INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We make Indiana a cleaner, healthier place to live.

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: November 30, 2006

RE: Milestone Contractors / 177-23348-03248

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 RENEWAL
OFFICE OF AIR QUALITY

Milestone Contractors, L.P.
6061 State Road 121
Richmond, Indiana 47374

(herein known as the Permittee) is hereby authorized to construct and 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 certain new source review requirements and is intended to fulfill the new source review procedures pursuant to 326 IAC 2-8-11.1, applicable to those conditions.

Operation Permit No.: 177-23348-03248	
Issued by: Nisha Sizemore Nisha Sizemore, Branch Chief Office of Air Quality	Issuance Date: November 30, 2006 Expiration Date: November 30, 2011

SECTION A SOURCE SUMMARY

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

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

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

Authorized Individual:	Vice President, Plants
Source Address:	6061 State Road 121, Richmond, IN 47374
Mailing Address:	5950 S. Belmont Avenue, Indianapolis, IN 46217
General Source Phone Number:	765-966-1935
SIC Code:	2951
County Location:	Wayne
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Federally Enforceable State Operating Permit Program Minor Source, under PSD Rules Minor Source, Section 112 of the Clean Air Act

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

This 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 300 tons per hour, equipped with one (1) re-refined waste oil fired aggregate dryer burner with a maximum rated capacity of 120 million (MM) British thermal units (Btu) per hour using No. 2 distillate fuel oil as a back-up fuel and one (1) baghouse for air pollution control, exhausting at one (1) stack, identified as S-1;
(b) one (1) drag slat conveyor, one (1) Recycled Asphalt Pavement (RAP) conveyor, two (2) feed conveyors, and one (1) screen;
(c) cold-mix (stockpile mix) asphalt storage piles;
(d) three (3) liquid asphalt storage tanks, identified as Tanks 12, 14, and 24, with maximum storage capacities of 30,000, 30,000, and 20,000 gallons, respectively, exhausting all emissions through stacks V-3, V-5, and V-6; and
(e) one (1) re-refined waste oil storage tank, identified as Tank 11, with a maximum storage capacity of 15,000 gallons, exhausting at one (1) stack, identified as V-2.

Under 40 CFR 60, Subpart I, Standards of Performance for Hot Mix Asphalt Facilities, the aggregate drum mix dryer, identified as Emission Unit No. 2, is considered an affected hot mix asphalt facility.

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

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

(a) one (1) No. 2 distillate fuel oil fired hot oil heater, identified as emission unit No. 16, rated at 1.4 MMBtu per hour, exhausting at one (1) stack, identified as S-7;
(b) two (2) No. 2 distillate fuel oil fired tank heaters, identified as emission unit Nos. 13 and 15, each rated at 1.4 and 1.0 MMBtu per hour, respectively, and each exhausting at two (2) stacks, identified as S-4A, S-4B, S-6A and S-6B, respectively.
(c) one (1) No. 2 distillate fuel oil fired hot oil heater, rated at 2.0 MMBtu per hour;

(d) one (1) cold feed system consisting of six (6) compartments with a total aggregate holding capacity of 120 tons;
(e) two (2) hot mix asphalt cement storage silos, each with a maximum storage capacity of 250 tons;
(f) one (1) hot mix asphalt cement storage silo with a maximum storage capacity of 300 tons;
(g) two (2) RAP feed bins;
(h) aggregate storage piles, with a maximum storage capacity of 30,000 tons;
(i) Volatile Organic Compound (VOC) and Hazardous Air Pollutant (HAP) storage tanks with capacity less than or equal to 1,000 gallons and annual throughput less than 12,000 gallons;
(j) vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids;
(k) application of oils, greases, lubricants or other nonvolatile materials applied as temporary protective coatings;
(l) 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 (100ºF) or; having a vapor pressure equal to or less than 0.7 kPa; 5 mm Hg; or 0.1 psi measured at 20ºC (68º); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months;
(m) closed loop heating and cooling systems;
(n) paved and unpaved roads and parking lots with public access [326 IAC 6-4][326 IAC 6-5]; and
(o) a laboratory as defined in 326 IAC 2-7-1(21)(D).

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

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

SECTION B GENERAL CONDITIONS

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

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

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

(a) This permit, 177-23348-03248, 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]

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]

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

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

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

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

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

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

(a) The Permittee shall furnish to IDEM, OAQ , within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. 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]

(a) All terms and conditions of permits established prior to177-23348-03248 and issued pursuant to permitting programs approved into the state implementation plan have been either:

(1) incorporated as originally stated,

(2) revised, or

(3) deleted.

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

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

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

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

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

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
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]

(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)]

(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

and

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
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 modification under 326 IAC 2-8-11.1 are satisfied by this permit for the proposed emission units, control equipment or insignificant activities in Sections A.2 and A.3.

(b) Pursuant to 326 IAC 2-1.1-9 any permit authorizing construction may be revoked if construction of the emission unit has not commenced within eighteen (18) months from the date of issuance of the permit, or if during the construction, work is suspended for a continuous period of one (1) year or more.

B.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)) 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 forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

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

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

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

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

The Permittee shall not operate an incinerator 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]

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

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

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

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

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

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

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

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

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

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

(A) Asbestos removal or 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]

(a) Compliance testing on new emissions units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. 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)]

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)]

(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]

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

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

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

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

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

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

(c) If the ERP is disapproved by IDEM, OAQ , the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.

(d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.

(e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.

(f) Upon direct notification by IDEM, OAQ 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]

(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]

(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]

(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 300 tons per hour, equipped with one (1) re-refined waste oil fired aggregate dryer burner with a maximum rated capacity of 120 million (MM) British thermal units (Btu) per hour using No. 2 distillate fuel oil as a back-up fuel and one (1) baghouse for air pollution control, exhausting at one (1) stack, identified as S-1;

(b) one (1) drag slat conveyor, one (1) Recycled Asphalt Pavement (RAP) conveyor, two (2) feed conveyors, and one (1) screen;

Under 40 CFR 60, Subpart I, Standards of Performance for Hot Mix Asphalt Facilities, the aggregate drum mix dryer, identified as Emission Unit No. 2, is considered an affected hot mix asphalt facility.

(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 6.5-10-14]

Pursuant to 326 IAC 6.5-10-14 (Wayne County - Richmond Milestone Contractors), particulate emissions from the rotary dryer shall not exceed 50.80 tons per year and 0.158 gr/dscf.

D.1.2 PSD Minor Limit [326 IAC 2-2]

Particulate matter emissions from the aggregate mixing and drying operation shall not exceed 0.145 pound PM per ton of asphalt mix.

This limits total source-wide PM emissions to less than 250 tons per year. Therefore, compliance with this limit will render 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.1.3 Particulate Matter Less Than 10 Microns In Diameter (PM-10) [326 IAC 2-8-4][326 IAC 2-2]

Pursuant to 326 IAC 2-8-4, particulate matter less than 10 microns in diameter emissions from the aggregate mixing and drying operation shall not exceed 0.057 pound of PM-10 per ton of asphalt mix.

This limits total source-wide PM-10 emissions to 90 tons per year. Compliance with this limit will satisfy 326 IAC 2-8-4 and render the requirements of Part 70 (326 IAC 2-7) and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.1.4 Sulfur Dioxide (SO_2) [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 120 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 120 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.1.5 Fuel Usage [326 IAC 2-8-4] [326 IAC 2-2]

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 120 MMBtu per hour burner for the aggregate dryer shall not exceed 0.75 percent.

(b) the chlorine content of the re-refined waste oil used in the 120 MMBtu per hour burner for the aggregate dryer shall not exceed 0.2 percent.

(c) the usage of re-refined waste oil with a sulfur content of 0.75% and a maximum chlorine content of 0.2% and re-refined waste oil equivalents in the 120 MMBtu per hour burner for the aggregate dryer shall be limited to 1,399,002 U.S. gallons per twelve (12) consecutive month period, with compliance determined at the end of each month. Therefore, SO_2 emissions are limited to 90 tons per year and HCl emissions are limited below 10 tons per year.

(d) For the purposes of determining compliance, every 1,000 gallons of No. 2 distillate fuel oil with a maximum sulfur content of 0.5% burned shall be equivalent to 712 gallons of re-refined waste oil based on SO_2 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.1.6 Carbon Monoxide (CO) [326 IAC 2-8-4]

Pursuant to 326 IAC 2-8-4, the following shall apply:

(a) CO emissions from the drum mix dryer shall not exceed 0.13 pound of CO per ton of hot mix asphalt produced.

(b) The amount of hot mix asphalt produced in the drum mix dryer shall not exceed 1,319,538 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

This limits total source-wide CO emissions to 90 tons per year. Compliance with this limit will satisfy 326 IAC 2-8-4 and render the requirements of Part 70 (326 IAC 2-7) not applicable.

D.1.7 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.1.8 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

(a) Within 60 days of achieving the maximum production rate, but no later than 180 days after start-up of the new aggregate dryer burner, in order to demonstrate compliance with Conditions D.1.1, D.1.2, D.1.3 and D.1.17, the Permittee shall perform PM and PM-10 testing on the aggregate mixing and drying operation utilizing methods as approved by the Commissioner. PM-10 includes filterable and condensible PM-10.

(b) Within 60 days of achieving the maximum production rate, but no later than 180 days after start-up of the new aggregate dryer burner, opacity testing shall be performed on the mixing and drying operation utilizing methods per 40 CFR Part 60 Appendix A, to demonstrate compliance with the opacity limitation of Condition D.1.17.

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.1.9 Sulfur Dioxide Emissions and Sulfur and Chlorine Content

(a) The Permittee shall demonstrate that the chlorine content of the re-refined waste oil does not exceed 0.2% by providing vendor analysis of fuel delivered, accompanied by a vendor certification.

Compliance for sulfur dioxide shall be determined utilizing one of the following options.

(b) Pursuant to 326 IAC 3-7-4, the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed 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.

(c) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from the 120 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 (b) through (c) above shall not be refuted by evidence of compliance pursuant to the other method.

D.1.10 Particulate Control

(a) The baghouse for particulate control shall be in operation and control emissions from the aggregate mixing and drying operation at all times that the aggregate mixing and drying operation 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 2-8-4][326 IAC 2-8-5(a)(1)]

D.1.11 Visible Emissions Notations

(a) Visible emission notations of the aggregate dryer and burner baghouse stack exhaust, and the conveying, material transfer points, and screening 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.1.12 Parametric Monitoring

The Permittee shall record the pressure drop across the baghouse used in conjunction with the aggregate mixing and drying operation, at least once per day when the aggregate dryer and burner are in operation when venting to the atmosphere. When for any one reading, 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.1.13 Broken or Failed Bag Detection

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

(b) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the 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 2-8-4(3)]

D.1.14 Record Keeping Requirements

(a) To document compliance with Conditions D.1.4 and D.1.5, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken monthly and shall be complete and sufficient to establish compliance with the SO_2 emission limit established in Conditions D.1.4 and D.1.5 and the HCl emission limit established in Condition D.1.5.

(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_2 and HCl emissions;

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

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

(4) Fuel supplier certifications;

(5) The name of the fuel supplier; and

(6) A statement from the fuel supplier that certifies the sulfur content and chlorine content of the fuel oil.

(b) To document compliance with Condition D.1.6, the Permittee shall maintain monthly records of the hot mix asphalt produced in the drum mix dryer.

(c) The Permittee shall maintain records sufficient to verify compliance with the procedures specified in condition D.1.9(a)(2) or D.1.9(b) if applicable. Records shall be maintained for a period of five (5) years and shall be made available upon request by IDEM.

(d) To document compliance with Condition D.1.11, the Permittee shall maintain daily records of visible emission notations of the aggregate dryer and burner baghouse stack exhaust and the conveying, material transfer points, and screening.

(e) To document compliance with Condition D.1.12, the Permittee shall maintain daily records of the pressure drop during normal operation when venting to the atmosphere.

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

D.1.15 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.1.5 and D.1.6 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.1.16 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.1.17 New Source Performance Standards (NSPS) for Hot Mix Asphalt 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)]:

(c) 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) [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) Gelled asphalt with VOC solvent liquid binder used in the production of cold mix asphalt shall not exceed 1,042 tons of VOC solvent per twelve (12) consecutive month period. This is equivalent to limiting the VOC emitted from solvent use to 26.04 tons per twelve (12) consecutive month period, based on the following definition:

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

Therefore, the requirements of 326 IAC 2-7 will not apply. This limit will also render 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) 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

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 (FESOP) CERTIFICATION

Source Name: Milestone Contractors, L.P.
Source Address: 6061 State Road 121, Richmond, Indiana 47374
Mailing Address: 5950 S. Belmont Avenue, Indianapolis, Indiana 46217
FESOP No.: F177-23348-03248

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

Please check what document is being certified:

☐ Annual Compliance Certification Letter

☐ Test Result (specify)_____

☐ Report (specify)_____

☐ Notification (specify)_____

☐ Affidavit (specify)_____

☐ Other (specify)_____

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

Signature:

Printed Name:

Title/Position:

Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH
100 North Senate Avenue
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: 6061 State Road 121, Richmond, Indiana 47374
Mailing Address: 5950 S. Belmont Avenue, Indianapolis, Indiana 46217
FESOP No.: F177-23348-03248

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

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

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

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

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

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

Form Completed by: _____
Title / Position: _____
Date: _____
Phone: _____

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: 6061 State Road 121, Richmond, Indiana 47374
Mailing Address: 5950 S. Belmont Avenue, Indianapolis, Indiana 46217
FESOP No.: F177-23348-03248
Facility: 120 MMBtu per hour aggregate dryer burner
Parameter: Re-refined waste oil and equivalent usage limit to limit SO_2 and HCl emissions
Limit: the usage of re-refined waste oil with a sulfur content of 0.75% and a maximum chlorine content of 0.2% and re-refined waste oil equivalents in the 120 MMBtu per hour burner for the aggregate dryer shall be limited to 1,399,002 U.S. gallons per twelve (12) consecutive month period, with compliance determined at the end of each month. For the purposes of determining compliance, every 1,000 gallons of No. 2 distillate fuel oil with a maximum sulfur content of 0.5% burned shall be equivalent to 712 gallons of re-refined waste oil based on SO_2 emissions.

YEAR:_____

Month	Column 1	Column 2	Column 1 + Column 2
	Re-refined waste oil Usage This Month (gallons)	Re-refined waste oil Usage Previous 11 Months (gallons)	12 Month Total Re-refined waste oil Usage (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: 6061 State Road 121, Richmond, Indiana 47374
Mailing Address: 5950 S. Belmont Avenue, Indianapolis, Indiana 46217
FESOP No.: F177-23348-03248
Facility: cold-mix (stockpile mix) asphalt storage
Parameter: VOC emissions
Limit: Gelled asphalt with VOC solvent liquid binder used in the production of cold mix asphalt shall not exceed 1,042 tons of VOC solvent per twelve (12) consecutive month period. This is equivalent to limiting the VOC emitted from solvent use to 26.04 tons per twelve (12) consecutive month period

YEAR:_____

Month	Column 1	Column 2	Column 1 + Column 2
	Total VOC Solvent Usage This Month (tons)	Total VOC Solvent Usage Previous 11 Months (tons)	12 Month Total VOC Solvent Usage (tons)
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: 6061 State Road 121, Richmond, Indiana 47374
Mailing Address: 5950 S. Belmont Avenue, Indianapolis, Indiana 46217
FESOP No.: F177-23348-03248
Facility: drum mix dryer
Parameter: CO emissions
Limit: The amount of hot mix asphalt produced in the drum mix dryer shall not exceed 1,319,538 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

YEAR:_____

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

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

Source Name: Milestone Contractors, L.P.
Source Address: 6061 State Road 121, Richmond, Indiana 47374
Mailing Address: 5950 S. Belmont Avenue, Indianapolis, Indiana 46217
FESOP No.: F177-23348-03248

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

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 ANo deviations occurred this reporting period@.

☐ NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

☐ THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

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

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

Page 2 of 2

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

Form Completed By: ____

Title/Position: ____

Date: ____

Phone: ____

Attach a signed certification to complete this report.

ATTACHMENT A

ASPHALT PLANT SITE FUGITIVE DUST CONTROL PLAN

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.

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.

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.

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.

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.

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

Source Background and Description

Source Name:	Milestone Contractors, L.P.
Source Location:	6061 State Road 121, Richmond, IN 47374
County:	Wayne
SIC Code:	2951
Operation Permit No.:	F177-23348-03248
Permit Reviewer:	Trish Earls / EVP

On October 27, 2006, the Office of Air Quality (OAQ) had a notice published in the Palladium Item in Richmond, Indiana, stating that Milestone Contractors, L.P. had applied for a New Source Review and Federally Enforceable State Operating Permit (FESOP) Renewal to operate a stationary drum mix asphalt pavement production plant and to replace the existing 109 MMBtu per hour dryer burner with a new 120 MMBtu per hour dryer burner. The notice also stated that OAQ proposed to issue a FESOP Renewal for this operation and provided information on how the public could review the proposed FESOP Renewal and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this FESOP Renewal should be issued as proposed.

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

1. Additional emission calculations for CO and NOx emissions from the drum mix dryer were included in the emission calculations which are included as Appendix A of this TSD addendum. Emission factors for the drum mix dryer from US EPA's AP-42, Section 11.1, Table 11.1-7 were used. Potential emissions of CO and NOx from the dryer were then determined to be equal to the worst case emissions using either the fuel combustion emission factors or the drum mix dryer emission factors.

   Based on these calculations, potential unrestricted CO emissions from the dryer based on the drum dryer emission factors are now 170.82 tons per year. Therefore, a limit on CO emissions has been added to the FESOP to limit CO emissions to less than 100 tons per year to comply with 326 IAC 2-8 (FESOP). The unrestricted source-wide CO emissions are less than 250 tons per year so that this limit is not required to render 326 IAC 2-2 (PSD) not applicable.

   The unrestricted NOx emissions from fuel combustion in the dryer burner are 90.10 tons per year and the unrestricted NOx emissions from the dryer based on the drum dryer emission factor are 72.27 tons per year. Therefore, potential unrestricted NOx emissions from the dryer remain at 90.10 tons per year from fuel combustion which is the worst case. Since the unrestricted source-wide NOx emissions remain at less than 100 tons per year, no additional limits for NOx emissions are required. After application of the existing fuel usage limit in the FESOP to limit SO_2 emissions, the worst-case NOx emissions from the dryer are 72.27 tons per year based on the drum dryer emission factor. A new condition D.1.6 has been added to the FESOP as follows:

D.1.6 Carbon Monoxide (CO) [326 IAC 2-8-4]

Pursuant to 326 IAC 2-8-4, the following shall apply:

(a) CO emissions from the drum mix dryer shall not exceed 0.13 pound of CO per ton of hot mix asphalt produced.

(b) The amount of hot mix asphalt produced in the drum mix dryer shall not exceed 1,319,538 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

This limits total source-wide CO emissions to 90 tons per year. Compliance with this limit will satisfy 326 IAC 2-8-4 and render the requirements of Part 70 (326 IAC 2-7) not applicable.

Conditions D.1.13 and D.1.14, now re-numbered as D.1.14 and D.1.15, have been revised as follows:

D.1.1~~3~~**4** Record Keeping Requirements

(a) To document compliance with Conditions D.1.4 and D.1.5, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken monthly and shall be complete and sufficient to establish compliance with the SO_2 emission limit established in Conditions D.1.4 and D.1.5 and the HCl emission limit established in Condition D.1.5.

(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_2 and HCl emissions;

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

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

(4) Fuel supplier certifications;

(5) The name of the fuel supplier; and

(6) A statement from the fuel supplier that certifies the sulfur content and chlorine content of the fuel oil.

(b) To document compliance with Condition D.1.6, the Permittee shall maintain monthly records of the hot mix asphalt produced in the drum mix dryer.

~~(b)~~**(c)** The Permittee shall maintain records sufficient to verify compliance with the procedures specified in condition D.1.~~8~~**9**(a)(2) or D.1.~~8~~**9**(b) if applicable. Records shall be maintained for a period of five (5) years and shall be made available upon request by IDEM.

~~(c)~~**(d)** To document compliance with Condition D.1.~~10~~**11**, the Permittee shall maintain daily records of visible emission notations of the aggregate dryer and burner baghouse stack exhaust and the conveying, material transfer points, and screening.

~~(d)~~**(e)** To document compliance with Condition D.1.~~11~~**12**, the Permittee shall maintain daily records of the pressure drop during normal operation when venting to the atmosphere.

~~(c)~~**(f)** All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.~~14~~**15** Reporting Requirements

A quarterly summary of the information to document compliance with Condition**s** D.1.5 **and D.1.6** 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).

A quarterly report form to document compliance with the CO emission limit has been added to the FESOP as follows:

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

FESOP Quarterly Report

Source Name: **Milestone Contractors, L.P.**
Source Address: **6061 State Road 121, Richmond, Indiana 47374**
Mailing Address: **5950 S. Belmont Avenue, Indianapolis, Indiana 46217**
FESOP No.: **F177-23348-03248**
Facility: **drum mix dryer**
Parameter: **CO emissions**
Limit: **The amount of hot mix asphalt produced in the drum mix dryer shall not exceed 1,319,538 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.**

YEAR:_____

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

9 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.

2. OAQ prefers that the Technical Support Document reflect the permit that was on public notice. Changes to the permit or technical support material that occur after the public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision. The Potential to Emit After Issuance table is revised in this addendum as follows:

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 constructed a new emission unit, the source's potential to emit is based on the new emission unit (aggregate dryer burner) and the other existing emission units included in the original FESOP.

	Potential To Emit (tons/year)							
Process/emission unit	PM	PM-10	SO_2	VOC	CO	NO_x	Single HAP	Total HAPs
Aggregate Dryer and Burner[1]	50.80[2]	75.23[3]	77.12	42.75	~~4.91~~ **85.77[5]**	~~23.58~~ **72.27**	9.51	23.09
Tank and Hot Oil heaters	0.36	0.60	12.88	0.06	0.91	3.63	Negl.	Negl.
Conveying/Handling	3.12	1.48	--	--	--	--	--	--
Unpaved Roadways[4]	42.73	10.89	--	--	--	--	--	--
Paved Roadways[4]	1.17	0.23	--	--	--	--	--	--
Load out and silo filling	1.46	1.46	--	21.15	3.32	--	0.11	0.38
Aggregate storage piles	0.31	0.11	--	--	--	--	--	--
Cold Mix VOC storage	--	--	--	26.04	--	--	--	--
Total Emissions	99.95	90.00	90.00	90.00	~~9.14~~ **90.00**	~~27.21~~ **75.90**	9.51	23.47

Notes:

(1) Emissions represent emissions after fuel usage limitation to limit SO_2 emissions to 90 tons per year to comply with 326 IAC 2-8 (FESOP). The source has requested that emissions be limited to 90 tons per year to allow for future modifications without exceeding 100 tons per year. These emissions include emissions from the new aggregate dryer burner.

(2) Allowable PM emissions pursuant to 326 IAC 6.5-10-14 which limits PM emissions from the aggregate dryer to 50.80 tons per year.

(3) Allowable PM-10 emissions to comply with 326 IAC 2-8 (FESOP). The source has requested that emissions be limited to 90 tons per year to allow for future modifications without exceeding 100 tons per year.

(4) Emissions after control.

(5) Emissions represent emissions after a limit on hot mix asphalt produced to limit source-wide CO emissions to 90 tons per year to comply with 326 IAC 2-8(FESOP).

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

Source Name:	**Milestone Contractors, L.P.**
Source Location:	**6061 State Road 121, Richmond, Indiana 47374**
County:	**Wayne**
SIC Code:	**2951**
Operation Permit No.:	**177-14108-03248**
Operation Permit Issuance Date:	**April 18, 2002**
Permit Renewal No.:	**177-23348-03248**
Permit Reviewer:	**Trish Earls/EVP**

The Office of Air Quality (OAQ) has reviewed a FESOP renewal application from Milestone Contractors, L.P. relating to the operation of a stationary drum mix asphalt pavement production plant.

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 300 tons per hour, equipped with one (1) re-refined waste oil fired aggregate dryer burner with a maximum rated capacity of ~~109~~ **120** million (MM) British thermal units (Btu) per hour using No. 2 distillate fuel oil as a back-up fuel and one (1) baghouse for air pollution control, exhausting at one (1) stack, identified as S-1;

Note: The source has requested approval to replace the existing 109 MMBtu per hour dryer burner with a new 120 MMBtu per hour dryer burner in this FESOP renewal.

(b) one (1) drag slat conveyor, one (1) Recycled Asphalt Pavement (RAP) conveyor, two (2) feed conveyors, and one (1) screen;

(c) cold-mix (stockpile mix) asphalt storage piles;

(d) three (3) liquid asphalt storage tanks, identified as Tanks 12, 14, and 24, with maximum storage capacities of 30,000, 30,000, and 20,000 gallons, respectively, exhausting all emissions through stacks V-3, V-5, and V-6; and

(e) one (1) re-refined waste oil storage tank, identified as Tank 11, with a maximum storage capacity of 15,000 gallons, exhausting at one (1) stack, identified as V-2.

Under 40 CFR 60, Subpart I, Standards of Performance for Hot Mix Asphalt Facilities, the aggregate drum mix dryer, identified as Emission Unit No. 2, is considered an affected hot mix asphalt facility.

Unpermitted Emission Units and Pollution Control Equipment

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

New Emission Units and Pollution Control Equipment Receiving Advanced Source Modification Approval

The application includes information relating to the prior approval for the construction and operation of the following equipment pursuant to 326 IAC 2-8-4(11):

(a) one (1) re-refined waste oil fired aggregate dryer burner with a maximum rated capacity of 120 million (MM) British thermal units (Btu) per hour using No. 2 distillate fuel oil as a back-up fuel.

Insignificant Activities

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

(a) one (1) No. 2 distillate fuel oil fired hot oil heater, identified as emission unit No. 16, rated at 1.4 MMBtu per hour, exhausting at one (1) stack, identified as S-7;
(b) two (2) No. 2 distillate fuel oil fired tank heaters, identified as emission unit Nos. 13 and 15, each rated at 1.4 and 1.0 MMBtu per hour, respectively, and each exhausting at two (2) stacks, identified as S-4A, S-4B, S-6A and S-6B, respectively.
(c) one (1) No. 2 distillate fuel oil fired hot oil heater, rated at 2.0 MMBtu per hour;
(d) one (1) cold feed system consisting of six (6) compartments with a total aggregate holding capacity of 120 tons;
(e) two (2) hot mix asphalt cement storage silos, each with a maximum storage capacity of 250 tons;
(f) one (1) hot mix asphalt cement storage silo with a maximum storage capacity of 300 tons;
(g) two (2) RAP feed bins;
(h) aggregate storage piles, with a maximum storage capacity of 30,000 tons;
(i) Volatile Organic Compound (VOC) and Hazardous Air Pollutant (HAP) storage tanks with capacity less than or equal to 1,000 gallons and annual throughput less than 12,000 gallons;
(j) vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids;
(k) application of oils, greases, lubricants or other nonvolatile materials applied as temporary protective coatings;
(l) 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 (100ºF) or; having a vapor pressure equal to or less than 0.7 kPa; 5 mm Hg; or 0.1 psi measured at 20ºC (68º); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months;
(m) closed loop heating and cooling systems;
(n) paved and unpaved roads and parking lots with public access; and
(o) a laboratory as defined in 326 IAC 2-7-1(21)(D).

Emission Units and Pollution Control Equipment Removed from the Source

The following permitted emission units and pollution control devices were removed from the source:

(a) one (1) re-refined waste oil fired aggregate dryer burner with a maximum rated capacity of 109 million (MM) British thermal units (Btu) per hour using No. 2 distillate fuel oil as a back-up fuel.

The following insignificant activities were removed from the source:

(a) propane or liquefied petroleum gas, or butane-fired combustion sources with heat input equal to or less than 6.0 MMBtu per hour;
(b) combustion source flame safety purging on startup;

(c) 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; and

(d) degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6 (parts washer using non-HAP Safety Kleen or Crystal Clean solvent).

Existing Approvals

The source has been operating under the previous FESOP 177-14108-03248 issued on April 18, 2002, and the following amendments and revisions:

(a) First Significant Permit Revision No. 177-18372-03248 issued on May 21, 2004.

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

(a) FESOP 177-14108-03248 issued on April 18, 2002, Condition D.1.17:

D.1.17 Used Oil Requirements

The waste oil burned in the aggregate dryer 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) First Significant Permit Revision No. 177-18372-03248 issued on May 21, 2004, Condition D.3.1:

D.3.1 Record Keeping Requirements [326 IAC 12][40 CFR 60.110b, Subpart Kb]

Pursuant to 40 CFR Part 60.110b, Subpart Kb (Standards of Performance for Volatile Organic Liquid Storage Vessels), the owner or operator shall, for Tanks 11, 12, 14, and 24, keep readily accessible records at the source showing the dimension of each storage vessel and an analysis showing the capacity of each storage vessel.

Said records shall be kept for the life of the source and made available to the Office of Air Quality upon request.

Reason not incorporated: Since the issuance of FESOP No. F177-14108-03248 on April 18, 2002, the U.S. EPA promulgated amendments to the NSPS, 40 CFR 60, Subpart Kb on October 15, 2003. Since the issuance of First Significant Permit Revision No. 177-18372-03248 on May 21, 2004, these amendments to 40 CFR 60, Subpart Kb, have been incorporated into the Indiana State Implementation Plan (SIP). 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^3), 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 12, 14, and 24 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. Since Tank 11 has a storage capacity of less than 75 cubic meters the requirements of this rule are no longer included in this permit for that tank.

(c) FESOP 177-14108-03248 issued on April 18, 2002, Condition D.4.1:

D.4.1 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), for cold cleaning operations constructed after January 1, 1980, the owner or operator shall:

(a) Equip the cleaner with a cover;

(b) Equip the cleaner with a facility for draining cleaned parts;

(c) Close the degreaser cover whenever parts are not being handled in the cleaner;

(d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;

(e) Provide a permanent, conspicuous label summarizing the operation requirements;

(f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

Reason not incorporated: The Permittee has removed the degreasing operation from this source, therefore, the requirements of 326 IAC 8-3-2 (Cold Cleaner Operations) are no longer applicable.

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 July 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 1 through 11).

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	>250
PM-10	>250
SO_2	>250
VOC	>250
CO	<100
NO_x	<100

HAPs	Unrestricted Potential Emissions (tons/yr)
HCl	Greater than 10
Arsenic	Less than 10
Acetaldehyde	Less than 10
Acrolein	Less than 10
Benzene	Less than 10
Beryllium	Less than 10
Cadmium	Less than 10
Chromium	Less than 10
Ethylbenzene	Less than 10
Formaldehyde	Less than 10
Hexane	Less than 10
2,2,4 Tri-methylpentane	Less than 10
Lead	Less than 10
Manganese	Less than 10
Mercury	Less than 10
Methyl Chloroform	Less than 10
Nickel	Less than 10
Propionaldehyde	Less than 10
Quinone	Less than 10
Selenium	Less than 10
Toluene	Less than 10
Total PAH	Less than 10
Xylene	Less than 10
Total	Greater than 25

(a) The unrestricted potential emissions of PM-10, SO_2, and VOC are equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 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
This type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2. 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.

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 constructed a new emission unit, the source's potential to emit is based on the new emission unit (aggregate dryer burner) and the other existing emission units included in the original FESOP.

	Potential To Emit (tons/year)							
Process/emission unit	PM	PM-10	SO_2	VOC	CO	NO_x	Single HAP	Total HAPs
Aggregate Dryer and Burner[1]	50.80[2]	75.23[3]	77.12	42.75	4.91	23.58	9.51	23.09
Tank and Hot Oil heaters	0.36	0.60	12.88	0.06	0.91	3.63	Negl.	Negl.
Conveying/Handling	3.12	1.48	--	--	--	--	--	--
Unpaved Roadways[4]	42.73	10.89	--	--	--	--	--	--
Paved Roadways[4]	1.17	0.23	--	--	--	--	--	--
Load out and silo filling	1.46	1.46	--	21.15	3.32	--	0.11	0.38
Aggregate storage piles	0.31	0.11	--	--	--	--	--	--
Cold Mix VOC storage	--	--	--	26.04	--	--	--	--
Total Emissions	99.95	90.00	90.00	90.00	9.14	27.21	9.51	23.47

Notes:
(1) Emissions represent emissions after fuel usage limitation to limit SO_2 emissions to 90 tons per year to comply with 326 IAC 2-8 (FESOP). The source has requested that emissions be limited to 90 tons per year to allow for future modifications without exceeding 100 tons per year. These emissions include emissions from the new aggregate dryer burner.
(2) Allowable PM emissions pursuant to 326 IAC 6.5-10-14 which limits PM emissions from the aggregate dryer to 50.80 tons per year.
(3) Allowable PM-10 emissions to comply with 326 IAC 2-8 (FESOP). The source has requested that emissions be limited to 90 tons per year to allow for future modifications without exceeding 100 tons per year.
(4) Emissions after control.

County Attainment Status

The source is located in Wayne County.

Pollutant	Status
PM2.5	Attainment
PM-10	Attainment
SO_2	Attainment
NO_2	Attainment
8-hour Ozone	Attainment
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 emissions and NOx emissions are considered when evaluating the rule applicability relating to ozone. Wayne County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(b) Wayne County has been classified as attainment for PM2.5. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM2.5 emissions. Therefore, until the U.S.EPA adopts specific provisions for PSD review for PM2.5 emissions, it has directed states to regulate PM10 emissions as a surrogate for PM2.5 emissions.

(c) Wayne County has been classified as attainment or unclassifiable for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(d) On August 7, 2006, a temporary emergency rule took effect revoking the one-hour ozone standard in Indiana. The Indiana Air Pollution Control Board has approved a permanent rule revision to incorporate this change into 326 IAC 1-4-1. A permanent revision to 326 IAC 1-4-1 will take effect prior to the expiration of the emergency rule.

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	144.74
PM-10	99.0
SO_2	99.0
VOC	99.0
CO	6.36
NO_x	30.07
Single HAP	<10.0
Combination HAPs	13.42

(a) This existing source is **not** a major stationary source 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 source under Section 112 of the Clean Air Act because single HAP emissions are limited to less than 10 tons per year and any combination of HAP emissions are limited to less than 25 tons per year.

Federal Rule Applicability

(a) The stationary drum mix asphalt plant constructed in 1992 is subject to the New Source Performance Standard, 326 IAC 12, (40 CFR Part 60.90, Subpart I) because it meets the definition of a hot mix asphalt facility pursuant to the rule and was constructed after June 11, 1973. This rule limits particulate matter emissions to 0.04 grains per dry standard cubic foot (gr/dscf) and also limits visible emissions to 20% opacity.

The source will comply with this rule by using a baghouse to limit particulate matter emissions to less than 0.04 grains/dscf.

The aggregate dryer and burner are subject to the following portions of 40 CFR 60, Subpart I:

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

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

Since the existing aggregate dryer burner has been replaced with a new burner and this replacement meets the definition of a modification pursuant to 40 CFR 60.2, a new performance test will be required for the aggregate mixing and drying operation within 60 days of achieving the maximum production rate, but no later than 180 days after start-up of the new burner to demonstrate compliance with this rule.

(b) The two (2) 30,000 gallon liquid asphalt storage tanks (Tanks 12 and 14), the one (1) 20,000 gallon liquid asphalt storage tank (Tank 24), and the one (1) 15,000 gallon re-refined waste oil storage tank (Tank 11), all constructed after July 23, 1984, are not subject to the New Source Performance Standard, 326 IAC 12, (40 CFR Part 60.110b, Subpart Kb) “Standards of Performance for Volatile Organic Liquid Storage Vessels”. Tank 11 is not subject to this rule because the tank has a storage capacity of less than 75 cubic meters. Tanks 12, 14, and 24 are not subject to this rule because the tanks have a storage capacity greater than 75 cubic meters but less than 151 cubic meters, and the liquid stored in the tanks has a maximum true vapor pressure of less than 15.0 kPa.

(c) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP)(326 IAC 14, 20 and 40 CFR Part 61, 63) included in this permit for this source.

(d) The requirements of 40 CFR Part 64, Compliance Assurance Monitoring, are not included in this permit. Generally, such requirements apply to a Part 70 source that involves a pollutant-specific emissions unit (PSEU), as defined in 40 CFR 64.1, which 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 before controls equal to or greater than the applicable Part 70 major source threshold for the regulated pollutant.

As a FESOP source, this source has accepted federally enforceable limits such that the requirements of 326 IAC 2-7 (Part 70) do not apply. 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 Deterioration (PSD))

This source, constructed in 1992 after the August, 1977 applicability date, is not subject to the requirements of this rule. Prior to the replacement of the aggregate dryer burner, this source was an existing minor PSD source because the allowable emissions of all regulated pollutants were less than 250 tons per year. As shown in the Potential to Emit After Issuance table, the allowable emissions of all regulated pollutants, except PM, remain at less than 100 tons per year after application of all federally enforceable emission limits (see 326 IAC 2-8-4 (FESOP) discussion below). PM emissions remain limited to less than 250 tons per year. The particulate emission limit for the aggregate dryer and burner is 0.145 lb/ton of asphalt mix (equivalent to 190.85 tons per year, based on a maximum asphalt mix throughput of 300 tons per hour). Therefore the replacement of the aggregate dryer burner is a minor modification to an existing minor PSD source and the requirements of 326 IAC 2-2 (PSD) do not apply. The source will remain an existing minor PSD source.

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 shall apply:

(a) The usage of re-refined waste oil with a limited sulfur content of 0.75% and a maximum chlorine content of 0.2% and re-refined waste oil equivalents in the 120 MMBtu per hour burner for the aggregate dryer shall not exceed 1,399,002 gallons per twelve (12) consecutive month period, with compliance determined at the end of each month, such that the source-wide SO_2 emissions are limited to 90.0 tons per year and source-wide HCl emissions are limited to less than 10 tons per year.

This fuel usage limitation will limit HCl emissions to less than 10 tons per year based on a maximum re-refined waste oil chlorine content of 0.2%. Since HCl is the only single HAP with unrestricted potential emissions of greater than 10 tons per year, this limit will ensure that source-wide single HAP and total HAP emissions are limited to less than 10 and 25 tons per year, respectively.

(b) Gelled asphalt with VOC solvent liquid binder, containing a maximum of 25.9% of the liquid binder of VOC solvent and 2.5% by weight of the VOC solvent evaporating, used in the production of cold mix asphalt shall not exceed 1,042 tons of VOC solvent 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 26.04 tons per twelve (12) consecutive month period so that source-wide VOC emissions are limited to 90.0 tons per year.

(c) PM-10 emissions from the aggregate dryer shall be limited to 0.057 pound PM-10 per ton of asphalt mix equivalent to 17.18 pounds per hour, based on a maximum throughput of 300 tons of asphalt mix per hour. Based on 8,760 hours of operation per 12 consecutive month period, this limits PM-10 emissions from the aggregate mixing and drying operation to 75.23 tons per year for a source-wide total potential to emit of 90.0 tons per year. The source will be able to comply with the PM-10 emission limit by utilizing a baghouse for controlling PM-10 emissions to less than 17.18 pounds per hour from the aggregate dryer.

These limits will also render the requirements of 326 IAC 2-7 (Part 70) and 326 IAC 2-2 (PSD) 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 forty percent (40%) 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. Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions), fugitive dust shall not be visible crossing the boundary or property line of a source. Observances of visible emissions crossing property lines may be refuted by factual data expressed in 326 IAC 6-4-2(1), (2) or (3).

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 includes the following:

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.

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.

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.

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.

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.

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.

State Rule Applicability – Individual Facilities

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

The operation of this stationary drum mix asphalt pavement production plant will emit less than 10 tons per year of a single HAP or 25 tons per year of a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

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 2-2 (PSD), 326 IAC 2-3 (Emission Offset), 326 IAC 6-1, 326 IAC 11, 326 IAC 12, or 326 IAC 20. Since the applicable PM emission limits established by 326 IAC 12, 40 CFR 60, Subpart I, and 326 IAC 6.5-10-14 are each less than the PM limit that would be established by 326 IAC 6-3-2 (63.0 pounds per hour, see Appendix A, page 11 of 11), the more stringent limit applies and the limit pursuant to 326 IAC 6-3-2 does not apply.

326 IAC 6.5-10-14 (Richmond Milestone Contractors)

Pursuant to 326 IAC 6.5-1-1, this source is subject to the requirements of 326 IAC 6.5-10-14 because it is located in Wayne county and is specifically listed in 326 IAC 6.5-10 (Richmond Milestone Contractors is the same as Milestone Contractors, L.P. in Richmond, IN). Pursuant to 326 IAC 6.5-10-14, particulate emissions from the rotary dryer shall not exceed 50.80 tons per year and 0.158 gr/dscf. The source will be able to comply with this limit by utilizing a baghouse for controlling particulate emissions to less than 50.80 tons per year and 0.158 gr/dscf from the rotary dryer.

326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)

The sulfur dioxide emissions from the 120 MMBtu/hr dryer burning re-refined waste oil shall be limited to 1.6 pounds per MMBtu 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 11 of 11 for detailed calculations). The source will be able to comply with this rule by using re-refined waste oil with a sulfur content of 0.75% or less.

The sulfur dioxide emissions from the 120 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 11 of 11 for detailed calculations). The source will be able to comply with this rule by using No. 2 distillate fuel oil with a sulfur content of 0.5% or less.

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

All testing requirements from previous approvals were incorporated into this FESOP. This source is subject to 40 CFR 60, Subpart I (Standards of Performance for Hot Mix Asphalt Facilities), and shall comply with the particulate matter (PM) and opacity compliance testing requirements of the rule. OAQ has also required PM-10 testing to demonstrate FESOP compliance.

Previous stack tests to comply with this requirement were conducted as follows:

(a) PM, PM-10, and opacity testing was performed on the baghouse for the mixing and drying operations on August 19, 2004 and May 26, 2005. The testing performed on May 26, 2005 was not observed by an IDEM representative. The tests indicate that the mixing and drying operation was in compliance with all applicable limits.

Since the existing aggregate dryer burner has been replaced with a new burner, a new performance test will be required for the aggregate mixing and drying operation within 60 days of achieving the maximum production rate, but no later than 180 days after start-up of the new burner to demonstrate compliance with all applicable PM and PM10 emission limits and opacity limits. The testing requirements applicable to the source are as follows:

(a) Within 60 days of achieving the maximum production rate, but no later than 180 days after start-up of the new aggregate dryer burner, in order to demonstrate compliance with the limits pursuant to 326 IAC 2-8, 326 IAC 2-2, 326 IAC 6.5-10-14, and 40 CFR Part 60, Subpart I, the Permittee shall perform PM and PM-10 testing on the aggregate mixing and drying operation utilizing methods as approved by the Commissioner. PM-10 includes filterable and condensible PM-10.

(b) Within 60 days of achieving the maximum production rate, but no later than 180 days after start-up of the new aggregate dryer burner, opacity testing shall be performed on the mixing and drying operation 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 approporiate corrective actions within a specific time period.

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

1. The conveying, material transfer points, screening, and mixing and drying has applicable compliance monitoring conditions as specified below:

   (a) Visible emission notations of the aggregate dryer and burner baghouse stack exhaust, and the conveying, material transfer points, and screening 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 mixing and drying operation, at least once per day when the aggregate dryer and burner are in operation when venting to the atmosphere. When for any one reading, 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.

(g) 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).

(h) 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 mixing and drying operation must operate properly to ensure compliance with 326 IAC 6.5-10-14 (Richmond Milestone Contractors), 40 CFR 60, Subpart I, and 326 IAC 2-8-4 (FESOP), and to ensure that the requirements of 326 IAC 2-2 (PSD) do not apply.

Air Quality Impacts from Minor Sources

Modeling Overview
Pursuant to 326 IAC 2-1.1-5, IDEM, OAQ, has conducted a modeling analysis of the Limited Potential to Emit (PTE) criteria pollutants from the proposed modification to replace the existing aggregate dryer burner with a new dryer burner to estimate whether the Limited PTE criteria pollutants will cause or contribute to a violation of any National Ambient Air Quality Standard (NAAQS).

Modeling Results – Criteria Pollutants
The modeling results indicate that the Limited PTE criteria pollutants from the modification will not exceed the National Ambient Air Quality Standards (NAAQS).

Conclusion

The operation of this stationary drum mix asphalt pavement production plant shall be subject to the conditions of the FESOP 177-23348-03248.

Company Name: Milestone Contractors, L.P.
Plant Location: 6061 SR 121, Richmond, Indiana 47374
County: Wayne
Permit Reviewer: Trish Earls

**** aggregate dryer burner****

The following calculations determine the amount of emissions created by the combustion of #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 1.3-3.

Criteria Pollutant: 120 MMBtu/hr * 8,760 hr/yr / 140,000 Btu/gal * 2,000 lb/ton * Ef (lb/1,000 gal) = (ton/yr)

P M:	2.0	lb/1000 gal =	**7.51**	**ton/yr**
P M-10:	3.3	lb/1000 gal =	**12.39**	**ton/yr**
S O 2:	78.5	lb/1000 gal =	**294.71**	**ton/yr**
N O x:	24.0	lb/1000 gal =	**90.10**	**ton/yr**
V O C:	0.20	lb/1000 gal =	**0.75**	**ton/yr**
C O:	5.0	lb/1000 gal =	**18.77**	**ton/yr**

The following calculations determine the amount of emissions created by the combustion of re-refined waste oil
@ 0.75 % sulfur, 0.947 % ash 0.200 % Cl, 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, and 1.11-3.

Criteria Pollutant: 120 MMBtu/hr * 8760 hr/yr / 140,000 Btu/gal * 2000 lb/ton * Ef (lb/1000 gal) = (ton/yr)

P M:	60.6	lb/1000 gal =	**227.54**	**ton/yr**
P M-10:	48.3	lb/1000 gal =	**181.32**	**ton/yr**
S O 2:	110.3	lb/1000 gal =	**413.91**	**ton/yr**
N O x:	19.0	lb/1000 gal =	**71.33**	**ton/yr**
V O C:	1.0	lb/1000 gal =	**3.75**	**ton/yr**
C O:	5.0	lb/1000 gal =	**18.77**	**ton/yr**
HCL:	13.2	lb/1000 gal =	**49.56**	**ton/yr**

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

Criteria Pollutant:			**Worst Case Fuel**
P M:	**227.54**	**ton/yr**	Waste Oil
P M-10:	**181.32**	**ton/yr**	Waste Oil
S O 2:	**413.91**	**ton/yr**	Waste Oil
N O x:	**90.10**	**ton/yr**	No. 2 Fuel Oil
V O C:	**3.75**	**ton/yr**	Waste Oil
C O:	**18.77**	**ton/yr**	No. 2 Oil or Waste Oil
HCL:	**49.56**	**ton/yr**	Waste Oil

****hot oil heater****

This facility possesses a two (2) asphalt storage tank heaters rated at 1.4 and 1.0 MMBtu/hr, respectively, and two (2) hot oil heaters rated at 1.4 and 2.0 MMBtu/hr, respectively, which combust No. 2 distillate fuel oil.

The following calculations determine the amount of emissions created by the combustion of #2 distillate fuel oil @ 0.50 % sulfur, from hot oil heater, based on 8760 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 1.3-3.

Criteria Pollutant: 5.8 MMBtu/hr * 8,760 hr/yr / 140,000 Btu/gal * 2,000 lb/ton * Ef (lb/1,000 gal) = (ton/yr)

P M:	2.0	lb/1000 gal =	**0.36**	**ton/yr**
P M-10:	3.3	lb/1000 gal =	**0.60**	**ton/yr**
S O 2:	71.0	lb/1000 gal =	**12.88**	**ton/yr**
N O x:	20.0	lb/1000 gal =	**3.63**	**ton/yr**
V O C:	0.34	lb/1000 gal =	**0.06**	**ton/yr**
C O:	5.0	lb/1000 gal =	**0.91**	**ton/yr**

*** * 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, Table 11.1-3 for a drum mix dryer which has the capability of combusting fuel oil:

Pollutant: Ef lb/ton x 300 / 2,000 lb/ton ton/hr x 8,760 hr/yr

Criteria Pollutant:

P M:	28	lb/ton =	**36,792.00**	**ton/yr**
P M-10:	6.5	lb/ton =	**8,541.00**	**ton/yr**
VOC:	0.032	lb/ton =	**42.05**	**ton/yr**
HCl:	2.10E-04	lb/ton =	**0.28**	**ton/yr**
CO:	1.30E-01	lb/ton =	**170.82**	**ton/yr**
NOx:	5.50E-02	lb/ton =	**72.27**	**ton/yr**

The VOC and HCl emission factors for aggregate drying were obtained from U.S. EPA's AP-42, 5th Edition, Section 11.1, Table 11.1-8. The CO and NOx emission factors for aggregate drying were obtained from U.S. EPA's AP-42, 5th Edition, Section 11.1, Table 11.1-7.

*** * 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))

=	1.12E-03	lb PM-10/ton
	2.37E-03	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 =	4.5	material moisture content (%)

300 ton/hr / 2,000 lb/ton * 8,760 hrs/yr * Ef (lb/ton of material) = (ton/yr)

Total PM 10 Emissions: **1.48 tons/yr**
Total PM Emissions: **3.12 tons/yr**

*** * paved roads * ***

The following calculations determine the amount of emissions created by vehicle traffic on paved roads, based on 8,760 hours of use and USEPA's AP-42, 5th Edition, Section 13.2.1.

I. Triaxle Dump Trucks

5.929	trip/hr x	
0.053	mile/trip x	
2	(round trip) x	
8,760	hr/yr =	5505.43224 miles per year

Ef = k*(sL/2)^0.65*(W/3)^1.5 - C
= 0.17 lb PM-10/mile
= 0.85 lb PM/mile

where k =	0.016	(particle size multiplier for PM-10) (k=0.082 for PM-30 or TSP)
sL =	0.6	road surface silt loading (g/m^2)
W =	24.0	tons average weight of all vehicles traveling the road
C =	0.00047	emission factor for 1980's vehicle exhaust, brake wear and tire wear for PM and PM10

PM-10: 0.17 lb/mi x 5505.4322 mi/yr = **0.45 tons/yr**
2000 lb/ton

PM: 0.85 lb/mi x 5505.4322 mi/yr = **2.33 tons/yr**
2000 lb/ton

*** * unpaved roads * ***

The following calculations determine the amount of emissions created by vehicle traffic on unpaved roads, based on 8,760 hours of use and USEPA's AP-42, 5th Edition, Section 13.2.2.

I. Triaxle Dump Trucks

5.929	trip/hr x	
0.053	mile/trip x	
2	(round trip) x	
8,760	hr/yr =	5505.43224 miles per year

Ef = k*[(s/12)^a]*[(W/3)^b]*[(365-p)/365]*(S/15)
= 0.73 lb PM-10/mile
= 2.88 lb PM/mile

where k =	1.5	(particle size multiplier for PM-10) (k=4.9 for PM-30 or TSP)
s =	4.8	mean % silt content of unpaved roads
a =	0.9	Constant for PM-10 (a = 0.7 for PM-30 or TSP)
b =	0.45	Constant for PM-10 and for PM-30 or TSP
W =	24.0	tons average weight of all vehicles traveling the road
S =	10.0	mph speed limit
p =	125.0	number of days with at least 0.01 in. of precipitation per year

PM-10: 0.73 lb/mi x 5505.4322 mi/yr = **2.02 tons/yr**
2000 lb/ton

PM: 2.88 lb/mi x 5505.4322 mi/yr = **7.94 tons/yr**
2000 lb/ton

II. Semi-Tank Truck

0.121	trip/hr x	
0.045	mile/trip x	
2	(round trip) x	
8,760	hr/yr =	95.3964 miles per year

Ef = k*[(s/12)^a]*[(W/3)^b]*[(365-p)/365]*(S/15)
= 0.79 lb PM-10/mile
= 3.09 lb PM/mile

where k =	1.5	(particle size multiplier for PM-10) (k=4.9 for PM-30 or TSP)
s =	4.8	mean % silt content of unpaved roads
a =	0.9	Constant for PM-10 (a = 0.7 for PM-30 or TSP)
b =	0.45	Constant for PM-10 and for PM-30 or TSP
W =	28.0	tons average weight of all vehicles traveling the road
S =	10.0	mph speed limit
p =	125.0	number of days with at least 0.01 in. of precipitation per year

PM-10: 0.79 lb/mi x 95.3964 mi/yr = **0.04 tons/yr**
2000 lb/ton

PM: 3.09 lb/mi x 95.3964 mi/yr = **0.15 tons/yr**
2000 lb/ton

III. Front End Loader

42.22	trip/hr x	
0.07	mile/trip x	
2	(round trip) x	
8,760	hr/yr =	51778.608 miles per year

Ef =	k*[(s/12)^a]*[(W/3)^b]*[(365-p)/365]*(S/15)	
=	0.76	lb PM-10/mile
=	2.99	lb PM/mile
where k =	1.5	(particle size multiplier for PM-10) (k=4.9 for PM-30 or TSP)
s =	4.8	mean % silt content of unpaved roads
a =	0.9	Constant for PM-10 (a = 0.7 for PM-30 or TSP)
b =	0.45	Constant for PM-10 and for PM-30 or TSP
W =	26.0	tons average weight of all vehicles traveling the road
S =	10.0	mph speed limit
p =	125.0	number of days with at least 0.01 in. of precipitation per year

PM-10: 0.76 lb/mi x 51778.608 mi/yr = **19.72 tons/yr**
2000 lb/ton

PM: 2.99 lb/mi x 51778.608 mi/yr = **77.38 tons/yr**
2000 lb/ton

Total PM Emissions From Unpaved Roads = 85.46 tons/yr

Total PM-10 Emissions From Unpaved Roads = 21.78 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)	PM Emissions tons/yr	PM-10 Emisions tons/yr
Sand	1.4	0.080	0.02	0.01
Gravel	0.8	0.770	0.13	0.05
Stone	0.9	0.610	0.12	0.04
Slag	1.2	0.060	0.02	0.01
RAP	0.2	0.630	0.03	0.01
Total			**0.31**	**0.11**

Sample Calculation:

Ef =	1.7*(s/1.5)*(365-p)/235*(f/15)	
=	1.62	lb/acre/day
where s =	1.4	% 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

PM = **0.31 tons/yr** **P M-10:** **35% of PM =** **0.11 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/PM10 Ef =	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 =	**0.69**	**tons/yr**	
Total PAH HAPs =	**0.03**	**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 Ef =	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 =	**5.14**	**tons/yr**	(94% of TOC emissions per AP-42)
Worst Case Single HAP (Xylenes) =	**0.03**	**tons/yr**	(0.49% of TOC emissions per AP-42)
Total Volatile HAPs =	**0.08**	**tons/yr**	(1.5% of TOC emissions per AP-42)

CO Ef =	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 =	**1.77**	**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.

PM/PM10 Ef =	0.000332 + 0.00105(-V)e((0.0251)(T+460)-20.43)		
=	5.86E-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 =	**0.77**	**tons/yr**	
Total PAH HAPs =	**0.05**	**tons/yr**	(11.40% of Organic PM emissions per AP-42)*

TOC Ef =	0.0504(-V)e((0.0251)(T+460)-20.43)		
=	1.22E-02	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 =	**16.01**	**tons/yr**	(100% of TOC emissions per AP-42)
Worst Case Single HAP (Formaldehyde) =	**0.11**	**tons/yr**	(0.69% of TOC emissions per AP-42)
Total Volatile HAPs =	**0.21**	**tons/yr**	(1.3% of TOC emissions per AP-42)

CO Ef =	0.00488(-V)e((0.0251)(T+460)-20.43)		
=	1.18E-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 =	**1.55**	**tons/yr**	

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

Organic PM Ef =	0.00141(-V)e((0.0251)(T+460)-20.43)		
=	3.41E-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)	

*** *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 Binder Throughput (tons/yr) = 2,628,000 tons/yr stockpile mix

Potential VOC Emissions (tons/yr) = Potential Throughput (tons/yr) * wt percent flash-off
Potential VOC Emissions = 657.00 tons/yr

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

Criteria Pollutants:

P M:	**37,110.25**	**ton/yr**
P M-10:	**8,747.74**	**ton/yr**
S O 2:	**426.79**	**ton/yr**
N O x:	**93.73**	**ton/yr**
V O C:	**724.01**	**ton/yr**
C O:	**175.05**	**ton/yr**
HCL:	**49.83**	**ton/yr**

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

In order to qualify for the FESOP program, this facility must limit PM-10, CO, SO2, and VOC emissions to less than 100.0 tons per year. Consequently, SO2 emissions from the aggregate dryer are being limited to 77.12 tons per year (90 ton/yr - 12.88 ton/yr from the storage tank heaters and hot oil heaters) by a fuel usage limitation.

* Emissions of PM and PM-10 from aggregate drying operations are controlled with a 99.880 % control efficiency.

The following calculations determine the amount of emissions created by No.2 fuel oil @ 0.50 % sulfur based on a fuel usage limitation of 1,964,841 gal/yr:

No. 2 Fuel Oil: $\frac{1{,}964{,}841 \text{ gal/yr}}{2{,}000 \text{ lb/ton}}$ * Ef (lb/1,000 gal) = (ton/yr)

P M:	2.0	lb/1000 gal =	**2.36E-03**	**ton/yr ***
P M-10:	3.3	lb/1000 gal =	**3.89E-03**	**ton/yr ***
S O 2:	78.5	lb/1000 gal =	**77.12**	**ton/yr**
N O x:	24.0	lb/1000 gal =	**23.58**	**ton/yr**
V O C:	0.2	lb/1000 gal =	**0.20**	**ton/yr**
C O:	5.0	lb/1000 gal =	**4.91**	**ton/yr**

The following calculations determine the amount of emissions created by waste oil @ 0.75 % sulfur based on a fuel usage limitation of 1,399,002 gal/yr:

Waste Oil: $\frac{1{,}399{,}002 \text{ gal/yr}}{2000 \text{ lb/ton}}$ * Ef (lb/1000 gal) = (ton/yr)

P M:	60.6	lb/1000 gal =	**0.05**	**ton/yr ***
P M-10:	48.3	lb/1000 gal =	**0.04**	**ton/yr ***
S O 2:	110.3	lb/1000 gal =	**77.12**	**ton/yr**
N O x:	19.0	lb/1000 gal =	**13.29**	**ton/yr**
V O C:	1.0	lb/1000 gal =	**0.70**	**ton/yr**
C O:	5.0	lb/1000 gal =	**3.50**	**ton/yr**
HCL:	13.2	lb/1000 gal =	**9.23**	**ton/yr**

Criteria Pollutant:

			Worst Case Fuel
P M:	**0.05**	**ton/yr ***	Waste Oil
P M-10:	**0.04**	**ton/yr ***	Waste Oil
S O 2:	**77.12**	**ton/yr**	No. 2 or Waste Oil
N O x:	**23.58**	**ton/yr**	No. 2 Fuel Oil
V O C:	**0.70**	**ton/yr**	Waste Oil
C O:	**4.91**	**ton/yr**	No. 2 Fuel Oil
HCL:	**9.23**	**ton/yr**	Waste Oil

Fuel Usage Limitations

Fuel Oil: No. 2 Fuel Oil

77.12 tons SO2/year limited / 294.71 tons SO2/year potential * 7508.57 Kgals/year potential = 1964.84 Kgals/year limited

Fuel Oil: waste oil

77.12 tons SO2/year limited / 413.91 tons SO2/year potential * 7508.57 Kgals/year potential = 1399.00 Kgals/year limited

9.62 tons HCL/year limited / 49.56 tons HCL/year potential * 7508.57 Kgals/year potential = 1457.58 Kgals/year limited

Fuel equivalence limit for No. 2 fuel oil based on SO2 emissions from waste oil

294.71 #2 F.O. potential emissions (ton/yr) / 7508.57 #2 F.O. potential usage (kgal/yr) = 413.91 W.O. potential emissions (ton/yr) / 7508.57 W.O. potential usage (kgal/yr)

= 0.7120 Kgal W.O. burned / Kgal #2 F.O. burned

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

CO emissions from the aggregate dryer are being limited to 85.77 tons per year (90 ton/yr - 4.23 ton/yr from the hot oil heater, load-out, and silo filling) via a limit on aggregate throughput.

The following calculations determine the amount of emissions created by aggregate drying before controls, based on a limited annual aggregate throughput and USEPA's AP-42, 5th Edition, Section 11.1 - Hot Mix Asphalt Plants, Table 11.1-3 for a drum mix dryer which has the capability of combusting fuel oil:

Pollutant: Ef lb/ton x 1,319,538 / 2,000 ton/yr lb/ton

Criteria Pollutant:

P M:	28	lb/ton =	**18,473.54**	**ton/yr**
P M-10:	6.5	lb/ton =	**4,288.50**	**ton/yr**
VOC:	0.032	lb/ton =	**21.11**	**ton/yr**
HCl:	0.00021	lb/ton =	**0.14**	**ton/yr**
CO:	0.13	lb/ton =	**85.77**	**ton/yr**
NOx:	0.055	lb/ton =	**36.29**	**ton/yr**

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

	heaters:			nonfugitive			
P M:	0.36	ton/yr x	100.00%	emitted after controls =	**0.36**	**ton/yr**
P M-10:	0.60	ton/yr x	100.00%	emitted after controls =	**0.60**	**ton/yr**
	aggregate drying:			nonfugitive			
P M:	18,473.54	ton/yr x	0.12%	emitted after controls =	**22.17**	**ton/yr**
P M-10:	4,288.50	ton/yr x	0.12%	emitted after controls =	**5.15**	**ton/yr**
VOC:	21.11	ton/yr x	100.00%	emitted after controls =	**21.11**	**ton/yr**
HCl:	0.14	ton/yr x	100.00%	emitted after controls =	**0.14**	**ton/yr**
CO:	85.77	ton/yr x	100.00%	emitted after controls =	**85.77**	**ton/yr**
NOx:	36.29	ton/yr x	100.00%	emitted after controls =	**36.29**	**ton/yr**
	conveying/handling:			fugitive			
P M:	3.12	ton/yr x	50%	emitted after controls =	**1.56**	**ton/yr**
P M-10:	1.48	ton/yr x	50%	emitted after controls =	**0.74**	**ton/yr**
	paved roads:			fugitive			
P M:	2.33	ton/yr x	50%	emitted after controls =	**1.17**	**ton/yr**
P M-10:	0.45	ton/yr x	50%	emitted after controls =	**0.23**	**ton/yr**
	unpaved roads:			fugitive			
P M:	85.46	ton/yr x	50%	emitted after controls =	**42.73**	**ton/yr**
P M-10:	21.78	ton/yr x	50%	emitted after controls =	**10.89**	**ton/yr**
	storage piles:			fugitive			
P M:	0.31	ton/yr x	50%	emitted after controls =	**0.16**	**ton/yr**
P M-10:	0.11	ton/yr x	50%	emitted after controls =	**0.05**	**ton/yr**
	load-out & silo filling:			fugitive			
P M:	1.46	ton/yr x	100%	emitted after controls =	**1.46**	**ton/yr**
P M-10:	1.46	ton/yr x	100%	emitted after controls =	**1.46**	**ton/yr**
VOC:	21.15	ton/yr x	100%	emitted after controls =	**21.15**	**ton/yr**
CO:	3.32	ton/yr x	100%	emitted after controls =	**3.32**	**ton/yr**
	cold mix VOC storage:			fugitive			
VOC:	657.00	ton/yr x	4%	emitted after controls =	**26.04**	**ton/yr***

* This is equivalent to 1,042 tons of gelled asphalt binder solvent used per year based on 2.5% of VOC solvent evaporating.

*** * summary of source emissions after controls * ***

Criteria Pollutant:

	Non-Fugitive	Fugitive	Total
PM:	**22.58 ton/yr**	**45.90 ton/yr**	**68.48 ton/yr**
PM-10:	**5.79 ton/yr**	**13.14 ton/yr**	**18.92 ton/yr**
S O 2:	**90.00 ton/yr**	**0.00 ton/yr**	**90.00 ton/yr**
N O x:	**39.92 ton/yr**	**0.00 ton/yr**	**39.92 ton/yr**
V O C:	**21.87 ton/yr**	**47.19 ton/yr**	**69.06 ton/yr**
C O:	**86.68 ton/yr**	**3.32 ton/yr**	**90.00 ton/yr**
HCL:	**9.37 ton/yr**	**0.00 ton/yr**	**9.37 ton/yr**

Milestone Contractors, L.P. Operation Permit No. F177-23348
Richmond, Indiana Plant I D 177-03248

Hazardous Air Pollutants (HAPs)

**** aggregate dryer burner****

The following calculations determine the amount of HAP emissions created by the combustion of No. 2 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.

Hazardous Air Pollutants (HAPs):

120 MMBtu/hr * 8760 hr/yr * Ef (lb/10^12 Btu) = (ton/yr)
2,000 lb/ton

			Potential To Emit		Limited Emissions	
Arsenic:	4	lb/10^12 Btu =	2.10E-03	ton/yr	2.52E-06	ton/yr
Beryllium:	3	lb/10^12 Btu =	1.58E-03	ton/yr	1.89E-06	ton/yr
Cadmium:	3	lb/10^12 Btu =	1.58E-03	ton/yr	1.89E-06	ton/yr
Chromium:	3	lb/10^12 Btu =	1.58E-03	ton/yr	1.89E-06	ton/yr
Lead:	9	lb/10^12 Btu =	4.73E-03	ton/yr	5.68E-06	ton/yr
Manganese:	6	lb/10^12 Btu =	3.15E-03	ton/yr	3.78E-06	ton/yr
Mercury:	3	lb/10^12 Btu =	1.58E-03	ton/yr	1.89E-06	ton/yr
Nickel:	3	lb/10^12 Btu =	1.58E-03	ton/yr	1.89E-06	ton/yr
Selenium:	15	lb/10^12 Btu =	7.88E-03	ton/yr	9.46E-06	ton/yr
		Total HAPs =	**0.03**	**ton/yr**	**3.09E-05**	**ton/yr**

The following calculations determine the amount of emissions created by waste oil combustion, from asphalt heating @ 0.0089 % lead, 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, and 1.11-3.

Hazardous Air Pollutants (HAPs):

120 MMBtu/hr * 8760 hr/yr * Ef (lb/1000 gal) = (ton/yr)
140,000 Btu/gal * 2000 lb/ton * 1000 gal/kgal

			Potential To Emit		Limited Emissions	
Lead:	0.4895	lb/1000 gal =	**1.84**	**ton/yr**	**2.21E-03**	**ton/yr**

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

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 fuel oil. The HAP emission factors represent the worst case emissions from both distillate fuel and waste-oil.

Pollutant:

Ef lb/ton x 300 ton/hr x 8760 hr/yr **Maximum throughput**
2000 lb/ton

Ef lb/ton x 1,319,538 ton/yr **Limited throughput**
2000 lb/ton

Hazardous Air Pollutants (HAPs):

			Potential To Emit		Limited Emissions	
Acetaldehyde:	1.30E-03	lb/ton =	1.71	ton/yr	0.86	ton/yr
Acrolein:	2.60E-05	lb/ton =	0.03	ton/yr	0.02	ton/yr
Benzene:	3.90E-04	lb/ton =	0.51	ton/yr	0.26	ton/yr
Ethylbenzene:	2.40E-04	lb/ton =	0.32	ton/yr	0.16	ton/yr
Formaldehyde:	3.10E-03	lb/ton =	4.07	ton/yr	2.05	ton/yr
Hexane:	9.20E-04	lb/ton =	1.21	ton/yr	0.61	ton/yr
2,2,4 Trimethylpentane:	4.00E-05	lb/ton =	0.05	ton/yr	0.03	ton/yr
Methyl chloroform:	4.80E-05	lb/ton =	0.06	ton/yr	0.03	ton/yr
Propionaldehyde:	1.30E-04	lb/ton =	0.17	ton/yr	0.09	ton/yr
Quinone:	1.60E-04	lb/ton =	0.21	ton/yr	0.11	ton/yr
Toluene:	2.90E-03	lb/ton =	3.81	ton/yr	1.91	ton/yr
Total PAH Haps:	8.80E-04	lb/ton =	1.16	ton/yr	0.58	ton/yr
Xylene:	2.00E-04	lb/ton =	0.26	ton/yr	0.13	ton/yr
		Total HAPs =	13.58	ton/yr	6.82	ton/yr

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

Hazardous Air Pollutants (HAPs):

Arsenic:	**0.002**	ton/yr
Acetaldehyde:	**1.708**	ton/yr
Acrolein:	**0.034**	ton/yr
Benzene:	**0.512**	ton/yr
Beryllium:	**0.002**	ton/yr
Cadmium:	**0.002**	ton/yr
Chromium:	**0.002**	ton/yr
Ethylbenzene:	**0.315**	ton/yr
Formaldehyde:	**4.184**	ton/yr
Hexane:	**1.209**	ton/yr
2,2,4 Trimethylpentane:	**0.053**	ton/yr
Methyl chloroform:	**0.063**	ton/yr
Propionaldehyde:	**0.171**	ton/yr
Quinone:	**0.210**	ton/yr
Lead:	**1.842**	ton/yr
Manganese:	**0.003**	ton/yr
Mercury:	**0.002**	ton/yr
Nickel:	**0.002**	ton/yr
Selenium:	**0.008**	ton/yr
Toluene:	**3.811**	ton/yr
Total PAH:	**1.234**	ton/yr
Xylene:	**0.290**	ton/yr
Hydrochloric Acid (HCL):	**49.833**	ton/yr
Other organic HAPs from load-out and silo filling:	**0.160**	ton/yr
Total:	**65.650**	**ton/yr**

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

Hazardous Air Pollutants (HAPs):

Arsenic:	**2.5E-06**	ton/yr
Acetaldehyde:	**0.86**	ton/yr
Acrolein:	**1.7E-02**	ton/yr
Benzene:	**0.26**	ton/yr
Beryllium:	**1.9E-06**	ton/yr
Cadmium:	**1.9E-06**	ton/yr
Chromium:	**1.9E-06**	ton/yr
Ethylbenzene:	**0.158**	ton/yr
Formaldehyde:	**2.156**	ton/yr
Hexane:	**0.607**	ton/yr
2,2,4 Trimethylpentane:	**0.026**	ton/yr
Methyl chloroform:	**0.032**	ton/yr
Propionaldehyde:	**0.086**	ton/yr
Quinone:	**0.106**	ton/yr
Lead:	**0.002**	ton/yr
Manganese:	**3.8E-06**	ton/yr
Mercury:	**1.9E-06**	ton/yr
Nickel:	**1.9E-06**	ton/yr
Selenium:	**9.5E-06**	ton/yr
Toluene:	**1.91**	ton/yr
Total PAH:	**0.66**	ton/yr
Xylene:	**0.16**	ton/yr
Hydrochloric Acid (HCL):	**9.372**	ton/yr
Other organic HAPs from load-out and silo filling:	**0.160**	ton/yr
Total:	**16.567**	**ton/yr**

(total includes additional HAPs from load-out and silo filling not shown)

*** * miscellaneous * ***

326 IAC 7 Compliance Calculations:

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

0.5 lb/MMBtu x 140,000 Btu/gal= 70 lb/1000gal

70 lb/1000gal / 142 lb/1000 gal = 0.5 %

Sulfur content must be less than or equal to 0.5% to comply with 326 IAC 7.

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

1.6 lb/MMBtu x 140,000 Btu/gal= 224 lb/1000gal

224 lb/1000gal / 147 lb/1000 gal = 1.5 %

Sulfur content must be less than or equal to 1.5% to comply with 326 IAC 7.

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:

limit = 55 * (300 ^ 0.11) - 40 = 63.00 lb/hr or
275.95 ton/yr

Since the emission limits pursuant to 326 IAC 6.5-10-14 of 50.80 tons per year and Subpart I of 46.76 tons per year are more stringent than this limit, the limit pursuant to 326 IAC 6-3-2 does not apply. The emission limits pursuant to 326 IAC 6.5-10-14 and Subpart I shall also render the requirements of 326 IAC 2-2 (PSD) not applicable.

PM-10 Emission Limit for Aggregate Dryer pursuant to 326 IAC 2-8 (FESOP):

(90 tons PM-10/yr - 14.77 tons PM-10/yr from other souces)
= 75.23 tons PM-10/yr = 17.18 lbs/hr

PM-10 emissions from the aggregate dryer are controlled to 1.18 lbs/hr < 17.18 lbs/hr (Will be able to comply)

Based on a maximum asphalt mix throughput of 300 tons/hr, this emission limit is equivalent to 0.057 lb PM10 per ton of asphalt mix.

PM Emission Limit for Aggregate Dryer to render 326 IAC 2-2 (PSD) not applicable:

(240.0 tons PM/yr - 49.15 tons PM/yr from other souces)
= 190.85 tons PM-10/yr = 43.57 lbs/hr

PM emissions from the aggregate dryer are controlled to 5.06 lbs/hr < 43.57 lbs/hr (Will be able to comply)

Based on a maximum asphalt mix throughput of 300 tons/hr, this emission limit is equivalent to 0.145 lb PM per ton of asphalt mix.

40 CFR Part 60.90, Subpart I (Standards of Performance for Hot Mix Asphalt Plants) and 326 IAC 6.5-10-14 Compliance Calculations:

The following calculations determine compliance with 326 IAC 6.5-10-14, which applies only to this source, and limits PM emissions to 50.80 tons per year and 0.158 gr/dscf, and NSPS, which limits stack emissions from asphalt plants to 0.04 gr/dscf:

$$\frac{22.22 \text{ ton/yr} * 2000 \text{ lb/ton} * 7000 \text{ gr/lb}}{525{,}600 \text{ min/yr} * 31{,}139 \text{ dscf/min}} = 0.019 \text{ gr/dscf}$$ (Will be able to comply)

Allowable particulate emissions under NSPS equate to 46.76 tons per year. 10.68 lbs/hr

Note:

SCFM = 44,821 acfm * (460 + 68) / (460 + 300)
= 31,139 scfm

Assumes exhaust gas temperature of 300F and exhaust gas flow of 44,821 acfm.

Appendix A: Emission Calculations Operation Permit No.- F177-23348 Plant I D 177-03248

Company Name: Milestone Contractors, L.P.
Plant Location: 6061 SR 121, Richmond, Indiana 47374
County: Wayne
Permit Reviewer: Trish Earls

**** aggregate dryer burner****

The following calculations determine the amount of emissions created by the combustion of #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 1.3-3.

Criteria Pollutant: 120 MMBtu/hr * 8,760 hr/yr / 140,000 Btu/gal * 2,000 lb/ton * Ef (lb/1,000 gal) = (ton/yr)

P M:	2.0	lb/1000 gal =	**7.51**	**ton/yr**
P M-10:	3.3	lb/1000 gal =	**12.39**	**ton/yr**
S O 2:	78.5	lb/1000 gal =	**294.71**	**ton/yr**
N O x:	24.0	lb/1000 gal =	**90.10**	**ton/yr**
V O C:	0.20	lb/1000 gal =	**0.75**	**ton/yr**
C O:	5.0	lb/1000 gal =	**18.77**	**ton/yr**

The following calculations determine the amount of emissions created by the combustion of re-refined waste oil
@ 0.75 % sulfur, 0.947 % ash 0.200 % Cl, 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, and 1.11-3.

Criteria Pollutant: 120 MMBtu/hr * 8760 hr/yr / 140,000 Btu/gal * 2000 lb/ton * Ef (lb/1000 gal) = (ton/yr)

P M:	60.6	lb/1000 gal =	**227.54**	**ton/yr**
P M-10:	48.3	lb/1000 gal =	**181.32**	**ton/yr**
S O 2:	110.3	lb/1000 gal =	**413.91**	**ton/yr**
N O x:	19.0	lb/1000 gal =	**71.33**	**ton/yr**
V O C:	1.0	lb/1000 gal =	**3.75**	**ton/yr**
C O:	5.0	lb/1000 gal =	**18.77**	**ton/yr**
HCL:	13.2	lb/1000 gal =	**49.56**	**ton/yr**

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

Criteria Pollutant:			**Worst Case Fuel**
P M:	**227.54**	**ton/yr**	Waste Oil
P M-10:	**181.32**	**ton/yr**	Waste Oil
S O 2:	**413.91**	**ton/yr**	Waste Oil
N O x:	**90.10**	**ton/yr**	No. 2 Fuel Oil
V O C:	**3.75**	**ton/yr**	Waste Oil
C O:	**18.77**	**ton/yr**	No. 2 Oil or Waste Oil
HCL:	**49.56**	**ton/yr**	Waste Oil

****hot oil heater****

This facility possesses a two (2) asphalt storage tank heaters rated at 1.4 and 1.0 MMBtu/hr, respectively, and two (2) hot oil heaters rated at 1.4 and 2.0 MMBtu/hr, respectively, which combust No. 2 distillate fuel oil.

The following calculations determine the amount of emissions created by the combustion of #2 distillate fuel oil @ 0.50 % sulfur, from hot oil heater, based on 8760 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 1.3-3.

Criteria Pollutant: 5.8 MMBtu/hr * 8,760 hr/yr / 140,000 Btu/gal * 2,000 lb/ton * Ef (lb/1,000 gal) = (ton/yr)

P M:	2.0	lb/1000 gal =	**0.36**	**ton/yr**
P M-10:	3.3	lb/1000 gal =	**0.60**	**ton/yr**
S O 2:	71.0	lb/1000 gal =	**12.88**	**ton/yr**
N O x:	20.0	lb/1000 gal =	**3.63**	**ton/yr**
V O C:	0.34	lb/1000 gal =	**0.06**	**ton/yr**
C O:	5.0	lb/1000 gal =	**0.91**	**ton/yr**

*** * 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, Table 11.1-3 for a drum mix dryer which has the capability of combusting fuel oil:

Pollutant: Ef lb/ton x 300 / 2,000 ton/hr x 8,760 hr/yr

Criteria Pollutant:

P M:	28	lb/ton =	**36,792.00**	**ton/yr**
P M-10:	6.5	lb/ton =	**8,541.00**	**ton/yr**
VOC:	0.032	lb/ton =	**42.05**	**ton/yr**
HCl:	2.10E-04	lb/ton =	**0.28**	**ton/yr**

The VOC emission factor for aggregate drying was obtained from U.S. EPA's AP-42, 5th Edition, Section 11.1, Table 11.1-8.

*** * 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))

=	1.12E-03	lb PM-10/ton
	2.37E-03	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 =	4.5	material moisture content (%)

300 ton/hr / 2,000 lb/ton * 8,760 hrs/yr * Ef (lb/ton of material) = (ton/yr)

Total PM 10 Emissions: **1.48 tons/yr**
Total PM Emissions: **3.12 tons/yr**

*** * paved roads * ***

The following calculations determine the amount of emissions created by vehicle traffic on paved roads, based on 8,760 hours of use and USEPA's AP-42, 5th Edition, Section 13.2.1.

I. Triaxle Dump Trucks

5.929	trip/hr	x
0.053	mile/trip	x
2	(round trip)	x
8,760	hr/yr =	5505.43224 miles per year

Ef = k*(sL/2)^0.65*(W/3)^1.5 - C
= 0.17 lb PM-10/mile
= 0.85 lb PM/mile

where k =	0.016	(particle size multiplier for PM-10) (k=0.082 for PM-30 or TSP)
sL =	0.6	road surface silt loading (g/m^2)
W =	24.0	tons average weight of all vehicles traveling the road
C =	0.00047	emission factor for 1980's vehicle exhaust, brake wear and tire wear for PM and PM10

PM-10: 0.17 lb/mi x 5505.4322 mi/yr = **0.45 tons/yr**
2000 lb/ton

PM: 0.85 lb/mi x 5505.4322 mi/yr = **2.33 tons/yr**
2000 lb/ton

*** * unpaved roads * ***

The following calculations determine the amount of emissions created by vehicle traffic on unpaved roads, based on 8,760 hours of use and USEPA's AP-42, 5th Edition, Section 13.2.2.

I. Triaxle Dump Trucks

5.929	trip/hr	x
0.053	mile/trip	x
2	(round trip)	x
8,760	hr/yr =	5505.43224 miles per year

Ef = k*[(s/12)^a]*[(W/3)^b]*[(365-p)/365]*(S/15)
= 0.73 lb PM-10/mile
= 2.88 lb PM/mile

where k =	1.5	(particle size multiplier for PM-10) (k=4.9 for PM-30 or TSP)
s =	4.8	mean % silt content of unpaved roads
a =	0.9	Constant for PM-10 (a = 0.7 for PM-30 or TSP)
b =	0.45	Constant for PM-10 and for PM-30 or TSP
W =	24.0	tons average weight of all vehicles traveling the road
S =	10.0	mph speed limit
p =	125.0	number of days with at least 0.01 in. of precipitation per year

PM-10: 0.73 lb/mi x 5505.4322 mi/yr = **2.02 tons/yr**
2000 lb/ton

PM: 2.88 lb/mi x 5505.4322 mi/yr = **7.94 tons/yr**
2000 lb/ton

II. Semi-Tank Truck

0.121	trip/hr	x
0.045	mile/trip	x
2	(round trip)	x
8,760	hr/yr =	95.3964 miles per year

Ef = k*[(s/12)^a]*[(W/3)^b]*[(365-p)/365]*(S/15)
= 0.79 lb PM-10/mile
= 3.09 lb PM/mile

where k =	1.5	(particle size multiplier for PM-10) (k=4.9 for PM-30 or TSP)
s =	4.8	mean % silt content of unpaved roads
a =	0.9	Constant for PM-10 (a = 0.7 for PM-30 or TSP)
b =	0.45	Constant for PM-10 and for PM-30 or TSP
W =	28.0	tons average weight of all vehicles traveling the road
S =	10.0	mph speed limit
p =	125.0	number of days with at least 0.01 in. of precipitation per year

PM-10: 0.79 lb/mi x 95.3964 mi/yr = **0.04 tons/yr**
2000 lb/ton

PM: 3.09 lb/mi x 95.3964 mi/yr = **0.15 tons/yr**
2000 lb/ton

III. Front End Loader

42.22	trip/hr x		
0.07	mile/trip x		
2	(round trip) x		
8,760	hr/yr =	51778.608	miles per year

Ef = k*[(s/12)^a]*[(W/3)^b]*[(365-p)/365]*(S/15)

=	0.76	lb PM-10/mile	
=	2.99	lb PM/mile	
where k =	1.5	(particle size multiplier for PM-10)	(k=4.9 for PM-30 or TSP)
s =	4.8	mean % silt content of unpaved roads	
a =	0.9	Constant for PM-10 (a = 0.7 for PM-30 or TSP)	
b =	0.45	Constant for PM-10 and for PM-30 or TSP	
W =	26.0	tons average weight of all vehicles traveling the road	
S =	10.0	mph speed limit	
p =	125.0	number of days with at least 0.01 in. of precipitation per year	

PM-10: 0.76 lb/mi x 51778.608 mi/yr = **19.72 tons/yr**
2000 lb/ton

PM: 2.99 lb/mi x 51778.608 mi/yr = **77.38 tons/yr**
2000 lb/ton

Total PM Emissions From Unpaved Roads = 85.46 tons/yr

Total PM-10 Emissions From Unpaved Roads = 21.78 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)	PM Emissions tons/yr	PM-10 Emisions tons/yr
Sand	1.4	0.080	0.02	0.01
Gravel	0.8	0.770	0.13	0.05
Stone	0.9	0.610	0.12	0.04
Slag	1.2	0.060	0.02	0.01
RAP	0.2	0.630	0.03	0.01
Total			**0.31**	**0.11**

Sample Calculation:

Ef = 1.7*(s/1.5)*(365-p)/235*(f/15)

=	1.62	lb/acre/day
where s =	1.4	% 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

PM = **0.31 tons/yr** **P M-10:** **35% of PM =** **0.11 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/PM10 Ef =	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 =	**0.69**	**tons/yr**	
Total PAH HAPs =	**0.03**	**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 Ef =	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 =	**5.14**	**tons/yr**	(94% of TOC emissions per AP-42)
Worst Case Single HAP (Xylenes) =	**0.03**	**tons/yr**	(0.49% of TOC emissions per AP-42)
Total Volatile HAPs =	**0.08**	**tons/yr**	(1.5% of TOC emissions per AP-42)

CO Ef =	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 =	**1.77**	**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.

PM/PM10 Ef =	0.000332 + 0.00105(-V)e((0.0251)(T+460)-20.43)		
=	5.86E-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 =	**0.77**	**tons/yr**	
Total PAH HAPs =	**0.05**	**tons/yr**	(11.40% of Organic PM emissions per AP-42)*

TOC Ef =	0.0504(-V)e((0.0251)(T+460)-20.43)		
=	1.22E-02	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 =	**16.01**	**tons/yr**	(100% of TOC emissions per AP-42)
Worst Case Single HAP (Formaldehyde) =	**0.11**	**tons/yr**	(0.69% of TOC emissions per AP-42)
Total Volatile HAPs =	**0.21**	**tons/yr**	(1.3% of TOC emissions per AP-42)

CO Ef =	0.00488(-V)e((0.0251)(T+460)-20.43)		
=	1.18E-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 =	**1.55**	**tons/yr**	

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

Organic PM Ef =	0.00141(-V)e((0.0251)(T+460)-20.43)		
=	3.41E-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)	

*** *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 Binder Throughput (tons/yr) = 2,628,000 tons/yr stockpile mix

Potential VOC Emissions (tons/yr) = Potential Throughput (tons/yr) * wt percent flash-off
Potential VOC Emissions = 657.00 tons/yr

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

Criteria Pollutants:

P M:	**37,110.25**	**ton/yr**
P M-10:	**8,747.74**	**ton/yr**
S O 2:	**426.79**	**ton/yr**
N O x:	**93.73**	**ton/yr**
V O C:	**724.01**	**ton/yr**
C O:	**23.00**	**ton/yr**
HCL:	**49.83**	**ton/yr**

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

In order to qualify for the FESOP program, this facility must limit PM-10, SO2, and VOC emissions to less than 100.0 tons per year. Consequently, SO2 emissions from the aggregate dryer are being limited to 77.12 tons per year (90 ton/yr - 12.88 ton/yr from the storage tank heaters and hot oil heaters).

* Emissions of PM and PM-10 from aggregate drying operations are controlled with a 99.880 % control efficiency.

The following calculations determine the amount of emissions created by No.2 fuel oil @ 0.50 % sulfur based on a fuel usage limitation of 1,964,841 gal/yr:

No. 2 Fuel Oil: 1,964,841 gal/yr / 2,000 lb/ton * Ef (lb/1,000 gal) = (ton/yr)

P M:	2.0	lb/1000 gal =	**2.36E-03**	**ton/yr ***
P M-10:	3.3	lb/1000 gal =	**3.89E-03**	**ton/yr ***
S O 2:	78.5	lb/1000 gal =	**77.12**	**ton/yr**
N O x:	24.0	lb/1000 gal =	**23.58**	**ton/yr**
V O C:	0.2	lb/1000 gal =	**0.20**	**ton/yr**
C O:	5.0	lb/1000 gal =	**4.91**	**ton/yr**

The following calculations determine the amount of emissions created by waste oil @ 0.75 % sulfur based on a fuel usage limitation of 1,399,002 gal/yr:

Waste Oil: 1,399,002 gal/yr / 2000 lb/ton * Ef (lb/1000 gal) = (ton/yr)

P M:	60.6	lb/1000 gal =	**0.05**	**ton/yr ***
P M-10:	48.3	lb/1000 gal =	**0.04**	**ton/yr ***
S O 2:	110.3	lb/1000 gal =	**77.12**	**ton/yr**
N O x:	19.0	lb/1000 gal =	**13.29**	**ton/yr**
V O C:	1.0	lb/1000 gal =	**0.70**	**ton/yr**
C O:	5.0	lb/1000 gal =	**3.50**	**ton/yr**
HCL:	13.2	lb/1000 gal =	**9.23**	**ton/yr**

Criteria Pollutant:

			Worst Case Fuel
P M:	**0.05**	**ton/yr ***	Waste Oil
P M-10:	**0.04**	**ton/yr ***	Waste Oil
S O 2:	**77.12**	**ton/yr**	No. 2 or Waste Oil
N O x:	**23.58**	**ton/yr**	No. 2 Fuel Oil
V O C:	**0.70**	**ton/yr**	Waste Oil
C O:	**4.91**	**ton/yr**	No. 2 Fuel Oil
HCL:	**9.23**	**ton/yr**	Waste Oil

Fuel Usage Limitations

Fuel Oil: No. 2 Fuel Oil

77.12	tons SO2/year limited	*	7508.57	Kgals	=	1964.84	Kgals
294.71	tons SO2/year potential			year potential			year limited

Fuel Oil: waste oil

77.12	tons SO2/year limited	*	7508.57	Kgals	=	1399.00	Kgals
413.91	tons SO2/year potential			year potential			year limited
9.62	tons HCL/year limited	*	7508.57	Kgals	=	1457.58	Kgals
49.56	tons HCL/year potential			year potential			year limited

Fuel equivalence limit for No. 2 fuel oil based on SO2 emissions from waste oil

294.71	#2 F.O. potential emissions (ton/yr)	/	413.91	W.O. potential emissions (ton/yr)
7508.57	#2 F.O. potential usage (kgal/yr)		7508.57	W.O. potential usage (kgal/yr)

= 0.7120 Kgal W.O. burned / Kgal #2 F.O. burned

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

	heaters:			nonfugitive			
P M:	0.36	ton/yr x	100.00%	emitted after controls =	**0.36**	**ton/yr**
P M-10:	0.60	ton/yr x	100.00%	emitted after controls =	**0.60**	**ton/yr**
	aggregate drying:			nonfugitive			
P M:	36,792.00	ton/yr x	0.12%	emitted after controls =	**44.15**	**ton/yr**
P M-10:	8,541.00	ton/yr x	0.12%	emitted after controls =	**10.25**	**ton/yr**
VOC:	42.05	ton/yr x	100.00%	emitted after controls =	**42.05**	**ton/yr**
HCl:	0.28	ton/yr x	100.00%	emitted after controls =	**0.28**	**ton/yr**
	conveying/handling:			fugitive			
P M:	3.12	ton/yr x	50%	emitted after controls =	**1.56**	**ton/yr**
P M-10:	1.48	ton/yr x	50%	emitted after controls =	**0.74**	**ton/yr**
	paved roads:			fugitive			
P M:	2.33	ton/yr x	50%	emitted after controls =	**1.17**	**ton/yr**
P M-10:	0.45	ton/yr x	50%	emitted after controls =	**0.23**	**ton/yr**
	unpaved roads:			fugitive			
P M:	85.46	ton/yr x	50%	emitted after controls =	**42.73**	**ton/yr**
P M-10:	21.78	ton/yr x	50%	emitted after controls =	**10.89**	**ton/yr**
	storage piles:			fugitive			
P M:	0.31	ton/yr x	50%	emitted after controls =	**0.16**	**ton/yr**
P M-10:	0.11	ton/yr x	50%	emitted after controls =	**0.05**	**ton/yr**
	load-out & silo filling:			fugitive			
P M:	1.46	ton/yr x	100%	emitted after controls =	**1.46**	**ton/yr**
P M-10:	1.46	ton/yr x	100%	emitted after controls =	**1.46**	**ton/yr**
VOC:	21.15	ton/yr x	100%	emitted after controls =	**21.15**	**ton/yr**
CO:	3.32	ton/yr x	100%	emitted after controls =	**3.32**	**ton/yr**
	cold mix VOC storage:			fugitive			
VOC:	657.00	ton/yr x	4%	emitted after controls =	**26.04**	**ton/yr***

* This is equivalent to 1,042 tons of gelled asphalt binder solvent used per year based on 2.5% of VOC solvent evaporating.

*** * summary of source emissions after controls * ***

Criteria Pollutant:

	Non-Fugitive	Fugitive	Total
PM:	**44.56 ton/yr**	**45.90 ton/yr**	**90.47 ton/yr**
PM-10:	**10.89 ton/yr**	**13.14 ton/yr**	**24.03 ton/yr**
S O 2:	**90.00 ton/yr**	**0.00 ton/yr**	**90.00 ton/yr**
N O x:	**27.21 ton/yr**	**0.00 ton/yr**	**27.21 ton/yr**
V O C:	**42.81 ton/yr**	**47.19 ton/yr**	**90.00 ton/yr**
C O:	**5.82 ton/yr**	**3.32 ton/yr**	**9.14 ton/yr**
HCL:	**9.51 ton/yr**	**0.00 ton/yr**	**9.51 ton/yr**

Hazardous Air Pollutants (HAPs)

**** aggregate dryer burner****

The following calculations determine the amount of HAP emissions created by the combustion of No. 2 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.

Hazardous Air Pollutants (HAPs):

120 MMBtu/hr * 8760 hr/yr / 2,000 lb/ton * Ef (lb/10^12 Btu) = (ton/yr)

			Potential To Emit		Limited Emissions	
Arsenic:	4	lb/10^12 Btu =	2.10E-03	ton/yr	2.52E-06	ton/yr
Beryllium:	3	lb/10^12 Btu =	1.58E-03	ton/yr	1.89E-06	ton/yr
Cadmium:	3	lb/10^12 Btu =	1.58E-03	ton/yr	1.89E-06	ton/yr
Chromium:	3	lb/10^12 Btu =	1.58E-03	ton/yr	1.89E-06	ton/yr
Lead:	9	lb/10^12 Btu =	4.73E-03	ton/yr	5.68E-06	ton/yr
Manganese:	6	lb/10^12 Btu =	3.15E-03	ton/yr	3.78E-06	ton/yr
Mercury:	3	lb/10^12 Btu =	1.58E-03	ton/yr	1.89E-06	ton/yr
Nickel:	3	lb/10^12 Btu =	1.58E-03	ton/yr	1.89E-06	ton/yr
Selenium:	15	lb/10^12 Btu =	7.88E-03	ton/yr	9.46E-06	ton/yr
		Total HAPs =	**0.03**	**ton/yr**	**3.09E-05**	**ton/yr**

The following calculations determine the amount of emissions created by waste oil combustion, from asphalt heating @ 0.0089 % lead, 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, and 1.11-3.

Hazardous Air Pollutants (HAPs):

120 MMBtu/hr * 8760 hr/yr / 140,000 Btu/gal * 2000 lb/ton * 1000 gal/kgal * Ef (lb/1000 gal) = (ton/yr)

			Potential To Emit		Limited Emissions	
Lead:	0.4895	lb/1000 gal =	**1.84**	**ton/yr**	**2.21E-03**	**ton/yr**

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

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 fuel oil. The HAP emission factors represent the worst case emissions from both distillate fuel and waste-oil.

Pollutant:

Ef lb/ton x 300 / 2000 ton/hr x 8760 hr/yr

Hazardous Air Pollutants (HAPs):

			Potential To Emit		Limited Emissions	
Acetaldehyde:	1.30E-03	lb/ton =	1.71	ton/yr	1.71	ton/yr
Acrolein:	2.60E-05	lb/ton =	0.03	ton/yr	0.03	ton/yr
Benzene:	3.90E-04	lb/ton =	0.51	ton/yr	0.51	ton/yr
Ethylbenzene:	2.40E-04	lb/ton =	0.32	ton/yr	0.32	ton/yr
Formaldehyde:	3.10E-03	lb/ton =	4.07	ton/yr	4.07	ton/yr
Hexane:	9.20E-04	lb/ton =	1.21	ton/yr	1.21	ton/yr
2,2,4 Trimethylpentane:	4.00E-05	lb/ton =	0.05	ton/yr	0.05	ton/yr
Methyl chloroform:	4.80E-05	lb/ton =	0.06	ton/yr	0.06	ton/yr
Propionaldehyde:	1.30E-04	lb/ton =	0.17	ton/yr	0.17	ton/yr
Quinone:	1.60E-04	lb/ton =	0.21	ton/yr	0.21	ton/yr
Toluene:	2.90E-03	lb/ton =	3.81	ton/yr	3.81	ton/yr
Total PAH Haps:	8.80E-04	lb/ton =	1.16	ton/yr	1.16	ton/yr
Xylene:	2.00E-04	lb/ton =	0.26	ton/yr	0.26	ton/yr
		Total HAPs =	13.58	ton/yr	13.58	ton/yr

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

Hazardous Air Pollutants (HAPs):

Arsenic:	**0.002**	ton/yr
Acetaldehyde:	**1.708**	ton/yr
Acrolein:	**0.034**	ton/yr
Benzene:	**0.512**	ton/yr
Beryllium:	**0.002**	ton/yr
Cadmium:	**0.002**	ton/yr
Chromium:	**0.002**	ton/yr
Ethylbenzene:	**0.315**	ton/yr
Formaldehyde:	**4.184**	ton/yr
Hexane:	**1.209**	ton/yr
2,2,4 Trimethylpentane:	**0.053**	ton/yr
Methyl chloroform:	**0.063**	ton/yr
Propionaldehyde:	**0.171**	ton/yr
Quinone:	**0.210**	ton/yr
Lead:	**1.842**	ton/yr
Manganese:	**0.003**	ton/yr
Mercury:	**0.002**	ton/yr
Nickel:	**0.002**	ton/yr
Selenium:	**0.008**	ton/yr
Toluene:	**3.811**	ton/yr
Total PAH:	**1.234**	ton/yr
Xylene:	**0.290**	ton/yr
Hydrochloric Acid (HCL):	**49.833**	ton/yr
Other organic HAPs from load-out and silo filling:	**0.160**	ton/yr
Total:	**65.650**	**ton/yr**

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

Hazardous Air Pollutants (HAPs):

Arsenic:	**2.5E-06**	ton/yr
Acetaldehyde:	**1.71**	ton/yr
Acrolein:	**3.4E-02**	ton/yr
Benzene:	**0.51**	ton/yr
Beryllium:	**1.9E-06**	ton/yr
Cadmium:	**1.9E-06**	ton/yr
Chromium:	**1.9E-06**	ton/yr
Ethylbenzene:	**0.315**	ton/yr
Formaldehyde:	**4.184**	ton/yr
Hexane:	**1.209**	ton/yr
2,2,4 Trimethylpentane:	**0.053**	ton/yr
Methyl chloroform:	**0.063**	ton/yr
Propionaldehyde:	**0.171**	ton/yr
Quinone:	**0.210**	ton/yr
Lead:	**0.002**	ton/yr
Manganese:	**3.8E-06**	ton/yr
Mercury:	**1.9E-06**	ton/yr
Nickel:	**1.9E-06**	ton/yr
Selenium:	**9.5E-06**	ton/yr
Toluene:	**3.81**	ton/yr
Total PAH:	**1.23**	ton/yr
Xylene:	**0.29**	ton/yr
Hydrochloric Acid (HCL):	**9.509**	ton/yr
Other organic HAPs from load-out and silo filling:	**0.160**	ton/yr
Total:	**23.465**	**ton/yr**

(total includes additional HAPs from load-out and silo filling not shown)

*** * miscellaneous * ***

326 IAC 7 Compliance Calculations:

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

0.5 lb/MMBtu x 140,000 Btu/gal= 70 lb/1000gal

70 lb/1000gal / 142 lb/1000 gal = 0.5 %

Sulfur content must be less than or equal to 0.5% to comply with 326 IAC 7.

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

1.6 lb/MMBtu x 140,000 Btu/gal= 224 lb/1000gal

224 lb/1000gal / 147 lb/1000 gal = 1.5 %

Sulfur content must be less than or equal to 1.5% to comply with 326 IAC 7.

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:

limit = 55 * (300 ^ 0.11) - 40 = 63.00 lb/hr or
275.95 ton/yr

Since the emission limits pursuant to 326 IAC 6.5-10-14 of 50.80 tons per year and Subpart I of 46.76 tons per year are more stringent than this limit, the limit pursuant to 326 IAC 6-3-2 does not apply. The emission limits pursuant to 326 IAC 6.5-10-14 and Subpart I shall also render the requirements of 326 IAC 2-2 (PSD) not applicable.

PM-10 Emission Limit for Aggregate Dryer pursuant to 326 IAC 2-8 (FESOP):

(90 tons PM-10/yr - 14.77 tons PM-10/yr from other souces)
= 75.23 tons PM-10/yr = 17.18 lbs/hr

PM-10 emissions from the aggregate dryer are controlled to 2.35 lbs/hr < 17.18 lbs/hr (Will be able to comply)

Based on a maximum asphalt mix throughput of 300 tons/hr, this emission limit is equivalent to 0.057 lb PM10 per ton of asphalt mix.

PM Emission Limit for Aggregate Dryer to render 326 IAC 2-2 (PSD) not applicable:

(240.0 tons PM/yr - 49.15 tons PM/yr from other souces)
= 190.85 tons PM-10/yr = 43.57 lbs/hr

PM emissions from the aggregate dryer are controlled to 10.09 lbs/hr < 43.57 lbs/hr (Will be able to comply)

Based on a maximum asphalt mix throughput of 300 tons/hr, this emission limit is equivalent to 0.145 lb PM per ton of asphalt mix.

40 CFR Part 60.90, Subpart I (Standards of Performance for Hot Mix Asphalt Plants) and 326 IAC 6.5-10-14 Compliance Calculations:

The following calculations determine compliance with 326 IAC 6.5-10-14, which applies only to this source, and limits PM emissions to 50.80 tons per year and 0.158 gr/dscf, and NSPS, which limits stack emissions from asphalt plants to 0.04 gr/dscf:

$$\frac{44.20 \text{ ton/yr} * 2000 \text{ lb/ton} * 7000 \text{ gr/lb}}{525{,}600 \text{ min/yr} * 31{,}139 \text{ dscf/min}} = 0.038 \text{ gr/dscf}$$ (Will be able to comply)

Allowable particulate emissions under NSPS equate to 46.76 tons per year. 10.68 lbs/hr

Note:

SCFM = 44,821 acfm * (460 + 68) / (460 + 300)
= 31,139 scfm

Assumes exhaust gas temperature of 300F and exhaust gas flow of 44,821 acfm.