvent and 46.4% by weight of the VOC solvent in the liquid blend evaporating. The percent oil distillate in emulsified asphalt with solvent liquid, as determined by ASTM, must be 7% or less of the total emulsion by volume

(5) Other asphalt with solvent binder, containing a maximum 25.9% of the liquid binder of VOC solvent and 2.5% by weight of the VOC solvent evaporating

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

(1) Cutback asphalt rapid cure liquid binder usage shall not exceed 69.5 tons of VOC solvent per twelve (12) consecutive month period rolled on a monthly basis.

(2) Cutback asphalt medium cure liquid binder usage shall not exceed 94.4 tons of VOC solvent per twelve (12) consecutive month period rolled on a monthly basis.

(3) Cutback asphalt slow cure liquid binder usage shall not exceed 264.2 tons of VOC solvent per twelve (12) consecutive month period rolled on a monthly basis.

(4) Emulsified asphalt with solvent liquid binder usage shall not exceed 142.4 tons of VOC solvent per twelve (12) consecutive month period rolled on a monthly basis.

(5) Other asphalt with solvent liquid binder shall not exceed 2,642.2 tons of VOC solvent per twelve (12) consecutive month period rolled on a monthly basis.

(6) The VOC solvent allotments in subpart (c)(1) through (c)(5) of this condition shall be adjusted when more than one type of binder is used per twelve (12) month consecutive period rolled on a monthly basis. In order to determine the tons of VOC emitted per each type of binder, use the following formula and divide the tons of VOC solvent used for each type of binder by the corresponding adjustment ratio listed in the table that follows.

$$\frac{\text{Tons of solvent contained in binder}}{\text{Adjustment ratio}} = \text{tons of VOC emitted}$$

Type of binder	tons VOC solvent	adjustment ratio	tons VOC emitted
cutback asphalt rapid cure		1.053	
cutback asphalt medium cure		1.429	
cutback asphalt slow cure		4.000	
emulsified asphalt		2.155	
other asphalt		40.0	

The equivalent total tons of VOC of the combined liquid binders shall be less than 56.62 tons per twelve (12) consecutive month period rolled on a monthly basis.

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

D.2.2 Record Keeping Requirements

To document the compliance status with Condition D.2.1(b) and (c), the Permittee shall maintain records in accordance with (a) through (d) below. Records maintained for (a) through (d) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC emission limits established in Condition D.2.1(b) and (c).

(a) Calendar dates covered in the compliance determination period;

(b) Asphalt binder usage per month since the last compliance determination period;

(c) VOC solvent content by weight of the asphalt binder used each month; and

(d) Amount of VOC solvent used in the production of cold mix asphalt, and the amount of VOC emitted each month.

Section C - General Record Keeping Requirements, contains the Permittee's obligations with regard to the records required by this condition.

D.2.3 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.2.1(b) and (c) shall be submitted using the reporting forms located at the end of this permit, or their equivalent, not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting Requirements contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meet the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

SECTION E.1 FACILITY OPERATION CONDITIONS

Emissions Unit Description [326 IAC 2-6.1-5(a)(1): Gasoline Dispensing Facilities

(i) One (1) 500 gallon gasoline storage tank, installed in 1990.

Under 40 CFR 63, Subpart CCCCCC: National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities, the gasoline fuel transfer and dispensing operation, including the 500 gallon gasoline storage tank, is considered an affected facility.

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

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

E.1.1 National Emission Standards for Hazardous Air Pollutants (NESHAPs): Area Source Standards for Source Category: Gasoline Dispensing Facilities [40 CFR 63, Subpart CCCCCC] [326 IAC 20]

Pursuant to 40 CFR § 63.11112(a), the emission sources to which this subpart applies are gasoline storage tanks and associated equipment components in vapor or liquid gasoline service at new, reconstructed, or existing gasoline dispensing facilities (GDF), located at an area source. The affected source includes each gasoline cargo tank during the delivery of product to a GDF and also includes each storage tank. Pressure/Vacuum vents on gasoline storage tanks and the equipment necessary to unload product from cargo tanks into the storage tanks at GDF are covered emission sources. The equipment used for the refueling of motor vehicles is not covered by this subpart.

The gasoline fuel transfer and dispensing operation is therefore subject to the following portions of Subpart CCCCCC (6C):

(1) § 63.11504(a)(1)(iii), (a)(2), (a)(3);
(2) § 63.11505(a)(1), (b), (e);
(3) § 63.11506(a);
(4) § 63.11507(g);
(5) § 63.11508(a), (b), (d)(1), (d)(2), (d)(8)
(6) § 63.11509(a), (b), (c)(6), (c)(7), (d), (e), (f)
(7) § 63.11510
(8) § 63.11511
(9) § 63.11512

Non-applicable portions of the NESHAP are not included in the permit.

The requirements of 40 CFR 63 Subpart A – General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the facility described in this section except when otherwise specified in 40 CFR 63, Subpart 6C.

A copy of the rule has been supplied as Attachment B to the Permit.

SECTION E.2 FACILITY OPERATION CONDITIONS

Emissions Unit Description: Hot-Mix Asphalt Plant

(a) One (1) six hundred fifty (650) tons per hour aggregate dryer, installed in June 1990, processing steel slag and certified ground asbestos-free shingles, in the aggregate mix, with a burner capacity of 116 million British thermal units per hour, and exhausting through a baghouse at stack SV1. This dryer is fired by natural gas, #2 fuel oil, #4 fuel oil, #4 waste oil, and biodiesel, as available. This unit has the capability of processing both hot-mix and warm-mix asphalt;

Under 40 CFR 60.90, Subpart I - New Source Performance Standards for Hot Mix Asphalt Facilities, this is considered an affected hot-mix asphalt facility.

(b) A drying process, used to dry magnetite, with a maximum capacity of 75,000 tons per year, exhausting through a baghouse at stack SV1;

(c) One (1) baghouse with a total filter area of 13,149 ft^2, exhausting at stack SV1; and

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

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

E.2.1 General Provisions Relating to NSPS [326 IAC 12-1] [40 CFR 60, Subpart A]

(a) Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference as 326 IAC 12-1, except as otherwise specified in 40 CFR 60, Subpart I.

(b) Pursuant to 40 CFR 60.10, the Permittee shall submit all required notifications and reports to:

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

E.2.2 New Source Performance Standards (NSPS) for Hot-mix Asphalt Facilities [40 CFR Part 60, Subpart I] [326 IAC 12]

The Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart I (included as Attachment C of this permit), which are incorporated by reference as 326 IAC 12, except as otherwise specified in 40 CFR Part 60, Subpart I:

(a) 40 CFR 60.90

(b) 40 CFR 60.91

(c) 40 CFR 60.92

(d) 40 CFR 60.93

E.2.3 Testing Requirements [326 IAC 2-8-5(a)(1), (4)] [326 IAC 2-1.1-11]

The Permittee shall perform the stack testing required under NSPS 40 CFR 60, Subpart I, utilizing methods as approved by the Commissioner to document compliance with Condition E.2.2. These tests shall be repeated at least once every five (5) years from the date of the last

valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

SECTION E.3 FACILITY OPERATION CONDITIONS

Emissions Unit Description: Recycled Asphalt Pavement (RAP) System

(d) One (1) RAP feed bin with a maximum holding capacity of 25 tons.

(e) One (1) recycled asphalt pavement (RAP) crusher, rated at 150 ton per hour, approved for construction in 2011.

Note: This RAP crusher will replace the existing crusher that was constructed in 1990. The former RAP crusher remains on site but is not operable.

Under 40 CFR 60, Subpart OOO, New Source Performance Standards for Nonmetallic Mineral Processing Plants, this is considered an affected facility.

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

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

E.3.1 General Provisions Relating to NSPS [326 IAC 12-1] [40 CFR 60, Subpart A]

(a) Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference as 326 IAC 12-1, except as otherwise specified in 40 CFR 60, Subpart OOO.

(b) Pursuant to 40 CFR 60.10, the Permittee shall submit all required notifications and reports to:

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

E.3.2 NSPS Subpart OOO Requirements - Standards of Performance for Nonmetallic Mineral Processing Plants [40 CFR Part 60, Subpart OOO] [326 IAC 12-1]

The Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart OOO (included as Attachment D of this permit), which are incorporated by reference as 326 IAC 12, except as otherwise specified in 40 CFR Part 60, Subpart OOO:

(a) 40 CFR 60.670(a), (d), (e), and (f)
(b) 40 CFR 60.671
(c) 40 CFR 60.672 (a), (b), (d), and (e)
(d) 40 CFR 60.673
(e) 40 CFR 60.674(b)
(f) 40 CFR 60.675(a), (b), (c)(1)(i), (ii), (iii), (c)(3), (d), (e), (g), and (i)
(g) 40 CFR 60.676(a), (b)(1), (f), (h), (i), (j), and (k)
(h) Table 1 and Table 3

E.3.3 Testing Requirements [40 CFR Part 60, Subpart I] [326 IAC 12-1] [326 IAC 2-8-5(a)(1),(4)] [326 IAC 2-1.1-11]

In order to demonstrate compliance with Condition E.3.2, the Permittee shall perform testing for fugitive emissions from affected facilities without water sprays, as required under NSPS 40 CFR 60, Subpart OOO, within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup, utilizing methods

approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

Note: Pursuant to §60.674(b)(1), affected facilities controlled by water carryover from upstream water sprays that are inspected according to the requirements in §60.674(b) and §60.676(b) are exempt from this 5-year repeat testing requirement.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) CERTIFICATION

Source Name: J.H. Rudolph & Company, Inc.
Source Address: 3300 S. Green River Road, Evansville, Indiana 47715
FESOP Permit No.: F163-23182-00186 (formerly plant ID 163-03408)

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

Please check what document is being certified:

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

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. Signature:
Printed Name:
Title/Position:
Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
Phone: (317) 233-0178
Fax: (317) 233-6865

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) EMERGENCY OCCURRENCE REPORT

Source Name: J.H. Rudolph & Company, Inc.
Source Address: 3300 S. Green River Road, Evansville, Indiana 47715
FESOP Permit No.: F163-23182-00186 (formerly plant ID 163-03408)

This form consists of 2 pages **Page 1 of 2**

☐ This is an emergency as defined in 326 IAC 2-7-1(12)
- The Permittee must notify the Office of Air Quality (OAQ), within four (**4**) business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and
- The Permittee must submit notice in writing or by facsimile within two (**2**) working days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16

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

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

If any of the following are not applicable, mark N/A **Page 2 of 2**

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO_2, VOC, NO_X, CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by:_____

Title / Position:_____

Date:_____

Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

FESOP Quarterly Report

Source Name: J.H. Rudolph & Company, Inc.
Source Address: 3300 S. Green River Road, Evansville, IN 47715
FESOP No.: F163-23182-00186 (formerly plant ID 163-03408)
Facility: 650 ton/hr aggregate mixer

Parameter: Steel Slag Usage

Limit: Maximum steel slag usage shall not exceed 100,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

QUARTER: _____ YEAR:_____

Month	Column 1 Steel Slag Usage (tons)	Column 2 Steel Slag Usage (tons)	Column 1 + Column 2 Steel Slag Usage (tons)
	This Month	Previous 11 Months	12 Month Total

☐ No deviation occurred in this quarter.

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

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

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

FESOP Quarterly Report

Source Name: J.H. Rudolph & Company Inc.
Source Address: 3300 S. Green River Road, Evansville, IN 47715
FESOP No.: F163-23182-00186 (formerly plant ID 163-03408)
Facility: 650 ton/hr aggregate mixer
Parameter: Combined Hot-Mix and Warm-Mix Asphalt Production
Limit: The annual throughput to the aggregate dryer shall be limited to 750,000 tons of hot-mix and warm-mix asphalt, combined, per twelve (12) consecutive month period, with compliance determined at the end of each month.

QUARTER: _____ YEAR:_____

Month	Column 1: Asphalt throughput (tons)	Column 2: Asphalt throughput (tons)	Column 1 + Column 2: Asphalt throughput (tons)
	This Month	Previous 11 Months	12 Month Total

☐ No deviation occurred in this quarter.

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

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

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

FESOP Quarterly Report

Source Name: J.H. Rudolph & Company Inc.
Source Address: 3300 S. Green River Road, Evansville, IN 47715
FESOP No.: F163-23182-00186 (formerly plant ID 163-03408)
Facility: Magnetite drying operation

Parameter: Throughput

Limit: The annual throughput to the magnetite drying operation shall be limited to 75,000 tons of magnetite per twelve (12) consecutive month period, with compliance determined at the end of each month.

QUARTER: _____ MONTH: _____ YEAR:_____

Month	Column 1: Magnetite throughput (tons)	Column 2: Magnetite throughput (tons)	Column 1 + Column 2: Magnetite throughput (tons)
	This Month	Previous 11 Months	12 Month Total

☐ No deviation occurred in this quarter.

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

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

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

FESOP Quarterly Report

Source Name: J.H. Rudolph & Company Inc.
Source Address: 3300 S. Green River Road, Evansville, IN 47715
FESOP No.: F163-23182-00186 (formerly plant ID 163-03408)
Facility: Aggregate Dryer

Parameter: Throughput

Limit: The annual throughput of the certified ground shingles added to the mixture process shall be limited to 20,000 tons of per twelve (12) consecutive month period, with compliance determined at the end of each month.

QUARTER: _____ YEAR:_____

Month	Column 1: ground shingles throughput (tons)	Column 2: ground shingles throughput (tons)	Column 1 + Column 2: ground shingles throughput (tons)
	This Month	Previous 11 Months	12 Month Total

☐ No deviation occurred in this quarter.

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

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

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

FESOP Quarterly Report

Source Name: J.H. Rudolph & Company, Inc.
Source Address: 3300 S. Green River Road, Evansville, IN 47715
FESOP No.: F163-23182-00186 (formerly plant ID 163-03408)

Facility: Dryer/Mixer (Unit No. 2) and Diesel Fuel-Fired Portable RAP Crusher & Screener

Parameter: **Fuel / SO2 emissions**

Emission Limits: *Sulfur dioxide (SO_2)* emissions shall not exceed 94.21 tons per twelve (12) consecutive month period, with compliance determined at the end of each month, using the equation found in Condition D.1.12.

Nitrogen Oxides (NOx) emissions shall not exceed 93.82 tons per twelve (12) consecutive month period, with compliance determined at the end of each month, using the equation found in Condition D.1.12.

Hydrogen Chloride (HCl) emissions shall not exceed 9.9 tons per twelve (12) consecutive month period, with compliance determined at the end of each month, using the equation found in Condition D.1.12.

Fuel & Slag Limits: When combusting only one type of fuel per twelve (12) consecutive month period in the dryer/mixer burner, in conjunction with the use of slag in the aggregate mix, fuel and slag usage shall not exceed the following:

Fuel Type (Units)	Fuel Usage Limit (per 12 consecutive month period)
Natural Gas (MMCF)	987.59
No. 2 Distillate Fuel Oil (gallons)	2,653,909
No. 4 Distillate Fuel Oil (gallons)	1,256,184
Waste Oil (gallons)	1,831,171
Biodiesel Fuel (gallons)	2,452,079

Facility: Cold-mix Asphalt Production

Parameter: **Binder Usage / VOC Emissions**

Emission Limits: *Volatile Organic Compound (VOC)* emissions from the sum of the binders shall not exceed 66.1 tons per twelve (12) consecutive month period with compliance determined at the end of each month, using the equation found in Condition D.2.2(c).

Binder Limits: When using only one type of liquid binder (asphalt emulsion) per twelve (12) consecutive month period in the production of cold-mix asphalt, liquid binder (asphalt emulsion) usage shall not exceed the following:

Type of Binder	Binder Usage Limit (per 12 consecutive month period)
Cutback Asphalt Rapid Cure	69.5
Cutback Asphalt Medium Cure	94.4
Cutback Asphalt Slow Cure	264.2
Emulsified Asphalt	142.4
Other Asphalt	2,642.2

FESOP Quarterly Report - Fuel Usage / SO2, NOx and HCl emissions

QUARTER: _____ YEAR: _____

Month	Fuel Types (units)	Column 1	Column 2	Column 1 + Column 2	Equation Results	Equation Results	Equation Results
		Usage This Month	Usage Previous 11 Months	Usage 12 Month Total	Sulfur Dioxide (SO2) Emissions (tons per 12 months)	Nitrogen Oxides (NOx) Emissions (tons per 12 months)	Hydrogen Chloride (HCL) Emissions (tons per 12 months)
Month 1	Natural Gas (MMCF)						
	No. 2 Fuel Oil (gallons)						
	No. 4 Fuel Oil (gallons						
	Waste Fuel Oil (gallons)						
	Biodiesel Fuel (gallons)						
Month 2	Natural Gas (MMCF)						
	No. 2 Fuel Oil (gallons)						
	No. 4 Fuel Oil (gallons						
	Waste Fuel Oil (gallons)						
	Biodiesel Fuel (gallons)						
Month 3	Natural Gas (MMCF)						
	No. 2 Fuel Oil (gallons)						
	No. 4 Fuel Oil (gallons						
	Waste Fuel Oil (gallons)						
	Biodiesel Fuel (gallons)						

☐ No deviation occurred in this reporting period.

☐ Deviation/s occurred in this reporting period.

Deviation has been reported on: _____

Submitted by: _____ Date: _____

Title / Position: _____ Phone: _____

Signature: _____

FESOP Quarterly Report - Liquid Binder (Asphalt Emulsion) Usage / VOC Emissions

QUARTER: _____ YEAR: _____

Month	Binder/Emulsion Types (units)	Column 1 Usage This Month	Column 2 Usage Previous 11 Months	Column 1 + Column 2 Usage 12 Month Total	Equation Results VOC Emissions (tons per 12 months)
Month 1	Cutback asphalt rapid cure liquid binder (million cubic feet)				
	Cutback asphalt medium cure liquid binder (gallons)				
	Cutback asphalt slow cure liquid binder (gallons)				
	Emulsified asphalt with solvent liquid binder				
	Other asphalt with solvent liquid binder				
Month 2	Cutback asphalt rapid cure liquid binder (million cubic feet)				
	Cutback asphalt medium cure liquid binder (gallons)				
	Cutback asphalt slow cure liquid binder (gallons)				
	Emulsified asphalt with solvent liquid binder				
	Other asphalt with solvent liquid binder				
Month 3	Cutback asphalt rapid cure liquid binder (million cubic feet)				
	Cutback asphalt medium cure liquid binder (gallons)				
	Cutback asphalt slow cure liquid binder (gallons)				
	Emulsified asphalt with solvent liquid binder				
	Other asphalt with solvent liquid binder				

☐ No deviation occurred in this reporting period.
☐ Deviation/s occurred in this reporting period.
Deviation has been reported on:_____

Submitted by:_____Date: _____
Title / Position:_____Phone:_____
Signature: _____

VOC Emitted (tons/day) = $\frac{\text{VOC solvent used for each binder (tons/day)}}{\text{Adjustment factor}}$

Type of Binder	Adjustment Factor
Cutback Asphalt Rapid Cure	1.053
Cutback Asphalt Medium Cure	1.429
Cutback Asphalt Slow Cure	4.0
Emulsified Asphalt	2.155
Other Asphalt	40.0

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

FESOP Quarterly Report

Source Name: J.H. Rudolph & Company, Inc.
Source Address: 3300 S. Green River Road, Evansville, IN 47715
FESOP No.: F163-23182-00186 (formerly plant ID 163-03408)
Facility: Diesel Fuel-Fired Recycled Asphalt Pavement (RAP) Crusher Operation
Limit: The diesel fuel-fired Recycled Asphalt Pavement (RAP) Crusher Operation shall remain at a location for a period not to exceed twelve (12) consecutive months.

Manufacture Date: _____ Installation Date: _____

Make: _____ Removal Date: _____

Model: _____ Model Year: _____

Horsepower Rating: _____ MMBtu/hr Rating: _____

QUARTER:_____ YEAR:_____

Month	Column 1	Column 2	Column 1 - Column 2
	Number of Days Onsite This Month	Number of Days Onsite Previous 11 Months	12 Month Total Number of Days Onsite
Month 1			
Month 2			
Month 3			

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: J.H. Rudolph & Company, Inc.
Source Address: 3300 S. Green River Road, Evansville, Indiana 47715
FESOP Permit No.: F163-23182-00186 (formerly plant ID 163-03408)

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

This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements of this permit, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

☐ NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

☐ THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

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

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

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

Form Completed by:_____

Title / Position:_____

Date:_____

Phone: _____

Mail to: Permit Administration & Development Section
Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

J.H. Rudolph & Company, Inc.
(formerly plant ID 163-03408)
3300 S. Green River Road
Evansville, Indiana 47715

Affidavit of Construction

I, _____, being duly sworn upon my oath, depose and say:
(Name of the Authorized Representative)

1. I live in _____ County, Indiana and being of sound mind and over twenty-one (21) years of age, I am competent to give this affidavit.

2. I hold the position of _____ for _____.
(Title) (Company Name)

3. By virtue of my position with _____, I have personal
(Company Name)

knowledge of the representations contained in this affidavit and am authorized to make these representations

on behalf of _____ .
(Company Name)

4. I hereby certify that J. H. Rudolph & Company, located at 3300 S. Green River Rd, Evansville IN 47715, completed construction of the cold-mix (stockpile mix) asphalt manufacturing operations and storage piles on in conformity with the requirements and intent of the Federally Enforceable Source Operating Permit application received by the Office of Air Quality on June 5, 2006 and as permitted pursuant to the FESOP Permit No. 163-23182-00186, Plant ID No. 163-00186, issued on _____.

Further Affiant said not.

I affirm under penalties of perjury that the representations contained in this affidavit are true, to the best of my information and belief.

_____.
Signature

_____.
Date

STATE OF INDIANA)
)SS

COUNTY OF _____)

Subscribed and sworn to me, a notary public in and for _____ County and State of Indiana on this _____ day of _____, 20 _____ .

My Commission expires: _____.

_____.
Signature

_____.
Name (typed or printed)

Federally Enforceable State Operating Permit (FESOP)
OFFICE OF AIR QUALITY

J.H. Rudolph & Company, Inc.
3300 S. Green River Road,
Evansville, IN 47715

Attachment A

HOT-MIX ASPHALT PLANT

FUGITIVE DUST CONTROL PLAN

F163-29299-00186

HOT-MIX ASPHALT PLANT SITE FUGITIVE DUST CONTROL PLAN

(a) Fugitive particulate matter emissions from plant roadways, parking lots and yards shall be controlled by one of the following methods:

1) Application of water and/or water-dust control material solutions;

2) Sweeping between watering;

3) Limiting vehicular speed to 10 miles per hour.

(b) Fugitive particulate matter emissions from conveying/handling operations shall be controlled by minimizing all drop distances.

(c) Fugitive particulate matter emissions from storage piles shall be controlled by one of the following methods:

1) minimizing drop distances; and

2) maintaining moisture content of materials above 1.5%.

(d) Fugitive particulate matter emissions from plant RAP crusher operations shall be controlled by minimizing all drop distances.

Federally Enforceable State Operating Permit (FESOP)
OFFICE OF AIR QUALITY

J.H. Rudolph & Company, Inc.
3300 S. Green River Road,
Evansville, IN 47715

Attachment B

Title 40: Protection of Environment

PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES

Subpart CCCCCC - NESHAPs for Source Category:
Gasoline Dispensing Facilities

F163-29299-00186

40 CFR 63, Subpart CCCCCC - National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities

Source: 73 FR 1945, Jan. 10, 2008, unless otherwise noted.

What This Subpart Covers

§ 63.11110 What is the purpose of this subpart?

This subpart establishes national emission limitations and management practices for hazardous air pollutants (HAP) emitted from the loading of gasoline storage tanks at gasoline dispensing facilities (GDF). This subpart also establishes requirements to demonstrate compliance with the emission limitations and management practices.

§ 63.11111 Am I subject to the requirements in this subpart?

(a) The affected source to which this subpart applies is each GDF that is located at an area source. The affected source includes each gasoline cargo tank during the delivery of product to a GDF and also includes each storage tank.

(b) If your GDF has a monthly throughput of less than 10,000 gallons of gasoline, you must comply with the requirements in §63.11116.

(c) If your GDF has a monthly throughput of 10,000 gallons of gasoline or more, you must comply with the requirements in §63.11117.

(d) If your GDF has a monthly throughput of 100,000 gallons of gasoline or more, you must comply with the requirements in §63.11118.

(e) An affected source shall, upon request by the Administrator, demonstrate that their average monthly throughput is less than the 10,000-gallon or the 100,000-gallon threshold level, as applicable.

(f) If you are an owner or operator of affected sources, as defined in paragraph (a) of this section, you are not required to obtain a permit under 40 CFR part 70 or 40 CFR part 71 as a result of being subject to this subpart. However, you must still apply for and obtain a permit under 40 CFR part 70 or 40 CFR part 71 if you meet one or more of the applicability criteria found in 40 CFR 70.3(a) and (b) or 40 CFR 71.3(a) and (b).

(g) The loading of aviation gasoline storage tanks at airports is not subject to this subpart and the aviation gasoline is not included in the gasoline throughput specified in paragraphs (b) through (e) of this section.

§ 63.11112 What parts of my affected source does this subpart cover?

(a) The emission sources to which this subpart applies are gasoline storage tanks and associated equipment components in vapor or liquid gasoline service at new, reconstructed, or existing GDF that meet the criteria specified in §63.11111. Pressure/Vacuum vents on gasoline storage tanks and the equipment necessary to unload product from cargo tanks into the storage tanks at GDF are covered emission sources. The equipment used for the refueling of motor vehicles is not covered by this subpart.

(b) An affected source is a new affected source if you commenced construction on the affected source after November 9, 2006, and you meet the applicability criteria in §63.11111 at the time you commenced operation.

(c) An affected source is reconstructed if you meet the criteria for reconstruction as defined in §63.2.

(d) An affected source is an existing affected source if it is not new or reconstructed.

§ 63.11113 When do I have to comply with this subpart?

(a) If you have a new or reconstructed affected source, you must comply with this subpart according to paragraphs (a)(1) and (2) of this section, except as specified in paragraph (d) of this section.

(1) If you start up your affected source before January 10, 2008, you must comply with the standards in this subpart no later than January 10, 2008.

(2) If you start up your affected source after January 10, 2008, you must comply with the standards in this subpart upon startup of your affected source.

(b) If you have an existing affected source, you must comply with the standards in this subpart no later than January 10, 2011.

(c) If you have an existing affected source that becomes subject to the control requirements in this subpart because of an increase in the average monthly throughput, as specified in §63.11111(c) or §63.11111(d), you must comply with the standards in this subpart no later than 3 years after the affected source becomes subject to the control requirements in this subpart.

(d) If you have a new or reconstructed affected source and you are complying with Table 1 to this subpart, you must comply according to paragraphs (d)(1) and (2) of this section.

(1) If you start up your affected source from November 9, 2006 to September 23, 2008, you must comply no later than September 23, 2008.

(2) If you start up your affected source after September 23, 2008, you must comply upon startup of your affected source.

[73 FR 1945, Jan. 10, 2008, as amended at 73 FR 35944, June 25, 2008]

Emission Limitations and Management Practices

§ 63.11116 Requirements for facilities with monthly throughput of less than 10,000 gallons of gasoline.

(a) You must not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following:

(1) Minimize gasoline spills;

(2) Clean up spills as expeditiously as practicable;

(3) Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use;

(4) Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.

(b) You are not required to submit notifications or reports, but you must have records available within 24 hours of a request by the Administrator to document your gasoline throughput.

(c) You must comply with the requirements of this subpart by the applicable dates specified in §63.11113.

§ 63.11117 Requirements for facilities with monthly throughput of 10,000 gallons of gasoline or more.

(a) You must comply with the requirements in section §63.11116(a).

(b) Except as specified in paragraph (c), you must only load gasoline into storage tanks at your facility by utilizing submerged filling, as defined in §63.11132, and as specified in paragraph (b)(1) or paragraph (b)(2) of this section.

(1) Submerged fill pipes installed on or before November 9, 2006, must be no more than 12 inches from the bottom of the storage tank.

(2) Submerged fill pipes installed after November 9, 2006, must be no more than 6 inches from the bottom of the storage tank.

(c) Gasoline storage tanks with a capacity of less than 250 gallons are not required to comply with the submerged fill requirements in paragraph (b) of this section, but must comply only with all of the requirements in §63.11116.

(d) You must have records available within 24 hours of a request by the Administrator to document your gasoline throughput.

(e) You must submit the applicable notifications as required under §63.11124(a).

(f) You must comply with the requirements of this subpart by the applicable dates contained in §63.11113.

[73 FR 1945, Jan. 10, 2008, as amended at 73 FR 12276, Mar. 7, 2008]

§ 63.11118 Requirements for facilities with monthly throughput of 100,000 gallons of gasoline or more.

(a) You must comply with the requirements in §§63.11116(a) and 63.11117(b).

(b) Except as provided in paragraph (c) of this section, you must meet the requirements in either paragraph (b)(1) or paragraph (b)(2) of this section.

(1) Each management practice in Table 1 to this subpart that applies to your GDF.

(2) If, prior to January 10, 2008, you satisfy the requirements in both paragraphs (b)(2)(i) and (ii) of this section, you will be deemed in compliance with this subsection.

(i) You operate a vapor balance system at your GDF that meets the requirements of either paragraph (b)(2)(i)(A) or paragraph (b)(2)(i)(B) of this section.

(A) Achieves emissions reduction of at least 90 percent.

(B) Operates using management practices at least as stringent as those in Table 1 to this subpart.

(ii) Your gasoline dispensing facility is in compliance with an enforceable State, local, or tribal rule or permit that contains requirements of either paragraph (b)(2)(i)(A) or paragraph (b)(2)(i)(B) of this section.

(c) The emission sources listed in paragraphs (c)(1) through (3) of this section are not required to comply with the control requirements in paragraph (b) of this section, but must comply with the requirements in §63.11117.

(1) Gasoline storage tanks with a capacity of less than 250 gallons that are constructed after January 10, 2008.

(2) Gasoline storage tanks with a capacity of less than 2,000 gallons that were constructed before January 10, 2008.

(3) Gasoline storage tanks equipped with floating roofs, or the equivalent.

(d) Cargo tanks unloading at GDF must comply with the management practices in Table 2 to this subpart.

(e) You must comply with the applicable testing requirements contained in §63.11120.

(f) You must submit the applicable notifications as required under §63.11124.

(g) You must keep records and submit reports as specified in §§63.11125 and 63.11126.

(h) You must comply with the requirements of this subpart by the applicable dates contained in §63.11113.

[73 FR 1945, Jan. 10, 2008, as amended at 73 FR 12276, Mar. 7, 2008]

Testing and Monitoring Requirements

§ 63.11120 What testing and monitoring requirements must I meet?

(a) Each owner or operator, at the time of installation of a vapor balance system required under §63.11118(b)(1), and every 3 years thereafter, must comply with the requirements in paragraphs (a)(1) and (2) of this section.

(1) You must demonstrate compliance with the leak rate and cracking pressure requirements, specified in item 1(g) of Table 1 to this subpart, for pressure-vacuum vent valves installed on your gasoline storage tanks using the test methods identified in paragraph (a)(1)(i) or paragraph (a)(1)(ii) of this section.

(i) California Air Resources Board Vapor Recovery Test Procedure TP–201.1E,—Leak Rate and Cracking Pressure of Pressure/Vacuum Vent Valves, adopted October 8, 2003 (incorporated by reference, see §63.14).

(ii) Use alternative test methods and procedures in accordance with the alternative test method requirements in §63.7(f).

(2) You must demonstrate compliance with the static pressure performance requirement, specified in item 1(h) of Table 1 to this subpart, for your vapor balance system by conducting a static pressure test on your gasoline storage tanks using the test methods identified in paragraph (a)(2)(i) or paragraph (a)(2)(ii) of this section.

(i) California Air Resources Board Vapor Recovery Test Procedure TP–201.3,—Determination of 2-Inch WC Static Pressure Performance of Vapor Recovery Systems of Dispensing Facilities, adopted April 12, 1996, and amended March 17, 1999 (incorporated by reference, see §63.14).

(ii) Use alternative test methods and procedures in accordance with the alternative test method requirements in §63.7(f).

(b) Each owner or operator choosing, under the provisions of §63.6(g), to use a vapor balance system other than that described in Table 1 to this subpart must demonstrate to the Administrator or delegated authority under paragraph §63.11131(a) of this subpart, the equivalency of their vapor balance system to that described in Table 1 to this subpart using the procedures specified in paragraphs (b)(1) through (3) of this section.

(1) You must demonstrate initial compliance by conducting an initial performance test on the vapor balance system to demonstrate that the vapor balance system achieves 95 percent reduction using the California Air Resources Board Vapor Recovery Test Procedure TP–201.1,—Volumetric Efficiency for Phase I Vapor Recovery Systems, adopted April 12, 1996, and amended February 1, 2001, and October 8, 2003, (incorporated by reference, see §63.14).

(2) You must, during the initial performance test required under paragraph (b)(1) of this section, determine and document alternative acceptable values for the leak rate and cracking pressure requirements specified in item 1(g) of Table 1 to this subpart and for the static pressure performance requirement in item 1(h) of Table 1 to this subpart.

(3) You must comply with the testing requirements specified in paragraph (a) of this section.

Notifications, Records, and Reports

§ 63.11124 What notifications must I submit and when?

(a) Each owner or operator subject to the control requirements in §63.11117 must comply with paragraphs (a)(1) through (3) of this section.

(1) You must submit an Initial Notification that you are subject to this subpart by May 9, 2008, or at the time you become subject to the control requirements in §63.11117, unless you meet the requirements in paragraph (a)(3) of this section. The Initial Notification must contain the information specified in paragraphs (a)(1)(i) through (iii) of this section. The notification must be submitted to the applicable EPA Regional Office and delegated State authority as specified in §63.13.

(i) The name and address of the owner and the operator.

(ii) The address (i.e., physical location) of the GDF.

(iii) A statement that the notification is being submitted in response to this subpart and identifying the requirements in paragraphs (a) through (c) of §63.11117 that apply to you.

(2) You must submit a Notification of Compliance Status to the applicable EPA Regional Office and the delegated State authority, as specified in §63.13, by the compliance date specified in §63.11113 unless you meet the requirements in paragraph (a)(3) of this section. The Notification of Compliance Status must be signed by a responsible official who must certify its accuracy and must indicate whether the source has complied with the requirements of this subpart. If your facility is in compliance with the requirements of this subpart at the time the Initial Notification required under paragraph (a)(1) of this section is due, the

Notification of Compliance Status may be submitted in lieu of the Initial Notification provided it contains the information required under paragraph (a)(1) of this section.

(3) If, prior to January 10, 2008, you are operating in compliance with an enforceable State, local, or tribal rule or permit that requires submerged fill as specified in §63.11117(b), you are not required to submit an Initial Notification or a Notification of Compliance Status under paragraph (a)(1) or paragraph (a)(2) of this section.

(b) Each owner or operator subject to the control requirements in §63.11118 must comply with paragraphs (b)(1) through (5) of this section.

(1) You must submit an Initial Notification that you are subject to this subpart by May 9, 2008, or at the time you become subject to the control requirements in §63.11118. The Initial Notification must contain the information specified in paragraphs (b)(1)(i) through (iii) of this section. The notification must be submitted to the applicable EPA Regional Office and the delegated State authority as specified in §63.13.

(i) The name and address of the owner and the operator.

(ii) The address (i.e., physical location) of the GDF.

(iii) A statement that the notification is being submitted in response to this subpart and identifying the requirements in paragraphs (a) through (c) of §63.11118 that apply to you.

(2) You must submit a Notification of Compliance Status to the applicable EPA Regional Office and the delegated State authority, as specified in §63.13, by the compliance date specified in §63.11113. The Notification of Compliance Status must be signed by a responsible official who must certify its accuracy and must indicate whether the source has complied with the requirements of this subpart. If your facility is in compliance with the requirements of this subpart at the time the Initial Notification required under paragraph (b)(1) of this section is due, the Notification of Compliance Status may be submitted in lieu of the Initial Notification provided it contains the information required under paragraph (b)(1) of this section.

(3) If, prior to January 10, 2008, you satisfy the requirements in both paragraphs (b)(3)(i) and (ii) of this section, you are not required to submit an Initial Notification or a Notification of Compliance Status under paragraph (b)(1) or paragraph (b)(2) of this subsection.

(i) You operate a vapor balance system at your gasoline dispensing facility that meets the requirements of either paragraphs (b)(3)(i)(A) or (b)(3)(i)(B) of this section.

(A) Achieves emissions reduction of at least 90 percent.

(B) Operates using management practices at least as stringent as those in Table 1 to this subpart.

(ii) Your gasoline dispensing facility is in compliance with an enforceable State, local, or tribal rule or permit that contains requirements of either paragraphs (b)(3)(i)(A) or (b)(3)(i)(B) of this section.

(4) You must submit a Notification of Performance Test, as specified in §63.9(e), prior to initiating testing required by §63.11120(a) and (b).

(5) You must submit additional notifications specified in §63.9, as applicable.

[73 FR 1945, Jan. 10, 2008, as amended at 73 FR 12276, Mar. 7, 2008]

§ 63.11125 What are my recordkeeping requirements?

(a) Each owner or operator subject to the management practices in §63.11118 must keep records of all tests performed under §63.11120(a) and (b).

(b) Records required under paragraph (a) of this section shall be kept for a period of 5 years and shall be made available for inspection by the Administrator's delegated representatives during the course of a site visit.

§ 63.11126 What are my reporting requirements?

Each owner or operator subject to the management practices in §63.11118 shall report to the Administrator the results of all volumetric efficiency tests required under §63.11120(b). Reports submitted under this paragraph must be submitted within 180 days of the completion of the performance testing.

Other Requirements and Information

§ 63.11130 What parts of the General Provisions apply to me?

Table 3 to this subpart shows which parts of the General Provisions apply to you.

§ 63.11131 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by the U.S. EPA or a delegated authority such as the applicable State, local, or tribal agency. If the U.S. EPA Administrator has delegated authority to a State, local, or tribal agency, then that agency, in addition to the U.S. EPA, has the authority to implement and enforce this subpart. Contact the applicable U.S. EPA Regional Office to find out if implementation and enforcement of this subpart is delegated to a State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under subpart E of this part, the authorities contained in paragraph (c) of this section are retained by the Administrator of U.S. EPA and cannot be transferred to the State, local, or tribal agency.

(c) The authorities that cannot be delegated to State, local, or tribal agencies are as specified in paragraphs (c)(1) through (3) of this section.

(1) Approval of alternatives to the requirements in §§63.11116 through 63.11118 and 63.11120.

(2) Approval of major alternatives to test methods under §63.7(e)(2)(ii) and (f), as defined in §63.90, and as required in this subpart.

(3) Approval of major alternatives to recordkeeping and reporting under §63.10(f), as defined in §63.90, and as required in this subpart.

§ 63.11132 What definitions apply to this subpart?

As used in this subpart, all terms not defined herein shall have the meaning given them in the Clean Air Act (CAA), or in subparts A and BBBBBB of this part. For purposes of this subpart, definitions in this section supersede definitions in other parts or subparts.

Dual-point vapor balance system means a type of vapor balance system in which the storage tank is equipped with an entry port for a gasoline fill pipe and a separate exit port for a vapor connection.

Gasoline cargo tank means a delivery tank truck or railcar which is loading gasoline or which has loaded gasoline on the immediately previous load.

Gasoline dispensing facility (GDF) means any stationary facility which dispenses gasoline into the fuel tank of a motor vehicle.

Monthly throughput means the total volume of gasoline that is loaded into all gasoline storage tanks during a month, as calculated on a rolling 30-day average.

Submerged filling means, for the purposes of this subpart, the filling of a gasoline storage tank through a submerged fill pipe whose discharge is no more than the applicable distance specified in §63.11117(b) from the bottom of the tank. Bottom filling of gasoline storage tanks is included in this definition.

Vapor balance system means a combination of pipes and hoses that create a closed system between the vapor spaces of an unloading gasoline cargo tank and a receiving storage tank such that vapors displaced from the storage tank are transferred to the gasoline cargo tank being unloaded.

Vapor-tight means equipment that allows no loss of vapors. Compliance with vapor-tight requirements can be determined by checking to ensure that the concentration at a potential leak source is not equal to or greater than 100 percent of the Lower Explosive Limit when measured with a combustible gas detector, calibrated with propane, at a distance of 1 inch from the source.

Table 1 to Subpart CCCCCC of Part 63—Applicability Criteria and Management Practices for Gasoline Dispensing Facilities With Monthly Throughput of 100,000 Gallons of Gasoline or More

If you own or operate	Then you must
1. A new, reconstructed, or existing GDF subject to §63.11118	Install and operate a vapor balance system on your gasoline storage tanks that meets the design criteria in paragraphs (a) through (h).
	(a) All vapor connections and lines on the storage tank shall be equipped with closures that seal upon disconnect.
	(b) The vapor line from the gasoline storage tank to the gasoline cargo tank shall be vapor-tight, as defined in §63.11132.
	(c) The vapor balance system shall be designed such that the pressure in the tank truck does not exceed 18 inches water pressure or 5.9 inches water vacuum during product transfer.
	(d) The vapor recovery and product adaptors, and the method of connection with the delivery elbow, shall be designed so as to prevent the over-tightening or loosening of fittings during normal delivery operations.
	(e) If a gauge well separate from the fill tube is used, it shall be provided with a submerged drop tube that extends the same distance from the bottom of the storage tank as specified in §63.11117(b).
	(f) Liquid fill connections for all systems shall be equipped with vapor-tight caps.
	(g) Pressure/vacuum (PV) vent valves shall be installed on the storage tank vent pipes. The pressure specifications for PV vent valves shall be: a positive pressure setting of 2.5 to 6.0 inches of water and a negative pressure setting of 6.0 to 10.0 inches of water. The total leak rate of all PV vent valves at an affected facility, including connections, shall not exceed 0.17 cubic foot per hour at a pressure of 2.0 inches of water and 0.63 cubic foot per hour at a vacuum of 4 inches of water.
	(h) The vapor balance system shall be capable of meeting the static pressure performance requirement of the following equation:

If you own or operate	Then you must
	$Pf = 2e^{-500.887/v}$
	Where:
	Pf = Minimum allowable final pressure, inches of water.
	v = Total ullage affected by the test, gallons.
	e = Dimensionless constant equal to approximately 2.718.
	2 = The initial pressure, inches water.
2. For new or reconstructed GDF, or new storage tank(s) at an existing affected facility subject to §63.11118	Equip your gasoline storage tanks with a dual-point vapor balance system, as defined in §63.11132, and comply with the requirements of item 1 in this Table.

[73 FR 1945, Jan. 10, 2008, as amended at 73 FR 35944, June 25, 2008]

Table 2 to Subpart CCCCCC of Part 63—Applicability Criteria and Management Practices for Gasoline Cargo Tanks Unloading at Gasoline Dispensing Facilities With Monthly Throughput of 100,000 Gallons of Gasoline or More

If you own or operate	Then you must
A gasoline cargo tank	Not unload gasoline into a storage tank at a GDF subject to the control requirements in this subpart unless the following conditions are met:
	(i) All hoses in the vapor balance system are properly connected,
	(ii) The adapters or couplers that attach to the vapor line on the storage tank have closures that seal upon disconnect,
	(iii) All vapor return hoses, couplers, and adapters used in the gasoline delivery are vapor-tight,
	(iv) All tank truck vapor return equipment is compatible in size and forms a vapor-tight connection with the vapor balance equipment on the GDF storage tank, and
	(v) All hatches on the tank truck are closed and securely fastened.
	(vi) The filling of storage tanks at GDF shall be limited to unloading by vapor-tight gasoline cargo tanks. Documentation that the cargo tank has met the specifications of EPA Method 27 shall be carried on the cargo tank.

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Table 3 to Subpart CCCCCC of Part 63—Applicability of General Provisions

Citation	Subject	Brief description	Applies to subpart CCCCCC
§63.1	Applicability	Initial applicability determination; applicability after standard established; permit requirements; extensions, notifications	Yes, specific requirements given in §63.11111.
§63.1(c)(2)	Title V Permit	Requirements for obtaining a title V permit from the applicable permitting authority	Yes, §63.11111(f) of subpart CCCCCC exempts identified area sources from the obligation to obtain title V operating permits.
§63.2	Definitions	Definitions for part 63 standards	Yes, additional definitions in §63.11132.
§63.3	Units and Abbreviations	Units and abbreviations for part 63 standards	Yes.
§63.4	Prohibited Activities and Circumvention	Prohibited activities; Circumvention, severability	Yes.
§63.5	Construction/Reconstruction	Applicability; applications; approvals	Yes.
§63.6(a)	Compliance with Standards/Operation & Maintenance—Applicability	General Provisions apply unless compliance extension; General Provisions apply to area sources that become major	Yes.
§63.6(b)(1)–(4)	Compliance Dates for New and Reconstructed Sources	Standards apply at effective date; 3 years after effective date; upon startup; 10 years after construction or reconstruction commences for CAA section 112(f)	Yes.
§63.6(b)(5)	Notification	Must notify if commenced construction or reconstruction after proposal	Yes.
§63.6(b)(6)	[Reserved]		
§63.6(b)(7)	Compliance Dates for New and Reconstructed Area Sources That Become Major	Area sources that become major must comply with major source standards immediately upon becoming major, regardless of whether required to comply when they were an area source	No.
§63.6(c)(1)–(2)	Compliance Dates for Existing Sources	Comply according to date in this subpart, which must be no later than 3 years after effective date; for CAA section 112(f) standards, comply within 90 days of effective date unless compliance extension	No, §63.11113 specifies the compliance dates.
§63.6(c)(3)–(4)	[Reserved]		
§63.6(c)(5)	Compliance Dates for Existing Area Sources That Become Major	Area sources That become major must comply with major source standards by date indicated in this subpart or by equivalent time period (e.g., 3 years)	No.
§63.6(d)	[Reserved]		
§63.6(e)(1)	Operation & Maintenance	Operate to minimize emissions at	Yes.

Citation	Subject	Brief description	Applies to subpart CCCCCC
		all times; correct malfunctions as soon as practicable; and operation and maintenance requirements independently enforceable; information Administrator will use to determine if operation and maintenance requirements were met	
§63.6(e)(2)	[Reserved]		
§63.6(e)(3)	Startup, Shutdown, and Malfunction (SSM) Plan	Requirement for SSM plan; content of SSM plan; actions during SSM	No.
§63.6(f)(1)	Compliance Except During SSM	You must comply with emission standards at all times except during SSM	No.
§63.6(f)(2)–(3)	Methods for Determining Compliance	Compliance based on performance test, operation and maintenance plans, records, inspection	Yes.
§63.6(g)(1)–(3)	Alternative Standard	Procedures for getting an alternative standard	Yes.
§63.6(h)(1)	Compliance with Opacity/Visible Emission (VE) Standards	You must comply with opacity/VE standards at all times except during SSM	No.
§63.6(h)(2)(i)	Determining Compliance with Opacity/VE Standards	If standard does not State test method, use EPA Method 9 for opacity in appendix A of part 60 of this chapter and EPA Method 22 for VE in appendix A of part 60 of this chapter	No.
§63.6(h)(2)(ii)	[Reserved]		
§63.6(h)(2)(iii)	Using Previous Tests To Demonstrate Compliance With Opacity/VE Standards	Criteria for when previous opacity/VE testing can be used to show compliance with this subpart	No.
§63.6(h)(3)	[Reserved]		
§63.6(h)(4)	Notification of Opacity/VE Observation Date	Must notify Administrator of anticipated date of observation	No.
§63.6(h)(5)(i), (iii)–(v)	Conducting Opacity/VE Observations	Dates and schedule for conducting opacity/VE observations	No.
§63.6(h)(5)(ii)	Opacity Test Duration and Averaging Times	Must have at least 3 hours of observation with 30 6-minute averages	No.
§63.6(h)(6)	Records of Conditions During Opacity/VE Observations	Must keep records available and allow Administrator to inspect	No.
§63.6(h)(7)(i)	Report Continuous Opacity Monitoring System (COMS) Monitoring Data From Performance Test	Must submit COMS data with other performance test data	No.
§63.6(h)(7)(ii)	Using COMS Instead of EPA Method 9	Can submit COMS data instead of EPA Method 9 results even if rule requires EPA Method 9 in appendix A of part 60 of this chapter, but must notify Administrator before performance test	No.

Citation	Subject	Brief description	Applies to subpart CCCCCC
§63.6(h)(7)(iii)	Averaging Time for COMS During Performance Test	To determine compliance, must reduce COMS data to 6-minute averages	No.
§63.6(h)(7)(iv)	COMS Requirements	Owner/operator must demonstrate that COMS performance evaluations are conducted according to §63.8(e); COMS are properly maintained and operated according to §63.8(c) and data quality as §63.8(d)	No.
§63.6(h)(7)(v)	Determining Compliance with Opacity/VE Standards	COMS is probable but not conclusive evidence of compliance with opacity standard, even if EPA Method 9 observation shows otherwise. Requirements for COMS to be probable evidence-proper maintenance, meeting Performance Specification 1 in appendix B of part 60 of this chapter, and data have not been altered	No.
§63.6(h)(8)	Determining Compliance with Opacity/VE Standards	Administrator will use all COMS, EPA Method 9 (in appendix A of part 60 of this chapter), and EPA Method 22 (in appendix A of part 60 of this chapter) results, as well as information about operation and maintenance to determine compliance	No.
§63.6(h)(9)	Adjusted Opacity Standard	Procedures for Administrator to adjust an opacity standard	No.
§63.6(i)(1)–(14)	Compliance Extension	Procedures and criteria for Administrator to grant compliance extension	Yes.
§63.6(j)	Presidential Compliance Exemption	President may exempt any source from requirement to comply with this subpart	Yes.
§63.7(a)(2)	Performance Test Dates	Dates for conducting initial performance testing; must conduct 180 days after compliance date	Yes.
§63.7(a)(3)	CAA Section 114 Authority	Administrator may require a performance test under CAA section 114 at any time	Yes.
§63.7(b)(1)	Notification of Performance Test	Must notify Administrator 60 days before the test	Yes.
§63.7(b)(2)	Notification of Re-scheduling	If have to reschedule performance test, must notify Administrator of rescheduled date as soon as practicable and without delay	Yes.
§63.7(c)	Quality Assurance (QA)/Test Plan	Requirement to submit site-specific test plan 60 days before the test or on date Administrator agrees with; test plan approval procedures; performance audit requirements; internal and external QA procedures for testing	Yes.
§63.7(d)	Testing Facilities	Requirements for testing facilities	Yes.
§63.7(e)(1)	Conditions for Conducting Performance Tests	Performance tests must be conducted under representative conditions; cannot conduct performance tests during SSM	Yes.

Citation	Subject	Brief description	Applies to subpart CCCCCC
§63.7(e)(2)	Conditions for Conducting Performance Tests	Must conduct according to this subpart and EPA test methods unless Administrator approves alternative	Yes.
§63.7(e)(3)	Test Run Duration	Must have three test runs of at least 1 hour each; compliance is based on arithmetic mean of three runs; conditions when data from an additional test run can be used	Yes.
§63.7(f)	Alternative Test Method	Procedures by which Administrator can grant approval to use an intermediate or major change, or alternative to a test method	Yes.
§63.7(g)	Performance Test Data Analysis	Must include raw data in performance test report; must submit performance test data 60 days after end of test with the Notification of Compliance Status; keep data for 5 years	Yes.
§63.7(h)	Waiver of Tests	Procedures for Administrator to waive performance test	Yes.
§63.8(a)(1)	Applicability of Monitoring Requirements	Subject to all monitoring requirements in standard	Yes.
§63.8(a)(2)	Performance Specifications	Performance Specifications in appendix B of 40 CFR part 60 apply	Yes.
§63.8(a)(3)	[Reserved]		
§63.8(a)(4)	Monitoring of Flares	Monitoring requirements for flares in §63.11 apply	Yes.
§63.8(b)(1)	Monitoring	Must conduct monitoring according to standard unless Administrator approves alternative	Yes.
§63.8(b)(2)–(3)	Multiple Effluents and Multiple Monitoring Systems	Specific requirements for installing monitoring systems; must install on each affected source or after combined with another affected source before it is released to the atmosphere provided the monitoring is sufficient to demonstrate compliance with the standard; if more than one monitoring system on an emission point, must report all monitoring system results, unless one monitoring system is a backup	No.
§63.8(c)(1)	Monitoring System Operation and Maintenance	Maintain monitoring system in a manner consistent with good air pollution control practices	No.
§63.8(c)(1)(i)–(iii)	Routine and Predictable SSM	Follow the SSM plan for routine repairs; keep parts for routine repairs readily available; reporting requirements for SSM when action is described in SSM plan	No.
§63.8(c)(2)–(8)	Continuous Monitoring System (CMS) Requirements	Must install to get representative emission or parameter measurements; must verify operational status before or at performance test	No.
§63.8(d)	CMS Quality Control	Requirements for CMS quality control,	No.

Citation	Subject	Brief description	Applies to subpart CCCCCC
		including calibration, etc.; must keep quality control plan on record for 5 years; keep old versions for 5 years after revisions	
§63.8(e)	CMS Performance Evaluation	Notification, performance evaluation test plan, reports	No.
§63.8(f)(1)–(5)	Alternative Monitoring Method	Procedures for Administrator to approve alternative monitoring	No.
§63.8(f)(6)	Alternative to Relative Accuracy Test	Procedures for Administrator to approve alternative relative accuracy tests for continuous emissions monitoring system (CEMS)	No.
§63.8(g)	Data Reduction	COMS 6-minute averages calculated over at least 36 evenly spaced data points; CEMS 1 hour averages computed over at least 4 equally spaced data points; data that cannot be used in average	No.
§63.9(a)	Notification Requirements	Applicability and State delegation	Yes.
§63.9(b)(1)–(2), (4)–(5)	Initial Notifications	Submit notification within 120 days after effective date; notification of intent to construct/reconstruct, notification of commencement of construction/ reconstruction, notification of startup; contents of each	Yes.
§63.9(c)	Request for Compliance Extension	Can request if cannot comply by date or if installed best available control technology or lowest achievable emission rate	Yes.
§63.9(d)	Notification of Special Compliance Requirements for New Sources	For sources that commence construction between proposal and promulgation and want to comply 3 years after effective date	Yes.
§63.9(e)	Notification of Performance Test	Notify Administrator 60 days prior	Yes.
§63.9(f)	Notification of VE/Opacity Test	Notify Administrator 30 days prior	No.
§63.9(g)	Additional Notifications when Using CMS	Notification of performance evaluation; notification about use of COMS data; notification that exceeded criterion for relative accuracy alternative	Yes, however, there are no opacity standards.
§63.9(h)(1)–(6)	Notification of Compliance Status	Contents due 60 days after end of performance test or other compliance demonstration, except for opacity/VE, which are due 30 days after; when to submit to Federal vs. State authority	Yes, however, there are no opacity standards.
§63.9(i)	Adjustment of Submittal Deadlines	Procedures for Administrator to approve change when notifications must be submitted	Yes.
§63.9(j)	Change in Previous Information	Must submit within 15 days after the change	Yes.
§63.10(a)	Recordkeeping/Reporting	Applies to all, unless compliance extension; when to submit to Federal vs. State authority; procedures for owners of more than one source	Yes.
§63.10(b)(1)	Recordkeeping/Reporting	General requirements; keep all records	Yes.

Citation	Subject	Brief description	Applies to subpart CCCCCC
		readily available; keep for 5 years	
§63.10(b)(2)(i)–(iv)	Records Related to SSM	Occurrence of each for operations (process equipment); occurrence of each malfunction of air pollution control equipment; maintenance on air pollution control equipment; actions during SSM	No.
§63.10(b)(2)(vi)–(xi)	CMS Records	Malfunctions, inoperative, out-of-control periods	No.
§63.10(b)(2)(xii)	Records	Records when under waiver	Yes.
§63.10(b)(2)(xiii)	Records	Records when using alternative to relative accuracy test	Yes.
§63.10(b)(2)(xiv)	Records	All documentation supporting Initial Notification and Notification of Compliance Status	Yes.
§63.10(b)(3)	Records	Applicability determinations	Yes.
§63.10(c)	Records	Additional records for CMS	No.
§63.10(d)(1)	General Reporting Requirements	Requirement to report	Yes.
§63.10(d)(2)	Report of Performance Test Results	When to submit to Federal or State authority	Yes.
§63.10(d)(3)	Reporting Opacity or VE Observations	What to report and when	No.
§63.10(d)(4)	Progress Reports	Must submit progress reports on schedule if under compliance extension	Yes.
§63.10(d)(5)	SSM Reports	Contents and submission	Yes.
§63.10(e)(1)–(2)	Additional CMS Reports	Must report results for each CEMS on a unit; written copy of CMS performance evaluation; two-three copies of COMS performance evaluation	No.
§63.10(e)(3)(i)–(iii)	Reports	Schedule for reporting excess emissions	Yes, note that §63.11130(K) specifies excess emission events for this subpart.
§63.10(e)(3)(iv)–(v)	Excess Emissions Reports	Requirement to revert to quarterly submission if there is an excess emissions and parameter monitor exceedances (now defined as deviations); provision to request semiannual reporting after compliance for 1 year; submit report by 30th day following end of quarter or calendar half; if there has not been an exceedance or excess emissions (now defined as deviations), report contents in a statement that there have been no deviations; must submit report containing all of the information in §§63.8(c)(7)–(8) and 63.10(c)(5)–(13)	No, §63.11130(K) specifies excess emission events for this subpart.

Citation	Subject	Brief description	Applies to subpart CCCCCC
§63.10(e)(3)(vi)–(viii)	Excess Emissions Report and Summary Report	Requirements for reporting excess emissions for CMS; requires all of the information in §§63.10(c)(5)–(13) and 63.8(c)(7)–(8)	No.
§63.10(e)(4)	Reporting COMS Data	Must submit COMS data with performance test data	No.
§63.10(f)	Waiver for Recordkeeping/Reporting	Procedures for Administrator to waive	Yes.
§63.11(b)	Flares	Requirements for flares	No.
§63.12	Delegation	State authority to enforce standards	Yes.
§63.13	Addresses	Addresses where reports, notifications, and requests are sent	Yes.
§63.14	Incorporations by Reference	Test methods incorporated by reference	Yes.
§63.15	Availability of Information	Public and confidential information	Yes.

Resource

EPA Summary of Regulations Controlling Air Emissions from Gasoline Dispensing Facilities (GDF) Fact Sheet
http://www.epa.gov/ttn/atw/area/gdfb.pdf

Reference

The US EPA Electronic Code of Federal Regulations - 40 CFR 63, Subpart CCCCCC National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities web address:
http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&sid=ec747058ccd5763d83153eaa83fe7220&rgn=div6&view=text&node=40:14.0.1.1.1.15&idno=40

Federally Enforceable State Operating Permit (FESOP)
OFFICE OF AIR QUALITY

J.H. Rudolph & Company, Inc.
3300 S. Green River Road,
Evansville, IN 47715

Attachment C

Title 40: Protection of Environment

PART 60—STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES

Subpart I—Standards of Performance for Hot Mix Asphalt Facilities

F163-30803-00186

Title 40: Protection of Environment

PART 60—STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES

Subpart I—Standards of Performance for Hot Mix Asphalt Facilities

§ 60.90 Applicability and designation of affected facility.

(a) The affected facility to which the provisions of this subpart apply is each hot mix asphalt facility. For the purpose of this subpart, a hot mix asphalt facility is comprised only of any combination of the following: dryers; systems for screening, handling, storing, and weighing hot aggregate; systems for loading, transferring, and storing mineral filler, systems for mixing hot mix asphalt; and the loading, transfer, and storage systems associated with emission control systems.

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

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

§ 60.91 Definitions.

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

(a) *Hot mix asphalt facility* means any facility, as described in §**60**.90, used to manufacture hot mix asphalt by heating and drying aggregate and mixing with asphalt cements.

[51 FR 12325, Apr. 10, 1986]

§ 60.92 Standard for particulate matter.

(a) On and after the date on which the performance test required to be conducted by §**60**.8 is completed, no owner or operator subject to the provisions of this subpart shall discharge or cause the discharge into the atmosphere from any affected facility any gases which:

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

(2) Exhibit 20 percent opacity, or greater.

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

§ 60.93 Test methods and procedures.

(a) In conducting the performance tests required in §**60**.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in §**60**.8(b).

(b) The owner or operator shall determine compliance with the particulate matter standards in §**60**.92 as follows:

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

(2) Method 9 and the procedures in §**60**.11 shall be used to determine opacity.

[54 FR 6667, Feb. 14, 1989]

Federally Enforceable State Operating Permit (FESOP)
OFFICE OF AIR QUALITY

J.H. Rudolph & Company, Inc.
3300 S. Green River Road,
Evansville, IN 47715

Attachment D

Title 40: Protection of Environment

PART 60—STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES

Subpart OOO—Standards of Performance for Nonmetallic Mineral Processing Plants

F163-30803-00186

Title 40: Protection of Environment

PART 60—STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES

Subpart OOO—Standards of Performance for Nonmetallic Mineral Processing Plants

Source: 74 FR 19309, Apr. 28, 2009, unless otherwise noted.

§ 60.670 Applicability and designation of affected facility.

(a)(1) Except as provided in paragraphs (a)(2), (b), (c), and (d) of this section, the provisions of this subpart are applicable to the following affected facilities in fixed or portable nonmetallic mineral processing plants: each crusher, grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, enclosed truck or railcar loading station. Also, crushers and grinding mills at hot mix asphalt facilities that reduce the size of nonmetallic minerals embedded in recycled asphalt pavement and subsequent affected facilities up to, but not including, the first storage silo or bin are subject to the provisions of this subpart.

(2) The provisions of this subpart do not apply to the following operations: All facilities located in underground mines; plants without crushers or grinding mills above ground; and wet material processing operations (as defined in §**60**.671).

(b) An affected facility that is subject to the provisions of subparts F or I of this part or that follows in the plant process any facility subject to the provisions of subparts F or I of this part is not subject to the provisions of this subpart.

(c) Facilities at the following plants are not subject to the provisions of this subpart:

(1) Fixed sand and gravel plants and crushed stone plants with capacities, as defined in §**60**.671, of 23 megagrams per hour (25 tons per hour) or less;

(2) Portable sand and gravel plants and crushed stone plants with capacities, as defined in §**60**.671, of 136 megagrams per hour (150 tons per hour) or less; and

(3) Common clay plants and pumice plants with capacities, as defined in §**60**.671, of 9 megagrams per hour (10 tons per hour) or less.

(d)(1) When an existing facility is replaced by a piece of equipment of equal or smaller size, as defined in §**60**.671, having the same function as the existing facility, and there is no increase in the amount of emissions, the new facility is exempt from the provisions of §§**60**.672, **60**.674, and **60**.675 except as provided for in paragraph (d)(3) of this section.

(2) An owner or operator complying with paragraph (d)(1) of this section shall submit the information required in §**60**.676(a).

(3) An owner or operator replacing all existing facilities in a production line with new facilities does not qualify for the exemption described in paragraph (d)(1) of this section and must comply with the provisions of §§**60**.672, **60**.674 and **60**.675.

(e) An affected facility under paragraph (a) of this section that commences construction, modification, or reconstruction after August 31, 1983, is subject to the requirements of this part.

(f) Table 1 of this subpart specifies the provisions of subpart A of this part **60** that do not apply to owners and operators of affected facilities subject to this subpart or that apply with certain exceptions.

§ 60.671 Definitions.

All terms used in this subpart, but not specifically defined in this section, shall have the meaning given them in the Act and in subpart A of this part.

Bagging operation means the mechanical process by which bags are filled with nonmetallic minerals.

Belt conveyor means a conveying device that transports material from one location to another by means of an endless belt that is carried on a series of idlers and routed around a pulley at each end.

Bucket elevator means a conveying device of nonmetallic minerals consisting of a head and foot assembly which supports and drives an endless single or double strand chain or belt to which buckets are attached.

Building means any frame structure with a roof.

Capacity means the cumulative rated capacity of all initial crushers that are part of the plant.

Capture system means the equipment (including enclosures, hoods, ducts, fans, dampers, etc.) used to capture and transport particulate matter generated by one or more affected facilities to a control device.

Control device means the air pollution control equipment used to reduce particulate matter emissions released to the atmosphere from one or more affected facilities at a nonmetallic mineral processing plant.

Conveying system means a device for transporting materials from one piece of equipment or location to another location within a plant. Conveying systems include but are not limited to the following: Feeders, belt conveyors, bucket elevators and pneumatic systems.

Crush or *Crushing* means to reduce the size of nonmetallic mineral material by means of physical impaction of the crusher or grinding mill upon the material.

Crusher means a machine used to crush any nonmetallic minerals, and includes, but is not limited to, the following types: Jaw, gyratory, cone, roll, rod mill, hammermill, and impactor.

Enclosed truck or railcar loading station means that portion of a nonmetallic mineral processing plant where nonmetallic minerals are loaded by an enclosed conveying system into enclosed trucks or railcars.

Fixed plant means any nonmetallic mineral processing plant at which the processing equipment specified in §**60**.670(a) is attached by a cable, chain, turnbuckle, bolt or other means (except electrical connections) to any anchor, slab, or structure including bedrock.

Fugitive emission means particulate matter that is not collected by a capture system and is released to the atmosphere at the point of generation.

Grinding mill means a machine used for the wet or dry fine crushing of any nonmetallic mineral. Grinding mills include, but are not limited to, the following types: Hammer, roller, rod, pebble and ball, and fluid energy. The grinding mill includes the air conveying system, air separator, or air classifier, where such systems are used.

Initial crusher means any crusher into which nonmetallic minerals can be fed without prior crushing in the plant.

Nonmetallic mineral means any of the following minerals or any mixture of which the majority is any of the following minerals:

(1) Crushed and Broken Stone, including Limestone, Dolomite, Granite, Traprock, Sandstone, Quartz, Quartzite, Marl, Marble, Slate, Shale, Oil Shale, and Shell.

(2) Sand and Gravel.

(3) Clay including Kaolin, Fireclay, Bentonite, Fuller's Earth, Ball Clay, and Common Clay.

(4) Rock Salt.

(5) Gypsum (natural or synthetic).

(6) Sodium Compounds, including Sodium Carbonate, Sodium Chloride, and Sodium Sulfate.

(7) Pumice.

(8) Gilsonite.

(9) Talc and Pyrophyllite.

(10) Boron, including Borax, Kernite, and Colemanite.

(11) Barite.

(12) Fluorospar.

(13) Feldspar.

(14) Diatomite.

(15) Perlite.

(16) Vermiculite.

(17) Mica.

(18) Kyanite, including Andalusite, Sillimanite, Topaz, and Dumortierite.

Nonmetallic mineral processing plant means any combination of equipment that is used to crush or grind any nonmetallic mineral wherever located, including lime plants, power plants, steel mills, asphalt concrete plants, portland cement plants, or any other facility processing nonmetallic minerals except as provided in §**60**.670 (b) and (c).

Portable plant means any nonmetallic mineral processing plant that is mounted on any chassis or skids and may be moved by the application of a lifting or pulling force. In addition, there shall be no cable, chain, turnbuckle, bolt or other means (except electrical connections) by which any piece of equipment is attached or clamped to any anchor, slab, or structure, including bedrock that must be removed prior to the application of a lifting or pulling force for the purpose of transporting the unit.

Production line means all affected facilities (crushers, grinding mills, screening operations, bucket elevators, belt conveyors, bagging operations, storage bins, and enclosed truck and railcar loading stations) which are directly connected or are connected together by a conveying system.

Saturated material means, for purposes of this subpart, mineral material with sufficient surface moisture such that particulate matter emissions are not generated from processing of the material through screening operations, bucket elevators and belt conveyors. Material that is wetted solely by wet suppression systems is not considered to be “saturated” for purposes of this definition.

Screening operation means a device for separating material according to size by passing undersize material through one or more mesh surfaces (screens) in series, and retaining oversize material on the mesh surfaces (screens). Grizzly feeders associated with truck dumping and static (non-moving) grizzlies used anywhere in the nonmetallic mineral processing plant are not considered to be screening operations.

Seasonal shut down means shut down of an affected facility for a period of at least 45 consecutive days due to weather or seasonal market conditions.

Size means the rated capacity in tons per hour of a crusher, grinding mill, bucket elevator, bagging operation, or enclosed truck or railcar loading station; the total surface area of the top screen of a screening operation; the width of a conveyor belt; and the rated capacity in tons of a storage bin.

Stack emission means the particulate matter that is released to the atmosphere from a capture system.

Storage bin means a facility for storage (including surge bins) of nonmetallic minerals prior to further processing or loading.

Transfer point means a point in a conveying operation where the nonmetallic mineral is transferred to or from a belt conveyor except where the nonmetallic mineral is being transferred to a stockpile.

Truck dumping means the unloading of nonmetallic minerals from movable vehicles designed to transport nonmetallic minerals from one location to another. Movable vehicles include but are not limited to: Trucks, front end loaders, skip hoists, and railcars.

Vent means an opening through which there is mechanically induced air flow for the purpose of exhausting from a building air carrying particulate matter emissions from one or more affected facilities.

Wet material processing operation(s) means any of the following:

(1) Wet screening operations (as defined in this section) and subsequent screening operations, bucket elevators and belt conveyors in the production line that process saturated materials (as defined in this section) up to the first crusher, grinding mill or storage bin in the production line; or

(2) Screening operations, bucket elevators and belt conveyors in the production line downstream of wet mining operations (as defined in this section) that process saturated materials (as defined in this section) up to the first crusher, grinding mill or storage bin in the production line.

Wet mining operation means a mining or dredging operation designed and operated to extract any nonmetallic mineral regulated under this subpart from deposits existing at or below the water table, where the nonmetallic mineral is saturated with water.

Wet screening operation means a screening operation at a nonmetallic mineral processing plant which removes unwanted material or which separates marketable fines from the product by a washing process which is designed and operated at all times such that the product is saturated with water.

§ 60.672 Standard for particulate matter (PM).

(a) Affected facilities must meet the stack emission limits and compliance requirements in Table 2 of this subpart within **60** days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup as required under §**60**.8. The requirements in Table 2 of this subpart apply for affected facilities with capture systems used to capture and transport particulate matter to a control device.

(b) Affected facilities must meet the fugitive emission limits and compliance requirements in Table 3 of this subpart within **60** days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup as required under §**60**.11. The requirements in Table 3 of this subpart apply for fugitive emissions from affected facilities without capture systems and for fugitive emissions escaping capture systems.

(c) [Reserved]

(d) Truck dumping of nonmetallic minerals into any screening operation, feed hopper, or crusher is exempt from the requirements of this section.

(e) If any transfer point on a conveyor belt or any other affected facility is enclosed in a building, then each enclosed affected facility must comply with the emission limits in paragraphs (a) and (b) of this section, or the building enclosing the affected facility or facilities must comply with the following emission limits:

(1) Fugitive emissions from the building openings (except for vents as defined in §**60**.671) must not exceed 7 percent opacity; and

(2) Vents (as defined in §**60**.671) in the building must meet the applicable stack emission limits and compliance requirements in Table 2 of this subpart.

(f) Any baghouse that controls emissions from only an individual, enclosed storage bin is exempt from the applicable stack PM concentration limit (and associated performance testing) in Table 2 of this subpart but must meet the applicable stack opacity limit and compliance requirements in Table 2 of this subpart. This exemption from the stack PM concentration limit does not apply for multiple storage bins with combined stack emissions.

§ 60.673 Reconstruction.

(a) The cost of replacement of ore-contact surfaces on processing equipment shall not be considered in calculating either the “fixed capital cost of the new components” or the “fixed capital cost that would be required to construct a comparable new facility” under §**60**.15. Ore-contact surfaces are crushing surfaces; screen meshes, bars, and plates; conveyor belts; and elevator buckets.

(b) Under §**60**.15, the “fixed capital cost of the new components” includes the fixed capital cost of all depreciable components (except components specified in paragraph (a) of this section) which are or will be replaced pursuant to all continuous programs of component replacement commenced within any 2-year period following August 31, 1983.

§ 60.674 Monitoring of operations.

(a) The owner or operator of any affected facility subject to the provisions of this subpart which uses a wet scrubber to control emissions shall install, calibrate, maintain and operate the following monitoring devices:

(1) A device for the continuous measurement of the pressure loss of the gas stream through the scrubber. The monitoring device must be certified by the manufacturer to be accurate within ±250 pascals ±1 inch water gauge pressure and must be calibrated on an annual basis in accordance with manufacturer's instructions.

(2) A device for the continuous measurement of the scrubbing liquid flow rate to the wet scrubber. The monitoring device must be certified by the manufacturer to be accurate within ±5 percent of design scrubbing liquid flow rate and must be calibrated on an annual basis in accordance with manufacturer's instructions.

(b) The owner or operator of any affected facility for which construction, modification, or reconstruction commenced on or after April 22, 2008, that uses wet suppression to control emissions from the affected facility must perform monthly periodic inspections to check that water is flowing to discharge spray nozzles in the wet suppression system. The owner or operator must initiate corrective action within 24 hours and complete corrective action as expediently as practical if the owner or operator finds that water is not flowing properly during an inspection of the water spray nozzles. The owner or operator must record each inspection of the water spray nozzles, including the date of each inspection and any corrective actions taken, in the logbook required under §**60**.676(b).

(1) If an affected facility relies on water carryover from upstream water sprays to control fugitive emissions, then that affected facility is exempt from the 5-year repeat testing requirement specified in Table 3 of this subpart provided that the affected facility meets the criteria in paragraphs (b)(1)(i) and (ii) of this section:

(i) The owner or operator of the affected facility conducts periodic inspections of the upstream water spray(s) that are responsible for controlling fugitive emissions from the affected facility. These inspections are conducted according to paragraph (b) of this section and §**60**.676(b), and

(ii) The owner or operator of the affected facility designates which upstream water spray(s) will be periodically inspected at the time of the initial performance test required under §**60**.11 of this part and §**60**.675 of this subpart.

(2) If an affected facility that routinely uses wet suppression water sprays ceases operation of the water sprays or is using a control mechanism to reduce fugitive emissions other than water sprays during the monthly inspection (for example, water from recent rainfall), the logbook entry required under §**60**.676(b) must specify the control mechanism being used instead of the water sprays.

(c) Except as specified in paragraph (d) or (e) of this section, the owner or operator of any affected facility for which construction, modification, or reconstruction commenced on or after April 22, 2008, that uses a baghouse to control emissions must conduct quarterly 30-minute visible emissions inspections using EPA Method 22 (40 CFR part **60**, Appendix A–7). The Method 22 (40 CFR part **60**, Appendix A–7) test shall be conducted while the baghouse is operating. The test is successful if no visible emissions are observed. If any visible emissions are observed, the owner or operator of the affected facility must initiate corrective action within 24 hours to return the baghouse to normal operation. The owner or operator must record each Method 22 (40 CFR part **60**, Appendix A–7) test, including the date and any corrective actions taken, in the logbook required under §**60**.676(b). The owner or operator of the affected facility may establish a different baghouse-specific success level for the visible emissions test (other than no visible emissions) by conducting a PM performance test according to §**60**.675(b) simultaneously with a Method 22 (40 CFR part **60**, Appendix A–7) to determine what constitutes normal visible emissions from that affected facility's baghouse when it is in compliance with the applicable PM concentration limit in Table 2 of this subpart. The revised visible emissions success level must be incorporated into the permit for the affected facility.

(d) As an alternative to the periodic Method 22 (40 CFR part **60**, Appendix A–7) visible emissions inspections specified in paragraph (c) of this section, the owner or operator of any affected facility for which construction, modification, or reconstruction commenced on or after April 22, 2008, that uses a baghouse to control emissions may use a bag leak detection system. The owner or operator must install, operate, and maintain the bag leak detection system according to paragraphs (d)(1) through (3) of this section.

(1) Each bag leak detection system must meet the specifications and requirements in paragraphs (d)(1)(i) through (viii) of this section.

(i) The bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 1 milligram per dry standard cubic meter (0.00044 grains per actual cubic foot) or less.

(ii) The bag leak detection system sensor must provide output of relative PM loadings. The owner or operator shall continuously record the output from the bag leak detection system using electronic or other means (*e.g.* , using a strip chart recorder or a data logger).

(iii) The bag leak detection system must be equipped with an alarm system that will sound when the system detects an increase in relative particulate loading over the alarm set point established according to paragraph (d)(1)(iv) of this section, and the alarm must be located such that it

can be heard by the appropriate plant personnel.

(iv) In the initial adjustment of the bag leak detection system, the owner or operator must establish, at a minimum, the baseline output by adjusting the sensitivity (range) and the averaging period of the device, the alarm set points, and the alarm delay time.

(v) Following initial adjustment, the owner or operator shall not adjust the averaging period, alarm set point, or alarm delay time without approval from the Administrator or delegated authority except as provided in paragraph (d)(1)(vi) of this section.

(vi) Once per quarter, the owner or operator may adjust the sensitivity of the bag leak detection system to account for seasonal effects, including temperature and humidity, according to the procedures identified in the site-specific monitoring plan required by paragraph (d)(2) of this section.

(vii) The owner or operator must install the bag leak detection sensor downstream of the fabric filter.

(viii) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.

(2) The owner or operator of the affected facility must develop and submit to the Administrator or delegated authority for approval of a site-specific monitoring plan for each bag leak detection system. The owner or operator must operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. Each monitoring plan must describe the items in paragraphs (d)(2)(i) through (vi) of this section.

(i) Installation of the bag leak detection system;

(ii) Initial and periodic adjustment of the bag leak detection system, including how the alarm set-point will be established;

(iii) Operation of the bag leak detection system, including quality assurance procedures;

(iv) How the bag leak detection system will be maintained, including a routine maintenance schedule and spare parts inventory list;

(v) How the bag leak detection system output will be recorded and stored; and

(vi) Corrective action procedures as specified in paragraph (d)(3) of this section. In approving the site-specific monitoring plan, the Administrator or delegated authority may allow owners and operators more than 3 hours to alleviate a specific condition that causes an alarm if the owner or operator identifies in the monitoring plan this specific condition as one that could lead to an alarm, adequately explains why it is not feasible to alleviate this condition within 3 hours of the time the alarm occurs, and demonstrates that the requested time will ensure alleviation of this condition as expeditiously as practicable.

(3) For each bag leak detection system, the owner or operator must initiate procedures to determine the cause of every alarm within 1 hour of the alarm. Except as provided in paragraph (d)(2)(vi) of this section, the owner or operator must alleviate the cause of the alarm within 3 hours of the alarm by taking whatever corrective action(s) are necessary. Corrective actions may include, but are not limited to the following:

(i) Inspecting the fabric filter for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in PM emissions;

(ii) Sealing off defective bags or filter media;

(iii) Replacing defective bags or filter media or otherwise repairing the control device;

(iv) Sealing off a defective fabric filter compartment;

(v) Cleaning the bag leak detection system probe or otherwise repairing the bag leak detection system; or

(vi) Shutting down the process producing the PM emissions.

(e) As an alternative to the periodic Method 22 (40 CFR part **60**, Appendix A–7) visible emissions inspections specified in paragraph (c) of this section, the owner or operator of any affected facility that is subject to the requirements for processed stone handling operations in the Lime Manufacturing NESHAP (40 CFR part 63, subpart AAAAA) may follow the continuous compliance requirements in row 1 items (i) through (iii) of Table 6 to Subpart AAAAA of 40 CFR part 63.

§ 60.675 Test methods and procedures.

(a) In conducting the performance tests required in §**60**.8, the owner or operator shall use as reference methods and procedures the test methods in appendices A–1 through A–7 of this part or other methods and procedures as specified in this section, except as provided in §**60**.8(b). Acceptable alternative methods and procedures are given in paragraph (e) of this section.

(b) The owner or operator shall determine compliance with the PM standards in §**60**.672(a) as follows:

(1) Except as specified in paragraphs (e)(3) and (4) of this section, Method 5 of Appendix A–3 of this part or Method 17 of Appendix A–6 of this part shall be used to determine the particulate matter concentration. The sample volume shall be at least 1.70 dscm (**60** dscf). For Method 5 (40 CFR part **60**, Appendix A–3), if the gas stream being sampled is at ambient temperature, the sampling probe and filter may be operated without heaters. If the gas stream is above ambient temperature, the sampling probe and filter may be operated at a temperature high enough, but no higher than 121 °C (250 °F), to prevent water condensation on the filter.

(2) Method 9 of Appendix A–4 of this part and the procedures in §**60**.11 shall be used to determine opacity.

(c)(1) In determining compliance with the particulate matter standards in §**60**.672(b) or §**60**.672(e)(1), the owner or operator shall use Method 9 of Appendix A–4 of this part and the procedures in §**60**.11, with the following additions:

(i) The minimum distance between the observer and the emission source shall be 4.57 meters (15 feet).

(ii) The observer shall, when possible, select a position that minimizes interference from other fugitive emission sources (*e.g.,* road dust). The required observer position relative to the sun (Method 9 of Appendix A–4 of this part, Section 2.1) must be followed.

(iii) For affected facilities using wet dust suppression for particulate matter control, a visible mist is sometimes generated by the spray. The water mist must not be confused with particulate matter emissions and is not to be considered a visible emission. When a water mist of this nature is present, the observation of emissions is to be made at a point in the plume where the mist is no longer visible.

(2)(i) In determining compliance with the opacity of stack emissions from any baghouse that controls emissions only from an individual enclosed storage bin under §**60**.672(f) of this subpart, using Method 9 (40 CFR part **60**, Appendix A–4), the duration of the Method 9 (40 CFR part **60**, Appendix A–4) observations shall be 1 hour (ten 6-minute averages).

(ii) The duration of the Method 9 (40 CFR part **60**, Appendix A–4) observations may be reduced to the duration the affected facility operates (but not less than 30 minutes) for baghouses that control storage bins or enclosed truck or railcar loading stations that operate for less than 1 hour at a time.

(3) When determining compliance with the fugitive emissions standard for any affected facility described under §**60**.672(b) or §**60**.672(e)(1) of this subpart, the duration of the Method 9 (40 CFR part **60**, Appendix A–4) observations must be 30 minutes (five 6-minute averages). Compliance with the applicable fugitive emission limits in Table 3 of this subpart must be based on the average of the five 6-minute averages.

(d) To demonstrate compliance with the fugitive emission limits for buildings specified in §**60**.672(e)(1), the owner or operator must complete the testing specified in paragraph (d)(1) and (2) of this section. Performance tests must be conducted while all affected facilities inside the building are operating.

(1) If the building encloses any affected facility that commences construction, modification, or reconstruction on or after April 22, 2008, the owner or operator of the affected facility must conduct an initial Method 9 (40 CFR part **60**, Appendix A–4) performance test according to this section and §**60**.11.

(2) If the building encloses only affected facilities that commenced construction, modification, or reconstruction before April 22, 2008, and the owner or operator has previously conducted an initial Method 22 (40 CFR part **60**, Appendix A–7) performance test showing zero visible emissions, then the owner or operator has demonstrated compliance with the opacity limit in §**60**.672(e)(1). If the owner or operator has not conducted an initial performance test for the building before April 22, 2008, then the owner or operator must conduct an initial Method 9 (40 CFR part **60**, Appendix A–4) performance test according to this section and §**60**.11 to show compliance with the opacity limit in §**60**.672(e)(1).

(e) The owner or operator may use the following as alternatives to the reference methods and procedures specified in this section:

(1) For the method and procedure of paragraph (c) of this section, if emissions from two or more facilities continuously interfere so that the opacity of fugitive emissions from an individual affected facility cannot be read, either of the following procedures may be used:

(i) Use for the combined emission stream the highest fugitive opacity standard applicable to any of the individual affected facilities contributing to

the emissions stream.

(ii) Separate the emissions so that the opacity of emissions from each affected facility can be read.

(2) A single visible emission observer may conduct visible emission observations for up to three fugitive, stack, or vent emission points within a 15-second interval if the following conditions are met:

(i) No more than three emission points may be read concurrently.

(ii) All three emission points must be within a 70 degree viewing sector or angle in front of the observer such that the proper sun position can be maintained for all three points.

(iii) If an opacity reading for any one of the three emission points equals or exceeds the applicable standard, then the observer must stop taking readings for the other two points and continue reading just that single point.

(3) Method 5I of Appendix A–3 of this part may be used to determine the PM concentration as an alternative to the methods specified in paragraph (b)(1) of this section. Method 5I (40 CFR part **60**, Appendix A–3) may be useful for affected facilities that operate for less than 1 hour at a time such as (but not limited to) storage bins or enclosed truck or railcar loading stations.

(4) In some cases, velocities of exhaust gases from building vents may be too low to measure accurately with the type S pitot tube specified in EPA Method 2 of Appendix A–1 of this part [*i.e.,* velocity head <1.3 mm H_2O (0.05 in. H_2O)] and referred to in EPA Method 5 of Appendix A–3 of this part. For these conditions, the owner or operator may determine the average gas flow rate produced by the power fans (*e.g.,* from vendor-supplied fan curves) to the building vent. The owner or operator may calculate the average gas velocity at the building vent measurement site using Equation 1 of this section and use this average velocity in determining and maintaining isokinetic sampling rates.

$$v_e = \frac{Q_f}{A_e} \qquad \text{(Eq. 1)}$$

Where:

V_e= average building vent velocity (feet per minute);

Q_f= average fan flow rate (cubic feet per minute); and

A_e= area of building vent and measurement location (square feet).

(f) To comply with §**60**.676(d), the owner or operator shall record the measurements as required in §**60**.676(c) using the monitoring devices in §**60**.674 (a)(1) and (2) during each particulate matter run and shall determine the averages.

(g) For performance tests involving only Method 9 (40 CFR part **60** Appendix A–4) testing, the owner or operator may reduce the 30-day advance notification of performance test in §**60**.7(a)(6) and **60**.8(d) to a 7-day advance notification.

(h) [Reserved]

(i) If the initial performance test date for an affected facility falls during a seasonal shut down (as defined in §**60**.671 of this subpart) of the affected facility, then with approval from the permitting authority, the owner or operator may postpone the initial performance test until no later than **60** calendar days after resuming operation of the affected facility.

§ 60.676 Reporting and recordkeeping.

(a) Each owner or operator seeking to comply with §**60**.670(d) shall submit to the Administrator the following information about the existing facility being replaced and the replacement piece of equipment.

(1) For a crusher, grinding mill, bucket elevator, bagging operation, or enclosed truck or railcar loading station:

(i) The rated capacity in megagrams or tons per hour of the existing facility being replaced and

(ii) The rated capacity in tons per hour of the replacement equipment.

(2) For a screening operation:

(i) The total surface area of the top screen of the existing screening operation being replaced and

(ii) The total surface area of the top screen of the replacement screening operation.

(3) For a conveyor belt:

(i) The width of the existing belt being replaced and

(ii) The width of the replacement conveyor belt.

(4) For a storage bin:

(i) The rated capacity in megagrams or tons of the existing storage bin being replaced and

(ii) The rated capacity in megagrams or tons of replacement storage bins.

(b)(1) Owners or operators of affected facilities (as defined in §§**60**.670 and **60**.671) for which construction, modification, or reconstruction commenced on or after April 22, 2008, must record each periodic inspection required under §**60**.674(b) or (c), including dates and any corrective actions taken, in a logbook (in written or electronic format). The owner or operator must keep the logbook onsite and make hard or electronic copies (whichever is requested) of the logbook available to the Administrator upon request.

(2) For each bag leak detection system installed and operated according to §**60**.674(d), the owner or operator must keep the records specified in paragraphs (b)(2)(i) through (iii) of this section.

(i) Records of the bag leak detection system output;

(ii) Records of bag leak detection system adjustments, including the date and time of the adjustment, the initial bag leak detection system settings, and the final bag leak detection system settings; and

(iii) The date and time of all bag leak detection system alarms, the time that procedures to determine the cause of the alarm were initiated, the cause of the alarm, an explanation of the actions taken, the date and time the cause of the alarm was alleviated, and whether the cause of the alarm was alleviated within 3 hours of the alarm.

(3) The owner or operator of each affected facility demonstrating compliance according to §**60**.674(e) by following the requirements for processed stone handling operations in the Lime Manufacturing NESHAP (40 CFR part 63, subpart AAAAA) must maintain records of visible emissions observations required by §63.7132(a)(3) and (b) of 40 CFR part 63, subpart AAAAA.

(c) During the initial performance test of a wet scrubber, and daily thereafter, the owner or operator shall record the measurements of both the change in pressure of the gas stream across the scrubber and the scrubbing liquid flow rate.

(d) After the initial performance test of a wet scrubber, the owner or operator shall submit semiannual reports to the Administrator of occurrences when the measurements of the scrubber pressure loss and liquid flow rate decrease by more than 30 percent from the average determined during the most recent performance test.

(e) The reports required under paragraph (d) of this section shall be postmarked within 30 days following end of the second and fourth calendar quarters.

(f) The owner or operator of any affected facility shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards set forth in §**60**.672 of this subpart, including reports of opacity observations made using Method 9 (40 CFR part **60**, Appendix A–4) to demonstrate compliance with §**60**.672(b), (e) and (f).

(g) The owner or operator of any wet material processing operation that processes saturated and subsequently processes unsaturated materials, shall submit a report of this change within 30 days following such change. At the time of such change, this screening operation, bucket elevator, or belt conveyor becomes subject to the applicable opacity limit in §**60**.672(b) and the emission test requirements of §**60**.11.

(h) The subpart A requirement under §**60**.7(a)(1) for notification of the date construction or reconstruction commenced is waived for affected facilities under this subpart.

(i) A notification of the actual date of initial startup of each affected facility shall be submitted to the Administrator.

(1) For a combination of affected facilities in a production line that begin actual initial startup on the same day, a single notification of startup may be submitted by the owner or operator to the Administrator. The notification shall be postmarked within 15 days after such date and shall include a description of each affected facility, equipment manufacturer, and serial number of the equipment, if available.

(2) For portable aggregate processing plants, the notification of the actual date of initial startup shall include both the home office and the current address or location of the portable plant.

(j) The requirements of this section remain in force until and unless the Agency, in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such States. In that event, affected facilities within the State will be relieved of the obligation to comply with the reporting requirements of this section, provided that they comply with requirements established by the State.

(k) Notifications and reports required under this subpart and under subpart A of this part to demonstrate compliance with this subpart need only to be sent to the EPA Region or the State which has been delegated authority according to §**60**.4(b).

Table 1 to Subpart OOO—Exceptions to Applicability of Subpart A to Subpart OOO

Table 1 to Subpart OOO—Exceptions to Applicability of Subpart A to Subpart OOO

Subpart A reference	Applies to subpart OOO	Explanation
60.4, Address	Yes	Except in §**60**.4(a) and (b) submittals need not be submitted to both the EPA Region and delegated State authority (§**60**.676(k)).
60.7, Notification and recordkeeping	Yes	Except in (a)(1) notification of the date construction or reconstruction commenced (§**60**.676(h)).
		Also, except in (a)(6) performance tests involving only Method 9 (40 CFR part **60**, Appendix A–4) require a 7-day advance notification instead of 30 days (§**60**.675(g)).
60.8, Performance tests	Yes	Except in (d) performance tests involving only Method 9 (40 CFR part **60**, Appendix A–4) require a 7-day advance notification instead of 30 days (§**60**.675(g)).
60.11, Compliance with standards and maintenance requirements	Yes	Except in (b) under certain conditions (§§**60**.675(c)), Method 9 (40 CFR part **60**, Appendix A–4) observation is reduced from 3 hours to 30 minutes for fugitive emissions.
60.18, General control device	No	Flares will not be used to comply with the emission limits.

Table 2 to Subpart OOO—Stack Emission Limits for Affected Facilities With Capture Systems

Table 2 to Subpart OOO—Stack Emission Limits for Affected Facilities With Capture Systems

For * * *	The owner or operator must meet a PM limit of * * *	And the owner or operator must meet an opacity limit of * * *	The owner or operator must demonstrate compliance with these limits by conducting * * *
Affected facilities (as defined in §§**60**.670 and **60**.671) that commenced construction, modification, or reconstruction after August 31, 1983 but before April 22, 2008	0.05 g/dscm (0.022 gr/dscf)[a]	7 percent for dry control devices[b]	An initial performance test according to §**60**.8 of this part and §**60**.675 of this subpart; and Monitoring of wet scrubber parameters according to §**60**.674(a) and §**60**.676(c), (d), and (e).
Affected facilities (as defined in §§**60**.670 and **60**.671) that commence construction, modification, or reconstruction on or after April 22, 2008	0.032 g/dscm (0.014 gr/dscf)[a]	Not applicable (except for individual enclosed storage bins) 7 percent for dry control devices on individual enclosed storage bins	An initial performance test according to §**60**.8 of this part and §**60**.675 of this subpart; and Monitoring of wet scrubber parameters according to §**60**.674(a) and §**60**.676(c), (d), and (e); and
			Monitoring of baghouses according to §**60**.674(c), (d), or (e) and §**60**.676(b).

[a]Exceptions to the PM limit apply for individual enclosed storage bins and other equipment. See §**60**.672(d) through (f).

[b]The stack opacity limit and associated opacity testing requirements do not apply for affected facilities using wet scrubbers.

Table 3 to Subpart OOO—Fugitive Emission Limits

Table 3 to Subpart OOO—Fugitive Emission Limits

For * * *	The owner or operator must meet the following fugitive emissions limit for grinding mills, screening operations, bucket elevators, transfer points on belt conveyors, bagging operations, storage bins, enclosed truck or railcar loading stations or from any other affected facility (as defined in §§60.670 and 60.671) * * *	The owner or operator must meet the following fugitive emissions limit for crushers at which a capture system is not used * * *	The owner or operator must demonstrate compliance with these limits by conducting * * *
Affected facilities (as defined in §§**60**.670 and **60**.671) that commenced construction, modification, or reconstruction after August 31, 1983 but before April 22, 2008	10 percent opacity	15 percent opacity	An initial performance test according to §**60**.11 of this part and §**60**.675 of this subpart.
Affected facilities (as defined in §§**60**.670 and **60**.671) that commence construction, modification, or reconstruction on or after April 22, 2008	7 percent opacity	12 percent opacity	An initial performance test according to §**60**.11 of this part and §**60**.675 of this subpart; and Periodic inspections of water sprays according to §**60**.674(b) and §**60**.676(b); and
			A repeat performance test according to §**60**.11 of this part and §**60**.675 of this subpart within 5 years from the previous performance test for fugitive emissions from affected facilities without water sprays. Affected facilities controlled by water carryover from upstream water sprays that are inspected according to the requirements in §**60**.674(b) and §**60**.676(b) are exempt from this 5-year repeat testing requirement.

Indiana Department of Environmental Management
Office of Air Quality

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

Source Description and Location

Source Name:	**J.H. Rudolph & Company, Inc.**
Source Location:	**3300 S. Green River Road, Evansville, IN 47715**
County:	**Vanderburgh**
SIC Code:	**2951**
Operation Permit Renewal No.:	**F163-23182-00186**
Operation Permit Issuance Date:	**January 12, 2007**
Significant Permit Revision No.:	**163-31195-00186**
Permit Reviewer:	**Bruce Farrar**

On November 30, 2011, the Office of Air Quality (OAQ) received an application from J.H. Rudolph & Company, Inc. related to a modification to an existing stationary drum hot-mix asphalt plant.

Existing Approvals

The source was issued FESOP Renewal No. 163-23182-00186 on January 12, 2007. The source has since received the following approvals:

(a) First Administrative Amendment No.: F163-26043-00186, issued February 19, 2008.

(b) First Significant Permit Revision No.: F163-27958-00186, issued September 16, 2009.

(c) Second Administrative Amendment No.: F163-28549-00186, issued November 18, 2009.

(d) Third Administrative Amendment No.: F163-29055-00186, issued May 7, 2010.

(e) Fourth Administrative Amendment No.: F163-29299-00186, issued on September 21, 2010.

(f) Fifth Administrative Amendment No.: F163-30567-00186, issued on July 27, 2011.

(g) Sixth Administrative Amendment No 163-30830-00186, issued on October 19, 2011

County Attainment Status

The source is located in Vanderburgh County.

Pollutant	Designation
SO_2	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O_3	Attainment effective January 30, 2006, for the Evansville area, including Vanderburgh County, for the 8-hour ozone standard.[1]
PM_{10}	Unclassifiable effective November 15, 1990.
NO_2	Cannot be classified or better than national standards.
Pb	Not designated.

[1]Attainment effective October 18, 2000, for the 1-hour ozone standard for the Evansville area, including Vanderburgh County, and is a maintenance area for the 1-hour ozone National Ambient Air Quality Standards (NAAQS) for purposes of 40 CFR 51, Subpart X*. The 1-hour designation was revoked effective June 15, 2005.
Unclassifiable or attainment effective October 27, 2011, for PM2.5.

(a) Ozone Standards
Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to ozone. Vanderburgh County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(b) $PM_{2.5}$
Vanderburgh County has been classified as attainment for $PM_{2.5}$. On May 8, 2008 U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for $PM_{2.5}$ emissions. These rules became effective on July 15, 2008. On May 4, 2011 the air pollution control board issued an emergency rule establishing the direct $PM_{2.5}$ significant level at ten (10) tons per year. This rule became effective, June 28, 2011. Therefore, direct $PM_{2.5}$ and SO_2 emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability – Entire Source section.

(c) Other Criteria Pollutants
Vanderburgh County has been classified as attainment or unclassifiable in Indiana for all other pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Fugitive Emissions

This type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2, 326 IAC 2-3, or 326 IAC 2-7, however, there is an applicable New Source Performance Standard that was in effect on August 7, 1980, therefore fugitive emissions are counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

Status of the Existing Source

The table below summarizes the potential to emit of the entire source, prior to the proposed revision, after consideration of all enforceable limits established in the effective permits:

Process/ Emission Unit	Potential To Emit of the Entire Source Prior to Revision (tons/year)									
	PM	PM10*	PM2.5	SO_2	NOx	VOC	CO	CO_2e***	Total HAPs	Worst Single HAP
Ducted Emissions										
Dryer Fuel Combustion (worst case) / Dryer/Mixer (Process)	106.73(1)	59.50(2)	59.50(2)	99.89(2)	96.54(3)	23.04(2)	93.60(2)	61,424.94	6.41(2)(5)	6.41(2)(5) (hydrogen chloride)
Magnetite Drying (Process)	1.50(1)	1.50(2)	1.50(2)	0	0	0	0	0	0	0
Dryer/Mixer Slag Processing	0	0	0	0.07(6)	0	0	0	0	0	0
Hot Oil Heater Fuel Combustion (worst case)	0.02	0.07	0.07	0.01	0.92	0.05	0.77	1,484.90	negl.	negl.
Total Process Emissions	108.25	61.07	61.07	99.97	97.46	23.09	94.37	62,909.84	6.41	6.41 (hydrogen chloride)
Fugitive Emissions										
Asphalt Load-Out, Silo Filling, On-Site Yard(4)	1.92	1.92	1.92	0	0	19.98	4.70	0	0.42	0.06/0.06 (xylene/formaldehyde)
Material Storage Piles(4)	0.46	0.16	0.16	0	0	0	0	0	0	0
Material Conveying and Handling(4)	31.47	14.89	14.89	0	0	0	0	0	0	0
Material Crushing(4) (RAP)	3.55	1.58	1.58	0	0	0	0	0	0	0
Ground shingles processing, handling and storage(7)	0.01	0.001	0.001	0	0	0	0	0	0	0
Paved Roads(4)	103.81	20.25	20.25	0	0	0	0	0	0	0
Cold Mix Asphalt Production(4)	0	0	0	0	0	56.62	0	0	NA	NA
Gasoline Fuel Transfer and Dispensing	0	0	0	0	0	negl.	0	0	negl.	negl.
Volatile Organic Liquid Storage Vessels **	0	0	0	0	0	negl.	0	0	negl.	negl.
Total Fugitive Emissions	**141.22**	**38.81**	**38.81**	**0**	**0**	**76.61**	**4.70**	**0**	**0.42**	**0.06/0.06 (xylene/formaldehyde)**
Total Limited/Controlled Emissions	(1) **249.47**	(2) **99.88**	(2) **99.88**	**99.97(2),(6)**	**97.46(3)**	**99.70(2)**	**99.07(2)**	**62,909.84**	**6.83(2)(5)**	**6.41(2)(5) (hydrogen chloride)**
Title V Major Source Thresholds**	NA	100	100	100	100	100	100	100,000	10	10
PSD Major Source Thresholds**	250	250	250	250	250	250	250	100,000	NA	NA

negl. = negligible N/A = Not applicable

The emissions contained in this table are based upon FESOP AA No. 163-30567-00186, issued on July 27, 2011.

* Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal ten (10) micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant".

** Fugitive emissions from each of the volatile organic liquid storage tanks were calculated using the EPA Tanks 4.0.9d program and were determined to be negligible.

*** The 100,000 CO_2e threshold represents the Title V and PSD subject to regulation thresholds for CO_2e in order to determine whether a source's emissions are a regulated NSR pollutant under Title V and PSD.

(1) Limited PTE based upon existing annual throughput limit and fuel usage limitations to render 326 IAC 2-2 (PSD) not applicable
(2) Limited PTE based upon existing annual throughput limit and fuel usage limitations to comply with 326 IAC 2-8 (FESOP).
(3) PTE inherently limited by existing annual throughput limit and fuel usage limitations; therefore, no limit is necessary to comply with 326 IAC 2-8 (FESOP).
(4) PTE after controls
(5) HAP values reflect worst-case chlorine content from the fuel(s) combusted in the 166 MMBtu aggregate dryer burner.
(6) Limited PTE based upon annual steel slag characteristics and usage limitations to comply with 326 IAC 2-8 (FESOP).
(7) PTE based upon annual usage limitation of certified asbestos-free shingles of 200 tons per year to comply with 326 IAC 2-8 (FESOP)

(a) This existing source is not a major stationary source, under PSD (326 IAC 2-2), because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(ff)(1).

(b) This existing source is not a major source of HAPs, as defined in 40 CFR 63.41, because the Permittee has accepted limits on HAPs emissions to less than ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year of a combination of HAPs. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA).

Description of Proposed Revision

The Office of Air Quality (OAQ) has reviewed an application, submitted by J.H. Rudolph & Company Inc. on November 30, 2011, relating to a request for a change in asphalt and asphalt roofing shingles limit. The source has requested the asphalt production limit be changed from 1.44 million tons per year to 750,000 tons per year and that the asphalt roofing shingles limit be changed from 200 tons per year to 20,000 tons per year.

In addition, the request change will result in change to limits for PM, PM10. PM2.5, SO2, NOx and HAPs.

Enforcement Issues

There are no pending enforcement actions related to this revision.

Emission Calculations

See Appendix A of this TSD for detailed emission calculations.

Permit Level Determination – FESOP Revision

This FESOP is being revised through a FESOP Significant Permit Revision pursuant to 326 IAC 2-8-11.1(g) because it involves adjustment to the existing source-wide emissions limitations to maintain the FESOP status of the source (see PTE of the Entire Source After The Issuance of the FESOP Revision Section).

PTE of the Entire Source After Issuance of the FESOP Revision

The table below summarizes the potential to emit of the entire source reflecting adjustment of existing limits, with updated emissions shown as **bold** values and previous emissions shown as ~~strikethrough~~ values.

Process/ Emission Unit	Potential To Emit of the Entire Source to accommodate the Proposed Revision (tons/year)									
	PM	PM10*	PM2.5[α]	SO_2	NOx	VOC	CO	CO_2e***	Total HAPs	Worst Single HAP
Ducted Emissions										
Dryer Fuel Combustion (worst case)	~~2.36E-02~~ **29.3**	~~1.88E-02~~ **23.35**	~~1.88E-02~~ **23.35**	~~99.89~~ **94.21**	~~96.54~~ **93.82**	~~2.79~~ **2.72**	~~42.68~~ **41.48**	~~61,424.94~~ **59,698**	~~6.41~~ **7.47**	~~6.41~~**6.04** (hydrogen chloride)
Dryer/Mixer (Process)	~~106.73~~ **203.98**	~~59.50~~ **83.69**	~~59.50~~ **90.78**	~~41.76~~ **21.75**	~~39.60~~ **20.63**	~~23.04~~ **12.00**	~~93.60~~ **48.75**	~~23941.44~~ **12,470**	~~6.33~~ **4.00**	~~2.23~~ **1.16** (formaldehyde)
Magnetite Drying (Process)	1.50	1.50	1.50	0	0	0	0	0	0	0
Dryer/Mixer Slag Processing	0	0	0	0.07[(6)]	0	0	0	0	0	0
Hot Oil Heater Fuel Combustion (worst case)	~~0.02~~ **0.13**	~~0.07~~ **0.22**	~~0.07~~ **0.22**	~~0.01~~ **4.66**	~~0.92~~ **1.31**	0.05	0.77	1,484	~~negl.~~ **0.02**	~~negl.~~ **0.017**
LPG-Butane - Commercial Boilers	**0.05**	**0.21**	**0.21**	**0.05**	**3.86**	**0.28**	**2.16**	**3,757**	**0**	**0**
Total Process Emissions	~~108.25~~ **205.66**	~~61.07~~ **85.62**	~~61.07~~ **92.70**	~~99.97~~ **99.00**	~~97.46~~ **99.00**	~~23.09~~ **12.33**	~~94.37~~ **51.69**	~~62,909.84~~ **64,940**	~~6.41~~ **7.49**	~~6.41~~ **6.04** (hydrogen chloride)
Fugitive Emissions										
Asphalt Load-Out, Silo Filling, On-Site Yard	~~1.92~~ **0.42**	~~1.92~~ **0.42**	~~1.92~~ **0.42**	0	0	~~19.98~~ **6.42**	~~4.70~~ **1.08**	0	~~0.42~~ **0.11**	~~0.06/0.06~~ **0.03** (xylene,formalde-hyde)
Material Storage Piles	~~0.46~~ **1.95**	~~0.16~~ **0.68**	~~0.16~~ **0.68**	0	0	0	0	0	0	0
Material Conveying and Handling[(4)]	~~31.47~~ **2.42**	~~14.89~~ **1.15**	~~14.89~~ **0.17**	0	0	0	0	0	0	0
Material Crushing[(4)] ~~(RAP)~~ **Screening, and Conveying**	~~3.55~~ **11.90**	~~1.58~~ **4.35**	~~1.58~~ **4.35**	0	0	0	0	0	0	0
~~Ground shingles processing, handling and storage~~[(7)]	~~0.01~~	~~0.001~~	~~0.001~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~
Unpaved and Paved Roads **(worst case)**	~~103.81~~ **26.65**	~~20.25~~ **6.79**	~~20.25~~ **0.68**	0	0	0	0	0	0	0
Cold Mix Asphalt Production[(4)]	0	0	0	0	0	~~56.62~~ **66.06**	0	0	~~NA~~ **17.23**	~~NA~~ **5.95(xylene)**
Gasoline Fuel Transfer and Dispensing	0	0	0	0	0	~~negl.~~ **0.28**	0	0	~~negl~~ **0.07**	~~negl.~~ **0.03(xylene)**
Volatile Organic Liquid Storage Vessels **	0	0	0	0	0	negl.	0	0	negl.	negl.
Total Fugitive Emissions	~~141.22~~ **43.34**	~~38.81~~ **13.38**	~~38.81~~ **6.30**	0	0	~~76.61~~ **72.76**	~~4.70~~ **1.08**	0	~~0.42~~ **17.41**	~~0.06/0.06~~ **5.97** (xylene~~/formaldehyde~~)
Total Limited/Controlled Emissions	~~249.47~~[(1)] **249.00**	~~99.88~~[(2)] **99.00**	~~99.88~~[(2)] **99.00**	~~99.97~~[(2),(6)] **99.00**	~~97.46~~[(3)] **99.00**	~~99.70~~[(2)] **85.10**	~~99.07~~[(2)] **52.77**	~~62,909.84~~ **64,940**	~~6.83~~[(2)(5)] **24.9**	~~6.41~~[(2)(5)] ~~(hydrogen chloride)~~
Title V Major Source Thresholds**	NA	100	100	100	100	100	100	100,000	10	10
PSD Major Source Thresholds**	250	250	~~NA~~ **250**	250	250	250	250	100,000	NA	NA
Emission Offset/ Nonattainment NSR Major Source Thresholds	NA	NA	~~100~~ **NA**	NA	NA	NA	NA	NA	NA	NA

Process/ Emission Unit	Potential To Emit of the Entire Source to accommodate the Proposed Revision (tons/year)									
	PM	PM10*	PM2.5[α]	SO_2	NOx	VOC	CO	CO_2e***	Total HAPs	Worst Single HAP

negl. = negligible N/A = Not applicable

The emissions contained in this table are based upon FESOP AA No. 163-30567-00186, issued on July 27, 2011.

***** Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal ten (10) micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant".

** Fugitive emissions from each of the volatile organic liquid storage tanks were calculated using the EPA Tanks 4.0.9d program and were determined to be negligible.

*** The 100,000 CO_2e threshold represents the Title V and PSD subject to regulation thresholds for CO_2e in order to determine whether a source's emissions are a regulated NSR pollutant under Title V and PSD.

α. Effective October 27, 2011 Vanderburgh County is redesignated as attainment for PM2.5.

(1) Limited PTE based upon existing annual throughput limit and fuel usage limitations to render 326 IAC 2-2 (PSD) not applicable
(2) Limited PTE based upon existing annual throughput limit and fuel usage limitations to comply with 326 IAC 2-8 (FESOP).
(3) PTE inherently limited by existing annual throughput limit and fuel usage limitations; therefore, no limit is necessary to comply with 326 IAC 2-8 (FESOP).
(4) PTE after controls
(5) HAP values reflect worst-case chlorine content from the fuel(s) combusted in the 166 MMBtu aggregate dryer burner.
(6) Limited PTE based upon annual steel slag characteristics and usage limitations to comply with 326 IAC 2-8 (FESOP).
~~(7) PTE based upon annual usage limitation of certified asbestos-free shingles of 200 tons per year to comply with 326 IAC 2-8 (FESOP)~~

The table below summarizes the potential to emit of the entire source after issuance of this revision, reflecting all limits, of the emission units. Any control equipment is considered federally enforceable only after issuance of this FESOP permit revision, and only to the extent that the effect of the control equipment is made practically enforceable in the permit. (Note: the table below was generated from the above table, with bold text un-bolded and strikethrough text deleted)

Process/ Emission Unit	Potential To Emit of the Entire Source After Issuance of Revision (tons/year)									
	PM	PM10*	PM2.5[1]	SO_2	NOx	VOC	CO	CO_2e***	Total HAPs	Worst Single HAP
Ducted Emissions										
Dryer Fuel Combustion (worst case)	29.30	23.35	23.35	94.21	93.82	2.72	41.48	59,698	7.47	6.04 (hydrogen chloride)
Dryer/Mixer (Process)	203.98	83.69	90.78	21.75	20.63	12.00	48.75	12,470	4.00	1.16 (formaldehyde)
Magnetite Drying (Process)	1.50	1.50	1.50	0	0	0	0	0	0	0
Dryer/Mixer Slag Processing	0	0	0	0.07	0	0	0	0	0	0
Hot Oil Heater Fuel Combustion (worst case)	0.13	0.22	0.22	4.66	1.31	0.05	0.77	1,484	0.02	0.017 (hexane)
LPG-Butane - Commercial Boilers	0.05	0.21	0.21	0.05	3.86	0.28	2.16	3,757	0	0
Total Process Emissions	**205.66**	**85.62**	**92.70**	**99.00**	**99.00**	**12.33**	**51.69**	**64,940**	**7.49**	**6.04 (hydrogen chloride)**
Fugitive Emissions										
Asphalt Load-Out, Silo Filling, On-Site Yard	0.42	0.42	0.42	0	0	6.42	1.08	0	0.11	0.03 (xylene,formalde-hyde)
Material Storage Piles	1.95	0.68	0.68	0	0	0	0	0	0	0
Material Conveying and Handling	2.42	1.15	0.17	0	0	0	0	0	0	0
Material Crushing Screening, and Conveying	11.90	4.35	4.35	0	0	0	0	0	0	0
Unpaved and Paved Roads (worst case)	26.65	6.79	0.68	0	0	0	0	0	0	0
Cold Mix Asphalt Production	0	0	0	0	0	66.06	0	0	17.23	5.95(xylene)
Gasoline Fuel Transfer and Dispensing	0	0	0	0	0	0.28	0	0	0.07	0.03(xylene)
Volatile Organic Liquid Storage Vessels **	0	0	0	0	0	negl.	0	0	negl.	negl.
Total Fugitive Emissions	**44.17**	**13.64**	**13.64**	**0**	**0**	**79.86**	**1.10**	**0**	**17.41**	**5.97 (xylene)**
Total Limited/Controlled Emissions	**249.00**(1)	**99.00**(2)	**99.00**(2)	**99.00** (2),(6)	**99.00**(3)	**92.15**	**51.60**	**63,642**	**24.9**(2)(5)	**6.04 (hydrogen chloride)**
Title V Major Source Thresholds**	NA	100	100	100	100	100	100	100,000	10	10
PSD Major Source Thresholds**	250	250	250	250	250	250	250	100,000	NA	NA
Emission Offset/ Nonattainment NSR Major Source Thresholds	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Process/ Emission Unit	Potential To Emit of the Entire Source After Issuance of Revision (tons/year)									
	PM	PM10*	PM2.5[1]	SO_2	NOx	VOC	CO	CO_2e***	Total HAPs	Worst Single HAP

negl. = negligible N/A = Not applicable

The emissions contained in this table are based upon FESOP AA No. 163-30567-00186, issued on July 27, 2011.

* Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal ten (10) micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant".

** Fugitive emissions from each of the volatile organic liquid storage tanks were calculated using the EPA Tanks 4.0.9d program and were determined to be negligible.

*** The 100,000 CO_2e threshold represents the Title V and PSD subject to regulation thresholds for CO_2e in order to determine whether a source's emissions are a regulated NSR pollutant under Title V and PSD.

1. Effective October 27, 2011 Vanderburgh County is redesignated as attainment for PM2.5.

(1) Limited PTE based upon existing annual throughput limit and fuel usage limitations to render 326 IAC 2-2 (PSD) not applicable
(2) Limited PTE based upon existing annual throughput limit and fuel usage limitations to comply with 326 IAC 2-8 (FESOP).
(3) PTE inherently limited by existing annual throughput limit and fuel usage limitations; therefore, no limit is necessary to comply with 326 IAC 2-8 (FESOP).
(4) PTE after controls
(5) HAP values reflect worst-case chlorine content from the fuel(s) combusted in the 166 MMBtu aggregate dryer burner.
(6) Limited PTE based upon annual steel slag characteristics and usage limitations to comply with 326 IAC 2-8 (FESOP).

(a) FESOP Status

This revision to an existing Title V minor stationary source will not change the minor status, because the potential to emit criteria pollutants from the entire source will still be limited to less than the Title V major source threshold levels. Therefore, the source will still be subject to the provisions of 326 IAC 2-8 (FESOP).

(1) In order to comply with the requirements of 326 IAC 2-8-4 (FESOP), PM10, PM2.5, VOC, and CO emissions from the dryer/mixer process shall be limited as follows:

(A) The amount of hot-mix asphalt processed shall not exceed 750,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month. *This is a change from 1,440,000 tons per twelve (12) consecutive month period. This is a Title I change.*

(B) The amount of the magnetite drying operation processed shall not exceed 75,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month. *This is an existing requirement for this source.*

(C) The amount of certified ground asbestos-free shingles processed shall not exceed 20,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month. *This is a change from 200 tons per twelve (12) consecutive month period. This is a Title I change.*

(D) The PM10 emissions from the dryer/mixer shall not exceed 0.223 pounds per ton of asphalt processed. *This is a change from 0.083 pounds per ton of asphalt processed. This is a Title I change.*

(E) The PM2.5 emissions from the dryer/mixer shall not exceed 0.242 pounds per ton of asphalt processed. *This is a change from 0.083 pounds per ton of asphalt processed. This is a Title I change.*

(F) The PM10 emissions from the magnetite drying operation shall not exceed 0.040 pounds per ton of magnetite.

(G) The PM2.5 emissions from the magnetite drying operation shall not exceed 0.040 pounds per ton of magnetite.

(H) The VOC emissions from the dryer/mixer shall not exceed 0.032 pounds per ton of asphalt processed. *This is an existing requirement for this source.*

(I) The CO emissions from the dryer/mixer shall not exceed 0.13 pounds per ton of asphalt processed. *This is an existing requirement for this source.*

Compliance with these limits, combined with the potential to emit PM10, PM2.5, VOC, and CO from all other emission units at this source, shall limit the source-wide total potential to emit of PM10, PM2.5, NOx, VOC, and CO to less than 100 tons per 12 consecutive month period, each, and shall render 326 IAC 2-7 (Part 70 Permits), 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)), and 326 IAC 2-1.1-5 (Nonattainment New Source Review) not applicable.

(2) In order to comply with the requirements of 326 IAC 2-8-4 (FESOP), SO2 and HAP emissions from the dryer/mixer fuel combustion shall be limited as follows:

(A) <u>Fuel and Slag Specifications</u>

(i) The sulfur content of No. 2 fuel oil Biodiesel shall not exceed 0.50% by weight, each. *This is an existing requirement for this source.*

(ii) The sulfur content of No. 4 Fuel Oil shall not exceed 1.00% by weight, each. *This is an existing requirement for this source.*

(iii) The sulfur content of the waste fuel oil shall not exceed 0.70% by weight. *This is an existing requirement for this source.*

(iv) The sulfur content of the Biodiesel shall not exceed 0.75% by weight.

(v) The waste oil combusted shall not contain more than 0.10% chlorine. *This is an existing requirement for this source.*

(vi) The waste oil combusted shall not contain more than 0.5% ash and 0.003% lead. *This is an existing requirement for this source.*

(vii) The HCl emissions shall not exceed 6.6 pounds of HCl per 1,000 gallons of waste oil burned. *This is a new requirement for this source. This is a Title I change*.

(viii) The sulfur content of the Steel slag shall not exceed 0.66% by weight. *This is an existing requirement for this source.*

(ix) The SO2 emissions from the dryer/mixer shall not exceed 0.0014 pounds per ton of Steel slag processed in the aggregate mix. *This is an existing requirement for this source.*

(B) <u>Single Fuel Usage Limitations:</u>
When combusting only one type of fuel per twelve (12) consecutive month period in the dryer/mixer burner, the usage of fuel shall be limited as follows:

(i) Natural Gas usage shall not exceed 987.59 MMCF per twelve (12) consecutive month period, with compliance determined at the end of each month. *This is a change from 1,016.16 MMCF per twelve (12) consecutive month period. This is a Title I change*.

(ii) No. 2 fuel oil usage shall not exceed 2,653,909 gallons per twelve (12) consecutive month period, with compliance determined at the end of each month. *This is a change from 2,600,012 gallons per twelve (12) consecutive month period. This is a Title I change*.

(iii) No. 4 fuel oil usage shall not exceed 1,256,184 gallons per twelve (12) consecutive month period, with compliance determined at the end of each month. *This is a change from 1,331,926 gallons per twelve (12) consecutive month period. This is a Title I change*.

(iv) Waste oil usage shall not exceed 1,831,171 gallons per twelve (12) consecutive month period, with compliance determined at the end of each month. *This is a change from 1,941,584 gallons per twelve (12) consecutive month period. This is a Title I change.*

(v) Biodiesel usage shall not exceed 2,452,079 gallons per twelve (12) consecutive month period, with compliance determined at the end of each month. *This is a change from 2,600,012 gallons per twelve (12) consecutive month period. This is a Title I change*; and

Note: The source is only permitted to burn the above-mentioned fuels. *This is an existing requirement for this source.*

Note: A Steel slag usage limit is not required for the source to comply with their FESOP SO2 Limit, since unlimited usage results in a PTE SO2 of only 0.02 tons/yr (see TSD Appendix A.1). To form a conservative estimate, SO2 emissions are based on the "worst case" assumption that steel slag usage corresponds to 100% of the aggregate used to produce hot-mix asphalt (see TSD Appendix A.2).

(C) Multiple Fuel and Slag Usage Limitation:
When combusting more than one fuel per twelve (12) consecutive month period in the dryer/mixer burner, in conjunction with the use of slag in the aggregate mix, emissions from the dryer/mixer shall be limited as follows:

(i) SO_2 emissions from the dryer/mixer shall not exceed 94.21 tons per twelve (12) consecutive month period, with compliance determined at the end of each month. *This is a change from 99.89 tons per twelve (12) consecutive month period. This is a Title I change.*

The Permittee shall limit fuel usage in the dryer/mixer burner according to the following formula:

$$\frac{S = G(E_G) + O(E_O) + F(E_F)\ W(E_W) + D(E_D)}{2{,}000 \text{ lbs/ton}}$$

where:

S = tons of sulfur dioxide emissions for a 12-month consecutive period
G = million cubic feet of natural gas used in the last 12 months
O = gallons of No. 2 fuel oil used in the last 12 months
F = gallons of No. 4 fuel oil used in the last 12 months
W = gallons of waste oil used in the last 12 months
D = gallons of Biodiesel used in the last 12 months
E_G = 0.6 lb/MMCF of natural gas
E_O = 71.0 lb/1000 gallons of No. 2 fuel oil

E_F = 150.0 lb/1000 gallons of No. 4 fuel oil
E_W = 147.0 lb/1000 gallons of waste oil
E_D = 76.8 lb/1000 gallons of Biodiesel

(ii) NOx emissions from the dryer/mixer shall not exceed 93.82 tons per twelve (12) consecutive month period, with compliance determined at the end of each month. *This is a change from 96.54 tons per twelve (12) consecutive month period. This is a Title I change.*

The Permittee shall limit fuel usage in the dryer/mixer burner according to the following formula:

$$\frac{N = G(E_G) + O(E_O) + F(E_F)\ W(E_W) + D(E_D)}{2{,}000 \text{ lbs/ton}}$$

where:

N = tons of nitrogen oxide emissions for twelve (12) month consecutive period
G = million cubic feet of natural gas used in the last 12 months
O = gallons of No. 2 fuel oil used in the last 12 months
F = gallons of No. 4 fuel oil used in the last 12 months
W = gallons of waste oil used in the last 12 months
D = gallons of Biodiesel used in the last 12 months
E_G = 190 lb/MMCF of natural gas
E_O = 24.0 lb/1000 gallons of No. 2 fuel oil
E_F = 47.0 lb/1000 gallons of No. 4 fuel oil
E_W = 19.0 lb/1000 gallons of waste oil
E_D = 26.4 lb/1000 gallons of Biodiesel

(iii) The unlimited PTE CO2e of this source is less than 100,000 tons per year. Therefore, a CO2e emissions limit is not required to allow for compliance with FESOP.

(iv) HCl emissions from the dryer/mixer shall not exceed 9.9 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

HCl Emission Calculation

$$\frac{HCl = W(E_W)}{2{,}000 \text{ lbs/ton}}$$

where:

CO2e = tons of nitrogen oxide emissions for twelve (12) month consecutive period
W = gallons of waste oil used in the last 12 months
E_W = 6.6/1000 gallons of waste oil

Compliance with these limits, combined with the potential to emit SO2, NOx and HAPs from all other emission units at this source, shall limit the source-wide total potential to emit of SO2 to less than 100 tons per twelve (12) consecutive month period, any single HAP to less than ten (10) tons per twelve (12) consecutive month period, and total HAPs to less than twenty-five (25) tons per twelve (12) consecutive month period and shall render the requirements of 326 IAC 2-7 (Part 70 Permits), 326 IAC 2-2 (Prevention of Significant

Deterioration (PSD)), and 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP) not applicable.

(4) In order to comply with the requirements of 326 IAC 2-8-4 (FESOP), the VOC emissions from cold-mix (cutback) asphalt production shall be limited as follows:

(A) VOC emissions from the sum of the binders shall not exceed 73.00 tons per twelve (12) consecutive month period with compliance determined at the end of each month. *This is a change from 56.62 tons per twelve (12) consecutive month period. This is a Title I change.*

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

(i) Cut back asphalt rapid cure, containing a maximum of 25.3% of the liquid binder by weight of VOC solvent and 95.0% by weight of VOC solvent evaporating. *This is an existing requirement for this source.*

(ii) Cut back asphalt medium cure, containing a maximum of 28.6% of the liquid binder by weight of VOC solvent and 70.0% by weight of VOC solvent evaporating. *This is an existing requirement for this source.*

(iii) Cut back asphalt slow cure, containing a maximum of 20.0% of the liquid binder by weight of VOC solvent and 25.0% by weight of VOC solvent evaporating. *This is an existing requirement for this source.*

(iv) Emulsified asphalt with solvent, containing a maximum of 15.0% of liquid binder by weight of VOC solvent and 46.4% by weight of the VOC solvent in the liquid blend evaporating. The percent oil distillate in emulsified asphalt with solvent liquid, as determined by ASTM, must be seven percent (7%) or less of the total emulsion by volume. *This is an existing requirement for this source.*

(v) Other asphalt with solvent binder, containing a maximum 25.9% of the liquid binder of VOC solvent and 2.5% by weight of the VOC solvent evaporating. *This is an existing requirement for this source*.

(C) When using only one type of liquid binder per twelve (12) consecutive month period, the usage of liquid binder shall be limited as follows:

(i) The amount of VOC solvent used in rapid cure cutback asphalt shall not exceed 76.9 tons per twelve (12) consecutive month period, with compliance determined at the end of each month. *This is a change from 59.6 tons per twelve (12) consecutive month period. This is a Title I change.*

(ii) The amount of VOC solvent used in medium cure cutback asphalt shall not exceed 104.3 tons per twelve (12) consecutive month period, with compliance determined at the end of each month. *This is a change from 80.89 tons per twelve (12) consecutive month period. This is a Title I change.*

(iii) The amount of VOC solvent used in slow cure cutback asphalt shall not exceed 292.1 per twelve (12) consecutive month period, with compliance determined at the end of each month. *This is a change from 226.49 tons per twelve (12) consecutive month period. This is a Title I change.*

(iv) The amount of VOC solvent used in emulsified asphalt shall not exceed 157.4 tons per twelve (12) consecutive month period, with compliance determined at the end of each month. *This is a change from 122.03 tons per twelve (12) consecutive month period. This is a Title I change.*

(v) The amount of VOC solvent used in all other asphalt shall not exceed 2,921.2 tons per twelve (12) consecutive month period, with compliance determined at the end of each month. *This is a change from 2,264.93 tons per twelve (12) consecutive month period. This is a Title I change.*

(D) When using more than one liquid binder per twelve (12) consecutive month period, VOC emissions shall be limited as follows:

(i) The VOC solvent allotments in (C)(i) through (C)(v) above shall be adjusted when more than one type of binder is used per twelve (12) consecutive month period with compliance determined at the end of each month. In order to determine the tons of VOC emitted per each type of binder, use the following formula and divide the tons of VOC solvent used for each type of binder by the corresponding adjustment factor listed in the table that follows. *This is an existing requirement for this source*.

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

Type of Binder	Adjustment Factor
Cutback Asphalt Rapid Cure	1.053
Cutback Asphalt Medium Cure	1.429
Cutback Asphalt Slow Cure	4.000
Emulsified Asphalt	2.155
Other Asphalt	40.0

Compliance with these limits, combined with the VOC emissions from other units at this source, will limit source-wide VOC emissions to less than 100 tons per twelve (12) consecutive month period and render 326 IAC 2-7 (Part 70 Permit Program) and 326 IAC 2-2 (PSD), not applicable.

(b) PSD Minor Source

This modification to an existing PSD minor stationary source will not change the PSD minor status, because the potential to emit of all attainment regulated pollutants from the entire source will continue to be less than the PSD major source threshold levels. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable, the source shall comply with the following:

(1) The amount of hot-mix asphalt processed shall not exceed 750,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month. *This is a change from 1,440,000 tons per twelve (12) consecutive month period. This is a Title I change.*

(2) PM emissions from the dryer/mixer shall not exceed 0.544 pounds per ton of asphalt processed. *This is a change from 0.148 pounds per ton of asphalt processed. This is a Title I change.*

(3) The amount of magnetite drying operation shall not exceed 75,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month. *This is an existing requirement for this source.*

(4) PM emissions from the magnetite drying operation shall not exceed 0.040 pounds PM per ton of magnetite. *This is an existing requirement for this source.*

Compliance with these limits, combined with the potential to emit PM from all other emission units at this source, shall limit the source-wide total potential to emit of PM to less than 250 tons per 12 consecutive month period and shall render 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

Federal Rule Applicability Determination

New Source Performance Standards (NSPS)

(a) 40 CFR 60, Subpart IIII - NSPS for Stationary Compression Ignition Internal Combustion Engines
The requirements of the New Source Performance Standard for Stationary Compression Ignition Internal Combustion Engines, 40 CFR 60, Subpart IIII (4I) (326 IAC 12), are not included in the permit for the diesel fuel-fired recycled asphalt pavement (RAP) crusher operation, as follows:

Pursuant to 40 CFR 60.4219, *Stationary internal combustion engine (ICE)* means any internal combustion engine, except combustion turbines, that converts heat energy into mechanical work and is not mobile. Stationary ICE differ from mobile ICE in that a stationary ICE is not a *nonroad engine* as defined at 40 CFR 1068.30 (excluding paragraph (2)(ii) of that definition), and is not used to propel a motor vehicle or a vehicle used solely for competition. Stationary ICE include; reciprocating ICE, rotary ICE, and other ICE, except combustion turbines.

Pursuant to 40 CFR 1068.30, *Nonroad engine* means:

(1) Except as discussed in paragraph (2) of this definition, a nonroad engine is an internal combustion engine that meets any of the following criteria:

(i) It is (or will be) used in or on a piece of equipment that is self-propelled or serves a dual purpose by both propelling itself and performing another function (such as garden tractors, off-highway mobile cranes and bulldozers).

(ii) It is (or will be) used in or on a piece of equipment that is intended to be propelled while performing its function (such as lawnmowers and string trimmers).

(iii) By itself or in or on a piece of equipment, it is portable or transportable, meaning designed to be and capable of being carried or moved from one location to another. Indicia of transportability include, but are not limited to, wheels, skids, carrying handles, dolly, trailer, or platform.

(2) An internal combustion engine is not a *nonroad engine* if it meets any of the following criteria:

(i) The engine is used to propel a motor vehicle, an aircraft, or equipment used solely for competition.

(ii) The engine is regulated under 40 CFR part 60, (or otherwise regulated by a federal New Source Performance Standard promulgated under section 111 of the Clean Air Act (42 U.S.C. 7411)).

(iii) The engine otherwise included in paragraph (1)(iii) of this definition remains or will remain at a location for more than 12 consecutive months or a shorter period of time for an engine located at a seasonal source. A location is any single site at a building, structure, facility, or installation. Any engine (or engines) that replaces an engine at a location and that is intended to perform the same or similar function as the engine replaced will be included in calculating the consecutive time period. An engine located at a seasonal source is an engine that remains at a seasonal source during the full annual operating period of the seasonal source. A seasonal source is a stationary source that remains in a single location on a permanent basis (i.e., at least two years) and that operates at that single location approximately three months (or more) each year. See §1068.31 for provisions that apply if the engine is removed from the location.

IDEM, OAQ has determined that based on information submitted by J. H. Rudolph & Company, the diesel fuel-fired recycled asphalt pavement (RAP) crusher operation may be considered a nonroad engine for the purposes of 40 CFR 60, Subpart IIII applicability, provided it meets the requirements of paragraph (2)(iii) of the definition of nonroad engine in 40 CFR 1068.30. Therefore, the requirements of 40 CFR 60, Subpart IIII are not applicable to the diesel fuel-fired portable crusher and screener (EU002), provided it meets the following requirements:

(1) The diesel fuel-fired recycled asphalt pavement (RAP) crusher operation shall remain at a location for a period not to exceed twelve (12) consecutive months.

(2) Any diesel fuel-fired recycled asphalt pavement (RAP) crusher operation that replaces a diesel fuel-fired portable RAP crusher and screener at a location and that is intended to perform the same or similar function as the diesel fuel-fired portable RAP crusher and screener replaced will be included in calculating the consecutive time period.

(3) For the purposes of this condition and pursuant to 40 CFR 1068.30 Nonroad Engine (2)(iii), a location is any single site at a building, structure, facility, or installation.

(b) There are no other New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR 60) included in the permit.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

(c) 40 CFR 63.6580, Subpart ZZZZ - NESHAP for Stationary Reciprocating Internal Combustion Engines
The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Stationary Reciprocating Internal Combustion Engines, 40 CFR 63.6580, Subpart ZZZZ (4Z) (326 IAC 20-84), are not included in the permit for the diesel fuel-fired recycled asphalt pavement (RAP) crusher operation, as follows:

Pursuant to 40 CFR 60.4219, *Stationary internal combustion engine (ICE)* means any internal combustion engine, except combustion turbines, that converts heat energy into mechanical work and is not mobile. Stationary ICE differ from mobile ICE in that a stationary ICE is not a *nonroad engine* as defined at 40 CFR 1068.30 (excluding paragraph (2)(ii) of that definition), and is not used to propel a motor vehicle or a vehicle used solely for competition. Stationary ICE include; reciprocating ICE, rotary ICE, and other ICE, except combustion turbines.

See paragraph (a) above for the definition of nonroad engine. IDEM, OAQ has determined that based on information submitted by Milestone, the diesel fuel-fired portable crusher and screener (EU002) may be considered a nonroad engine for the purposes of 40 CFR 63, Subpart ZZZZ applicability, provided it meets the requirements of paragraph (2)(iii) of the definition of nonroad engine in 40 CFR 1068.30. Therefore, the requirements of 40 CFR 60, Subpart ZZZZ are not

applicable to the diesel fuel-fired recycled asphalt pavement (RAP) crusher operation, provided it meets the following requirements:

(1) The diesel fuel-fired recycled asphalt pavement (RAP) crusher operation shall remain at a location for a period not to exceed twelve (12) consecutive months.

(2) Any diesel fuel-fired portable RAP crusher and screener that replaces a diesel fuel-fired portable RAP crusher and screener at a location and that is intended to perform the same or similar function as the diesel fuel-fired portable RAP crusher and screener replaced will be included in calculating the consecutive time period.

(3) For the purposes of this condition and pursuant to 40 CFR 1068.30 Nonroad Engine (2)(iii), a location is any single site at a building, structure, facility, or installation.

(d) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included for this proposed revision.

Compliance Assurance Monitoring (CAM)

(e) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is not included in the permit, because the potential to emit of the source is limited to less than the Title V major source thresholds and the source is not required to obtain a Part 70 or Part 71 permit.

State Rule Applicability Determination

The following state rules are applicable to the proposed revision:

(a) 326 IAC 2-8-4 (FESOP)
This revision to an existing Title V minor stationary source will not change the minor status, because the potential to emit criteria pollutants from the entire source will still be limited to less than the Title V major source threshold levels. Therefore, the source will still be subject to the provisions of 326 IAC 2-8 (FESOP). See PTE of the Entire Source After Issuance of the FESOP Revision Section above.

(b) 326 IAC 2-2 (Prevention of Significant Deterioration(PSD))
This modification to an existing PSD minor stationary source will not change the PSD minor status, because the potential to emit of all attainment regulated pollutants from the entire source will continue to be less than the PSD major source threshold levels. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply. See PTE of the Entire Source After Issuance of the FESOP Revision Section above.

(c) 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
The unlimited potential to emit of HAPs from the from the existing units is greater than ten (10) tons per year for any single HAP and/or greater than twenty-five (25) tons per year of a combination of HAPs. However, the source shall limit the potential to emit of HAPs from the existing units to less than ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year of a combination of HAPs. Therefore, the proposed revision is not subject to the requirements of 326 IAC 2-4.1. See PTE of the Entire Source After Issuance of the FESOP Revision Section above.

(d) 326 IAC 2-6 (Emission Reporting)
Pursuant to 326 IAC 2-6-1, this source is not subject to this rule, because it is not required to have an operating permit under 326 IAC 2-7 (Part 70), it is not located in Lake, Porter, or LaPorte County, and it does not emit lead into the ambient air at levels equal to or greater than 5 tons per year. Therefore, 326 IAC 2-6 does not apply.

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

(1) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

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

(f) 326 IAC 6-4 (Fugitive Dust Emissions Limitations)
Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions Limitations), the source 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.

Recycled Asphalt Pavement (RAP) Crusher Operation

The RAP crusher operation was originally determined to be subject to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes) instead of 326 IAC 6.5-1-2 (Particulate Matter Limitations Except Lake County). This determination was based on 326 IAC 6.5-1-2 (g) that sets a PM limit for total enclosed mineral aggregate operations and the RAP crusher operation is not enclosed.

However the determination is based on the definition of a mineral aggregate operation as defined in 326 IAC 6.5-1.5(b)(6). The RAP crusher does not meet the definition of a mineral aggregate operation pursuant to 326 IAC 6.5-1.5, because the RAP crusher does not perform all the operations listed in 326 IAC 6.5-1.5(b)(6). Therefore 326 IAC 6.5-1-2 applies to the RAP crusher operation.

(g) 326 IAC 6.5 (Particulate Matter Limitations Except Lake County)
The requirements of this rule apply to stationary asphalt plants constructed after June 11, 1973, is located in Vanderburgh County, is not specifically listed in 326 IAC 6.5-2 through 326 IAC 6.5-10, and has potential particulate matter emissions greater than 10 tons per year. Pursuant to 6.5-1-2(a), the particulate matter emissions from the RAP Crusher Operation is limited to 0.03 gr/dscf.

(h) 326 IAC 12 (New Source Performance Standards)
See Federal Rule Applicability Section of this TSD.

(i) 326 IAC 20 (Hazardous Air Pollutants)
See Federal Rule Applicability Section of this TSD.

Compliance Determination, Monitoring and Testing Requirements

The existing compliance requirements will not change as a result of this revision. The source shall continue to comply with the applicable requirements and permit conditions as contained in FESOP No: 163-30830-00186, issued on October 19, 2011.

Proposed Changes

(a) The following changes listed below are due to the proposed revision. Deleted language appears as ~~strikethrough~~ text and new language appears as **bold** text:

(1) Effective October 27, 201, Vanderburgh county was designated Unclassifiable or attainment, for PM2.5.

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

The Permittee owns and operates a stationary drum-mix asphalt plant (formerly identified under plant ID 163-03408), with the capability of producing both hot-mix and warm-mix asphalt, ~~and~~ a cold-mix asphalt **and magnetite** production operation. This source processes steel slag and certified ground asbestos-free shingles in its aggregate mix.

Source Address:	3300 S. Green River Road, Evansville, Indiana 47715
General Source Phone Number:	(812) 547-1400
SIC Code:	2951 (Asphalt Paving Mixtures and Blocks)
County Location:	Vanderburgh
Source Location Status:	~~Nonattainment for PM2.5 standard~~ Attainment for all ~~other~~ criteria pollutants
Source Status:	Federally Enforceable State Operating Permit Program Minor Source, under PSD and Emission Offset Rules Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

(2) The source has requested to the asphalt production limit be changed from 1.44 million tons per year to 750,000 tons per year and that the asphalt roofing shingles limit be changed from 200 tons per year to 20,000 tons per year. This change results in many limits to also be changed.

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

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

***

(b) ~~An alternate~~ drying process, used to dry magnetite, with a maximum capacity of 75,000 tons per year, exhausting through a baghouse at stack SV1;

***

(e) One (1) recycled asphalt pavement (RAP) crusher, rated at 150 ton per hour, approved for construction in 2011.

Note: This RAP crusher will replace the existing crusher that was constructed in 1990. **The former RAP crusher remains on site but is not operable.**

Under 40 CFR 60, Subpart OOO, New Source Performance Standards for Nonmetallic Mineral Processing Plants, this is considered an affected facility.

***

~~**SECTION D.1 FACILITY OPERATION CONDITIONS**~~

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

~~(a) One (1) six hundred fifty (650) tons per hour aggregate dryer, installed in June 1990, processing steel slag and certified ground asbestos-free shingles*, in the aggregate mix, with a burner capacity of 116 million British thermal units per hour, and exhausting through a baghouse at stack SV1. This dryer is fired by natural gas, #2 fuel oil, #4 fuel oil, #4 waste oil, and biodiesel, as available. This unit has the capability of processing both hot-mix and warm-~~

~~mix asphalt;~~

~~[Note: *approved to process certified asbestos-free shingles in 2011 and no grinding of shingles occurs at this source.]~~

~~Under 40 CFR 60.90, Subpart I - New Source Performance Standards for Hot Mix Asphalt Facilities, this is considered an affected hot-mix asphalt facility.~~

~~(b) An alternate drying process, used to dry magnetite, with a maximum capacity of 75,000 tons per year, exhausting through a baghouse at stack SV1;~~

~~(c) One (1) baghouse with a total filter area of 13,149 ft^2, exhausting at stack SV1; and~~

~~(e) One (1) recycled asphalt pavement (RAP) crusher, rated at 150 ton per hour, approved for construction in 2011.~~

~~Note: This RAP crusher will replace the existing crusher that was constructed in 1990.~~

~~Under 40 CFR 60, Subpart OOO, New Source Performance Standards for Nonmetallic Mineral Processing Plants, this is considered an affected facility.~~

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

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

~~D.1.1 Particulate Matter (PM) [326 IAC 6.5-1-2]~~

~~Pursuant to 326 IAC 6.5-1-2(a) (Nonattainment Area Particulate Limitations), particulate matter (PM) emissions from the aggregate mixing and drying operation and magnetite drying operation shall be limited to 0.03 grains per dry standard cubic foot (gr/dscf) for particulate matter. Compliance with this limit will also demonstrate compliance with the PM emission limit pursuant to 40 CFR 60.90, Subpart I.~~

~~D.1.2 Particulate Matter (PM) [326 IAC 6-3-2]~~

~~Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the RAP crusher shall not exceed 55.44 pounds per hour when operating at a process weight rate of 150 tons per hour.~~

~~The pound per hour limitation was calculated with the following equation:~~

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

$$E = 55.0\ P^{0.11} - 40$$

~~where: E = rate of emission in pounds per hour and~~
~~P = process weight rate in tons per hour~~

~~D.1.3 PSD Minor Limit [326 IAC 2-2]~~

~~(a) Particulate matter emissions from the aggregate dryer and mixer shall not exceed 0.148 pounds PM per ton of asphalt mix.~~

~~(b) Particulate matter emissions from the magnetite drying operation shall not exceed 0.040 pounds PM per ton of magnetite.~~

~~(c) Particulate matter emissions from the shingles handling shall not exceed 0.007 pounds PM per ton of shingles.~~

~~Compliance with the above limits, in addition to the limit in condition D.1.6, will limit total source wide PM emissions to less than 250 tons per year. Therefore, compliance with this limit will render 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.~~

~~D.1.4 FESOP and PSD Limits [326 IAC 2-8-4] [326 IAC 2-2]~~

~~Pursuant to 326 IAC 2-8-4, and in order to limit the SO2 emissions from the aggregate dryer, the Permittee shall comply with the following:~~

~~(a) The amount of steel slag used in the production of hot-mix and warm-mix asphalt, combined, shall not exceed 100,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.~~

~~(b) The calendar-month average sulfur content of the steel slag shall not exceed sixty-six hundredths percent (0.66%) by weight with compliance determined at the end of each month.~~

~~(c) SO2 emissions from the steel slag used in the hot-mix asphalt dryer/mixer shall not exceed fourteen ten-thousandths (0.0014) pounds of SO2 per ton of steel slag processed.~~

~~Compliance with these limits, combined with the potential SO2 emissions from all other emission units at this source, shall limit the source-wide total potential to emit SO2 to less than one hundred (100) tons per twelve (12) consecutive month period, and shall render 326 IAC 2-7 (Part 70 Permits) and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD) not applicable.~~

~~D.1.5 Particulate Matter (PM10 and PM2.5) [326 IAC 2-8-4] [326 IAC 2-2] [326 IAC 2-3]~~

~~Pursuant to 326 IAC 2-8-4, the following limits shall apply:~~

~~(a) PM10 emissions from the aggregate mixing and drying operation shall be limited to 0.083 pounds per ton of asphalt produced. This will limit the total potential to emit PM10 from the aggregate dryer and mixer to less than 59.50 tons per year.~~

~~(b) PM10 emissions from the magnetite drying operation shall be limited to 0.04 pounds per ton of magnetite. This will limit the total potential to emit PM10 from the magnetite drying operation to less than 1.50 tons per year.~~

~~(c) PM10 emissions from the shingles handlings shall be limited to 0.003 pounds per ton of shingles. This will limit the total potential to emit PM10 from the shingles operation to less than 0.001 tons per year.~~

~~(d) PM2.5 emissions from the aggregate mixing and drying operation shall be limited to 0.083 pounds per ton of asphalt produced. This will limit the total potential to emit PM2.5 from the aggregate dryer and mixer to less than 59.50 tons per year.~~

~~(e) PM2.5 emissions from the magnetite drying operation shall be limited to 0.04 pounds per ton of magnetite. This will limit the total potential to emit PM2.5 from the magnetite drying operation to less than 1.50 tons per year.~~

~~(f) PM2.5 emissions from the shingles handling shall be limited to 0.0005 pounds per ton of shingles. This will limit the total potential to emit PM2.5 from the shingles operation to less than 0.001 tons per year.~~

~~Compliance with these limits, combined with the potential to emit PM10 and PM2.5 from all other emission units at this source, in addition to the limit in conditions D.1.3 and D.1.6, shall limit the~~

~~source-wide total potential to emit of PM10 and PM2.5 to less than 100 tons per 12 consecutive month period, each, and shall render 326 IAC 2-7 (Part 70 Permits), 326 IAC 2-2 (Prevention of Significant Deterioration (PSD) and 326 IAC 2-3 (Emission Offset) not applicable.~~

~~D.1.6 FESOP Limit [326 IAC 2-8]~~

~~Pursuant to 326 IAC 2-8-4, the following limits shall apply:~~

~~(a) The annual throughput to the aggregate dryer shall be not exceed 1,440,000 tons of hot-mix and warm-mix asphalt, combined, per twelve (12) consecutive month period, with compliance determined at the end of each month.~~

~~(b) The annual throughput to the magnetite drying operation shall not exceed 75,000 tons of magnetite per twelve (12) consecutive month period, with compliance determined at the end of each month.~~

~~(c) The Permittee shall use only certified asbestos-free shingles.~~

~~(d) The maximum asbestos-free shingles usage shall not exceed 200 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.~~

~~Compliance with the above limits, in addition to the limit in conditions D.1.3, D.1.5, D.1.7 and D.1.8, will limit the source's emissions of all regulated pollutants, except PM, to less than 100 tons per year. PM emissions are limited to less than 250 tons per year. This will also limit combined HAP emissions to less than 25 tons per year. Therefore, the requirements of 326 IAC 2-7 (Part 70), and 326 IAC 2-2 (PSD) are not applicable.~~

~~D.1.7 Volatile Organic Compounds (VOCs) [326 IAC 8-1-6]~~

~~(a) VOC emissions from the drum mix dryer shall not exceed 0.032 pounds of VOC per ton of hot mix, and/or warm-mix, asphalt produced.~~

~~(b) VOC emissions from the silo filling process shall not exceed 0.0122 pounds of VOC per tons of hot mix, and/or warm-mix, asphalt produced.~~

~~Compliance with the above limits, in addition to the limit in condition D.1.6, will limit VOC emissions from the drum mix dryer and the silo filling process each to less than 25 tons per year. Compliance with this limit will render the requirements of 326 IAC 8-1-6 not applicable to these facilities.~~

~~D.1.8 Carbon monoxide (CO) [326 IAC 2-8]~~

~~Pursuant to 326 IAC 2-8-4, the following shall apply:~~

~~(a) CO emissions from the drum mix dryer shall not exceed 0.13 pounds of CO per ton of hot mix, and/or warm-mix, asphalt produced.~~

~~(b) CO emissions from the silo filling process shall not exceed 0.019 pounds of VOC per ton of hot mix, and/or warm-mix, asphalt produced.~~

~~Compliance with the above limits, in addition to the limit in condition D.1.6, will limit total source-wide CO emissions to less than 100 tons per year. Compliance with this limit will satisfy 326 IAC 2-8-4 and render the requirements of Part 70 (326 IAC 2-7) not applicable.~~

~~D.1.9 Sulfur Dioxide (SO_2) [326 IAC 7-1.1-1] [326 IAC 7-2-1]~~

~~Pursuant to 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations), sulfur dioxide emissions from the 116 million British thermal units per hour burner for the aggregate dryer shall be limited to 0.5 pounds per MMBtu heat input when using distillate oils and 1.6 pounds per MMBtu heat input when firing residual oils. This is equivalent to the following maximum allowable sulfur contents of the following fuels: No. 2 fuel oil and biodiesel (0.5%), No. 4 waste oil (1.5%) and No. 4 fuel oil (1.5%).~~

~~Pursuant to 326 IAC 7-1.1-2, this sulfur dioxide limit applies at all times including periods of startup, shutdown, and malfunction. Pursuant to 326 IAC 7-2-1, compliance shall be demonstrated on a calendar month average, with compliance determined at the end of each month.~~

~~D.1.10 No. 4 Fuel Usage and Equivalents [326 IAC 2-8]~~

~~Pursuant to 326 IAC 2-8-4(1), the following limits shall apply:~~

~~(a) The sulfur content of the No. 2 fuel oil and biodiesel used in the 116 MMBtu per hour burner for the aggregate dryer shall not exceed 0.5 % by weight, each. The sulfur content of the No. 4 fuel oil and waste oil used in the 116 MMBtu per hour burner for the aggregate dryer shall not exceed 1.0 % and 0.7% by weight, respectively.~~

~~(b) The input of No. 4 fuel oil with a maximum sulfur content of 1.0% and No. 4 fuel oil equivalents to the 116 MMBtu per hour burner for the aggregate dryer shall be limited to 1,331,926 gallons per twelve (12) consecutive month period, with compliance determined at the end of each month.~~

~~(c) For purposes of determining compliance based on SO2 emissions, the following shall apply:~~

~~(1) every million cubic feet (MMCF) of natural gas burned shall be equivalent to 4.0 gallons of No. 4 fuel oil based on SO_2 emissions, such that the total input of No. 4 fuel oil and No. 4 fuel oil equivalent input does not exceed the limit specified;~~

~~(2) every 1,000 gallons of No. 2 distillate oil burned in the aggregate dryer burner shall be equivalent to 512.3 gallons of No. 4 fuel oil based on SO_2 emissions and a maximum No. 2 distillate oil sulfur content of 0.5% such that the total gallons of No. 4 fuel oil and No. 4 fuel oil equivalent input does not exceed the limit specified; and~~

~~(3) every 1,000 gallons of waste oil (No. 4) burned in the aggregate dryer burner shall be equivalent to 686.0 gallons of No. 4 fuel oil based on SO_2 emissions and a maximum waste oil sulfur content of 0.7 % such that the total gallons of No. 4 fuel oil and No. 4 fuel oil equivalent input does not exceed the limit specified.~~

~~(4) every 1,000 gallons of biodiesel burned in the aggregate dryer burner shall be equivalent to 512.3 gallons of No. 4 fuel oil based on SO_2 emissions and a maximum waste oil sulfur content of 0.5 % such that the total gallons of No. 4 fuel oil and No. 4 fuel oil equivalent input does not exceed the limit specified.~~

~~Compliance with these limits, combined with the SO2 emissions from all other units at this source, will limit the source-wide SO2 emissions, and indirectly NOx emissions, to less than 100 tons per twelve (12) consecutive month period, each, and shall render 326 IAC 2-7 (Part 70 Permit Program), 326 IAC 2-2 (PSD)), and 326 IAC 2-3 (Emission Offset) not applicable.~~

~~D.1.11 Preventive Maintenance Plan [326 IAC 2-8-4(9)]~~

~~A Preventive Maintenance Plan is required for this facility and any control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.~~

~~Compliance Determination Requirements~~

~~D.1.12 Testing Requirements [326 IAC 2-8-5(a)(1), (4)] [326 IAC 2-1.1-11][40 CFR 60.93][326 IAC 12]~~

~~(a) Not later than five (5) years from October 26, 2004, in order to demonstrate compliance with Conditions D.1.1, D.1.3(a), D.1.5, and D.1.21 the Permittee shall perform PM testing for the aggregate dryer/mixer utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of the most recent~~

~~valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C- Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.~~

~~(b) In order to demonstrate compliance with Conditions D.1.1, D.1.3(a), D.1.5(a) and (c), and D.1.21, the Permittee shall perform PM2.5 and PM10 testing for the baghouse controlling the aggregate dryer/mixer within 180 days of publication of the new or revised condensable PM test method(s) referenced in the U. S. EPA's Final Rule for Implementation of the New Source Review (NSR) Program for Particulate Matter Less Than 2.5 Micrometers (PM2.5), signed on May 8th, 2008, or within five (5) years of issuance of FESOP Revision No. 163-27958-00186, whichever is later. This testing shall be conducted utilizing methods as approved by the Commissioner. These tests shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition. PM10 and PM2.5, each, includes filterable and condensable PM.~~

~~(c) Pursuant to 40 CFR 60.93, compliance with the PM standards in 40 CFR 60.92 and condition D.1.21 shall be determined by using Method 5 to determine particulate concentration. When determining the particulate concentration, the sampling time and sampling volume for each run shall be at least 60 minutes and 0.90 dry standard cubic meters (31.8 dry standard cubic feet).~~

~~(d) Pursuant to 40 CFR 60.93, compliance with the opacity standards in 40 CFR 60.92 and condition D.1.21 shall be determined by utilizing 40 CFR Part 60 Appendix A, Method 9 to determine opacity. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C- Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.~~

~~(e) Not later than one-hundred and eighty (180) days after issuance of this permit, Permit No F163-23182-00186 (formerly Plant ID# 163-03408), in order to demonstrate compliance with the opacity standards in 40 CFR 60.672 and condition D.1.23, the Permittee shall perform opacity testing for the RAP crusher utilizing 40 CFR Part 60 Appendix A, Method 9 at least once every five (5) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C- Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.~~

~~D.1.13 Sulfur Dioxide Emissions and Sulfur Content~~

~~Compliance shall be determined utilizing one of the following options.~~

~~(a) Compliance with the slag limitations established in Condition D.1.4(b) shall be determined utilizing one of the following options.~~

~~(1) Providing vendor analysis of the steel slag delivered, if accompanied by a vendor certification; or~~

~~(2) Analyzing a sample of the slag delivery to determine the sulfur content of the steel slag, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.~~

~~(3) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from the one hundred twenty (120) million British thermal units per hour~~

~~burner, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6, or other procedures approved by IDEM, OAQ.~~

~~A determination of noncompliance pursuant to any of the methods specified above shall not be refuted by evidence of compliance pursuant to the other method.~~

~~(b) Pursuant to 326 IAC 3-7-4, the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed five-tenths (0.5) pounds per million British thermal unit heat input when operating on No. 2 distillate oil, and biodiesel, each, and one and six-tenths (1.6) pounds per million British thermal unit heat input when operating on No. 4 fuel oil and waste oil (No. 4) by:~~

~~(1) Providing vendor analysis of fuel delivered, if accompanied by a vendor certification; or~~

~~(2) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.~~

~~(A) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and~~

~~(B) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling.~~

~~(3) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from the aggregate dryer and drum mixer using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6.~~

~~(4) In order to demonstrate compliance with Conditions D.1.9 and D.1.10, the Permittee shall demonstrate that weight percent sulfur dioxide in the fuels used does not exceed one half of a percent (0.5%) by weight when operating on No. 2 distillate fuel oil and biodiesel, each, one percent (1.0%) by weight when operating on No. 4 fuel oil, and seven tenths percent (0.7%) by weight when operating on No. 4 waste oil, using the methods described in (a) of this condition.~~

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

~~D.1.14 Particulate Matter (PM, PM10, and PM2.5) Control~~

~~(a) In order to comply with Conditions D.1.1, D.1.3, D.1.5, and D.1.21, the baghouse for particulate control shall be in operation and control emissions from the aggregate dryer, drum mixer and the magnetite drying operation at all times that the aggregate dryer, drum mixer, and magnetite drying operation are in operation.~~

~~(b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.~~

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

~~D.1.15 Visible Emissions Notations~~

~~(a) Daily visible emission notations of the magnetite dryer, aggregate dryer, and burner baghouse stack exhaust and the crushing, conveying, material transfer points, and~~

~~screening shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.~~

~~(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.~~

~~(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.~~

~~(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.~~

~~(e) If abnormal emissions are observed, the Permittee shall take reasonable response. Section C- Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.~~

~~D.1.16 Parametric Monitoring~~

~~The Permittee shall record the pressure drop across the baghouse used in conjunction with the aggregate dryer and mixer and magnetite drying process, once per day when the process is in operation and venting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal range of 1.0 and 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps. Section C- Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above-mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.~~

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

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

~~(a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).~~

~~(b) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the emission unit. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).~~

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

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

~~D.1.18 Record Keeping Requirements~~

~~(a) To document the compliance status with the slag/shingles limitations in condition D.1.4, the~~

~~Permittee shall maintain monthly records of the information listed in items (1) through (4) below.~~

~~(1) Calendar dates covered in the compliance determination period;~~

~~(2) Actual steel slag/shingles usage, calendar-month average sulfur content and equivalent sulfur dioxide emission rates for all steel slag used at the source since the last compliance determination period;~~

~~(3) A certification, signed by the owner or operator, that the records of the slag/shingles supplier certifications represent all of the steel slag used during the period; and~~

~~(4) If the slag/shingles supplier certification is used to demonstrate compliance the following, as a minimum, shall be maintained:~~

~~(A) slag/shingles supplier certifications;~~

~~(B) The name of the slag/shingles supplier; and~~

~~(C) A statement from the slag/shingles supplier that certifies the sulfur content of the steel slag and the shingles contain no asbestos.~~

~~Records that may be used to document the information included in (1) through (4) may include delivery tickets, manufacturer's data, material safety data sheets (MSDS), and other documents necessary to verify the type and amount used.~~

~~(b) To document the compliance status with condition D.1.6, the Permittee shall maintain records in accordance with (1) through (3) below. Records maintained for (1) through (3) shall be taken monthly and shall be complete and sufficient to establish compliance with the annual throughput limits to the aggregate dryer and magnetite drying operation established in Condition D.1.6.~~

~~(1) Calendar dates covered in the compliance determination period;~~

~~(2) Asphalt mix throughput to the aggregate dryer per month since the last compliance determination period;~~

~~(3) Magnetite throughput to the magnetite dryer per month since the last compliance determination period; and~~

~~(4) Ground shingles throughput to the aggregate dryer per month since the last compliance determination period.~~

~~(c) To document the compliance status with conditions D.1.9 and D.1.10, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) below shall be complete and sufficient to establish compliance with the SO_2 emission limits established in conditions D.1.9 and D.1.10.~~

~~(1) Calendar dates covered in the compliance determination period;~~

~~(2) Actual No. 4 fuel oil and No. 4 fuel oil equivalent usage per month since last compliance determination period and equivalent SO_2 and NO_x emissions;~~

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

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

~~(4) Fuel supplier certifications;~~

~~(5) The name of the fuel supplier; and~~

~~(6) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.~~

~~The Permittee shall retain records of all recording/monitoring data and support information for a period of five (5) years, or longer, if specified elsewhere in this permit, from the date of the monitoring sample, measurement, or report. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit.~~

~~(d) The Permittee shall maintain records sufficient to verify compliance with the procedures specified in Condition D.1.13. Records shall be maintained for a period of five (5) years and shall be made available upon request by IDEM, OAQ.~~

~~(e) To document the compliance status with Condition D.1.15, the Permittee shall maintain daily records of visible emission notations from the magnetite dryer, aggregate dryer, and burner baghouse stack exhaust and the crushing, conveying, material transfer points, and screening or the reason why visible emission notations were not taken.~~

~~(f) To document the compliance status with Condition D.1.16, the Permittee shall maintain daily records of the pressure drop during normal operation or the reason why a pressure drop reading was not taken.~~

~~(g) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.~~

~~D.1.19 Reporting Requirements~~

~~A quarterly summary of the information to document the compliance status with Conditions D.1.4(a), D.1.6, D.1.9, and D.1.10, shall be submitted using the reporting forms located at the end of this permit, or their equivalent, not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting Requirements contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meet the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).~~

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

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

(a) One (1) six hundred fifty (650) tons per hour aggregate dryer, installed in June 1990, processing steel slag and certified ground asbestos-free shingles*, in the aggregate mix, with a burner capacity of 116 million British thermal units per hour, and exhausting through a baghouse at stack SV1. This dryer is fired by natural gas, #2 fuel oil, #4 fuel oil, #4 waste oil, and biodiesel, as available. This unit has the capability of processing both hot-mix and warm-mix asphalt;

[Note: *approved to process certified asbestos-free shingles in 2011 and no grinding of shingles occurs at this source.]

Under 40 CFR 60.90, Subpart I - New Source Performance Standards for Hot Mix Asphalt Facilities, this is considered an affected hot-mix asphalt facility.

(b) A drying process, used to dry magnetite, with a maximum capacity of 75,000 tons per year, exhausting through a baghouse at stack SV1;

(c) One (1) baghouse with a total filter area of 13,149 ft^2, exhausting at stack SV1; and

(e) One (1) recycled asphalt pavement (RAP) crusher, rated at 150 ton per hour, approved for construction in 2011.

Note: This RAP crusher will replace the existing crusher that was constructed in 1990. The former RAP crusher remains on site but is not operable.

Under 40 CFR 60, Subpart OOO, New Source Performance Standards for Nonmetallic Mineral Processing Plants, this is considered an affected facility.

Insignificant Activities:

(a) Natural gas-fired combustion sources with a heat input equal to or less than 10 million British thermal units per hour;

(1) One (1) hot oil heater, fired by natural gas and rated at 2.10 million British thermal units per hour, and exhausting to stack SV2, installed in June 1990;

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

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

D.1.1 PSD Minor Limit [326 IAC 2-2]]

In order to render 326 IAC 2-2 not applicable;

(a) The amount of hot-mix and warm-mix asphalt processed shall not exceed 750,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

(b) PM emissions from the dryer/mixer shall not exceed 0.544 pounds per ton of asphalt processed.

(c) The annual throughput to the magnetite drying operation shall not exceed 75,000 tons of magnetite per twelve (12) consecutive month period, with compliance determined at the end of each month.

(d) PM emissions from the magnetite drying operation shall not exceed 0.040 pounds PM per ton of magnetite.

Compliance with these limits, combined with the potential to emit PM from all other emission units at this source, shall limit the source-wide total potential to emit of PM to less than 250 tons per 12 consecutive month period and shall render 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.1.2 FESOP Limits: PM10, PM2.5, VOC, and CO [326 IAC 2-8-4][326 IAC 2-2][326 IAC 8-1-6]

Pursuant to 326 IAC 2-8-4, the Permittee shall comply with the following:

(a) The amount of hot-mix asphalt processed shall not exceed 750,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each

month.

(b) The annual throughput to the magnetite drying operation shall not exceed 75,000 tons of magnetite per twelve (12) consecutive month period, with compliance determined at the end of each month.

(c) The Permittee shall use only certified asbestos-free shingles.

(d) The maximum asbestos-free shingles usage shall not exceed 20,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

(e) The PM10 emissions from the dryer/mixer shall not exceed 0.223 pounds per ton of asphalt processed.

(f) PM10 emissions from the magnetite drying operation shall be limited to 0.04 pounds per ton of magnetite.

(g) The PM2.5 emissions from the dryer/mixer shall not exceed 0.242 pounds per ton of asphalt processed.

(h) PM2.5 emissions from the magnetite drying operation shall be limited to 0.04 pounds per ton of magnetite.

(i) The VOC emissions from the dryer/mixer shall not exceed 0.032 pounds per ton of asphalt processed.

(j) The CO emissions from the dryer/mixer shall not exceed 0.130 pounds per ton of asphalt processed.

Compliance with these limits, combined with the potential to emit PM10, PM2.5, VOC, and CO from all other emission units at this source, shall limit the source-wide total potential to emit of PM10, PM2.5, VOC, and CO to less than 100 tons per 12 consecutive month period, each, and shall render 326 IAC 2-7 (Part 70 Permits), and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)), not applicable.

Additionally, compliance with the limit in condition D.1.2(i) shall limit the VOC emissions from the dryer/mixer to less than twenty-five (25) tons per twelve (12) consecutive month period and shall render 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities) not applicable.

D.1.3 FESOP Limits: SO2, NOx and HAPs [326 IAC 2-8-4][326 IAC 2-2][326 IAC 2-4.1]

Pursuant to 326 IAC 2-8-4, and in order to render 326 IAC 2-2 and 326 IAC 2-4.1 not applicable, the Permittee shall comply with the following:

(a) <u>Fuel and Slag Specifications</u>

(1) The sulfur content of the No. 2 distillate fuel oil and biodiesel shall not exceed 0.50% by weight.

(2) The sulfur content of the No. 4 distillate fuel oil shall not exceed 1.00% by weight.

(3) The sulfur content of the waste oil shall not exceed 0.70% by weight.

(4) The waste oil combusted in the dryer burner shall not contain more than 0.50% ash, 0.10% chlorine, and 0.003% lead.

(5) The HCl emissions shall not exceed 6.6 pounds of HCl per 1,000 gallons of waste oil burned.

(6) The sulfur content of the steel slag shall not exceed 0.66% by weight.

(7) The SO2 emissions from the dryer/mixer shall not exceed 0.0014 pounds per ton of Steel slag processed in the aggregate mix.

(b) <u>Single Fuel and Slag Usage Limitations:</u>

(1) When combusting only one type of fuel per twelve (12) consecutive month period in the dryer/mixer burner, the usage of fuel shall be limited as follows:

(A) Natural Gas usage shall not exceed 987.59 MMCF per twelve (12) consecutive month period, with compliance determined at the end of each month.

(B) No. 2 fuel oil usage shall not exceed 2,653,909 gallons per twelve (12) consecutive month period, with compliance determined at the end of each month;

(C) No. 4 fuel oil usage shall not exceed 1,256,184 gallons per twelve (12) consecutive month period, with compliance determined at the end of each month;

(C) Waste oil usage shall not exceed 1,831,171 gallons per twelve (12) consecutive month period, with compliance determined at the end of each month; and

(D) Biodiesel usage shall not exceed 2,452,079 gallons per twelve (12) consecutive month period, with compliance determined at the end of each month;

(E) The steel slag usage shall not exceed 100,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

Note: The source is only permitted to burn the above-mentioned fuels in the dryer/mixer burner.

(c) <u>Multiple Fuel Limitation:</u>

When combusting more than one fuel per twelve (12) consecutive month period in the dryer/mixer burner, in conjunction with the use of slag in the aggregate mix, emissions from the dryer/mixer shall be limited as follows:

(1) SO_2 emissions shall not exceed 94.21 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

(2) NOx emissions from the dryer/mixer shall not exceed 93.82 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

(3) HCl emissions shall not exceed 9.9 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

(d) <u>Asphalt Shingle Usage Limitation</u>

Pursuant to 326 IAC 2-8-4 (FESOP), and in order to render the requirements of 326 IAC 2-2 (PSD) and 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAPs)) not applicable, the Permittee shall not grind recycled asphalt shingles on-site and shall only use certified asbestos-free recycled shingles, post consumer waste and/or factory seconds, as an additive in its aggregate mix.

Compliance with these limits, combined with the potential to emit SO2 and HAPs from all other emission units at this source, shall limit the source-wide total potential to emit of SO2 to less than 100 tons per twelve (12) consecutive month period, any single HAP to less than ten (10) tons per twelve (12) consecutive month period, and total HAPs to less than twenty-five (25) tons per twelve (12) consecutive month period and shall render the requirements of 326 IAC 2-7 (Part 70 Permits), 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)), and 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP) not applicable.

D.1.4 Particulate Emission Limits [326 IAC 6-2]

Pursuant to 326 IAC 6-2-4, the particulate emissions from the hot oil heater, shall not exceed six tenths (0.6) pounds of particulate matter per MMBtu heat input.

D.1.5 Particulate Matter (PM) [326 IAC 6.5-1-2]

(a) Pursuant to 326 IAC 6.5-1-2(a) (Nonattainment Area Particulate Limitations), particulate matter (PM) emissions from the aggregate mixing and drying operation and magnetite drying operation shall be limited to 0.03 grains per dry standard cubic foot (gr/dscf) for particulate matter.

(b) Pursuant to 326 IAC 6.5-1-2(a) (Nonattainment Area Particulate Limitations), particulate matter (PM) emissions from the RAP crusher operation shall be limited to 0.03 grains per dry standard cubic foot (gr/dscf) for particulate matter.

D.1.6 Sulfur Dioxide (SO2) [326 IAC 7-1.1-1] [326 IAC 7-2-1]

(a) Pursuant to 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations), the Permittee shall comply with the following:

(1) The sulfur dioxide (SO2) emissions from the dryer/mixer burner, and diesel fuel-fired portable RAP crusher and screener, each, shall not exceed five tenths (0.5) pounds per MMBtu when using distillate oil.

(2) The sulfur dioxide (SO2) emissions from the dryer/mixer burner shall not exceed one and six tenths (1.6) pounds per MMBtu heat input when using residual oil.

Note: No. 2 fuel oil, No. 4 fuel oil, diesel fuel oil and Biodiesel are considered distillate oils, and waste oil is considered residual oil.

(b) Pursuant to 326 IAC 7-2-1, compliance shall be demonstrated on a calendar month average.

D.1.7 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan is required for these facilities and any corresponding control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.1.8 Particulate Control (PM/PM10/PM2.5)

(a) In order to comply with Conditions D.1.1(b), D.1.1(d), D.1.2(e), D.1.2(f), D.1.2(g) and

D.1.2(h), the baghouse for particulate control shall be in operation and control emissions from the dryer/mixer at all times when the dryer/mixer is in operation.

(b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

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

Not later than five (5) years from October 26, 2004, in order to demonstrate compliance with Conditions D.1.1(b), D.1.1(d), D.1.2(e), D.1.2(f), D.1.2(g) and D.1.2(h), the Permittee shall perform PM, PM10, and PM2.5 testing of the dryer/mixer not later than five (5) years from the most recent valid compliance demonstration, utilizing methods approved by the Commissioner. These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition. PM10 and PM2.5 includes filterable and condensable particulate matter.

D.1.10 Sulfur Dioxide (SO_2) Emissions and Sulfur Content

Fuel Oil

(a) Compliance with the fuel limitations established in Conditions D.1.3(a)(1) through D.1.3(a)(4) shall be determined utilizing one of the following options. Pursuant to 326 IAC 7-2-1 (Sulfur Dioxide Reporting Requirements), compliance shall be demonstrated on a thirty (30) day calendar-month average.

(1) Providing vendor analysis of fuel delivered, if accompanied by a vendor certification; or

(2) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.

(A) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and

(B) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling.

(3) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from the burner, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6.

A determination of noncompliance pursuant to any of the methods specified in (1) or (2) above shall not be refuted by evidence of compliance pursuant to the other method.

Steel Slag

(b) Compliance with the Steel slag limitations established in Condition D.1.3(a)(7) shall be determined utilizing one of the following options. Pursuant to 326 IAC 7-2-1 (Sulfur Dioxide Reporting Requirements), compliance shall be demonstrated on a thirty (30) day calendar-month average.

(1) Maintaining all records of vendor analyses or certifications of slag delivered;

or

(2) Analyzing a sample of the Steel slag delivery if no vendor analyses or certifications are available, at least once per quarter, to determine the sulfur content of the Steel slag, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

(3) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from the burner, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6, or other procedures approved by IDEM, OAQ.

A determination of noncompliance pursuant to any of the methods specified in (1) or (2) above shall not be refuted by evidence of compliance pursuant to the other method.

D.1.11 Hydrogen Chloride (HCl) Emissions and Ash, Chlorine, and Lead Content

The Permittee shall demonstrate compliance with the waste oil ash, chlorine, and lead content limits established in Condition D.1.3(a)(5), by providing a vendor analysis of each fuel delivery accompanied by a vendor certification.

D.1.12 Multiple Fuel and Slag Usage Limitations

(a) In order to comply with the Condition D.1.3(c) when combusting more than one fuel per twelve (12) consecutive month period in the dryer/mixer burner, the Permittee shall limit fuel usage according to the following formulas:

Sulfur Dioxide (SO2) Emission Calculation

$$S = \frac{G(E_G) + O(E_O) + F(E_F)\ W(E_W) + D(E_D)}{2{,}000 \text{ lbs/ton}}$$

where:

S = tons of sulfur dioxide emissions for a 12-month consecutive period
G = million cubic feet of natural gas used in the last 12 months
O = gallons of No. 2 fuel oil used in the last 12 months
F = gallons of No. 4 fuel oil used in the last 12 months
W = gallons of waste oil used in the last 12 months
D = gallons of Biodiesel used in the last 12 months

E_G = 0.6 lb/MMCF of natural gas
E_O = 71.0 lb/1000 gallons of No. 2 fuel oil
E_F = 150.0 lb/1000 gallons of No. 4 fuel oil
E_W = 147.0 lb/1000 gallons of waste oil
E_D = 71.0 lb/1000 gallons of Biodiesel

(b) In order to comply with the Condition D.1.3(c) when combusting more than one fuel per twelve (12) consecutive month period in the dryer/mixer burner, the Permittee shall limit fuel usage according to the following formulas:

Nitrogen Oxides (NOx) Emission Calculation

$$N = \frac{G(E_G) + O(E_O) + F(E_F)\ W(E_W) + D(E_D)}{2{,}000 \text{ lbs/ton}}$$

***where*:**

N = tons of nitrogen oxide emissions for twelve (12) month consecutive period
G = million cubic feet of natural gas used in the last 12 months
O = gallons of No. 2 fuel oil used in the last 12 months
F = gallons of No. 4 fuel oil used in the last 12 months
W = gallons of waste oil used in the last 12 months
D = gallons of Biodiesel used in the last 12 months

E_G = 190 lb/MMCF of natural gas
E_O = 24.0 lb/1000 gallons of No. 2 fuel oil
E_F = 47.0 lb/1000 gallons of No. 4 fuel oil
E_W = 19.0 lb/1000 gallons of waste oil
E_D = 26.4 lb/1000 gallons of Biodiesel

(c) In order to comply with the Condition D.1.3(c) when combusting more than one fuel per twelve (12) consecutive month period in the dryer/mixer burner, the Permittee shall limit fuel usage according to the following formulas:

<u>HCl Emission Calculation</u>

$$\frac{HCl = W(E_W)}{2{,}000 \text{ lbs/ton}}$$

***where*:**

HCl = tons of Hydrogen Chloride emissions for twelve (12) month consecutive period
W = gallons of waste oil used in the last 12 months
E_W = 6.6/1000 gallons of waste oil

D.1.13 Shingle Asbestos Content

Pursuant to 326 IAC 2-8-4, compliance with Condition D.1.3(d) shall be determined utilizing one of the following options:

(1) Providing shingle supplier certification that the factory second shingles do not contain asbestos; or

(2) Analyzing a sample of the factory second shingles delivery to determine the asbestos content of the factory second shingles, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A determination of noncompliance pursuant to any of the methods specified above shall not be refuted by evidence of compliance pursuant to the other method.

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

D.1.14 Visible Emissions Notations

(a) Visible emission notations from the conveyors, screens, material transfer points, crusher, and dryer/mixer stack (SV-1) exhaust shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(b) **For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.**

(c) **In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.**

(d) **A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.**

(e) **If abnormal emissions are observed, the Permittee shall take reasonable response steps. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. An abnormal visible emission notation is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.**

D.1.15 Parametric Monitoring

The Permittee shall record the pressure drop across the baghouse used in conjunction with the dryer/mixer, at least once per day when the dryer/mixer is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of one-half (0.5) and six (6.0) inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above-mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months, or other time period specified by the manufacturer. The Permittee shall maintain records of the manufacturer specifications, if used.

D.1.16 Broken or Failed Bag Detection

In the event that bag failure has been observed:

(a) **For a single compartment baghouses controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).**

(b) **For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the emissions unit. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).**

Bag failure can be indicated by a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas

temperature, flow rate, air infiltration, leaks, dust traces, or triboflows.

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

D.1.17 Record Keeping Requirements

(a) To document the compliance status with Conditions D.1.1(a), D.1.1(b), D.1.2(a) and D.1.2(b) the Permittee shall keep monthly records of the amount of asphalt processed through the dryer/mixer.

(b) To document the compliance status with Conditions D.1.3 and D.1.6, the Permittee shall maintain records in accordance with (1) through (10) below. Records maintained for (1) through (10) below shall be taken monthly and shall be complete and sufficient to establish compliance with the limits established in Conditions D.1.3 and D.1.6.

(1) Calendar dates covered in the compliance determination period;

(2) Actual fuel usage, sulfur content, heat content, and equivalent sulfur dioxide, emission rates for each fuel used at the source since the last compliance determination period;

(3) Actual waste oil usage, ash, chlorine, and lead content, and equivalent hydrogen chloride emission rate for waste oil used at the source since the last compliance determination period;

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

(i) Fuel supplier certifications;

(ii) The name of the fuel supplier; and

(iii) A statement from the fuel supplier that certifies the sulfur content of the No. 2 fuel oil, No. 4 fuel oil, waste oil and Biodiesel, and the chlorine content of waste oil.

(6) Actual steel slag usage, sulfur content and equivalent sulfur dioxide emission rates for all steel slag used at the source since the last compliance determination period;

(7) A certification, signed by the owner or operator, that the records of the steel slag supplier certifications represent all of the steel slag used during the period; and

(8) If the slag supplier certification is used to demonstrate compliance the following, as a minimum, shall be maintained:

(i) Steel slag supplier certifications;

(ii) The name of the steel slag supplier; and

(iii) A statement from the steel slag supplier that certifies the sulfur content of the steel slag.

(9) A certification, signed by the owner or operator, that the records of the shingle supplier certifications represent all of the shingles used during the period; and

(10) If the shingle supplier certification is used to demonstrate compliance the following, as a minimum, shall be maintained:

(A) Shingle supplier certifications;

(B) The name of the shingle supplier(s); and

(C) A statement from the shingle supplier(s) that certifies the asbestos content of the shingles from their company.

(d) To document the compliance status with Condition D.1.15, the Permittee shall maintain records of visible emission notations of the dryer/mixer stack (SV-1) exhaust once per day. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g., the process did not operate that day).

(e) To document the compliance status with Condition D.1.16, the Permittee shall maintain records once per day of the pressure drop during normal operation. The Permittee shall include in its daily record when the pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g., the process did not operate that day).

(f) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

D.1.18 Reporting Requirements

A quarterly summary of the information to document compliance status with Conditions D.1.1(a), D.1.2(a), and D.1.3, shall be submitted using the reporting forms located at the end of this permit, or their equivalent, not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1)by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

SECTION D.2 FACILITY OPERATION CONDITIONS – COLD MIX ASPHALT

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

(a) cold-mix (stockpile mix) asphalt manufacturing operations and storage piles.

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

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

D.2.1 Volatile Organic Compounds (VOC) [326 IAC 8-5-2][326 IAC 2-8-4][326 IAC 2-2]

(a) Pursuant to 326 IAC 8-5-2 (Miscellaneous Operations: Asphalt Paving), the use of cutback asphalt or asphalt emulsion shall not contain more than seven percent (7%) oil distillate by

volume of emulsion for any paving application except the following purposes:

(a) Penetrating prime coating

(b) Stockpile storage

(c) Application during the months of November, December, January, February and March.

(b) The VOC solvent used as diluent in the liquid binder used in cold mix asphalt production from the plant shall be limited such that no more than ~~56.62~~ **66.1**tons of VOC emissions emitted per twelve (12) consecutive months. This shall be achieved by limiting the total VOC solvent of any one selected binder to not exceed the stated limit for that binder during the last twelve (12) months. When more than one binder is used, the formula below must be applied so that the total VOC emitted does not exceed ~~56.62~~ **66.1** tons per twelve (12) consecutive month period rolled on a monthly basis.

***

D.2.2 Volatile Organic Compounds (VOC) [326 IAC 8-5-2][326 IAC 2-8-4][326 IAC 2-2]

***

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

(1) Cutback asphalt rapid cure liquid binder usage shall not exceed ~~59.60~~**69.56** tons of VOC solvent per twelve (12) consecutive month period rolled on a monthly basis.

(2) Cutback asphalt medium cure liquid binder usage shall not exceed ~~80.89~~**94.4** tons of VOC solvent per twelve (12) consecutive month period rolled on a monthly basis.

(3) Cutback asphalt slow cure liquid binder usage shall not exceed ~~226.49~~**264.2** tons of VOC solvent per twelve (12) consecutive month period rolled on a monthly basis.

(4) Emulsified asphalt with solvent liquid binder usage shall not exceed ~~122.03~~ **142.4** tons of VOC solvent per twelve (12) consecutive month period rolled on a monthly basis.

(5) Other asphalt with solvent liquid binder shall not exceed ~~2,264.93~~ **2,6442.2** tons of VOC solvent per twelve (12) consecutive month period rolled on a monthly basis.

***

SECTION E.2 FACILITY OPERATION CONDITIONS

Emissions Unit Description: Hot-Mix Asphalt Plant

(a) One (1) six hundred fifty (650) tons per hour aggregate dryer, installed in June 1990, processing steel slag and certified ground asbestos-free shingles, in the aggregate mix, with a burner capacity of 116 million British thermal units per hour, and exhausting through a baghouse at stack SV1. This dryer is fired by natural gas, #2 fuel oil, #4 fuel oil, #4 waste oil, and biodiesel, as available. This unit has the capability of processing both hot-mix and warm-mix asphalt;

Under 40 CFR 60.90, Subpart I - New Source Performance Standards for Hot Mix Asphalt Facilities, this is considered an affected hot-mix asphalt facility.

(b) A~~n alternate~~ drying process, used to dry magnetite, with a maximum capacity of 75,000 tons per year, exhausting through a baghouse at stack SV1;

(c) One (1) baghouse with a total filter area of 13,149 ft^2, exhausting at stack SV1; and

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

SECTION E.3 FACILITY OPERATION CONDITIONS

Emissions Unit Description: Recycled Asphalt Pavement (RAP) System

(d) One (1) RAP feed bin with a maximum holding capacity of 25 tons.

(e) One (1) recycled asphalt pavement (RAP) crusher, rated at 150 ton per hour, approved for construction in 2011.

Note: This RAP crusher will replace the existing crusher that was constructed in 1990. **The former RAP crusher remains on site but is not operable.**

Under 40 CFR 60, Subpart OOO, New Source Performance Standards for Nonmetallic Mineral Processing Plants, this is considered an affected facility.

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

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
Phone: (317) 233-0178
Fax: (317) 233-6865

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
EMERGENCY OCCURRENCE REPORT

Source Name: J.H. Rudolph & Company, Inc.
Source Address: 3300 S. Green River Road, Evansville, Indiana 47715
~~Mailing Address: PO Box 5226, Evansville, IN 47716~~
FESOP Permit No.: F163-23182-00186 (formerly plant ID 163-03408)

This form consists of 2 pages **Page 1 of 2**

☐ This is an emergency as defined in 326 IAC 2-7-1(12)
- The Permittee must notify the Office of Air Quality (OAQ), within four (**4**) business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and
- The Permittee must submit notice in writing or by facsimile within two (**2**) working days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16

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

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

If any of the following are not applicable, mark N/A **Page 2 of 2**

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO_2, VOC, NO_X, CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by:_____

Title / Position:_____

Date:_____

Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

FESOP Quarterly Report

Source Name: J.H. Rudolph & Company, Inc.
Source Address: 3300 S. Green River Road, Evansville, IN 47715
~~Mailing Address: P.O. Box 5226, Evansville, IN 47716~~
FESOP No.: F163-23182-00186 (formerly plant ID 163-03408)
Facility: 650 ton/hr aggregate mixer

Parameter: Steel Slag Usage

Limit: Maximum steel slag usage shall not exceed 100,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

QUARTER: _____ ~~MONTH: _____~~ YEAR:_____

Month	Column 1 Steel Slag Usage (tons)	Column 2 Steel Slag Usage (tons)	Column 1 + Column 2 Steel Slag Usage (tons)
	This Month	Previous 11 Months	12 Month Total

☐ No deviation occurred in this quarter.

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

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

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

FESOP Quarterly Report

Source Name: J.H. Rudolph & Company Inc.
Source Address: 3300 S. Green River Road, Evansville, IN 47715
~~Mailing Address: P.O. Box 5226, Evansville, IN 47716-5226~~
FESOP No.: F163-23182-00186 (formerly plant ID 163-03408)
Facility: 650 ton/hr aggregate mixer

Parameter: Combined Hot-Mix and Warm-Mix Asphalt Production

Limit: The annual throughput to the aggregate dryer shall be limited to ~~1,440,000~~ **750,000** tons of hot-mix and warm-mix asphalt, combined, per twelve (12) consecutive month period, with compliance determined at the end of each month.

QUARTER: _____ ~~MONTH: _____~~ YEAR:_____

Month	Column 1: Asphalt throughput (tons)	Column 2: Asphalt throughput (tons)	Column 1 + Column 2: Asphalt throughput (tons)
	This Month	Previous 11 Months	12 Month Total

☐ No deviation occurred in this quarter.

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

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

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

FESOP Quarterly Report

Source Name: J.H. Rudolph & Company Inc.
Source Address: 3300 S. Green River Road, Evansville, IN 47715
~~Mailing Address: P.O. Box 5226, Evansville, IN 47716~~
FESOP No.: F163-23182-00186 (formerly plant ID 163-03408)
Facility: Magnetite drying operation

Parameter: Throughput

Limit: The annual throughput to the magnetite drying operation shall be limited to 75,000 tons of magnetite per twelve (12) consecutive month period, with compliance determined at the end of each month.

QUARTER: _____ ~~MONTH: _____~~ YEAR:_____

Month	Column 1: Magnetite throughput (tons)	Column 2: Magnetite throughput (tons)	Column 1 + Column 2: Magnetite throughput (tons)
	This Month	Previous 11 Months	12 Month Total

☐ No deviation occurred in this quarter.

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

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

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

FESOP Quarterly Report

Source Name: J.H. Rudolph & Company Inc.
Source Address: 3300 S. Green River Road, Evansville, IN 47715
~~Mailing Address: P.O. Box 5226, Evansville, IN 47716~~
FESOP No.: F163-23182-00186 (formerly plant ID 163-03408)
Facility: Aggregate Dryer

Parameter: Throughput

Limit: The annual throughput of the certified ground shingles added to the mixture process shall be limited to ~~200~~ **20,000** tons of per twelve (12) consecutive month period, with compliance determined at the end of each month.

QUARTER: _____ ~~MONTH: _____~~ YEAR:_____

Month	Column 1: **Ground Shingles** ~~Magnetite~~ throughput (tons)	Column 2: **Ground Shingles** ~~Magnetite~~ throughput (tons)	Column 1 + Column 2: **Ground Shingles** ~~Magnetite~~ throughput (tons)
	This Month	Previous 11 Months	12 Month Total

☐ No deviation occurred in this quarter.

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

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

~~INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT~~
~~OFFICE OF AIR QUALITY~~
~~COMPLIANCE AND ENFORCEMENT BRANCH~~

~~FESOP Quarterly Report~~

~~Source Name:~~ ~~J.H. Rudolph & Company Inc.~~
~~Source Address:~~ ~~3300 S. Green River Road, Evansville, IN 47715~~
~~Mailing Address:~~ ~~P.O. Box 5226, Evansville, IN 47716-5226~~
~~FESOP No.:~~ ~~F163-23182-00186 (formerly plant ID 163-03408)~~
~~Facility:~~ ~~116 MMBtu per hour burner for the aggregate dryer~~

~~Parameter:~~ ~~No. 4 fuel oil usage limit SO2 and NOX emissions~~

~~Limit:~~ ~~The input of No. 4 fuel oil with a maximum sulfur content of 1.0% and No. 4 fuel oil equivalents to the 116 MMBtu per hour burner for the aggregate dryer shall be limited to 1,331,926 gallons per twelve (12) consecutive month period, with compliance determined at the end of each month, where every million cubic feet (MMCF) of natural gas burned shall be equivalent to 4.0 gallons of No. 4 fuel oil, every 1,000 gallons of No. 2 distillate oil burned in the aggregate dryer burner shall be equivalent to 512.3 gallons of No. 4 fuel oil, every 1,000 gallons of waste oil (No. 4) burned in the aggregate dryer burner shall be equivalent to 686.0 gallons of No. 4 fuel oil, and every 1,000 gallons of biodiesel burned shall be equivalent to 512.3 gallons of No. 4 fuel oil. This will limit SO_2 emissions to less than 100 tons per year.~~

~~QUARTER:~~ _____ ~~MONTH:~~ _____ ~~YEAR:~~ _____

~~Month~~	~~Column 1:~~ ~~No. 4 fuel oil usage plus equivalent of other fuels (gallons)~~	~~Column 2:~~ ~~No. 4 fuel oil usage plus equivalent of other fuels (gallons)~~	~~Column 1 + Column 2:~~ ~~No. 4 fuel oil usage plus equivalent of other fuels (gallons)~~
	~~This Month~~	~~Previous 11 Months~~	~~12 Month Total~~

☐ ~~No deviation occurred in this quarter.~~

☐ ~~Deviation/s occurred in this quarter.~~
~~Deviation has been reported on:~~ _____

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

~~INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT~~
~~OFFICE OF AIR QUALITY~~
~~COMPLIANCE AND ENFORCEMENT BRANCH~~

~~FESOP Quarterly Report~~

~~Source Name:~~ ~~J.H. Rudolph & Company Inc.~~
~~Source Address:~~ ~~3300 S. Green River Road, Evansville, IN 47715~~
~~Mailing Address:~~ ~~P.O. Box 5226, Evansville, IN 47716-5226~~
~~FESOP No.:~~ ~~F163-23182-00186~~ ~~(formerly plant ID 163-03408)~~
~~Facility:~~ ~~Cold-mix asphalt storage piles~~

~~Parameter:~~ ~~VOC~~

~~Limit:~~ ~~56.62 tons of VOC per year twelve (12) consecutive month period rolled on a monthly basis. Therefore, any one single liquid binder solvent shall be limited as follows:~~

~~(a) Cutback asphalt rapid cure liquid binder usage shall not exceed 59.6 tons of VOC solvent per twelve (12) consecutive month period rolled on a monthly basis.~~

~~(b) Cutback asphalt medium cure liquid binder usage shall not exceed 80.89 tons of VOC solvent per twelve (12) consecutive month period rolled on a monthly basis.~~

~~(c) Cutback asphalt slow cure liquid binder usage shall not exceed 226.49 tons of VOC solvent per twelve (12) consecutive month period rolled on a monthly basis.~~

~~(d) Emulsified asphalt with solvent liquid binder usage shall not exceed 122.03 tons of VOC solvent per twelve (12) consecutive month period rolled on a monthly basis.~~

~~(e) Other asphalt with solvent liquid binder shall not exceed 2,264.93 tons of VOC solvent per twelve (12) consecutive month period rolled on a monthly basis.~~

~~QUARTER: _____ MONTH: _____ YEAR: _____~~

~~The following liquid binder solvent was the only liquid binder solvent used over the previous 12 month period:_____ Limit applicable:_____~~
~~(use of more than one binder requires the use of the "Multiple Liquid Binder Solvents" report form)~~

~~Month~~	~~Column 1~~ ~~Solvent input This Month (tons)~~	~~Column 2~~ ~~Solvent input Previous 11 Months (tons)~~	~~Column 1 + Column 2~~ ~~Solvent input 12 Month Total (tons)~~

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

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

~~INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT~~
~~OFFICE OF AIR QUALITY, COMPLIANCE AND ENFORCEMENT BRANCH~~

~~Multiple Liquid Binder Solvent Quarterly Report~~

~~Source Name:~~ ~~J.H. Rudolph & Company, Inc.~~
~~Initial Source Address:~~ ~~3300 S. Green River Road, Evansville, IN 47715~~
~~Mailing Address:~~ ~~P.O. Box 5226, Evansville, IN 47716-5226~~
~~FESOP No.:~~ ~~F163-23182-00186 (formerly plant ID 163-03408)~~
~~Facility:~~ ~~Cold-mix asphalt storage piles~~
~~Parameter:~~ ~~VOC~~
~~Limit:~~ ~~56.62 tons per year twelve (12) consecutive month period rolled on a monthly basis.~~

~~QUARTER:~~ _____ ~~MONTH:~~ _____ ~~YEAR:~~ _____

~~Month~~	~~Type of Liquid binder~~	~~Solvent Usage This Month (tons)~~	~~Divisor~~	~~VOC emitted This Month (tons) for each solvent~~	~~VOC emitted This Month (tons)~~	~~VOC emitted Previous 11 Months (tons)~~	~~This month + Previous 11 months =VOC emitted 12 Month Total (tons)~~
	~~Cutback asphalt rapid cure~~		~~1~~				
	~~Cutback asphalt medium cure~~		~~1.36~~				
	~~Cutback asphalt slow cure~~		~~3.8~~				
	~~Emulsified asphalt~~		~~2.04~~				
	~~other asphalt~~		~~38~~				
	~~Cutback asphalt rapid cure~~		~~1~~				
	~~Cutback asphalt medium cure~~		~~1.36~~				
	~~Cutback asphalt slow cure~~		~~3.8~~				
	~~Emulsified asphalt~~		~~2.04~~				
	~~other asphalt~~		~~38~~				
	~~Cutback asphalt rapid cure~~		~~1~~				
	~~Cutback asphalt medium cure~~		~~1.36~~				
	~~Cutback asphalt slow cure~~		~~3.8~~				
	~~Emulsified asphalt~~		~~2.04~~				
	~~other asphalt~~		~~38~~				

~~☐ No deviation occurred in this reporting period.~~ ~~Submitted by:~~ _____ ~~Date:~~ _____

~~☐ Deviation/s occurred in this reporting period.~~ ~~Title / Position:~~ _____ ~~Phone:~~ _____

~~Deviation has been reported on:~~ _____ ~~Signature:~~ _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: J.H. Rudolph & Company, Inc.
Source Address: 3300 S. Green River Road, Evansville, Indiana 47715
~~Mailing Address: PO Box 5226, Evansville, IN 47716~~
FESOP Permit No.: F163-23182-00186 (formerly plant ID 163-03408)

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

This report shall be submitted quarterly based on a calendar year. **Proper notice submittal under Section B –Emergency Provisions satisfies the reporting requirements of paragraph (a) of Section C-General Reporting.** Any deviation from the requirements of this permit, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

☐ NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

☐ THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

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

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

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

Form Completed by:_____

Title / Position:_____

Date:_____

Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

FESOP Quarterly Report

Source Name: **J.H. Rudolph & Company, Inc.**
Source Address: **3300 S. Green River Road, Evansville, IN 47715**
FESOP No.: **F163-23182-00186 (formerly plant ID 163-03408)**

Facility: **Dryer/Mixer (Unit No. 2) and Diesel Fuel-Fired Portable RAP Crusher & Screener**

Parameter: **Fuel / SO2 emissions**

Emission Limits: ***Sulfur dioxide (SO_2)*** **emissions shall not exceed 94.21 tons per twelve (12) consecutive month period, with compliance determined at the end of each month, using the equation found in Condition D.1.12.**

Nitrogen Oxides (NOx) **emissions shall not exceed 93.82 tons per twelve (12) consecutive month period, with compliance determined at the end of each month, using the equation found in Condition D.1.12.**

Hydrogen Chloride (HCl) **emissions shall not exceed 9.9 tons per twelve (12) consecutive month period, with compliance determined at the end of each month, using the equation found in Condition D.1.12.**

Fuel & Slag Limits: **When combusting only one type of fuel per twelve (12) consecutive month period in the dryer/mixer burner, in conjunction with the use of slag in the aggregate mix, fuel and slag usage shall not exceed the following:**

Fuel Type (Units)	Fuel Usage Limit (per 12 consecutive month period)
Natural Gas (MMCF)	987.59
No. 2 Distillate Fuel Oil (gallons)	2,653,909
No. 4 Distillate Fuel Oil (gallons)	1,256,184
Waste Oil (gallons)	1,831,171
Biodiesel Fuel (gallons)	2,452,079

Facility: **Cold-mix Asphalt Production**

Parameter: **Binder Usage / VOC Emissions**

Emission Limits: ***Volatile Organic Compound (VOC)*** **emissions from the sum of the binders shall not exceed 66.1 tons per twelve (12) consecutive month period with compliance determined at the end of each month, using the equation found in Condition D.2.2(c).**

Binder Limits: **When using only one type of liquid binder (asphalt emulsion) per twelve (12) consecutive month period in the production of cold-mix asphalt, liquid binder (asphalt emulsion) usage shall not exceed the following:**

Type of Binder	Binder Usage Limit (per 12 consecutive month period)
Cutback Asphalt Rapid Cure	**69.5**
Cutback Asphalt Medium Cure	**94.4**
Cutback Asphalt Slow Cure	**264.2**
Emulsified Asphalt	**142.4**
Other Asphalt	**2,642.2**

FESOP Quarterly Report - Fuel Usage / SO2, NOx and HCl emissions

QUARTER:_____ YEAR:_____

Month	Fuel Types / Slag (units)	Column 1	Column 2	Column 1 + Column 2	Equation Results	Equation Results	Equation Results
		Usage This Month	Usage Previous 11 Months	Usage 12 Month Total	Sulfur Dioxide (SO2) Emissions (tons per 12 months)	Nitrogen Oxides (NOx) Emissions (tons per 12 months)	Hydrogen Chloride (HCL) Emissions (tons per 12 months)
Month 1	Natural Gas (MMCF)						
	No. 2 Fuel Oil (gallons)						
	No. 4 Fuel Oil (gallons						
	Waste Fuel Oil (gallons)						
	Biodiesel Fuel (gallons)						
Month 2	Natural Gas (MMCF)						
	No. 2 Fuel Oil (gallons)						
	No. 4 Fuel Oil (gallons						
	Waste Fuel Oil (gallons)						
	Biodiesel Fuel (gallons)						
Month 3	Natural Gas (MMCF)						
	No. 2 Fuel Oil (gallons)						
	No. 4 Fuel Oil (gallons						
	Waste Fuel Oil (gallons)						
	Biodiesel Fuel (gallons)						

☐ No deviation occurred in this reporting period. Submitted by: _____Date: _____

☐ Deviation/s occurred in this reporting period. Title / Position: _____Phone:_____

Deviation has been reported on: _____ Signature: _____

FESOP Quarterly Report - Liquid Binder (Asphalt Emulsion) Usage / VOC Emissions

QUARTER:_____ YEAR:_____

Month	Binder/Emulsion Types (units)	Column 1 Usage This Month	Column 2 Usage Previous 11 Months	Column 1 + Column 2 Usage 12 Month Total	Equation Results VOC Emissions (tons per 12 months)
Month 1	Cutback asphalt rapid cure liquid binder (million cubic feet)				
	Cutback asphalt medium cure liquid binder (gallons)				
	Cutback asphalt slow cure liquid binder (gallons)				
	Emulsified asphalt with solvent liquid binder				
	Other asphalt with solvent liquid binder				
Month 2	Cutback asphalt rapid cure liquid binder (million cubic feet)				
	Cutback asphalt medium cure liquid binder (gallons)				
	Cutback asphalt slow cure liquid binder (gallons)				
	Emulsified asphalt with solvent liquid binder				
	Other asphalt with solvent liquid binder				
Month 3	Cutback asphalt rapid cure liquid binder (million cubic feet)				
	Cutback asphalt medium cure liquid binder (gallons)				
	Cutback asphalt slow cure liquid binder (gallons)				
	Emulsified asphalt with solvent liquid binder				
	Other asphalt with solvent liquid binder				

☐ No deviation occurred in this reporting period.
☐ Deviation/s occurred in this reporting period.
Deviation has been reported on: _____

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

VOC Emitted (tons/day) = $\frac{\text{VOC solvent used for each binder (tons/day)}}{\text{Adjustment factor}}$

Type of Binder	Adjustment Factor
Cutback Asphalt Rapid Cure	1.053
Cutback Asphalt Medium Cure	1.429
Cutback Asphalt Slow Cure	4.0
Emulsified Asphalt	2.155
Other Asphalt	40.0

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

FESOP Quarterly Report

Source Name: J.H. Rudolph & Company, Inc.
Source Address: 3300 S. Green River Road, Evansville, IN 47715
FESOP No.: F163-23182-00186 (formerly plant ID 163-03408)
Facility: Diesel Fuel-Fired Recycled Asphalt Pavement (RAP) Crusher Operation
Limit: The diesel fuel-fired Recycled Asphalt Pavement (RAP) Crusher Operation shall remain at a location for a period not to exceed twelve (12) consecutive months.

Manufacture Date: _____ **Installation Date:** _____

Make: _____ **Removal Date:** _____

Model: _____ **Model Year:** _____

Horsepower Rating: _____ **MMBtu/hr Rating:** _____

QUARTER:_____ **YEAR:**_____

Month	Column 1	Column 2	Column 1 - Column 2
	Number of Days Onsite This Month	Number of Days Onsite Previous 11 Months	12 Month Total Number of Days Onsite
Month 1			
Month 2			
Month 3			

Submitted by: _____

Title / Position:_____

Signature: _____

Date: _____

Phone: _____

(b) Upon further review, IDEM, OAQ has decided to make the following changes to the permit. Deleted language appears as ~~strikethrough~~ text and new language appears as **bold** text:

(1) On October 27, 2010, the Indiana Air Pollution Control Board issued revisions to 326 IAC 2. These revisions resulted in changes to the rule sites listed in the permit. These changes are not changes to the underlining provisions. The change is only to site of these rules in Section B - Operational Flexibility. IDEM, OAQ has clarified the rule sites for the Preventive Maintenance Plan.

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

***

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

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

***

(5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-8-15~~(b)(2), (c)(1), and (d)~~ **(b)(1) and (c)**. The Permittee shall make such records available, upon reasonable request, for public review.

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

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

(c) Alternative Operating Scenarios [326 IAC 2-8-15 ~~(d)~~ **(c)**]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, OAQ, or U.S. EPA is required.

***

(2) IDEM, OAQ has clarified the Permittee's responsibility with regards to record keeping.

C.17 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]

(a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. **Support information includes the following:**

(AA) All calibration and maintenance records.
(BB) All original strip chart recordings for continuous monitoring instrumentation.
(CC) Copies of all reports required by the FESOP.

Records of required monitoring information include the following:

(AA) The date, place, as defined in this permit, and time of sampling or measurements.
(BB) The dates analyses were performed.

(CC) The company or entity that performed the analyses.
(DD) The analytical techniques or methods used.
(EE) The results of such analyses.
(FF) The operating conditions as existing at the time of sampling or measurement.

These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, for all record keeping requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or the date of initial start-up, whichever is later, to begin such record keeping.

(3) IDEM, OAQ has clarified the interaction of the Quarterly Deviation and Compliance Monitoring Report and the Emergency Provisions.

C.18 General Reporting Requirements

(a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. **Proper notice submittal under Section B –Emergency Provisions satisfies the reporting requirements of this paragraph**. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported except that a deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. This report shall be submitted not later than thirty (30) days after the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1). A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

Conclusion and Recommendation

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant. An application for the purposes of this review was received on November 30, 2011.

The construction and operation of this proposed revision shall be subject to the conditions of the attached proposed FESOP Significant Revision No. 163-31195-00186. The staff recommends to the Commissioner that this FESOP Significant Revision be approved.

IDEM Contact

(a) Questions regarding this proposed permit can be directed to Bruce Farrar at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 234-5401or toll free at 1-800-451-6027 extension 4-5401.

(b) A copy of the findings is available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/

(c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: www.in.gov/idem

Appendix A.1: Unlimited Emissions Calculations
Entire Source - Drum Mix

Company Name: J.H. Rudolph & Company, Inc.
Source Address: 3300 South Green River Road, Evansville, IN 47715
Permit Number: F163-23182-00186 (formerly plant ID 163-03408)
Significant Permit Revision: F163-31195-00186
Reviewer: Bruce Farrar
Date: November 30, 2011

Asphalt Plant Maximum Capacity - Drum Mix

Maximum Hourly Asphalt Production =	650	ton/hr						
Maximum Annual Asphalt Production =	5,694,000	ton/yr						
Maximum Annual Magnetite Usage =	75,000							
Maximum Annual Blast Furnace Slag Usage =	2,391,480	ton/yr	1.5	% sulfur				
Maximum Annual Steel Slag Usage =	2,391,480	ton/yr	0.66	% sulfur				
Maximum Shingle Handling Throughput =	68,400	ton/yr						
Maximum Annual Magnetite Drying Throughput =	25	ton/yr						
Maximum Annual RAP Crushing Throughput =	657	ton/yr						
Maximum Dryer Fuel Input Rate =	116.0	MMBtu/hr						
Natural Gas Usage =	1,016	MMCF/yr						
No. 2 Fuel Oil Usage =	7,258,286	gal/yr, and	0.49	% sulfur				
No. 4 Fuel Oil Usage =	7,258,286	gal/yr, and	1.00	% sulfur				
Residual (No. 5 or No. 6) Fuel Oil Usage =	0	gal/yr, and	0.50	% sulfur				
Propane Usage =	0	gal/yr, and	0.20	gr/100 ft3 sulfur				
Butane Usage =	0	gal/yr, and	0.22	gr/100 ft3 sulfur				
Used/Waste Oil Usage =	7,258,286	gal/yr, and	0.70	% sulfur	0.50	% ash	0.100	% chlorine, 0.003 % lead
Biodiesel Limitation =	7,258,286	gal/yr, and	0.50	% sulfur				

Unlimited PM Dryer/Mixer Emission Factor =	28.0	lb/ton of asphalt production
Unlimited PM10 Dryer/Mixer Emission Factor =	6.5	lb/ton of asphalt production
Unlimited PM2.5 Dryer/Mixer Emission Factor =	1.5	lb/ton of asphalt production
Unlimited VOC Dryer/Mixer Emission Factor =	0.032	lb/ton of asphalt production
Unlimited CO Dryer/Mixer Emission Factor =	0.13	lb/ton of asphalt production
Unlimited Blast Furnace Slag SO2 Dryer/Mixer Emission Factor =	0.74	lb/ton of slag processed
Unlimited Steel Slag SO2 Dryer/Mixer Emission Factor =	0.0014	lb/ton of slag processed

Unlimited/Uncontrolled Emissions

	Unlimited/Uncontrolled Potential to Emit (tons/year)										
	Criteria Pollutants							Greenhouse Gas Pollutants	Hazardous Air Pollutants		
Process Description	PM	PM10	PM2.5	SO2	NOx	VOC	CO	CO_2e	Total HAPs	Worst Case HAP	
Ducted Emissions											
Dryer Fuel Combustion (worst case)	116.13	92.54	92.54	544.37	170.57	3.63	42.68	87,947.24	26.99	23.95	(hydrogen chloride)
Dryer/Mixer (Process)	79,716.00	18,505.50	4,270.50	165.13	156.59	91.10	370.11	94,668.44	30.35	8.83	(formaldehyde)
Dryer/Mixer Magnetite Processing	738.64	449.94	449.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Dryer/Mixer Slag Processing (worst case)	0	0	0	884.85	0	0	0	0.00	0	0	
Hot Oil Heater Fuel Combustion (worst case)	0.13	0.22	0.22	4.66	1.31	0.05	0.77	1,484.90	0.021	0.017	(hexane)
LPG-Butane - Commercial Boilers <6 MMB/tu	0.05	0.21	0.21	0.05	3.86	0.28	2.16	3,757.32			
Worst Case Emissions*	**80,454.82**	**18,955.87**	**4,720.87**	**1,433.94**	**175.75**	**91.44**	**373.05**	**99,911**	**30.37**	**23.95**	(hydrogen chloride)
Fugitive Emissions											
Asphalt Load-Out, Silo Filling, On-Site Yard	3.15	3.15	3.15	0	0	48.77	8.20	0	0.81	0.25	(formaldehyde)
Material Storage Piles	2.23	0.78	0.78	0	0	0	0	0	0	0	
Material Processing and Handling	18.39	8.70	1.32	0	0	0	0	0	0	0	
Material Crushing, Screening, and Conveying	90.34	33.00	33.00	0	0	0	0	0	0	0	
Unpaved and Paved Roads (worst case)	202.12	51.51	5.15	0	0	0	0	0	0	0	
Cold Mix Asphalt Production	0	0	0	0	0	68,427.65	0	0	17,848.46	6,158.49	(xylenes)
Gasoline Fuel Transfer and Dispensing	0	0	0	0	0	0.28	0	0	0.07	0.03	(xylenes)
Volatile Organic Liquid Storage Vessels	0	0	0	0	0	negl	0	0	negl	0	
Total Fugitive Emissions	**316.23**	**97.15**	**43.40**	**0.00**	**0.00**	**68,476.70**	**8.20**	**0.00**	**17,849.35**	**6,158.51**	(xylenes)
Totals Unlimited/Uncontrolled PTE	**80,771.06**	**19,053.01**	**4,764.27**	**1,433.94**	**175.75**	**68,568.14**	**381.25**	**99,911**	**17,879.72**	**6,158.51**	(xylenes)

negl = negligible
Worst Case Fuel Combustion is based on the fuel with the highest emissions for each specific pollutant.
*Worst Case Emissions (tons/yr) = Worst Case Emissions from Dryer Fuel Combustion and Dryer/Mixer + Worst Case Emissions From Dryer/Mixer Slag Processing + Worst Case Emissions from Hot Oil Heater Fuel Combustion
Fuel component percentages provided by the source.

Appendix A.1: Unlimited Emissions Calculations
Dryer/Mixer Fuel Combustion with Maximum Capacity > 100 MMBtu/hr

Company Name:	J.H. Rudolph & Company, Inc.
Source Address:	3300 South Green River Road, Evansville, IN 47715
Permit Number:	F163-23182-00186 (formerly plant ID 163-03408)
Significant Permit Revision:	F163-31195-00186
Reviewer:	Bruce Farrar
Date:	November 30, 2011

The following calculations determine the unlimited/uncontrolled emissions created from the combustion of natural gas, fuel oil, propane, butane, or used/waste oil in the dryer/mixer at the source.

Maximum Capacity

Maximum Hourly Asphalt Production =	650	ton/hr								
Maximum Annual Asphalt Production =	5,694,000	ton/yr								
Maximum Fuel Input Rate =	116	MMBtu/hr								
Natural Gas Usage =	1,016	MMCF/yr								
No. 2 Fuel Oil Usage =	7,258,286	gal/yr, and	0.49	% sulfur						
No. 4 Fuel Oil Usage =	7,258,286	gal/yr, and	1.00	% sulfur						
Residual (No. 5 or No. 6) Fuel Oil Usage =	0	gal/yr, and	0.50	% sulfur						
Propane Usage =	0	gal/yr, and	0.20	gr/100 ft3 sulfur						
Butane Usage =	0	gal/yr, and	0.22	gr/100 ft3 sulfur						
Used/Waste Oil Usage =	7,258,286	gal/yr, and	0.70	% sulfur	0.50	% ash	0.100	% chlorine,	0.003	% lead
Biodiesel Limitation =	7,258,286	gal/yr, and	0.50	% sulfur						

Unlimited/Uncontrolled Emissions

	Emission Factor (units)								Unlimited/Uncontrolled Potential to Emit (tons/yr)								
Criteria Pollutant	Natural Gas (lb/MMCF)	No. 2 Fuel Oil (lb/kgal)	No. 4 Fuel Oil* (lb/kgal)	Residual (No. 5 or No. 6) Fuel Oil (lb/kgal)	Propane (lb/kgal)	Butane (lb/kgal)	Biodiesel ** (lb/kgal)	Used/ Waste Oil (lb/kgal)	Natural Gas (tons/yr)	No. 2 Fuel Oil (tons/yr)	No. 4 Fuel Oil (tons/yr)	Residual (No. 5 or No. 6) Fuel Oil (tons/yr)	Propane (tons/yr)	Butane (tons/yr)	Biodiesel ** (lb/kgal)	Used/ Waste Oil (tons/yr)	Worse Case Fuel (tons/yr)
PM	1.9	2.0	7.0	7.615	0.5	0.6	2.0	32.0	0.97	7.26	25.40	0.00	0.000	0.000	7.26	116.13	116.13
PM10/PM2.5	7.6	3.3	8.3	9.315	0.5	0.6	3.3	25.5	3.86	11.98	30.12	0.00	0.000	0.000	11.98	92.54	92.54
SO2	0.6	69.6	150.0	78.5	0.020	0.020	76.8	102.9	0.30	252.52	544.37	0.00	0.000	0.000	278.88	373.44	544.37
NOx	190	24.0	47.0	47.0	13.0	15.0	26.4	19.0	96.54	87.10	170.57	0.00	0.00	0.00	95.81	68.95	170.57
VOC	5.5	0.20	0.20	0.28	1.00	1.10	0.20	1.0	2.79	0.73	0.73	0.00	0.00	0.00	0.73	3.63	3.63
CO	84	5.0	5.0	5.0	7.5	8.4	5.0	5.0	42.67872	18.15	18.15	0.00	0.00	0.00	18.15	18.15	42.68
Hazardous Air Pollutant																	
HCl								6.6								23.95	23.95
Antimony			5.25E-03	5.25E-03				negl			1.91E-02	0.00E+00				negl	1.9E-02
Arsenic	2.0E-04	5.6E-04	1.32E-03	1.32E-03			5.6E-04	1.1E-01	1.0E-04	2.03E-03	4.79E-03	0.00E+00			2.02E-03	3.99E-01	4.0E-01
Beryllium	1.2E-05	4.2E-04	2.78E-05	2.78E-05			4.2E-04	negl	6.1E-06	1.52E-03	1.01E-04	0.00E+00			1.51E-03	negl	1.5E-03
Cadmium	1.1E-03	4.2E-04	3.98E-04	3.98E-04			4.2E-04	9.3E-03	5.6E-04	1.52E-03	1.44E-03	0.00E+00			1.51E-03	3.38E-02	3.4E-02
Chromium	1.4E-03	4.2E-04	8.45E-04	8.45E-04			4.2E-04	2.0E-02	7.1E-04	1.52E-03	3.07E-03	0.00E+00			1.51E-03	7.28E-02	7.3E-02
Cobalt	8.4E-05		6.02E-03	6.02E-03				2.1E-04	4.3E-05		2.18E-02	0.00E+00			0.00E+00	7.62E-04	2.2E-02
Lead	5.0E-04	1.3E-03	1.51E-03	1.51E-03			1.3E-03	0.165	2.5E-04	4.57E-03	5.48E-03	0.00E+00			4.54E-03	6.0E-01	0.60
Manganese	3.8E-04	8.4E-04	3.00E-03	3.00E-03			8.3E-04	6.8E-02	1.9E-04	3.05E-03	1.09E-02	0.00E+00			3.03E-03	2.47E-01	0.25
Mercury	2.6E-04	4.2E-04	1.13E-04	1.13E-04			4.2E-04		1.3E-04	1.52E-03	4.10E-04	0.00E+00			1.51E-03		1.6E-03
Nickel	2.1E-03	4.2E-04	8.45E-02	8.45E-02			4.2E-04	1.1E-02	1.1E-03	1.52E-03	3.07E-01	0.00E+00			1.51E-03	3.99E-02	0.307
Selenium	2.4E-05	2.1E-03	6.83E-04	6.83E-04			2.1E-03	negl	1.2E-05	7.62E-03	2.48E-03	0.00E+00			7.57E-03	negl	7.8E-03
1,1,1-Trichloroethane			2.36E-04	2.36E-04							8.56E-04	0.00E+00					8.6E-04
1,3-Butadiene																	0.0E+00
Acetaldehyde																	0.0E+00
Acrolein																	0.0E+00
Benzene	2.1E-03		2.14E-04	2.14E-04					1.1E-03		7.77E-04	0.00E+00					1.1E-03
Bis(2-ethylhexyl)phthalate								2.2E-03								7.98E-03	8.0E-03
Dichlorobenzene	1.2E-03							8.0E-07	6.1E-04							2.90E-06	6.1E-04
Ethylbenzene			6.36E-05	6.36E-05							2.31E-04	0.00E+00					2.3E-04
Formaldehyde	7.5E-02	6.10E-02	3.30E-02	3.30E-02					3.8E-02	2.21E-01	1.20E-01	0.00E+00					0.221
Hexane	1.8E+00								0.91								0.915
Phenol								2.4E-03								8.71E-03	8.7E-03
Toluene	3.4E-03		6.20E-03	6.20E-03					1.7E-03		2.25E-02	0.00E+00					2.3E-02
Total PAH Haps	negl		1.13E-03	1.13E-03				3.9E-02	negl		4.10E-03	0.00E+00				1.42E-01	1.4E-01
Polycyclic Organic Matter		3.30E-03								1.20E-02							1.2E-02
Xylene			1.09E-04	1.09E-04							3.96E-04	0.00E+00					4.0E-04
								Total HAPs	0.96	0.26	0.52	0.00	0	0	0.02	25.50	26.99

Methodology

Natural Gas Usage (MMCF/yr) = [Maximum Fuel Input Rate (MMBtu/hr)] * [8,760 hrs/yr] * [1 MMCF/1,000 MMBtu]
Oil Usage (gal/yr) = [Maximum Fuel Input Rate (MMBtu/hr)] * [8,760 hrs/yr] * [1 gal/0.140 MMBtu]
Propane Usage (gal/yr) = [Maximum Fuel Input Rate (MMBtu/hr)] * [8,760 hrs/yr] * [1 gal/0.0905 MMBtu]
Butane Usage (gal/yr) = [Maximum Fuel Input Rate (MMBtu/hr)] * [8,760 hrs/yr] * [1 gal/0.0974 MMBtu]
Natural Gas: Unlimited/Uncontrolled Potential to Emit (tons/yr) = [Maximum Natural Gas Usage (MMCF/yr)] * [Emission Factor (lb/MMCF)] * [ton/2000 lbs]
All Other Fuels: Unlimited/Uncontrolled Potential to Emit (tons/yr) = [Maximum Fuel Usage (gals/yr)] * [Emission Factor (lb/kgal)] * [kgal/1000 gal] * [ton/2000 lbs]
Sources of AP-42 Emission Factors for fuel combustion:

Natural Gas : AP-42 Chapter 1.4 (dated 7/98), Tables 1.4-1, 1.4-2, 1.4-3, and 1.4-4
No. 2, No.4, and No.6 Fuel Oil: AP-42 Chapter 1.3 (dated 9/98), Tables 1.3-1, 1.3-2, 1.3-3, 1.3-8, 1.3-9, 1.3-10, and 1.3-11
Propane and Butane: AP-42 Chapter 1.5 (dated 7/08), Tables 1.5-1 (assuming PM = PM10)
Waste Oil: AP-42 Chapter 1.11 (dated 10/98), Tables 1.11-1, 1.11-2, 1.11-3, 1.11-4, and 1.11-5

*Since there are no specific AP-42 HAP emission factors for combustion of No. 4 fuel oil, it was assumed that HAP emissions from combustion of No. 4 fuel oil were equal to combustion of residual or No. 6 fuel oil.

Abbreviations

PM = Particulate Matter
PM10 = Particulate Matter (<10 um)
PM2.5 = Particulate Matter (< 2.5 um)
SO2 = Sulfur Dioxide
NOx = Nitrous Oxides
VOC - Volatile Organic Compounds
CO = Carbon Monoxide
HAP = Hazardous Air Pollutant
HCl = Hydrogen Chloride
PAH = Polyaromatic Hydrocarbon

Appendix A.1: Unlimited Emissions Calculations
Greenhouse Gas (CO2e) Emissions from the
Dryer/Mixer Fuel Combustion with Maximum Capacity ≥ 100 MMBtu/hr

Company Name: J.H. Rudolph & Company, Inc.
Source Address: 3300 South Green River Road, Evansville, IN 47715
Permit Number: F163-23182-00186 (formerly plant ID 163-03408)
Significant Permit Revision: F163-31195-00186
Reviewer: Bruce Farrar
Date: November 30, 2011

The following calculations determine the unlimited/uncontrolled emissions created from the combustion of natural gas, fuel oil, propane, butane, or used/waste oil in the dryer/mixer at the source.

Maximum Capacity

Maximum Hourly Asphalt Production =	650	ton/hr						
Maximum Annual Asphalt Production =	5,694,000	ton/yr						
Maximum Fuel Input Rate =	116	MMBtu/hr						
Natural Gas Usage =	1,016	MMCF/yr						
No. 2 Fuel Oil Usage =	7,258,286	gal/yr, and	0.49	% sulfur				
No. 4 Fuel Oil Usage =	7,258,286	gal/yr, and	1.00	% sulfur				
Refinery Blend, and Residual (No. 5 or No. 6) Fuel Oil Usage =	0	gal/yr, and	0.50	% sulfur				
Propane Usage =	0	gal/yr, and	0.20	gr/100 ft3 sulfur				
Butane Usage =	0	gal/yr, and	0.22	gr/100 ft3 sulfur				
Used/Waste Oil Usage =	7,258,286	gal/yr, and	0.70	% sulfur	0.50	% ash	0.100 % chlorine,	0.003 % lead

Unlimited/Uncontrolled Emissions

	Emission Factor (units)						
CO2e Fraction	Natural Gas (lb/MMCF)	No. 2 Fuel Oil * (lb/kgal)	No. 4 Fuel Oil (lb/kgal)	Residual (No. 5 or No. 6) Fuel Oil (lb/kgal)	Propane (lb/kgal)	Butane (lb/kgal)	Used/Waste Oil (lb/kgal)
CO2	120,161.84	22,501.41	24,153.46	24,835.04	12,500.00	14,506.73	22,024.15
CH4	2.49	0.91	0.97	1.00	0.60	0.67	0.89
N2O	2.2	0.26	0.19	0.53	0.9	0.9	0.18

Greenhouse Warming Potentials (GWP)		
Name	Chemical Formula	Global warming potential
Carbon dioxide	CO_2	1
Methane	CH_4	21
Nitrous oxide	N_2O	310

	Unlimited/Uncontrolled Potential to Emit (tons/yr)						
CO2e Fraction	Natural Gas (tons/yr)	No. 2 Fuel Oil (tons/yr)	No. 4 Fuel Oil (tons/yr)	Residual (No. 5 or No. 6) Fuel Oil (tons/yr)	Propane (tons/yr)	Butane (tons/yr)	Used/ Waste Oil (tons/yr)
CO2	61,051.83	81,660.83	87656.37	0.00	0.00	0.00	79,928.80
CH4	1.27	3.31	3.50	0.00	0.00	0.00	3.24
N2O	1.12	0.94	0.70	0.00	0.00	0.00	0.65
Total	61,054.21	81,665.09	87,660.58	0.00	0.00	0.00	79,932.69
CO2e Equivalent Emissions (tons/yr)	61,424.94	82,022.91	87,947.24	0.00	0.00	0.00	80,199.35

CO2e for Worst Case Fuel* (tons/yr)
87,947.24

* Assume Biodiesel is equal to No. 2 fuel oil

Methodology
Fuel Usage from TSD Appendix A.1, page 1 of 14.
Natural Gas Usage (MMCF/yr) = [Maximum Fuel Input Rate (MMBtu/hr)] * [8,760 hrs/yr] * [1 MMCF/1,000 MMBtu]
Fuel Oil Usage (gal/yr) = [Maximum Fuel Input Rate (MMBtu/hr)] * [8,760 hrs/yr] * [1 gal/0.140 MMBtu]
Propane Usage (gal/yr) = [Maximum Fuel Input Rate (MMBtu/hr)] * [8,760 hrs/yr] * [1 gal/0.0916 MMBtu]
Butane Usage (gal/yr) = [Maximum Fuel Input Rate (MMBtu/hr)] * [8,760 hrs/yr] * [1 gal/0.102 MMBtu]
Greenhouse Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.
Sources of Emission Factors for fuel combustion: (Note: To form a conservative estimate, the "worst case" emission factors have been used.)

Natural Gas: Emission Factors for CO2 and CH4 from 40 CFR Part 98 Subpart C, Tables C-1 and 2, have been converted from kg/mmBtu to lb/MMCF. Emission Factor for N2O from AP-42 Chapter 1.4 (dated 7/98), Table 1.4-2

No. 2 Fuel Oil: Emission Factors for CO2 and CH4 from 40 CFR Part 98 Subpart C, Tables C-1 and 2, have been converted from kg/mmBtu to lb/kgal. Emission Factor for N2O from AP-42 Chapter 1.3 (dated 9/98), Table 1.3-8

No.4 Fuel Oil: Emission Factors for CO2 and CH4 from 40 CFR Part 98 Subpart C, Tables C-1 and 2, have been converted from kg/mmBtu to lb/kgal. Emission Factor for N2O from AP-42 Chapter 1.3 (dated 9/98), Table 1.3-8

Residual (No. 5 or No. 6) Fuel Oil: Emission Factor for CO2 from 40 CFR Part 98 Subpart C, Table C-1, has been converted from kg/mmBtu to lb/kgal. Emission Factors for CH4 and N2O from AP-42 Chapter 1.3 (dated 9/98), Table 1.3-8

Propane: Emission Factor for CH4 from 40 CFR Part 98 Subpart C, Tables C-1 and 2, has been converted from kg/mmBtu to lb/kgal. Emission Factors for CO2 and N2O from AP-42 Chapter 1.5 (dated 7/08), Table 1.5-1

Butane: Emission Factors for CO2 and CH4 from 40 CFR Part 98 Subpart C, Tables C-1 and 2, have been converted from kg/mmBtu to lb/kgal. Emission Factor for N2O from AP-42 Chapter 1.5 (dated 7/08), Table 1.5-1

Waste Oil: Emission Factors for CO2, CH4, and N2O from 40 CFR Part 98 Subpart C, Tables C-1 and 2, have been converted from kg/mmBtu to lb/kgal.

Emission Factor (EF) Conversions

Natural Gas: EF (lb/MMCF) = [EF (kg/MMBtu) * Conversion Factor (2.20462 lbs/kg) * Heating Value of Natural Gas (MMBtu/scf) * Conversion Factor (1,000,000 scf/MMCF)]

Fuel Oils: EF (lb/kgal) = [EF (kg/MMBtu) * Conversion Factor (2.20462 lbs/kg) * Heating Value of the Fuel Oil (MMBtu/gal) * Conversion Factor (1000 gal/kgal)]

Natural Gas: Unlimited/Uncontrolled Potential to Emit (tons/yr) = [Maximum Natural Gas Usage (MMCF/yr)] * [Emission Factor (lb/MMCF)] * [ton/2000 lbs]

All Other Fuels: Unlimited/Uncontrolled Potential to Emit (tons/yr) = [Maximum Fuel Usage (gals/yr)] * [Emission Factor (lb/kgal)] * [kgal/1000 gal] * [ton/2000 lbs]

Unlimited Potential to Emit CO2e (tons/yr) = Unlimited Potential to Emit CO2 of "worst case" fuel (ton/yr) x CO2 GWP (1) + Unlimited Potential to Emit CH4 of "worst case" fuel (ton/yr) x CH4 GWP (21) + Unlimited Potential to Emit N2O of "worst case" fuel (ton/yr) x N2O GWP (310).

Abbreviations
PTE = Potential to Emit
CO2 = Carbon Dioxide
CH4 = Methane
N2O = Nitrogen Dioxide

Appendix A.1: Unlimited Emissions Calculations
Dryer/Mixer

Company Name: J.H. Rudolph & Company, Inc.
Source Address: 3300 South Green River Road, Evansville, IN 47715
Permit Number: F163-23182-00186 (formerly plant ID 163-03408)
Significant Permit Revision: F163-31195-00186
Reviewer: Bruce Farrar
Date: November 30, 2011

The following calculations determine the unlimited/uncontrolled emissions from the aggregate drying/mixing

Maximum Hourly Asphalt Production =	650	ton/hr
Maximum Annual Asphalt Production =	5,694,000	ton/yr

	Uncontrolled Emission Factors (lb/ton)			Unlimited/Uncontrolled Potential to Emit (tons/yr)			
	Drum-Mix Plant (dryer/mixer)			Drum-Mix Plant (dryer/mixer)			
Criteria Pollutant	Natural Gas	No. 2 Fuel Oil	Waste Oil	Natural Gas	No. 2 Fuel Oil	Waste Oil	**Worse Case PTE**
PM*	28	28	28	79716	79716	79716	**79716**
PM10*	6.5	6.5	6.5	18505.5	18505.5	18505.5	**18505.5**
PM2.5*	1.5	1.5	1.5	4270.5	4270.5	4270.5	**4271**
SO2**	0.0034	0.011	0.058	9.7	31.3	165.1	**165.1**
NOx**	0.026	0.055	0.055	74.0	156.6	156.6	**156.6**
VOC**	0.032	0.032	0.032	91.1	91.1	91.1	**91.1**
CO***	0.13	0.13	0.13	370.1	370.1	370.1	**370.1**
Hazardous Air Pollutant							
HCl			2.10E-04			5.98E-01	**0.60**
Antimony	1.80E-07	1.80E-07	1.80E-07	5.12E-04	5.12E-04	5.12E-04	**5.12E-04**
Arsenic	5.60E-07	5.60E-07	5.60E-07	1.59E-03	1.59E-03	1.59E-03	**1.59E-03**
Beryllium	negl	negl	negl	negl	negl	negl	**0.00E+00**
Cadmium	4.10E-07	4.10E-07	4.10E-07	1.17E-03	1.17E-03	1.17E-03	**1.17E-03**
Chromium	5.50E-06	5.50E-06	5.50E-06	1.57E-02	1.57E-02	1.57E-02	**1.57E-02**
Cobalt	2.60E-08	2.60E-08	2.60E-08	7.40E-05	7.40E-05	7.40E-05	**7.40E-05**
Lead	6.20E-07	1.50E-05	1.50E-05	1.77E-03	4.27E-02	4.27E-02	**4.27E-02**
Manganese	7.70E-06	7.70E-06	7.70E-06	2.19E-02	2.19E-02	2.19E-02	**2.19E-02**
Mercury	2.40E-07	2.60E-06	2.60E-06	6.83E-04	7.40E-03	7.40E-03	**7.40E-03**
Nickel	6.30E-05	6.30E-05	6.30E-05	0.18	0.18	0.18	**0.18**
Selenium	3.50E-07	3.50E-07	3.50E-07	9.96E-04	9.96E-04	9.96E-04	**9.96E-04**
2,2,4 Trimethylpentane	4.00E-05	4.00E-05	4.00E-05	0.11	0.11	0.11	**0.11**
Acetaldehyde			1.30E-03			3.70	**3.70**
Acrolein			2.60E-05			7.40E-02	**7.40E-02**
Benzene	3.90E-04	3.90E-04	3.90E-04	1.11	1.11	1.11	**1.11**
Ethylbenzene	2.40E-04	2.40E-04	2.40E-04	0.68	0.68	0.68	**0.68**
Formaldehyde	3.10E-03	3.10E-03	3.10E-03	8.83	8.83	8.83	**8.83**
Hexane	9.20E-04	9.20E-04	9.20E-04	2.62	2.62	2.62	**2.62**
Methyl chloroform	4.80E-05	4.80E-05	4.80E-05	0.14	0.14	0.14	**0.14**
MEK			2.00E-05			0.06	**0.06**
Propionaldehyde			1.30E-04			0.37	**0.37**
Quinone			1.60E-04			0.46	**0.46**
Toluene	1.50E-04	2.90E-03	2.90E-03	0.43	8.26	8.26	**8.26**
Total PAH Haps	1.90E-04	8.80E-04	8.80E-04	0.54	2.51	2.51	**2.51**
Xylene	2.00E-04	2.00E-04	2.00E-04	0.57	0.57	0.57	**0.57**
						Total HAPs	**30.35**
						Worst Single HAP	**8.83** **(formaldehyde)**

Methodology
Unlimited/Uncontrolled Potential to Emit (tons/yr) = (Maximum Annual Asphalt Production (tons/yr)) * (Emission Factor (lb/ton)) * (ton/2000 lbs)
Emission Factors from AP-42 Chapter 11.1 (dated 3/04), Tables 11.1-3, 11.1-7, 11.1-8, 11.1-10, and 11.1-12
Natural gas, No. 2 fuel oil, and waste oil represent the worst possible emissions scenario. AP-42 did not provide emission factors for any other fuels.

* PM, PM10, and PM2.5 AP-42 emission factors based on drum mix dryer fired with natural gas, propane, fuel oil, and waste oil. According to AP-42 fuel type does not significantly effect PM, PM10, and PM2.5 emissions.
** SO2, NOx, and VOC AP-42 emission factors are for natural gas, No. 2 fuel oil, and waste oil only.
*** CO AP-42 emission factor determined by combining data from drum mix dryer fired with natural gas, No. 6 fuel oil, and No. 2 fuel oil to develop single CO emission factor.

Abbreviations
VOC - Volatile Organic Compounds
HCl = Hydrogen Chloride
SO2 = Sulfur Dioxide
HAP = Hazardous Air Pollutant
PAH = Polyaromatic Hydrocarbon

Appendix A.1: Unlimited Emissions Calculations
Greenhouse Gas (CO2e) Emissions from the
Drum-Mix Plant (Dryer/Mixer) Process Emissions

Company Name: J.H. Rudolph & Company, Inc.
Source Address: 3300 South Green River Road, Evansville, IN 47715
Permit Number: F163-23182-00186 (formerly plant ID 163-03408)
Significant Permit Revision: F163-31195-00186
Reviewer: Bruce Farrar
Date: November 30, 2011

The following calculations determine the unlimited/uncontrolled emissions from the aggregate drying/mixing

Maximum Hourly Asphalt Production = 650 ton/hr
Maximum Annual Asphalt Production = 5,694,000 ton/yr

	Emission Factor (lb/ton) Drum-Mix Plant (dryer/mixer)			Greenhouse Gas Global Warming Potentials (GWP)	Unlimited/Uncontrolled Potential to Emit (tons/yr) Drum-Mix Plant (dryer/mixer)			
Criteria Pollutant	Natural Gas	No. 2 Fuel Oil	Waste Oil		Natural Gas	No. 2 Fuel Oil	Waste Oil	**CO2e for Worst Case Fuel (tons/yr)**
CO2	33	33	33	1	93,951.00	93,951.00	93,951.00	
CH4	0.0120	0.0120	0.0120	21	34.16	34.16	34.16	
N2O				310	0	0	0	**94,668.44**
				Total	93,985.16	93,985.16	93,985.16	
				CO2e Equivalent Emissions (tons/yr)	94,668.44	94,668.44	94,668.44	

Methodology
Natural gas, No. 2 fuel oil, and waste oil represent the worst possible emissions scenario. AP-42 did not provide emission factors for any other fuels.
Emission Factors from AP-42 Chapter 11.1 (dated 3/04), Tables 11.1-7 and 11.1-8
There are no emission factors for N20 available in either the 40 CFR 98, Subpart C or AP-42 Chapter 11.1. Therefore, it is assumed that there are no N2O emission anticipated from this process.

Unlimited/Uncontrolled Potential to Emit (tons/yr) = (Maximum Annual Asphalt Production (tons/yr)) * (Emission Factor (lb/ton)) * (ton/2000 lbs)
Unlimited Potential to Emit CO2e (tons/yr) = Unlimited Potential to Emit CO2 of "worst case" fuel (ton/yr) x CO2 GWP (1) + Unlimited Potential to Emit CH4 of "worst case" fuel (ton/yr) x CH4 GWP (21) + Unlimited Potential to Emit N2O of "worst case" fuel (ton/yr) x N2O GWP (310).

Abbreviations
CO2 = Carbon Dioxide CH4 = Methane N2O = Nitrogen Dioxide PTE = Potential to Emit

Appendix A: Emissions Calculations
Dryer/Mixer Magnetite Processing
Unlimited Process Emissions

Company Name: J.H. Rudolph & Company, Inc.
Source Address: 3300 South Green River Road, Evansville, IN 47715
Permit Number: F163-23182-00186 (formerly plant ID 163-03408)
Significant Permit Revision: F163-31195-00186
Reviewer: Bruce Farrar
Date: November 30, 2011

The following calculations determine the unlimited emissions from the magnetite drying process before controls and based on 8760 hrs of operation

Maximum Annual Magnetite Usage* = 75,000 ton/yr

Criteria Pollutant	Emission Factor (lb/ton)**	Unlimited Potential to Emit (tons/yr)
PM	19.70	738.64
PM10	12	449.94
PM2.5	12	449.94

Methodology

* The maximum annual magnetite usage was provided by the source.

Unlimited Potential to Emit from Magnetite (tons/yr) = [(Maximum Annual Magnetite Usage (ton/yr)] * [Emission Factor (lb/ton)] * [ton/2000 lbs]

Emission Factors from AP-42, 5th Edition, Section 11.24 - Metallic Minerals Processing, Table 11.24-2 for drying of high-moistre ore.

** Since there are no specific AP-42 emission factors for PM2.5 emissions from drying of high-moistre ore, a "worst case" scenario was assumed where PM2.5 emissions are the same as PM10 emissions.

Abbreviations

PM = Particulate Matter
PM10 = Particulate Matter (<10 um)
PM2.5 = Particulate Matter (< 2.5 um)

Appendix A.1: Unlimited Emissions Calculations
Dryer/Mixer Slag Processing

Company Name: J.H. Rudolph & Company, Inc.
Source Address: 3300 South Green River Road, Evansville, IN 47715
Permit Number: F163-23182-00186 (formerly plant ID 163-03408)
Significant Permit Revision: F163-31195-00186
Reviewer: Bruce Farrar
Date: November 30, 2011

The following calculations determine the unlimited emissions from the processing of slag in the aggregate drying/mixing

Maximum Annual Blast Furnace Slag Usage* =	2,391,480	ton/yr	1.5	% sulfur
Maximum Annual Steel Slag Usage* =	2,391,480	ton/yr	0.66	% sulfur

Type of Slag	SO2 Emission Factor (lb/ton)**	Unlimited Potential to Emit SO2 (tons/yr)
Blast Furnace Slag	0.74	884.8
Steel Slag	0.0014	1.67

Methodology
* The maximum annual slag usage was provided by the source.
** Testing results for blast furnace slag, obtained January 9, 2009 from similar operations at Rieth-Riley Construction Co., Inc. facility located in Valparaiso, IN (permit #127-27075-

** Testing results for steel slag, obtained June 2009 from E & B Paving, Inc. facility located in Huntington, IN. The testing results showed a steel slag emission factor of 0.0007 lb/ton from slag containing 0.33% sulfur content.
Unlimited Potential to Emit SO2 from Slag (tons/yr) = [(Maximum Annual Slag Usage (ton/yr)] * [Emission Factor (lb/ton)] * [ton/2000 lbs]
Abbreviations
SO2 = Sulfur Dioxide

Appendix A.1: Unlimited Emissions Calculations
Hot Oil Heater
Fuel Combustion with Maximum Capacity < 100 MMBtu/hr

Company Name: J.H. Rudolph & Company, Inc.
Source Address: 3300 South Green River Road, Evansville, IN 47715
Permit Number: F163-23182-00186 (formerly plant ID 163-03408)
Significant Permit Revision: F163-31195-00186
Reviewer: Bruce Farrar
Date: November 30, 2011

Maximum Hot Oil Heater Fuel Input Rate =	2.10	MMBtu/hr		
Natural Gas Usage =	18	MMCF/yr		
No. 2 Fuel Oil Usage =	131,400	gal/yr, and	0.49	% sulfur

Unlimited/Uncontrolled Emissions

	Emission Factor (units)		Unlimited/Uncontrolled Potential to Emit (tons/yr)		
	Hot Oil Heater		Hot Oil Heater		
Criteria Pollutant	Natural Gas (lb/MMCF)	No. 2 Fuel Oil (lb/kgal)	Natural Gas (tons/yr)	No. 2 Fuel Oil (tons/yr)	**Worse Case Fuel (tons/yr)**
PM	1.9	2.0	0.017	0.131	**0.13**
PM10/PM2.5	7.6	3.3	0.070	0.217	**0.22**
SO2	0.6	71.0	0.006	4.665	**4.66**
NOx	100	20.0	0.920	1.314	**1.31**
VOC	5.5	0.20	0.051	0.013	**0.05**
CO	84	5.0	0.773	0.329	**0.77**
Hazardous Air Pollutant					
Arsenic	2.0E-04	5.6E-04	1.8E-06	3.68E-05	**3.7E-05**
Beryllium	1.2E-05	4.2E-04	1.1E-07	2.76E-05	**2.8E-05**
Cadmium	1.1E-03	4.2E-04	1.0E-05	2.76E-05	**2.8E-05**
Chromium	1.4E-03	4.2E-04	1.3E-05	2.76E-05	**2.8E-05**
Cobalt	8.4E-05		7.7E-07		**7.7E-07**
Lead	5.0E-04	1.3E-03	4.6E-06	8.28E-05	**8.3E-05**
Manganese	3.8E-04	8.4E-04	3.5E-06	5.52E-05	**5.5E-05**
Mercury	2.6E-04	4.2E-04	2.4E-06	2.76E-05	**2.8E-05**
Nickel	2.1E-03	4.2E-04	1.9E-05	2.76E-05	**2.8E-05**
Selenium	2.4E-05	2.1E-03	2.2E-07	1.38E-04	**1.4E-04**
Benzene	2.1E-03		1.9E-05		**1.9E-05**
Dichlorobenzene	1.2E-03		1.1E-05		**1.1E-05**
Ethylbenzene					**0.0E+00**
Formaldehyde	7.5E-02	6.10E-02	6.9E-04	4.01E-03	**4.0E-03**
Hexane	1.8E+00		0.02		**1.7E-02**
Phenol					**0.0E+00**
Toluene	3.4E-03		3.1E-05		**3.1E-05**
Total PAH Haps	negl		negl		**0.0E+00**
Polycyclic Organic Matter		3.30E-03		2.17E-04	**2.2E-04**
		Total HAPs =	**1.7E-02**	**4.7E-03**	**0.021**

Methodology
Equivalent Natural Gas Usage (MMCF/yr) = [Maximum Fuel Input Rate (MMBtu/hr)] * [8,760 hrs/yr] * [1 MMCF/1,000 MMBtu]
Equivalent Oil Usage (gal/yr) = [Maximum Fuel Input Rate (MMBtu/hr)] * [8,760 hrs/yr] * [1 gal/0.140 MMBtu]
Natural Gas: Unlimited/Uncontrolled Potential to Emit (tons/yr) = [Maximum Natural Gas Usage (MMCF/yr)] * [Emission Factor (lb/MMCF)] * [ton/2000 lbs]
All Other Fuels: Unlimited/Uncontrolled Potential to Emit (tons/yr) = [Maximum Fuel Usage (gals/yr)] * [Emission Factor (lb/kgal)] * [kgal/1000 gal] * [ton/2000 lbs]
Sources of AP-42 Emission Factors for fuel combustion:
Natural Gas : AP-42 Chapter 1.4 (dated 7/98), Tables 1.4-1, 1.4-2, 1.4-3, and 1.4-4
No. 2 Fuel Oil: AP-42 Chapter 1.3 (dated 9/98), Tables 1.3-1, 1.3-2, 1.3-3, 1.3-8, 1.3-9, 1.3-10, and 1.3-11

Abbreviations
PM = Particulate Matter
PM10 = Particulate Matter (<10 um)
SO2 = Sulfur Dioxide
NOx = Nitrous Oxides
VOC - Volatile Organic Compounds
CO = Carbon Monoxide
HAP = Hazardous Air Pollutant
HCl = Hydrogen Chloride
PAH = Polyaromatic Hydrocarbon

Appendix A.1: Unlimited Emissions Calculations
Greenhouse Gas (CO2e) Emissions from
Hot Oil Heater Fuel Combustion with Maximum Capacity < 100 MMBtu/hr

Company Name: J.H. Rudolph & Company, Inc.
Source Address: 3300 South Green River Road, Evansville, IN 47715
Permit Number: F163-23182-00186 (formerly plant ID 163-03408)
Significant Permit Revision: F163-31195-00186
Reviewer: Bruce Farrar
Date: November 30, 2011

Maximum Hot Oil Heater Fuel Input Rate =	2.10	MMBtu/hr		
Natural Gas Usage =	18.40	MMCF/yr		
No. 2 Fuel Oil Usage =	131,400.00	gal/yr,	0.49	% sulfur

Unlimited/Uncontrolled Emissions

Criteria Pollutant	Emission Factor (units) Natural Gas (lb/MMCF)	Emission Factor (units) No. 2 Fuel Oil (lb/kgal)	Greenhouse Global Warming Potentials (GWP)	Potential to Emit (tons/yr) Natural Gas (tons/yr)	Potential to Emit (tons/yr) No. 2 Fuel Oil (tons/yr)	Worse Case CO2e Emissions (tons/yr)
CO2	120,161.84	22,501.41	1	1,105.25	1,478.34	1,484.90
CH4	2.49	0.91	21	0.02	0.06	
N2O	2.2	0.26	310	0.02	0.02	
				1,105.29	1,478.42	
CO2e Equivalent Emissions (tons/yr)				1,112.00	1,484.90	

Methodology

Greenhouse Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.
Equivalent Natural Gas Usage (MMCF/yr) = [Maximum Fuel Input Rate (MMBtu/hr)] * [8,760 hrs/yr] * [1 MMCF/1,000 MMBtu]
Equivalent Oil Usage (gal/yr) = [Maximum Fuel Input Rate (MMBtu/hr)] * [8,760 hrs/yr] * [1 gal/0.140 MMBtu]
Sources of Emission Factors for fuel combustion: (Note: To form a conservative estimate, the "worst case" emission factors have been used.)
Natural Gas: Emission Factors for CO2 and CH4 from 40 CFR Part 98 Subpart C, Tables C-1 and 2, have been converted from
No. 2 Fuel Oil: Emission Factors for CO2 and CH4 from 40 CFR Part 98 Subpart C, Tables C-1 and 2, have been converted from
Propane: Emission Factor for CH4 from 40 CFR Part 98 Subpart C, Tables C-1 and 2, has been converted from kg/mmBtu to lb/kgal.
Butane: Emission Factors for CO2 and CH4 from 40 CFR Part 98 Subpart C, Tables C-1 and 2, have been converted from
Emission Factor (EF) Conversions
Natural Gas: EF (lb/MMCF) = [EF (kg/MMBtu) * Conversion Factor (2.20462 lbs/kg) * Heating Value of Natural Gas
Fuel Oils: EF (lb/kgal) = [EF (kg/MMBtu) * Conversion Factor (2.20462 lbs/kg) * Heating Value of the Fuel Oil (MMBtu/gal) *
Natural Gas: Unlimited/Uncontrolled Potential to Emit (tons/yr) = [Maximum Natural Gas Usage (MMCF/yr)] * [Emission Factor (lb/MMCF)] *
All Other Fuels: Unlimited/Uncontrolled Potential to Emit (tons/yr) = [Maximum Fuel Usage (gals/yr)] * [Emission Factor (lb/kgal)] * [kgal/1000 gal]
Unlimited Potential to Emit CO2e (tons/yr) = Unlimited Potential to Emit CO2 of "worst case" fuel (ton/yr) x CO2 GWP (1) + Unlimited Potential to

Abbreviations

CO2 = Carbon Dioxide
CH4 = Methane
N2O = Nitrogen Dioxide
PTE = Potential to Emit

Appendix A: Emission Calculations
LPG-Butane - Commercial Boilers
(Heat input capacity: > 0.03 MMBtu/hr and < 10 MMBtu/hr)

Company Name: J.H. Rudolph & Company, Inc.
Source Address: 3300 South Green River Road, Evansville, IN 47715
Permit Number: F163-23182-00186 (formerly plant ID 163-03408)
Significant Permit Revision: F163-31195-00186
Reviewer: Bruce Farrar
Date: November 30, 2011

Heat Input Capacity MMBtu/hr	Potential Throughput kgals/year	SO2 Emission factor = 0.09 x S S = Sulfur Content = 2.00 grains/100ft^3
6.00	515.29	

	Pollutant						
	PM*	PM10*	direct PM2.5**	SO2	NOx	VOC	CO
Emission Factor in lb/kgal	0.2	0.8	0.8	0.2 *(0.09S)*	15.0	1.1 **TOC value	8.4
Potential Emission in tons/yr	0.05	0.21	0.21	0.05	3.86	0.28	2.16

*PM emission factor is filterable PM only. PM emissions are stated to be all less than 10 microns in aerodynamic equivalent diameter, footnote in Table 1.5-1, therefore PM10 is based on the filterable and condensable PM emission factors.
** No direct PM2.5 emission factor was given. Direct PM2.5 is a subset of PM10. If one assumes all PM10 to be all direct PM2.5, then a worst case assumption of direct PM2.5 can be made.
**The VOC value given is TOC. The methane emission factor is 0.2 lb/kgal.

Methodology

1 gallon of LPG has a heating value of 94,000 Btu
1 gallon o fbutane has a heating value of 102,000 Btu (use this to convert emission factors to an energy basis for butane)
(Source - AP-42 (Supplement B 10/96) page 1.5-1)

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.0915 MMBtu

Emission Factors are from AP42 (7/08), Table 1.5-1 (SCC #1-02-010-02)
Propane Emission Factors shown. Please see AP-42 for butane.
Emission (tons/yr) = Throughput (kgals/yr) x Emission Factor (lb/kgal) / 2,000 lb/ton
See Page 2 for Greenhouse Gas calculations.

Appendix A: Emission Calculations
LPG-Butane - Commercial Boilers
(Heat input capacity: > 0.03 MMBtu/hr and < 10 MMBtu/hr)
Greenhouse Gas

Company Name: J.H. Rudolph & Company, Inc.
Source Address: 3300 South Green River Road, Evansville, IN 47715
Permit Number: F163-23182-00186 (formerly plant ID 163-03408)
Significant Permit Revision: F163-31195-00186
Reviewer: Bruce Farrar
Date: November 30, 2011

	Greenhouse Gas		
	CO2	CH4	N2O
Emission Factor in lb/kgal	14,300	0.2	0.9
Potential Emission in tons/yr	3,684	0.1	0.2
Summed Potential Emissions in tons/yr	3,685		
CO2e Total in tons/yr	3,757		

Methodology

The CO2 Emission Factor for Propane is 12500. The CO2 Emission Factor for Butane is 14300.
Emission Factors are from AP 42 (7/08), Table 1.5-1 (SCC #1-03-010-01)
Greenhouse Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.
Emission (tons/yr) = Throughput (kgals/ yr) x Emission Factor (lb/kgal)/2,000 lb/ton
CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O Potential Emission ton/yr x N2O GWP (310).

Appendix A.1: Unlimited Emissions Calculations
Asphalt Load-Out, Silo Filling, and Yard Emissions

Company Name: J.H. Rudolph & Company, Inc.
Source Address: 3300 South Green River Road, Evansville, IN 47715
Permit Number: F163-23182-00186 (formerly plant ID 163-03408)
Significant Permit Revision: F163-31195-00186
Reviewer: Bruce Farrar
Date: November 30, 2011

The following calculations determine the unlimited/uncontrolled fugitive emissions from hot asphalt mix load-out, silo filling, and on-site yard for a drum mix hot mix asphalt plant

Asphalt Temperature, T =	325	F
Asphalt Volatility Factor, V =	-0.5	
Maximum Annual Asphalt Production =	5,694,000	tons/yr

	Emission Factor (lb/ton asphalt)			Unlimited/Uncontrolled Potential to Emit (tons/yr)			
Pollutant	Load-Out	Silo Filling	On-Site Yard	Load-Out	Silo Filling	On-Site Yard	Total
Total PM*	5.2E-04	5.9E-04	NA	1.49	1.67	NA	3.15
Organic PM	3.4E-04	2.5E-04	NA	0.97	0.723	NA	1.69
TOC	0.004	0.012	0.001	11.84	34.70	3.132	49.7
CO	0.001	0.001	3.5E-04	3.84	3.359	1.002	8.20

NA = Not Applicable (no AP-42 Emission Factor)

PM/HAPs	0.069	0.081	0	0.150
VOC/HAPs	0.175	0.441	0.046	0.662
non-VOC/HAPs	9.1E-04	9.4E-05	2.4E-04	1.2E-03
non-VOC/non-HAPs	0.86	0.49	0.23	1.58

Total VOCs	11.13	34.70	2.9	48.8
Total HAPs	0.24	0.52	0.047	0.81
			Worst Single HAP	0.253 (formaldehyde)

Methodology
The asphalt temperature and volatility factor were provided by the source.
Unlimited/Uncontrolled Potential to Emit (tons/yr) = (Maximum Annual Asphalt Production (tons/yr)) * (Emission Factor (lb/ton)) * (ton/2000 lbs)
Emission Factors from AP-42 Chapter 11.1 (dated 3/04), Tables 11.1-14, 11.1-15, and 11.1-16
Plant Load-Out Emission Factor Equations (AP-42 Table 11.1-14)::
Total PM/PM10/PM2.5 Ef = 0.000181 + 0.00141(-V)e^((0.0251)(T+460)-20.43)
Organic PM Ef = 0.00141(-V)e^((0.0251)(T+460)-20.43)
TOC Ef = 0.0172(-V)e^((0.0251)(T+460)-20.43)
CO Ef = 0.00558(-V)e^((0.0251)(T+460)-20.43)
Silo Filling Emission Factor Equations (AP-42 Table 11.1-14):
PM/PM10 Ef = 0.000332 + 0.00105(-V)e^((0.0251)(T+460)-20.43)
Organic PM Ef = 0.00105(-V)e^((0.0251)(T+460)-20.43)
TOC Ef = 0.0504(-V)e^((0.0251)(T+460)-20.43)
CO Ef = 0.00488(-V)e^((0.0251)(T+460)-20.43)
On Site Yard CO emissions estimated by multiplying the TOC emissions by 0.32
*No emission factors available for PM10 or PM2.5, therefore IDEM assumes PM10 and PM2.5 are equivalent to Total PM.

Abbreviations
TOC = Total Organic Compounds
CO = Carbon Monoxide
PM = Particulate Matter
PM10 = Particulate Matter (<10 um)
PM2.5 = Particulate Matter (<2.5 um)
HAP = Hazardous Air Pollutant
VOC = Volatile Organic Compound

Appendix A.1: Unlimited Emissions Calculations
Asphalt Load-Out, Silo Filling, and Yard Emissions (continued)

Company Name: J.H. Rudolph & Company, Inc.
Source Address: 3300 South Green River Road, Evansville, IN 47715
Permit Number: F163-23182-00186 (formerly plant ID 163-03408)
Significant Permit Revision: F163-31195-00186
Reviewer: Bruce Farrar
Date: November 30, 2011

Organic Particulate-Based Compounds (Table 11.1-15)

					Speciation Profile		Unlimited/Uncontrolled Potential to Emit (tons/yr)			
Pollutant	CASRN	Category	HAP Type	Source	Load-out and Onsite Yard (% by weight of Total Organic PM)	Silo Filling and Asphalt Storage Tank (% by weight of Total Organic PM)	Load-out	Silo Filling	Onsite Yard	Total
PAH HAPs										
Acenaphthene	83-32-9	PM/HAP	POM	Organic PM	0.26%	0.47%	2.5E-03	3.4E-03	NA	5.9E-03
Acenaphthylene	208-96-8	PM/HAP	POM	Organic PM	0.028%	0.014%	2.7E-04	1.0E-04	NA	3.7E-04
Anthracene	120-12-7	PM/HAP	POM	Organic PM	0.07%	0.13%	6.8E-04	9.4E-04	NA	1.6E-03
Benzo(a)anthracene	56-55-3	PM/HAP	POM	Organic PM	0.019%	0.056%	1.8E-04	4.0E-04	NA	5.9E-04
Benzo(b)fluoranthene	205-99-2	PM/HAP	POM	Organic PM	0.0076%	0	7.4E-05	0	NA	7.4E-05
Benzo(k)fluoranthene	207-08-9	PM/HAP	POM	Organic PM	0.0022%	0	2.1E-05	0	NA	2.1E-05
Benzo(g,h,i)perylene	191-24-2	PM/HAP	POM	Organic PM	0.0019%	0	1.8E-05	0	NA	1.8E-05
Benzo(a)pyrene	50-32-8	PM/HAP	POM	Organic PM	0.0023%	0	2.2E-05	0	NA	2.2E-05
Benzo(e)pyrene	192-97-2	PM/HAP	POM	Organic PM	0.0078%	0.0095%	7.6E-05	6.9E-05	NA	1.4E-04
Chrysene	218-01-9	PM/HAP	POM	Organic PM	0.103%	0.21%	1.0E-03	1.5E-03	NA	2.5E-03
Dibenz(a,h)anthracene	53-70-3	PM/HAP	POM	Organic PM	0.00037%	0	3.6E-06	0	NA	3.6E-06
Fluoranthene	206-44-0	PM/HAP	POM	Organic PM	0.05%	0.15%	4.9E-04		NA	4.9E-04
Fluorene	86-73-7	PM/HAP	POM	Organic PM	0.77%	1.01%	7.5E-03	7.3E-03	NA	1.5E-02
Indeno(1,2,3-cd)pyrene	193-39-5	PM/HAP	POM	Organic PM	0.00047%	0	4.6E-06	0	NA	4.6E-06
2-Methylnaphthalene	91-57-6	PM/HAP	POM	Organic PM	2.38%	5.27%	2.3E-02	3.8E-02	NA	0.061
Naphthalene	91-20-3	PM/HAP	POM	Organic PM	1.25%	1.82%	1.2E-02	1.3E-02	NA	2.5E-02
Perylene	198-55-0	PM/HAP	POM	Organic PM	0.022%	0.03%	2.1E-04	2.2E-04	NA	4.3E-04
Phenanthrene	85-01-8	PM/HAP	POM	Organic PM	0.81%	1.80%	7.9E-03	1.3E-02	NA	2.1E-02
Pyrene	129-00-0	PM/HAP	POM	Organic PM	0.15%	0.44%	1.5E-03	3.2E-03	NA	4.6E-03
Total PAH HAPs							**0.058**	**0.081**	**NA**	**0.139**
Other semi-volatile HAPs										
Phenol		PM/HAP	---	Organic PM	1.18%	0	1.1E-02	0	0	1.1E-02

NA = Not Applicable (no AP-42 Emission Factor)

Methodology

Unlimited/Uncontrolled Potential to Emit (tons/yr) = [Speciation Profile (%)] * [Organic PM (tons/yr)]
Specieation Profiles from AP-42 Chapter 11.1 (dated 3/04), Tables 11.1-15 and 11.1-16

Abbreviations

PM = Particulate Matter
HAP = Hazardous Air Pollutant
POM = Polycyclic Organic Matter

Appendix A.1: Unlimited Emissions Calculations
Asphalt Load-Out, Silo Filling, and Yard Emissions (continued)

Organic Volatile-Based Compounds (Table 11.1-16)

Pollutant	CASRN	Category	HAP Type	Source	Speciation Profile		Unlimited/Uncontrolled Potential to Emit (tons/yr)			
					Load-out and Onsite Yard (% by weight of TOC)	Silo Filling and Asphalt Storage Tank (% by weight of TOC)	Load-out	Silo Filling	Onsite Yard	Total
VOC		VOC	---	TOC	94%	100%	**11.13**	**34.70**	**2.94**	**48.77**
non-VOC/non-HAPS										
Methane	74-82-8	non-VOC/non-HAP	---	TOC	6.50%	0.26%	7.7E-01	9.0E-02	2.0E-01	1.063
Acetone	67-64-1	non-VOC/non-HAP	---	TOC	0.046%	0.055%	5.4E-03	1.9E-02	1.4E-03	0.026
Ethylene	74-85-1	non-VOC/non-HAP	---	TOC	0.71%	1.10%	8.4E-02	3.8E-01	2.2E-02	0.488
Total non-VOC/non-HAPS					7.30%	1.40%	**0.864**	**0.486**	**0.229**	**1.58**
Volatile organic HAPs										
Benzene	71-43-2	VOC/HAP	---	TOC	0.052%	0.032%	6.2E-03	1.1E-02	1.6E-03	1.9E-02
Bromomethane	74-83-9	VOC/HAP	---	TOC	0.0096%	0.0049%	1.1E-03	1.7E-03	3.0E-04	3.1E-03
2-Butanone	78-93-3	VOC/HAP	---	TOC	0.049%	0.039%	5.8E-03	1.4E-02	1.5E-03	2.1E-02
Carbon Disulfide	75-15-0	VOC/HAP	---	TOC	0.013%	0.016%	1.5E-03	5.6E-03	4.1E-04	7.5E-03
Chloroethane	75-00-3	VOC/HAP	---	TOC	0.00021%	0.004%	2.5E-05	1.4E-03	6.6E-06	1.4E-03
Chloromethane	74-87-3	VOC/HAP	---	TOC	0.015%	0.023%	1.8E-03	8.0E-03	4.7E-04	1.0E-02
Cumene	92-82-8	VOC/HAP	---	TOC	0.11%	0	1.3E-02	0	3.4E-03	1.6E-02
Ethylbenzene	100-41-4	VOC/HAP	---	TOC	0.28%	0.038%	3.3E-02	1.3E-02	8.8E-03	0.055
Formaldehyde	50-00-0	VOC/HAP	---	TOC	0.088%	0.69%	1.0E-02	2.4E-01	2.8E-03	0.253
n-Hexane	100-54-3	VOC/HAP	---	TOC	0.15%	0.10%	1.8E-02	3.5E-02	4.7E-03	0.057
Isooctane	540-84-1	VOC/HAP	---	TOC	0.0018%	0.00031%	2.1E-04	1.1E-04	5.6E-05	3.8E-04
Methylene Chloride	75-09-2	non-VOC/HAP	---	TOC	0	0.00027%	0	9.4E-05	0	9.4E-05
MTBE	1634-04-4	VOC/HAP	---	TOC	0	0	0	0	0	0
Styrene	100-42-5	VOC/HAP	---	TOC	0.0073%	0.0054%	8.6E-04	1.9E-03	2.3E-04	3.0E-03
Tetrachloroethene	127-18-4	non-VOC/HAP	---	TOC	0.0077%	0	9.1E-04	0	2.4E-04	1.2E-03
Toluene	100-88-3	VOC/HAP	---	TOC	0.21%	0.062%	2.5E-02	2.2E-02	6.6E-03	0.053
1,1,1-Trichloroethane	71-55-6	VOC/HAP	---	TOC	0	0	0	0	0	0
Trichloroethene	79-01-6	VOC/HAP	---	TOC	0	0	0	0	0	0
Trichlorofluoromethane	75-69-4	VOC/HAP	---	TOC	0.0013%	0	1.5E-04	0	4.1E-05	1.9E-04
m-/p-Xylene	1330-20-7	VOC/HAP	---	TOC	0.41%	0.20%	4.9E-02	6.9E-02	1.3E-02	0.131
o-Xylene	95-47-6	VOC/HAP	---	TOC	0.08%	0.057%	9.5E-03	2.0E-02	2.5E-03	3.2E-02
Total volatile organic HAPs					1.50%	1.30%	**0.178**	**0.451**	**0.047**	**0.676**

Methodology
Unlimited/Uncontrolled Potential to Emit (tons/yr) = [Speciation Profile (%)] * [TOC (tons/yr)]
Specieation Profiles from AP-42 Chapter 11.1 (dated 3/04), Tables 11.1-15 and 11.1-16

Abbreviations
TOC = Total Organic Compounds
HAP = Hazardous Air Pollutant
VOC = Volatile Organic Compound
MTBE = Methyl tert butyl ether

Appendix A.1: Unlimited Emissions Calculations
Material Storage Piles

Company Name: J.H. Rudolph & Company, Inc.
Source Address: 3300 South Green River Road, Evansville, IN 47715
Permit Number: F163-23182-00186 (formerly plant ID 163-03408)
Significant Permit Revision: F163-31195-00186
Reviewer: Bruce Farrar
Date: November 30, 2011

The following calculations determine the amount of emissions created by wind erosion of storage stockpiles, based on 8,760 hours of use and USEPA's AP-42 (Pre 1983 Edition), Section 11.2.3.

Ef = 1.7*(s/1.5)*(365-p)/235*(f/15)
where Ef = emission factor (lb/acre/day)
s = silt content (wt %)
p = 125 days of rain greater than or equal to 0.01 inches
f = 15 % of wind greater than or equal to 12 mph

Material	Silt Content (wt %)*	Emission Factor (lb/acre/day)	Maximum Anticipated Pile Size (acres)**	PTE of PM (tons/yr)	PTE of PM10/PM2.5 (tons/yr)
Sand	2.6	3.01	0.80	0.439	0.154
Limestone	1.6	1.85	1.30	0.439	0.154
RAP	0.5	0.58	1.40	0.148	0.052
Gravel	1.6	1.85	1.20	0.406	0.142
Slag	3.8	4.40	1.00	0.803	0.281
			Totals	**2.23**	**0.78**

Methodology
PTE of PM (tons/yr) = (Emission Factor (lb/acre/day)) * (Maximum Pile Size (acres)) * (ton/2000 lbs) * (8760 hours/yr)
PTE of PM10/PM2.5 (tons/yr) = (Potential PM Emissions (tons/yr)) * 35%
*Silt content values obtained from AP-42 Table 13.2.4-1 (dated 1/95)
**Maximum anticipated pile size (acres) provided by the source.
RAP - recycled asphalt pavement

Abbreviations
PM = Particulate Matter
PM10 = Particulate Matter (<10 um)
PM2.5 = Particulate Matter (<2.5 um)
PM2.5 = PM10
PTE = Potential to Emit

Appendix A.1: Unlimited Emissions Calculations
Material Processing, Handling, Crushing, Screening, and Conveying

Company Name: J.H. Rudolph & Company, Inc.
Source Address: 3300 South Green River Road, Evansville, IN 47715
Permit Number: F163-23182-00186 (formerly plant ID 163-03408)
Significant Permit Revision: F163-31195-00186
Reviewer: Bruce Farrar
Date: November 30, 2011

Batch or Continuous Drop Operations (AP-42 Section 13.2.4)
To estimate potential fugitive dust emissions from processing and hangling of raw materials (batch or continuous drop operations), AP-42 emission factors for Aggregate Handling, Section 13.2.4 (fifth edition, 1/95) are utilized.

Ef = k*(0.0032)*[(U/5)^1.3 / (M/2)^1.4]

where: Ef =	Emission factor (lb/ton)	
k (PM) =	0.74	= particle size multiplier (0.74 assumed for aerodynamic diameter <=100 um)
k (PM10) =	0.35	= particle size multiplier (0.35 assumed for aerodynamic diameter <=10 um)
k (PM2.5) =	0.053	= particle size multiplier (0.053 assumed for aerodynamic diameter <=2.5 um)
U =	10.2	= worst case annual mean wind speed (Source: NOAA, 2006*)
M =	4.0	= material % moisture content of aggregate (Source: AP-42 Section 11.1.1.1)
Ef (PM) =	2.27E-03	lb PM/ton of material handled
Ef (PM10) =	1.07E-03	lb PM10/ton of material handled
Ef (PM2.5) =	1.62E-04	lb PM2.5/ton of material handled

Maximum Annual Asphalt Production =	5,694,000	tons/yr
Percent Asphalt Cement/Binder (weight %) =	5.0%	
Maximum Material Handling Throughput =	5,409,300	tons/yr

Type of Activity	Unlimited/Uncontrolled PTE of PM (tons/yr)	Unlimited/Uncontrolled PTE of PM10 (tons/yr)	Unlimited/Uncontrolled PTE of PM2.5 (tons/yr)
Truck unloading of materials into storage piles	6.13	2.90	0.44
Front-end loader dumping of materials into feeder bins	6.13	2.90	0.44
Conveyor dropping material into dryer/mixer or batch tower	6.13	2.90	0.44
Total (tons/yr)	**18.39**	**8.70**	**1.32**

Methodology
The percent asphalt cement/binder provided by the source.
Maximum Material Handling Throughput (tons/yr) = [Annual Asphalt Production Limitation (tons/yr)] * [1 - Percent Asphalt Cement/Binder (weight %)]
Unlimited Potential to Emit (tons/yr) = (Maximum Material Handling Throughput (tons/yr)) * (Emission Factor (lb/ton)) * (ton/2000 lbs)
Raw materials may include limestone, sand, recycled asphalt pavement (RAP), gravel, slag, and other additivies
*Worst case annual mean wind speed (Indianapolis, IN) from "Comparative Climatic Data", National Climatic Data Center, NOAA, 2006

Material Screening and Conveying (AP-42 Section 11.19.2)
To estimate potential fugitive dust emissions from raw material crushing, screening, and conveying, AP-42 emission factors for Crushed Stone Processing Operations, Section 11.19.2 (dated 8/04) are utilized.

Operation	Uncontrolled Emission Factor for PM (lbs/ton)*	Uncontrolled Emission Factor for PM10 (lbs/ton)*	Unlimited/Uncontrolled PTE of PM (tons/yr)	Unlimited/Uncontrolled PTE of PM10/PM2.5 (tons/yr)**
Crushing	0.0054	0.0024	14.61	6.49
Screening	0.025	0.0087	67.62	23.53
Conveying	0.003	0.0011	8.11	2.98
Unlimited Potential to Emit (tons/yr) =			**90.34**	**33.00**

Methodology
Maximum Material Handling Throughput (tons/yr) = [Annual Asphalt Production Limitation (tons/yr)] * [1 - Percent Asphalt Cement/Binder (weight %)]
Unlimited Potential to Emit (tons/yr) = [Maximum Material Handling Throughput (tons/yr)] * [Emission Factor (lb/ton)] * [ton/2000 lbs]
Raw materials may include stone/gravel, slag, and recycled asphalt pavement (RAP)
Emission Factors from AP-42 Chapter 11.19.2 (dated 8/04), Table 11.19.2-2
*Uncontrolled emissions factors for PM/PM10 represent tertiary crushing of stone with moisture content ranging from 0.21 to 1.3 percent by weight (Table 11.19.2-2). The bulk moisture content of aggregate in the storage piles at a hot mix asphalt production plant typically stabilizes between 3 to 5 percent by weight (Source: AP-42 Section 11.1.1.1).
**Assumes PM10 = PM2.5

Abbreviations
PM = Particulate Matter
PM10 = Particulate Matter (<10 um)
PM2.5 = Particulate matter (< 2.5 um)
PTE = Potential to Emit

Appendix A.1: Unlimited Emissions Calculations
Unpaved Roads

Company Name: J.H. Rudolph & Company, Inc.
Source Address: 3300 South Green River Road, Evansville, IN 47715
Permit Number: F163-23182-00186 (formerly plant ID 163-03408)
Significant Permit Revision: F163-31195-00186
Reviewer: Bruce Farrar
Date: November 30, 2011

Unpaved Roads at Industrial Site

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

Maximum Annual Asphalt Production =	5,694,000	tons/yr
Percent Asphalt Cement/Binder (weight %) =	5.0%	
Maximum Material Handling Throughput =	5,409,300	tons/yr
Maximum Asphalt Cement/Binder Throughput =	284,700	tons/yr
Maximum No. 2 Fuel Oil Usage =	7,258,286	gallons/yr

Process	Vehicle Type	Maximum Weight of Vehicle (tons)	Maximum Weight of Load (tons)	Maximum Weight of Vehicle and Load (tons/trip)	Maximum trips per year (trip/yr)	Total Weight driven per year (ton/yr)	Maximum one-way distance (feet/trip)	Maximum one-way distance (mi/trip)	Maximum one-way miles (miles/yr)
Aggregate/RAP Truck Enter Full	Dump truck (16 CY)	17.0	22.4	39.4	2.4E+05	9.5E+06	300	0.057	13720.8
Aggregate/RAP Truck Leave Empty	Dump truck (16 CY)	17.0	0	17.0	2.4E+05	4.1E+06	300	0.057	13720.8
Asphalt Cement/Binder Truck Enter Full	Tanker truck (6000 gal)	12.0	36.0	48.0	7.9E+03	3.8E+05	300	0.057	449.3
Asphalt Cement/Binder Truck Leave Empty	Tanker truck (6000 gal)	12.0	0	12.0	7.9E+03	9.5E+04	300	0.057	449.3
Fuel Oil Truck Enter Full	Tanker truck (6000 gal)	12.0	32.0	44.0	7.7E+02	3.4E+04	300	0.057	43.6
Fuel Oil Truck Leave Empty	Tanker truck (6000 gal)	12.0	0	12.0	7.7E+02	9.2E+03	300	0.057	43.6
Aggregate/RAP Loader Full	Front-end loader (3 CY)	15.0	4.2	19.2	1.3E+06	2.5E+07	300	0.057	73177.8
Aggregate/RAP Loader Empty	Front-end loader (3 CY)	15.0	0	15.0	1.3E+06	1.9E+07	300	0.057	73177.8
Asphalt Concrete Truck Leave Full	Dump truck (16 CY)	17.0	24.0	41.0	2.4E+05	9.7E+06	300	0.057	13480.1
Asphalt Concrete Truck Enter Empty	Dump truck (16 CY)	17.0	0	17.0	2.4E+05	4.0E+06	300	0.057	13480.1
	Total				**3.6E+06**	**7.2E+07**			**2.0E+05**

Average Vehicle Weight Per Trip =	20.3	tons/trip
Average Miles Per Trip =	0.057	miles/trip

Unmitigated Emission Factor, Ef = k*[(s/12)^a]*[(W/3)^b] (Equation 1a from AP-42 13.2.2)

	PM	PM10	PM2.5	
where k =	4.9	1.5	0.15	lb/mi = particle size multiplier (AP-42 Table 13.2.2-2 for Industrial Roads)
s =	4.8	4.8	4.8	% = mean % silt content of unpaved roads (AP-42 Table 13.2.2-3 Sand/Gravel Processing Plant Road)
a =	0.7	0.9	0.9	= constant (AP-42 Table 13.2.2-2)
W =	20.3	20.3	20.3	tons = average vehicle weight (provided by source)
b =	0.45	0.45	0.45	= constant (AP-42 Table 13.2.2-2)

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, Eext = E * [(365 - P)/365]

Mitigated Emission Factor, Eext = E * [(365 - P)/365]

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

	PM	PM10	PM2.5	
Unmitigated Emission Factor, Ef =	6.09	1.55	0.16	lb/mile
Mitigated Emission Factor, Eext =	4.01	1.02	0.10	lb/mile
Dust Control Efficiency =	50%	50%	50%	(pursuant to control measures outlined in fugitive dust control plan)

Process	Vehicle Type	Unmitigated PTE of PM (tons/yr)	Unmitigated PTE of PM10 (tons/yr)	Unmitigated PTE of PM2.5 (tons/yr)	Mitigated PTE of PM (tons/yr)	Mitigated PTE of PM10 (tons/yr)	Mitigated PTE of PM2.5 (tons/yr)	Controlled PTE of PM (tons/yr)	Controlled PTE of PM10 (tons/yr)	Controlled PTE of PM2.5 (tons/yr)
Aggregate/RAP Truck Enter Full	Dump truck (16 CY)	41.81	10.66	1.07	27.49	7.01	0.70	13.75	3.50	0.35
Aggregate/RAP Truck Leave Empty	Dump truck (16 CY)	41.81	10.66	1.07	27.49	7.01	0.70	13.75	3.50	0.35
Asphalt Cement/Binder Truck Enter Full	Tanker truck (6000 gal)	1.369	0.349	0.03	0.900	0.229	0.02	0.450	0.115	0.01
Asphalt Cement/Binder Truck Leave Empty	Tanker truck (6000 gal)	1.369	0.349	0.03	0.900	0.229	0.02	0.450	0.115	0.01
Fuel Oil Truck Enter Full	Tanker truck (6000 gal)	0.133	0.034	0.00	0.087	0.022	0.00	0.044	0.011	0.00
Fuel Oil Truck Leave Empty	Tanker truck (6000 gal)	0.133	0.034	0.00	0.087	0.022	0.00	0.044	0.011	0.00
Aggregate/RAP Loader Full	Front-end loader (3 CY)	222.99	56.83	5.68	146.63	37.37	3.74	73.31	18.68	1.87
Aggregate/RAP Loader Empty	Front-end loader (3 CY)	222.99	56.83	5.68	146.63	37.37	3.74	73.31	18.68	1.87
Asphalt Concrete Truck Leave Full	Dump truck (16 CY)	41.08	10.47	1.05	27.01	6.88	0.69	13.51	3.44	0.34
Asphalt Concrete Truck Enter Empty	Dump truck (16 CY)	41.08	10.47	1.05	27.01	6.88	0.69	13.51	3.44	0.34
	Totals	**614.77**	**156.68**	**15.67**	**404.23**	**103.02**	**10.30**	**202.12**	**51.51**	**5.15**

Methodology

Maximum Material Handling Throughput = [Annual Asphalt Production Limitation (tons/yr)] * [1 - Percent Asphalt Cement/Binder (weight %)]
Maximum Asphalt Cement/Binder Throughput = [Annual Asphalt Production Limitation (tons/yr)] * [Percent Asphalt Cement/Binder (weight %)]
Maximum Weight of Vehicle and Load (tons/trip) = [Maximum Weight of Vehicle (tons/trip)] + [Maximum Weight of Load (tons/trip)]
Maximum trips per year (trip/yr) = [Throughput (tons/yr)] / [Maximum Weight of Load (tons/trip)]
Total Weight driven per year (ton/yr) = [Maximum Weight of Vehicle and Load (tons/trip)] * [Maximum trips per year (trip/yr)]
Maximum one-way distance (mi/trip) = [Maximum one-way distance (feet/trip) / [5280 ft/mile]
Maximum one-way miles (miles/yr) = [Maximum trips per year (trip/yr)] * [Maximum one-way distance (mi/trip)]
Average Vehicle Weight Per Trip (ton/trip) = SUM[Total Weight driven per year (ton/yr)] / SUM[Maximum trips per year (trip/yr)]
Average Miles Per Trip (miles/trip) = SUM[Maximum one-way miles (miles/yr)] / SUM[Maximum trips per year (trip/yr)]
Unmitigated PTE (tons/yr) = (Maximum one-way miles (miles/yr)) * (Unmitigated Emission Factor (lb/mile)) * (ton/2000 lbs)
Mitigated PTE (tons/yr) = (Maximum one-way miles (miles/yr)) * (Mitigated Emission Factor (lb/mile)) * (ton/2000 lbs)
Controlled PTE (tons/yr) = (Mitigated PTE (tons/yr)) * (1 - Dust Control Efficiency)

Abbreviations

PM = Particulate Matter
PM10 = Particulate Matter (<10 um)
PM2.5 = Particulate Matter (<2.5 um)
PM2.5 = PM10
PTE = Potential to Emit

Appendix A: Unlimited Emissions Calculations
Paved Roads

Company Name: J.H. Rudolph & Company, Inc.
Source Address: 3300 South Green River Road, Evansville, IN 47715
Permit Number: F163-23182-00186 (formerly plant ID 163-03408)
Significant Permit Revision: F163-31195-00186
Reviewer: Bruce Farrar
Date: November 30, 2011

Paved Roads at Industrial Site

The following calculations determine the amount of emissions created by paved roads, based on 8,760 hours of use and AP-42, Ch 13.2.1 (12/2003).

Maximum Annual Asphalt Production =	5,694,000	tons/yr
Percent Asphalt Cement/Binder (weight %) =	5.0%	
Maximum Material Handling Throughput =	5,409,300	tons/yr
Maximum Asphalt Cement/Binder Throughput =	284,700	tons/yr
Maximum No. 2 Fuel Oil Usage =	7,258,286	gallons/yr

Process	Vehicle Type	Maximum Weight of Vehicle (tons)	Maximum Weight of Load (tons)	Maximum Weight of Vehicle and Load (tons/trip)	Maximum trips per year (trip/yr)	Total Weight driven per day (ton/yr)	Maximum one-way distance (feet/trip)	Maximum one-way distance (mi/trip)	Maximum one-way miles (miles/yr)
Aggregate/RAP Truck Enter Full	Dump truck (16 CY)	17.0	22.4	39.40	2.4E+05	9.5E+06	300	0.057	13720.8
Aggregate/RAP Truck Leave Empty	Dump truck (16 CY)	17.0	0	17.00	2.4E+05	4.1E+06	300	0.057	13720.8
Asphalt Cement/Binder Truck Enter Full	Tanker truck (6000 gal)	12.0	36.0	48.00	7.9E+03	3.8E+05	300	0.057	449.3
Asphalt Cement/Binder Truck Leave Empty	Tanker truck (6000 gal)	12.0	0	12.00	7.9E+03	9.5E+04	300	0.057	449.3
Fuel Oil Truck Enter Full	Tanker truck (6000 gal)	12.0	32.0	44.00	7.7E+02	3.4E+04	300	0.057	43.6
Fuel Oil Truck Leave Empty	Tanker truck (6000 gal)	12.0	0	12.00	7.7E+02	9.2E+03	300	0.057	43.6
Aggregate/RAP Loader Full	Front-end loader (3 CY)	15.0	4.2	19.20	1.3E+06	2.5E+07	300	0.057	73177.8
Aggregate/RAP Loader Empty	Front-end loader (3 CY)	15.0	0	15.00	1.3E+06	1.9E+07	300	0.057	73177.8
Asphalt Concrete Truck Leave Full	Dump truck (16 CY)	17.0	24.0	41.00	2.4E+05	9.7E+06	300	0.057	13480.1
Asphalt Concrete Truck Enter Empty	Dump truck (16 CY)	17.0	0	17.00	2.4E+05	4.0E+06	300	0.057	13480.1
	Total				**3.6E+06**	**7.2E+07**			**2.0E+05**

Average Vehicle Weight Per Trip =	20.3	tons/trip
Average Miles Per Trip =	0.057	miles/trip

Unmitigated Emission Factor, Ef = [k * (sL)^0.91 * (W)^1.02] (Equation 1 from AP-42 13.2.1)

	PM	PM10	PM2.5	
where k =	0.011	0.0022	0.00054	lb/mi = particle size multiplier (AP-42 Table 13.2.1-1)
W =	20.3	20.3	20.3	tons = average vehicle weight (provided by source)
sL =	0.6	0.6	0.6	g/m^2 = Ubitiguous Baseline Silt Loading Values of paved roads (Table 13.2.1-3 for summer months)

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, Eext = E * [1 - (p/4N)]
Mitigated Emission Factor, Eext = Ef * [1 - (p/4N)]

where p =	125	days of rain greater than or equal to 0.01 inches (see Fig. 13.2.1-2)
N =	365	days per year

	PM	PM10	PM2.5	
Unmitigated Emission Factor, Ef =	0.15	0.03	0.01	lb/mile
Mitigated Emission Factor, Eext =	0.14	0.03	0.01	lb/mile
Dust Control Efficiency =	50%	50%	50%	(pursuant to control measures outlined in fugitive dust control plan)

Process	Vehicle Type	Unmitigated PTE of PM (tons/yr)	Unmitigated PTE of PM10 (tons/yr)	Unmitigated PTE of PM2.5 (tons/yr)	Mitigated PTE of PM (tons/yr)	Mitigated PTE of PM10 (tons/yr)	Mitigated PTE of PM2.5 (tons/yr)	Controlled PTE of PM (tons/yr)	Controlled PTE of PM10 (tons/yr)	Controlled PTE of PM2.5 (tons/yr)
Aggregate/RAP Truck Enter Full	Dump truck (16 CY)	1.02	0.20	0.05	0.93	0.19	0.05	0.47	0.09	0.02
Aggregate/RAP Truck Leave Empty	Dump truck (16 CY)	1.02	0.20	0.05	0.93	0.19	0.05	0.47	0.09	0.02
Asphalt Cement/Binder Truck Enter Full	Tanker truck (6000 gal)	0.033	0.007	1.6E-03	0.031	0.006	1.5E-03	0.015	3.1E-03	7.5E-04
Asphalt Cement/Binder Truck Leave Empty	Tanker truck (6000 gal)	0.033	0.007	1.6E-03	0.031	0.006	1.5E-03	0.015	3.1E-03	7.5E-04
Fuel Oil Truck Enter Full	Tanker truck (6000 gal)	3.2E-03	6.5E-04	1.6E-04	3.0E-03	5.9E-04	1.5E-04	1.5E-03	3.0E-04	7.3E-05
Fuel Oil Truck Leave Empty	Tanker truck (6000 gal)	3.2E-03	6.5E-04	1.6E-04	3.0E-03	5.9E-04	1.5E-04	1.5E-03	3.0E-04	7.3E-05
Aggregate/RAP Loader Full	Front-end loader (3 CY)	5.44	1.09	0.27	4.98	1.00	0.24	2.49	0.50	0.12
Aggregate/RAP Loader Empty	Front-end loader (3 CY)	5.44	1.09	0.27	4.98	1.00	0.24	2.49	0.50	0.12
Asphalt Concrete Truck Leave Full	Dump truck (16 CY)	1.00	0.20	0.05	0.92	0.18	0.04	0.46	0.09	0.02
Asphalt Concrete Truck Enter Empty	Dump truck (16 CY)	1.00	0.20	0.05	0.92	0.18	0.04	0.46	0.09	0.02
	Totals	**15.00**	**3.00**	**0.74**	**13.72**	**2.74**	**0.67**	**6.86**	**1.37**	**0.34**

Methodology
Maximum Material Handling Throughput = [Annual Asphalt Production Limitation (tons/yr)] * [1 - Percent Asphalt Cement/Binder (weight %)]
Maximum Asphalt Cement/Binder Throughput = [Annual Asphalt Production Limitation (tons/yr)] * [Percent Asphalt Cement/Binder (weight %)]
Maximum Weight of Vehicle and Load (tons/trip) = [Maximum Weight of Vehicle (tons/trip)] + [Maximum Weight of Load (tons/trip)]
Maximum trips per year (trip/yr) = [Throughput (tons/yr)] / [Maximum Weight of Load (tons/trip)]
Total Weight driven per year (ton/yr) = [Maximum Weight of Vehicle and Load (tons/trip)] * [Maximum trips per year (trip/yr)]
Maximum one-way distance (mi/trip) = [Maximum one-way distance (feet/trip) / [5280 ft/mile]
Maximum one-way miles (miles/yr) = [Maximum trips per year (trip/yr)] * [Maximum one-way distance (mi/trip)]
Average Vehicle Weight Per Trip (ton/trip) = SUM[Total Weight driven per year (ton/yr)] / SUM[Maximum trips per year (trip/yr)]
Average Miles Per Trip (miles/trip) = SUM[Maximum one-way miles (miles/yr)] / SUM[Maximum trips per year (trip/yr)]
Unmitigated PTE (tons/yr) = (Maximum one-way miles (miles/yr)) * (Unmitigated Emission Factor (lb/mile)) * (ton/2000 lbs)
Mitigated PTE (tons/yr) = (Maximum one-way miles (miles/yr)) * (Mitigated Emission Factor (lb/mile)) * (ton/2000 lbs)
Controlled PTE (tons/yr) = (Mitigated PTE (tons/yr)) * (1 - Dust Control Efficiency)

Abbreviations
PM = Particulate Matter
PM10 = Particulate Matter (<10 um)
PM2.5 = Particulate Matter (<2.5 um)
PM2.5 = PM10
PTE = Potential to Emit

Appendix A.1: Unlimited Emissions Calculations
Cold Mix Asphalt Production and Stockpiles

Company Name: J.H. Rudolph & Company, Inc.
Source Address: 3300 South Green River Road, Evansville, IN 47715
Permit Number: F163-23182-00186 (formerly plant ID 163-03408)
Significant Permit Revision: F163-31195-00186
Reviewer: Bruce Farrar
Date: November 30, 2011

The following calculations determine the amount of VOC and HAP emissions created from volatilization of solvent used as diluent in the liquid binder for cold mix asphalt production

Maximum Annual Asphalt Production =	5,694,000	tons/yr
Percent Asphalt Cement/Binder (weight %) =	5.0%	
Maximum Asphalt Cement/Binder Throughput =	284,700	tons/yr

Volatile Organic Compounds

	Maximum weight % of VOC solvent in binder*	Weight % VOC solvent in binder that evaporates	Maximum VOC Solvent Usage (tons/yr)	PTE of VOC (tons/yr)
Cut back asphalt rapid cure (assuming gasoline or naphtha solvent)	25.3%	95.0%	72,029.1	68,427.6
Cut back asphalt medium cure (assuming kerosene solvent)	28.6%	70.0%	81,424.2	56,996.9
Cut back asphalt slow cure (assuming fuel oil solvent)	20.0%	25.0%	56,940.0	14,235.0
Emulsified asphalt with solvent (assuming water, emulsifying agent, and 15% fuel oil solvent)	15.0%	46.4%	42,705.0	19,815.1
Other asphalt with solvent binder	25.9%	2.5%	73,737.3	1,843.4
			Worst Case PTE of VOC =	**68,427.6**

Hazardous Air Pollutants

Worst Case Total HAP Content of VOC solvent (weight %)* =	26.08%	
Worst Case Single HAP Content of VOC solvent (weight %)* =	9.0%	Xylenes
PTE of Total HAPs (tons/yr) =	**17,848.46**	
PTE of Single HAP (tons/yr) =	**6,158.49**	**Xylenes**

Hazardous Air Pollutant (HAP) Content (% by weight) For Various Petroleum Solvents*

		Hazardous Air Pollutant (HAP) Content (% by weight)* For Various Petroleum Solvents				
Volatile Organic HAP	CAS#	Gasoline	Kerosene	Diesel (#2) Fuel Oil	No. 2 Fuel Oil	No. 6 Fuel Oil
1,3-Butadiene	106-99-0	3.70E-5%				
2,2,4-Trimethylpentane	540-84-1	2.40%				
Acenaphthene	83-32-9		4.70E-5%		1.80E-4%	
Acenaphthylene	208-96-8		4.50E-5%		6.00E-5%	
Anthracene	120-12-7		1.20E-6%	5.80E-5%	2.80E-5%	5.00E-5%
Benzene	71-43-2	1.90%		2.90E-4%		
Benzo(a)anthracene	56-55-3			9.60E-7%	4.50E-7%	5.50E-4%
Benzo(a)pyrene	50-32-8			2.20E-6%	2.10E-7%	4.40E-5%
Benzo(g,h,i)perylene	191-24-2			1.20E-7%	5.70E-8%	
Biphenyl	92-52-4			6.30E-4%	7.20E-5%	
Chrysene	218-01-9			4.50E-7%	1.40E-6%	6.90E-4%
Ethylbenzene	100-41-4	1.70%		0.07%	3.40E-4%	
Fluoranthene	206-44-0		7.10E-6%	5.90E-5%	1.40E-5%	2.40E-4%
Fluorene	86-73-7		4.20E-5%	8.60E-4%	1.90E-4%	
Indeno(1,2,3-cd)pyrene	193-39-5			1.60E-7%		1.00E-4%
Methyl-tert-butylether	1634-04-4	0.33%				
Naphthalene	91-20-3	0.25%	0.31%	0.26%	0.22%	4.20E-5%
n-Hexane	110-54-3	2.40%				
Phenanthrene	85-01-8		8.60E-6%	8.80E-4%	7.90E-4%	2.10E-4%
Pyrene	129-00-0		2.40E-6%	4.60E-5%	2.90E-5%	2.30E-5%
Toluene	108-88-3	8.10%		0.18%	6.20E-4%	
Total Xylenes	1330-20-7	9.00%		0.50%	0.23%	
Total Organic HAPs		**26.08%**	**0.33%**	**1.29%**	**0.68%**	**0.19%**
Worst Single HAP		**9.00% Xylenes**	**0.31% Naphthalene**	**0.50% Xylenes**	**0.23% Xylenes**	**0.07% Chrysene**

Methodology
Maximum Asphalt Cement/Binder Throughput = [Annual Asphalt Production Limitation (tons/yr)] * [Percent Asphalt Cement/Binder (weight %)]
Maximum VOC Solvent Usage (tons/yr) = [Maximum Asphalt Cement/Binder Throughput (tons/yr)] * [Maximum Weight % of VOC Solvent in Binder]
PTE of VOC (tons/yr) = [Weight % VOC solvent in binder that evaporates] * [Maximum VOC Solvent Usage (tons/yr)]
PTE of Total HAPs (tons/yr) = [Worst Case Total HAP Content of VOC solvent (weight %)] * [Worst Case Limited PTE of VOC (tons/yr)]
PTE of Single HAP (tons/yr) = [Worst Case Single HAP Content of VOC solvent (weight %)] * [Worst Case Limited PTE of VOC (tons/yr)]
*Source: Petroleum Liquids. Potter, T.L. and K.E. Simmons. 1998. Total Petroleum Hydrocarbon Criteria Working Group Series, Volume 2. Composition of Petroleum Mixtures. The Association for Environmental Health and Science. Available on the Internet at: http://www.aehs.com/publications/catalog/contents/tph.htm

Abbreviations
VOC = Volatile Organic Compounds
PTE = Potential to Emit

Appendix A.1: Unlimited Emissions Calculations
Gasoline Fuel Transfer and Dispensing Operation

Company Name: J.H. Rudolph & Company, Inc.
Source Address: 3300 South Green River Road, Evansville, IN 47715
Permit Number: F163-23182-00186 (formerly plant ID 163-03408)
Significant Permit Revision: F163-31195-00186
Reviewer: Bruce Farrar
Date: November 30, 2011

To calculate evaporative emissions from the gasoline dispensing fuel transfer and dispensing operation handling emission factors from AP-42 Table 5.2-7 were used. The total potential emission of VOC is as follows:

Gasoline Throughput =	500	gallons/day
=	182.5	kgal/yr

Volatile Organic Compounds

Emission Source	Emission Factor (lb/kgal of throughput)	PTE of VOC (tons/yr)*
Filling storage tank (balanced submerged filling)	0.3	0.03
Tank breathing and emptying	1.0	0.09
Vehicle refueling (displaced losses - controlled)	1.1	0.10
Spillage	0.7	0.06
Total		**0.28**

Hazardous Air Pollutants

Worst Case Total HAP Content of VOC solvent (weight %)* =	26.08%	
Worst Case Single HAP Content of VOC solvent (weight %)* =	9.0%	Xylenes
Limited PTE of Total HAPs (tons/yr) =	**0.07**	
Limited PTE of Single HAP (tons/yr) =	**0.03**	**Xylenes**

Methodology
The gasoline throughput was provided by the source.
Gasoline Throughput (kgal/yr) = [Gasoline Throughput (lbs/day)] * [365 days/yr] * [kgal/1000 gal]
PTE of VOC (tons/yr) = [Gasoline Throughput (kgal/yr)] * [Emission Factor (lb/kgal)] * [ton/2000 lb]
PTE of Total HAPs (tons/yr) = [Worst Case Total HAP Content of VOC solvent (weight %)] * [PTE of VOC (tons/yr)]
PTE of Single HAP (tons/yr) = [Worst Case Single HAP Content of VOC solvent (weight %)] * [PTE of VOC (tons/yr)]
*Source: Petroleum Liquids. Potter, T.L. and K.E. Simmons. 1998. Total Petroleum Hydrocarbon Criteria Working Group Series, Volume 2. Composition of Petroleum Mixtures. The Association for Environmental Health and Science. Available on the Internet at: http://www.aehs.com/publications/catalog/contents/tph.htm

Abbreviations
VOC = Volatile Organic Compounds
PTE = Potential to Emit

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

Brian Peters
J H Rudolph & Company, Inc.
534 Mozart St
Tell City, IN 47586

Re: Public Notice
J.H. Rudolph and Company, Inc.
Permit Level: FESOP
Permit Number: 163-31195-00186

Dear Mr. Peters:

Enclosed is a copy of your draft FESOP, Technical Support Document, emission calculations, and the Public Notice which will be printed in your local newspaper.

The Office of Air Quality (OAQ) has submitted the draft permit package to the Evansville Vanderburgh Public Library, Central Library, 22 SE 5th Street in Evansville, IN.
As a reminder, you are obligated by 326 IAC 2-1.1-6(c) to place a copy of the complete permit application at this library no later than ten (10) days after submittal of the application or additional information to our department. We highly recommend that even if you have already placed these materials at the library, that you confirm with the library that these materials are available for review and request that the library keep the materials available for review during the entire permitting process.

You will not be responsible for collecting any comments, nor are you responsible for having the notice published in the newspaper. The OAQ has requested that the Evansville Courier in Evansville, IN publish this notice no later than March 24, 2012.

Please review the enclosed documents carefully. This is your opportunity to comment on the draft permit and notify the OAQ of any corrections that are needed before the final decision. Questions or comments about the enclosed documents should be directed to Bruce Farrar, Indiana Department of Environmental Management, Office of Air Quality, 100 N. Senate Avenue, Indianapolis, Indiana, 46204 or call (800) 451-6027, and ask for extension4-5401 or dial (317) 234-5401.

Sincerely,

Debra Pabst
Permits Branch
Office of Air Quality

Enclosures
PN Applicant Cover letter. dot 3/27/08

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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ATTENTION: PUBLIC NOTICES, LEGAL ADVERTISING

March 21, 2012

Evansville Courier
P.O. Box 268
Evansville, Indiana 47702-0268

Enclosed, please find one Indiana Department of Environmental Management Notice of Public Comment for J.H. Rudolph and County in Vanderburgh County, Indiana.

Since our agency must comply with requirements which call for a Notice of Public Comment, we request that you print this notice one time, no later than March 24, 2012

Please send a notarized form, clippings showing the date of publication, and the billing to the Indiana Department of Environmental Management, Accounting, Room N1345, 100 North Senate Avenue, Indianapolis, Indiana, 46204.

We are required by the Auditor's Office to request that you place the Federal ID Number on all claims. If you have any conflicts, questions, or problems with the publishing of this notice or if you do not receive complete public notice information for this notice, please call Debra Pabst at 800-451-6027 and ask for extension 4-5256 or dial 317-234-5256.

Sincerely,

Debra Pabst
Permit Branch
Office of Air Quality

cc: Pat Cuzzort: OAQ Billing, Licensing and Training Section
Permit Level: FESOP
Permit Number: 163-31195-00186

Enclosure
PN Newspaper.dot 3/27/08

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

To: Evansville Vanderburgh Public Library

From: Matthew Stuckey, Branch Chief
Permits Branch
Office of Air Quality

Subject: **Important Information to Display Regarding a Public Notice for an Air Permit**

Applicant Name: J.H. Rudolph & Company
Permit Number: **163-31195-00186**

Enclosed is a copy of important information to make available to the public. This proposed project is regarding a source that may have the potential to significantly impact air quality. Librarians are encouraged to educate the public to make them aware of the availability of this information. The following information is enclosed for public reference at your library:

- Notice of a 30-day Period for Public Comment
- Request to publish the Notice of 30-day Period for Public Comment
- Draft Permit and Technical Support Document

You will not be responsible for collecting any comments from the citizens. Please refer all questions and request for the copies of any pertinent information to the person named below.

Members of your community could be very concerned in how these projects might affect them and their families. **Please make this information readily available until you receive a copy of the final package.**

If you have any questions concerning this public review process, please contact Joanne Smiddie-Brush, OAQ Permits Administration Section at 1-800-451-6027, extension 3-0185. Questions pertaining to the permit itself should be directed to the contact listed on the notice.

Enclosures
PN Library.dot 03/27/08

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.

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Indianapolis, Indiana 46204
(317) 232-8603
Toll Free (800) 451-6027
www.idem.IN.gov

Notice of Public Comment

J H Rudolph & Company, Inc
163-31195-00186

Dear Concerned Citizen(s):

You have been identified as someone who could potentially be affected by this proposed air permit. The Indiana Department of Environmental Management, in our ongoing efforts to better communicate with concerned citizens, invites your comment on the draft permit.

Enclosed is a Notice of Public Comment, which has been placed in the Legal Advertising section of your local newspaper. The application and supporting documentation for this proposed permit have been placed at the library indicated in the Notice. These documents more fully describe the project, the applicable air pollution control requirements and how the applicant will comply with these requirements.

If you would like to comment on this draft permit, please contact the person named in the enclosed Public Notice. Thank you for your interest in the Indiana's Air Permitting Program.

Please Note: *If you feel you have received this Notice in error, or would like to be removed from the Air Permits mailing list, please contact Patricia Pear with the Air Permits Administration Section at 1-800-451-6027, ext. 3-6875 or via e-mail at PPEAR@IDEM.IN.GOV. If you have recently moved and this Notice has been forwarded to you, please notify us of your new address and if you wish to remain on the mailing list. Mail that is returned to IDEM by the Post Office with a forwarding address in a different county will be removed from our list unless otherwise requested.*

Enclosure
PN AAA Cover.dot 3/27/08

Mail Code 61-53

IDEM Staff	DPABST 3/21/2012 J H Rudolph & Company, Inc 163-31195-00186 (Draft)			AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender	▶	Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204	Type of Mail: **CERTIFICATE OF MAILING ONLY**	

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee Remarks
1		Brian Peters J H Rudolph & Company, Inc 534 Mozart St Tell City IN 47586 (Source CAATS)									
2		Alvin Evans COO J H Rudolph & Company, Inc PO Box 5226 Evansville IN 47716-5226 *(RO CAATS)*									
3		Evansville Library (Branch) Oaklyn Branch, 3001 Oaklyn Dr Evansville IN 47711 *(Library)*									
4		Evansville City Council and Mayors Office 1NW MLK Blvd, Rm 302 Evansville IN 47708 *(Local Official)*									
5		Vanderburgh County Commissioners 1 NW MLK Blvd, Rm 305 Evansville IN 47708 *(Local Official)*									
6		Mr. Wendell Hibdon Plumbers & Steam Fitters Union, Local 136 2300 St. Joe Industrial Park Dr Evansville IN 47720 *(Affected Party)*									
7		Mr. Don Mottley Save Our Rivers 6222 Yankeetown Hwy Boonville IN 47601 *(Affected Party)*									
8		Vanderburgh County Health Dept. 420 Milberry Street Evansville IN 47713-1888 *(Health Department)*									
9		Kim Sherman 3355 Woodview Drive Newburgh IN 47630 *(Affected Party)*									
10		Mr. Mark Wilson Evansville Courier & Press P.O. Box 268 Evansville IN 47702-0268 *(Affected Party)*									
11		Mr. John Blair 800 Adams Ave Evansville IN 47713 *(Affected Party)*									
12		Evansville EPA 100 E. Walnut St. Suite 100, Newsome Center Evansville IN 47713 *(Local Official)*									
13		Christopher Zirkelbach Environmental & Safety Solutions 201 NW Fourth Street, Old Court House, Ste 106 Evansville IN 47708 (Consultant)									
14		David Boggs 216 Western Hills Dr Mt Vernon IN 47620 *(Affected Party)*									
15											

Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is $50,000 per piece subject to a limit of $50, 000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is $500. The maximum indemnity payable is $25,000 for registered mail, sent with optional postal insurance. See ***Domestic Mail Manual*** **R900, S913**, and **S921** for limitations of coverage on inured and COD mail. See ***International Mail Manual*** for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.

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