



Mitchell E. Daniels, Jr.  
Governor

Thomas W. Easterly  
Commissioner

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

TO: Interested Parties / Applicant  
DATE: September 18, 2006  
RE: Milestone Contractors, L.P. / 057-23089-03289  
FROM: Nisha Sizemore  
Chief, Permits Branch  
Office of Air Quality

### Notice of Decision: Approval - Effective Immediately

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

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

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

Enclosures  
FNPER.dot 03/23/06



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## New Source Review and Federally Enforceable State Operating Permit (FESOP) Renewal OFFICE OF AIR QUALITY

**Milestone Contractors, L.P.  
5160 East 96<sup>th</sup> Street  
Indianapolis, Indiana 46240**

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

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

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

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

Operation Permit No.: F057-23089-03289	
Original signed by: Nisha Sizemore, Chief Permits Branch Office of Air Quality	Issuance Date: September 18, 2006  Expiration Date: September 18, 2011

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## SECTION A SOURCE SUMMARY

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

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

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

Authorized Individual:	Senior Manager Asphalt Plants
Source Address:	5160 East 96 <sup>th</sup> Street, Indianapolis, Indiana 46240
Mailing Address:	P.O. Box 421459, Indianapolis, Indiana 46242-1459
General Source Phone Number:	317-788-6885
SIC Code:	2951
County Location:	Hamilton
Source Location Status:	Nonattainment for 8-hr Ozone Standard Nonattainment for PM2.5 Standard Attainment for all other criteria pollutants
Source Status:	Federally Enforceable State Operating Permit Program Minor Source, under PSD, Emission Offset and Nonattainment NSR Rules Minor Source, Section 112 of the Clean Air Act

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

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

- (a) one (1) aggregate drum mix dryer, identified as emission unit No. 2, with a maximum capacity of 600 tons per hour, equipped with one (1) natural gas fired aggregate dryer burner with a maximum rated capacity of 200 million British thermal units per hour (MMBtu/hr) using No. 2 distillate fuel oil and re-refined waste oil as back-up fuels and one (1) knock out box and one (1) baghouse for air pollution control, exhausting at one (1) stack, identified as DS-1;
- (b) one (1) drag slat conveyor, four (4) feed conveyors, and one (1) screen;
- (c) one (1) liquid asphalt storage tank, identified as Tank 22, with a maximum storage capacity of 30,000 gallons, exhausting at one (1) stack, identified as DV-7;
- (d) one (1) double-walled re-refined waste oil storage tank, identified as Tank F03, with a maximum storage capacity of 30,000 gallons; and
- (e) cold-mix (stockpile mix) asphalt storage piles.

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

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

- (a) one (1) natural gas fired hot oil heater rated at 2.2 MMBtu per hour, identified as emission unit No. 17, using No.2 fuel oil as back-up fuel, and exhausting at one (1) stack, identified as DS-6;

- (b) three (3) liquid asphalt storage tanks, identified as Tanks 14, 15 and 16, each with a maximum storage capacity of 20,000 gallons, with emissions exhausted to Stacks DV-3, DV-5 and DV-6, respectively;
- (c) one (1) double-walled No. 2 fuel oil storage tank, identified as Tank F04, with a maximum storage capacity of 10,000 gallons;
- (d) one (1) cold feed system consisting of eight (8) compartments with a total aggregate holding capacity of 400 tons;
- (e) three (3) storage silos each with a maximum storage capacity of 300 tons;
- (f) four (4) storage silos each with a maximum storage capacity of 200 tons;
- (g) one (1) dust storage silo with a maximum capacity of 650 barrels;
- (h) one (1) dust pod;
- (i) Reclaimed Asphalt Pavement (RAP) bins with a capacity of 30 tons;
- (j) aggregate storage piles with a total maximum storage capacity of 32,159 tons;
- (k) one (1) RAP storage pile with a total maximum storage capacity of 8,640 tons;
- (l) combustion source flame safety purging on startup;
- (m) a gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons;
- (n) a petroleum fuel, other than gasoline, dispensing facility, having a storage capacity of less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month;
- (o) vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids;
- (p) application of oils, greases, lubricants or other nonvolatile materials applied as temporary protective coatings;
- (q) cleaners and solvents having a vapor pressure equal to or less than 2 kPa; 15mm Hg; or 0.3 psi measured at 38 degrees C (100°F) or; having a vapor pressure equal to or less than 0.7 kPa; 5 mm Hg; or 0.1 psi measured at 20°C (68°); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months;
- (r) closed loop heating and cooling systems;
- (s) paved and unpaved roads and parking lots with public access;
- (t) a laboratory as defined in 326 IAC 2-7-1(21)(D); and
- (u) one liquid asphalt calibration tank, identified as Tank 17.

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

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

## SECTION B GENERAL CONDITIONS

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

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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)]

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- (a) This permit, F057-23089-03289, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.
- (b) If IDEM, OAQ, 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]

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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]

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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)]

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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)]

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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)]

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- (a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1). Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.
- (b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.8 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.9 Certification [326 IAC 2-8-3(d)][326 IAC 2-8-4(3)(C)(i)][326 IAC 2-8-5(1)]

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by an "authorized individual" of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.
- (c) An "authorized individual" is defined at 326 IAC 2-1.1-1(1).

B.10 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 Branch, Office of Air Quality  
100 North Senate Avenue  
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 the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall maintain and implement Preventive Maintenance Plans (PMPs) including the following information on each facility:
- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
  - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
  - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.
- (b) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMPs do not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

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

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation except as provided in 326 IAC 2-8-12.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
- (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
  - (2) The permitted facility was at the time being properly operated;
  - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
  - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

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

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

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204-2251

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

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
- (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
  - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
    - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and

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

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

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

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

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- (a) All terms and conditions of permits established prior to F145-23091-03230 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)]**

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

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

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

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

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

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

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

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

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- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Federally Enforceable State Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)] The notification by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ, 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.17 Permit Renewal [326 IAC 2-8-3(h)]

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

Request for renewal shall be submitted to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204-2251

- (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 in writing by IDEM, OAQ any additional information identified as being needed to process the application.

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

- (a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:  
  
Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204-2251  
  
Any such application shall be certified by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

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

- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-8-15(b) through (d) without a prior permit revision, if each of the following conditions is met:
  - (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
  - (2) Any approval required by 326 IAC 2-8-11.1 has been obtained;
  - (3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
  - (4) The Permittee notifies the:  
  
Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204-2251  
  
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.20 Source Modification Requirement [326 IAC 2-8-11.1]**

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

**B.21 Inspection and Entry [326 IAC 2-8-5(a)(2)][IC 13-14-2-2][IC 13-17-3-2][IC13-30-3-1]**

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

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

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

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204-2251

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

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

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

- (a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ, the applicable fee is due April 1 of each year.
- (b) Failure to pay may result in administrative enforcement action or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

B.24 Advanced Source Modification Approval [326 IAC 2-8-4(11)] [326 IAC 2-1.1-9]

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

B.25 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. This limitation shall also make the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) and 326 IAC 2-3 (Emission Offset) not applicable;
- (2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per 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) The potential to emit particulate matter (PM) from the entire source shall be limited to less than two hundred fifty (250) tons per twelve (12) consecutive month period. This limitation shall make the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

(c) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided 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 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

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

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

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

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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]

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

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

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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]

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Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions shall be controlled according to the plan submitted on June 17, 1996. The plan is included as Attachment A.

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

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

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

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

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

All required notifications shall be submitted to:

Indiana Department of Environmental Management  
Asbestos Section, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204-2251

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

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

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

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

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

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

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

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the Permittee submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

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

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

---

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

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

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

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

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204-2251

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

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

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

---

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

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

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

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

- (a) The Permittee prepared and submitted written emergency reduction plans (ERPs) consistent with safe operating procedures on February 15, 2002.
- (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.16 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.17 Response to Excursions or Exceedances [326 IAC 2-8-4] [326 IAC 2-8-5]**

- 
- (a) Upon detecting an excursion or exceedance, the Permittee shall restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.
  - (b) The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Corrective actions may include, but are not limited to, the following:
    - (1) initial inspection and evaluation;
    - (2) recording that operations returned to normal without operator action (such as through response by a computerized distribution control system); or
    - (3) any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
  - (c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:
    - (1) monitoring results;
    - (2) review of operation and maintenance procedures and records;
    - (3) inspection of the control device, associated capture system, and the process.
  - (d) Failure to take reasonable response steps shall be considered a deviation from the permit.

- (e) The Permittee shall maintain the following records:
  - (1) monitoring data;
  - (2) monitor performance data, if applicable; and
  - (3) corrective actions taken.

**C.18 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4] [326 IAC 2-8-5]**

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- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require the certification by 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.19 General Record Keeping Requirements[326 IAC 2-8-4(3)] [326 IAC 2-8-5]**

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

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

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

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue  
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) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (e) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

### **Stratospheric Ozone Protection**

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

---

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

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

## SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

### Emissions Unit Description:

- (a) one (1) aggregate drum mix dryer, identified as emission unit No. 2, with a maximum capacity of 600 tons per hour, equipped with one (1) natural gas fired aggregate dryer burner with a maximum rated capacity of 200 million British thermal units per hour (MMBtu/hr) using No. 2 distillate fuel oil and re-refined waste oil as back-up fuels and one (1) knock out box and one (1) baghouse for air pollution control, exhausting at one (1) stack, identified as DS-1;

Under New Source Performance Standards (NSPS) Subpart I, the aggregate dryer burner is considered an affected facility because the construction of the aggregate dryer burner commenced after June 11, 1973.

- (b) one (1) drag slat conveyor, four (4) feed conveyors, and one (1) screen;

(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]

The PM emissions from the aggregate mixing and drying operation shall not exceed 0.080 pound of PM per ton of asphalt mix. This is equivalent to a PM emission limit of 48.21 pounds per hour, based on a maximum throughput of 600 tons of asphalt mix per hour. This limits PM emissions from the entire source to less than 250 tons per year. Compliance with the above requirements shall render 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)), not applicable.

#### D.1.2 Particulate Matter Less Than 10 Microns (PM-10) [326 IAC 2-8-4] [326 IAC 2-2]

Pursuant to 326 IAC 2-8-4, PM-10 emissions from the aggregate mixing and drying operation shall not exceed 0.031 pound of PM-10 per ton of asphalt mix. This is equivalent to a PM-10 emission limit of 18.78 pounds per hour, including both filterable and condensable fractions based on a maximum throughput of 600 tons of asphalt mix per hour. This limits PM-10 emissions from the entire source to less than 100 tons per year. Compliance with this limit will render Part 70 rules (326 IAC 2-7) and 326 IAC 2-2 (PSD), not applicable.

#### D.1.3 Sulfur Dioxide (SO<sub>2</sub>) [326 IAC 7-1.1-1][326 IAC 7-2-1]

- (a) Pursuant to 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations), sulfur dioxide emissions from the 200 million Btu per hour burner for the aggregate dryer shall be limited to 0.5 pounds per million Btu heat input or a sulfur content of less than or equal to 0.5% when using distillate oil.
- (b) Pursuant to 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations), sulfur dioxide emissions from the 200 million Btu per hour burner for the aggregate dryer shall be limited to 1.6 pounds per million Btu heat input or a sulfur content of less than or equal to 1.5 percent when using re-refined waste oil. The source has accepted a sulfur content limit of 0.75 percent for re-refined waste oil.
- (c) Pursuant to 326 IAC 7-2-1, compliance shall be demonstrated on a calendar month average.

D.1.4 Fuel Usage [326 IAC 2-8-4] [326 IAC 2-2] [326 IAC 2-3]

Pursuant to 326 IAC 2-8-4(1), the following limits shall apply:

- (a) the sulfur content of the re-refined waste oil used in the 200 MMBtu per hour burner for the aggregate dryer shall not exceed 0.75 percent.
- (b) the usage of re-refined waste oil with a sulfur content of 0.75% and re-refined waste oil equivalents in the 200 MMBtu per hour burner for the aggregate dryer shall be limited to 1,458,000 U.S. gallons per twelve (12) consecutive month period, with compliance determined at the end of each month. Therefore, SO<sub>2</sub> emissions are limited below 100 tons per year and HCl emissions are limited below 10 tons per year.
- (c) For the purposes of determining compliance, the following shall apply:
  - (1) every MMCF of natural gas burned shall be equivalent to 5.44 gallons of re-refined waste oil based on SO<sub>2</sub> emissions, such that the total gallons of re-refined waste oil and re-refined waste oil equivalent input does not exceed the limit specified;
  - (2) every 1,000 gallons of No. 2 distillate fuel oil burned shall be equivalent to 712 gallons of re-refined waste oil based on SO<sub>2</sub> emissions, such that the total gallons of re-refined waste oil and re-refined waste oil equivalent input does not exceed the limit specified.
- (d) the usage of natural gas and natural gas equivalents in the 200 MMBtu per hour aggregate dryer burner shall be limited to 1037.27 million cubic feet per twelve (12) consecutive month period, with compliance determined at the end of each month. Therefore, NO<sub>x</sub> emissions are limited to less than 100 tons per year.
- (e) For purposes of determining compliance, the following shall apply:
  - (1) every 1,000 gallons of No. 2 distillate fuel oil burned shall be equivalent to 0.126 MMCF of natural gas burned based on NO<sub>x</sub> emissions, such that the total MMCF of natural gas and natural gas equivalent input does not exceed the limit specified; and
  - (2) every 1,000 gallons of re-refined waste oil burned shall be equivalent to 0.1 MMCF of natural gas burned based on NO<sub>x</sub> emissions, such that the total MMCF of natural gas and natural gas equivalent input does not exceed the limit specified.

Therefore, the requirements of 326 IAC 2-7 do not apply. Compliance with the above fuel usage limits shall also render 326 IAC 2-2 (PSD) and 326 IAC 2-3 (Emission Offset) not applicable.

D.1.5 Hazardous Air Pollutants [326 IAC 2-8-4]

Pursuant to 326 IAC 2-8-4, the amount of hot mix asphalt produced by the source shall not exceed 3,504,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month. This will limit HAP emissions to less than ten (10) tons per year of any single HAP and to less than twenty five (25) tons per year of any combination of HAP.

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

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and any control devices.

## Compliance Determination Requirements

### D.1.7 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

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- (a) No later than five (5) years from September 21, 2004, in order to demonstrate compliance with Conditions D.1.1, D.1.2, and D.1.16, the Permittee shall perform PM and PM-10 testing on the aggregate dryer/burner utilizing methods as approved by the Commissioner. PM-10 includes filterable and condensable PM-10.
- (b) Opacity testing shall be performed utilizing methods per 40 CFR Part 60 Appendix A to demonstrate compliance with the opacity limitation of Condition D.1.16.

These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C-Performance Testing.

### D.1.8 Sulfur Dioxide Emissions and Sulfur Content

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Compliance shall be determined utilizing one of the following options.

- (a) Pursuant to 326 IAC 3-7-4, the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed five-tenths (0.5) pounds per million Btu heat input when burning No. 2 distillate fuel oil and 1.6 pounds per million Btu heat input when burning re-refined waste oil by:
  - (1) Providing vendor analysis of fuel delivered, if accompanied by a vendor certification, or;
  - (2) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.
    - (A) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and
    - (B) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling.
- (b) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from the 200 MMBtu per hour burner for the aggregate dryer, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6.

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

### D.1.9 Particulate Control

---

- (a) The baghouse for particulate control shall be in operation and control emissions from the aggregate dryer/burner at all times that the aggregate dryer/burner 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.

## Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

### D.1.10 Visible Emissions Notations

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- (a) Visible emission notations of the aggregate dryer/burner baghouse stack exhaust, the conveyors and transfer points shall be performed once per day 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 in accordance with Section C- Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

### D.1.11 Parametric Monitoring

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The Permittee shall record the pressure drop across the baghouse used in conjunction with the aggregate dryer/burner, at least once per day when the aggregate dryer/burner is in operation when venting to the atmosphere. When for any aggregate dryer/burner, the pressure drop across the baghouse is outside the normal range of 1.0 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

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 at least once every six (6) months.

### D.1.12 Broken or Failed Bag Detection

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- (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 line. 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 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 2-7-5(3)] [326 IAC 2-7-19]**

### **D.1.13 Record Keeping Requirements**

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(a) To document compliance with Conditions D.1.3 and D.1.4, the Permittee shall maintain records in accordance with (1) through (7) below. Records maintained for (1) through (7) shall be taken monthly and shall be complete and sufficient to establish compliance with the SO<sub>2</sub> and NO<sub>x</sub> emission limits established in Conditions D.1.3 and D.1.4.

- (1) Calendar dates covered in the compliance determination period;
- (2) Actual re-refined waste oil and re-refined waste oil equivalent usage per month since last compliance determination period and equivalent SO<sub>2</sub> emissions;
- (3) Actual natural gas and natural gas equivalent usage per month since last compliance determination period and equivalent NO<sub>x</sub> emissions;
- (4) A certification, signed by the owner or operator, that the records of the fuel supplier certifications represent all of the fuel combusted during the period. The natural gas fired boiler certification does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1); and

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

- (5) Fuel supplier certifications;
  - (6) The name of the fuel supplier; and
  - (7) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.
- (b) To document compliance with Condition D.1.5, the Permittee shall maintain records of the amount of hot mix asphalt produced.
- (c) To document compliance with Condition D.1.9, the Permittee shall maintain records of visible emission notations of the aggregate dryer/burner baghouse stack exhaust.
- (d) To document compliance with Condition D.1.10, the Permittee shall maintain daily records of the pressure drop during normal operation when venting to the atmosphere.
- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

### **D.1.14 Reporting Requirements**

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A quarterly summary of the information to document compliance with Conditions D.1.4 and D.1.5 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

## **New Source Performance Standards (NSPS) Requirements [326 IAC 2-7-5(1)]**

### **D.1.15 General Provisions Relating to New Source Performance Standards (NSPS) for Hot Mix Asphalt Facilities [326 IAC 12-1][40 CFR Part 60, Subpart A] [40 CFR Part 60, Subpart I]**

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

### **D.1.16 New Source Performance Standards (NSPS) for Hot Mix Facilities [40 CFR Part 60, Subpart I]**

Pursuant to 40 CFR Part 60, Subpart I, the Permittee shall comply with the provisions of 40 CFR 60, Subpart I specified as follows:

#### **§ 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.

#### **§ 60.91 Definitions.**

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

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

#### **§ 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.

#### **§ 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.

## SECTION D.2

## FACILITY CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]:

- (e) cold-mix (stockpile mix) asphalt storage piles.

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

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

#### D.2.1 Volatile Organic Compound (VOC), Hazardous Air Pollutant (HAP) [326 IAC 8-5-2] [326 IAC 2-8-4][326 IAC 2-2]

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

- (1) penetrating prime coating
- (2) stockpile storage
- (3) application during the months of November, December, January, February and March.

- (b) The use of gelled asphalt with solvent liquid binder shall be limited to 480 tons per twelve (12) consecutive month period, with compliance determined at the end of each month. This is equivalent to limiting the VOC emitted from solvent use to 12.0 tons per year, so that source-wide VOC emissions are limited to less than 100 tons per year, based on the following definition:

Other asphalt with solvent binder, containing a maximum 2.5% by weight of the VOC solvent evaporating.

Compliance with this limitation makes 326 IAC 2-7 (Part 70 Permit Program) not applicable. This limit will also render the requirements of 326 IAC 2-3 (Emission Offset) not applicable.

Compliance with this limitation makes 326 IAC 2-7 (Part 70 Permit Program) not applicable.

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

#### D.2.2 Record Keeping Requirements

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

- (a) Calendar dates covered in the compliance determination period;
- (b) Gelled asphalt binder usage per month since the last compliance determination period;
- (c) VOC solvent content by weight of the gelled asphalt binder used each month; and

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

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

#### D.2.3 Reporting Requirements

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A quarterly summary of the information to document compliance with Condition D.2.1(b) shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY

### FEDERALLY ENFORCEABLE STATE OPERATING PERMIT CERTIFICATION

Source Name: Milestone Contractors, L.P.  
Source Address: 5160 East 96<sup>th</sup> Street, Indianapolis, Indiana 46240  
Mailing Address: P.O. Box 421459, Indianapolis, Indiana 46242-1459  
FESOP No.: F057-23089-03289

**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:

Phone:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE BRANCH  
100 North Senate Avenue  
Indianapolis, Indiana 46204-2251  
Phone: 317-233-0178  
Fax: 317-233-6865**

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

Source Name: Milestone Contractors, L.P.  
Source Address: 5160 East 96<sup>th</sup> Street, Indianapolis, Indiana 46240  
Mailing Address: P.O. Box 421459, Indianapolis, Indiana 46242-1459  
FESOP No.: F057-23089-03289

**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
Type of Pollutants Emitted: TSP, PM-10, SO <sub>2</sub> , VOC, NO <sub>x</sub> , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by:

Title / Position:

Date:

Phone:

A certification is not required for this report.

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

### FESOP Quarterly Report

Source Name: Milestone Contractors, L.P.  
 Source Address: 5160 East 96<sup>th</sup> Street, Indianapolis, Indiana 46240  
 Mailing Address: P.O. Box 421459, Indianapolis, Indiana 46242-1459  
 FESOP No.: F057-23089-03289  
 Facility: 200 MMBtu per hour aggregate dryer burner  
 Parameter: Re-refined waste oil and equivalent usage limit to limit SO2 emissions  
 Limit: the usage of re-refined waste oil with a sulfur content of 0.75% and re-refined waste oil equivalents in the 200 MMBtu per hour burner for the aggregate dryer shall be limited to 1,458,000 U.S. gallons per twelve (12) consecutive month period, with compliance determined at the end of each month. For purposes of determining compliance with this limit, the fuel equivalency ratios in condition D.1.4(b) shall be used.

YEAR:

Month	Column 1	Column 2	Column 1 + Column 2
	Re-refined waste oil and equivalent usages this month (gallons)	Re-refined waste oil and equivalent usages previous 11 months (gallons)	Re-refined waste oil and equivalent usages 12 month total (gallons)
Month 1			
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:

Attach a signed certification to complete this report.

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

### FESOP Quarterly Report

Source Name: Milestone Contractors, L.P.  
 Source Address: 5160 East 96<sup>th</sup> Street, Indianapolis, Indiana 46240  
 Mailing Address: P.O. Box 421459, Indianapolis, Indiana 46242-1459  
 FESOP No.: F057-23089-03289  
 Facility: 200 MMBtu per hour aggregate dryer burner  
 Parameter: Natural gas and equivalent usage limit to limit NOx emissions  
 Limit: the usage of natural gas and natural gas equivalents in the 200 MMBtu per hour aggregate dryer burner shall be limited to 1,037.27 million cubic feet per twelve (12) consecutive month period, with compliance determined at the end of each month. For purposes of determining compliance with this limit, the fuel equivalency ratios in condition D.1.4(d) shall be used.

YEAR:

Month	Column 1	Column 2	Column 1 + Column 2
	Natural gas and equivalent usages this month (MMCF)	Natural gas and equivalent usages previous 11 months (MMCF)	12 month total Natural gas and equivalent usages (MMCF)
Month 1			
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:

Attach a signed certification to complete this report.

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

**Single Liquid Binder Solvent Quarterly Report**

Source Name: Milestone Contractors, L.P.  
 Source Address: 5160 East 96<sup>th</sup> Street, Indianapolis, Indiana 46240  
 Mailing Address: P.O. Box 421459, Indianapolis, Indiana 46242-1459  
 FESOP No.: F057-23089-03289  
 Facility: Cold Mix Asphalt Storage  
 Parameter: VOC  
 Limit: The use of gelled asphalt with solvent liquid binder shall be limited to 480 tons per twelve (12) consecutive month period, with compliance determined at the end of each month. This is equivalent to limiting the VOC emitted from solvent use to 12.0 tons per year. Compliance shall be determined at the end of each month.

YEAR:

Month	Column 1	Column 2	Column 1 + Column 2
	Gelled binder Usage This Month (tons)	Gelled Binder Usage Previous 11 Months (tons)	Gelled Binder Usage 12 Month Total (tons)
Month 1			
Month 2			
Month 3			

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

Submitted by:  
 Title / Position:  
 Signature:  
 Phone:

Date:

Attach a signed certification to complete this report.

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

**Hot Asphalt Mix Production Quarterly Report**

Source Name: Milestone Contractors, L.P.  
 Source Address: 5160 East 96<sup>th</sup> Street, Indianapolis, Indiana 46240  
 Mailing Address: P.O. Box 421459, Indianapolis, Indiana 46242-1459  
 FESOP No.: F057-23089-03289  
 Facility: Hot Asphalt Mix Production  
 Parameter: HAP  
 Limit: Pursuant to 326 IAC 2-8-4, the amount of hot mix asphalt produced by the source shall not exceed 3,504,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month. This will limit HAP emissions to less than ten (10) tons per year of any single HAP and to less than twenty five (25) tons per year of any combination of HAP.

YEAR:

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

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

Submitted by:  
 Title / Position:  
 Signature:  
 Phone:

Date:

Attach a signed certification to complete this report.

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

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

Source Name: Milestone Contractors, L.P.  
 Source Address: 5160 East 96<sup>th</sup> Street, Indianapolis, Indiana 46240  
 Mailing Address: P.O. Box 421459, Indianapolis, Indiana 46242-1459  
 FESOP No.: F057-23089-03289

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

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

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

Form Completed By:

Title/Position:

Date:

Phone:

Attach a signed certification to complete this report.

## ATTACHMENT A

### ASPHALT PLANT SITE FUGITIVE DUST CONTROL PLAN

- (a) Fugitive particulate matter emissions from paved roads, unpaved roads, and parking lots shall be controlled by one or more of the following methods:
- Paved roads and parking lots:
- (1) power brooming while wet either from rain or application of water on an as needed basis.
- Unpaved roads and parking lots:
- (1) paving with asphalt;
  - (2) treating with emulsified asphalt on an as needed basis;
  - (3) treating with water on an as needed basis;
  - (4) double chip and seal the road surface and maintained on an as needed basis.
- (b) Fugitive particulate matter emissions from aggregate stockpiles shall be controlled by one or more of the following methods on an as needed basis:
- (1) maintaining minimum size and number of stock piles of aggregate;
  - (2) treating around the stockpile area with emulsified asphalt;
  - (3) treating around the stockpile area with water;
  - (4) treating the stockpiles with water.
- (c) Fugitive particulate matter emissions from outdoor conveying of aggregates shall be controlled by the following method on an as needed basis:
- (1) applying water at the feed and the intermediate points.
- (d) Fugitive particulate matter emissions from the transfer of aggregates shall be controlled by one of the following methods:
- (1) minimize the vehicular distance between transfer points;
  - (2) enclose the transfer points;
  - (3) apply water on transfer points on an as needed basis.
- (e) Fugitive particulate matter emissions from transportation of aggregate by truck, front end loader, etc. shall be controlled by one of the following methods:
- (1) tarping the aggregate hauling vehicles;
  - (2) maintain vehicle bodies in a condition to prevent leakage;
  - (3) spray the aggregates with water;
  - (4) maintain a 10 MPH speed limit in the yard.
- (f) Fugitive particulate matter emissions from the loading and unloading of aggregate shall be controlled by one of the following methods:
- (1) reduce free fall distance to a minimum;
  - (2) reduce the rate of discharge of the aggregate;
  - (3) spray the aggregate with water on an as needed basis.

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

**Addendum to the  
Technical Support Document for a New Source Review and  
Federally Enforceable State Operating Permit (FESOP) Renewal**

**Source Background and Description**

<b>Source Name:</b>	<b>Milestone Contractors, L.P.</b>
<b>Source Location:</b>	<b>5160 East 96<sup>th</sup> Street, Indianapolis, IN 46240</b>
<b>County:</b>	<b>Hamilton</b>
<b>SIC Code:</b>	<b>2951</b>
<b>Permit Renewal No.:</b>	<b>F057-23089-03289</b>
<b>Permit Reviewer:</b>	<b>Linda Quigley/EVP</b>

On August 15, 2006, the Office of Air Quality (OAQ) had a notice published in the Noblesville Ledger, Noblesville, Indiana, stating that Milestone Contractors, L.P. had applied for a renewal of a Federally Enforceable State Operating Permit (FESOP) with new source construction to operate a stationary hot drum mix asphalt plant. The notice also stated that OAQ proposed to issue a FESOP for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

Upon further review, the OAQ has decided to make the following changes to the FESOP. Bolded language has been added and the language with a line through it has been deleted.

Condition C.9(g), Asbestos Abatement Projects, has been revised to remove the statement "The requirement to use an Indiana Accredited Asbestos inspector is not federally enforceable" because all conditions and requirements in a FESOP are federally enforceable.

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

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(g) Indiana Accredited Asbestos Inspector  
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. ~~The requirement to use an Indiana Accredited Asbestos inspector is not federally enforceable.~~

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

**Technical Support Document (TSD) for a New Source Review and  
Federally Enforceable State Operating Permit (FESOP) Renewal**

**Source Background and Description**

<b>Source Name:</b>	<b>Milestone Contractors, L.P.</b>
<b>Source Location:</b>	<b>5160 East 96<sup>th</sup> Street, Indianapolis, IN 46240</b>
<b>County:</b>	<b>Hamilton</b>
<b>SIC Code:</b>	<b>2951</b>
<b>Operation Permit No.:</b>	<b>F057-14104-03289</b>
<b>Operation Permit Issuance Date:</b>	<b>February 14, 2002</b>
<b>Permit Renewal No.:</b>	<b>F057-23089-03289</b>
<b>Permit Reviewer:</b>	<b>Linda Quigley/EVP</b>

The Office of Air Quality (OAQ) has reviewed a FESOP renewal application with new source construction from Milestone Contractors, L.P. relating to the operation of a stationary hot drum mix asphalt plant. On May 12, 2006, Milestone Contractors, L.P. submitted an application to the OAQ requesting a renewal of the current FESOP and to replace the 135 MMBtu per hour dryer burner with a 200 MMBtu per hour dryer burner.

**Permitted Emission Units and Pollution Control Equipment**

The source consists of the following permitted emission units and pollution control devices:

- (a) one (1) aggregate drum mix dryer, identified as emission unit No. 2, with a maximum capacity of 600 tons per hour, equipped with one (1) natural gas fired aggregate dryer burner with a maximum rated capacity of ~~135~~ **200** million British thermal units per hour (MMBtu/hr) using No. 2 distillate fuel oil and re-refined waste oil as back-up fuels and one (1) knock out box and one (1) baghouse for air pollution control, exhausting at one (1) stack, identified as DS-1;
- (b) one (1) drag slat conveyor, four (4) feed conveyors, and one (1) screen;
- (c) one (1) liquid asphalt storage tank, identified as Tank 22, with a maximum storage capacity of 30,000 gallons, exhausting at one (1) stack, identified as DV-7;
- (d) one (1) double-walled re-refined waste oil storage tank, identified as Tank F03, with a maximum storage capacity of 30,000 gallons; and
- (e) cold-mix (stockpile mix) asphalt storage piles.

**Unpermitted Emission Units and Pollution Control Equipment**

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

## Insignificant Activities

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

- (a) one (1) natural gas fired hot oil heater rated at 2.2 MMBtu per hour, identified as emission unit No. 17, using No.2 fuel oil as back-up fuel, and exhausting at one (1) stack, identified as DS-6;
- (b) three (3) liquid asphalt storage tanks, identified as Tanks 14, 15 and 16, each with a maximum storage capacity of 20,000 gallons, with emissions exhausted to Stacks DV-3, DV-5 and DV-6, respectively;
- (c) one (1) double-walled No. 2 fuel oil storage tank, identified as Tank F04, with a maximum storage capacity of 10,000 gallons;
- (d) one (1) cold feed system consisting of eight (8) compartments with a total aggregate holding capacity of 400 tons;
- (e) three (3) storage silos each with a maximum storage capacity of 300 tons;
- (f) four (4) storage silos each with a maximum storage capacity of 200 tons;
- (g) one (1) dust storage silo with a maximum capacity of 650 barrels;
- (h) one (1) dust pod;
- (i) Reclaimed Asphalt Pavement (RAP) bins with a capacity of 30 tons;
- (j) aggregate storage piles with a total maximum storage capacity of 32,159 tons;
- (k) one (1) RAP storage pile with a total maximum storage capacity of 8,640 tons;
- (l) combustion source flame safety purging on startup;
- (m) a gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons;
- (n) a petroleum fuel, other than gasoline, dispensing facility, having a storage capacity of less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month;
- (o) vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids;
- (p) application of oils, greases, lubricants or other nonvolatile materials applied as temporary protective coatings;
- (q) cleaners and solvents having a vapor pressure equal to or less than 2 kPa; 15mm Hg; or 0.3 psi measured at 38 degrees C (100°F) or; having a vapor pressure equal to or less than 0.7 kPa; 5 mm Hg; or 0.1 psi measured at 20°C (68°); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months;
- (r) closed loop heating and cooling systems;
- (s) paved and unpaved roads and parking lots with public access;

- (t) a laboratory as defined in 326 IAC 2-7-1(21)(D); and
- (u) one liquid asphalt calibration tank, identified as Tank 17.

### Existing Approvals

The source has been operating under the previous FESOP 057-14140-03289 issued on February 14, 2002, and the following amendments and revisions:

- (a) Significant Permit Revision 057-16293-03289, issued on October 7, 2002;
- (b) Administrative Amendment 057-17419-03289, issued on July 17, 2003; and
- (c) Administrative Amendment 057-20461-03289, issued on February 22, 2005.

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

(a)

#### D.1.18 Used Oil Requirements

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

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

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

*Reason not incorporated:* Upon further review, IDEM has determined that the above condition does not need to be included in the permit, since it is regulated by an agency other than the OAQ.

(b)

## SECTION D.2

## FACILITY OPERATION CONDITIONS

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

- (c) one (1) liquid asphalt storage tank, identified as Tank 22, with a maximum storage capacity of 30,000 gallons, exhausting at one (1) stack, identified as DV-7; and
- (d) one (1) double-walled re-refined waste oil storage tank, identified as Tank F03, with a maximum storage capacity of 30,000 gallons.

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

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

### **D.2.1 Record Keeping Requirements [326 IAC 12][40 CFR 60.110b, Subpart Kb]**

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- (a) Pursuant to 40 CFR Part 60.110b, Subpart Kb (Standards of Performance for Volatile Organic Liquid Storage Vessels), the one (1) 30,000 gallon asphalt storage tank (Tank 22), and the one (1) 30,000 gallon re-refined waste oil storage tank (Tank F03), each with a vapor pressure of less than 15.0 kPa, are subject to 40 CFR Part 60.116b, paragraphs (a), (b), and (d) which require record keeping.
- (b) To document compliance with paragraph (a) above, the Permittee shall maintain permanent records at the source in accordance with (1) through (3) below:
  - (1) the dimension of each storage vessel;
  - (2) an analysis showing the capacity of each storage vessel; and
  - (3) the true vapor pressure of each VOC stored in the 30,000 gallon asphalt storage tank (Tank 22) and the 30,000 gallon re-refined waste oil storage tank (Tank F03), indicating that the maximum true vapor pressure of VOC is less than 15.0 kPa.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

*Reason not incorporated:* Since issuance of FESOP No. F057-14104-03289 on February 14, 2002, the U.S. EPA promulgated amendments to the NSPS, 40 CFR 60, Subpart Kb on October 15, 2003. Therefore, the requirements from the previous version of 40 CFR 60, Subpart Kb, published in the federal register on August 8, 1987 are no longer applicable. The rule now applies to each storage vessel installed after July 23, 1984, with a storage capacity greater than 75 cubic meters (m<sup>3</sup>), used to store volatile organic liquids (VOLs). However, pursuant to 40 CFR 60.110b (b), the requirements of 40 CFR 60, Subpart Kb, are not applicable to tanks that have a capacity greater than seventy-five (75) cubic meters, but less than 151 cubic meters, and a maximum true vapor pressure less than 15.0 kiloPascals. Since each of the tanks 22 and F03 have storage capacities greater than seventy-five (75) cubic meters, but less than 151 cubic meters, and a maximum true vapor pressure less than 15.0 kiloPascals, the requirements of this rule are no longer included in this permit for these tanks.

### **Enforcement Issue**

There are no enforcement actions pending.

### **Recommendation**

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

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

An administratively complete FESOP renewal application for the purposes of this review was received on May 12, 2006.

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

### Emission Calculations

See Appendix A of this document for detailed emission calculations, pages one (1) through twelve (12).

### Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source, excluding the emission limits that were contained in the previous FESOP.

Pollutant	Unrestricted Potential Emissions (tons/yr)
PM	Greater than 250
PM-10	Greater than 250
SO <sub>2</sub>	Greater than 250
VOC	Greater than 250
CO	Less than 100
NO <sub>x</sub>	Greater than 250, Less than 100

HAPs	Unrestricted Potential Emissions (tons/yr)
Acetaldehyde	0.84
Acrolein	0.07
Arsenic	0.688
Benzene	1.02
Beryllium	0.003
Cadmium	0.058
Chromium	0.125
Cobalt	0.001
Ethyl benzene	0.63
Formaldehyde	8.15
Hexane	2.42
Lead	1.170
2,2,4 Trimethylpentane	0.11
Manganese	0.425
Mercury	0.003
Methyl chloroform	0.13
Propionaldehyde	0.342
Quinone	0.420
Nickel	0.069
Selenium	0.013
Toluene	7.62
Total POM	2.31
Xylene	0.53
Total PAH	0.155
Total VHAP	0.580
HCl	83.15
Total	111.08

- (a) The unrestricted potential emissions of PM<sub>10</sub>, SO<sub>2</sub>, VOC and NO<sub>x</sub> are each equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7. The source will be issued a FESOP because the source will limit its emissions below the Title V levels.
- (b) The unrestricted potential emissions of any single HAP is equal to or greater than ten (10) tons per year and the unrestricted potential emissions of a combination of HAPs is equal to or greater than twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7. The source will be issued a FESOP because the source will limit its emissions below the Title V levels.
- (c) **Fugitive Emissions**  
 Since there are applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are counted toward determination of PSD and Emission Offset applicability. This type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and 326 IAC 2-3.

**Potential to Emit After Issuance**

The source has opted to remain a FESOP source. The table below summarizes the potential to emit, reflecting all limits of the emission units. Any control equipment is considered enforceable only after issuance of this FESOP and only to the extent that the effect of the control equipment is made practically enforceable in the permit. Since the source has not constructed any new emission units, the source's potential to emit is based on the emission units included in the original FESOP.

Process/emission unit	Potential To Emit (tons/year)						
	PM	PM-10	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	HAPs
Aggregate Dryer and Burner <sup>(1)(6)</sup>	211.17 <sup>(2)</sup>	82.26 <sup>(3)</sup>	95.08	58.91	43.57	98.54	22.27
Hot Oil Heaters	0.14	0.22	4.82	0.05	0.81	1.36	--
Conveying/Handling	29.05	13.74	--	--	--	--	--
Unpaved Roads <sup>(4)</sup>	6.39	1.63	--	--	--	--	--
Aggregate Storage	0.31	0.11	--	--	--	--	--
Cold-mix VOC storage <sup>(5)</sup>	--	--	--	12.00	--	--	--
Load Out and Silo Filling	1.94	1.94	--	28.20	4.43	--	0.58
<b>Total Emissions</b>	<b>249</b>	<b>99.90</b>	<b>99.90</b>	<b>99.16</b>	<b>48.81</b>	<b>99.90</b>	<b>22.85</b>

- (1) Limited PTE reflects fuel oil usage limitations in order to comply with 326 IAC 2-8 (FESOP).
- (2) Maximum allowable PM emissions limited to 0.080 lb of PM/ ton of asphalt mix in order to render 326 IAC 2-2 (PSD) not applicable.
- (3) Maximum allowable PM10 emissions in order to comply with 326 IAC 2-8 (FESOP).
- (4) Potential to emit after controls.
- (5) Maximum allowable VOC emissions in order to comply with 326 IAC 2-8 (FESOP).
- (6) Largest single HAP = HCl (9.9 tpy).

### County Attainment Status

The source is located in Hamilton County.

Pollutant	Status
PM2.5	Nonattainment
PM-10	Attainment
SO <sub>2</sub>	Attainment
NO <sub>2</sub>	Attainment
8-hour Ozone	Nonattainment
CO	Attainment
Lead	Attainment

- (a) 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 the ozone standards. Hamilton County has been designated as nonattainment for the 8-hour ozone standard. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.
- (b) U.S.EPA in Federal Register Notice 70 FR 943 dated January 5, 2005 has designated Hamilton County as nonattainment for PM2.5. On March 7, 2005 the Indiana Attorney General's Office on behalf of IDEM filed a law suit with the Court of Appeals for the District of Columbia Circuit challenging U.S. EPA's designation of non-attainment areas without sufficient data. However, in order to ensure that sources are not potentially liable for violation of the Clean Air Act, the OAQ is following the U.S. EPA's guidance to regulate PM10 emissions as surrogate for PM2.5 emissions pursuant to the Non-attainment New Source Review requirements. See the State Rule Applicability for the source section.
- (c) Hamilton County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability for the source section.

### Source Status

Existing Source PSD and FESOP Definition (emissions after controls, based on 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/yr)
PM	90.02
PM-10	99.00
SO <sub>2</sub>	99.00
VOC	99.00
CO	30.33
NO <sub>x</sub>	99.00
Single HAP	8.15
Combination HAPs	22.91

- (a) This existing source is not a major stationary source under PSD (326 IAC 2-2) because no attainment regulated pollutant is emitted at a rate of 250 tons per year or greater and it is not in one of the 28 listed source categories.

- (b) This existing source is not a major stationary source under Emission Offset (326 IAC 2-3) because no nonattainment regulated pollutant is emitted at a rate of 100 tons per year or greater.
- (c) These emissions are based upon FESOP No.: 057-14104-03289, issued on February 14, 2002.

### **Federal Rule Applicability**

- (a) This source is subject to the New Source Performance Standard (NSPS), 326 IAC 12, (40 CFR 60.90, Subpart I) because it meets the definition of a hot mix asphalt facility pursuant to the rule and it was constructed after June 11, 1973.

The affected facility includes:

one (1) aggregate drum mix dryer, identified as emission unit No. 2, with a maximum capacity of 600 tons per hour, equipped with one (1) natural gas fired aggregate dryer burner with a maximum rated capacity of 200 million British thermal units per hour (MMBtu/hr) using No. 2 distillate fuel oil and re-refined waste oil as back-up fuels and one (1) knock out box and one (1) baghouse for air pollution control, exhausting at one (1) stack, identified as DS-1;

Nonapplicable portions of the NSPS will not be included in the permit. This source is subject to the following portion of Subpart I.

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

The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, apply to this aggregate dryer burner except when otherwise specified in 40 CFR Part 60, Subpart I.

- (b) The one (1) 20,000 gallon liquid asphalt storage tank (Tank 14) is not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60.110b, Subpart Kb) because the tank was installed before July 23, 1984. The one (1) 10,000 gallon double-walled No. 2 fuel oil storage tank (Tank F04) is not subject to the requirements of Subpart Kb because the tank has a storage capacity less than 75 cubic meters. Therefore, the requirements of 40 CFR 60.110b, Subpart Kb are not included in the permit.
- (c) The one (1) 20,000 gallon liquid asphalt storage tank (Tank 14) is not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60.110a, Subpart Ka) because the tank was installed before May 18, 1978 and has a storage capacity of less than 40,000 gallons. Therefore, the requirements of 40 CFR 60.110a, Subpart Ka are not included in the permit.
- (d) The one (1) 20,000 gallon liquid asphalt storage tank (Tank 14) is not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60.110, Subpart K) because the tank has a storage capacity of less than 40,000 gallons. Therefore, the requirements of 40 CFR 60.110, Subpart K are not included in the permit.

- (e) The two (2) 20,000 gallon liquid asphalt storage tanks (Tank 15 and 16) are not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60.110b, Subpart Kb). This subpart does not apply to storage vessels with a capacity greater than or equal to 75 cubic meters but less than 151 cubic meters storing a liquid with a maximum true vapor pressure less than 15.0 kPa. The 20,000 gallon liquid asphalt storage tanks (Tank 15 and 16) each have a storage capacity greater than 75 cubic meters and less than 151 cubic meters, and stores a liquid with a maximum true vapor pressure less than 15.0 kPa. Therefore, the requirements of 40 CFR 60.110b, subpart Kb are not included in the permit.
- (f) The one (1) 30,000 gallon liquid asphalt storage tank (Tank 22) and the one (1) 30,000 double-walled re-refined waste oil storage tank (Tank F03) are not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60.110b, Subpart Kb). This subpart does not apply to storage vessels with a capacity greater than or equal to 75 cubic meters but less than 151 cubic meters storing a liquid with a maximum true vapor pressure less than 15.0 kPa. The 30,000 gallon liquid asphalt storage tank (Tank 22) and the one (1) 30,000 double-walled re-refined waste oil storage tank (Tank F03) each have a storage capacity greater than 75 cubic meters and less than 151 cubic meters, and stores a liquid with a maximum true vapor pressure less than 15.0 kPa. Therefore, the requirements of 40 CFR 60.110b, subpart Kb are not included in the permit.
- (g) There are no other New Source Performance Standards (NSPSs)(326 IAC 12 and 40 CFR Part 60) included in this permit.
- (h) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) included in this permit.
- (i) The requirements of 40 CFR Part 64, Compliance Assurance Monitoring, are not included in this permit. Such requirements apply to a pollutant-specific emissions unit (PSEU), as defined in 40 CFR 64.1, at a major source that is required to obtain a Part 70 or 71 permit if the PSEU meets the following criteria:
  - (1) The unit is subject to an emission limitation or standard for an applicable regulated air pollutant,
  - (2) The unit uses a control device as defined in 40 CFR 64.1 to comply with that emission limitation or standard, and
  - (3) The unit has a potential to emit (PTE) before controls equal to or greater than 100 percent of the amount (tons per year) of the pollutant required for a source to be classified as a Part 70 major source.

This source is a FESOP source and is not a major Part 70 source. Therefore, the requirements of 40 CFR 64, Compliance Assurance Monitoring, are not included in this permit.

## State Rule Applicability – Entire Source

### 326 IAC 2-2 (Prevention of Significant Deteriorations (PSD))

This source is not subject to the requirements of this rule. The existing source is an existing minor PSD source. The allowable emissions of all regulated pollutants, except PM, are less than 100 tons per year after application of all federally enforceable emission limits as discussed below under 326 IAC 2-8. The allowable emissions of PM are less than 250 tons per year after application of a federally enforceable emission limit of 0.080 pound of PM per ton of asphalt mix for the aggregate mixing and drying operation equivalent to 48.21 pounds per hour based on a maximum throughput of 600 tons of asphalt mix per hour. Therefore the requirements of 326 IAC 2-2 (PSD) do not apply. This type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2.

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

On April 15, 2004, the United States Environmental Protection Agency (U.S. EPA) named 23 Indiana counties and one partial county nonattainment for the new 8-hour ozone standard. The designations became effective on June 15, 2004. Hamilton County has been designated as basic nonattainment for the 8-hour ozone standard. Currently, the source wide limited potential to emit of NO<sub>x</sub> and VOC is less than 100 tons per year, for each pollutant as discussed below under 326 IAC 2-8. Therefore, the requirements of Emission Offset 326 IAC 2-3 do not apply.

### 326 IAC 2-1.1-5 (Non-attainment New Source Review)

This source is not major under nonattainment NSR. The allowable emissions of PM<sub>10</sub> (as a surrogate for PM<sub>2.5</sub>) are less than 100 tons per year after application of all federally enforceable limits as discussed below under 326 IAC 2-8. Therefore, the Non-attainment New Source Review requirements are not applicable.

### 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

The operation of the aggregate mixing and drying operation will emit less than 10 tons per year of a single HAP and 25 tons per year of a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

### 326 IAC 2-6 (Emission Reporting)

Pursuant to 326 IAC 2-6-1, this source is not subject to this rule because it is not required to have an operating permit under 326 IAC 2-7 (Part 70), it is not located in Lake or Porter counties, and it does not emit lead into the ambient air at levels equal to or greater than 5 tons per year. Therefore, 326 IAC 2-6 does not apply.

### 326 IAC 2-8-4 (FESOP)

This source is subject to 326 IAC 2-8-4 (FESOP). Pursuant to this rule, the following limits apply:

- (a) the usage of re refined waste oil with a sulfur content of 0.75% and re-refined waste oil equivalents in the 200 MMBtu per hour aggregate dryer burner shall be limited to 1,458,000 U.S. gallons per twelve (12) consecutive month period, with compliance determined at the end of each month. Therefore, SO<sub>2</sub> emissions are limited to less than 100 tons per year and HCl emissions are limited to less than 10 tons per year. For purposes of determining compliance, the following shall apply:
  - (1) every MMCF of natural gas burned shall be equivalent to 5.44 gallons of re-refined waste oil based on SO<sub>2</sub> emissions, such that the total gallons of re-refined waste oil and re-refined waste oil equivalent input does not exceed the limit specified;

- (2) every 1,000 gallons of No. 2 distillate fuel oil burned shall be equivalent to 712 gallons of re-refined waste oil based on SO<sub>2</sub> emissions, such that the total gallons of re-refined waste oil and re-refined waste oil equivalent input does not exceed the limit specified.

Therefore, the requirements of 326 IAC 2-7 and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) do not apply.

- (b) the usage of natural gas and natural gas equivalents in the 200 MMBtu per hour aggregate dryer burner shall be limited to 1,037.27 million cubic feet per twelve (12) consecutive month period, with compliance determined at the end of each month. Therefore, NO<sub>x</sub> emissions are limited to less than 100 tons per year. For purposes of determining compliance, the following shall apply:

- (1) every 1,000 gallons of No. 2 distillate fuel oil burned shall be equivalent to 0.126 MMCF of natural gas burned based on NO<sub>x</sub> emissions, such that the total MMCF of natural gas and natural gas equivalent input does not exceed the limit specified; and
- (2) every 1,000 gallons of re-refined waste oil burned shall be equivalent to 0.1 MMCF of natural gas burned based on NO<sub>x</sub> emissions, such that the total MMCF of natural gas and natural gas equivalent input does not exceed the limit specified.

Therefore, the requirements of 326 IAC 2-7 and 326 IAC 2-3 (Emission Offset) do not apply.

- (c) The use of gelled asphalt with solvent liquid binder shall be limited to 480 tons per twelve (12) consecutive month period, with compliance determined at the end of each month. This is equivalent to limiting the VOC emitted from solvent use to 12.0 tons per year, so that source-wide VOC emissions are limited to less than 100 tons per year, based on the following definition:

Other asphalt with solvent binder, containing a maximum 2.5% by weight of the VOC solvent evaporating.

Compliance with this limitation makes 326 IAC 2-7 (Part 70 Permit Program) not applicable. This limit will also render the requirements of 326 IAC 2-3 (Emission Offset) not applicable.

- (d) PM-10 emissions from the aggregate dryer shall be limited to 0.031 pound PM-10 per ton of asphalt mix equivalent to 18.78 pounds per hour based on a maximum throughput of 600 tons of asphalt mix per hour. The source will comply with the PM-10 emission limit by utilizing a baghouse for controlling PM-10 emissions. Therefore, the requirements of 326 IAC 2-7, 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)), and Nonattainment NSR do not apply.
- (e) Pursuant to 326 IAC 2-8-4, the amount of hot mix asphalt produced by the source shall not exceed 3,504,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month. This will limit HAP emissions to less than ten (10) tons per year of any single HAP and to less than twenty five (25) tons per year of any combination of HAP.

Compliance with this limitation makes 326 IAC 2-7 (Part 70 Permit Program) not applicable.

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

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

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

**326 IAC 6-4 (Fugitive Dust Emissions)**

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

**326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)**

This source is subject to 326 IAC 6-5 for fugitive particulate matter emissions. Pursuant to 326 IAC 6-5, for any new source which has not received all the necessary preconstruction approvals before December 13, 1985, a fugitive dust control plan must be submitted, reviewed and approved. The fugitive dust control plan for this source is included in the FESOP as Attachment A.

**State Rule Applicability – Individual Facilities**

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

The aggregate mixing and drying operation is not subject to the requirements of 326 IAC 6-3-2. This rule does not apply if the limitation established in the rule is less stringent than applicable limitations in 326 IAC 6-1 or 326 IAC 12. Since the applicable PM emission limit established by 326 IAC 12, 40 CFR 60, Subpart I, is less than the PM limit that would be established by 326 IAC 6-3-2 (71.16 pounds per hour, see Appendix A, page 12 of 12), the more stringent limit applies and the limit pursuant to 326 IAC 6-3-2 does not apply.

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

- (a) The sulfur dioxide emissions from the 200 MMBtu/hr dryer burning distillate oil shall be limited to 0.5 lb/MMBtu heat input. This equates to a fuel oil sulfur content limit of 0.5%. Therefore, the sulfur content of the fuel must be less than or equal to 0.5% in order to comply with this rule (See Appendix A, Page 12 of 12 for detailed calculations). The source will comply with this rule by using No. 2 distillate oil with a sulfur content of 0.5% or less.
- (b) The sulfur dioxide emissions from the 200 MMBtu/hr dryer burning re-refined waste oil shall be limited to 1.6 lb/MMBtu/hr heat input. This equates to a fuel oil sulfur content limit of 1.5%. Therefore, the sulfur content of the fuel must be less than or equal to 1.5% in order to comply with this rule (See Appendix A, Page 12 of 12 for detailed calculations). The source will comply with this rule by using re-refined waste oil with a maximum sulfur content of 0.75%.

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

This source is subject to 326 IAC 7-2-1 (Reporting Requirements). This rule requires the source to submit to the Office of Air Quality upon request records of sulfur content, heat content, fuel consumption, and sulfur dioxide emission rates based on a calendar-month average.

### 326 IAC 8-5-2 (Miscellaneous Operations: Asphalt Paving)

This rule applies to any paving application constructed after January 1, 1980 located anywhere in the state. 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:

- 1) penetrating prime coating
- 2) stockpile storage
- 3) application during the months of November, December, January, February and March.

This source uses gelled asphalt to manufacture stockpile mix on a limited basis. The gelled asphalt contains less than 7% oil distillate by volume. It is only manufactured during the winter months and is in compliance with 326 IAC 8-5-2.

### Testing Requirements

Testing was last conducted on September 21, 2004 and the source was found to be in compliance with Permitted emission limits.

- (a) No later than five (5) years from September 21, 2004, in order to demonstrate compliance with the limits pursuant to 326 IAC 2-8, 326 IAC 2-2, and 40 CFR Part 60, Subpart I, the Permittee shall perform PM and PM-10 testing on the aggregate dryer/burner utilizing methods as approved by the Commissioner. PM-10 includes filterable and condensable PM-10.
- (b) Opacity testing shall be performed utilizing methods per 40 CFR Part 60 Appendix A, to demonstrate compliance with the opacity limitation of 40 CFR Part 60, Subpart I.

This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing.

### Compliance Requirements

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

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

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

1. The aggregate dryer/burner baghouse stack exhaust, the conveyors and transfer points, have applicable compliance monitoring conditions as specified below:

- (a) Visible emission notations of the aggregate dryer/burner baghouse stack exhaust, the conveyors and transfer points shall be performed once per day 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 in accordance with Section C- Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.
- (f) The Permittee shall record the pressure drop across the baghouse used in conjunction with the aggregate dryer/burner, at least once per day when the aggregate dryer/burner is in operation when venting to the atmosphere. When for any aggregate dryer/burner, the pressure drop across the baghouse is outside the normal range of 1.0 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

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 at least once every six (6) months.

- (1) 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).
- (2) 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 line. 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 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.

These monitoring conditions are necessary because the baghouse for the aggregate dryer/burner must operate properly to ensure compliance with 326 IAC 12, 40 CFR 60.90, Subpart I (Standards of Performance for Hot Mix Asphalt Facilities), 326 IAC 2-8 (FESOP) and the limits to render 326 IAC 2-2 (PSD) not applicable.

## **Conclusion**

The operation of this stationary hot drum mix asphalt plant shall be subject to the conditions of the FESOP 057-23089-03289.

Company Name:  
Plant Location:  
County:  
Permit Reviewer:

Milestone Contractors, L. P.  
5160 East 96th Street, Indianapolis, IN  
Hamilton  
Linda Quigley/EVP

**\*\* aggregate dryer burner\*\***

The following calculations determine the amount of emissions created by natural gas combustion, from the aggregate dryer burner, based on 8,760 hours of operation and US EPA's AP-42, 5th Edition, Section 1.4 - Natural Gas Combustion, Tables 1.4-1 and 1.4-2.

<b>Criteria Pollutant:</b>	<b>200 MMBtu/hr * 8,760 hr/yr</b>	<b>* Ef (lb/MMcf) = (ton/yr)</b>
	<b>1000 Btu/cf * 2,000 lb/ton</b>	
<b>P M:</b>	1.9 lb/MMcf =	<b>1.66 ton/yr</b>
<b>P M-10:</b>	7.6 lb/MMcf =	<b>6.66 ton/yr</b>
<b>S O 2:</b>	0.6 lb/MMcf =	<b>0.53 ton/yr</b>
<b>N O x:</b>	190.0 lb/MMcf =	<b>166.44 ton/yr</b>
<b>V O C:</b>	5.5 lb/MMcf =	<b>4.82 ton/yr</b>
<b>C O:</b>	84.0 lb/MMcf =	<b>73.58 ton/yr</b>

The following calculations determine the amount of emissions created by the combustion of re-refined waste oil

@ 0.20 % Chlorine and  
@ 0.75 % sulfur, and  
@ 0.95 % ash, from the aggregate dryer burner, based on 8,760 hours of use and  
US EPA's AP-42, 5th Edition, Section 1.11 - Waste Oil Combustion, Tables 1.11-1, 1.11-2, 1.11-3,  
and 1.11-4.

<b>Criteria Pollutant:</b>	<b>200 MMBtu/hr * 8,760 hr/yr</b>	<b>* Ef (lb/1,000 gal) = (ton/yr)</b>
	<b>140,000 Btu/gal * 2,000 lb/ton</b>	
<b>P M:</b>	60.6 lb/1000 gal =	<b>379.23 ton/yr</b>
<b>P M-10:</b>	48.3 lb/1000 gal =	<b>302.20 ton/yr</b>
<b>S O 2:</b>	110.3 lb/1000 gal =	<b>689.85 ton/yr</b>
<b>N O x:</b>	19.0 lb/1000 gal =	<b>118.89 ton/yr</b>
<b>V O C:</b>	1.00 lb/1000 gal =	<b>6.26 ton/yr</b>
<b>C O:</b>	5.0 lb/1000 gal =	<b>31.29 ton/yr</b>
<b>HCl:</b>	13.20000 lb/1000 gal =	<b>82.59 ton/yr</b>

The following calculations determine the amount of emissions created by the combustion of No. 2 distillate fuel oil

@ 0.50 % sulfur, from the aggregate dryer burner, based on 8,760 hours of use and  
US EPA's AP-42, 5th Edition, Section 1.3 - Fuel Oil Combustion, Tables 1.3-1, 1.3-2, and 1.3-5.

<b>Criteria Pollutant:</b>	<b>200 MMBtu/hr * 8,760 hr/yr</b>	<b>* Ef (lb/1,000 gal) = (ton/yr)</b>
	<b>139,000 Btu/gal * 2,000 lb/ton</b>	
<b>P M:</b>	2.0 lb/1000 gal =	<b>12.60 ton/yr</b>
<b>P M-10:</b>	3.3 lb/1000 gal =	<b>20.80 ton/yr</b>
<b>S O 2:</b>	78.5 lb/1000 gal =	<b>494.72 ton/yr</b>
<b>N O x:</b>	24.0 lb/1000 gal =	<b>151.25 ton/yr</b>
<b>V O C:</b>	0.20 lb/1000 gal =	<b>1.26 ton/yr</b>
<b>C O:</b>	5.0 lb/1000 gal =	<b>31.51 ton/yr</b>

The maximum potential emissions from the aggregate dryer burner due to fuel combustion are the following:

<b>Criteria Pollutant:</b>		<b>Worst Case Fuel</b>
<b>P M:</b>	<b>379.23 ton/yr</b>	Re-refined Waste Oil
<b>P M-10:</b>	<b>302.20 ton/yr</b>	Re-refined Waste Oil
<b>S O 2:</b>	<b>689.85 ton/yr</b>	Re-refined Waste Oil
<b>N O x:</b>	<b>166.44 ton/yr</b>	Natural Gas
<b>V O C:</b>	<b>6.26 ton/yr</b>	Re-refined Waste Oil
<b>C O:</b>	<b>73.58 ton/yr</b>	Natural Gas
<b>HCl:</b>	<b>82.59 ton/yr</b>	Re-refined Waste Oil

**\*\*Insignificant Combustion Sources\*\***

**\*\*hot oil heaters\*\***

**Hot Oil Heater- 2.2 MMBtu/hr**

The following calculations determine the amount of emissions created by #2 distillate fuel oil @ 0.5% sulfur, from the hot oil heater based on 8,760 hours of operation and US EPA's AP-42, Ch. 1.4, Tables 1.3-1, 1.3-2, 1.3-3 Tables 1.4-1, 1.4-2, and 1.4-3.

<b>Criteria Pollutant:</b>	2.2 MMBtu/hr * 8,760 hr/yr	* Ef (lb/1000 gal) = (ton/yr)
	141,800.00 Btu/1000 gal* 2,000 lb/ton	
<b>P M:</b>	2.00 lb/1000 gal =	<b>0.14 ton/yr</b>
<b>P M-10:</b>	3.30 lb/1000 gal =	<b>0.22 ton/yr</b>
<b>S O 2:</b>	71.00 lb/1000 gal =	<b>4.82 ton/yr</b>
<b>N O x:</b>	20.00 lb/1000 gal =	<b>1.36 ton/yr</b>
<b>V O C:</b>	0.34 lb/1000 gal =	<b>0.02 ton/yr</b>
<b>C O:</b>	5.00 lb/1000 gal =	<b>0.34 ton/yr</b>

The following calculations determine the amount of emissions created by natural gas combustion, from the hot oil heater, based on 8,760 hours of operation and US EPA's AP-42, 5th Edition, Section 1.4 - Natural Gas Combustion, Tables 1.4-1 and 1.4-2.

<b>Criteria Pollutant:</b>	2.2 MMBtu/hr * 8,760 hr/yr	* Ef (lb/MMcf) = (ton/yr)
	1000 Btu/cf * 2,000 lb/ton	
<b>P M:</b>	1.9 lb/MMcf =	<b>0.02 ton/yr</b>
<b>P M-10:</b>	7.6 lb/MMcf =	<b>0.07 ton/yr</b>
<b>S O 2:</b>	0.6 lb/MMcf =	<b>0.01 ton/yr</b>
<b>N O x:</b>	100.0 lb/MMcf =	<b>0.96 ton/yr</b>
<b>V O C:</b>	5.5 lb/MMcf =	<b>0.05 ton/yr</b>
<b>C O:</b>	84.0 lb/MMcf =	<b>0.81 ton/yr</b>

The maximum potential emissions from the hot oil heater due to fuel combustion are the following:

<b>Criteria Pollutant:</b>		<b>Worst Case Fuel</b>
<b>P M:</b>	<b>0.14 ton/yr</b>	Distillate Oil
<b>P M-10:</b>	<b>0.22 ton/yr</b>	Distillate Oil
<b>S O 2:</b>	<b>4.82 ton/yr</b>	Distillate Oil
<b>N O x:</b>	<b>1.36 ton/yr</b>	Distillate Oil
<b>V O C:</b>	<b>0.05 ton/yr</b>	Natural Gas
<b>C O:</b>	<b>0.81 ton/yr</b>	Natural Gas

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

The following calculations determine the amount of worst case emissions created by aggregate drying before controls, based on 8,760 hours of use and USEPA's AP-42, 5th Edition, Section 11.1 - Hot Mix Asphalt Plants, Tables 11.1-5 and 11.1-10 for a drum mix dryer which has the capability of combusting either fuel oil, natural gas, or re-refined waste oil:

Pollutant:	Ef	lb/ton x	600	ton/hr x	8,760	hr/yr
			2,000	lb/ton		
<b>Criteria Pollutant:</b>						
<b>P M:</b>		28	lb/ton =	<b>73,584.00 ton/yr</b>		
<b>P M-10:</b>		6.5	lb/ton =	<b>17,082.00 ton/yr</b>		
<b>VOC:</b>		0.032000	lb/ton =	<b>84.10 ton/yr</b>		
<b>HCl:</b>		0.00021	lb/ton =	<b>0.55 ton/yr</b>		

The HCl emission factor for aggregate drying is from Table 11.1-8 of Section 11.1 of AP-42.

**\*\* conveying / handling \*\***

The following calculations determine the amount of emissions created by material handling, based on 8,760 hours of use and AP-42, Section 13.2.4, Equation 1. The emission factor for calculating PM emissions is calculated as follows:

PM-10 Emissions:

$$E = k * (0.0032) * ((U/5)^{1.3}) / ((M/2)^{1.4})$$

$$= 5.23E-03 \text{ lb PM-10/ton}$$

$$= 1.11E-02 \text{ lb PM/ton}$$

where k = 0.35 (particle size multiplier for <10um)  
0.74 (particle size multiplier for <30um)

U = 12 mph mean wind speed  
M = 1.5 material moisture content (%)

$$\frac{600 \text{ ton/hr} * 8,760 \text{ hrs/yr} * \text{Ef (lb/ton of material)}}{2,000 \text{ lb/ton}} = (\text{ton/yr})$$

**Total PM 10 Emissions: 13.74 tons/yr**  
**Total PM Emissions: 29.05 tons/yr**

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

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

**I. Haul Trucks**

1.33 trip/hr x  
 0.038 mile/trip x  
 2 (round trip ) x = 885.4608 miles per year  
 8,760 hr/hr

$E_f = k \cdot (s/12)^a \cdot a \cdot (W/3)^b$   
 = 2.37 lb PM-10/mile  
 = 9.31 lb PM/mile  
 where k = 1.5 (particle size multiplier for PM-10)  
 k = 4.9 (particle size multiplier for PM)  
 s = 4.8 mean % silt content of unpaved roads  
 a = 0.9 Constant for PM-10  
 a = 0.7 Constant for PM  
 b = 0.45 Constant for PM and PM-10  
 W = 52 tons average vehicle weight

**PM-10:**  $\frac{2.37 \text{ lb/mi} \times 885.4608 \text{ mi/yr}}{2000 \text{ lb/ton}} = 1.05 \text{ tons/yr}$   
**PM:**  $\frac{9.31 \text{ lb/mi} \times 885.4608 \text{ mi/yr}}{2000 \text{ lb/ton}} = 4.12 \text{ tons/yr}$

**I. Front End Loader**

4.7 trip/hr x  
 0.027 mile/trip x  
 2 (round trip ) x = 2223.288 miles per year  
 8,760 hr/hr

$E_f = k \cdot (s/12)^a \cdot a \cdot (W/3)^b$   
 = 1.99 lb PM-10/mile  
 = 7.79 lb PM/mile  
 where k = 1.5 (particle size multiplier for PM-10)  
 k = 4.9 (particle size multiplier for PM)  
 s = 4.8 mean % silt content of unpaved roads  
 a = 0.9 Constant for PM-10  
 a = 0.7 Constant for PM  
 b = 0.45 Constant for PM and PM-10  
 W = 35 tons average vehicle weight

**PM-10:**  $\frac{1.99 \text{ lb/mi} \times 2223.288 \text{ mi/yr}}{2000 \text{ lb/ton}} = 2.21 \text{ tons/yr}$   
**PM:**  $\frac{7.79 \text{ lb/mi} \times 2223.288 \text{ mi/yr}}{2000 \text{ lb/ton}} = 8.66 \text{ tons/yr}$

Total PM Emissions From Unpaved Roads = 12.79 tons/yr  
 Total PM10 Emissions From Unpaved Roads = 3.26 tons/yr

**\*\* storage \*\***

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.

Material	Silt Content (wt %)	Pile Size (acres)	Storage Capacity (tons)	PM EF lb/acre/day	PM Emissions tons/yr	PM-10 Emissions (35% of PM) tons/yr
Sand	1.1	0.18	4,800.00	1.27	0.04	0.01
Stone	1.2	0.97	25,440.00	1.39	0.25	0.09
Slag	0.8	0.07	1,919.00	0.93	0.01	0.00
RAP	0.2	0.33	8,640.00	0.23	0.01	0.00
<b>Total</b>					<b>0.31</b>	<b>0.11</b>

Sample Calculation:

$$E_f = 1.7 \cdot (s/1.5)^2 \cdot (365-p)/235 \cdot (f/15)$$

= 1.74 lb/acre/day  
 where s = 1.5 % silt  
 p = 125 days of rain greater than or equal to 0.01 inches  
 f = 15 % of wind greater than or equal to 12 mph

**\*\* cold mix VOC storage emissions \*\***

The following calculations determine the amount of VOC emissions created by the application of stockpile mix containing gelled asphalt, of which is 2.5% by weight of VOC is evaporated, based on 8,760 hours of use.

VOC Emission Factor = 0.025 weight percent flash-off of cold mix  
 Potential Throughput (tons/yr) = 5,256,000 tons/yr stockpile mix

Potential VOC Emissions (tons/yr) = Potential Throughput (tons/yr) \* wt percent flash-off

**Potential VOC Emissions = 1,314.00 tons/yr**

**\*\* load-out \*\***

The following calculations determine the amount of emissions created by plant load-out, based on 8,760 hours of use and USEPA's AP-42, Section 11.1, Tables 11.1-14 through 11.1-16.

$$PM/PM_{10} E_f = 0.000181 + 0.00141(-V)e^{((0.0251)(T+460)-20.43)}$$

= 5.22E-04 lb PM or PM-10 per ton of asphalt mix produced  
 where V = -0.5 asphalt volatility (default value of -0.5 used per AP-42)  
 T = 325 hot mix asphalt (HMA) mix temperature in degrees F (default value of 325 used per AP-42)

**PM/PM10 = 1.37 tons/yr**  
**Total PAH HAPs = 0.05 tons/yr** (5.93% of Organic PM emissions per AP-42)\*  
**Phenol = 0.01 tons/yr** (1.18% of Organic PM emissions per AP-42)\*

$$TOC E_f = 0.0172(-V)e^{((0.0251)(T+460)-20.43)}$$

= 4.16E-03 lb TOC per ton of asphalt mix produced  
 where V = -0.5 asphalt volatility (default value of -0.5 used per AP-42)  
 T = 325 hot mix asphalt (HMA) mix temperature in degrees F (default value of 325 used per AP-42)

**VOC = 10.27 tons/yr** (94% of TOC emissions per AP-42)  
**Worst Case Single HAP (Xylenes) = 0.05 tons/yr** (0.49% of TOC emissions per AP-42)  
**Total Volatile HAPs = 0.16 tons/yr** (1.5% of TOC emissions per AP-42)

$$CO E_f = 0.00558(-V)e^{((0.0251)(T+460)-20.43)}$$

= 1.35E-03 lb CO per ton of asphalt mix produced  
 where V = -0.5 asphalt volatility (default value of -0.5 used per AP-42)  
 T = 325 hot mix asphalt (HMA) mix temperature in degrees F (default value of 325 used per AP-42)

**CO = 3.55 tons/yr**

**\*\* silo filling \*\***

The following calculations determine the amount of emissions created by silo filling, based on 8,760 hours of use and USEPA's AP-42, Section 11.1, Tables 11.1-14 through 11.1-16.

$$\begin{aligned} \text{PM/PM10 Ef} &= 0.000332 + 0.00105(-V)e^{((0.0251)(T+460)-20.43)} \\ &= 5.86E-04 \text{ lb PM or PM-10 per ton of asphalt mix produced} \\ \text{where V} &= -0.5 \text{ asphalt volatility (default value of -0.5 used per AP-42)} \\ \text{T} &= 325 \text{ hot mix asphalt (HMA) mix temperature in degrees F (default value of 325 used per AP-42)} \end{aligned}$$

**PM/PM10 = 1.54 tons/yr**  
**Total PAH HAPs = 0.10 tons/yr** (11.40% of Organic PM emissions per AP-42)\*

$$\begin{aligned} \text{TOC Ef} &= 0.0504(-V)e^{((0.0251)(T+460)-20.43)} \\ &= 1.22E-02 \text{ lb TOC per ton of asphalt mix produced} \\ \text{where V} &= -0.5 \text{ asphalt volatility (default value of -0.5 used per AP-42)} \\ \text{T} &= 325 \text{ hot mix asphalt (HMA) mix temperature in degrees F (default value of 325 used per AP-42)} \end{aligned}$$

**VOC = 32.03 tons/yr** (100% of TOC emissions per AP-42)  
**Worst Case Single HAP (Formaldehyde) = 0.22 tons/yr** (0.69% of TOC emissions per AP-42)  
**Total Volatile HAPs = 0.42 tons/yr** (1.3% of TOC emissions per AP-42)

$$\begin{aligned} \text{CO Ef} &= 0.00488(-V)e^{((0.0251)(T+460)-20.43)} \\ &= 1.18E-03 \text{ lb CO per ton of asphalt mix produced} \\ \text{where V} &= -0.5 \text{ asphalt volatility (default value of -0.5 used per AP-42)} \\ \text{T} &= 325 \text{ hot mix asphalt (HMA) mix temperature in degrees F (default value of 325 used per AP-42)} \end{aligned}$$

**CO = 3.10 tons/yr**

\* Organic PM emissions are calculated using the equation from Table 11.1-14.

$$\begin{aligned} \text{Organic PM Ef} &= 0.00141(-V)e^{((0.0251)(T+460)-20.43)} \\ &= 3.41E-04 \text{ lb PM or PM-10 per ton of asphalt mix produced} \\ \text{where V} &= -0.5 \text{ asphalt volatility (default value of -0.5 used per AP-42)} \\ \text{T} &= 325 \text{ hot mix asphalt (HMA) mix temperature in degrees F (default value of 325 used per AP-42)} \end{aligned}$$

**\*\* summary of source emissions before controls \*\***

Criteria Pollutants:

<b>P M:</b>	<b>74,008.43 ton/yr</b>
<b>P M-10:</b>	<b>17,404.45 ton/yr</b>
<b>S O 2:</b>	<b>694.67 ton/yr</b>
<b>N O x:</b>	<b>167.80 ton/yr</b>
<b>V O C:</b>	<b>1,446.71 ton/yr</b>
<b>C O:</b>	<b>81.04 ton/yr</b>
<b>HCL:</b>	<b>83.15 ton/yr</b>

**\*\* source emissions after controls \*\***

In order to qualify for the FESOP program, this facility must limit PM-10, SO<sub>2</sub>, VOC and NO<sub>x</sub> emissions to less than 100 tons per year and HCL emissions to less than 10 tons per year. Consequently, SO<sub>2</sub> emissions from the use of No. 2 fuel oil and re-refined waste oil is being limited to less than 95.08 tons per year and 80.37 tons per year, respectively. from the aggregate dryer) and, NO<sub>x</sub> emissions from the use of natural gas is limited to less than 98.54 from the aggregate dryer). HCL emissions from the use of re-refined waste oil is being limited to less than 9.9 tons per year.

\* Emissions of PM and PM-10 from aggregate drying operations are controlled with a 99.900 % control efficiency.

The following calculations determine the amount of emissions created by natural gas combustion based on a maximum fuel usage of 1,037.27 MMcf

<b>Natural Gas:</b>	<u>1,037.27 MMcf/yr</u>	* Ef (lb/MMcf) = (ton/yr)
	2,000 lb/ton	
<b>P M:</b>	1.9 lb/MMcf =	<b>9.85E-04 ton/yr *</b>
<b>P M-10:</b>	7.6 lb/MMcf =	<b>3.94E-03 ton/yr *</b>
<b>S O 2:</b>	0.6 lb/MMcf =	<b>0.31 ton/yr</b>
<b>N O x:</b>	190.0 lb/MMcf =	<b>98.54 ton/yr</b>
<b>V O C:</b>	5.5 lb/MMcf =	<b>2.85 ton/yr</b>
<b>C O:</b>	84.0 lb/MMcf =	<b>43.57 ton/yr</b>

The following calculations determine the amount of emissions created by No. 2 fuel oil @ 0.50 % sulfur based on a fuel usage limitation of 2,422,298 gal/yr:

<b>No. 2 Distillate Oil:</b>	<u>2,422,298 gal/yr</u>	* Ef (lb/1,000 gal) = (ton/yr)
	2,000 lb/ton	
<b>P M:</b>	2.0 lb/1000 gal =	<b>2.42E-03 ton/yr *</b>
<b>P M-10:</b>	3.3 lb/1000 gal =	<b>4.00E-03 ton/yr *</b>
<b>S O 2:</b>	78.5 lb/1000 gal =	<b>95.08 ton/yr</b>
<b>N O x:</b>	24.0 lb/1000 gal =	<b>29.07 ton/yr</b>
<b>V O C:</b>	0.2 lb/1000 gal =	<b>0.24 ton/yr</b>
<b>C O:</b>	5.0 lb/1000 gal =	<b>6.06 ton/yr</b>

The following calculations determine the amount of emissions created by re-refined waste oil @ 0.75 % sulfur based on a fuel usage limitation of 1,724,720 gal/yr:

Re-refined waste oil usage has been further reduced to 1,458,000 gal/yr: in order to limit HCL below 10 tpy.

<b>Re-refined Waste Oil:</b>	<u>1,458,000 gal/yr</u>	* Ef (lb/1,000 gal) = (ton/yr)
	2,000 lb/ton	
<b>P M:</b>	60.6 lb/1000 gal =	<b>4.42E-02 ton/yr *</b>
<b>P M-10:</b>	48.3 lb/1000 gal =	<b>3.52E-02 ton/yr *</b>
<b>S O 2:</b>	110.3 lb/1000 gal =	<b>80.37 ton/yr</b>
<b>N O x:</b>	19.0 lb/1000 gal =	<b>13.85 ton/yr</b>
<b>V O C:</b>	1.0 lb/1000 gal =	<b>0.73 ton/yr</b>
<b>C O:</b>	5.0 lb/1000 gal =	<b>3.65 ton/yr</b>
<b>HCl:</b>	13.2 lb/1000 gal =	<b>9.62 ton/yr</b>

**Criteria Pollutant:**

		<b>Worst Case Fuel</b>
<b>P M:</b>	<b>0.04 ton/yr *</b>	Re-refined Waste Oil
<b>P M-10:</b>	<b>0.04 ton/yr *</b>	Re-refined Waste Oil
<b>S O 2:</b>	<b>95.08 ton/yr</b>	No. 2 Fuel Oil
<b>N O x:</b>	<b>98.54 ton/yr</b>	Natural Gas
<b>V O C:</b>	<b>2.85 ton/yr</b>	Natural Gas
<b>C O:</b>	<b>43.57 ton/yr</b>	Natural Gas
<b>HCl:</b>	<b>9.62 ton/yr</b>	Re-refined Waste Oil

**Primary Fuel Usage Limitations**

**Fuel Usage Limitations to Limit SO2**

Fuel Oil: No. 2 distillate fuel oil

$$\frac{95.08 \text{ tons SO2/year limited}}{494.72 \text{ tons SO2/year potential}} \times 12604.32 \frac{\text{Kgals}}{\text{year potential}} = 2422.30 \frac{\text{Kgals}}{\text{year limited}}$$

Fuel Oil: Re-refined waste oil

$$\frac{95.08 \text{ tons SO2/year limited}}{689.85 \text{ tons SO2/year potential}} \times 12514.29 \frac{\text{Kgals}}{\text{year potential}} = 1724.72 \frac{\text{Kgals}}{\text{year limited}}$$

**Fuel Usage Limitations to Limit NOx**

Fuel Oil: Natural gas

$$\frac{98.54 \text{ tons NOx/year limited}}{166.44 \text{ tons NOx/year potential}} \times 1752.00 \frac{\text{MMcf}}{\text{year potential}} = 1037.27 \frac{\text{MMcf}}{\text{year limited}}$$

**Fuel equivalence for re-refined waste oil is determined from the limiting pollutant, SO2, as follows:**

$$\frac{0.6 \text{ lb/MMcf}}{110.25 \text{ lb/1000 gal}} = 5.44 \text{ gallons per million cubic feet (MMcf) natural gas (i.e., every 1 MMcf natural gas burned is equivalent to 5.44 gallons of oil burned, based on SO2 emissions)}$$

**Fuel equivalence for No. 2 fuel oil is determined from the limiting pollutant, SO2, as follows:**

$$\frac{78.5 \text{ lb/1000 gal}}{110.25 \text{ lb/1000 gal}} = 712.02 \text{ gallons per 1000 gallons No. 2 distillate oil (i.e., every 1000 gallons of No. 2 oil burned is equivalent to 712 gallons of waste oil burned, based on SO2 emissions)}$$

**Fuel equivalence for natural gas is determined from the limiting pollutant, NOX, as follows:**

$$\frac{24.0 \text{ lb/1000 gal}}{190.00 \text{ lb/MMcf}} = 0.1263 \text{ million cubic feet (MMcf) per kgal No. 2 distillate oil (i.e., every 1000 gallons of No. 2 oil burned is equivalent to 0.1263 MMcf of natural gas burned, based on NOX emissions)}$$

$$\frac{19.0 \text{ lb/1000 gal}}{190.00 \text{ lb/MMcf}} = 0.1000 \text{ million cubic feet (MMcf) per kgal waste oil (i.e., every 1000 gallons of waste oil burned is equivalent to 0.1000 MMcf of natural gas burned, based on NOX emissions)}$$

**\*\* source emissions after throughput limit of 400 tph hot mix asphalt \*\***

**\*\* load-out \*\***

The following calculations determine the amount of emissions created by plant load-out, based on 8,760 hours of use and USEPA's AP-42, Section 11.1, Tables 11.1-14 through 11.1-16.

$$\begin{aligned}
 \text{PM/PM10 Ef} &= 0.000181 + 0.00141(-V)e^{((0.0251)(T+460)-20.43)} \\
 &= 5.22\text{E-}04 \text{ lb PM or PM-10 per ton of asphalt mix produced} \\
 \text{where V} &= -0.5 \text{ asphalt volatility (default value of -0.5 used per AP-42)} \\
 \text{T} &= 325 \text{ hot mix asphalt (HMA) mix temperature in degrees F (default value of 325 used per AP-42)} \\
 \text{PM/PM10} &= \mathbf{0.91 \text{ tons/yr}} \\
 \text{Total PAH HAPs} &= \mathbf{0.12 \text{ tons/yr}} \quad (5.93\% \text{ of Organic PM emissions per AP-42})^* \\
 \text{Phenol} &= \mathbf{0.02 \text{ tons/yr}} \quad (1.18\% \text{ of Organic PM emissions per AP-42})^* \\
 \\
 \text{TOC Ef} &= 0.0172(-V)e^{((0.0251)(T+460)-20.43)} \\
 &= 4.16\text{E-}03 \text{ lb TOC per ton of asphalt mix produced} \\
 \text{where V} &= -0.5 \text{ asphalt volatility (default value of -0.5 used per AP-42)} \\
 \text{T} &= 325 \text{ hot mix asphalt (HMA) mix temperature in degrees F (default value of 325 used per AP-42)} \\
 \text{VOC} &= \mathbf{6.85 \text{ tons/yr}} \quad (94\% \text{ of TOC emissions per AP-42}) \\
 \text{Worst Case Single HAP (Xylenes)} &= \mathbf{0.04 \text{ tons/yr}} \quad (0.49\% \text{ of TOC emissions per AP-42}) \\
 \text{Total Volatile HAPs} &= \mathbf{0.11 \text{ tons/yr}} \quad (1.5\% \text{ of TOC emissions per AP-42}) \\
 \\
 \text{CO Ef} &= 0.00558(-V)e^{((0.0251)(T+460)-20.43)} \\
 &= 1.35\text{E-}03 \text{ lb CO per ton of asphalt mix produced} \\
 \text{where V} &= -0.5 \text{ asphalt volatility (default value of -0.5 used per AP-42)} \\
 \text{T} &= 325 \text{ hot mix asphalt (HMA) mix temperature in degrees F (default value of 325 used per AP-42)} \\
 \text{CO} &= \mathbf{2.36 \text{ tons/yr}}
 \end{aligned}$$

**\*\* silo filling \*\***

The following calculations determine the amount of emissions created by silo filling, based on 8,760 hours of use and USEPA's AP-42, Section 11.1, Tables 11.1-14 through 11.1-16.

$$\begin{aligned}
 \text{PM/PM10 Ef} &= 0.000332 + 0.00105(-V)e^{((0.0251)(T+460)-20.43)} \\
 &= 5.86\text{E-}04 \text{ lb PM or PM-10 per ton of asphalt mix produced} \\
 \text{where V} &= -0.5 \text{ asphalt volatility (default value of -0.5 used per AP-42)} \\
 \text{T} &= 325 \text{ hot mix asphalt (HMA) mix temperature in degrees F (default value of 325 used per AP-42)} \\
 \text{PM/PM10} &= \mathbf{1.03 \text{ tons/yr}} \\
 \text{Total PAH HAPs} &= \mathbf{0.07 \text{ tons/yr}} \quad (11.40\% \text{ of Organic PM emissions per AP-42})^* \\
 \\
 \text{TOC Ef} &= 0.0504(-V)e^{((0.0251)(T+460)-20.43)} \\
 &= 1.22\text{E-}02 \text{ lb TOC per ton of asphalt mix produced} \\
 \text{where V} &= -0.5 \text{ asphalt volatility (default value of -0.5 used per AP-42)} \\
 \text{T} &= 325 \text{ hot mix asphalt (HMA) mix temperature in degrees F (default value of 325 used per AP-42)} \\
 \text{VOC} &= \mathbf{21.35 \text{ tons/yr}} \quad (100\% \text{ of TOC emissions per AP-42}) \\
 \text{Worst Case Single HAP (Formaldehyde)} &= \mathbf{0.15 \text{ tons/yr}} \quad (0.69\% \text{ of TOC emissions per AP-42}) \\
 \text{Total Volatile HAPs} &= \mathbf{0.28 \text{ tons/yr}} \quad (1.3\% \text{ of TOC emissions per AP-42}) \\
 \\
 \text{CO Ef} &= 0.00488(-V)e^{((0.0251)(T+460)-20.43)} \\
 &= 1.18\text{E-}03 \text{ lb CO per ton of asphalt mix produced} \\
 \text{where V} &= -0.5 \text{ asphalt volatility (default value of -0.5 used per AP-42)} \\
 \text{T} &= 325 \text{ hot mix asphalt (HMA) mix temperature in degrees F (default value of 325 used per AP-42)} \\
 \text{CO} &= \mathbf{2.07 \text{ tons/yr}}
 \end{aligned}$$

\* Organic PM emissions are calculated using the equation from Table 11.1-14.

$$\begin{aligned}
 \text{Organic PM Ef} &= 0.00141(-V)e^{((0.0251)(T+460)-20.43)} \\
 &= 3.41\text{E-}04 \text{ lb PM or PM-10 per ton of asphalt mix produced} \\
 \text{where V} &= -0.5 \text{ asphalt volatility (default value of -0.5 used per AP-42)} \\
 \text{T} &= 325 \text{ hot mix asphalt (HMA) mix temperature in degrees F (default value of 325 used per AP-42)}
 \end{aligned}$$

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

Ef	lb/ton x	400	ton/hr x	8,760	hr/yr
		2,000	lb/ton		
PM:	28		lb/ton =		<b>49,056.00 ton/yr</b>
PM-10:	6.5		lb/ton =		<b>11,388.00 ton/yr</b>
VOC:	0.032000		lb/ton =		<b>56.06 ton/yr</b>
HCl:	0.00021		lb/ton =		<b>0.37 ton/yr</b>

The HCl emission factor for aggregate drying is from Table 11.1-8 of Section 11.1 of AP-42.

hot oil heater:		nonfugitive	
<b>P M:</b>	0.14 ton/yr x	100.00% emitted after controls =	<b>0.14 ton/yr</b>
<b>P M-10:</b>	0.22 ton/yr x	100.00% emitted after controls =	<b>0.22 ton/yr</b>
<b>S O 2:</b>	4.82 ton/yr x	100.00% emitted after controls =	<b>4.82 ton/yr</b>
<b>N O x:</b>	1.36 ton/yr x	100.00% emitted after controls =	<b>1.36 ton/yr</b>
<b>V O C:</b>	0.05 ton/yr x	100.00% emitted after controls =	<b>0.05 ton/yr</b>
<b>C O:</b>	0.81 ton/yr x	100.00% emitted after controls =	<b>0.81 ton/yr</b>
dryer burner combustion:		nonfugitive	
<b>P M:</b>	379.23 ton/yr x	0.10% emitted after controls =	<b>0.04 ton/yr</b>
<b>P M-10:</b>	302.20 ton/yr x	0.10% emitted after controls =	<b>0.04 ton/yr</b>
<b>HCl:</b>	82.59 ton/yr x	11.65% emitted after controls =	<b>9.62 ton/yr</b>
drum mix:		nonfugitive	
<b>P M:</b>	73,584.00 ton/yr x	0.10% emitted after controls =	<b>73.58 ton/yr</b>
<b>P M-10:</b>	17,082.00 ton/yr x	0.10% emitted after controls =	<b>17.08 ton/yr</b>
<b>VOC:</b>	84.10 ton/yr x	66.7% emitted after controls =	<b>56.06 ton/yr</b>
<b>HCl:</b>	0.55 ton/yr x	66.7% emitted after controls =	<b>0.37 ton/yr</b>
conveying/handling:		fugitive	
<b>P M:</b>	29.05 ton/yr x	50% emitted after controls =	<b>14.53 ton/yr</b>
<b>P M-10:</b>	13.74 ton/yr x	50% emitted after controls =	<b>6.87 ton/yr</b>
cold mix storage		fugitive	
<b>VOC:</b>	1,314.00 ton/yr x	0.91% emitted after controls =	<b>12.00 ton/yr</b>
The source shall be limited to 480 tons of gelled asphalt binder solvent used per year based on 2.5% of VOC solvent evaporating.			
unpaved roads:		fugitive	
<b>P M:</b>	12.79 ton/yr x	50% emitted after controls =	<b>6.39 ton/yr</b>
<b>P M-10:</b>	3.26 ton/yr x	50% emitted after controls =	<b>1.63 ton/yr</b>
load-out & silo filling:		fugitive	
<b>P M:</b>	2.91 ton/yr x	67% emitted after controls =	<b>1.94 ton/yr</b>
<b>P M-10:</b>	2.91 ton/yr x	67% emitted after controls =	<b>1.94 ton/yr</b>
<b>VOC:</b>	42.30 ton/yr x	67% emitted after controls =	<b>28.20 ton/yr</b>
<b>CO:</b>	13.37 ton/yr x	33% emitted after controls =	<b>4.43 ton/yr</b>
storage piles:		fugitive	
<b>P M:</b>	0.31 ton/yr x	50% emitted after controls =	<b>0.16 ton/yr</b>
<b>P M-10:</b>	0.11 ton/yr x	50% emitted after controls =	<b>0.05 ton/yr</b>

*These should match limited combustion emissions above.*

** summary of source emissions after limitation and controls **			
Criteria Pollutant:	Non-Fugitive	Fugitive	Total
<b>PM:</b>	73.76 ton/yr	21.08 ton/yr	94.84 ton/yr
<b>PM-10:</b>	17.34 ton/yr	8.56 ton/yr	25.90 ton/yr
<b>S O 2:</b>	99.90 ton/yr	0.00 ton/yr	99.90 ton/yr
<b>N O x:</b>	99.90 ton/yr	0.00 ton/yr	99.90 ton/yr
<b>V O C:</b>	58.97 ton/yr	40.20 ton/yr	99.17 ton/yr
<b>C O:</b>	44.37 ton/yr	4.43 ton/yr	48.81 ton/yr
<b>HCl:</b>	9.99 ton/yr	0.00 ton/yr	9.99 ton/yr

**Hazardous Air Pollutants (HAPs)**

**\*\* aggregate dryer burner\*\***

The following calculations determine the amount of HAP emissions created by the combustion of distillate fuel oil before & after controls @ 0.50 % sulfur, from the aggregate dryer burner, based on 8,760 hours of use and US EPA's AP-42, 5th Edition, Section 1.3 - Fuel Oil Combustion, Table 1.3-10.

\* Metal Emissions from aggregate drying operations are controlled with a 99.90% control efficiency.

Hazardous Air Pollutants (HAPs):

	200 MMBtu/hr * 8760 hr/yr 2,000 lb/ton	* Ef (lb/10 <sup>12</sup> Btu) = (ton/yr)	Potential To Emit	Limited Emissions
<b>Beryllium:</b>	3 lb/10 <sup>12</sup> Btu =		2.63E-03 ton/yr	2.63E-06 ton/yr
<b>Mercury:</b>	3 lb/10 <sup>12</sup> Btu =		2.63E-03 ton/yr	2.63E-06 ton/yr
<b>Selenium:</b>	15 lb/10 <sup>12</sup> Btu =		1.31E-02 ton/yr	1.31E-05 ton/yr
	<b>Total HAPs =</b>		<b>1.84E-02 ton/yr</b>	<b>1.84E-05 ton/yr</b>

The following calculations determine the amount of HAP emissions created by the combustion of waste oil before & after controls @ 0.75 % sulfur, from the aggregate dryer burner, based on 8,760 hours of use and US EPA's AP-42, 5th Edition, Section 1.3 - Fuel Oil Combustion, Table 1.11-5.

Hazardous Air Pollutants (HAPs):

	200 MMBtu/hr * 8,760 hr/yr 140,000 Btu/gal * 2,000 lb/ton	* Ef (lb/1,000 gal) = (ton/yr)	Potential To Emit	Limited Emissions
<b>Arsenic:</b>	1.10E-01 lb/1000 gal =		6.88E-01 ton/yr	6.88E-04 ton/yr
<b>Cadmium:</b>	9.30E-03 lb/1000 gal =		5.82E-02 ton/yr	5.82E-05 ton/yr
<b>Chromium:</b>	2.00E-02 lb/1000 gal =		1.25E-01 ton/yr	1.25E-04 ton/yr
<b>Cobalt:</b>	2.10E-04 lb/1000 gal =		1.31E-03 ton/yr	1.31E-06 ton/yr
<b>Lead:</b>	1.87E-01 lb/1000 gal =		1.17E+00 ton/yr	1.17E-03 ton/yr
<b>Manganese:</b>	6.80E-02 lb/1000 gal =		4.25E-01 ton/yr	4.25E-04 ton/yr
<b>Nickel:</b>	1.10E-02 lb/1000 gal =		6.88E-02 ton/yr	6.88E-05 ton/yr
	<b>Total HAPs =</b>		<b>2.54E+00 ton/yr</b>	<b>2.54E-03 ton/yr</b>

**\*\* aggregate drying: drum-mixer \*\***

The following calculations determine the amount of HAP emissions created by aggregate drying before & after controls, based on 8,760 hours of use and USEPA's AP-42, 5th Edition, Section 11.1 - Hot Mix Asphalt Plants, Table 11.1-10 for a drum mix dryer which can be fired with either fuel oil or natural gas. The HAP emission factors represent the worst case emissions (fuel oil combustion).

Pollutant:	Ef	lb/ton x	600	ton/hr x	8760 hr/yr	400.00 ton/hr limited
Hazardous Air Pollutants (HAPs):			2000	lb/ton		
					Potential To Emit	Limited Emissions
<b>Acetaldehyde</b>		3.20E-04	lb/ton =		0.84 ton/yr	0.56 ton/yr
<b>Acrolein</b>		2.60E-05	lb/ton =		0.07 ton/yr	0.05 ton/yr
<b>Benzene:</b>		3.90E-04	lb/ton =		1.02 ton/yr	0.68 ton/yr
<b>Ethyl benzene:</b>		2.40E-04	lb/ton =		0.63 ton/yr	0.42 ton/yr
<b>Formaldehyde:</b>		3.10E-03	lb/ton =		8.15 ton/yr	5.43 ton/yr
<b>Hexane:</b>		9.20E-04	lb/ton =		2.42 ton/yr	1.61 ton/yr
<b>2,2,4 Trimethylpentane:</b>		4.00E-05	lb/ton =		0.11 ton/yr	0.07 ton/yr
<b>Methyl chloroform:</b>		4.8E-05	lb/ton =		0.13 ton/yr	0.08 ton/yr
<b>MEK</b>		2.00E-05	lb/ton =		0.05 ton/yr	0.04 ton/yr
<b>Propionaldehyde</b>		1.30E-04	lb/ton =		0.34 ton/yr	0.23 ton/yr
<b>Quinone</b>		1.60E-04	lb/ton =		0.42 ton/yr	0.28 ton/yr
<b>Toluene:</b>		2.90E-03	lb/ton =		7.62 ton/yr	5.08 ton/yr
<b>Total Polycyclic Organic Matter (POM):</b>		8.800E-04	lb/ton =		2.31 ton/yr	1.54 ton/yr
<b>Xylene:</b>		2.00E-04	lb/ton =		0.53 ton/yr	0.35 ton/yr
			<b>Total HAPs =</b>		<b>23.73 ton/yr</b>	<b>15.82 ton/yr</b>

**\*\* summary of source HAP emissions potential to emit \*\***

Hazardous Air Pollutants (HAPs):

Acetaldehyde:	0.841	ton/yr
Acrolein:	0.068	ton/yr
Arsenic:	0.688	ton/yr
Benzene:	1.025	ton/yr
Beryllium:	0.003	ton/yr
Cadmium:	0.058	ton/yr
Chromium:	0.125	ton/yr
Cobalt:	0.001	ton/yr
Ethyl benzene:	0.631	ton/yr
Formaldehyde:	8.147	ton/yr
Hexane:	2.418	ton/yr
Lead:	1.170	ton/yr
2,2,4 Trimethylpentane:	0.105	ton/yr
Manganese:	0.425	ton/yr
Mercury:	0.003	ton/yr
Methyl chloroform:	0.126	ton/yr
MEK:	0.053	ton/yr
Propionaldehyde:	0.342	ton/yr
Quinone:	0.420	ton/yr
Nickel:	0.069	ton/yr
Selenium:	0.013	ton/yr
Toluene:	7.621	ton/yr
Total POM:	2.313	ton/yr
Xylene:	0.526	ton/yr
Hydrogen Chloride (HCL):	83.146	ton/yr
Total PAH(silo filling and load out):	0.155	ton/yr
Total Volatile HAPs (silo filling and load out):	0.580	ton/yr
<b>Total:</b>	<b>111.072</b>	<b>ton/yr</b>

**\*\* summary of source HAP limited emissions \*\***

Hazardous Air Pollutants (HAPs):

Acetaldehyde:	0.561	ton/yr
Arsenic:	0.001	ton/yr
Benzene:	0.683	ton/yr
Beryllium:	0.000	ton/yr
Cadmium:	0.000	ton/yr
Chromium:	0.000	ton/yr
Cobalt:	0.000	ton/yr
Ethyl benzene:	0.420	ton/yr
Formaldehyde:	5.431	ton/yr
Hexane:	1.612	ton/yr
Lead:	0.001	ton/yr
2,2,4 Trimethylpentane:	0.070	ton/yr
Manganese:	0.000	ton/yr
Mercury:	0.000	ton/yr
Methyl chloroform:	0.084	ton/yr
MEK:	0.035	ton/yr
Propionaldehyde:	0.228	ton/yr
Quinone:	0.280	ton/yr
Nickel:	0.000	ton/yr
Selenium:	0.000	ton/yr
Toluene:	1.542	ton/yr
Total POM:	1.542	ton/yr
Xylene:	0.350	ton/yr
Hydrogen Chloride (HCL):	9.991	ton/yr
Total PAH(silo filling and load out):	0.191	ton/yr
Total Volatile HAPs (silo filling and load out):	0.387	ton/yr
<b>Total:</b>	<b>22.849</b>	<b>ton/yr</b>

**\*\* miscellaneous \*\***

**326 IAC 7 Compliance Calculations:**

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

$$\begin{aligned}
 &0.5 \text{ lb/MMBtu} \times 139,000 \text{ Btu/gal} = 69.5 \text{ lb/1000gal} \\
 &69.5 \text{ lb/1000gal} / 142 \text{ lb/1000 gal} = 0.5 \% \\
 &\text{Sulfur content must be less than or equal to } 0.5\% \text{ to comply with 326 IAC 7.}
 \end{aligned}$$

The following calculations determine the maximum sulfur content of re-refined waste oil allowable by 326 IAC 7:

$$\begin{aligned}
 &1.6 \text{ lb/MMBtu} \times 140,000 \text{ Btu/gal} = 224 \text{ lb/1000gal} \\
 &224 \text{ lb/1000gal} / 147 \text{ lb/1000 gal} = 1.5 \% \\
 &\text{Sulfur content must be less than or equal to } 1.5\% \text{ to comply with 326 IAC 7.}
 \end{aligned}$$

**326 IAC 6-3-2 Compliance Calculations:**

The following calculations determine compliance with 326 IAC 6-3-2 for process weight rates in excess of 30 tons per hour:

$$\text{limit} = 55 * (600 \wedge 0.11) - 40 = 71.16 \text{ lb/hr or } 311.69 \text{ ton/yr}$$

Since the emission limits pursuant to Subpart I of 17.85 lbs/hr is more stringent than this limit, the limit pursuant to 326 IAC 6-3-2 does not apply.

**PM-10 Emission Limit for Aggregate Dryer:**

$$(99.9 \text{ tons PM-10/yr} - 17.64 \text{ tons PM-10/yr from other sources}) =$$

$$82.26 \text{ tons PM-10/yr} = 18.78 \text{ lbs/hr}$$

PM-10 emissions from the aggregate dryer are controlled to 3.9 lbs/hr < 18.78 lbs/hr (Will comply)

Based on a maximum asphalt mix throughput of 600 tons/hr, this emission limit is equivalent to 0.031 lb PM10 per ton of asphalt mix.

**PM Emission Limit for Aggregate Dryer (PSD):**

$$(246 \text{ tons PM/yr} - 37.83 \text{ tons PM/yr from other sources}) =$$

$$211.17 \text{ tons PM/yr} = 48.21 \text{ lbs/hr}$$

PM emissions from the aggregate dryer are controlled to 16.80 lbs/hr < 47.99 lbs/hr (Will comply)

Based on a maximum asphalt mix throughput of 600 tons/hr, this emission limit is equivalent to 0.080 lb PM per ton of asphalt mix.

**Compliance with NSPS (326 IAC 12; 40 CFR 60.90 to 60.93, Subpart I)**

The following calculations determine compliance with the NSPS, 40 CFR 60, Subpart I, which limits stack emissions from asphalt plants to 0.04 gr/dscf.

Aggregate Dryer and Mixer Baghouse:

$$\frac{73.63 \text{ ton/yr} * 2000 \text{ lb/ton} * 7000 \text{ gr/lb}}{525,600 \text{ min/yr} * 52,056 \text{ dscf/min}} = 0.038 \text{ gr/dscf} \quad (\text{will comply})$$

Allowable particulate emissions under NSPS equate to 78.17 tons per year. 17.85 lbs/hr

Note:

$$\begin{aligned}
 \text{SCFM} &= \\
 &= \frac{69,014 \text{ acfm} * (460 + 68)}{52,056 \text{ scfm}}
 \end{aligned}$$