

**FEDERALLY ENFORCEABLE STATE  
OPERATING PERMIT (FESOP)  
and ENHANCED NEW SOURCE REVIEW  
OFFICE OF AIR MANAGEMENT**

**City of Fort Wayne Street Department  
1701 South Lafayette Street  
Fort Wayne, Indiana 46803**

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

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

Operation Permit No.: F003-10047-00293	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

## SECTION A SOURCE SUMMARY

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

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

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

Responsible Official: Mr. Robert Dinse  
Source Address: 1701 South Lafayette Street, Fort Wayne, Indiana 46803  
Mailing Address: 1701 South Lafayette Street, Fort Wayne, Indiana 46803  
SIC Code: 9199  
County Location: Allen  
County Status: Attainment for all criteria pollutants  
Source Status: Federally Enforceable State Operating Permit (FESOP)  
Minor Source, under PSD Rules;

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

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

- (a) One (1) Hauck Starjet drum mixer with heater with a low NO<sub>x</sub> burner identified as SJG#4200, rated at maximum capacity of 37 million British thermal units (mmBtu/hr), with a natural gas as a primary fuel and No. 4 distillate fuel oil as a secondary fuel, maximum capacity of 120 tons per hour, particulate matter controlled by a Baghouse identified as BCI, exhausting through a stack identified as S<sub>1</sub>;
- (b) One (1) 20" drag conveyor identified as DC<sub>1</sub>,
- (c) Four (4) cold feed bins, each bins sized of 8' x 12' connected with a two (2) 3' x 4' screens identified as CFB<sub>1</sub>, and capable of feeding 118.75 tons of wet aggregate per hour into a dryer;
- (d) Four (4) aggregate bins identified as #9, #11, #12, and #13, storing limestone as raw material, transferred by front end loader dropping, each with a storage capacity of 8925 cubic feet.
- (e) Two (2) asphalt cement storage tanks, identified as #AT<sub>1</sub> and AT<sub>2</sub>, each has a capacity of 8,000 gallons,
- (f) One (1) asphalts emulsion storage tank, identified as #AE<sub>1</sub>, with a capacity of 8,000 gallons,
- (g) One (1) dust storage bin, which exhaust back to the drum mixer.

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):

- (1) 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.
- (2) The following VOC and HAP storage containers:
  - (A) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids.
- (3) Application of oils, greases, lubricants or other nonvolatile materials applied as temporary protective coatings.
- (4) The following equipment related to manufacturing activities not resulting in the emissions of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.
- (5) Replacement or repair of electrostatic precipitator, bags in baghouses and filters in other air filtration equipment.
- (6) Conveyors as follow:
  - (A) Covered conveyors for limestone conveying of less than or equal to 7,200 tons per day for sources other than mineral processing plant constructed after August 31, 1983.

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 Management (OAM) for a Federally Enforceable State Operating Permit (FESOP).

A.5 Prior Permit Conditions

- (a) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits.
- (b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, including any term or condition from a previously issued construction or operation permit, IDEM, OAM, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued.

## **SECTION B GENERAL CONDITIONS**

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

- (c) Upon request, the Permittee shall also furnish to IDEM, OAM, copies of records required to be kept by this permit. If the Permittee wishes to assert a claim of confidentiality over any of the furnished records, the Permittee must furnish such records to IDEM, OAM, along with a claim of confidentiality under 326 IAC 17. If requested by IDEM, OAM, or the U.S. EPA, to furnish copies of requested records directly to U. S. EPA, and if the Permittee is making a claim of confidentiality regarding the furnished records, the Permittee must furnish such confidential records directly to the U.S. EPA along with a claim of confidentiality under 40 CFR 2, Subpart B.

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

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

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

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

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

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

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

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

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

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

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

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

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) within ninety (90) days after issuance of this permit, including the following information on each 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;
  - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

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

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

- (b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that lack of proper maintenance does not cause or contribute to a violation of any limitation on emissions or potential to emit.

- (c) PMP's shall be submitted to IDEM, OAM, upon request and shall be subject to review and approval by IDEM, OAM.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:
- (1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or
  - (2) An emergency as defined in 326 IAC 2-7-1(12); or
  - (3) Failure to implement elements of the Preventive Maintenance Plan unless lack of maintenance has caused or contributed to a deviation.
  - (4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred is a deviation.

- (c) Written notification shall be submitted on the attached Emergency/Deviation Occurrence Reporting Form or its substantial equivalent. The notification does not need to be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) Proper notice submittal under 326 IAC 2-7-16 satisfies the requirement of this subsection.

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

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a FESOP modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)]
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAM determines any of the following:
- (1) That this permit contains a material mistake.
  - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
  - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]

- (c) Proceedings by IDEM, OAM, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-8-8(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAM, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAM, may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

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

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

Request for renewal shall be submitted to:

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

- (b) Timely Submittal of Permit Renewal [326 IAC 2-8-3]
  - (1) A timely renewal application is one that is:
    - (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
    - (B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due. [326 IAC 2-5-3]
  - (2) If IDEM, OAM upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.
- (c) Right to Operate After Application for Renewal [326 IAC 2-8-9]

If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAM takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAM, any additional information identified as needed to process the application.

**B.18 Permit Amendment or Modification [326 IAC 2-8-10] [326 IAC 2-8-11]**

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(a) The Permittee must comply with the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11 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 Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34) only if a certification is required by the terms of the applicable rule.

(c) The Permittee may implement the 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 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-8-11(b)(2)]**

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

**B.20 Changes Under Section 502(b)(10) of the Clean Air Act [326 IAC 2-8-15(b)]**

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

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

**B.21 Operational Flexibility [326 IAC 2-8-15]**

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

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

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

and

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

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

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

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

- (b) For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:
  - (1) A brief description of the change within the source;
  - (2) The date on which the change will occur;
  - (3) Any change in emissions; and
  - (4) Any permit term or condition that is no longer applicable as a result of the change.

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

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

B.22 Construction Permit Requirement [326 IAC 2]

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

B.23 Inspection and Entry [326 IAC 2-8-5(a)(2)]

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

- (a) Enter upon the Permittee's premises where a FESOP source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.  
[326 IAC 2-8-5(a)(4)]
  - (1) The Permittee may assert a claim that, in the opinion of the Permittee, information removed or about to be removed from the source by IDEM, OAM, or an authorized representative, contains information that is confidential under IC 5-14-3-4(a). The claim shall be made in writing before or at the time the information is removed from the source. In the event that a claim of confidentiality is so asserted, neither IDEM, OAM, nor an authorized representative, may disclose the information unless and until IDEM, OAM, makes a determination under 326 IAC 17-1-7 through 326 IAC 17-1-9 that the information is not entitled to confidential treatment and that determination becomes final. [IC 5-14-3-4; IC 13-14-11-3; 326 IAC 17-1-7 through 326 IAC 17-1-9]
  - (2) The Permittee, and IDEM, OAM, acknowledge that the federal law applies to claims of confidentiality made by the Permittee with regard to information removed or about to be removed from the source by U.S. EPA. [40 CFR Part 2, Subpart B]

B.24 Transfer of Ownership or Operation [326 IAC 2-1-6][326 IAC 2-8-10]

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

- (a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAM, Permits Branch, within thirty (30) days of the change. Notification shall include a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current Permittee and the new owner.

- (b) The written notification shall be sufficient to transfer the permit to the new owner by an administrative amendment pursuant to 326 IAC 2-8-10. The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) IDEM, OAM shall reserve the right to issue a new permit.

**B.25 Annual Fee Payment [326 IAC 2-8-4(6)][326 IAC 2-8-16]**

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- (a) The Permittee shall pay annual fees to IDEM, OAM, within thirty (30) calendar days of receipt of a billing. If the Permittee does not receive a bill from IDEM, OAM 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 317-233-0425 (ask for OAM, Technical Support and Modeling Section), to determine the appropriate permit fee.

**B.26 Enhanced New Source Review [326 IAC 2]**

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

**SECTION C SOURCE OPERATION CONDITIONS**

Entire Source

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

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

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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 of sulfur dioxide (SO<sub>2</sub>) from the entire source shall be less than one-hundred (100) tons per twelve (12) month period. This shall also make the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable;
  - (2) The potential to emit (PTE) of particulate matter less than 10 microns (PM<sub>10</sub>) from the entire source is less than 100 tons per twelve (12) month period, PTE for particulate matter (PM) from the entire source is less than 250 tons per twelve (12) month period. Therefore, 326 IAC 2-7 (Part 70 Permit) and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) will not apply.
  - (2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source is less than ten (10) tons per twelve (12) month period; and
  - (3) The potential to emit any combination of HAPs from the entire source is less than twenty-five (25) tons per twelve (12) month period.

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

**C.2 Opacity [326 IAC 5-1]**

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

- (a) Visible emissions shall not exceed an average of forty percent (40%) opacity in twenty-four (24) consecutive readings as determined by 326 IAC 5-1-4,
- (b) Visible emissions shall not exceed sixty percent (60%) opacity for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) in a six (6) hour period.

**C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]**

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The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3(a)(2)(A) and (B) are not federally enforceable.

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

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

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

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

**C.6 Operation of Equipment [326 IAC 2-8-5(a)(4)]**

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All air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission unit vented to the control equipment is in operation.

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

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

**C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61.140]**

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

- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
  - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
  - (2) If there is a change in the following:
    - (A) Asbestos removal or demolition start date;
    - (B) Removal or demolition contractor; or
    - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

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

The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (e) **Procedures for Asbestos Emission Control**  
The Permittee shall comply with the emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4 emission control requirements are mandatory for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Indiana Accredited Asbestos Inspector**  
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement that the inspector be accredited is federally enforceable.

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

#### **C.9 Performance Testing [326 IAC 3-6]**

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- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing methods approved by the IDEM,OAM.

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

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

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

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

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

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

##### C.10 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]

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

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

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

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

##### C.11 Monitoring Methods [326 IAC 3]

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

##### C.12 Pressure Gauge Specifications

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

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

**C.13 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68.215]**

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

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

All documents submitted pursuant to this condition shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

**C.14 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-8-4][326 IAC 2-8-5] [326 IAC 1-6]**

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- (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:
  - (1) This condition;
  - (2) The Compliance Determination Requirements in Section D of this permit;
  - (3) The Compliance Monitoring Requirements in Section D of this permit;
  - (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and
  - (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAM upon request and shall be subject to review and approval by IDEM, OAM. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of :
    - (A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and

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

C.15 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4]  
[326 IAC 2-8-5]

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- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAM, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected facility while the corrective actions are being implemented. IDEM, OAM shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAM within thirty (30) days of receipt of the notice of deficiency. IDEM, OAM reserves the authority to use enforcement activities to resolve noncompliant stack tests.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAM that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAM may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate permit conditions may be grounds for immediate revocation of the permit to operate the affected facility.

The documents submitted pursuant to this condition do not require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

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

#### **C.16 Monitoring Data Availability**

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

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

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- (a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAM, representative. 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 written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Records of required monitoring information shall include, where applicable:
  - (1) The date, place, and time of sampling or measurements;
  - (2) The dates analyses were performed;
  - (3) The company or entity performing the analyses;
  - (4) The analytic techniques or methods used;
  - (5) The results of such analyses; and

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

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

- (a) To affirm that the source has met all the compliance monitoring requirements stated in this permit the source shall submit a Quarterly. Compliance Monitoring Report. Any deviation from the requirements and the date(s) of each deviation must be reported.
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:  
  
Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.
- (d) Unless otherwise specified in this permit, any quarterly report shall be submitted within thirty (30) days of the end of the reporting period.
- (e) All instances of deviations as described in Section B- Deviations from Permit Requirements Conditions must be clearly identified in such reports.

- (f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.
- (g) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

### **Stratospheric Ozone Protection**

#### **C.19 Compliance with 40 CFR 82 and 326 IAC 22-1**

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

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

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

### **Construction Conditions [326 IAC 2-1-3.2]**

#### **General Construction Conditions**

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

#### **Effective Date of the Permit**

- C.21 Pursuant to IC 13-15-5-3, this section of this permit becomes effective upon its issuance.
- C.22 Pursuant to 326 IAC 2-1-9(b) (Revocation of Permits), IDEM, OAM may revoke this section of the approved permit if construction is not commenced within eighteen (18) months after receipt of this permit or if construction is suspended for a continuous period of one (1) year or more.
- C.23 All requirements of these construction conditions shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

### **First Time Operation Permit**

C.24 This document shall also become the first-time operation permit for the facilities under this section of this permit, pursuant to 326 IAC 2-1-4 (Operating Permits) when, prior to start of operation, the following requirements are met:

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

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

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

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

### **Notice of Malfunction [326 IAC 1-6-2]**

- (a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM) or appointed representative upon request.
- (b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAM, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.
- (c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).
- (d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

## SECTION D.1 FACILITY OPERATION CONDITIONS

- (a) One (1) Hauck Starjet drum mixer with heater with a low NO<sub>x</sub> burner identified as SJG#4200, rated at maximum capacity of 37 million British thermal units (mmBtu/hr), with a natural gas as a primary fuel and No. 4 distillate fuel oil as a secondary fuel, maximum capacity of 120 tons per hour, particulate matter controlled by a Baghouse identified as BCI, exhausting through a stack identified as S<sub>1</sub>;
- (b) One (1) 20" drag conveyor identified as DC<sub>1</sub>,
- (c) Four (4) cold feed bins, each bins sized of 8' x 12' connected with a two (2) 3' x 4' screens identified as CFB<sub>1</sub>, and capable of feeding 118.75 tons of wet aggregate per hour into a dryer;
- (d) Four (4) aggregate bins identified as #9, #11, #12, and #13, storing limestone as raw material, transferred by front end loader dropping, each with a storage capacity of 8925 cubic feet.
- (e) Two (2) asphalt cement storage tanks, identified as #AT<sub>1</sub> and AT<sub>2</sub>, each has a capacity of 8,000 gallons,
- (f) One (1) asphalts emulsion storage tank, identified as #AE<sub>1</sub>, with a capacity of 8,000 gallons,
- (g) One (1) dust storage bin, which exhaust back to the drum mixer.

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

#### D.1.1 Particulate Matter Limitation [ 326 IAC 12, 40 CFR 60.92, Subpart I and 326 IAC 6-3]

- (a) Pursuant to 326 IAC 12 and 40 CFR 60.92, Subpart I (Standards of Performance for Hot Mix Asphalt Facilities), the PM emissions from the asphalt drum mixer identified as SJG # 4200 shall be limited to 0.04 grain per dry standard cubic foot (gr/dscf). This is equivalent to 4.70 pounds per hour at 20,000 actual cubic feet per minute (acfm) air flow rate. Compliance with this condition will also satisfy the limit in 326 IAC 6-3-2(c).
- (b) Compliance with condition D.1.1(a), will make the requirements of 326 IAC 2-7 (Part 70 Operating Permit) and 326 IAC 2-2(Prevention of Significant Deterioration (PSD)) not applicable.

#### D.1.2 Opacity [326 IAC 12 and 40 CFR 60.92, Subpart I]

Pursuant to 326 IAC 12 and 40 CFR 60.92, Subpart I, the visible emissions from this plant shall not exceed 20 percent opacity. Compliance with this limit shall also satisfy 326 IAC 5-1 (Opacity Limitation).

D.1.3 Sulfur Dioxide Emission Limitations [326 IAC 7-1.1-2]

- (a) Pursuant to 326 IAC 7-1.1-2 (Sulfur Dioxide Emission Limitation), the 37 mmBtu/hr asphalt drum mix burner when combusting distillate fuel oil no. 4 shall be limited to 0.5 pounds per mmBtu heat input, which is equivalent to 81.0 tons per 12 month period.
- (b) Compliance with condition D.1.3(a), will make the requirements of 326 IAC 2-7 (Part 70 Operating Permit) and 326 IAC 2-2(Prevention of Significant Deterioration (PSD)) not applicable.

D.1.4 Volatile Organic Compounds [326 IAC 8-5-2]

Pursuant to 326 IAC 8-5-2 (Miscellaneous Operations: Asphalt Paving), no person shall cause or allow the use of cutback or asphalt emulsion containing more than seven percent (7%) oil distillate by volume of emulsion for any paving application except for the following purposes in items (a) through (c) of this condition:

- (a) penetrating prime coating.
- (b) stockpile storage.
- (c) application during the months of November, December, January, February and March.
- (d) The liquified asphalt usage shall be limited to 1488 tons per 12 month period, based on a monthly rolling total and a maximum of 7% distillate oil. This liquified asphalt usage limit will give an equivalent VOC emissions of 99 tons per 12-month period.
- (e) During the first 12 months of operation, the liquified asphalt usage shall be limited such that the total usage divided by the accumulated months of operation shall not exceed 124 tons per month.
- (f) Compliance with the limit in condition D.1.4(d), and (e) will make the requirements of 326 IAC 2-7 (Part 70 permit) and 326 IAC 2-2 (PSD) not applicable.

D.1.5 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 a drum mixer with a low NO<sub>x</sub> burner identified as SJG # 4200 and a baghouse identified as BCI.

## Compliance Determination Requirements

### D.1.6 Testing Requirements [326 IAC 2-8-5(a)(1),(4)] [326 IAC 12 and 40 CFR Part 60.93, Subpart I]

During the period between 6 and 12 months after issuance of this permit, the Permittee shall perform a stack test to demonstrate compliance with the PM grain loading limit in condition D.1.1 utilizing Methods 5 or 17 (40 CFR 60, Appendix A) or other methods as approved by the Commissioner. The sampling time and sample volume for each run shall be at least 60 minutes and 0.90 dscm (31.80 dscf). This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.

### D.1.7 Opacity Reading [326 IAC 12 and 40 CFR, Part 60.93, Subpart I]

Pursuant to 326 IAC 12 and 40 CFR Part 60.93, Subpart I, a Reference Method 9 (40 CFR 60, Appendix A) and the procedures in §60.11 shall be used to determine opacity limit in condition D.1.2.

### D.1.8 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 7-2-1]

Pursuant to 326 IAC 7-2-1 (Sulfur Dioxide Compliance: Reporting and methods of determine compliance), compliance shall be determined utilizing one of the following options.

- (a) Pursuant to 326 IAC 3-7, the Permittee shall demonstrate that the distillate fuel oil no. 4 sulfur content does not exceed five-tenths percent (0.5%) by weight by:
  - (1) Providing vendor analysis of fuel delivered, if accompanied by a certification;
  - (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; or
- (b) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from the 37 mmBtu per hour asphalt drum mixer 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 either of the methods specified in (a) or (b) above shall not be refuted by evidence of compliance pursuant to the other method.

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

#### D.1.9 Baghouse Operation

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The baghouse identified as BCI shall be in operation at all times when the asphalt drum mixer dryer is in operation.

#### D.1.10 Parametric Monitoring

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The Permittee shall record the total static pressure drop across the baghouse identified as BCI used in conjunction with the asphalt drum mixing process, at least once per day when the asphalt drum mixing process is in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 3.0 and 6.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

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

#### D.1.11 Broken or Failed Bag Detection

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In the event that bag failure has been observed:

- (a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. 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 single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have 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).

#### D.1.12 Visible Emissions Notations

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- (a) Daily visible emission notations of the asphalt plant stack exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

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

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

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- (a) To document compliance with Condition D.1.10 and D.1.12, the Permittee shall maintain the following:
  - (1) Daily records of the following operational parameters during normal operation when venting to the atmosphere:
    - (A) Inlet and outlet differential static pressure; and
    - (B) Cleaning cycle: frequency and differential pressure.
  - (2) Documentation of all response steps implemented, per event .
  - (3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.
  - (4) Quality Assurance/Quality Control (QA/QC) procedures.
  - (5) Operator standard operating procedures (SOP).
  - (6) Manufacturer's specifications or its equivalent.
  - (7) Equipment "troubleshooting" contingency plan.
  - (8) Documentation of the dates vents are redirected.
- (b) The Permittee shall maintain monthly records at the site of the following values:
  - (1) Amount of each fuel used;
  - (2) Average sulfur content of the fuel oil no. 4 used;
  - (3) Average higher heating value of any fuel used;
  - (4) Average sulfur dioxide emission rate (expressed in pounds per million Btu);
  - (5) Calendar dates covered in the compliance determination period;

- (6) Actual fuel oil usage since last compliance determination period and equivalent sulfur dioxide emissions;
- (7) A certification, signed by the owner or operator, that the records of the fuel supplier certifications represent all of the fuel combusted during the period; and
- (8) Fuel supplier certifications.

The fuel supplier certification shall contain, as a minimum, the following:

- (i) The name of the fuel supplier; and
- (ii) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.

The Permittee shall retain records of all recording/monitoring data and support information for a period of five (5) years, or longer if specified elsewhere in this permit, from the date of the monitoring sample, measurement, or report. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit.

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

#### D.1.14 Reporting Requirements [326 IAC 7-2-1]

- (a) The Permittee shall submit reports of calendar month sulfur content, heat content, fuel consumption, and sulfur dioxide rate in pounds per mmBtu upon request to the Office of Air Management (OAM).
- (b) A quarterly summary of the information to document compliance with Conditions D.1.3, and D.1.4 shall be submitted to the address listed in Section C - General Reporting Requirements, 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.

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

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

Source Name: City of Fort Wayne Street Department  
Source Address: 1701 South Lafayette Street, Fort Wayne, Indiana 46803  
Mailing Address: 1701 South Lafayette Street, Fort Wayne, Indiana 46803  
FESOP No.: F003-10047-00293

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

Please check what document is being certified:

- 9 Annual Compliance Certification Letter
- 9 Test Result (specify) \_\_\_\_\_
- 9 Report (specify) \_\_\_\_\_
- 9 Notification (specify) \_\_\_\_\_
- 9 Other (specify) \_\_\_\_\_

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

Signature:

Printed Name:

Title/Position:

Date:

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

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

Source Name: City of Fort Wayne Street Department  
Source Address: 1701 South Lafayette Street, Fort Wayne, Indiana 46803  
Mailing Address: 1701 South Lafayette Street, Fort Wayne, Indiana 46803  
FESOP No.: F003-10047-00293

**This form consists of 2 pages**

**Page 1 of 2**

Check either No. 1 or No.2

**9** 1. This is an emergency as defined in 326 IAC 2-7-1(12)  
CThe Permittee must notify the Office of Air Management (OAM), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and  
CThe Permittee must submit notice in writing or by facsimile within two (2) days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16

**9** 2. This is a deviation, reportable per 326 IAC 2-7-5(3)(c)  
CThe Permittee must submit notice in writing within ten (10) calendar days

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

Facility/Equipment/Operation:

Control Equipment:

Permit Condition or Operation Limitation in Permit:

Description of the Emergency/Deviation:

Describe the cause of the Emergency/Deviation:

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

**Page 2 of 2**

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

Form Completed by: \_\_\_\_\_  
Title / Position: \_\_\_\_\_  
Date: \_\_\_\_\_  
Phone: \_\_\_\_\_

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

**FESOP Quarterly Report**

Source Name: City of Fort Wayne Street Department  
 Source Address: 1701 South Lafayette Street, Fort Wayne, Indiana 46803  
 Mailing Address: 1701 South Lafayette Street, Fort Wayne, Indiana 46803  
 FESOP No.: F003-10047-00293  
 Facility: Asphalt Mixer  
 Parameter: VOC  
 Limits: Liquid Asphalt Usage - 1,488 tons per 12 month period, based on a rolling monthly total  
 Distillate Content - Maximum of 7%

YEAR: \_\_\_\_\_

Month	Column 1		Column 2	Column 1 + Column 2
	Average Distillate Oil Content This Month (%)	Liquid Asphalt Usage This Month (tons/month)	Tons Liquid Asphalt Usage in Previous 11 Months	Tons Liquid Asphalt Usage for 12 Month Total
Month 1				
Month 2				
Month 3				

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

Submitted by: \_\_\_\_\_  
 Title / Position: \_\_\_\_\_  
 Signature: \_\_\_\_\_  
 Date: \_\_\_\_\_  
 Phone: \_\_\_\_\_

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

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

Source Name: City of Fort Wayne Street Department  
 Source Address: 1701 South Lafayette Street, Fort Wayne, Indiana 46803  
 Mailing Address: 1701 South Lafayette Street, Fort Wayne, Indiana 46803  
 FESOP No.: F003-10047-00293

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

This report is an affirmation that the source has met all the compliance monitoring requirements stated in this permit. This report shall be submitted quarterly. Any deviation from the compliance monitoring requirements and the date(s) of each deviation must be reported. Additional pages may be attached if necessary. This form can be supplemented by attaching the Emergency/Deviation Occurrence Report. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

**9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD**

**9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD.**

Compliance Monitoring Requirement (eg. Permit Condition D.1.3)	Number of Deviations	Date of each Deviation

Form Completed By: \_\_\_\_\_  
 Title/Position: \_\_\_\_\_  
 Date: \_\_\_\_\_  
 Phone: \_\_\_\_\_

Attach a signed certification to complete this report.

**MALFUNCTION REPORT**

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR MANAGEMENT  
FAX NUMBER - 317 233-5967**

**This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6  
and to qualify for the exemption under 326 IAC 1-6-4.**

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE: IT HAS POTENTIAL TO EMIT 25 LBS/HR PARTICULATES ?\_\_\_\_, 100 LBS/HR VOC ?\_\_\_\_, 100 LBS/HR SULFUR DIOXIDE ?\_\_\_\_ OR 2000 LBS/HR OF ANY OTHER POLLUTANT ?\_\_\_\_ EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION \_\_\_\_\_.

THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC \_\_\_\_\_ OR, PERMIT CONDITION # \_\_\_\_\_ AND/OR PERMIT LIMIT OF \_\_\_\_\_

THIS INCIDENT MEETS THE DEFINITION OF 'MALFUNCTION' AS LISTED ON REVERSE SIDE ?    Y            N

THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT ?    Y            N

COMPANY: City of Fort Wayne Street Department PHONE NO. ( 219 ) 427 - 1235  
LOCATION: (CITY AND COUNTY): 1701 South Lafayette Street, Fort Wayne, Indiana 46803, Allen County  
PERMIT NO. F003-10043 AFS PLANT ID: 003-00293 AFS POINT ID: \_\_\_\_\_ INSP: Jennifer Schick  
CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON: \_\_\_\_\_

DATE/TIME MALFUNCTION STARTED: \_\_\_\_/\_\_\_\_/ 19\_\_\_\_    \_\_\_\_ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION: \_\_\_\_\_

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE \_\_\_\_/\_\_\_\_/ 19\_\_\_\_    \_\_\_\_\_ AM/PM

TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO2, VOC, OTHER: \_\_\_\_\_

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: \_\_\_\_\_

MEASURES TAKEN TO MINIMIZE EMISSIONS: \_\_\_\_\_

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL\* SERVICES: \_\_\_\_\_

CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS: \_\_\_\_\_

CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT: \_\_\_\_\_

INTERIM CONTROL MEASURES: (IF APPLICABLE) \_\_\_\_\_

MALFUNCTION REPORTED BY: \_\_\_\_\_ TITLE: \_\_\_\_\_  
(SIGNATURE IF FAXED)

MALFUNCTION RECORDED BY: \_\_\_\_\_ DATE: \_\_\_\_\_ TIME: \_\_\_\_\_

**Please note - This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.**

**326 IAC 1-6-1      Applicability of rule**

Sec. 1. The requirements of this rule (326 IAC 1-6) shall apply to the owner or operator of any facility which has the potential to emit twenty-five (25) pounds per hour of particulates, one hundred (100) pounds per hour of volatile organic compounds or SO<sub>2</sub>, or two thousand (2,000) pounds per hour of any other pollutant; or to the owner or operator of any facility with emission control equipment which suffers a malfunction that causes emissions in excess of the applicable limitation.

**326 IAC 1-2-39      “Malfunction” definition**

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. (Air Pollution Control Board; 326 IAC 1-2-39; filed Mar 10, 1988, 1:20 p.m. : 11 IR 2373)

**\*Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

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## Indiana Department of Environmental Management Office of Air Management

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

#### Source Background and Description

Source Name: City of Fort Wayne Street Department  
Source Location: 1701 South Lafayette Street, Fort Wayne, Indiana 46803  
County: Allen  
FESOP No.: F-003-10047-00293  
SIC Code: 9199  
Permit Reviewer: Manoj P. Patel

The Office of Air Management (OAM) has reviewed an application from City of Fort Wayne Street Department relating to the construction and operation of a stationary drum mixed asphalt plant with a maximum capacity of 120 tons per hour.

#### Permitted Emission Units and Pollution Control Equipment

- (1) Two (2) asphalt cement storage tanks, identified as #AT<sub>1</sub> and AT<sub>2</sub>, each has a capacity of 8,000 gallons,
- (2) One (1) asphalt emulsion storage tank, identified as #AE<sub>1</sub>, with a capacity of 8,000 gallons,
- (3) One (1) dust storage bin, which exhaust back to the drum mixer.

The source was issued an Operation Permit (ID. # 02-07-0-0276), on June 30, 1975 for 40 tons per hour asphalt mixing plant. The existing asphalt mixing plant has been removed from the source.

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

- (1) One (1) Hauck Starjet drum mixer with heater with a low NO<sub>x</sub> burner identified as SJG#4200, rated at maximum capacity of 37 million British thermal units (mmBtu/hr), with a natural gas as a primary fuel and No. 4 distillate fuel oil as a secondary fuel, maximum capacity of 120 tons per hour, particulate matter controlled by a Baghouse identified as BCI, exhausting through a stack identified as S<sub>1</sub>;
- (2) One (1) 20" drag conveyor identified as DC<sub>1</sub>,
- (3) Four (4) cold feed bins, each bins sized of 8' x 12' connected with a two (2) 3' x 4' screens identified as CFB<sub>1</sub>, and capable of feeding 118.75 tons of wet aggregate per hour into a dryer;

- (4) Four (4) aggregate bins identified as #9, #11, #12, and #13, storing limestone as raw material, transferred by front end loader dropping, each with a storage capacity of 8925 cubic feet.

### Unpermitted Emission Units and Pollution Control Equipment

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

### Insignificant Activities

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

- (1) 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.
- (2) The following VOC and HAP storage containers:
  - (A) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids.
- (3) Application of oils, greases, lubricants or other nonvolatile materials applied as temporary protective coatings.
- (4) The following equipment related to manufacturing activities not resulting in the emissions of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.
- (5) Replacement or repair of electrostatic precipitator, bags in baghouses and filters in other air filtration equipment.
- (6) Conveyors as follow:
  - (A) Covered conveyors for limestone conveying of less than or equal to 7,200 tons per day for sources other than mineral processing plant constructed after August 31, 1983.

### Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
S <sub>1</sub>	asphalt drum mixer	35	3' 2"	20,000	270

### Recommendation

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

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

An administratively complete FESOP and ENSR application for the purposes of this review was received on August 17, 1998, with additional information received on September 30, October 21, 1998.

This proposed permit will also satisfy the construction permit requirements.

**Emissions Calculations**

- (1) See Appendix A for detailed Emissions Calculations ( pages 1 through 5).

**Total Potential and Allowable Emissions**

Indiana Permit Allowable Emissions Definition (after compliance with applicable rules, based on 8,760 hours of operation per year at rated capacity):

Pollutant	Allowable Emissions (tons/year)	Potential Emissions (tons/year)
Particulate Matter (PM)	30.25*	9889.70
Particulate Matter (PM10)	30.25*	2296.35
Sulfur Dioxide (SO <sub>2</sub> )	81.0	78.70
Volatile Organic Compounds (VOC)	1.30	1.30
Carbon Monoxide (CO)	19.35	19.35
Nitrogen Oxides (NO <sub>x</sub> )	23.50	23.50
Combination of HAPs	3.05	3.05

\* - Total Allowable PM & PM<sub>10</sub> emissions are based on 20.55tons /year (aggregate drying) + 8.20 tons/year (Dryer burner while burning distillate fuel oil as worst case)+ 1.50 tons/year from material handling.

- (a) Allowable emissions are determined from the applicability of rule 326 IAC 6-3, NSPS, 40 CFR 60.90, Subpart I and 326 IAC 7-1.1-2. The asphalt drum mixer shall have an allowable PM emissions using the more stringent between the following equations:

- (1) 326 IAC 6-3: Process weight rate:

$$E = 55 P^{0.11} - 40$$

Where: E = PM allowable emissions, lb./hr  
 P = Process weight rate, ton/hr

$$E = 55 (120)^{0.11} - 40$$

$$E = 53.10 \text{ lb./hr}$$

$$= 232.70 \text{ tons/yr}$$

- (2) Standards of Performance for Hot Mix Asphalt Facilities, Part 60.92, Subpart I

Pursuant to 40 CFR 60, Subpart 60.92, no owner or operator shall discharge or cause to be discharge into the atmosphere from any affected facility any gases which (A) contain particulate matter in excess of 90 mg/dscm (0.04 gr/dscf). (B) exhibit 20 percent opacity, or greater.

$$0.04 \text{ gr/dscf} * 20,000 \text{ acfm} * \frac{528}{460 + 280 \text{ temp}} * \frac{100 - 5\% \text{ moisture}}{100}$$

$$* 525600 \text{ minute/yr} * \text{lb/7000 grain} * \text{ton/2000 lb} = 20.55 \text{ tons PM/yr}$$

Since this federal rule is more stringent than the state rule, 326 IAC 6-3, therefore the PM allowable emissions for the drum asphalt mixer are 20.55 tons per year or an equivalent of 4.70 lbs/hr. Compliance with the NSPS grain loading allowable emissions will also satisfy 326 IAC 6-3.

- (b) Allowable SO<sub>2</sub> emissions are determined from the applicability of rule 326 IAC 326 IAC 7-1.1-2 (Sulfur Dioxide Emission Limitations): Pursuant to this rule, the sulfur dioxide emission from fuel combustion facilities shall be limited to five-tenth (0.50) pounds per million Btu for No. 4 distillate oil combustion. Therefore,

$$0.5 \text{ lb/mmBtu (No. 4 distillate oil)} * 37 \text{ mmBtu/hr} * 8760 \text{ hr/yr} * \text{ton/2000 lb} = 81.0 \text{ t/yr}$$

- (c) The potential SO<sub>2</sub> emissions are less than the allowable emissions, therefore, the potential emissions are used for the permitting determination.
- (d) Allowable emissions (as defined in the Indiana Rule) of dioxides of sulfur (SO<sub>2</sub>) and particulate matter (PM) are greater than 25 tons per year. Therefore, pursuant to 326 IAC 2-1, Sections 1 and 3, a construction permit is required.

**Potential to Emit**

- (a) The source's potential to emit PM<sub>10</sub> and SO<sub>x</sub> are less than 100 tons per year, consisting of:
- (i) 78.70 tons SO<sub>x</sub> per year for the significant activities;
  - (ii) 30.25 tons PM<sub>10</sub> per year from the significant activities; and
- (b) The table below summarizes the total limited potential to emit of the significant and insignificant emission units.

Process / facility	Potential To Emit	
	SO <sub>2</sub>	PM <sub>10</sub>
Significant Activities	78.70	30.25
Insignificant Activities	0.0	0.0
Total Emissions	78.70	30.25

**County Attainment Status**

Pollutant	Status
TSP	attainment or unclassifiable
PM-10	attainment or unclassifiable
SO <sub>2</sub>	attainment or unclassifiable
VOC	attainment or unclassifiable
NO <sub>x</sub>	attainment or unclassifiable
CO	attainment or unclassifiable

**Source Status**

Existing Source PSD, Part 70 or FESOP Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM	0.0
PM10	0.0
SO <sub>2</sub>	0.0
VOC	0.50
CO	0.0
NO <sub>x</sub>	0.0
Combination HAPs	0.0

- (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 more, and it is not in one of the 28 listed source categories.

**Proposed Modification**

PTE from the proposed modification (based on 8,760 hours of operation per year at rated capacity including enforceable emission control and production limit, where applicable):

Pollutant	PM (ton/yr)	PM10 (ton/yr)	SO <sub>2</sub> (ton/yr)	VOC (ton/yr)	CO (ton/yr)	NO <sub>x</sub> (ton/yr)
Proposed Modification	30.20	30.20	78.70	99.0	19.35	23.50
PSD Threshold Level	250	250	250	250	250	250

This modification to an existing minor stationary source is not major because the emission increase is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

### Part 70 Permit Determination

326 IAC 2-8 (Federally State Operating Permit) and 326 IAC 2-7 (Part 70 Permit Program)  
This existing source is subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a)  $PM_{10}$  are greater than 100 tons per year.
- (b) This source, otherwise required to obtain a Title V permit, has agreed to accept a permit with federally enforceable limits that restrict its PTE to below the Title V emission levels. Therefore this source will be issued a Federally Enforceable State Operating Permit (FESOP), pursuant to 326 IAC 2-8.

### Federal Rule Applicability

- (a) Standards of Performance for Hot Mix Asphalt Facilities, 326 IAC 12 and 40 CFR Part 60.90, Subpart, I apply to drum-mix asphalt facility, which commences construction or modification after June 11, 1973. A drum-mix asphalt facility is subject to this NSPS. Pursuant to Part 60.92 through Part 60.93, the following applies to the facility:
  - (1) The drum-mix asphalt facility shall not emit PM in excess of 0.04 grain per dry standard cubic foot (gr/dscf),
  - (2) The visible emissions from this facility shall not exceed twenty percent (20%) opacity or greater, and
  - (3) The owner or operator of the facility shall conduct performance tests to demonstrate compliance with the PM standard of 0.04 gr/dscf, using Method 5, and Method 9 to determine opacity.
- (b) 40 CFR, Part 60.110, Subpart Kb - Standards of performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for which Construction, Reconstruction, or Modification Commenced after July 23, 1984.
  - (1) The proposed asphalt emulsion storage tank (constructed in 1985) with a capacity of 8,000 gallons (30.3 m<sup>3</sup>) is not subject to this NSPS, because its capacity is less than 40 m<sup>3</sup>.
- (c) 40 CFR Part 60 Subpart K - Standards of performance for Volatile Organic Liquid Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced after June 11, 1973, and prior to May 19, 1978.
  - (1) The proposed two (2) asphalt cement tanks (constructed in 1975) with a capacity of 8,000 gallons (30.3 m<sup>3</sup>) are not subject to this subpart, because the tank capacity less than 40,000 gallons (151.40 m<sup>3</sup>).
- (d) There are no National Emissions Standards for Hazardous Air Pollutants 326 IAC 14 & 40 CFR 63, applicable to this source.

### State Rule Applicability

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

This facility is not subject to 326 IAC 2-6 (Emission Reporting), because the source's potential to emit for carbon monoxide (CO), volatile organic compounds (CO), oxides of nitrogen (NO<sub>x</sub>), particulate matter (PM<sub>10</sub>), or sulfur dioxide (SO<sub>2</sub>) emissions are less than 100 tons/yr.

#### 326 IAC 6-3 (Process Operations)

The asphalt drum mixer shall have an allowable PM emissions using the following equation:

(a) 326 IAC 6-3-2(c):

$$E = 55 P^{0.11} - 40$$

Where: E = PM allowable emissions, lb/hr  
P = Process weight rate, ton/hr

$$\begin{aligned} E &= 55 (120)^{0.11} - 40 \\ E &= 53.10 \text{ lb/hr} \\ &= 232.70 \text{ tons/yr} \end{aligned}$$

The asphalt plant is subject to the NSPS, Part 60.90, Subpart I, which limits the PM emissions from the asphalt plant to 0.04 grain per dry standard cubic foot (gr/dscf). The NSPS PM limit is more stringent than the PM limit under 326 IAC 6-3, (see calculation on page 5 of 5 of the spreadsheet). Therefore, the plant is subject to the NSPS limit.

The source is in compliance with this grain loading requirement using a baghouse with a grain loading of 0.04 gr/dscf. Compliance with the grain loading also satisfies 326 IAC 6-3 rule.

#### 326 IAC 6-2 (Particulate Emissions Limitations for Sources of Indirect Heating)

The 37 mmBtu/hr drum mix burner is not subject to this rule, because they are not source of indirect heating.

#### 326 IAC 8-9 (Volatile Organic Liquid Storage Vessels (VOL))

This rule only applies to VOL tanks in nonattainment counties. It does not apply to the two (2) 8,000 gallons asphalt storage tanks and one (1) 8,000 gallons asphalt emulsion tank, because these tanks are not located in a nonattainment county.

#### 326 IAC 8-5-2 (Asphalt Paving)

This source is subject to this rule, which requires that no person shall cause or allow the use of cutback or asphalt emulsion containing more than seven percent (7%) oil distillate by volume of emulsion for any paving application except for the following purposes:

- (a) penetrating prime coating;
- (b) stockpile storage; and
- (c) application during the months of November, December, January, February and March.

The source is in compliance with this rule, using 3% of oil distillate by volume of emulsion.  
Maximum usage of liquified asphalt at 63072 ton/yr, using maximum of 7% of distillate oil.

$$\begin{aligned} \text{VOC emissions} &= 63072 \text{ ton/yr} * 7\% * 95\% \text{ flash off} \\ &= 4194.0 \text{ ton/yr} \end{aligned}$$

$$\begin{aligned} \text{Liquified asphalt usage limit} &= 99 \text{ ton/yr} / 7\% / 95\% \text{ flash off} \\ &= 1488 \text{ ton/yr} \end{aligned}$$

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

The drum-mixer is not subject to 326 IAC 2-1-3.4 (New Source Toxics Control Rule), because it does not emit or have potential to emit (i.e. after control) ten (10) tons per year or more of any hazardous air pollutants or twenty-five (25) tons of any combination of hazardous air pollutants which are listed in section 112(b) of the Clean Air Act.

#### 326 IAC 7-1.1(Sulfur Dioxide Emission Limitation)

The 37 mmBtu/hr drum mix dryer when using fuel oil no. 4 is subject to this rule because the potential SO<sub>2</sub> emissions of 78.70 tons per year, will be more than the applicability level of 25 tons per year.

This rule limits the SO<sub>2</sub> emission to 0.5 pounds per mmBtu heat input when using No. 4 distillate fuel oil which is equivalent to 0.50% average sulfur content in the No. 4 distillate oil.

$$0.5 \text{ lb/mmBtu} * 37 \text{ mmBtu/hr} * 8760 \text{ hr/yr} * \text{ton}/2000 \text{ lb} = 81.0 \text{ ton SO}_2/\text{yr}$$

Since, potential emissions are less than the allowable emissions, the 37 mmBtu/hr drum mix burner will comply with the rule.

### Compliance Requirements

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

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

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

- (a) Drum mix baghouse shall be in operation at all times when the asphalt drum mix is in operation.
- (b) The Permittee shall record the total static pressure drop of the baghouse used to control the PM and PM10 from the asphalt drum mixer, at least once weekly when it is in operation. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across baghouse shall be maintained at a pressure drop of 6 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above-mentioned range for any one reading.

### **Air Toxic Emissions**

Indiana presently requests applicants to provide information on emissions of the 188 hazardous air pollutants set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Construction Permit Application Form Y.

- (a) This new source will emit levels of air toxics less than those which constitute a major source according to Section 112 of the 1990 Amendments to Clean Air Act.
- (b) See page 2 of 5 of the spreadsheet for detailed air toxic calculations.

### **Conclusion**

The construction of this drum mix asphalt dryer will be subject to the conditions of the attached proposed **FESOP and ENSR Permit No.003-10047, Plt ID 003-00293.**

## Indiana Department of Environmental Management Office of Air Management

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

Source Name:	City of Fort Wayne Street Department
Source Location:	1701 South Lafayette Street, Fort Wayne, Indiana 46803
County:	Allen
FESOP No.:	F-003-10047-00293
SIC Code:	9199
Permit Reviewer:	Manoj P. Patel

On November 9, 1998, the Office of Air Management (OAM) had a notice published in the Fort Wayne Journal Gazette, Fort Wayne, Indiana, stating that City of Fort Wayne Street Department had applied for a construction permit to construct and operate a 120-ton asphalt manufacturing operation with a bag house as air pollution control equipment. The notice also stated that OAM proposed to issue a permit for this installation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

No comments received for the proposed FESOP and ENSR permit. On further review, the OAM has made the following change on the Condition D.1.11 (Broken Bag or Failure Detection), on page 28 of 38 of the permit (changes are bolded and deletion is strike-through for emphasis):

#### D.1.11 Broken **or Failed** Bag ~~or Failure~~ Detection

In the event that bag failure has been observed.

- (a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. ~~For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced.~~ **Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. 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) ~~Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion.~~ **For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have 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).**

## Appendix A: Emission Calculations

Company Name: **City of Fort Wayne Street Dept.**  
 Plant Location: **1701 South Lafayette Street, Fort Wayne, Indiana 46803**  
 County: **Allen**  
 CP No.: **003-10047**  
 Plt. ID: **003-00293**  
 Date: **Sept. 15, 1998**  
 Permit Reviewer: **Manoj P. Patel**

### I. Potential Emissions

#### A. Source emissions before controls

#### Dryer Burner - 37 MMBtu/hr firing Natural gas and No.4 fuel oil.

(Natural gas/<100MMBTU/uncontrolled)

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

Pollutant:	<b>37</b> MMBtu/hr * 8760 hr/yr	* Ef (lb/MMcf) = (ton/yr)																															
	1000 Btu/cf * 2000 lb/ton		Fuel Usage (MMCF/yr): <b>324.12</b>																														
<table border="0" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">P M:</td> <td style="width: 25%;">13.7 lb/MMcf =</td> <td style="width: 15%; text-align: center;"><b>2.22</b></td> <td style="width: 15%;">ton/yr</td> <td style="width: 30%;"></td> </tr> <tr> <td>P M-10:</td> <td>13.7 lb/MMcf =</td> <td style="text-align: center;"><b>2.22</b></td> <td>ton/yr</td> <td></td> </tr> <tr> <td>S O x:</td> <td>0.6 lb/MMcf =</td> <td style="text-align: center;"><b>0.10</b></td> <td>ton/yr</td> <td></td> </tr> <tr> <td>N O x:</td> <td>50.0 lb/MMcf =</td> <td style="text-align: center;"><b>8.10</b></td> <td>ton/yr</td> <td style="text-align: right;">(With Low NOx Burner)</td> </tr> <tr> <td>V O C:</td> <td>5.5 lb/MMcf =</td> <td style="text-align: center;"><b>0.89</b></td> <td>ton/yr</td> <td></td> </tr> <tr> <td>C O:</td> <td>83.0 lb/MMcf =</td> <td style="text-align: center;"><b>13.45</b></td> <td>ton/yr</td> <td></td> </tr> </table>				P M:	13.7 lb/MMcf =	<b>2.22</b>	ton/yr		P M-10:	13.7 lb/MMcf =	<b>2.22</b>	ton/yr		S O x:	0.6 lb/MMcf =	<b>0.10</b>	ton/yr		N O x:	50.0 lb/MMcf =	<b>8.10</b>	ton/yr	(With Low NOx Burner)	V O C:	5.5 lb/MMcf =	<b>0.89</b>	ton/yr		C O:	83.0 lb/MMcf =	<b>13.45</b>	ton/yr	
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(#4 oil/ <100MMBTU)

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

Pollutant:	<b>37</b> MMBtu/hr * 8760 hr/yr * 1000000 lb/MMBtu	* Ef (lb/1000 gal) = (ton/yr)																															
	<b>140,000</b> Btu/gal * 2000 lb/ton * 1000 gal/kgal		Fuel Usage (kgal/yr): <b>2315.14</b>																														
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<table border="0" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">S =</td> <td style="width: 15%;">0.48</td> <td style="width: 15%;"></td> <td style="width: 15%;"></td> <td style="width: 40%;">( Shown as Worst Case Sulfur)</td> </tr> <tr> <td>SOx =</td> <td>142 * S</td> <td></td> <td></td> <td>68.16 lbs./1000 gallons</td> </tr> </table>				S =	0.48			( Shown as Worst Case Sulfur)	SOx =	142 * S			68.16 lbs./1000 gallons																				
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**aggregate drying: drum-mix plant - 1 @ 118.70 ton per hour**

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

Potential asphalt produced (ton/yr): 1040075

P M:	19 lb/ton x	<b>118.73</b> ton/hr x	8760 hr/yr =	<b>9880.71</b> ton/yr
		2000 lb/ton		
P M-10:	4.4 lb/ton x	<b>118.73</b> ton/hr x	8760 hr/yr =	<b>2288.16</b> ton/yr
		2000 lb/ton		
Lead:	3.3E-06 lb/ton x	<b>118.73</b> ton/hr x	8760 hr/yr =	<b>0.00</b> ton/yr
		2000 lb/ton		
HAPs:	0.0058 lb/ton x	<b>118.73</b> ton/hr x	8760 hr/yr =	<b>3.02</b> ton/yr
		2000 lb/ton		

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

**conveying / handling**

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

$$E_f = .0032 * \frac{(U/5)^{1.3} * k}{(M/2)^{1.4}} = 0.0028 \text{ lb/ton}$$

where k= 1 (particle size multiplier)  
 U = 12 mph mean wind speed (worst case)  
 M = **5.00** % moisture

P M :	<b>0.0028</b> lb/ton x	<b>113</b> ton/hr x	8760 hr/yr =	<b>1.37</b> ton/yr
		2000 lb/ton		
P M-10:	10% of PM =			<b>0.14</b> ton/yr

**unpaved roads**

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

**A. Semi Truck**

<b>0</b> trip/hr x	
<b>0</b> mile/roundtrip x	
8760 hr/yr =	<b>0</b> miles per year

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

$$= 4.63 \text{ lb/mile}$$

where k = 0.8 (particle size multiplier)  
 s = 4.8 % silt content of unpaved roads  
 p = 125 days of rain greater than or equal to 0.01 inches  
 S = 10 miles/hr vehicle speed  
 W = 28 tons average vehicle weight  
 w = 22 wheels

$$\text{PM: } \frac{4.63 \text{ lb/mi} \times 0 \text{ mi/yr}}{2000 \text{ lb/ton}} = 0.00 \text{ tons/yr}$$

$$\text{P M-10: } 35\% \text{ of PM} = 0.00 \text{ ton/yr}$$

### B. Tri-axle Truck

0 trip/hr x  
 0 mile/roundtrip x  
 8760 hr/yr =

$$0.00 \text{ miles per year}$$

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

$$= 3.02 \text{ lb/mile}$$

where k = 0.8 (particle size multiplier)  
 s = 4.8 % silt content of unpaved roads  
 p = 125 days of rain greater than or equal to 0.01 inches  
 S = 10 miles/hr vehicle speed  
 W = 21 tons average vehicle weight  
 w = 14 wheels

$$\text{PM: } \frac{3.02 \text{ lb/mi} \times 0 \text{ mi/yr}}{2000 \text{ lb/ton}} = 0.00 \text{ tons/yr}$$

$$\text{P M-10: } 35\% \text{ of PM} = 0.00 \text{ ton/yr}$$

### C. Front End Loader

0 trip/hr x  
 0 mile/roundtrip x  
 8760 hr/yr =

$$0.00 \text{ miles per year}$$

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

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

where k = 0.8 (particle size multiplier)  
 s = 4.8 % silt content of unpaved roads  
 p = 125 days of rain greater than or equal to 0.01 inches  
 S = 10 miles/hr vehicle speed  
 W = 35 tons average vehicle weight  
 w = 4 wheels

$$\text{PM: } \frac{2.30 \text{ lb/mi} \times 0 \text{ mi/yr}}{2000 \text{ lb/ton}} = 0.00 \text{ tons/yr}$$

P M-10: 2000 lb/ton  
 35% of PM = 0.00 ton/yr

Total PM: 0.00 tons/yr  
 Total PM-10: 0.00 tons/yr

**storage**

The following calculations determine the amount of emissions created by wind erosion of storage stockpiles, based on 8760 hours of use and AP-42, Ch 11.2.3.

$$\begin{aligned}
 E_f &= 1.7 \cdot (s/1.5) \cdot (365-p)/235 \cdot (f/15) \\
 &= 1.27 \text{ lb/acre/day for sand} \\
 &= 1.39 \text{ lb/acre/day for stone} \\
 &= 1.16 \text{ lb/acre/day for slag} \\
 &= 1.16 \text{ lb/acre/day for gravel} \\
 &= 0.93 \text{ lb/acre/day for RAP} \\
 \text{where } s &= 1.1 \text{ \% silt for sand} \\
 s &= 1.2 \text{ \% silt of stone} \\
 s &= 1.0 \text{ \% silt of slag} \\
 s &= 1.0 \text{ \% silt of gravel} \\
 s &= 0.8 \text{ \% silt for RAP} \\
 p &= 125 \text{ days of rain greater than or equal to 0.01 inches} \\
 f &= 15 \text{ \% of wind greater than or equal to 12 mph}
 \end{aligned}$$

$$\begin{aligned}
 E_p (\text{storage}) &= \frac{E_f \cdot sc \cdot (20 \text{ cuft/ton}) \cdot (365 \text{ day/yr})}{(2000 \text{ lb/ton}) \cdot (43560 \text{ sqft/acre}) \cdot (25 \text{ ft})} \\
 &= 0.10 \text{ tons/yr for sand} \\
 &= 0.00 \text{ tons/yr for stone} \\
 &= 0.00 \text{ tons/yr for slag} \\
 &= 0.00 \text{ tons/yr for gravel} \\
 &= 0.00 \text{ tons/yr for RAP} \\
 \text{Total PM:} &= 0.10 \text{ tons/yr}
 \end{aligned}$$

where sc = 24,000 tons storage capacity for sand  
 sc = 0,000 tons storage capacity for stone  
 sc = 0,000 tons storage capacity for slag  
 sc = 0,000 tons storage capacity for gravel  
 sc = 0,000 tons storage capacity for RAP

P M-10: 35% of PM = 0.04 tons/yr for sand  
 35% of PM = 0.00 tons/yr for stone  
 35% of PM = 0.00 tons/yr for slag  
 35% of PM = 0.00 tons/yr for gravel  
 35% of PM = 0.00 tons/yr for RAP

Total PM-10: 0.04 tons/yr

## II. Allowable Emissions

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

$$\begin{array}{l}
 \frac{0.04 \text{ grain}^*}{\text{dscf}} \times \frac{20000 \text{ acfm}^*}{460} \times \frac{528}{460 + 300 \text{ Temp}^*} \times \frac{100}{100 - 5.00 \% \text{ moisture}} \quad * \\
 \\
 \frac{525600 \text{ minute}^*}{\text{year}} \times \frac{1}{7000 \text{ grain}^*} \times \frac{1 \text{ ton}}{2000 \text{ lb}} = \frac{19.82 \text{ tons PM}}{\text{year}}
 \end{array}$$

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

$$\begin{array}{l}
 \frac{0.03 \text{ grain}^*}{\text{dscf}} \times \frac{20000 \text{ acfm}^*}{460} \times \frac{528}{460 + 300 \text{ Temp}^*} \times \frac{100}{100 - 5.00 \% \text{ moisture}} \quad * \\
 \\
 \frac{525600 \text{ minute}^*}{\text{year}} \times \frac{1}{7000 \text{ grain}^*} \times \frac{1 \text{ ton}}{2000 \text{ lb}} = \frac{14.87 \text{ tons PM}}{\text{year}}
 \end{array}$$