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: Interested Parties / Applicant

DATE: November 16, 2010

RE: Gohmann Asphalt / 147-29141-05167

FROM: Matthew Stuckey, Branch Chief
Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

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

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

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

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

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

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

Enclosures
FNPER.dot12/03/07

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Federally Enforceable State Operating Permit Renewal
OFFICE OF AIR QUALITY

Gohmann Asphalt & Construction Inc.
Portable

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

The Permittee must comply with all conditions of this permit. Noncompliance with any 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.: F147-29141-05167	
Issued by: Iryn Callung, Section Chief Permits Branch Office of Air Quality	Issuance Date: November 16, 2010 Expiration Date: November 16, 2020

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SECTION A SOURCE SUMMARY

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

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

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

Initial Source Address:	HWY 68, Dale, Indiana 47523
General Source Phone Number:	812-246-3359
SIC Code:	2951
County Location:	Spencer
Source Location Status:	Nonattainment for PM2.5 standard in Ohio Twp., and 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 portable source consists of the following emission units and pollution control devices:

(a) One (1) hot mix asphalt drum mixer/dryer, identified as EU-01, constructed in 1998, capable of processing a maximum of 450 tons per hour of raw material, equipped with one (1) 120 million British thermal units (MMBtu) per hour natural gas fired burner, using waste oil and #2 fuel oil as primary oil and #4 distillate fuel oil, propane, and natural gas as backup fuels, processing steel slag in the aggregate mix; equipped with one (1) baghouse for particulate control and exhausting through one (1) stack, identified as stack SV-1. This source does not produce or uses cold mix asphalt and no shingles are used at this source. No crushers are used.

Under 40 CFR 60, Subpart I, this hot mix asphalt plant is considered an affected facility.

(b) Feeding, conveying and loading operations consisting of the following:

(1) Two (2) asphalt storage silos, rated at 200 tons;

(2) One (1) asphalt storage silos, rated at 100 tons;

(3) Fifteen (15) storage piles, including:

(i) Five (5) reclaimed asphalt pavement (RAP) piles, total capacity 5,500 tons;
(ii) Five (5) lime stone pile, total capacity 15,000 tons;
(iii) One (1) sandstone Pile, total capacity 2,000 tons;
(iv) Three (3) sand Pile, total capacity 6,600 tons;
(v) One (1) steel slag pile, total capacity 6,000 tons;

(4) Five (5) cold feed bins for coarse to fine aggregate;

(5) Four (4) conveyors, including:

(i) Three (3) transporting coarse to fine aggregate to the drum mixer;

(ii) One (1) transporting recycled asphalt pavement to the drum mixer;

(c) One (1) 2.0 million British Thermal Units (MMBtu) per hour hot oil heater firing natural gas as the primary fuel and # 2 distillate fuel oil as the backup fuel, and exhausting to stack SV-2;

(d) Three (3) storage tanks exhausting at stacks SV-3, SV-4, and SV-5, including:

(1) One (1) liquid asphalt storage tank, identified as Tank-01, with a capacity of 35,000 gallons; and

(3) One (1) #4 waste oil fuel storage tank, identified as Tank-02, with a capacity of 15,000 gallons.

(3) One (1) #2 diesel fuel storage tank, identified as Tank-03, with a capacity of 1,000 gallons.

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

This portable source also includes the following insignificant activities:

(a) Process vessel degassing and cleaning to prepare for internal repairs.

(b) Combustion related activities, space heaters, process heaters, or boilers including the following;

(1) Fuel oil-fired combustion sources with heat input equal to or less than two million (2,000,000) Btu/hr and firing fuel containing less than five-tenths (0.5) percent;

(2) Propane or liquefied petroleum gas, or butane-fired combustion sources with heat input equal to or less than six million (6,000,000) Btu/hr;

(3) Equipment powered by diesel fuel fired or natural gas fired internal combustion engines of capacity equal to or less than five hundred thousand (500,000) Btu/hour, except where total capacity of equipment operated by one stationary source exceeds two million (2,000,000) Btu/hour;

(c) Combustion source flame safety purging on startup;

(d) Air compressors and pneumatically operated equipment, including hand tools;

(e) A petroleum fuel, other than gasoline, dispensing facility, having a storage capacity of less than or equal to ten thousand five hundred (10,500) gallons, and dispensing three thousand five hundred (3,500) gallons per day or less.

(f) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids;

(g) Application of oils, greases, lubricants or other nonvolatile materials applied as temporary protective coatings;

(h) Cleaners and solvents characterized as follows:

(1) having a vapor pressure equal to or less than 2 kPa; 15 mm Hg; or 0.3 psi measured at 38°C (100°F) or;

(2) having a vapor pressure equal to or less than 0.7 kPa; 5 mm Hg; or 0.1psi measured at

20°C(68°F); the use of which for all cleaners and solvents combined does not exceed one hundred forty-five (145) gallons per twelve (12) months;

(i) Activities related to ventilation, venting equipment and refrigeration;

(j) Storage tanks, vessels, and containers holding or storing liquid substances that do not contain any VOC or HAP;

(k) Pressurized storage tanks and associated piping for the Acetylenes and the Liquid petroleum gas (LPG);

(l) Storage of drums containing maintenance raw materials;

(m) The equipment related to manufacturing activities not resulting in the emission of HAPs, cutting torches, soldering equipments, welding equipment.

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

(o) portable dust collectors

(p) Manual loading and unloading operations

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

(r) Vehicle travel on paved roads, unpaved roads, and parking lots; and

(s) Painting, including interior and exterior painting of buildings, and solvent use, excluding degreasing operations utilizing halogenated organic solvents.

(t) Lubrication, including hand held spray can lubrication, dipping metal parts into lubricating oil, and manual or automated addition of cutting oil in machining operations.

(u) Safety and emergency equipment, except engine driven fire pumps, including fire suppression systems and emergency road flares.

(v) Closed loop heating and cooling systems;

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

This portable source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) 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, F147-29141-05167, 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:

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

(2) the certification states that, 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 July 1 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)][326 IAC 2-8-5(a)(1)]

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

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, or Southwest Regional Office within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance and Enforcement Branch), or
Telephone Number: 317-233-0178 (ask for Office of Air Quality, Compliance and Enforcement Branch)
Facsimile Number: 317-233-6865
Southwest Regional Office phone: (812) 380-2305; fax: (812) 380-2304.

(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
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

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 F147-29141-05167 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) through (d) without a prior permit revision, if each of the following conditions is met:

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

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

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

(4) The Permittee notifies the:

Indiana Department of Environmental Management
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) through (d). The Permittee shall make such records available, upon reasonable request, for public review.

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

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

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

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

B.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 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 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

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

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

(a) Pursuant to 326 IAC 2-8:

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

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

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

(b) Pursuant to 326 IAC 2-2 (PSD), potential to emit particulate matter (PM) from the entire source shall be limited to less than one hundred (100) 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 forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4, when the source is located in any County except Lake or the areas specified in Condition C.3(b)(1) through (7).

(b) 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, when the source is located in the

following areas listed in 326 IAC 5-1-1(c):

(1) Clark County (Jefferson Township - Cities of Jeffersonville, Clarksville, Oak Park);

(2) Dearborn County (Lawrenceburg Township - Cities of Lawrenceburg and Greendale);

(3) Dubois County (Bainbridge Township - the City of Jasper);

(4) Marion County (except the area of Washington Township east of Fall Creek and the area of Franklin Township south of Thompson Road and east of Five Points Road);

(5) St. Joseph County (the area north of Kern Road and east of Pine Road);

(6) Vanderburgh County (the area included in the City of Evansville and Pigeon Township); and

(7) Vigo County (Indiana State University campus, 0.5km radius around UTM Easting 464,519.00, Northing 4,369,208.00, Zone 16.

(c) Opacity shall not exceed an average of twenty percent (20%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4, when the source is located in Lake County.

(d) 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, when the source is located in any County.

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

(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at

least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

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

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

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

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

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

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

All required notifications shall be submitted to:

Indiana Department of Environmental Management
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.9 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.10 Compliance Requirements [326 IAC 2-1.1-11]

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

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

C.11 Compliance Monitoring [326 IAC 2-8-4(3)][326 IAC 2-8-5(a)(1)]

Unless otherwise specified in this permit, 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.12 Continuous Compliance Plan [326 IAC 6.8-8-1] [326 IAC 6.8-8-8]

(a) Pursuant to 326 IAC 326 IAC 6.8-8-1, the Permittee shall submit to IDEM and maintain at source a copy of the Continuous Compliance Plan (CCP). The Permittee shall perform the inspections, monitoring and record keeping in accordance with the information in 326 IAC 6.8-8-5 through 326 IAC 6.8-8-7 or applicable procedures in the CCP.

(b) Pursuant to 326 IAC 6.8-8-8, the Permittee shall update the CCP, as needed, retain a copy of any changes and updates to the CCP at the source and make the updated CCP available for inspection by the department. The Permittee shall submit the updated CCP, if required to IDEM, OAQ within thirty (30) days of the update.

(c) Pursuant to 326 IAC 6.8-8, failure to submit a CCP, maintain all information required by the CCP at the source, or submit update to a CCP is a violation of 326 IAC 6.8-8.

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

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

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

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

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

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

(a) The Permittee shall maintain the most recently submitted written emergency reduction plans (ERPs) consistent with safe operating procedures.

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

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

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

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

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

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall 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.18 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]

(a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, 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.19 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

(a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported 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.

C.20 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]

(a) In accordance with the compliance schedule specified in 326 IAC 2-6-3(b)(1), the Permittee shall submit by July 1 an emission statement covering the previous calendar year as follows:

(1) starting in 2004 and every three (3) years thereafter, and

(2) any year not already required under (1) if the source emits volatile organic compounds or oxides of nitrogen into the ambient air at levels equal to or greater than twenty-five (25) tons during the previous calendar year.

(b) The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:

(1) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);

(2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1(32) ("Regulated pollutant, which is used only for purposes of Section 19 of this rule") from the source, for purpose of fee assessment.

The statement must be submitted to:

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

The emission statement does require a certification that meets the requirements of 326 IAC 2-6- by an " authorized individual" as defined by 326 IAC 2-1.1-1(1).

Portable Source Requirement

C.21 Relocation of Portable Sources [326 IAC 2-14-4] [326 IAC 2-1.1-5]

(a) This permit is approved for operation in all areas of Indiana except in severe nonattainment areas for ozone. This determination is based on the requirements of Prevention of Significant Deterioration in 326 IAC 2-2, 326 IAC 2-1.1-5, and Emission Offset requirements in 326 IAC 2-3. Prior to locating in any severe nonattainment area, the Permittee must submit a request and obtain a permit modification.

(b) A request to relocate shall be submitted to IDEM, OAQ at least thirty (30) days prior to the intended date of relocation. This submittal shall include the following:

(1) A list of governmental officials entitled to receive notice of application to relocate. IC 13-15-3-1

(2) A list of adjacent landowners that the Permittee will send written notice to not more than ten (10) days after submission of the request to relocate. IC 13-15-8

(3) The new location address of the portable source.

(4) Whether or not this portable source will be relocated to another source.

(5) If relocating to another source:

(A) Name, location address, and permit number of the source this portable source is relocating to.

(B) Whether or not the sources will be considered as one source. See Non Rule Policy (NRP) Air-005 and Air-006.

(6) If the sources will be considered as one source, whether or not the source to be relocated to has received the necessary approvals from IDEM to allow the relocation.

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).

(c) A “Relocation Site Approval” letter shall be obtained prior to relocating.

(d) A valid operation permit consists of this document and any subsequent “Relocation Site Approval” letter specifying the current location of the portable plant.

Stratospheric Ozone Protection

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

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

Emissions Unit Description:

(a) One (1) hot mix asphalt drum mixer/dryer, identified as EU-01, constructed in 1998, capable of processing a maximum of 450 tons per hour of raw material, equipped with one (1) 120 million British thermal units (MMBtu) per hour natural gas fired burner, using waste oil and #2 fuel oil as primary oil and #4 distillate fuel oil, propane, and natural gas as backup fuels, processing steel slag in the aggregate mix; equipped with one (1) baghouse for particulate control and exhausting through one (1) stack, identified as stack SV-1. This source does not produce or uses cold mix asphalt and no shingles are used at this source. No crushers are used.

Under 40 CFR 60, Subpart I, this hot mix asphalt plant is considered an affected facility.

(b) Feeding, conveying and loading operations consisting of the following:

(1) Two (2) asphalt storage silos, rated at 200 tons;

(2) One (1) asphalt storage silos, rated at 100 tons;

(3) Fifteen (15) storage piles, including:

(i) Five (5) reclaimed asphalt pavement (RAP) piles, total capacity 5,500 tons;
(ii) Five (5) lime stone pile, total capacity 15,000 tons;
(iii) One (1) sandstone Pile, total capacity 2,000 tons;
(iv) Three (3) sand Pile, total capacity 6,600 tons;
(v) One (1) steel slag pile, total capacity 6,000 tons;

(4) Five (5) cold feed bins for coarse to fine aggregate;

(5) Four (4) conveyors, including:

(i) Three (3) transporting coarse to fine aggregate to the drum mixer;

(ii) One (1) transporting recycled asphalt pavement to the drum mixer;

(c) One (1) 2.0 million British Thermal Units (MMBtu) per hour hot oil heater firing natural gas as the primary fuel and # 2 distillate fuel oil as the backup fuel, and exhausting to stack SV-2;

(d) Three (3) storage tanks exhausting at stacks SV-3, SV-4, and SV-5, including:

(1) One (1) liquid asphalt storage tank, identified as Tank-01, with a capacity of 35,000 gallons; and

(3) One (1) #4 waste oil fuel storage tank, identified as Tank-02, with a capacity of 15,000 gallons.

(3) One (1) #2 diesel fuel storage tank, identified as Tank-03, with a capacity of 1,000 gallons.

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

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

D.1.1 Particulate Matter (PM) [326 IAC 2-2]

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

(a) the amount of asphalt processed shall not exceed 600,000 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 0.642 pounds per ton of asphalt processed.

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

D.1.2 Dryer and Mixer FESOP and Emission Offset Limits [326 IAC 2-8-4] [326 IAC 2-2][326 IAC 2-3]

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

(a) The amount of asphalt processed shall not exceed 600,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

(b) The PM10 emissions from the dryer/mixer shall not exceed 0.275 pounds per ton of asphalt processed.

(c) The PM2.5 emissions from the dryer/mixer shall not exceed 0.310 pounds per ton of asphalt processed.

(d) The CO emissions from the dryer/mixer shall not exceed 0.13 pounds per ton of asphalt processed.

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

Compliance with these limitations, combined with the limited PTE from other emission units at this source, shall limit the source-wide total potential to emit PM10, PM2.5, CO, and VOC, to less than 100 tons per twelve (12) consecutive month period, and shall render 326 IAC 2-7 (Part 70) , 326 IAC 2-3, and 326 IAC 2-2 (PSD) not applicable.

D.1.3 Hazardous Air Pollutants (HAPs) [326 IAC 2-8-4][326 IAC 2-2][326 IAC 2-4.1]

Pursuant to 326 IAC 2-8-4, the Permittee shall comply with the following fuel and feedstock limitations for fuels combusted in the dryer/mixer burner and feedstock used in the dryer/mixer:

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

(b) The waste oil combusted shall not contain more than 0.30% ash, 0.10% chlorine, and 0.1% Lead.

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

D.1.4 Fuel and Slag Usage Limitations [326 IAC 2-8-4][326 IAC 2-2]

Pursuant to 326 IAC 2-8-4, the Permittee shall comply with the following fuel limitations combusted in the dryer/mixer burner:

(a) Sulfur Content Specifications

(1) The sulfur content of No.2 and No.4 fuel oil shall not exceed 0.50 percent by weight.

(2) The sulfur content of the waste fuel oil shall not exceed 0.50 percent by weight.

(3) The sulfur content of the Steel slag shall not exceed 0.66 percent by weight.

(4) 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 Usage and Slag Usage Limitations:

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

(1) Natural gas usage shall not exceed 180 million cubic feet per twelve (12) consecutive month period, with compliance determined at the end of each month;

(2) No. 2 fuel oil usage shall not exceed 2,663,353 gallons per twelve (12) consecutive month period, with compliance determined at the end of each month;

(3) No. 4 fuel oil usage shall not exceed 2,521,307 gallons per twelve (12) consecutive month period, with compliance determined at the end of each month;

(4) Propane usage shall not exceed 15,038,242 gallons per twelve (12) consecutive month period, with compliance determined at the end of each month;

(5) Waste oil usage shall not exceed 2,572,763 gallons per twelve (12) consecutive month period, with compliance determined at the end of each month;

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

(c) Multiple Fuel Usage 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 steel slag, emissions from the dryer/mixer shall be limited as follows:

(1) NOx emissions from the dryer/mixer shall be less than 97.75 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

(2) SO_2 emissions from the dryer/mixer and all other combustion equipment shall be less than 94.55 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with these limits, combined with the limited PTE from all other emission units at this source, shall limit the source-wide total potential to emit NOx and SO_2 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 (PSD), and 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP)) not applicable.

D.1.5 Sulfur Dioxide (SO_2) [326 IAC 7-1.1-2]

Pursuant to 326 IAC 7-1.1-2, the Permittee shall comply with the following:

(a) The sulfur dioxide (SO_2) emissions from the dryer/mixer burner shall not exceed five-tenths (0.5) pounds per MMBtu when using distillate oil.

(b) The sulfur dioxide (SO_2) emissions from the dryer/mixer burner shall not exceed one and six tenths (1.6) pounds per MMBtu heat input when using residual oil.

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

D.1.6 Particulate Matter (PM) [326 IAC 6.5-1-2] [326 IAC 6.8-1-2]

(a) Pursuant to 326 IAC 6.5-1-2(a) and 326 IAC 6.8-1-2(a), particulate emissions from the aggregate dryer/mixer shall not exceed 0.03 grain per dry standard cubic foot when operating in the counties listed in 326 IAC 6.5-1-1(a) or in Lake County.

(b) Pursuant to 326 IAC 6.5-1-2(a) and 326 IAC 6.8-1-2(a), particulate emissions from the material conveying and handling operation shall not exceed 0.03 grain per dry standard cubic foot when operating in the counties listed in 326 IAC 6.5-1-1(a) or in Lake County.

D.1.7 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

In order to render the requirements of 326 IAC 8-1-6 not applicable, the dryer/mixer shall be limited as follows:

(a) The amount of asphalt processed shall not exceed 600,000 tons per twelve (12) consecutive month period

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

Compliance with this limit shall limit the VOC PTE from the dryer/mixer to less than twenty-five (25) tons per 12 consecutive month period and shall render 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities) not applicable.

D.1.8 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan is required for this facility and its control device. Section B - Preventive maintenance plan contains the Permittee's obligation with regard to the preventive maintenance required by this condition. Preventive maintenance plan is attached as Attachment B.

Compliance Determination Requirements

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

(a) In order to demonstrate compliance with Conditions D.1.1(b), D.1.2(b), and D.1.2(c), the Permittee shall perform PM, PM10, and PM2.5 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 last valid compliance demonstration. PM10 and PM2.5 includes filterable and condensable particulate matter. 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.1.4(a)(3) and D.1.4(a)(4), when using Steel Furnace slag, the Permittee shall perform SO2 testing for the aggregate dryer within one hundred eighty (180) days of initial use of Steel Furnace slag in the aggregate mix, utilizing methods as approved by the Commissioner. Testing shall only be performed if the company has not previously performed SO2 testing while using Steel Furnace slag in the aggregate mix at one of their other Indiana facilities. Testing shall be conducted in accordance with Section C- Performance Testing.

D.1.10 Particulate Control

(a) In order to comply with Conditions D.1.1(b), D.1.2(b), D.1.2(c) and D.1.6, the baghouse for the dryer/mixer shall be in operation and control emissions from the emission unit 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.1.11 Multiple Fuel Usage and Slag Limitation

In order to comply with Condition D.1.4(c) when combusting more than one fuel per twelve (12) consecutive month period in the dryer/mixer burner, in conjunction with the use of steel slag, the Permittee shall limit fuel usage in the dryer/mixer burner according to the following formulas:

(1) NOx emissions from the dryer/mixer shall be less than 97.75 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

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

where:

N = tons of nitrogen oxide 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 last 12 months
F = gallons of No. 4 fuel oil used in last 12 months
P = gallons of Propane used in last 12 months
W = gallons of Waste oil used for last 12 months

Emission factors for Nitrogen Oxide
E_G = 190 lb/million cubic feet of natural gas
E_O = 24 lb/1000 gallons of No. 2 fuel oil
E_F = 47 lb/1000 gallons of No. 4 fuel oil
E_W = 19 lb/1000 gallons of Waste oil
E_P = 13 lb/1000 gallons of Propane

(2) SO_2 emissions from the dryer/mixer shall be less than 94.55 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

$$S = \frac{G(E_G) + O(E_O) + F(E_F) + W(E_W) + P(E_P) + T(E_T)}{2000 \text{ lbs/ton}}$$

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 last 12 months
F = gallons of No. 4 fuel oil used in last 12 months
W = gallons of Waste oil used in last 12 months
P = gallons of Propane used in last 12 months
T = tons of Steel slag used in last 12 months

Emission factors for Sulfur Dioxide
E_G = 0.60 lb/million cubic feet of natural gas
E_O = 71.00 lb/1000 gallons of No. 2 fuel oil
E_F = 75.00 lb/1000 gallons of No. 4 fuel oil
E_W = 73.5 lb/1000 gallons of Waste oil
E_P = 0.02 lb/1000 gallons of Propane
E_T = 0.0014 lb/ton of Steel slag used

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

D.1.12 Sulfur Dioxide (SO_2) Emissions and Sulfur Content

Steel Slag

(a) Compliance with the Steel slag limitations established in Condition D.1.4(a)(3) 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.

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 in (1) or (2) above shall not be refuted by evidence of compliance pursuant to the other method.

Fuel Oil and Waste Oil

(b) Compliance with the fuel limitations established in Conditions D.1.4(a) and D.1.5 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) Pursuant to 326 IAC 3-7-4, the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed five-tenths (0.5) pounds per million British

thermal units heat input when combusting No. 2 fuel oil, or one (1.00) pound per million British thermal units heat input when combusting waste fuel oil, by:

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

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

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

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

(2) 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.

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.1.13 Visible Emissions Notations

(a) Daily visible emission notations of the aggregate dryer, mixer, and burner baghouse stack exhaust and the 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 steps. 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.1.14 Parametric Monitoring

The Permittee shall record the pressure drop across the baghouse used in conjunction with the aggregate dryer/mixer, 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 2.0 and 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions and 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 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.1.15 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 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.1.16 Record Keeping Requirements

(a) To document the compliance status with Conditions D.1.1(a), D.1.2(a) and D.1.7(a), the Permittee shall keep records of the amount of asphalt processed through the dryer/mixer. Records necessary to demonstrate compliance shall be available within thirty (30) days of the end of each compliance period.

(b) To document the compliance status with Condition D.1.4(b)(7), the Permittee shall keep records of the amount of Steel slag processed through the dryer/mixer. Records necessary to demonstrate compliance shall be available within thirty (30) days of the end of each compliance period.

(c) To document the compliance status with Conditions D.1.4(a)(3), the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken daily and shall be complete and sufficient to establish compliance with the SO2 emission limits established in Conditions D.1.4(a)(3). For the sulfur content limit, the compliance determination period is each calendar month.

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

(2) Actual slag usage, sulfur content and equivalent sulfur dioxide emission rates for all slag used at the source per month;

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

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

(4) Slag supplier certifications;

(5) The name of the slag supplier; and

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

(d) To document the compliance status with Conditions D.1.3, D.1.4, and D.1.5, the Permittee shall maintain records in accordance with (1) through (7) below.

(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 per month;

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

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

(4) Fuel supplier certifications;

(5) The name of the fuel suppliers; and

(6) A statement from the fuel supplier that certifies the sulfur content of the No. 2 fuel oil, No. 4 fuel oil, and/or the Waste oil.

The Permittee shall maintain records of all recording/monitoring data and support information in accordance with Section C - General Record Keeping Requirements, of this permit. 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.

(e) To document the compliance status with Conditions D.1.4(c) and D.1.11 when combusting more than one fuel per twelve (12) consecutive month period in the dryer/mixer burner, the Permittee shall maintain records of actual fuel usage, and equivalent nitrogen oxides and sulfur dioxide emission rates for each fuel used at the source per month.

(f) To document the compliance status with Condition D.1.13, the Permittee shall maintain daily records of the visible emission notations from each of the conveyors, screens, material transfer points, and dryer/mixer stack (SV-1) exhaust. 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 plant did not operate that day).

(g) To document the compliance status with Condition D.1.14, the Permittee shall maintain the daily records of the pressure drop across the baghouse controlling the dryer/mixer. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading, (e.g., the dryer/mixer did not operate that day).

(h) Section C - General Record Keeping Requirements, contains the Permittee’s obligation with regard to the records required by this condition.

D.1.17 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.1.1(a), D.1.2(a), D.1.4(b), D.1.4(c), D.1. 7(a), and D.1.11 shall be submitted no 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 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.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(a) Process vessel degassing and cleaning to prepare for internal repairs.

(b) Combustion related activities, space heaters, process heaters, or boilers including the following;

(1) Fuel oil-fired combustion sources with heat input equal to or less than two million (2,000,000) Btu/hr and firing fuel containing less than five-tenths (0.5) percent;

(2) Propane or liquefied petroleum gas, or butane-fired combustion sources with heat input equal to or less than six million (6,000,000) Btu/hr;

(3) Equipment powered by diesel fuel fired or natural gas fired internal combustion engines of capacity equal to or less than five hundred thousand (500,000) Btu/hour, except where total capacity of equipment operated by one stationary source exceeds two million (2,000,000) Btu/hour;

(c) Combustion source flame safety purging on startup;

(d) Air compressors and pneumatically operated equipment, including hand tools;

(e) A petroleum fuel, other than gasoline, dispensing facility, having a storage capacity of less than or equal to ten thousand five hundred (10,500) gallons, and dispensing three thousand five hundred (3,500) gallons per day or less.

(f) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids;

(g) Application of oils, greases, lubricants or other nonvolatile materials applied as temporary protective coatings;

(h) Cleaners and solvents characterized as follows:

(1) having a vapor pressure equal to or less than 2 kPa; 15 mm Hg; or 0.3 psi measured at 38°C (100°F) or;

(2) having a vapor pressure equal to or less than 0.7 kPa; 5 mm Hg; or 0.1psi measured at 20°C(68°F); the use of which for all cleaners and solvents combined does not exceed one hundred forty-five (145) gallons per twelve (12) months;

(i) Activities related to ventilation, venting equipment and refrigeration;

(j) Storage tanks, vessels, and containers holding or storing liquid substances that do not contain any VOC or HAP;

(k) Pressurized storage tanks and associated piping for the Acetylenes and the Liquid petroleum gas (LPG);

(l) Storage of drums containing maintenance raw materials;

(m) The equipment related to manufacturing activities not resulting in the emission of HAPs, cutting torches, soldering equipments, welding equipment.

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

(o) portable dust collectors

(p) Manual loading and unloading operations

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

(r) Vehicle travel on paved roads, unpaved roads, and parking lots; and

(s) Painting, including interior and exterior painting of buildings, and solvent use, excluding degreasing operations utilizing halogenated organic solvents.

(t) Lubrication, including hand held spray can lubrication, dipping metal parts into lubricating oil, and manual or automated addition of cutting oil in machining operations.

(u) Safety and emergency equipment, except engine driven fire pumps, including fire suppression systems and emergency road flares.

(v) Closed loop heating and cooling systems;

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

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

D.2.1 Fugitive Particulate Matter [326 IAC 6.8-10]

Pursuant to 326 IAC 6.8-10-3, the particulate matter emissions from source wide activities shall meet the following requirements whenever the plant is located in Lake County:

(a) The average instantaneous opacity of fugitive particulate emissions from a paved road shall not exceed ten percent (10%).

(b) The average instantaneous opacity of fugitive particulate emissions from an unpaved road shall not exceed ten percent (10%).

(c) The average instantaneous opacity of fugitive particulate emissions from batch transfer shall not exceed ten percent (10%).

(d) The opacity of fugitive particulate emissions from continuous transfer of material onto and out of storage piles shall not exceed ten percent (10%) on a three (3) minute average.

(e) The opacity of fugitive particulate emissions from storage piles shall not exceed ten percent (10%) on a six (6) minute average.

(f) There shall be a zero (0) percent frequency of visible emission observations of a material during the inplant transportation of material by truck or rail at any time.

(g) The opacity of fugitive particulate emissions from the inplant transportation of material by front end loaders and skip hoists shall not exceed ten percent (10%).

(h) There shall be a zero (0) percent frequency of visible emission observations from a building enclosing all or part of the material processing equipment, except from a vent in the building.

(i) The PM_{10} emissions from building vents shall not exceed twenty-two thousandths (0.022) grains per dry standard cubic foot and ten percent (10%) opacity.

(j) The opacity of particulate emissions from dust handling equipment shall not exceed ten percent (10%).

(k) Any facility or operation not specified in 326 IAC 6.8-10-3 shall meet a twenty percent (20%), three (3) minute average opacity standard.

The Permittee shall achieve these limits by controlling fugitive particulate matter emissions according to the Fugitive Dust Control Plan, submitted on June 3, 1996. The fugitive dust control plan is as follows: Roadways and stockpiles shall be watered on an as needed basis to prevent fugitive particulate emissions.

D.2.2 Volatile Organic Liquid Storage Vessels [326 IAC 8-9]

Pursuant to 326 IAC 8-9-1(b), the storage tanks are subject to reporting and recordkeeping provisions of section 6(a) and 6(b) of this rule when operating in Clark, Floyd, Lake, or Porter Counties.

D.2.3 Particulate Emissions [326 IAC 2-8]

Pursuant to 326 IAC 2-8, the emissions of PM10 from the unpaved roads shall be controlled according to the Fugitive Dust Control Plan submitted by the Permittee in attachment A.

SECTION E.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(a) One (1) hot mix asphalt drum mixer/dryer, identified as EU-01, constructed in 1998, capable of processing a maximum of 450 tons per hour of raw material, equipped with one (1) 120 million British thermal units (MMBtu) per hour natural gas fired burner, using waste oil and #2 fuel oil as primary oil and #4 distillate fuel oil, propane, and natural gas as backup fuels, processing steel slag in the aggregate mix; equipped with one (1) baghouse for particulate control and exhausting through one (1) stack, identified as stack SV-1. This source does not produce or uses cold mix asphalt and no shingles are used at this source. No crushers are used.

Under 40 CFR 60, Subpart I, this hot mix asphalt plant is considered an affected facility.

(b) Feeding, conveying and loading operations consisting of the following:

(1) Two (2) asphalt storage silos, rated at 200 tons;

(2) One (1) asphalt storage silos, rated at 100 tons;

(3) Fifteen (15) storage piles, including:

(i) Five (5) reclaimed asphalt pavement (RAP) piles, total capacity 5,500 tons;
(ii) Five (5) lime stone pile, total capacity 15,000 tons;
(iii) One (1) sandstone Pile, total capacity 2,000 tons;
(iv) Three (3) sand Pile, total capacity 6,600 tons;
(v) One (1) steel slag pile, total capacity 6,000 tons;

(4) Five (5) cold feed bins for coarse to fine aggregate;

(5) Four (4) conveyors, including:

(i) Three (3) transporting coarse to fine aggregate to the drum mixer;

(ii) One (1) transporting recycled asphalt pavement to the drum mixer;

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

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

E.1.1 NSPS Subpart I Requirements - Standards of Performance for Hot Mix Asphalt Facilities [40 CFR Part 60, Subpart I] [326 IAC 12-1]

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

§ 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 and mixing with asphalt cements.

[51 FR 12325, Apr. 10, 1986]

§ 60.92 Standard for particulate matter.

(a) On and after the date on which the performance test required to be conducted by §60.8 is completed, no owner or operator subject to the provisions of this subpart shall discharge or cause the discharge into the atmosphere from any affected facility any gases which:
(1) Contain particulate matter in excess of 90 mg/dscm (0.04 gr/dscf).
(2) Exhibit 20 percent opacity, or greater.

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

§ 60.93 Test methods and procedures.

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

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

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

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

[54 FR 6667, Feb. 14, 1989]

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) CERTIFICATION

Source Name: Gohmann Asphalt & Construction Inc. (Portable)
Initial Source Address: HWY 68, Dale, Indiana 47523
FESOP Permit No.: F147-29141-05167

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: Gohmann Asphalt & Construction Inc. (Portable)
Initial Source Address: HWY 68, Dale, Indiana 47523
FESOP Permit No.: F147-29141-05167

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: Gohmann Asphalt & Construction Inc. (Portable)
Initial Source Address: HWY 68, Dale, Indiana 47523
FESOP Permit No.: F147-29141-05167
Facility: Dryer/Burner (EU-01)
Parameter: Hot Mix Asphalt Production
Limit: The amount of hot mix asphalt produced in the dryer/burner shall not exceed 600,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

YEAR:_____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1	Hot Mix Asphalt Produced This Month (tons)	Hot Mix Asphalt Produced Previous 11 Months (tons)	12 Month Total Hot Mix Asphalt Produced (tons)
Month 2			
Month 3			

☐ 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:	Gohmann Asphalt & Construction Inc. (Portable)
Initial Source Address:	HWY 68, Dale, Indiana 47523
FESOP Permit No.:	F147-29141-05167
Facility:	EU-01
Parameters:	Nitrogen Oxides (NOx) and Sulfur Dioxide (SO_2) Emissions

Limit: Nitrogen oxides (NOx) emissions from dryer/mixer shall be less than 97.75 tons per twelve (12) consecutive month period based on the following equation:

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

where:
N = tons of nitrogen oxide 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 last 12 months
F = gallons of No. 4 fuel oil used in last 12 months
P = gallons of Propane used in last 12 months
W = gallons of Waste oil used for last 12 months

Emission factors for Nitrogen Oxide
E_G = 190 lb/million cubic feet of natural gas
E_O = 24 lb/1000 gallons of No. 2 fuel oil
E_F = 47 lb/1000 gallons of No. 4 fuel oil
E_W = 19 lb/1000 gallons of Waste oil
E_P = 13 lb/1000 gallons of Propane

Limit: SO_2 emissions from the dryer/mixer shall be less than 94.55 tons per twelve (12) consecutive month period based on the following equation:

$$S = G(E_G) + O(E_O) + F(E_F) + W(E_W) + P(E_P) + T(E_T)$$

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 last 12 months
F = gallons of No. 4 fuel oil used in last 12 months
W = gallons of Waste oil used in last 12 months
P = gallons of Propane used in last 12 months
T = tons of Steel slag used in last 12 months

Emission factors for Sulfur Dioxide
E_G = 0.60 lb/million cubic feet of natural gas
E_O = 71.00 lb/1000 gallons of No. 2 fuel oil
E_F = 75.00 lb/1000 gallons of No. 4 fuel oil
E_W = 73.5 lb/1000 gallons of Waste oil
E_P = 0.02 lb/1000 gallons of Propane
E_T = 0.0014 lb/ton of Steel slag used

Multiple Fuel / Slag Usage Quarterly Report

QUARTER: _____ YEAR: _____ **Page 2 of 2**

Month		Column 1	Column 2	Column 1 + Column 2	Equation Results
	Fuel Types / Slag (units)	Usage This Month	Usage Previous 11 Months	Usage 12 Month Total	Emissions (tons per 12 months)
Month 1	Natural Gas (million cubic feet)				Nitrogen Oxides = Sulfur Dioxide =
	No. 2 Fuel Oil (gallons)				
	No. 4 Fuel Oil (gallons)				
	Waste Fuel Oil (gallons)				
	Propane(gallons)				
	Steel Slag Usage (tons)				
Month 2	Natural Gas (million cubic feet)				Nitrogen Oxides = Sulfur Dioxide =
	No. 2 Fuel Oil (gallons)				
	No. 4 Fuel Oil (gallons)				
	Waste Fuel Oil (gallons)				
	Propane(gallons)				
	Steel Slag Usage (tons)				
Month 3	Natural Gas (million cubic feet)				Nitrogen Oxides = Sulfur Dioxide =
	No. 2 Fuel Oil (gallons)				
	No. 4 Fuel Oil (gallons)				
	Waste Fuel Oil (gallons)				
	Propane(gallons)				
	Steel Slag Usage (tons)				

☐ 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: _____

Attach a signed certification to complete this report.

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: Gohmann Asphalt & Construction Inc. (Portable)
Initial Source Address: HWY 68, Dale, Indiana 47523
FESOP Permit No.: F147-29141-05167

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 ANo 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: _____

1. Fugitive particulate matter (dust) emissions from paved roads, unpaved roads, and parking lots shall be controlled by one or more of the following measures:

    a. Paved roads and parking lots:
        i. Cleaning by vacuum sweeping on an as needed basis[i] (monthly at a minimum).
        ii. Power brooming while wet either from rain or application of water.

    b. Unpaved roads and parking lots:
        i. paving with asphalt.
        ii. Treating with emulsified asphalt on an as needed basis.
        iii. Treating with water on an as needed basis.
        iv. Double chip and seal the road surface and maintained on an as needed basis.

2. Fugitive particulate matter (dust) emissions from aggregate stockpiles shall be controlled by one or more of the following measures:

    a. Maintain minimum size and number of stockpiles of aggregate.
    b. Treating around the stockpile area with emulsified asphalt on an as needed basis.
    c. Treating around the stockpile area with water on an as needed basis.
    d. Treating the stockpiles with water on an as needed basis.

3. Fugitive particulate matter (dust) emissions from outdoor conveying of aggregates shall be controlled by the following measure:

    a. Apply water at the feed and the intermediate points on an as needed basis.

4. Fugitive particulate matter (dust) emissions resulting from the transferring of aggregates shall be controlled by one or more of the following measures:

    a. Minimize the vehicular distance between the transfer points.
    b. Enclose the transfer points.
    c. Apply water on transfer points on an as needed basis.

5. Fugitive particulate matter (dust) emissions resulting from transportation of aggregate by truck, front-end loader, etc., shall be controlled by one or more of the following measures:

    a. Tarping the aggregate hauling vehicles.
    b. Maintain vehicle bodies in a condition to prevent leakage.
    c. Spray the aggregates with water.
    d. Maintain a 10 MPH speed limit in the yard.

6. Fugitive particulate matter (dust) emissions resulting from the loading and unloading of aggregates shall be controlled by on or more of the following measures:

    a. Reduce free fall distance to a minimum.
    b. Reduce the rate of discharge of the aggregate.
    c. Spray the aggregate with water on an as needed basis.

[i] "An As Needed Basis" means the frequency or quantity of application necessary to minimize visible particulate matter emissions.

Attachment B

Permit #147-29141-05167

FORM CE-02 PREVENTATIVE MAINTENANCE PLAN

SPARE PARTS LIST:

ITEM NO	DESCRIPTION	QUANTITY
1	KIT-DIAPHRAGM	2
2	BAG	4

Individuals responsible for inspections, maintaining and repairing emission control devices are as follows:

Plant Operator

Loader Operator

Plant Manager – Dale Douglas

Inspection items, conditions and schedule:

1. Daily (while in production)
   a. Check fugitive dust enclosures and duct work for visible emissions.

2. Weekly (during operating season)
   a. Check duct work and fugitive dust enclosures for holes and leaks.
   b. Check duct work for plugging.

3. Monthly (during operating season)
   a. Check fugitive exhaust fan and drive belt tension.
   b. Check dampers in duct work for proper opening.

4. Yearly (during off season)
   a. Check fugitive dust enclosure and duct work for rust and worn places in steel.

Record keeping requirements:

1. Maintenance checks.
2. Maintenance performed.

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a General Asphalt Federally Enforceable State Operating Permit (FESOP) Transitioning to a FESOP Renewal

Source Description and Location

Source Name:	**Gohmann Asphalt & Construction, Inc. (Portable)**
Current Source Location:	**I-64 and SR 231, Dale, Indiana 47523**
County:	**Spencer**
SIC Code:	**2951**
Operation Permit No.:	**F 147-29141-05167**
Permit Reviewer:	**Swarna Prabha**

On April 6, 2010, the Office of Air Quality (OAQ) received an application from Gohmann Asphalt & Construction, Inc. related to the renewal of its General Asphalt FESOP for a portable asphalt plant, currently located at I-64 and SR 231, Dale, Indiana 47523. IDEM, OAQ is no longer issuing the General FESOP permit until the permit can be updated to coincide with current environmental standards and regulations. Therefore, Gohmann Asphalt & Construction, Inc. will be issued a Federally Enforceable State Operating Permit (FESOP). This plant does not manufacture or uses cold mix asphalt and shingles. It uses steel slag only in aggregate mix.

Existing Approvals

The source has been operating under General Asphalt FESOP No. F051-22395-05167, issued on March 27, 2006.

Due to this application, the source is transitioning from a General Asphalt FESOP to a FESOP.

County Attainment Status

The source is located in Spencer County.

Pollutant	Designation
SO_2	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O_3	Unclassifiable or attainment effective June 15, 2004, 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]Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005.
Basic nonattainment designation effective federally April 5, 2005, for the Ohio Twp for PM2.5. The remainder of Spencer County is unclassifiable or attainment effective April 5, 2005, for PM2.5.

(Air Pollution Control Board; 326 IAC 1-4-74; filed Dec 26, 2007, 1:43 p.m.: 20080123-IR-326070308FRA)

(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. Spencer 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) PM2.5
Spencer County has been classified as nonattainment for PM2.5 in Ohio Township. This source is located in Carter Township, therefore it is classified as attainment at this location. On May 8, 2008 U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for PM2.5 emissions, and the effective date of these rules was July 15th, 2008. Indiana has three years from the publication of these rules to revise its PSD rules, 326 IAC 2-2, to include those requirements. The May 8, 2008 rule revisions require IDEM to regulate PM10 emissions as a surrogate for PM2.5 emissions until 326 IAC 2-2 is revised.

(c) Other Criteria Pollutants
Spencer County has been classified as attainment or unclassifiable in Indiana for all criteria air 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.

Portable Source

(a) Current Location
This is a portable source and its present location is I-64 and SR 231, Dale, IN 47523. This source has not changed the location since the previous permit was issued.

(b) PSD, Emission Offset and Nonattainment New Source Review for PM2.5 [326 IAC 2-1.1-5] requirements.
The emissions from this portable source were reviewed under the requirements of the Prevention of Significant Deterioration (PSD) 326 IAC 2-2 and Emission Offset 326 IAC 2-3 and nonattainment for PM2.5 [326 IAC 2-1.1].

(c) Relocation
This portable source is allowed to operate in all areas of Indiana except in areas designated as severe for ozone. This determination is based on the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 326 IAC 2-3 (Emission Offset) and 326 IAC 2-1.1 (New Source Review for PM2.5).

Background and Description of Permitted Emission Units

The Office of Air Quality (OAQ) has reviewed an application, submitted by Gohmann Asphalt & construction, Inc. on April 6, 2010, relating to the renewal of a General FESOP. This portable plant does not manufacture or uses cold mix asphalt, therefore the related conditions are not included in this renewal. There is no RAP crusher at this plant.

The source consists of the following permitted emission units:

(a) One (1) hot mix asphalt drum mixer/dryer, identified as EU-01, constructed in 1998, capable of processing a maximum of 450 tons per hour of raw material, equipped with one (1) 120 million British thermal units (MMBtu) per hour natural gas fired burner, using waste oil and #2 fuel oil as primary oil and #4 distillate fuel oil, propane, and natural gas as backup fuels, processing steel slag in the aggregate mix; equipped with one (1) baghouse for particulate control and exhausting through one (1) stack, identified as stack SV-1. This source does not produce or uses cold mix asphalt and no shingles are used at this source. No crushers are used.

Under 40 CFR 60, Subpart I, this hot mix asphalt plant is considered an affected facility.

(b) Feeding, conveying and loading operations consisting of the following:

(1) Two (2) asphalt storage silos, rated at 200 tons;

(2) One (1) asphalt storage silos, rated at 100 tons;

(3) Fifteen (15) storage piles, including:

(i) Five (5) reclaimed asphalt pavement (RAP) piles, total capacity 5,500 tons;
(ii) Five (5) lime stone pile, total capacity 15,000 tons;
(iii) One (1) sandstone Pile, total capacity 2,000 tons;
(iv) Three (3) sand Pile, total capacity 6,600 tons;
(v) One (1) steel slag pile, total capacity 6,000 tons;

(4) Five (5) cold feed bins for coarse to fine aggregate;

(5) Four (4) conveyors, including:

(i) Three (3) transporting coarse to fine aggregate to the drum mixer;

(ii) One (1) transporting recycled asphalt pavement to the drum mixer;

(c) One (1) 2.0 million British Thermal Units (MMBtu) per hour hot oil heater firing natural gas as the primary fuel and # 2 distillate fuel oil as the backup fuel, and exhausting to stack SV-2;

(d) Three (3) storage tanks exhausting at stacks SV-3, SV-4, and SV-5, including:

(1) One (1) liquid asphalt storage tank, identified as Tank-01, with a capacity of 35,000 gallons; and

(3) One (1) #4 waste oil fuel storage tank, identified as Tank-02, with a capacity of 15,000 gallons.

(3) One (1) #2 diesel fuel storage tank, identified as Tank-03, with a capacity of 1,000 gallons.

Insignificant Activities

The source consists of the following insignificant activities:

(a) Process vessel degassing and cleaning to prepare for internal repairs.

(b) Combustion related activities, space heaters, process heaters, or boilers including the following;

(1) Fuel oil-fired combustion sources with heat input equal to or less than two million (2,000,000) Btu/hr and firing fuel containing less than five-tenths (0.5) percent;

(2) Propane or liquefied petroleum gas, or butane-fired combustion sources with heat input equal to or less than six million (6,000,000) Btu/hr;

(3) Equipment powered by diesel fuel fired or natural gas fired internal combustion engines of capacity equal to or less than five hundred thousand (500,000) Btu/hour, except where total capacity of equipment operated by one stationary source exceeds two million (2,000,000) Btu/hour;

(c) Combustion source flame safety purging on startup;

(d) Air compressors and pneumatically operated equipment, including hand tools;

(e) A petroleum fuel, other than gasoline, dispensing facility, having a storage capacity of less than or equal to ten thousand five hundred (10,500) gallons, and dispensing three thousand five hundred (3,500) gallons per day or less.

(f) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids;

(g) Application of oils, greases, lubricants or other nonvolatile materials applied as temporary protective coatings;

(h) Cleaners and solvents characterized as follows:

(1) having a vapor pressure equal to or less than 2 kPa; 15 mm Hg; or 0.3 psi measured at 38°C (100°F) or;

(2) having a vapor pressure equal to or less than 0.7 kPa; 5 mm Hg; or 0.1psi measured at 20°C(68°F); the use of which for all cleaners and solvents combined does not exceed one hundred forty-five (145) gallons per twelve (12) months;

(i) Activities related to ventilation, venting equipment and refrigeration;

(j) Storage tanks, vessels, and containers holding or storing liquid substances that do not contain any VOC or HAP;

(k) Pressurized storage tanks and associated piping for the Acetylenes and the Liquid petroleum gas (LPG);

(l) Storage of drums containing maintenance raw materials;

(m) The equipment related to manufacturing activities not resulting in the emission of HAPs, cutting torches, soldering equipments, welding equipment.

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

(o) portable dust collectors

(p) Manual loading and unloading operations

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

(r) Vehicle travel on paved roads, unpaved roads, and parking lots; and

(s) Painting, including interior and exterior painting of buildings, and solvent use, excluding degreasing operations utilizing halogenated organic solvents.

(t) Lubrication, including hand held spray can lubrication, dipping metal parts into lubricating oil, and manual or automated addition of cutting oil in machining operations.

(u) Safety and emergency equipment, except engine driven fire pumps, including fire suppression systems and emergency road flares.

(v) Closed loop heating and cooling systems;

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted emission units operating at this source at the time of this review.

Existing Approvals

The General FESOP (051-22396-05060) was issued on March 27, 2006.

All terms and conditions of previous permits issued pursuant to permitting programs approved into the State Implementation Plan have been either incorporated as originally stated, revised, or deleted by this permit. All previous permits are superseded by this permit. The applicant requested to add additional fuels and slag: No.4 fuel oil, and Steel slag.

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

(a) The fuel combusted by the dryer/mixer burner have changed as follows due to the revised calculations and emission factors.

1. The No. 2 fuel oil usage is revised from 1,200,000 gallons per twelve (12) month period to 2,663,353 gallons per twelve (12) consecutive month period.

2. The No. 4 fuel oil usage is revised from 600,000 gallons per twelve (12) month period to 2,521,307 gallons per twelve (12) consecutive month period.

3. The Propane usage is revised from 1,800,000 gallons per twelve (12) month period to 15,038,242 gallons per twelve (12) consecutive month period.

4. The Waste oil fuel usage is revised from 600,000 gallons per twelve (12) month period to 2,572,763 gallons per twelve (12) consecutive month period.

5. The Steel slag usage is revised from 0 tons per twelve (12) month period to12,000 tons per twelve (12) consecutive month period.

6. The source does not process the cold mix Asphalt, therefore the usage is revised from 50 tons per year to zero (0) tons per year and related conditions are removed from the permit.

(b) The Permittee requested to limit the PM10, PM2.5, SO2 and NOx emissions to less than 100 tons per year instead of 50 tons per year as specified in the existing General FESOP Permit, therefore the emissions factors for PM10 are revised from 0.13 lbs/ton to 0.275 lbs/ton.

Enforcement Issues

There are no pending enforcement actions related to this source.

Emission Calculations

See Appendix A of this TSD for detailed emission calculations.

Permit Level Determination – FESOP

The following table reflects the unlimited potential to emit (PTE) of the entire source before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	Greater than 250
PM10(1)	Greater than 250
PM2.5	Greater than 250
SO_2	Greater than 250
NO_x	Greater than 250
VOC	Less than 100
CO	Greater than 250

(1) Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant".

HAPs	Potential To Emit (tons/year)
Single (HCl)	Greater than 10
Combined	Greater than 25

(a) The potential to emit (PTE) (as defined in 326 IAC 2-7-1(29)) of PM, PM2.5, PM10, SO_2, NO_X, and CO is greater than one hundred (100) tons per year. The PTE of all other regulated criteria pollutants are less than one hundred (100) tons per year. The source would have been subject to the provisions of 326 IAC 2-7. However, the source will be issued a Federally Enforceable State Operating Permit renewal (FESOP) (326 IAC 2-8), because the source will limit emissions to less than the Title V major source threshold levels.

(b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of all other criteria pollutants are less than 100 tons per year.

(c) The potential to emit (PTE) (as defined in 326 IAC 2-7-1(29)) of any single HAP is greater than ten (10) tons per year and the PTE of a combination of HAPs is greater than twenty-five (25) tons per year. Therefore, the source would have been subject to the provisions of 326 IAC 2-7. However, the source will be issued a FESOP (326 IAC 2-8), because the source will limit emissions of HAPs to less than the Title V major source threshold levels.

PTE of the Entire Source After Issuance of the FESOP

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

Process Description	Potential to Emit of the Entire Source After Issuance of the FESOP (tons/year) Limited/Controlled Potential Emissions								
	Criteria Pollutants							Hazardous Air Pollutants	
	PM	PM10*	PM2.5	SO2	NOx	VOC	CO	Total HAPs	Worst Single HAP
Ducted Emissions									
Fuel Combustion (worst case)	24.70	19.68	19.68	94.55	97.75	7.52	56.39	17.03	8.49 HCl
Dryer/Mixer	192.5	82.54	93.11	17.40	16.50	9.60	39.0	3.20	0.93 HCOH
Dryer/Mixer Slag Processing	-	-	-	0.0084	-	-	-	-	-
Hot Oil Heater	0.13	0.21	0.21	4.44	1.25	0.05	0.74	0.02	0.016 Hexane
Worst Case Emissions	**192.6**	**82.75**	**93.32**	**99.00**	**99.00**	**9.65**	**57.13**	**17.05**	**8.49 HCl**
Fugitive Emissions									
Asphalt Load-Out, Silo Filling, On-Site Yard	0.33	0.33	0.33	-	-	5.14	0.86	0.09	0.03 HCOH
Material Storage Piles	1.85	0.65	0..65	-	-	-	-	-	-
Material Processing and Handling	1.94	0.92	0.14	-	-	-	-	-	-
Material Crushing, Screening, and Conveying	9.52	3.48	3.48	-	-	-	-	-	-
Paved and Unpaved Roads (worst case)	42.68	10.88	1.09	-	-	-	-	-	-
Cold Mix Asphalt Production	-	-	-	-	-	-	-	-	-
Gasoline Dispensing	-	-	-	-	-	-	-	-	-
**Volatile Organic Liquid Storage Vessels	-	-	-	-	-	negl.	-	negl.	negl.
Total Fugitive Emissions	**56.32**	**16.25**	**5.68**	**-**	**-**	**5.14**	**0.86**	**0.09**	**0.03 HCOH**
Totals Limited/Controlled Emissions	**249**	**99.00**	**99.00**	**99.00**	**99.00**	**14.79**	**57.99**	**17.14**	**8.49** HCl
Title V Major Source Thresholds	NA	100	100	100	100	100	100	25	10
PSD Major Source Thresholds	250	250	NA	250	250	250	250	NA	NA
Emission Offset/ Nonattainment NSR Major Source Thresholds	NA	NA 0	100	NA	NA	NA	N/A	N/A	N/A

(1) PTE after Production Limitation.
negl. = negligible
* Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant". US EPA has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions.
** 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.

(a) FESOP Status

This existing source is not a Title V major stationary source, because the potential to emit criteria pollutants from the entire source will be limited to less than the Title V major source threshold levels. In addition, this existing source is not a major source of HAPs, as defined in 40 CFR 63.41, because the potential to emit HAPs is limited to less than ten (10) tons per year for a single HAP and twenty-five (25) tons per year of total HAPs. Therefore, this source is an area source under Section 112 of the Clean Air Act and is 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), the source shall comply with the following:

(a) Fuel and Sulfur Content Specifications

(1) The sulfur content of No.2 and No. 4 fuel oil shall not exceed 0.50 percent by weight.

(2) The sulfur content of the waste fuel oil shall not exceed 0.50 percent by weight.

(3) The sulfur content of the Steel slag shall not exceed 0.66 percent by weight.

(b) Single Fuel Usage and Slag Usage Limitations:

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

(1) Natural gas usage shall not exceed 180 million cubic feet per twelve (12) consecutive month period, with compliance determined at the end of each month;

(2) No. 2 fuel oil usage shall not exceed 2,663,353 gallons per twelve (12) consecutive month period, with compliance determined at the end of each month;

(3) No. 4 fuel oil usage shall not exceed 2,521,307 gallons per twelve (12) consecutive month period, with compliance determined at the end of each month;

(4) Propane usage shall not exceed 15,038,242 gallons per twelve (12) consecutive month period, with compliance determined at the end of each month;

(6) Waste oil usage shall not exceed 2,572,763 gallons per twelve (12) consecutive month period, with compliance determined at the end of each month;

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

(c) Multiple Fuel Usage 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, emissions from the dryer/mixer shall be limited as follows:

(1) NOx emissions from the dryer/mixer shall be less than 97.75 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

The Permittee shall limit fuel usage in the dryer/mixer burner according to the following formula:

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

where:
N = tons of nitrogen oxide 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 last 12 months
F = gallons of No. 4 fuel oil used in last 12 months
P = gallons of Propane used in last 12 months
W = gallons of Waste oil used for last 12 months

Emission factors for Nitrogen Oxide
E_G = 190 lb/million cubic feet of natural gas
E_O = 24 lb/1000 gallons of No. 2 fuel oil
E_F = 47 lb/1000 gallons of No. 4 fuel oil
E_W = 19 lb/1000 gallons of Waste oil
E_P = 13 lb/1000 gallons of Propane

(2) SO_2 emissions from the dryer/mixer shall be less than 94.55 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

The Permittee shall limit fuel usage in the dryer/mixer burner according to the following formula:

$$S = G(E_G) + O(E_O) + F(E_F) + W(E_W) + P(E_P) + T(E_T)$$

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 last 12 months
F = gallons of No. 4 fuel oil used in last 12 months
W = gallons of Waste oil used in last 12 months
P = gallons of Propane used in last 12 months
T = tons of Steel slag used in last 12 months

Emission factors for Sulfur Dioxide
E_G = 0.60 lb/million cubic feet of natural gas
E_O = 71.00 lb/1000 gallons of No. 2 fuel oil
E_F = 75.00 lb/1000 gallons of No. 4 fuel oil
E_W = 73.5 lb/1000 gallons of Waste oil
E_P = 0.02 lb/1000 gallons of Propane
E_T = 0.0014 lb/ton of Steel slag used

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

(a) The amount of asphalt processed shall not exceed 600,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

(b) The PM10 emissions from the dryer/mixer shall not exceed 0.275 pounds per ton of asphalt processed.

(c) The PM2.5 emissions from the dryer/mixer shall not exceed 0.310 pounds per ton of asphalt processed.

(d) The CO emissions from the dryer/mixer shall not exceed 0.13 pounds per ton of

asphalt processed.

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

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

NOTE: Testing results for steel slag were obtained in 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.

Compliance with these limits, combined with the limited PTE from all other emission units at this source, shall limit the source-wide total potential to emit shall render 326 IAC 2-7 (Part 70 Permits), 326 IAC 2-2 (PSD) not applicable.

(3) Hazardous Air Pollutants (HAPs) [326 IAC 2-8-4][326 IAC 2-2][326 IAC 2-4.1]
Pursuant to 326 IAC 2-8-4, the Permittee shall comply with the following fuel limitations for fuels combusted in the dryer/mixer burner and all other combustion equipment used in the dryer/mixer:

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

(b) The waste oil combusted shall not contain more than 0.30% ash, 0.10% chlorine, and 0.1% Lead.

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

(4) Pursuant to 326 IAC 2-8, the Permittee shall control PM10, and PM2.5 emissions from the unpaved roads according to the fugitive dust plan, included as Attachment A to the permit.

(b) PSD Minor Source

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 asphalt processed shall not exceed 600,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

(2) PM emissions from the dryer/mixer shall not exceed 0.642 pounds per ton of asphalt processed.

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.

(c) Emission Offset Minor Source

When relocating in nonattainment county for Ozone, the existing source is not a major stationary source, under Emission Offset (326 IAC 2-3), because the potential to emit NOx is limited to less than one hundred (100) tons per year and the potential to emit VOC is less than twenty-five (25) tons per year. Therefore, pursuant to 326 IAC 2-3, the Emission Offset requirements do not apply.

In order to render the requirements of 326 IAC 2-3 (Emission Offset) not applicable, the source shall comply with the following:

(1) NOx emissions from the dryer/mixer burner and hot oil heaters shall not exceed ninety-nine (99.0) tons per twelve (12) consecutive month period with compliance determined at the end of each month.

Federal Rule Applicability Determination

(a) This drum hot-mix asphalt plant, is subject to the New Source Performance Standard for Hot-mix Asphalt Facilities (40 CFR 60.90, Subpart I), which is incorporated by reference as 326 IAC 12, because it meets the definition of a hot-mix asphalt facility pursuant to the rule and it was constructed after June 11, 1973.

The dryer/mixer is subject to the following portions of 40 CFR 60, Subpart I:

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

Nonapplicable portions of the NSPS will not be included in the permit.

The provisions of 40 CFR 60 Subpart A – General Provisions, which are incorporated as 326 IAC 12-1, apply to the dryer/mixer except when otherwise specified in 40 CFR 60 Subpart I.

(b) <u>40 CFR 60, Subpart Dc - Standards for Small Industrial/Commercial/Institutional Steam Generating Units</u>

The requirements of the New Source Performance Standard for Small Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60, Subpart Dc (326 IAC 12), are not included in this renewal, because the two (2) hot oil heaters, with maximum rated heat input capacities of two and fifteen hundredths (2.00) MMBtu/hr, each, have a maximum design heat input capacity of less than the applicability threshold of ten (10) million British thermal units per hour.

(c) <u>40 CFR 60, Subpart Kb - Standards for Volatile Organic Liquid Storage Vessels</u>

(1) The requirements of the New Source Performance Standard for Volatile Organic Liquid Storage Vessels, 40 CFR 60, Subpart Kb (326 IAC 12), are not included in this renewal for existing storage tank Tank-01, because although tank was constructed after the rule applicability date of July 23, 1984 and has a maximum capacity greater than 75 m^3 (19,813 gallons) but less than 151 m^3 (39,890 gallons), the liquid stored in each tank has a true maximum vapor pressure of less than fifteen kiloPascals (15.0 kPa).

(2) The requirements of the New Source Performance Standard for Volatile Organic Liquid Storage Vessels, 40 CFR 60, Subpart Kb (326 IAC 12), are not included in this renewal for existing storage tanks Tank-02, and Tank-03 each, because although each tank was constructed after the rule applicability date of July 23, 1984, each tank has a maximum capacity of less than 75 m^3 (19,813 gallons), and the liquid stored in each tank has a maximum true vapor pressure of less than fifteen kiloPascals (15.0 kPa).

(d) <u>40 CFR 60, Subpart UU - Standards for Asphalt Processing and Asphalt Roofing Manufacture</u>
The requirements of the New Source Performance Standard for Asphalt Processing and Asphalt

Roofing Manufacture, 40 CFR 60, Subpart UU (326 IAC 12), are not included in the permit, since pursuant to 40 CFR 60.471, the portable drum hot-mix asphalt plant is not an asphalt processing plant because it does not blow asphalt, or an asphalt roofing plant because it does not produce asphalt roofing products, and pursuant to 40 CFR 60.101(a) the portable drum hot-mix asphalt plant is not a petroleum refinery because it is not engaged in producing gasoline, kerosene, distillate fuel oils, residual fuel oils, lubricants, or other products through distillation of petroleum or through redistillation, cracking or reforming of unfinished petroleum derivatives.

(e) 40 CFR 60, Subpart XX - Standards for Bulk Gasoline Terminals
The requirements of the New Source Performance Standard for Bulk Gasoline Terminals (40 CFR 60, Subpart XX)(326 IAC 12), are not included in the permit, since the source is not considered a bulk gasoline terminal under 40 CFR 60.500. The source has an insignificant gasoline fuel transfer and dispensing operation.

(f) 40 CFR 60, Subpart OOO - Standards for Nonmetallic Mineral Processing Plants
The requirements of the New Source Performance Standard for Nonmetallic Mineral Processing Plants (40 CFR 60, Subpart OOO) (326 IAC 12), are not included in the permit, since the Recycled Asphalt Pavement (RAP) system does not contain a crusher or grinding mill. The source will be receiving pre-crushed/pre-sized RAP materials, therefore, pursuant to 40 CFR 60.670(a)(2) stand-alone screening operations at plants without crushers or grinding mills are exempt.

(g) 40 CFR 60, Subpart UUU - Standards for Calciners and Dryers in Mineral Industries
The requirements of the New Source Performance Standard for Calciners and Dryers in Mineral Industries, 40 CFR 60, Subpart UUU (326 IAC 12), are not included in the permit, since a portable drum hot-mix asphalt plant is not a mineral processing plant, meaning that it does not process or produce any of the following minerals, their concentrates or any mixture of which the majority (>50 percent) is any of the following minerals or a combination of these minerals: alumina, ball clay, bentonite, diatomite, feldspar, fire clay, fuller's earth, gypsum, industrial sand, kaolin, lightweight aggregate, magnesium compounds, perlite, roofing granules, talc, titanium dioxide, and vermiculite.

(h) There are no other New Source Performance Standards (NSPS)(40 CFR Part 60) included in the permit.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

(a) 40 CFR 63, Subpart LLLLL - NESHAPs for Asphalt Processing and Asphalt Roofing Manufacturing
The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Asphalt Processing and Asphalt Roofing Manufacturing, 40 CFR 63, Subpart LLLLL (326 IAC 20-71, are not included in the permit, since the portable drum hot-mix asphalt plant is not a major source of HAPs, is not located at and is not part of a major source of HAP emissions, and does not engage in the preparation of asphalt flux or asphalt roofing materials.

(b) 40 CFR 63, Subpart CCCCCC - NESHAP for the Source Category Identified as Gasoline Dispensing Facilities (GDF)
The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Source Category Gasoline Dispensing Facilities (40 CFR 63, Subpart CCCCCC) are not included in the permit, since the portable drum hot-mix asphalt plant does not operate gasoline dispensing facility (GDF).

(c) 40 CFR 63, Subpart AAAAAAA - NESHAP for Area Sources: Asphalt Processing and Asphalt Roofing Manufacturing
The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) forArea Sources: Asphalt Processing and Asphalt Roofing Manufacturing, 40 CFR 63, Subpart AAAAAAA (7A) (326 IAC 20), are not included in this renewal, because although the stationary drum hot-mix asphalt plant is an area source of hazardous air pollutant (HAP) emissions, as defined in §63.2, it does not meet the definition of an asphalt processing operation or an asphalt roofing manufacturing operation, as

defined in §63.11566, since it does not engage in the preparation of asphalt flux or asphalt roofing materials.

(d) There are no other National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in the permit.

Compliance Assurance Monitoring (CAM)

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 source:

(a) 326 IAC 2-8-4 (FESOP)
FESOP applicability is discussed under the PTE of the Entire Source After Issuance of the FESOP section above.

(b) 326 IAC 2-2 (Prevention of Significant Deterioration(PSD))
PSD applicability is discussed under the PTE of the Entire Source After Issuance of the FESOP section above.

The PTE of PM10, PM2.5, SO_2, CO, and NO_x, for this portable source are all limited to less than 100 tons per year (see discussion of FESOP limits). This portable source will not be allowed to relocate and/or operate in areas designated as a “severe” or “serious” non-attainment area for PM2.5, PM10, SO_2, NO_X, CO, Lead, or Ozone. Lake County was previously designated severe nonattainment for the one hour ozone standard, however, the one hour ozone standard was revoked in Indiana on October 25, 2006. Currently, there are no counties in Indiana that are designated “severe” or “serious” non-attainment areas for any pollutant. Since the limited potential emissions of all regulated pollutants are less than 100 tons per year, this source may relocate to any county in Indiana and will be a minor source under 326 IAC 2-2 (PSD) and 326 IAC 2-3 (Emission Offset).

(c) 326 IAC 2-3 (Emission Offset)
Emission Offset applicability is discussed under the "PTE of the Entire Source after Issuance of the FESOP Renewal" section above.

(d) 326 IAC 2-1.1-5 (Nonattainment New Source Review)
This existing source is not a major stationary source, under 326 IAC 2-1.1-5 (Nonattainment New Source Review), because the potential to emit particulate matter with a diameter less than two and five tenths (2.5) micrometers (PM2.5), is limited to less than one hundred (100) tons per year. Therefore, pursuant to 326 IAC 2-1.1-5, the Nonattainment New Source Review requirements do not apply.

(e) 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
The unlimited potential to emit of HAPs from the source 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 source 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 source is not subject to the requirements of 326 IAC 2-4.1. See PTE of the Entire Source After Issuance of the FESOP Section above.

(f) 326 IAC 2-6 (Emission Reporting)
This source is currently located in Spencer County and can relocate to any other county in Indiana, is not required to operate under the Part 70 Permit Program, does not emit lead into the ambient air at

levels equal to or greater than five (5) tons per year, and has the potential to emit VOC and NOx into the ambient air at levels equal to or greater than twenty-five (25) tons per year. Pursuant to 326 IAC 2-6, when operating in counties other than Lake, Porter, or LaPorte, the source is only subject to additional information requests as provided in 326 IAC 2-6-5. When operating in Lake, Porter, or LaPorte Counties, the Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6. This statement must be received in accordance with the compliance schedule specified in 326 IAC 2-6-3 and must comply with the minimum requirements specified in 326 IAC 2-6-4. The submittal should cover the period identified in 326 IAC 2-6.

(g) 326 IAC 5-1 (Opacity Limitations)

(a) 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 forty percent (40%) 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.

(b) Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), 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, when the source is located in the following areas listed in 326 IAC 5-1-1(c):

(1) Clark County (Jefferson Township - Cities of Jeffersonville, Clarksville, Oak Park);

(2) Dearborn County (Lawrenceburg Township - Cities of Lawrenceburg and Greendale);

(3) Dubois County (Bainbridge Township - the City of Jasper);

(4) Marion County (except the area of Washington Township east of Fall Creek and the area of Franklin Township south of Thompson Road and east of Five Points Road);

(5) St. Joseph County (the area north of Kern Road and east of Pine Road);

(6) Vanderburgh County (the area included in the City of Evansville and Pigeon Township); and

(7) Vigo County (Indiana State University campus, 0.5km radius around UTM Easting 464,519.00, Northing 4,369,208.00, Zone 16.

(c) Opacity shall not exceed an average of twenty percent (20%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4, when the source is located in Lake County.

(h) 326 IAC 6-3-2 (Particulate Emission limitations for Manufacturing Processes)
Particulate emissions from this asphalt plant are subject to a more stringent particulate requirement in 40CFR 60, Subpart I, therefore the asphalt plant is exempt from the requirements of 326 IAC 6-3-2.

(i) 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.

(j) 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)
The source is subject to the requirements of 326 IAC 6-5, because the paved and unpaved roadways have potential fugitive particulate emissions greater than 25 tons per year. Pursuant to 326 IAC 6-5, fugitive particulate matter emissions shall be controlled according to the Fugitive Dust Control Plan, which is included as Attachment A to the permit.

(k) 326 IAC 6.8-10 (Lake County: Fugitive Particulate Matter)
Although this source is presently located in Spencer County, it may relocate to Lake County. Since the fugitive particulate emissions will exceed 5 tons per year and this source will have material transfer operations, storage piles, and paved/unpaved roads, this source will be subject to the requirements of 326 IAC 6.8-10 if it is relocated to Lake County.

Pursuant to 326 IAC 6.8-10-3, the particulate matter emissions from source wide activities shall meet the following requirements whenever the plant is located in Lake County:

(1) The average instantaneous opacity of fugitive particulate emissions from a paved road shall not exceed ten percent (10%).

(2) The average instantaneous opacity of fugitive particulate emissions from an unpaved road shall not exceed ten percent (10%).

(3) The average instantaneous opacity of fugitive particulate emissions from batch transfer shall not exceed ten percent (10%).

(4) The opacity of fugitive particulate emissions from continuous transfer of material onto and out of storage piles shall not exceed ten percent (10%) on a three (3) minute average.

(5) The opacity of fugitive particulate emissions from storage piles shall not exceed ten percent (10%) on a six (6) minute average.

(6) There shall be a zero (0) percent frequency of visible emission observations of a material during the inplant transportation of material by truck or rail at any time.

(7) The opacity of fugitive particulate emissions from the inplant transportation of material by front end loaders and skip hoists shall not exceed ten percent (10%).

(8) There shall be a zero (0) percent frequency of visible emission observations from a building enclosing all or part of the material processing equipment, except from a vent in the building.

(9) The PM_{10} emissions from building vents shall not exceed twenty-two thousandths (0.022) grains per dry standard cubic foot and ten percent (10%) opacity.

(10) The opacity of particulate emissions from dust handling equipment shall not exceed ten percent (10%).

(11) Any facility or operation not specified in 326 IAC 6.8-10-3 shall meet a twenty percent (20%), three (3) minute average opacity standard.

The Permittee shall achieve these limits by controlling fugitive particulate matter emissions according to the Fugitive Dust Control Plan, submitted. The plan includes watering of roadways and stockpiles as necessary to prevent fugitive particulate emissions.

State Rule Applicability – Aggregate Dryer/Mixer

326 IAC 6.5-1-2(a) (Nonattainment Area PM Limitations)

This existing portable asphalt plant has the potential to emit PM before controls greater than 100 tons per year and may be relocated to Clark, Dearborn, Dubois, Howard, Marion, St. Joseph, Vanderburgh, Vigo, or Wayne Counties. Therefore, the PM emission units at this portable asphalt plant are subject to the requirements of 326 IAC 6.5-1-2 (Nonattainment Area Limitations) and shall comply with the PM emission limit of three-hundredths (0.03) grain per dry standard cubic foot when operating in these counties.

326 IAC 6.8-1 (Particulate Matter Limitations for Lake County)

Although this source is currently located in Spencer County, it may relocate to Lake County, and it has potential particulate emissions greater than one hundred (100) tons per year. The particulate limit pursuant to 326 IAC 6.8-1-2 for asphalt concrete plants constructed after June 11, 1973 is seven hundredths (0.07) gram per dry standard cubic meter (g/dscm) (three hundredths (0.03) grain per dry standard cubic foot (dscf)), which is more stringent than the particulate limit pursuant to 326 IAC 12 (four hundredths (0.04) grain per dry standard cubic foot (dscf)).

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

Particulate emissions from this asphalt plant are subject to a more stringent particulate requirement in 40 CFR 60, Subpart I, and the particulate emissions are limited by 326 IAC 6.5 and 6.8 when operating in the counties listed in those rules. Therefore, the aggregate dryer/mixer is exempt from the requirements of 326 IAC 6-3 when operating in any county.

326 IAC 7-1.1-2 (Sulfur Dioxide (SO_2) Emission Limitations)

Pursuant to 326 IAC 7-1.1-1, The asphalt drum mixer/dryer, identified as emission unit EU-01, is subject to the requirements of 326 IAC 7-1.1-2, because it has potential sulfur dioxide emissions greater than twenty-five (25) tons per year. The hot oil heater is not subject to the requirements of 326 IAC 7-1.1-2, because the potential to emit sulfur dioxide from hot oil heater is less than twenty-five (25) tons per year. Pursuant to this rule, sulfur dioxide emissions from the dryer/mixer burner shall be limited to five-tenths (0.5) pounds per million Btu for distillate oil combustion (including No. 2 fuel oil). This equates to a maximum allowable sulfur content of (0.5% by weight) for the distillate fuel oils.

326 IAC 7-2-1 (Sulfur Dioxide Reporting Requirements)

Pursuant to this rule, the source shall submit reports of calendar month average sulfur content, heat content, fuel consumption, and sulfur dioxide emission rate (pounds SO_2 per MMBtu), to the OAQ upon request.

326 IAC 8-1-6 (New Facilities; General Reduction Requirements)

In order to render the requirements of 326 IAC 8-1-6 not applicable, the dryer/mixer shall be limited as follows:

The amount of asphalt processed shall not exceed 600,000 tons per twelve (12) consecutive month period and a VOC limit of 0.032 pound of VOC per ton of hot mix asphalt produced.

Compliance with this limit shall limit the VOC PTE from the dryer/mixer to less than twenty-five (25) tons per 12 consecutive month period and shall render 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities) not applicable.

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

Any paving application made after January 1, 1980, is subject to the requirements of 326 IAC 8-5-2. Pursuant to this rule, no person shall cause or allow the use of cutback asphalt or asphalt emulsion containing more than seven percent (7%) oil distillate by volume of emulsion for any paving application except the following purposes:

(a) penetrating prime coating

(b) stockpile storage

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

The owner or operator will not process emulsified or cutback asphalt at this source unless proper approval has been obtained from IDEM, OAQ. Therefore, this source is not subject to this rule.

326 IAC 10-1 (Nitrogen Oxides Control in Clark and Floyd Counties)
This portable asphalt plant may relocate to Clark or Floyd Counties. However, the aggregate dryer/mixer is subject to the requirements of 40 CFR 60, Subpart I. Therefore, the aggregate dryer/mixer is not subject to the requirements of 326 IAC 10-1.

326 IAC 10-3 (Nitrogen Oxide Reduction Program for Specific Source Category)
This source does not operate a Portland cement kiln or a blast furnace gas boiler with a heat input greater than two hundred fifty million (250,000,000) British thermal units per hour. The one (1) 96 million Btu dryer/mixer burner is not subject to this rule, therefore the requirements of 326 IAC 10-3 are not included in the permit for this source.

State Rule Applicability – Hot Oil Heater

326 IAC 6-2 (Emission Limitations for Sources of Indirect Heating)
The hot oil heater is not subject to the requirements of 326 IAC 6-2 because it is not a source of indirect heating.

326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes)
The hot oil heater is not subject to the requirements of 326 IAC 6-3 because it has potential particulate emissions less than five hundred fifty-one thousandths (0.551) pound per hour.

326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)
The hot oil heater is not subject to the requirements of 326 IAC 7-1.1 because it does not have the potential to emit twenty-five (25) tons per year or ten (10) pounds per hour of sulfur dioxide.

326 IAC 8-1-6 (New Facilities; General Reduction Requirements)
Although constructed after January 1, 1980, the hot oil heater is not subject to the requirements of 326 IAC 8-1-6 because it does not have the potential to emit twenty-five (25) tons or more of VOC per year.

State Rule Applicability – Material Conveying and Handling

326 IAC 6.5-1-2(a) (Nonattainment Area PM Limitations)
This existing portable asphalt plant has the potential to emit PM before controls greater than 100 tons per year and may be relocated to Clark, Dearborn, Dubois, Howard, Marion, St. Joseph, Vanderburgh, Vigo, or Wayne Counties. Therefore, the material conveying and handling operation is subject to the requirements of 326 IAC 6.5-1-2 (Nonattainment Area Limitations) and shall comply with the PM emission limit of three-hundredths (0.03) grain per dry standard cubic foot when operating in these counties.

326 IAC 6.8-1 (Particulate Matter Limitations for Lake County)
Although this source is initially located in Spencer County, it may relocate to Lake County, and it has potential particulate emissions greater than one hundred (100) tons per year. The particulate limit pursuant to 326 IAC 6.8-1-2 for asphalt concrete plants constructed after June 11, 1973 is seven hundredths (0.07) gram per dry standard cubic meter (g/dscm) (three hundredths (0.03) grain per dry standard cubic foot (dscf)), which is more stringent than the particulate limit pursuant to 40 CFR 60, Subpart I (326 IAC 12) (four hundredths (0.04) grain per dry standard cubic foot (dscf)).

Pursuant to 326 IAC 6.8-1-2(a), the particulate emissions from the portable asphalt plant shall be limited to less than seven hundredths (0.07) gram per dry standard cubic meter (g/dscm) (three hundredths (0.03) grain per dry standard cubic foot (dscf)) whenever the plant is located in Lake County.

326 IAC 6.8-1-2 (Particulate Matter Limitations for Lake County)

The portable asphalt plant is still subject to the requirements of 326 IAC 6.8-1-2 because the potential to emit PM before controls is greater than one hundred (100) tons per year and it may be relocated to Lake County. Therefore, pursuant to 6.8-1-2(a), PM emissions from the dryer/mixer shall not exceed seven-hundredths (0.07) gram per dry standard cubic meter (g/dscm) (three-hundredths (0.03) grain per dry standard cubic foot (dscf)) when the source is located in Lake County.

In order to comply with the requirements of 326 IAC 6.8-1-2, particulate emissions from the dryer/mixer shall be controlled by the baghouse at all times that the dryer/mixer is in operation.

326 IAC 6.8-8 (Lake County: Continuous Compliance Plan)

Pursuant to 326 IAC 6.8-8-1(18)(C), when located in Lake County, the Permittee shall continue to submit to IDEM, and maintain at the source, a copy of the Continuous Compliance Plan. The Permittee shall perform the inspections, monitoring, and record keeping requirements as specified in 326 IAC 6.8-8-7. The Permittee shall update the CCP (as needed), retain a copy on site, and make the updated CCP available for inspection as specified in 326 IAC 6.8-8-8.

326 IAC 6.8-10 (Lake County: Fugitive Particulate Matter)

When located in Lake County, the source is still subject to the requirements of 326 IAC 6.8-10, because the asphalt load-out and on-site yard, material storage piles, material processing and handling, material crushing, screening, and conveying, and unpaved and paved roads have potential fugitive particulate emissions greater than five (5) tons per year.

Therefore, pursuant to 326 IAC 6.8-10-3, the particulate matter emissions from source wide activities shall meet the following requirements:

(1) The average instantaneous opacity of fugitive particulate emissions from a paved road shall not exceed ten percent (10%).

(2) The average instantaneous opacity of fugitive particulate emissions from an unpaved road shall not exceed ten percent (10%).

(3) The average instantaneous opacity of fugitive particulate emissions from batch transfer shall not exceed ten percent (10%).

(4) The opacity of fugitive particulate emissions from continuous transfer of material onto and out of storage piles shall not exceed ten percent (10%) on a three (3) minute average.

(5) The opacity of fugitive particulate emissions from storage piles shall not exceed ten percent (10%) on a six (6) minute average.

(6) There shall be a zero (0%) percent frequency of visible emission observations of a material during the inplant transportation of material by truck or rail at any time.

(7) The opacity of fugitive particulate emissions from the inplant transportation of material by front end loaders and skip hoists shall not exceed ten percent (10%).

(8) There shall be a zero (0%) percent frequency of visible emission observations from a building enclosing all or part of the material processing equipment, except from a vent in the building.

(9) The PM_{10} emissions from building vents shall not exceed twenty-two thousandths (0.022) grains per dry standard cubic foot and ten percent (10%) opacity.

(10) The opacity of particulate emissions from dust handling equipment shall not exceed ten percent (10%).

(11) Any facility or operation not specified in 326 IAC 6.8-10-3 shall meet a twenty percent (20%), three (3) minute average opacity standard.

The Permittee shall achieve these limits by continuing to control fugitive particulate matter emissions according to the Fugitive Dust Control Plan, which is included as Attachment A to the permit.

326 IAC 6.8-11 (Lake County: Particulate Matter Contingency Measures)
When located in Lake County, the source is subject to 326 IAC 6.8-11 because it is subject to the requirements of 326 IAC 6.8-10(a). Pursuant to this rule, the source shall comply with 326 IAC 6.8-11-2 through 326 IAC 6.8-11-6.

326 IAC 8-7 (Specific VOC Reduction Requirements for Lake, Porter, Clark, and Floyd Counties)
VOC emissions from this source are limited to less than twenty-five (25) tons per year. Therefore, this source is not subject to the requirements of 326 IAC 8-7.

326 IAC 12-1 (New Source Performance Standards)
The hot-mix asphalt plant is required to comply with the requirements of 40 CFR 60.90, Subpart I, Standards of Performance for Hot-mix Asphalt Facilities, as described in the “Federal Rule Applicability” section of this TSD.

State Rule Applicability - Storage Tanks

326 IAC 8-1-6 (New Facilities; General Reduction Requirements)
Although constructed after January 1, 1980, the storage tanks are not subject to the requirements of 326 IAC 8-1-6 because they do not have the potential to emit twenty-five (25) tons or more of VOC per year.

326 IAC 8-4-3 (Petroleum Liquid Storage Facilities)
The storage tanks are not subject to the requirements of 326 IAC 8-4-3 because they are not petroleum liquid storage vessels with capacities greater than thirty-nine thousand (39,000) gallons.

326 IAC 8-9 (Volatile Organic Liquid Storage Vessels)
This portable source can relocate to Clark, Floyd, Lake, or Porter Counties and has storage tanks that each have a capacity less than thirty-nine thousand (39,000) gallons. Pursuant to 326 IAC 8-9-1(b), the storage tanks are subject to reporting and recordkeeping provisions of section 6(a) and 6(b) of this rule and are exempt from all other provisions of this rule when the source is located in Clark, Floyd, Lake, or Porter Counties.

Compliance Determination, Monitoring and Testing Requirements

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance with all applicable state and federal rules on a continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a continuous demonstration. When this occurs, IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 8-4. As a result, Compliance Determination Requirements are included in the permit. The Compliance Determination Requirements in Section D of the permit are those conditions that are found directly within state and federal rules and the violation of which serves as grounds for enforcement action.

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

(a) The compliance determination and monitoring requirements applicable to this source are as follows:

Control	Parameter	Frequency	Range	Excursions and Exceedances
Conveyors, screening, material transfer points and dryer/mixer stack (SV-1) exhaust	Visible Emissions	Daily	Normal-Abnormal	Response Steps
Baghouse for the dryer/mixer	Pressure Drop	Daily	2.0 to 6.0 inches	Response Steps

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

Emission Unit	Control Device	Timeframe for Testing	Pollutant	Frequency of Testing	Limit or Requirement (lb/ton of asphalt)
EU-01	Baghouse	Within five (5) years of the date of the last valid compliance demonstration	PM	Once every five (5) years	0.642 lb PM/ton
					0.275 lb PM10/ton
		No later than five (5) years from the last valid compliance demonstration .	PM10		0.310 lb PM2.5/ton
			PM2.5		
		180 days after initial use of Steel Furnace slag	SO2	One Time*	0.0014 lb SO2/ton**

The Permittee shall perform PM2.5 testing of the aggregate dryer/mixer at least once every five (5) years from the date of the last valid compliance demonstration, to be run concurrently with the PM and PM10 testing.

Note:
The source previously performed PM and PM10 testing on the EU-01 mixer/dryer on October 3, 2007. The test results were well below the proposed particulate limits. Therefore, PM10 and PM2.5 testing will be required to be performed 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, and will be performed concurrently with the PM testing once every five years from the date of the last valid compliance demonstration.

*The Permittee shall perform SO2 testing for the aggregate dryer within one hundred eighty days (180) of initial use of steel slag in the aggregate mix. The testing shall only be performed if the company has not previously performed SO2 testing while using steel slag in the aggregate mix at one of their Indiana facility.

**Testing results for steel slag were obtained on 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.

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 April 6, 2010 and additional information was received in July and August and September of 2010.

The operation of this source shall be subject to the conditions of the attached proposed FESOP No. 147-29141-05167. The staff recommends to the Commissioner that this FESOP be approved.

IDEM Contact

(a) Questions regarding this proposed permit can be directed to Swarna Prabha 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) 234-5376 or toll free at 1-800-451-6027 extension 4-5376.

(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.idem.in.gov

Appendix A.1: Unlimited Emissions Calculations
Entire Source

Company Name: Gohman Asphalt & Construction
Source Address: I-64 & SR 231, Dale, Indiana 47523
Permit Number: 147-29141-05167
Reviewer: Swarna Prabha

Asphalt Plant Maximum Capacity

Maximum Hourly Asphalt Production =	450	ton/hr								
Maximum Annual Asphalt Production =	3,942,000	ton/yr								
**Maximum Annual Slag Usage =	12,000	ton/yr	0.66	% sulfur						
Maximum Dryer Fuel Input Rate =	120.0	MMBtu/hr								
Natural Gas Usage =	1,051	MMCF/yr								
No. 2 Fuel Oil Usage =	7,508,571	gal/yr, and	0.50	% sulfur						
No. 4 Fuel Oil Usage =	7,508,571	gal/yr, and	0.50	% sulfur						
Residual (No. 5 or No. 6) Fuel Oil Usage =	0	gal/yr, and	0.00	% sulfur						
Propane Usage =	11,615,470	gal/yr, and	0.20	gr/100 ft3 sulfur						
Butane Usage =	0	gal/yr, and	0.00	gr/100 ft3 sulfur						
Used/Waste Oil Usage =	7,508,571	gal/yr, and	0.50	% sulfur	0.30	% ash	0.10	% chlorine,	0.100	% lead
Diesel Engine Oil Usage =	0	gal/yr, and								
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 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							Hazardous Air Pollutants		
Process Description	**PM**	**PM10**	**PM2.5**	**SO2**	**NOx**	**VOC**	**CO**	**Total HAPs**	**Worst Case HAP**	
Ducted Emissions										
Dryer Fuel Combustion (worst case)	72.08	57.44	57.44	281.57	176.45	5.81	44.15	47.95	24.78	(hydrogen chloride)
Dryer/Mixer (Process)	55188.00	12811.50	2956.50	114.32	108.41	63.07	256.23	21.01	6.11	(formaldehyde)
Dryer/Mixer Slag Processing	0	0	0	0.0084	0	0	0	0	0	
Hot Oil Heater Fuel Combustion (worst case)	0.13	0.21	0.21	4.44	1.25	0.05	0.74	0.020	0.016	(hexane)
Worst Case Emissions*	**55188.13**	**12811.71**	**2956.71**	**286.02**	**177.70**	**63.12**	**256.97**	**47.97**	**24.78**	(hydrogen chloride)
Fugitive Emissions										
Asphalt Load-Out, Silo Filling, On-Site Yard	2.18	2.18	2.18	0	0	33.76	5.68	0.56	0.17	(formaldehyde)
Material Storage Piles	1.85	0.65	0.65	0	0	0	0	0	0	
Material Processing and Handling	12.73	6.02	0.91	0	0	0	0	0	0	
Material Crushing, Screening, and Conveying	62.54	22.84	22.84	0	0	0	0	0	0	
Unpaved and Paved Roads (worst case)	279.56	71.25	7.13	0	0	0	0	0	0	
Cold Mix Asphalt Production	0	0	0	0	0	0.00	0	0.00	0.00	(xylenes)
Gasoline Fuel Transfer and Dispensing	0	0	0	0	0	0.00	0	0.00	0.00	(xylenes)
Volatile Organic Liquid Storage Vessels	0	0	0	0	0	negl	0	negl	0	
Total Fugitive Emissions	**358.87**	**102.95**	**33.71**	**0**	**0.00**	**33.76**	**5.68**	**0.56**	**0.00**	(xylenes)
Totals Unlimited/Uncontrolled PTE	**55546.99**	**12914.65**	**2990.42**	**286.02**	**177.70**	**96.88**	**262.64**	**48.54**	**24.78**	(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 + Dryer/Mixer Slag Processing + Worst Case Emissions from Hot Oil Heater Fuel Combustion
Fuel component percentages provided by the source.
** maximum amount of slag used

Appendix A.1: Unlimited Emissions Calculations
Dryer/Mixer Fuel Combustion with Maximum Capacity > 100 MMBtu/hr

Company Name: Gohman Asphalt & Construction
Source Address: I-64 & SR 231, Dale, Indiana 47523
Permit Number: 147-29141-05167
Reviewer: Swarna Prabha

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 =	450	ton/hr								
Maximum Annual Asphalt Production =	3,942,000	ton/yr								
Maximum Fuel Input Rate =	120	MMBtu/hr								
Natural Gas Usage =	1,051	MMCF/yr								
No. 2 Fuel Oil Usage =	7,508,571	gal/yr, and	0.50	% sulfur						
No. 4 Fuel Oil Usage =	7,508,571	gal/yr, and	0.50	% sulfur						
Residual (No. 5 or No. 6) Fuel Oil Usage =	0	gal/yr, and	0.00	% sulfur						
Propane Usage =	11,615,470	gal/yr, and	0.20	gr/100 ft3 sulfur						
Butane Usage =	0	gal/yr, and	0.00	gr/100 ft3 sulfur						
Used/Waste Oil Usage =	7,508,571	gal/yr, and	0.50	% sulfur	0.30	% ash	0.100	% chlorine,	0.100	% lead
Diesel Engine Oil Usage =	0	gal/yr, and								

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)	Used/ Waste Oil (lb/kgal)	Diesel Engine (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)	Used/ Waste Oil (tons/yr)	Diesel Engine (tons/yr)	**Worse Case Fuel (tons/yr)**
PM	1.9	2.0	7.0	3.22	0.5	0.6	19.2	43.4	1.00	7.51	26.28	0.00	2.904	0.000	72.08	0.00	**72.08**
PM10/PM2.5	7.6	3.3	8.3	4.72	0.5	0.6	15.3	43.4	3.99	12.39	31.16	0.00	2.904	0.000	57.44	0.00	**57.44**
SO2	0.6	71.0	75.0	0.0	0.020	0.000	73.5	40.6	0.32	266.55	281.57	0.00	0.116	0.000	275.94	0.00	**281.57**
NOx	190	24.0	47.0	47.0	13.0	15.0	19.0	617.4	99.86	90.10	176.45	0.00	75.50	0.00	71.33	0.00	**176.45**
VOC	5.5	0.20	0.20	0.28	1.00	1.10	1.0	49.00	2.89	0.75	0.75	0.00	5.81	0.00	3.75	0.00	**5.81**
CO	84	5.0	5.0	5.0	7.5	8.4	5.0	133.0	44.1504	18.77	18.77	0.00	43.56	0.00	18.77	0.00	**44.15**
Hazardous Air Pollutant																	
HCl							6.6								24.78		**24.78**
Antimony			5.25E-03	5.25E-03			negl				1.97E-02	0.00E+00			negl		**2.0E-02**
Arsenic	2.0E-04	5.6E-04	1.32E-03	1.32E-03			1.1E-01		1.1E-04	2.10E-03	4.96E-03	0.00E+00			4.13E-01		**4.1E-01**
Beryllium	1.2E-05	4.2E-04	2.78E-05	2.78E-05			negl		6.3E-06	1.58E-03	1.04E-04	0.00E+00			negl		**1.6E-03**
Cadmium	1.1E-03	4.2E-04	3.98E-04	3.98E-04			9.3E-03		5.8E-04	1.58E-03	1.49E-03	0.00E+00			3.49E-02		**3.5E-02**
Chromium	1.4E-03	4.2E-04	8.45E-04	8.45E-04			2.0E-02		7.4E-04	1.58E-03	3.17E-03	0.00E+00			7.51E-02		**7.5E-02**
Cobalt	8.4E-05		6.02E-03	6.02E-03			2.1E-04		4.4E-05		2.26E-02	0.00E+00			7.88E-04		**2.3E-02**
Lead	5.0E-04	1.3E-03	1.51E-03	1.51E-03			5.5		2.6E-04	4.73E-03	5.67E-03	0.00E+00			2.1E+01		**20.65**
Manganese	3.8E-04	8.4E-04	3.00E-03	3.00E-03			6.8E-02		2.0E-04	3.15E-03	1.13E-02	0.00E+00			2.55E-01		**0.26**
Mercury	2.6E-04	4.2E-04	1.13E-04	1.13E-04					1.4E-04	1.58E-03	4.24E-04	0.00E+00					**1.6E-03**
Nickel	2.1E-03	4.2E-04	8.45E-02	8.45E-02			1.1E-02		1.1E-03	1.58E-03	3.17E-01	0.00E+00			4.13E-02		**0.317**
Selenium	2.4E-05	2.1E-03	6.83E-04	6.83E-04			negl		1.3E-05	7.88E-03	2.56E-03	0.00E+00			negl		**7.9E-03**
1.1.1-Trichloroethane			2.36E-04	2.36E-04							8.86E-04	0.00E+00					**8.9E-04**
1,3-Butadiene								5.47E-03								0.00E+00	**0.0E+00**
Acetaldehyde								1.07E-01								0.00E+00	**0.0E+00**
Acrolein								1.30E-02								0.00E+00	**0.0E+00**
Benzene	2.1E-03		2.14E-04	2.14E-04				1.31E-01	1.1E-03		8.03E-04	0.00E+00				0.00E+00	**1.1E-03**
Bis(2-ethylhexyl)phthalate							2.2E-03								8.26E-03		**8.3E-03**
Dichlorobenzene	1.2E-03						8.0E-07		6.3E-04						3.00E-06		**6.3E-04**
Ethylbenzene			6.36E-05	6.36E-05							2.39E-04	0.00E+00					**2.4E-04**
Formaldehyde	7.5E-02	6.10E-02	3.30E-02	3.30E-02				1.65E-01	3.9E-02	2.29E-01	1.24E-01	0.00E+00				0.00E+00	**0.229**
Hexane	1.8E+00								0.95								**0.946**
Phenol							2.4E-03								9.01E-03		**9.0E-03**
Toluene	3.4E-03		6.20E-03	6.20E-03				5.73E-02	1.8E-03		2.33E-02	0.00E+00				0.00E+00	**2.3E-02**
Total PAH Haps	negl		1.13E-03	1.13E-03			3.9E-02	2.35E-02	negl		4.24E-03	0.00E+00			1.47E-01	0.00E+00	**1.5E-01**
Polycyclic Organic Matter		3.30E-03								1.24E-02							**1.2E-02**
Xylene			1.09E-04	1.09E-04				3.99E-02			4.09E-04	0.00E+00				0.00E+00	**4.1E-04**
								Total HAPs	**0.99**	**0.27**	**0.54**	**0.00**	**0**	**0**	**46.41**	**0.00**	**47.95**

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 10/96), Tables 1.11-1, 1.11-2, 1.11-3, 1.11-4, and 1.11-5
Diesel Engine Oil:	AP-42 Chapter 3.3 (dated 10/96), Tables 3.3-1 and 3.3-2

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
Dryer/Mixer

Company Name: Gohman Asphalt & Construction
Source Address: I-64 & SR 231, Dale, Indiana 47523
Permit Number: 147-29141-05167
Reviewer: Swarna Prabha

The following calculations determine the unlimited/uncontrolled emissions from the aggregate drying/mixing

Maximum Hourly Asphalt Production =	450	ton/hr
Maximum Annual Asphalt Production =	3,942,000	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	55188	55188	55188	**55188**
PM10*	6.5	6.5	6.5	12811.5	12811.5	12811.5	**12811.5**
PM2.5*	1.5	1.5	1.5	2956.5	2956.5	2956.5	**2957**
SO2**	0.0034	0.011	0.058	6.7	21.7	114.3	**114.3**
NOx**	0.026	0.055	0.055	51.2	108.4	108.4	**108.4**
VOC**	0.032	0.032	0.032	63.1	63.1	63.1	**63.1**
CO***	0.13	0.13	0.13	256.2	256.2	256.2	**256.2**
Hazardous Air Pollutant							
HCl			2.10E-04			4.14E-01	**0.41**
Antimony	1.80E-07	1.80E-07	1.80E-07	3.55E-04	3.55E-04	3.55E-04	**3.55E-04**
Arsenic	5.60E-07	5.60E-07	5.60E-07	1.10E-03	1.10E-03	1.10E-03	**1.10E-03**
Beryllium	negl	negl	negl	negl	negl	negl	**0.00E+00**
Cadmium	4.10E-07	4.10E-07	4.10E-07	8.08E-04	8.08E-04	8.08E-04	**8.08E-04**
Chromium	5.50E-06	5.50E-06	5.50E-06	1.08E-02	1.08E-02	1.08E-02	**1.08E-02**
Cobalt	2.60E-08	2.60E-08	2.60E-08	5.12E-05	5.12E-05	5.12E-05	**5.12E-05**
Lead	6.20E-07	1.50E-05	1.50E-05	1.22E-03	2.96E-02	2.96E-02	**2.96E-02**
Manganese	7.70E-06	7.70E-06	7.70E-06	1.52E-02	1.52E-02	1.52E-02	**1.52E-02**
Mercury	2.40E-07	2.60E-06	2.60E-06	4.73E-04	5.12E-03	5.12E-03	**5.12E-03**
Nickel	6.30E-05	6.30E-05	6.30E-05	0.12	0.12	0.12	**0.12**
Selenium	3.50E-07	3.50E-07	3.50E-07	6.90E-04	6.90E-04	6.90E-04	**6.90E-04**
2,2,4 Trimethylpentane	4.00E-05	4.00E-05	4.00E-05	0.08	0.08	0.08	**0.08**
Acetaldehyde			1.30E-03			2.56	**2.56**
Acrolein			2.60E-05			5.12E-02	**5.12E-02**
Benzene	3.90E-04	3.90E-04	3.90E-04	0.77	0.77	0.77	**0.77**
Ethylbenzene	2.40E-04	2.40E-04	2.40E-04	0.47	0.47	0.47	**0.47**
Formaldehyde	3.10E-03	3.10E-03	3.10E-03	6.11	6.11	6.11	**6.11**
Hexane	9.20E-04	9.20E-04	9.20E-04	1.81	1.81	1.81	**1.81**
Methyl chloroform	4.80E-05	4.80E-05	4.80E-05	0.09	0.09	0.09	**0.09**
MEK			2.00E-05			0.04	**0.04**
Propionaldehyde			1.30E-04			0.26	**0.26**
Quinone			1.60E-04			0.32	**0.32**
Toluene	1.50E-04	2.90E-03	2.90E-03	0.30	5.72	5.72	**5.72**
Total PAH Haps	1.90E-04	8.80E-04	8.80E-04	0.37	1.73	1.73	**1.73**
Xylene	2.00E-04	2.00E-04	2.00E-04	0.39	0.39	0.39	**0.39**
						Total HAPs	**21.01**
						Worst Single HAP	**6.11** **(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
Dryer/Mixer Slag Processing

Company Name: **Gohman Asphalt & Construction**
Source Address: **I-64 & SR 231, Dale, Indiana 47523**
Permit Number: **147-29141-05167**
Reviewer: **Swarna Prabha**

The following calculations determine the unlimited emissions from the processing of slag in the aggregate drying/mixing

Maximum Annual Slag Usage* = 12,000 ton/yr 0.66 % sulfur

	Emission Factor (lb/ton)**	Unlimited Potential to Emit (tons/yr)
Criteria Pollutant	Slag Processing	Slag Processing
SO2	0.0014	0.0084

Methodology
* The maximum annual slag usage was provided by the source.

** Testing results for Slag, obtained January 9, 2009 from similar operations at Rieth-Riley Construction Co., Inc. facility located 05241), produced an Emission Factor of 0.54 lb/ton from slag containing 1.10% sulfur content. The source has requested a sa the tested value for use at this location to allow for a sulfur content up to 1.5%.
Unlimited Potential to Emit SO2 from Slag (tons/yr) = [(Maximum Annual Slag Usage (ton/yr)] * [Emission Factor (lb/ton)] * [ton
Abbreviations
SO2 = Sulfur Dioxide

Appendix A.1: Unlimited Emissions Calculations
Hot Oil Heater
Fuel Combustion with Maximum Capacity < 100 MMBtu/hr

Company Name: **Gohman Asphalt & Construction**
Source Location: **I-64 & SR 231, Dale, Indiana 47523**
Permit Number: **147-29141-05167**
Reviewer: **Swarna Prabha**

Maximum Hot Oil Heater Fuel Input Rate =	2.00	MMBtu/hr		
Natural Gas Usage =	18	MMCF/yr		
No. 2 Fuel Oil Usage =	125,143	gal/yr, and	0.50	% 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	0.125	**0.13**
PM10/PM2.5	7.6	3.3	0.067	0.206	**0.21**
SO2	0.6	71.0	0.005	4.443	**4.44**
NOx	100	20.0	0.876	1.251	**1.25**
VOC	5.5	0.20	0.048	0.013	**0.05**
CO	84	5.0	0.736	0.313	**0.74**
Hazardous Air Pollutant					
Arsenic	2.0E-04	5.6E-04	1.8E-06	3.50E-05	**3.5E-05**
Beryllium	1.2E-05	4.2E-04	1.1E-07	2.63E-05	**2.6E-05**
Cadmium	1.1E-03	4.2E-04	9.6E-06	2.63E-05	**2.6E-05**
Chromium	1.4E-03	4.2E-04	1.2E-05	2.63E-05	**2.6E-05**
Cobalt	8.4E-05		7.4E-07		**7.4E-07**
Lead	5.0E-04	1.3E-03	4.4E-06	7.88E-05	**7.9E-05**
Manganese	3.8E-04	8.4E-04	3.3E-06	5.26E-05	**5.3E-05**
Mercury	2.6E-04	4.2E-04	2.3E-06	2.63E-05	**2.6E-05**
Nickel	2.1E-03	4.2E-04	1.8E-05	2.63E-05	**2.6E-05**
Selenium	2.4E-05	2.1E-03	2.1E-07	1.31E-04	**1.3E-04**
Benzene	2.1E-03		1.8E-05		**1.8E-05**
Dichlorobenzene	1.2E-03		1.1E-05		**1.1E-05**
Ethylbenzene					**0.0E+00**
Formaldehyde	7.5E-02	6.10E-02	6.6E-04	3.82E-03	**3.8E-03**
Hexane	1.8E+00		0.02		**1.6E-02**
Phenol					**0.0E+00**
Toluene	3.4E-03		3.0E-05		**3.0E-05**
Total PAH Haps	negl		negl		**0.0E+00**
Polycyclic Organic Matter		3.30E-03		2.06E-04	**2.1E-04**
		Total HAPs =	**1.7E-02**	**4.5E-03**	**0.020**

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
Asphalt Load-Out, Silo Filling, and Yard Emissions

Company Name: Gohman Asphalt & Construction
Source Address: I-64 & SR 231, Dale, Indiana 47523
Permit Number: 147-29141-05167
Reviewer: Swarna Prabha

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 =	3,942,000	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	1.03	1.15	NA	**2.18**
Organic PM	3.4E-04	2.5E-04	NA	0.67	0.500	NA	**1.17**
TOC	0.004	0.012	0.001	8.20	24.02	2.168	**34.4**
CO	0.001	0.001	3.5E-04	2.66	2.326	0.694	**5.68**

NA = Not Applicable (no AP-42 Emission Factor)

PM/HAPs	**0.048**	**0.056**	**0**	**0.104**
VOC/HAPs	**0.121**	**0.305**	**0.032**	**0.459**
non-VOC/HAPs	**6.3E-04**	**6.5E-05**	**1.7E-04**	**8.6E-04**
non-VOC/non-HAPs	**0.59**	**0.34**	**0.16**	**1.09**

Total VOCs	**7.71**	**24.02**	**2.0**	**33.8**
Total HAPs	**0.17**	**0.36**	**0.032**	**0.56**
			Worst Single HAP	**0.175 (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: Gohman Asphalt & Construction
Source Address: I-64 & SR 231, Dale, Indiana 47523
Permit Number: 147-29141-05167
Reviewer: Swarna Prabha

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%	1.7E-03	2.4E-03	NA	4.1E-03
Acenaphthylene	208-96-8	PM/HAP	POM	Organic PM	0.028%	0.014%	1.9E-04	7.0E-05	NA	2.6E-04
Anthracene	120-12-7	PM/HAP	POM	Organic PM	0.07%	0.13%	4.7E-04	6.5E-04	NA	1.1E-03
Benzo(a)anthracene	56-55-3	PM/HAP	POM	Organic PM	0.019%	0.056%	1.3E-04	2.8E-04	NA	4.1E-04
Benzo(b)fluoranthene	205-99-2	PM/HAP	POM	Organic PM	0.0076%	0	5.1E-05	0	NA	5.1E-05
Benzo(k)fluoranthene	207-08-9	PM/HAP	POM	Organic PM	0.0022%	0	1.5E-05	0	NA	1.5E-05
Benzo(g,h,i)perylene	191-24-2	PM/HAP	POM	Organic PM	0.0019%	0	1.3E-05	0	NA	1.3E-05
Benzo(a)pyrene	50-32-8	PM/HAP	POM	Organic PM	0.0023%	0	1.5E-05	0	NA	1.5E-05
Benzo(e)pyrene	192-97-2	PM/HAP	POM	Organic PM	0.0078%	0.0095%	5.2E-05	4.8E-05	NA	1.0E-04
Chrysene	218-01-9	PM/HAP	POM	Organic PM	0.103%	0.21%	6.9E-04	1.1E-03	NA	1.7E-03
Dibenz(a,h)anthracene	53-70-3	PM/HAP	POM	Organic PM	0.00037%	0	2.5E-06	0	NA	2.5E-06
Fluoranthene	206-44-0	PM/HAP	POM	Organic PM	0.05%	0.15%	3.4E-04		NA	3.4E-04
Fluorene	86-73-7	PM/HAP	POM	Organic PM	0.77%	1.01%	5.2E-03	5.1E-03	NA	1.0E-02
Indeno(1,2,3-cd)pyrene	193-39-5	PM/HAP	POM	Organic PM	0.00047%	0	3.2E-06	0	NA	3.2E-06
2-Methylnaphthalene	91-57-6	PM/HAP	POM	Organic PM	2.38%	5.27%	1.6E-02	2.6E-02	NA	0.042
Naphthalene	91-20-3	PM/HAP	POM	Organic PM	1.25%	1.82%	8.4E-03	9.1E-03	NA	1.8E-02
Perylene	198-55-0	PM/HAP	POM	Organic PM	0.022%	0.03%	1.5E-04	1.5E-04	NA	3.0E-04
Phenanthrene	85-01-8	PM/HAP	POM	Organic PM	0.81%	1.80%	5.4E-03	9.0E-03	NA	1.4E-02
Pyrene	129-00-0	PM/HAP	POM	Organic PM	0.15%	0.44%	1.0E-03	2.2E-03	NA	3.2E-03
Total PAH HAPs							**0.040**	**0.056**	**NA**	**0.096**
Other semi-volatile HAPs										
Phenol		PM/HAP	---	Organic PM	1.18%	0	7.9E-03	0	0	7.9E-03

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)

					Speciation Profile		Unlimited/Uncontrolled Potential to Emit (tons/yr)			
Pollutant	**CASRN**	**Category**	**HAP Type**	**Source**	**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%	**7.71**	**24.02**	**2.04**	**33.76**
non-VOC/non-HAPS										
Methane	74-82-8	non-VOC/non-HAP	---	TOC	6.50%	0.26%	5.3E-01	6.2E-02	1.4E-01	0.736
Acetone	67-64-1	non-VOC/non-HAP	---	TOC	0.046%	0.055%	3.8E-03	1.3E-02	1.0E-03	0.018
Ethylene	74-85-1	non-VOC/non-HAP	---	TOC	0.71%	1.10%	5.8E-02	2.6E-01	1.5E-02	0.338
Total non-VOC/non-HAPS					7.30%	1.40%	**0.598**	**0.336**	**0.158**	**1.09**
Volatile organic HAPs										
Benzene	71-43-2	VOC/HAP	---	TOC	0.052%	0.032%	4.3E-03	7.7E-03	1.1E-03	1.3E-02
Bromomethane	74-83-9	VOC/HAP	---	TOC	0.0096%	0.0049%	7.9E-04	1.2E-03	2.1E-04	2.2E-03
2-Butanone	78-93-3	VOC/HAP	---	TOC	0.049%	0.039%	4.0E-03	9.4E-03	1.1E-03	1.4E-02
Carbon Disulfide	75-15-0	VOC/HAP	---	TOC	0.013%	0.016%	1.1E-03	3.8E-03	2.8E-04	5.2E-03
Chloroethane	75-00-3	VOC/HAP	---	TOC	0.00021%	0.004%	1.7E-05	9.6E-04	4.6E-06	9.8E-04
Chloromethane	74-87-3	VOC/HAP	---	TOC	0.015%	0.023%	1.2E-03	5.5E-03	3.3E-04	7.1E-03
Cumene	92-82-8	VOC/HAP	---	TOC	0.11%	0	9.0E-03	0	2.4E-03	1.1E-02
Ethylbenzene	100-41-4	VOC/HAP	---	TOC	0.28%	0.038%	2.3E-02	9.1E-03	6.1E-03	0.038
Formaldehyde	50-00-0	VOC/HAP	---	TOC	0.088%	0.69%	7.2E-03	1.7E-01	1.9E-03	0.175
n-Hexane	100-54-3	VOC/HAP	---	TOC	0.15%	0.10%	1.2E-02	2.4E-02	3.3E-03	0.040
Isooctane	540-84-1	VOC/HAP	---	TOC	0.0018%	0.00031%	1.5E-04	7.4E-05	3.9E-05	2.6E-04
Methylene Chloride	75-09-2	non-VOC/HAP	---	TOC	0	0.00027%	0	6.5E-05	0	6.5E-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%	6.0E-04	1.3E-03	1.6E-04	2.1E-03
Tetrachloroethene	127-18-4	non-VOC/HAP	---	TOC	0.0077%	0	6.3E-04	0	1.7E-04	8.0E-04
Toluene	100-88-3	VOC/HAP	---	TOC	0.21%	0.062%	1.7E-02	1.5E-02	4.6E-03	0.037
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	1.1E-04	0	2.8E-05	1.3E-04
m-/p-Xylene	1330-20-7	VOC/HAP	---	TOC	0.41%	0.20%	3.4E-02	4.8E-02	8.9E-03	0.091
o-Xylene	95-47-6	VOC/HAP	---	TOC	0.08%	0.057%	6.6E-03	1.4E-02	1.7E-03	2.2E-02
Total volatile organic HAPs					1.50%	1.30%	**0.123**	**0.312**	**0.033**	**0.468**

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

Appendix A.1: Unlimited Emissions Calculations
Material Storage Piles

Company Name: **Gohman Asphalt & Construction**
Source Address: **I-64 & SR 231, Dale, Indiana 47523**
Permit Number: **147-29141-05167**
Reviewer: **Swarna Prabha**

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	0.25	0.137	0.048
Limestone	1.6	1.85	4.00	1.352	0.473
RAP	0.5	0.58	1.50	0.158	0.055
Gravel	1.6	1.85	0.00	0.000	0.000
Slag	3.8	4.40	0.25	0.201	0.070
			Totals	**1.85**	**0.65**

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 Calculation
Material Processing, Handling, Crushing, Screening, and Conveying

Company Name: Gohman Asphalt & Construction
Source Address: I-64 & SR 231, Dale, Indiana 47523
Permit Number: 147-29141-05167
Reviewer: Swarna Prabha

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 emissi
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 =	3,942,000	tons/yr
Percent Asphalt Cement/Binder (weight %) =	5.0%	
Maximum Material Handling Throughput =	3,744,900	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	4.24	2.01	0.30
Front-end loader dumping of materials into feeder bins	4.24	2.01	0.30
Conveyor dropping material into dryer/mixer or batch tower	4.24	2.01	0.30
Total (tons/yr)	**12.73**	**6.02**	**0.91**

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 (we
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 P
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	10.11	4.49
Screening	0.025	0.0087	46.81	16.29
Conveying	0.003	0.0011	5.62	2.06
Unlimited Potential to Emit (tons/yr) =			**62.54**	**22.84**

Methodology
Maximum Material Handling Throughput (tons/yr) = [Annual Asphalt Production Limitation (tons/yr)] * [1 - Percent Asphalt Cement/Binder (we
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 w
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
(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: Gohman Asphalt & Construction
Source Address: I-64 & SR 231, Dale, Indiana 47523
Permit Number: 147-29141-05167
Reviewer: Swarna Prabha

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 =	3,942,000	tons/yr
Percent Asphalt Cement/Binder (weight %) =	5.0%	
Maximum Material Handling Throughput =	3,744,900	tons/yr
Maximum Asphalt Cement/Binder Throughput =	197,100	tons/yr
Maximum No. 2 Fuel Oil Usage =	7,508,571	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)	14.6	20.5	35.1	1.8E+05	6.4E+06	1500	0.284	51897.2
Aggregate/RAP Truck Leave Empty	Dump truck (16 CY)	14.6	0	14.6	1.8E+05	2.7E+06	1500	0.284	51897.2
Asphalt Cement/Binder Truck Enter Full	Tanker truck (6000 gal)	14.1	22.0	36.1	9.0E+03	3.2E+05	1800	0.341	3054.2
Asphalt Cement/Binder Truck Leave Empty	Tanker truck (6000 gal)	14.1	0	14.1	9.0E+03	1.3E+05	1800	0.341	3054.2
Fuel Oil Truck Enter Full	Tanker truck (6000 gal)	12.0	32.0	44.0	7.9E+02	3.5E+04	1800	0.341	270.4
Fuel Oil Truck Leave Empty	Tanker truck (6000 gal)	12.0	0	12.0	7.9E+02	9.5E+03	1800	0.341	270.4
Aggregate/RAP Loader Full	Front-end loader (3 CY)	27.5	7.0	34.5	5.3E+05	1.8E+07	620	0.117	62820.3
Aggregate/RAP Loader Empty	Front-end loader (3 CY)	27.5	0	27.5	5.3E+05	1.5E+07	620	0.117	62820.3
Asphalt Concrete Truck Leave Full	Dump truck (16 CY)	0.0	0.0	0.0	0.0E+00	0.0E+00	0	0.000	0.0
Asphalt Concrete Truck Enter Empty	Dump truck (16 CY)	0.0	0	0.0	0.0E+00	0.0E+00	0	0.000	0.0
	Total				**1.5E+06**	**4.3E+07**			**2.4E+05**

Average Vehicle Weight Per Trip =	29.4	tons/trip
Average Miles Per Trip =	0.162	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 Roa
a =	0.7	0.9	0.9	= constant (AP-42 Table 13.2.2-2)
W =	29.4	29.4	29.4	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 =	7.20	1.84	0.18	lb/mile
Mitigated Emission Factor, Eext =	4.74	1.21	0.12	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)	186.93	47.64	4.76	122.91	31.33	3.13	61.45	15.66	1.57
Aggregate/RAP Truck Leave Empty	Dump truck (16 CY)	186.93	47.64	4.76	122.91	31.33	3.13	61.45	15.66	1.57
Asphalt Cement/Binder Truck Enter Full	Tanker truck (6000 gal)	11.001	2.804	0.28	7.233	1.844	0.18	3.617	0.922	0.09
Asphalt Cement/Binder Truck Leave Empty	Tanker truck (6000 gal)	11.001	2.804	0.28	7.233	1.844	0.18	3.617	0.922	0.09
Fuel Oil Truck Enter Full	Tanker truck (6000 gal)	0.974	0.248	0.02	0.640	0.163	0.02	0.320	0.082	0.01
Fuel Oil Truck Leave Empty	Tanker truck (6000 gal)	0.974	0.248	0.02	0.640	0.163	0.02	0.320	0.082	0.01
Aggregate/RAP Loader Full	Front-end loader (3 CY)	226.27	57.67	5.77	148.78	37.92	3.79	74.39	18.96	1.90
Aggregate/RAP Loader Empty	Front-end loader (3 CY)	226.27	57.67	5.77	148.78	37.92	3.79	74.39	18.96	1.90
Asphalt Concrete Truck Leave Full	Dump truck (16 CY)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Concrete Truck Enter Empty	Dump truck (16 CY)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Totals	**850.34**	**216.72**	**21.67**	**559.13**	**142.50**	**14.25**	**279.56**	**71.25**	**7.13**

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: Gohman Asphalt & Construction
Source Address: I-64 & SR 231, Dale, Indiana 47523
Permit Number: 147-29141-05167
Reviewer: Swarna Prabha

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 =	3,942,000	tons/yr
Percent Asphalt Cement/Binder (weight %) =	5.0%	
Maximum Material Handling Throughput =	3,744,900	tons/yr
Maximum Asphalt Cement/Binder Throughput =	197,100	tons/yr
Maximum No. 2 Fuel Oil Usage =	7,508,571	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)	14.6	20.5	35.10	1.8E+05	6.4E+06	1500	0.284	51897.2
Aggregate/RAP Truck Leave Empty	Dump truck (16 CY)	14.6	0	14.60	1.8E+05	2.7E+06	1500	0.284	51897.2
Asphalt Cement/Binder Truck Enter Full	Tanker truck (6000 gal)	14.1	22.0	36.10	9.0E+03	3.2E+05	1800	0.341	3054.2
Asphalt Cement/Binder Truck Leave Empty	Tanker truck (6000 gal)	14.1	0	14.10	9.0E+03	1.3E+05	1800	0.341	3054.2
Fuel Oil Truck Enter Full	Tanker truck (6000 gal)	12.0	32.0	44.00	7.9E+02	3.5E+04	1800	0.341	270.4
Fuel Oil Truck Leave Empty	Tanker truck (6000 gal)	12.0	0	12.00	7.9E+02	9.5E+03	1800	0.341	270.4
Aggregate/RAP Loader Full	Front-end loader (3 CY)	27.5	7.0	34.50	5.3E+05	1.8E+07	620	0.117	62820.3
Aggregate/RAP Loader Empty	Front-end loader (3 CY)	27.5	0	27.50	5.3E+05	1.5E+07	620	0.117	62820.3
Asphalt Concrete Truck Leave Full	Dump truck (16 CY)	0.0	0.0	0.00	0.0E+00	0.0E+00	0	0.000	0.0
Asphalt Concrete Truck Enter Empty	Dump truck (16 CY)	0.0	0	0.00	0.0E+00	0.0E+00	0	0.000	0.0
	Total				**1.5E+06**	**4.3E+07**			**2.4E+05**

Average Vehicle Weight Per Trip =	29.4	tons/trip
Average Miles Per Trip =	0.162	miles/trip

Unmitigated Emission Factor, Ef = [k * (sL/2)^0.65 * (W/3)^1.5 - C] (Equation 1 from AP-42 13.2.1)

	PM	PM10	PM2.5	
where k =	0.082	0.016	0.0024	lb/mi = particle size multiplier (AP-42 Table 13.2.1-1)
W =	29.4	29.4	29.4	tons = average vehicle weight (provided by source)
C =	0.00047	0.00047	0.00036	lb/mi = emission factor for vehicle exhaust, brake wear, and tire wear (AP-42 Table 13.2.1-2)
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 =	1.15	0.22	0.03	lb/mile
Mitigated Emission Factor, Eext =	1.05	0.20	0.03	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)	29.80	5.81	0.86	27.25	5.31	0.79	13.63	2.65	0.39
Aggregate/RAP Truck Leave Empty	Dump truck (16 CY)	29.80	5.81	0.86	27.25	5.31	0.79	13.63	2.65	0.39
Asphalt Cement/Binder Truck Enter Full	Tanker truck (6000 gal)	1.754	0.342	5.1E-02	1.604	0.312	4.6E-02	0.802	1.6E-01	2.3E-02
Asphalt Cement/Binder Truck Leave Empty	Tanker truck (6000 gal)	1.754	0.342	5.1E-02	1.604	0.312	4.6E-02	0.802	1.6E-01	2.3E-02
Fuel Oil Truck Enter Full	Tanker truck (6000 gal)	1.6E-01	3.0E-02	4.5E-03	1.4E-01	2.8E-02	4.1E-03	7.1E-02	1.4E-02	2.1E-03
Fuel Oil Truck Leave Empty	Tanker truck (6000 gal)	1.6E-01	3.0E-02	4.5E-03	1.4E-01	2.8E-02	4.1E-03	7.1E-02	1.4E-02	2.1E-03
Aggregate/RAP Loader Full	Front-end loader (3 CY)	36.08	7.03	1.05	32.99	6.43	0.96	16.49	3.21	0.48
Aggregate/RAP Loader Empty	Front-end loader (3 CY)	36.08	7.03	1.05	32.99	6.43	0.96	16.49	3.21	0.48
Asphalt Concrete Truck Leave Full	Dump truck (16 CY)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Concrete Truck Enter Empty	Dump truck (16 CY)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Totals	**135.58**	**26.41**	**3.93**	**123.97**	**24.15**	**3.59**	**61.99**	**12.07**	**1.80**

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: **Gohman Asphalt & Construction**
Source Address: **I-64 & SR 231, Dale, Indiana 47523**
Permit Number: **147-29141-05167**
Reviewer: **Swarna Prabha**

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 =	0	tons/yr
Percent Asphalt Cement/Binder (weight %) =	5.0%	
Maximum Asphalt Cement/Binder Throughput =	0	tons/yr

source does not produce cold mix asphalt .

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%	0.0	0.0
Cut back asphalt medium cure (assuming kerosene solvent)	28.6%	70.0%	0.0	0.0
Cut back asphalt slow cure (assuming fuel oil solvent)	20.0%	25.0%	0.0	0.0
Emulsified asphalt with solvent (assuming water, emulsifying agent, and 15% fuel oil solvent)	15.0%	46.4%	0.0	0.0
Other asphalt with solvent binder	25.9%	2.5%	0.0	0.0
			Worst Case PTE of VOC =	**0.0**

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) =	**0.00**	
PTE of Single HAP (tons/yr) =	**0.00**	**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

Appendix A.1: Unlimited Emissions Calculations
Gasoline Fuel Transfer and Dispensing Operation

Company Name: **Gohman Asphalt & Construction**
Source Address: **I-64 & SR 231, Dale, Indiana 47523**
Permit Number: **147-29141-05167**
Reviewer: **Swarna Prabha**

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:

Source does not have a gasoline dispensing operation .

Gasoline Throughput =	0	gallons/day
=	0.0	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	0.00
Tank breathing and emptying	1.0	0.00
Vehicle refueling (displaced losses - controlled)	1.1	0.00
Spillage	0.7	0.00
Total		**0.00**

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) =	**0.00**	
Limited PTE of Single HAP (tons/yr) =	**0.00**	**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

Appendix A.2: Limited Emissions Summary
Entire Source

Company Name: Gohman Asphalt & Construction
Source Address: I-64 & SR 231, Dale, Indiana 47523
Permit Number: 147-29141-05167
Reviewer: Swarna Prabha

Asphalt Plant Limitations

Maximum Hourly Asphalt Production =	450	ton/hr								
Annual Asphalt Production Limitation =	600,000	ton/yr								
Slag Usage Limitation =	12,000	ton/yr	0.66	% sulfur						
Natural Gas Limitation =	1,028.93	MMCF/yr								
No. 2 Fuel Oil Limitation =	2,663,353	gal/yr, and	0.50	% sulfur						
No. 4 Fuel Oil Limitation =	2,521,307	gal/yr, and	0.50	% sulfur						
Residual (No. 5 or No. 6) Fuel Oil Limitation =	0	gal/yr, and	0.50	% sulfur						
Propane Limitation =	15,038,242	gal/yr, and	0.20	gr/100 ft3 sulfur						
Butane Limitation =	0	gal/yr, and	0.22	gr/100 ft3 sulfur						
Used/Waste Oil Limitation =	2,572,763	gal/yr, and	0.50	% sulfur	0.30	% ash	0.100	% chlorine,	0.100	% lead

PM Dryer/Mixer Limitation =	0.642	lb/ton of asphalt production	Value is set in order to limit source-wide PM to less than 250 tons/year.
PM10 Dryer/Mixer Limitation =	0.275	lb/ton of asphalt production	Value set in order to limit source-wide PM-10 to less than 100 tons/year.
PM2.5 Dryer/Mixer Limitation =	0.310	lb/ton of asphalt production	Value is set in order to limit source-wide PM2.5 to less than 100 tons/year.
CO Dryer/Mixer Limitation =	0.130	lb/ton of asphalt production	Note AP-42 uncontrolled emission factor for CO is 0.13 lb/ton.
VOC Dryer/Mixer Limitation =	0.032	lb/ton of asphalt production	Note AP-42 uncontrolled emission factor for VOC is 0.032 lb/ton.
Slag SO2 Dryer/Mixer Limitation =	0.0014	lb/ton of slag processed	Value is set in order to limit source-wide SO2 to less than 100 tons/year.
Cold Mix Asphalt VOC Usage Limitation =	0.0	tons/yr	
HCl Limitation =	6.6	lb/kgal	and source-wide HAPs to less than 10/25 tons/year.

Limited/Controlled Emissions

	Limited/Controlled Potential Emissions (tons/year)									
	Criteria Pollutants							Hazardous Air Pollutants		
Process Description	**PM**	**PM10**	**PM2.5**	**SO2**	**NOx**	**VOC**	**CO**	**Total HAPs**	**Worst Case HAP**	
Ducted Emissions										
Dryer Fuel Combustion (worst case)	24.70	19.68	19.68	94.55	97.75	7.52	56.39	17.03	8.49	(hydrogen chloride)
Dryer/Mixer (Process)	192.56	82.54	93.11	17.40	16.50	9.60	39.00	3.20	0.93	(formaldehyde)
Dryer/Mixer Slag Processing	0	0	0	0.0084	0	0	0	0	0	
Hot Oil Heater Fuel Combustion (worst case)	0.13	0.21	0.21	4.44	1.25	0.05	0.74	0.02	0.016	(hexane)
Worst Case Emissions*	**192.68**	**82.75**	**93.32**	**99.00**	**99.00**	**9.65**	**57.13**	**17.05**	**8.49**	(hydrogen chloride)
Fugitive Emissions										
Asphalt Load-Out, Silo Filling, On-Site Yard	0.33	0.33	0.33	0	0	5.14	0.86	0.09	0.03	(formaldehyde)
Material Storage Piles	1.85	0.65	0.65	0	0	0	0	0	0	
Material Processing and Handling	1.94	0.92	0.14	0	0	0	0	0	0	
Material Crushing, Screening, and Conveying	9.52	3.48	3.48	0	0	0	0	0	0	
Unpaved and Paved Roads (worst case)	42.68	10.88	1.09	0	0	0	0	0	0	
Cold Mix Asphalt Production	0	0	0	0	0	0.00	0	0.00	0.00	(xylenes)
Gasoline Fuel Transfer and Dispensing	0	0	0	0	0	0.00	0	0.00	0.00	(xylenes)
Volatile Organic Liquid Storage Vessels	0	0	0	0	0	negl	0	negl	negl	
Total Fugitive Emissions	**56.32**	**16.25**	**5.68**	**0**	**0**	**5.14**	**0.86**	**0.09**	**0.00**	(xylenes)
Totals Limited/Controlled Emissions	**249.00**	**99.00**	**99.00**	**99.00**	**99.00**	**14.79**	**57.99**	**17.14**	**8.49**	(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 + Dryer/Mixer Slag Processing + Worst Case Emissions from Hot Oil Heater Fuel Combustion
Fuel component percentages provided by the source.

Appendix A.2: Limited Emissions Summary
Dryer/Mixer Fuel Combustion with Maximum Capacity > 100 MMBtu/hr

Company Name: Gohman Asphalt & Construction
Source Address: I-64 & SR 231, Dale, Indiana 47523
Permit Number: 147-29141-05167
Reviewer: Swarna Prabha

The following calculations determine the limited emissions created from the combustion of natural gas, fuel oil, propane, butane, or used/waste oil in the dryer/mixer and all other fuel combustion sources at the source.

Production and Fuel Limitations

Maximum Hourly Asphalt Production =	450	ton/hr								
Annual Asphalt Production Limitation =	600,000	ton/yr								
Natural Gas Limitation =	1,029	MMCF/yr								
No. 2 Fuel Oil Limitation =	2,663,353	gal/yr, and	0.50	% sulfur						
No. 4 Fuel Oil Limitation =	2,521,307	gal/yr, and	0.50	% sulfur						
Residual (No. 5 or No. 6) Fuel Oil Limitation =	0	gal/yr, and	0.50	% sulfur						
Propane Limitation =	15,038,242	gal/yr, and	0.20	gr/100 ft3 sulfur						
Butane Limitation =	0	gal/yr, and	0.22	gr/100 ft3 sulfur						
Used/Waste Oil Limitation =	2,572,763	gal/yr, and	0.50	% sulfur	0.30	% ash	0.100	% chlorine,	0.100	% lead

Limited Emissions

	Emission Factor (units)							Limited 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)	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)	Used/ Waste Oil (tons/yr)	**Worse Case Fuel (tons/yr)**
PM	1.9	2	7	7.815	0.5	0.6	19.2	0.98	2.66	8.82	0.00	3.760	0.000	24.70	**24.70**
PM10	7.6	3.3	8.3	9.315	0.5	0.6	15.3	3.91	4.39	10.46	0.00	3.760	0.000	19.68	**19.68**
SO2	0.6	71.0	75.0	78.5	0.020	0.020	73.5	0.31	94.55	94.55	0.00	0.150	0.000	94.55	**94.55**
NOx	190	24.0	47.0	47.0	13.0	15.0	19.0	97.75	31.96	59.25	0.00	97.75	0.00	24.44	**97.75**
VOC	5.5	0.20	0.20	0.28	1.00	1.10	1.0	2.83	0.27	0.25	0.00	7.52	0.00	1.29	**7.52**
CO	84	5.0	5.0	5.0	7.5	8.4	5.0	43.22	6.66	6.30	0.00	56.39	0.00	6.43	**56.39**
Hazardous Air Pollutant															
HCl							6.6							8.49	**8.49**
Antimony			5.25E-03	5.25E-03			negl			6.62E-03	0.00E+00			negl	**6.6E-03**
Arsenic	2.0E-04	5.6E-04	1.32E-03	1.32E-03			1.1E-01	1.0E-04	7.46E-04	1.66E-03	0.00E+00			1.42E-01	**1.4E-01**
Beryllium	1.2E-05	4.2E-04	2.78E-05	2.78E-05			negl	6.2E-06	5.59E-04	3.50E-05	0.00E+00			negl	**5.6E-04**
Cadmium	1.1E-03	4.2E-04	3.98E-04	3.98E-04			9.3E-03	5.7E-04	5.59E-04	5.02E-04	0.00E+00			1.20E-02	**1.2E-02**
Chromium	1.4E-03	4.2E-04	8.45E-04	8.45E-04			2.0E-02	7.2E-04	5.59E-04	1.07E-03	0.00E+00			2.57E-02	**2.6E-02**
Cobalt	8.4E-05		6.02E-03	6.02E-03			2.1E-04	4.3E-05		7.59E-03	0.00E+00			2.70E-04	**7.6E-03**
Lead	5.0E-04	1.3E-03	1.51E-03	1.51E-03			5.5	2.6E-04	1.68E-03	1.90E-03	0.00E+00			7.1E+00	**7.08**
Manganese	3.8E-04	8.4E-04	3.00E-03	3.00E-03			6.8E-02	2.0E-04	1.12E-03	3.78E-03	0.00E+00			8.75E-02	**0.09**
Mercury	2.6E-04	4.2E-04	1.13E-04	1.13E-04				1.3E-04	5.59E-04	1.42E-04	0.00E+00				**5.6E-04**
Nickel	2.1E-03	4.2E-04	8.45E-02	8.45E-02			1.1E-02	1.1E-03	5.59E-04	1.07E-01	0.00E+00			1.42E-02	**0.107**
Selenium	2.4E-05	2.1E-03	6.83E-04	6.83E-04			negl	1.2E-05	2.80E-03	8.61E-04	0.00E+00			negl	**2.8E-03**
1.1.1-Trichloroethane			2.36E-04	2.36E-04						2.98E-04	0.00E+00				**3.0E-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		2.70E-04	0.00E+00				**1.1E-03**
Bis(2-ethylhexyl)phthalate							2.2E-03							2.83E-03	**2.8E-03**
Dichlorobenzene	1.2E-03						8.0E-07	6.2E-04						1.03E-06	**6.2E-04**
Ethylbenzene			6.36E-05	6.36E-05						8.02E-05	0.00E+00				**8.0E-05**
Formaldehyde	7.5E-02	6.10E-02	3.30E-02	3.30E-02				3.9E-02	8.12E-02	4.16E-02	0.00E+00				**0.081**
Hexane	1.8E+00							0.93							**0.926**
Phenol							2.4E-03							3.09E-03	**3.1E-03**
Toluene	3.4E-03		6.20E-03	6.20E-03				1.7E-03		7.82E-03	0.00E+00				**7.8E-03**
Total PAH Haps	negl		1.13E-03	1.13E-03			3.9E-02	negl		1.42E-03	0.00E+00			5.03E-02	**5.0E-02**
Polycyclic Organic Matter		3.30E-03							4.39E-03						**4.4E-03**
Xylene			1.09E-04	1.09E-04						1.37E-04	0.00E+00				**1.4E-04**
							Total HAPs	**0.97**	**0.09**	**0.18**	**0.00**	**0**	**0**	**15.90**	**17.03**

Methodology

Natural Gas: Limited Potential to Emit (tons/yr) = (Natural Gas Limitation (MMCF/yr)) * (Emission Factor (lb/MMCF)) * (ton/2000 lbs)
All Other Fuels: Limited Potential to Emit (tons/yr) = (Fuel Limitation (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 10/96), 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)
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.2: Limited Emissions Summary
Dryer/Mixer

Company Name: Gohman Asphalt & Construction
Source Address: I-64 & SR 231, Dale, Indiana 47523
Permit Number: 147-29141-05167
Reviewer: Swarna Prabha

The following calculations determine the limited emissions from the aggregate drying/mixing

Maximum Hourly Asphalt Production =	450	ton/hr
Annual Asphalt Production Limitation =	600,000	ton/yr
PM Dryer/Mixer Limitation =	0.642	lb/ton of asphalt production
PM10 Dryer/Mixer Limitation =	0.275	lb/ton of asphalt production
PM2.5 Dryer/Mixer Limitation =	0.310	lb/ton of asphalt production
CO Dryer/Mixer Limitation =	0.130	lb/ton of asphalt production
VOC Dryer/Mixer Limitation =	0.032	lb/ton of asphalt production

	Emission Factor or Limitation (lb/ton) Drum-Mix Plant (dryer/mixer, controlled by fabric filter)			Limited/Controlled Potential to Emit (tons/yr) Drum-Mix Plant (dryer/mixer, controlled by fabric filter)			
Criteria Pollutant	Natural Gas	No. 2 Fuel Oil	Waste Oil	Natural Gas	No. 2 Fuel Oil	Waste Oil	**Worse Case PTE**
PM*	0.642	0.642	0.642	192.6	192.6	192.6	**192.6**
PM10*	0.275	0.275	0.275	82.5	82.5	82.5	**82.5**
PM2.5*	0.310	0.310	0.310	93.1	93.1	93.1	**93.1**
SO2**	0.003	0.011	0.058	1.0	3.3	17.4	**17.4**
NOx**	0.026	0.055	0.055	7.8	16.5	16.5	**16.5**
VOC**	0.032	0.032	0.032	9.6	9.6	9.6	**9.6**
CO***	0.130	0.130	0.130	39.0	39.0	39.0	**39.0**
Hazardous Air Pollutant							
HCl			2.10E-04			0.06	**0.06**
Antimony	1.80E-07	1.80E-07	1.80E-07	5.40E-05	5.40E-05	5.40E-05	**5.40E-05**
Arsenic	5.60E-07	5.60E-07	5.60E-07	1.68E-04	1.68E-04	1.68E-04	**1.68E-04**
Beryllium	negl	negl	negl	negl	negl	negl	**0.00E+00**
Cadmium	4.10E-07	4.10E-07	4.10E-07	1.23E-04	1.23E-04	1.23E-04	**1.23E-04**
Chromium	5.50E-06	5.50E-06	5.50E-06	1.65E-03	1.65E-03	1.65E-03	**1.65E-03**
Cobalt	2.60E-08	2.60E-08	2.60E-08	7.80E-06	7.80E-06	7.80E-06	**7.80E-06**
Lead	6.20E-07	1.50E-05	1.50E-05	1.86E-04	4.50E-03	4.50E-03	**4.50E-03**
Manganese	7.70E-06	7.70E-06	7.70E-06	2.31E-03	2.31E-03	2.31E-03	**2.31E-03**
Mercury	2.40E-07	2.60E-06	2.60E-06	7.20E-05	7.80E-04	7.80E-04	**7.80E-04**
Nickel	6.30E-05	6.30E-05	6.30E-05	1.89E-02	1.89E-02	1.89E-02	**1.89E-02**
Selenium	3.50E-07	3.50E-07	3.50E-07	1.05E-04	1.05E-04	1.05E-04	**1.05E-04**
2,2,4 Trimethylpentane	4.00E-05	4.00E-05	4.00E-05	1.20E-02	1.20E-02	1.20E-02	**1.20E-02**
Acetaldehyde			1.30E-03			0.39	**0.39**
Acrolein			2.60E-05			7.80E-03	**7.80E-03**
Benzene	3.90E-04	3.90E-04	3.90E-04	0.12	0.12	0.12	**0.12**
Ethylbenzene	2.40E-04	2.40E-04	2.40E-04	0.07	0.07	0.07	**0.07**
Formaldehyde	3.10E-03	3.10E-03	3.10E-03	0.93	0.93	0.93	**0.93**
Hexane	9.20E-04	9.20E-04	9.20E-04	0.28	0.28	0.28	**0.28**
Methyl chloroform	4.80E-05	4.80E-05	4.80E-05	0.01	0.01	0.01	**0.01**
MEK			2.00E-05			0.01	**0.01**
Propionaldehyde			1.30E-04			0.04	**0.04**
Quinone			1.60E-04			0.05	**0.05**
Toluene	1.50E-04	2.90E-03	2.90E-03	0.05	0.87	0.87	**0.87**
Total PAH Haps	1.90E-04	8.80E-04	8.80E-04	0.06	0.26	0.26	**0.26**
Xylene	2.00E-04	2.00E-04	2.00E-04	0.06	0.06	0.06	**0.06**
						Total HAPs	**3.20**
						Worst Single HAP	**0.93** **(formaldehyde)**

Methodology
Limited/Controlled Potential to Emit (tons/yr) = (Annual Asphalt Production Limitation (tons/yr)) * (Emission Factor (lb/ton)) * (ton/2000 lbs)
Emission Factors from AP-42 Chapter 11.1 (dated 3/04), Tables 11.1-3, 11.1-4, 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.2: Limited Emissions Summary
Dryer/Mixer Slag Processing

Company Name: **Gohman Asphalt & Construction**
Source Address: **I-64 & SR 231, Dale, Indiana 47523**
Permit Number: **147-29141-05167**
Reviewer: **Swarna Prabha**

The following calculations determine the limited emissions from the processing of slag in the aggregate drying/mixing

Slag Usage Limitation =	12,000	ton/yr		
SO2 Slag Limitation =	0.0014	lb/ton of slag processed	0.66	% sulfur

	Emission Factor or Limitation (lb/ton)*	Limited Potential to Emit (tons/yr)
Criteria Pollutant	Slag Processing	Slag Processing
SO2	0.0014	0.0084

Methodology

* Testing results for Slag, obtained January 9, 2009 from similar operations at Rieth-Riley Construction Co., Inc. facility located in Valparaiso, IN (permit #127-27075-05241), produced an Emission Factor of 0.54 lb/ton from slag containing 1.10% sulfur content. The source has requested a safety factor of 0.20 lb/ton be added to the tested value for use at this location to allow for a sulfur content up to 1.5%.

Limited Potential to Emit SO2 from Slag (tons/yr) = (Slag Usage Limitation (ton/yr)] * [Limited Emission Factor (lb/ton)] * [ton/2000 lbs]

Abbreviations

SO2 = Sulfur Dioxide

Appendix A.2: Limited Emissions Summary
Hot Oil Heater
Fuel Combustion with Maximum Capacity < 100 MMBtu/hr

Company Name: Gohman Asphalt & Construction
Source Location: I-64 & SR 231, Dale, Indiana 47523
Permit Number: 147-29141-05167
Reviewer: Swarna Prabha

Maximum Hot Oil Heater Fuel Input Rate =	2.00	MMBtu/hr		
Natural Gas Usage =	18	MMCF/yr		
No. 2 Fuel Oil Usage =	125,143	gal/yr, and	0.50	% 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	0.125	**0.13**
PM10/PM2.5	7.6	3.3	0.067	0.206	**0.21**
SO2	0.6	71.0	0.005	4.443	**4.44**
NOx	100	20.0	0.876	1.251	**1.25**
VOC	5.5	0.20	0.048	0.013	**0.05**
CO	84	5.0	0.736	0.313	**0.74**
Hazardous Air Pollutant					
Arsenic	2.0E-04	5.6E-04	1.8E-06	3.50E-05	**3.5E-05**
Beryllium	1.2E-05	4.2E-04	1.1E-07	2.63E-05	**2.6E-05**
Cadmium	1.1E-03	4.2E-04	9.6E-06	2.63E-05	**2.6E-05**
Chromium	1.4E-03	4.2E-04	1.2E-05	2.63E-05	**2.6E-05**
Cobalt	8.4E-05		7.4E-07		**7.4E-07**
Lead	5.0E-04	1.3E-03	4.4E-06	7.88E-05	**7.9E-05**
Manganese	3.8E-04	8.4E-04	3.3E-06	5.26E-05	**5.3E-05**
Mercury	2.6E-04	4.2E-04	2.3E-06	2.63E-05	**2.6E-05**
Nickel	2.1E-03	4.2E-04	1.8E-05	2.63E-05	**2.6E-05**
Selenium	2.4E-05	2.1E-03	2.1E-07	1.31E-04	**1.3E-04**
Benzene	2.1E-03		1.8E-05		**1.8E-05**
Dichlorobenzene	1.2E-03		1.1E-05		**1.1E-05**
Ethylbenzene					**0**
Formaldehyde	7.5E-02	6.10E-02	6.6E-04	3.82E-03	**0.004**
Hexane	1.8E+00		0.02		**0.016**
Phenol					**0**
Toluene	3.4E-03		3.0E-05		**3.0E-05**
Total PAH Haps	negl		negl		**0**
Polycyclic Organic Matter		3.30E-03		2.06E-04	**2.1E-04**
		Total HAPs =	**1.7E-02**	**4.5E-03**	**0.020**

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.2: Limited Emissions Summary
Asphalt Load-Out, Silo Filling, and Yard Emissions

Company Name: Gohman Asphalt & Construction
Source Address: I-64 & SR 231, Dale, Indiana 47523
Permit Number: 147-29141-05167
Reviewer: Swarna Prabha

The following calculations determine the limited 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	
Annual Asphalt Production Limitation =	600,000	tons/yr

	Emission Factor (lb/ton asphalt)			Limited 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	0.16	0.18	NA	**0.33**
Organic PM	3.4E-04	2.5E-04	NA	0.10	0.076	NA	**0.18**
TOC	0.004	0.012	0.001	1.25	3.66	0.330	**5.2**
CO	0.001	0.001	3.5E-04	0.40	0.354	0.106	**0.86**

NA = Not Applicable (no AP-42 Emission Factor)

PM/HAPs	**0.007**	**0.009**	**0**	**0.016**
VOC/HAPs	**0.018**	**0.046**	**0.005**	**0.070**
non-VOC/HAPs	**9.6E-05**	**9.9E-06**	**2.5E-05**	**1.3E-04**
non-VOC/non-HAPs	**0.09**	**0.05**	**0.02**	**0.17**

Total VOCs	**1.17**	**3.66**	**0.3**	**5.1**
Total HAPs	**0.03**	**0.06**	**0.005**	**0.09**
			Worst Single HAP	**0.027 (formaldehyde)**

Methodology
The asphalt temperature and volatility factor were provided by the source.
Limited Potential to Emit (tons/yr) = (Annual Asphalt Production Limitation (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 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.2: Limited Emissions Summary
Asphalt Load-Out, Silo Filling, and Yard Emissions (continued)

Company Name: Gohman Asphalt & Construction
Source Address: I-64 & SR 231, Dale, Indiana 47523
Permit Number: 147-29141-05167
Reviewer: Swarna Prabha

Organic Particulate-Based Compounds (Table 11.1-15)

					Speciation Profile		Limited 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%	2.7E-04	3.6E-04	NA	6.2E-04
Acenaphthylene	208-96-8	PM/HAP	POM	Organic PM	0.028%	0.014%	2.9E-05	1.1E-05	NA	3.9E-05
Anthracene	120-12-7	PM/HAP	POM	Organic PM	0.07%	0.13%	7.2E-05	9.9E-05	NA	1.7E-04
Benzo(a)anthracene	56-55-3	PM/HAP	POM	Organic PM	0.019%	0.056%	1.9E-05	4.3E-05	NA	6.2E-05
Benzo(b)fluoranthene	205-99-2	PM/HAP	POM	Organic PM	0.0076%	0	7.8E-06	0	NA	7.8E-06
Benzo(k)fluoranthene	207-08-9	PM/HAP	POM	Organic PM	0.0022%	0	2.3E-06	0	NA	2.3E-06
Benzo(g,h,i)perylene	191-24-2	PM/HAP	POM	Organic PM	0.0019%	0	1.9E-06	0	NA	1.9E-06
Benzo(a)pyrene	50-32-8	PM/HAP	POM	Organic PM	0.0023%	0	2.4E-06	0	NA	2.4E-06
Benzo(e)pyrene	192-97-2	PM/HAP	POM	Organic PM	0.0078%	0.0095%	8.0E-06	7.2E-06	NA	1.5E-05
Chrysene	218-01-9	PM/HAP	POM	Organic PM	0.103%	0.21%	1.1E-04	1.6E-04	NA	2.7E-04
Dibenz(a,h)anthracene	53-70-3	PM/HAP	POM	Organic PM	0.00037%	0	3.8E-07	0	NA	3.8E-07
Fluoranthene	206-44-0	PM/HAP	POM	Organic PM	0.05%	0.15%	5.1E-05	1.1E-04	NA	1.7E-04
Fluorene	86-73-7	PM/HAP	POM	Organic PM	0.77%	1.01%	7.9E-04	7.7E-04	NA	1.6E-03
Indeno(1,2,3-cd)pyrene	193-39-5	PM/HAP	POM	Organic PM	0.00047%	0	4.8E-07	0	NA	4.8E-07
2-Methylnaphthalene	91-57-6	PM/HAP	POM	Organic PM	2.38%	5.27%	2.4E-03	4.0E-03	NA	0.006
Naphthalene	91-20-3	PM/HAP	POM	Organic PM	1.25%	1.82%	1.3E-03	1.4E-03	NA	2.7E-03
Perylene	198-55-0	PM/HAP	POM	Organic PM	0.022%	0.03%	2.3E-05	2.3E-05	NA	4.5E-05
Phenanthrene	85-01-8	PM/HAP	POM	Organic PM	0.81%	1.80%	8.3E-04	1.4E-03	NA	2.2E-03
Pyrene	129-00-0	PM/HAP	POM	Organic PM	0.15%	0.44%	1.5E-04	3.4E-04	NA	4.9E-04
Total PAH HAPs							**0.006**	**0.009**	**NA**	**0.015**
Other semi-volatile HAPs										
Phenol		PM/HAP	---	Organic PM	1.18%	0	1.2E-03	0	0	1.2E-03

NA = Not Applicable (no AP-42 Emission Factor)

Methodology

Limited Potential to Emit (tons/yr) = [Speciation Profile (%)] * [Organic PM (tons/yr)]
Speciation 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.2: Limited Emissions Summary
Asphalt Load-Out, Silo Filling, and Yard Emissions (continued)
Limited Emissions

Organic Volatile-Based Compounds (Table 11.1-16)

Pollutant	CASRN	Category	HAP Type	Source	Speciation Profile		Limited 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%	**1.17**	**3.66**	**0.31**	**5.14**
non-VOC/non-HAPS										
Methane	74-82-8	non-VOC/non-HAP	---	TOC	6.50%	0.26%	8.1E-02	9.5E-03	2.1E-02	0.112
Acetone	67-64-1	non-VOC/non-HAP	---	TOC	0.046%	0.055%	5.7E-04	2.0E-03	1.5E-04	0.003
Ethylene	74-85-1	non-VOC/non-HAP	---	TOC	0.71%	1.10%	8.9E-03	4.0E-02	2.3E-03	0.051
Total non-VOC/non-HAPS					7.30%	1.40%	**0.091**	**0.051**	**0.024**	**0.17**
Volatile organic HAPs										
Benzene	71-43-2	VOC/HAP	---	TOC	0.052%	0.032%	6.5E-04	1.2E-03	1.7E-04	2.0E-03
Bromomethane	74-83-9	VOC/HAP	---	TOC	0.0096%	0.0049%	1.2E-04	1.8E-04	3.2E-05	3.3E-04
2-Butanone	78-93-3	VOC/HAP	---	TOC	0.049%	0.039%	6.1E-04	1.4E-03	1.6E-04	2.2E-03
Carbon Disulfide	75-15-0	VOC/HAP	---	TOC	0.013%	0.016%	1.6E-04	5.8E-04	4.3E-05	7.9E-04
Chloroethane	75-00-3	VOC/HAP	---	TOC	0.00021%	0.004%	2.6E-06	1.5E-04	6.9E-07	1.5E-04
Chloromethane	74-87-3	VOC/HAP	---	TOC	0.015%	0.023%	1.9E-04	8.4E-04	5.0E-05	1.1E-03
Cumene	92-82-8	VOC/HAP	---	TOC	0.11%	0	1.4E-03	0	3.6E-04	1.7E-03
Ethylbenzene	100-41-4	VOC/HAP	---	TOC	0.28%	0.038%	3.5E-03	1.4E-03	9.2E-04	0.006
Formaldehyde	50-00-0	VOC/HAP	---	TOC	0.088%	0.69%	1.1E-03	2.5E-02	2.9E-04	0.027
n-Hexane	100-54-3	VOC/HAP	---	TOC	0.15%	0.10%	1.9E-03	3.7E-03	5.0E-04	0.006
Isooctane	540-84-1	VOC/HAP	---	TOC	0.0018%	0.00031%	2.2E-05	1.1E-05	5.9E-06	4.0E-05
Methylene Chloride	75-09-2	non-VOC/HAP	---	TOC	0	0.00027%	0	9.9E-06	0	9.9E-06
MTBE	1634-04-4	VOC/HAP	---	TOC	0	0	0	0	0	0
Styrene	100-42-5	VOC/HAP	---	TOC	0.0073%	0.0054%	9.1E-05	2.0E-04	2.4E-05	3.1E-04
Tetrachloroethene	127-18-4	non-VOC/HAP	---	TOC	0.0077%	0	9.6E-05	0	2.5E-05	1.2E-04
Toluene	100-88-3	VOC/HAP	---	TOC	0.21%	0.062%	2.6E-03	2.3E-03	6.9E-04	0.006
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	1.6E-05	0	4.3E-06	2.1E-05
m-/p-Xylene	1330-20-7	VOC/HAP	---	TOC	0.41%	0.20%	5.1E-03	7.3E-03	1.4E-03	0.014
o-Xylene	95-47-6	VOC/HAP	---	TOC	0.08%	0.057%	1.0E-03	2.1E-03	2.6E-04	3.3E-03
Total volatile organic HAPs					1.50%	1.30%	**0.019**	**0.048**	**0.005**	**0.071**

Methodology
Limited Potential to Emit (tons/yr) = [Speciation Profile (%)] * [TOC (tons/yr)]
Speciation 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

Appendix A.2: Limited Emissions Summary
Material Storage Piles

Company Name: Gohman Asphalt & Construction
Source Address: I-64 & SR 231, Dale, Indiana 47523
Permit Number: 147-29141-05167
Reviewer: Swarna Prabha

Note: Since the emissions from the storage piles are minimal, the limited emissions are equal to the unlimited emissions.

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	0.25	0.137	0.048
Limestone	1.6	1.85	4.00	1.352	0.473
RAP	0.5	0.58	1.50	0.158	0.055
Gravel	1.6	1.85	0.00	0.000	0.000
Steel Slag	3.8	4.40	0.25	0.201	0.070
			Totals	**1.85**	**0.65**

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.

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.2: Limited Emissions Summary
Material Processing, Handling, Crushing, Screening, and Conveying

Company Name: Gohman Asphalt & Construction
Source Address: I-64 & SR 231, Dale, Indiana 47523
Permit Number: 147-29141-05167
Reviewer: Swarna Prabha

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

Annual Asphalt Production Limitation =	600,000	tons/yr
Percent Asphalt Cement/Binder (weight %) =	5.0%	
Maximum Material Handling Throughput =	570,000	tons/yr

Type of Activity	Limited PTE of PM (tons/yr)	Limited PTE of PM10 (tons/yr)	Limited PTE of PM2.5 (tons/yr)
Truck unloading of materials into storage piles	0.65	0.31	0.05
Front-end loader dumping of materials into feeder bins	0.65	0.31	0.05
Conveyor dropping material into dryer/mixer or batch tower	0.65	0.31	0.05
Total (tons/yr)	**1.94**	**0.92**	**0.14**

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 (we
Limited 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 19.2.2)
To estimate potential fugitive dust emissions from raw material crushing, screening, and conveying, AP-42 emission factors for Crushed Stone Processing Operations, Section 19.2.2 (dated 8/04) are utilized.

Operation	Uncontrolled Emission Factor for PM (lbs/ton)*	Uncontrolled Emission Factor for PM10 (lbs/ton)*	Limited PTE of PM (tons/yr)	Limited PTE of PM10/PM2.5 (tons/yr)**
Crushing	0.0054	0.0024	1.54	0.68
Screening	0.025	0.0087	7.13	2.48
Conveying	0.003	0.0011	0.86	0.31
Limited Potential to Emit (tons/yr) =			**9.52**	**3.48**

Methodology
Maximum Material Handling Throughput (tons/yr) = [Annual Asphalt Production Limitation (tons/yr)] * [1 - Percent Asphalt Cement/Binder (we
Limited 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.2: Limited Emissions Summary
Unpaved Roads

Company Name: Gohman Asphalt & Construction
Source Address: I-64 & SR 231, Dale, Indiana 47523
Permit Number: 147-29141-05167
Reviewer: Swarna Prabha

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).

Annual Asphalt Production Limitation =	600,000	tons/yr
Percent Asphalt Cement/Binder (weight %) =	5.0%	
Maximum Material Handling Throughput =	570,000	tons/yr
Maximum Asphalt Cement/Binder Throughput =	30,000	tons/yr
No. 2 Fuel Oil Limitation =	2,663,353	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)	14.6	20.5	35.1	2.8E+04	9.8E+05	1500	0.284	7899.1
Aggregate/RAP Truck Leave Empty	Dump truck (16 CY)	14.6	0	14.6	2.8E+04	4.1E+05	1500	0.284	7899.1
Asphalt Cement/Binder Truck Enter Full	Tanker truck (6000 gal)	14.1	22.0	36.1	1.4E+03	4.9E+04	1800	0.341	464.9
Asphalt Cement/Binder Truck Leave Empty	Tanker truck (6000 gal)	14.1	0	14.1	1.4E+03	1.9E+04	1800	0.341	464.9
Fuel Oil Truck Enter Full	Tanker truck (6000 gal)	12.0	32.0	44.0	2.8E+02	1.2E+04	1800	0.341	95.9
Fuel Oil Truck Leave Empty	Tanker truck (6000 gal)	12.0	0	12.0	2.8E+02	3.4E+03	1800	0.341	95.9
Aggregate/RAP Loader Full	Front-end loader (3 CY)	27.5	7.0	34.5	8.1E+04	2.8E+06	620	0.117	9561.7
Aggregate/RAP Loader Empty	Front-end loader (3 CY)	27.5	0	27.5	8.1E+04	2.2E+06	620	0.117	9561.7
Asphalt Concrete Truck Leave Full	Dump truck (16 CY)	0.0	0.0	0.0	0.0E+00	0.0E+00	0	0.000	0.0
Asphalt Concrete Truck Enter Empty	Dump truck (16 CY)	0.0	0	0.0	0.0E+00	0.0E+00	0	0.000	0.0
	Total				**2.2E+05**	**6.5E+06**			**3.6E+04**

Average Vehicle Weight Per Trip =	29.4	tons/trip
Average Miles Per Trip =	0.163	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 =	29.4	29.4	29.4	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 =	7.20	1.84	0.18	lb/mile
Mitigated Emission Factor, Eext =	4.74	1.21	0.12	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)	28.45	7.25	0.73	18.71	4.77	0.48	9.35	2.38	0.24
Aggregate/RAP Truck Leave Empty	Dump truck (16 CY)	28.45	7.25	0.73	18.71	4.77	0.48	9.35	2.38	0.24
Asphalt Cement/Binder Truck Enter Full	Tanker truck (6000 gal)	1.674	0.427	0.04	1.101	0.281	2.8E-02	0.550	0.140	1.4E-02
Asphalt Cement/Binder Truck Leave Empty	Tanker truck (6000 gal)	1.674	0.427	0.04	1.101	0.281	2.8E-02	0.550	0.140	1.4E-02
Fuel Oil Truck Enter Full	Tanker truck (6000 gal)	0.345	0.088	8.8E-03	0.227	0.058	5.8E-03	0.114	0.029	2.9E-03
Fuel Oil Truck Leave Empty	Tanker truck (6000 gal)	0.345	0.088	8.8E-03	0.227	0.058	5.8E-03	0.114	0.029	2.9E-03
Aggregate/RAP Loader Full	Front-end loader (3 CY)	34.44	8.78	0.88	22.64	5.77	0.58	11.32	2.89	0.29
Aggregate/RAP Loader Empty	Front-end loader (3 CY)	34.44	8.78	0.88	22.64	5.77	0.58	11.32	2.89	0.29
Asphalt Concrete Truck Leave Full	Dump truck (16 CY)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Concrete Truck Enter Empty	Dump truck (16 CY)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Totals	**129.82**	**33.09**	**3.31**	**85.36**	**21.76**	**2.18**	**42.68**	**10.88**	**1.09**

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.2: Limited Emissions Summary
Paved Roads
Limited Emissions

Company Name: Gohman Asphalt & Construction
Source Address: I-64 & SR 231, Dale, Indiana 47523
Permit Number: 147-29141-05167
Reviewer: Swarna Prabha

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).

Annual Asphalt Production Limitation =	600,000	tons/yr
Percent Asphalt Cement/Binder (weight %) =	5.0%	
Maximum Material Handling Throughput =	570,000	tons/yr
Maximum Asphalt Cement/Binder Throughput =	30,000	tons/yr
No. 2 Fuel Oil Limitation =	2,663,353	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)	14.6	20.5	35.10	2.8E+04	9.8E+05	1500	0.284	7899.1
Aggregate/RAP Truck Leave Empty	Dump truck (16 CY)	14.6	0	14.60	2.8E+04	4.1E+05	1500	0.284	7899.1
Asphalt Cement/Binder Truck Enter Full	Tanker truck (6000 gal)	14.1	22.0	36.10	1.4E+03	4.9E+04	1800	0.341	464.9
Asphalt Cement/Binder Truck Leave Empty	Tanker truck (6000 gal)	14.1	0	14.10	1.4E+03	1.9E+04	1800	0.341	464.9
Fuel Oil Truck Enter Full	Tanker truck (6000 gal)	12.0	32.0	44.00	2.8E+02	1.2E+04	1800	0.341	95.9
Fuel Oil Truck Leave Empty	Tanker truck (6000 gal)	12.0	0	12.00	2.8E+02	3.4E+03	1800	0.341	95.9
Aggregate/RAP Loader Full	Front-end loader (3 CY)	27.5	7.0	34.50	8.1E+04	2.8E+06	620	0.117	9561.7
Aggregate/RAP Loader Empty	Front-end loader (3 CY)	27.5	0	27.50	8.1E+04	2.2E+06	620	0.117	9561.7
Asphalt Concrete Truck Leave Full	Dump truck (16 CY)	0.0	0.0	0.00	0.0E+00	0.0E+00	0	0.000	0.0
Asphalt Concrete Truck Enter Empty	Dump truck (16 CY)	0.0	0	0.00	0.0E+00	0.0E+00	0	0.000	0.0
	Total				**2.2E+05**	**6.5E+06**			**3.6E+04**

Average Vehicle Weight Per Trip =	29.4	tons/trip
Average Miles Per Trip =	0.163	miles/trip

Unmitigated Emission Factor, Ef = [k * (sL/2)^0.65 * (W/3)^1.5 - C] (Equation 1 from AP-42 13.2.1)

	PM	PM10	PM2.5	
where k =	0.082	0.016	0.0024	lb/mi = particle size multiplier (AP-42 Table 13.2.1-1)
W =	29.4	29.4	29.4	tons = average vehicle weight (provided by source)
C =	0.00047	0.00047	0.00036	lb/mi = emission factor for vehicle exhaust, brake wear, and tire wear (AP-42 Table 13.2.1-2)
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 =	1.15	0.22	0.03	lb/mile
Mitigated Emission Factor, Eext =	1.05	0.20	0.03	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)	4.54	0.88	0.13	4.15	0.81	0.12	2.07	0.40	0.06
Aggregate/RAP Truck Leave Empty	Dump truck (16 CY)	4.54	0.88	0.13	4.15	0.81	0.12	2.07	0.40	0.06
Asphalt Cement/Binder Truck Enter Full	Tanker truck (6000 gal)	0.267	0.052	7.7E-03	0.244	0.048	7.1E-03	0.122	2.4E-02	3.5E-03
Asphalt Cement/Binder Truck Leave Empty	Tanker truck (6000 gal)	0.267	0.052	7.7E-03	0.244	0.048	7.1E-03	0.122	2.4E-02	3.5E-03
Fuel Oil Truck Enter Full	Tanker truck (6000 gal)	5.5E-02	1.1E-02	1.6E-03	5.0E-02	9.8E-03	1.5E-03	2.5E-02	4.9E-03	7.3E-04
Fuel Oil Truck Leave Empty	Tanker truck (6000 gal)	5.5E-02	1.1E-02	1.6E-03	5.0E-02	9.8E-03	1.5E-03	2.5E-02	4.9E-03	7.3E-04
Aggregate/RAP Loader Full	Front-end loader (3 CY)	5.49	1.07	0.16	5.02	0.98	0.15	2.51	0.49	0.07
Aggregate/RAP Loader Empty	Front-end loader (3 CY)	5.49	1.07	0.16	5.02	0.98	0.15	2.51	0.49	0.07
Asphalt Concrete Truck Leave Full	Dump truck (16 CY)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Concrete Truck Enter Empty	Dump truck (16 CY)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Totals	**20.70**	**4.03**	**0.60**	**18.92**	**3.69**	**0.55**	**9.46**	**1.84**	**0.27**

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.2: Limited Emissions Summary
Cold Mix Asphalt Production and Stockpiles

Company Name: Gohman Asphalt & Construction
Source Address: I-64 & SR 231, Dale, Indiana 47523
Permit Number: 147-29141-05167
Reviewer: Swarna Prabha

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

Cold Mix Asphalt VOC Usage Limitation = 0.0 tons/yr

Volatile Organic Compounds

	Maximum weight % of VOC solvent in binder	Weight % VOC solvent in binder that evaporates	VOC Solvent Usage Limitation (tons/yr)	Limited PTE of VOC (tons/yr)	Liquid Binder Adjustment Ratio
Cut back asphalt rapid cure (assuming gasoline or naphtha solvent)	25.3%	95.0%	0.0	0.0	#DIV/0!
Cut back asphalt medium cure (assuming kerosene solvent) 28.6%		70.0%	0.0	0.0	#DIV/0!
Cut back asphalt slow cure (assuming fuel oil solvent)	20.0%	25.0%	0.0	0.0	#DIV/0!
Emulsified asphalt with solvent (assuming water, emulsifying agent, and 15% fuel oil solvent)	15.0%	46.4%	0.0	0.0	#DIV/0!
Other asphalt with solvent binder	25.9%	2.5%	0.0	0.0	#DIV/0!
Worst Case Limited PTE of VOC =				**0.0**	

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) =	**0.00**	
Limited PTE of Single HAP (tons/yr) =	**0.00**	**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
Limited PTE of VOC (tons/yr) = [Weight % VOC solvent in binder that evaporates] * [VOC Solvent Usage Limitation (tons/yr)]
Limited PTE of Total HAPs (tons/yr) = [Worst Case Total HAP Content of VOC solvent (weight %)] * [Worst Case Limited PTE of VOC (tons/yr)]
Limited 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.2: Limited Emissions Summary
Gasoline Fuel Transfer and Dispensing Operation

Company Name: Gohman Asphalt & Construction
Source Address: I-64 & SR 231, Dale, Indiana 47523
Permit Number: 147-29141-05167
Reviewer: Swarna Prabha

Note: Since the emissions from the gasoline fuel transfer and dispensing operation are minimal, the limited emissions are equal to the unlimited emissions.

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 =	0	gallons/day
=	0.0	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	0.00
Tank breathing and emptying	1.0	0.00
Vehicle refueling (displaced losses - controlled)	1.1	0.00
Spillage	0.7	0.00
Total		**0.00**

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) =	**0.00**	
Limited PTE of Single HAP (tons/yr) =	**0.00**	**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

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Indianapolis, Indiana 46204
(317) 232-8603
Toll Free (800) 451-6027
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TO: Diane Green
Gohmann Asphalt & Construction
POB 2428
Clarksville, IN 47131

DATE: November 16, 2010

FROM: Matt Stuckey, Branch Chief
Permits Branch
Office of Air Quality

SUBJECT: Final Decision
FESOP
147-29141-05167

Enclosed is the final decision and supporting materials for the air permit application referenced above. Please note that this packet contains the original, signed, permit documents.

The final decision is being sent to you because our records indicate that you are the contact person for this application. However, if you are not the appropriate person within your company to receive this document, please forward it to the correct person.

A copy of the final decision and supporting materials has also been sent via standard mail to:
OAQ Permits Branch Interested Parties List

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178, or toll-free at 1-800-451-6027 (ext. 3-0178), and ask to speak to the permit reviewer who prepared the permit. If you think you have received this document in error, please contact Joanne Smiddie-Brush of my staff at 1-800-451-6027 (ext 3-0185), or via e-mail at jbrush@idem.IN.gov.

Final Applicant Cover letter.dot 11/30/07

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Commissioner

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Toll Free (800) 451-6027
www.idem.IN.gov

November 16, 2010

TO: Spencer County Public Library

From: Matthew Stuckey, Branch Chief
Permits Branch
Office of Air Quality

Subject: **Important Information for Display Regarding a Final Determination**

Applicant Name: Gohmann Asphalt and Construction, Inc.
Permit Number: 147-29141-05167

You previously received information to make available to the public during the public comment period of a draft permit. Enclosed is a copy of the final decision and supporting materials for the same project. Please place the enclosed information along with the information you previously received. To ensure that your patrons have ample opportunity to review the enclosed permit, **we ask that you retain this document for at least 60 days.**

The applicant is responsible for placing a copy of the application in your library. If the permit application is not on file, or 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.

Enclosures
Final Library.dot 11/30/07

Mail Code 61-53

IDEM Staff	DPABST 11/16/2010 Gohmann Asphalt & Construction, Inc. 147-29141-05167 (Final)			AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
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2		Diane Green Executive VP Safety and HR Gohmann Asphalt & Construction, Inc. PO Box 2428 Clarksville IN 47131-2428 *(RO CAATS)*									
3		Mr. Randy Brown Plumbers & Steam Fitters Union, Local 136 2300 St. Joe Industrial Park Dr Evansville IN 47720 *(Affected Party)*									
4		Ms. Francis Lueken 223 W. 10th Street, P.O. Box 206 Ferdinand IN 47532 *(Affected Party)*									
5		Spencer Co Public Library 210 N Walnut St Rockport IN 47635-1398 *(Library)*									
6		Ms. Kathy Tretter Dubois-Spencer Counties Publishing Co, Inc P.O. Box 38 Ferdinand IN 47532-0038 *(Affected Party)*									
7		Dale Town Council 606 W Medcalf Dale IN 47523 *(Local Official)*									
8		Spencer County Commissioner/Health Dept. 200 Main Street, Courthouse Rockport IN 47635 *(Affected Party)*									
9		Spencer County Commissioners 200 Main St., Courthouse Rockport IN 47635 *(Local Official)*									
10		Spencer County Health Department Main Street Courthouse, 1st Floor, Room 1 Roackport IN 47635-1492 *(Health Department)*									
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