



Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant
DATE: July 25, 2005
RE: Performix Technologies / 091-20085-00125
FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

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

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

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

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

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

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

Enclosures
FNPER.dot 1/10/05



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**FEDERALLY ENFORCEABLE STATE OPERATING
 PERMIT (FESOP)
 OFFICE OF AIR QUALITY**

**Performix Technologies
 8151 South Range Road
 Kingsford Heights, Indiana 46346**

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

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

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

Operation Permit No.: F091-20085-00125	
Issued by: Original Signed By: Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: July 25, 2005 Expiration Date: July 25, 2010

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SECTION A SOURCE SUMMARY

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

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

The Permittee owns and operates stationary source relating to the operation of briquette manufacturing.

Authorized Individual:	General Manager
Source Address:	8151 South Range Road, Kingsford Heights, IN 46346
Mailing Address:	8151 South Range Road, Kingsford Heights, IN 46346
General Source Phone:	(219) 393-5585
SIC Code:	3297
County Location:	LaPorte
Source Location Status:	Marginal Nonattainment for ozone under 8-hour standard Attainment for all other criteria pollutants
Source Status:	Federally Enforceable State Operating Permit (FESOP) Minor Source, under PSD and Emission Offset Rules Minor Source, Section 112 of the Clean Air Act

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

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

- (a) One (1) auto briquette operation identified as F001 (constructed in 1994), with a maximum process weight rate of 8.0 tons per hour, using a dust collectors (CE1 and CE5) for PM and PM10 control, and exhausting through two (2) stacks identified as S01 and S05, consisting of the following equipment and processes: Five (5) storage silos, two (2) weight hoppers, two (2) briquette silos, one (1) mixer, one (1) holding tank, one (1) briquette press, one (1) Trommel (screener), two (2) loading bins, and various equipment involved in the conveying of material.
- (b) One (1) batch briquette operation identified as F002 (constructed in 1994), with a maximum process weight of 3.2 tons per hour, using a dust collector (CE4) for PM and PM10 control, and exhausting through one (1) stack identified as S04, consisting of the following equipment and processes: one (1) feed hopper, one (1) mixer, one(1) holding hopper, one (1) briquette press, one (1) screener, and various equipment involved in the conveying of material.
- (c) One (1) hot top compounding operation identified as F003 (constructed in 1990), with a maximum process weight rate of 1.25 tons per hour, using a dust collector (CE2) for PM and PM10 control, and exhausting through one (1) stack identified as S02, consisting of the following equipment and processes: two (2) storage silos, one (1) storage bin, one (1) enclosed mixer/hopper, and various equipment involved in the conveying of material.
- (d) One (1) coarse mixing operation identified as F004 (constructed in 1990), with a maximum process weight rate of 6.0 tons per hour, and exhausting inside the building, consisting of two (2) enclosed mixers, and various equipment involved in the conveying of material.

- (e) One (1) truck load out and conveying operation identified as F005 (constructed in 2000), with a maximum process weight rate of 20.0 tons per hour, using a dust collector (CE3) for PM and PM10 control and exhausting through one (1) stack identified as S03.

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

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

- (a) Propane-fired combustion sources with heat input equal to or less than six million (6,000,000) British thermal units per hour.
- (b) Equipment powered by internal combustion engines of capacity equal to or less than 500,000 British thermal units per hour, except where total capacity of equipment operated by one stationary source exceeds 2,000,000 British thermal units per hour.
- (c) Vessels storing lubricating oil, hydraulic oils, machining oils, and machining fluids.
- (d) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.
- (e) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (f) Paved and unpaved roads and parking lots with public access.

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

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

A.5 Prior Permits Superseded [326 IAC 2-1.1-9.5]

- (a) All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been
 - (1) incorporated as originally stated,
 - (2) revised, or
 - (3) deletedby this permit.
- (b) All previous registrations and permits are superseded by this permit.

SECTION B GENERAL CONDITIONS

B.1 Permit No Defense [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, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2, and 326 IAC 2-7) shall prevail.

B.3 Permit Term [326 IAC 2-8-4(2)][326 IAC 2-1.1-9.5]

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

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

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

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

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

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

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

B.10 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)]

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

B.11 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 initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications 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 Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
 - (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether compliance was continuous or intermittent;
 - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-8-4(3); and
 - (5) Such other facts as specified in Sections D of this permit, IDEM, OAQ 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 "authorized individual" as defined by 326 IAC 2-1.1-1(1).

B.12 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 (PMPs) 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; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

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

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

The PMP extension notification does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall implement the PMPs, including any required record keeping, as necessary to ensure that failure to implement a PMP does not cause or contribute to an exceedance of any limitation on emissions or potential to emit.
- (c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMP does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation, Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

B.13 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, OAQ, and Northwest Regional Office within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

IDEM, OAQ

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

Northwest Regional Office

Telephone No.: 1-888-209-8892 or,
Telephone No.: 1-219-757-0265
Facsimile No.: 1-219-757-0267

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

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

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

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
 - (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
 - (e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC

Performix Technologies
Kingsford Heights, Indiana
Permit Reviewer: Jenny Acker

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2-8-3(c)(6) be revised in response to an emergency.

- (f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
 - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
 - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
 - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
 - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

Any operations shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.
- (h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

B.14 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 Data Section, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does need to be included in this report.

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

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

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

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a 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)] The notification by the Permittee does require the certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:
 - (1) That this permit contains a material mistake.
 - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
 - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]
- (c) Proceedings by IDEM, OAQ, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-8-8(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

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

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

Request for renewal shall be submitted to:

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

- (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, OAQ, on or before the date it is due.

- (2) If IDEM, OAQ 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, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ, any additional information identified as needed to process the application.

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

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

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

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

Any such application shall be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (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)]

- (d) No permit amendment or modification is required for the addition, operation or removal of a nonroad engine, as defined in 40 CFR 89.2.

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

- (a) The Permittee may make any change or changes at 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 2-8-11.1 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 Quality
100 North Senate Avenue
Indianapolis, Indiana 46204

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, OAQ, in the notices specified in 326 IAC 2-8-15(b)(2), (c)(1), and (d).

- (b) Emission Trades [326 IAC 2-8-15(c)]
The Permittee may trade 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).
- (c) Alternative Operating Scenarios [326 IAC 2-8-15(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, OAQ or U.S. EPA is required.
- (d) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

B.19 Permit Revision Requirement [326 IAC 2-8-11.1]

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

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

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

- (a) Enter upon the Permittee's premises where a FESOP source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample

or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

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

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

- (a) The Permittee must comply with the requirements of 326 IAC 2-8-10 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

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

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

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

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

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

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

- (a) The requirements to obtain a permit revision under 326 IAC 2-8-11.1 are satisfied by this permit for the proposed emission units, control equipment or insignificant activities in Sections A.2 and A.3.
- (b) Pursuant to 326 IAC 2-1.1-9 any permit authorizing construction may be revoked if construction of the emission unit has not commenced within eighteen (18) months from the date of issuance of the permit, or if during the construction work is suspended for a continuous period of one (1) year or more.

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

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

SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

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

C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [40 CFR 52 Subpart P][326 IAC 6-3-2]

- (1) Pursuant to 40 CFR 52 Subpart P, particulate matter emissions from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.
- (2) Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

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

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

- (a) Pursuant to 326 IAC 2-8:
 - (1) The potential to emit any regulated pollutant, except particulate matter (PM), from the entire source shall be limited to less than one-hundred (100) tons per twelve (12) consecutive month period.
 - (2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and
 - (3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.
- (b) 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.3 Opacity [326 IAC 5-1]

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

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

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

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

C.5 Incineration [326 IAC 4-2] [326 IAC 9-1-2(3)]

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

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

C.7 Operation of Equipment [326 IAC 2-8-5(a)(4)]

Except as otherwise provided by statute, rule or in this permit, 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 units vented to the control equipment are in operation.

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

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

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

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

All required notifications shall be submitted to:

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

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

- (e) **Procedures for Asbestos Emission Control**
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1 emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Demolition and renovation**
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).
- (g) **Indiana Accredited Asbestos Inspector**
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Accredited Asbestos inspector is not federally enforceable.

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

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

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

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

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

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

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

Compliance Requirements [326 IAC 2-1.1-11]

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

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

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

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

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

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

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

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

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

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

C.14 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-8-4(3)] [326 IAC 2-8-5(1)]

- (a) 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 (2%) of full scale reading.
- (b) The Permittee may request the IDEM, OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

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

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

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

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

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

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

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

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

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

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

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

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

C.16 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68]

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

C.17 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-8-4] [326 IAC 2-8-5]

(a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP shall be submitted to IDEM, OAQ upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and is comprised of:

(1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected time frame for taking reasonable response steps.

(2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee’s current Compliance Response Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan to include such response steps taken.

- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:
 - (1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or
 - (2) If none of the reasonable response steps listed in the Compliance Response is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.
 - (3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, and it will be ten (10) days or more until the unit or device will be shut down, then the Permittee shall promptly notify the IDEM, OAQ of the expected date of the shut down. The notification shall also include the status of the applicable compliance monitoring parameter with respect to normal, and the results of the response actions taken up to the time of notification.
 - (4) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (c) The Permittee is not required to take any further response steps for any of the following reasons:
 - (1) A false reading occurs due to the malfunction of the monitoring equipment and 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.
 - (3) An automatic measurement was taken when the process was not operating.
 - (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.
- (e) The Permittee shall record all instances when response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-8-12 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- (f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

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

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

The response action documents submitted pursuant to this condition do require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

C.19 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]

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

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

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

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

- (d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1).
- (e) The first report covered the period commencing on the date of issuance of the original FESOP and ended on the last day of the reporting period. All subsequent reporting periods shall be based on calendar years, unless otherwise specified in this permit. For the purpose of this permit “calendar year” means the twelve (12) month period from January 1 to December 31 inclusive.

Stratospheric Ozone Protection

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

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

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

SECTION D.1 FACILITY OPERATION CONDITIONS

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

- (a) One (1) auto briquette operation identified as F001 (constructed in 1994), with a maximum process weight rate of 8.0 tons per hour, using a dust collectors (CE1 and CE5) for PM and PM10 control, and exhausting through two (2) stacks identified as S01 and S05, consisting of the following equipment and processes: Five (5) storage silos, two (2) weight hoppers, two (2) briquette silos, one (1) mixer, one (1) holding tank, one (1) briquette press, one (1) Trommel (screener), two (2) loading bins, and various equipment involved in the conveying of material.
- (b) One (1) batch briquette operation identified as F002 (constructed in 1994), with a maximum process weight of 3.2 tons per hour, using a dust collector (CE4) for PM and PM10 control, and exhausting through one (1) stack identified as S04, consisting of the following equipment and processes: one (1) feed hopper, one (1) mixer, one(1) holding hopper, one (1) briquette press, one (1) screener, and various equipment involved in the conveying of material.
- (c) One (1) hot top compounding operation identified as F003 (constructed in 1990), with a maximum process weight rate of 1.25 tons per hour, using a dust collector (CE2) for PM and PM10 control, and exhausting through one (1) stack identified as S02, consisting of the following equipment and processes: two (2) storage silos, one (1) storage bin, one (1) enclosed mixer/hopper, and various equipment involved in the conveying of material.
- (d) One (1) coarse mixing operation identified as F004 (constructed in 1990), with a maximum process weight rate of 6.0 tons per hour, and exhausting inside the building, consisting of two (2) enclosed mixers, and various equipment involved in the conveying of material.
- (e) One (1) truck load out and conveying operation identified as F005 (constructed in 2000), with a maximum process weight rate of 20.0 tons per hour, using a dust collector (CE3) for PM and PM10 control and exhausting through one (1) stack identified as S03.

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

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

D.1.1 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the following units shall be limited as follows:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

Emission Unit	Process Weight Rate (tons/hr)	Allowable PM Emissions (326 IAC 6-3-2) (lb/hr)
Auto Briquette (F001)	8.0	16.51
Batch Briquette (F002)	3.2	8.93
Hot Top Compounding (F003)	1.25	4.76
Coarse Mixer (F004)	6.0	13.61
Truck Loadout and Conveying (F005)	20.0	30.51

Compliance with 326 IAC 6-3-2 limits, renders the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.

D.1.2 PM10 FESOP Limit [326 IAC 2-8]

Pursuant to 326 IAC 8-2, the source has chosen to limit PM10 emissions to below 100 tons per year. Therefore, 326 IAC 2-7 (Part 70 Permit Program) will not be applicable.

The source will be in compliance with this PM10 limit by limiting the units to less than a total of 99 of PM10 per twelve (12) consecutive month period. The units shall be limited as follows:

Unit	Control Device	PM10 (pounds/hour)	PM10 (tons/year)
F001 (Auto Briquette Operation)	CE1 (baghouse)	4.45	19.5
	CE5 (baghouse)	4.45	19.5
F002 (Batch Briquette Operation)	CE4 (baghouse)	6.39	28
F003 (Hot Top Compounding)	CE2 (baghouse)	1.82	8
F004 (Coarse Mixing)	None	1.14	5
F005 (Truck Loadout & Conveying)	CE3 (baghouse)	3.65	16
Fugitives and Insignificant Activities	None	PTE is below 0.69	PTE is below 3
	Total	22.59	99

D.1.3 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 the Auto Briquette, Batch Briquette, Hot Top Compounding and Truck Loadout and Conveying facilities and their control devices.

Compliance Determination Requirements

D.1.4 Particulate Control

In order to comply with D.1.1 and D.1.2, the dust collectors (CE1, CE2, CE3, CE4, and CE5) for particulate control shall be in operation and control emissions from the Batch Briquette, Auto Briquette, Hot Top Compounding and Truck Loadout and Conveying facilities at all times that these facilities are in operation.

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

D.1.5 Visible Emissions Notations

- (a) Once per day emission notations of the S01, S02, S03, S04, and S05 stack exhausts shall be performed during normal daylight operations when exhausting to 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. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation and Implementation shall be considered a deviation of this permit.

D.1.6 Parametric Monitoring

The Permittee shall record the total static pressure drop across the dust collectors (CE1, CE2, C3, CE4, and CE5) used in conjunction with the Auto Briquette, Hot Top Compounding and Truck Loadout and Conveying facilities, at least daily when the Auto Briquette, Hot Top Compounding and Truck Loadout and Conveying facilities are in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 3.0 and 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation and Implementation shall be considered a deviation of this permit.

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

D.1.7 Baghouse Inspections

An inspection shall be performed each calendar quarter of all dust collectors controlling the briquette manufacturing operation. A dust collector inspection shall be performed within three (3) months of redirecting vents to the atmosphere and every three (3) months thereafter. Inspections are optional when venting to the indoors. Inspections required by this condition shall not be performed in consecutive months. All defective bags shall be replaced.

D.1.8 Broken or Failed Bag Detection

In the event that bag failure has been observed:

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) business 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) business hours of discovery of the failure and shall

include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan -Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit. If operations continue after bag failure is observed and it will be 10 days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

- (b) For single compartment baghouses, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then 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).

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

D.1.9 Record Keeping Requirements

- (a) To document compliance with Condition D.1.3, the Permittee shall maintain of records of any additional inspections prescribed by the Preventive Maintenance Plan.
- (b) To document compliance with Condition D.1.5, the Permittee shall maintain records of visible emission notations of the Auto Briquette, Batch Briquette, Hot Top Compounding, Truck Loadout and Conveying facilities stack exhaust daily.
- (c) To document compliance with Condition D.1.6, the Permittee shall maintain records daily of the total static pressure drop.
- (d) To document compliance with Condition D.1.7, the Permittee shall maintain records of the results of the inspections required under Condition D.1.7, and the dates the vents are redirected.
- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.2

FACILITY OPERATION CONDITIONS

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

- (a) Propane-fired combustion sources with heat input equal to or less than six million (6,000,000) British thermal units per hour.
- (b) Equipment powered by internal combustion engines of capacity equal to or less than 500,000 British thermal units per hour, except where total capacity of equipment operated by one stationary source exceeds 2,000,000 British thermal units per hour.
- (c) Vessels storing lubricating oil, hydraulic oils, machining oils, and machining fluids.
- (d) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.
- (e) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (f) Paved and unpaved roads and parking lots with public access.

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

There are no regulations applicable to these sources.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) CERTIFICATION

Source Name: Performix Technologies
Source Address: 8151 South Range Road, Kingsford Heights, IN 46346
Mailing Address: 101 Tidewater Road NE, Warren, OH 44483
FESOP No.: 091-20085-00125

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

Please check what document is being certified:

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

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

Signature:

Printed Name:

Title/Position:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH
100 North Senate Avenue
Indianapolis, Indiana 46204
Phone: 317-233-5674
Fax: 317-233-5967**

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

Source Name: Performix Technologies
Source Address: 8151 South Range Road, Kingsford Heights, IN 46346
Mailing Address: 101 Tidewater Road NE, Warren, OH 44483
FESOP No.: 091-20085-00125

This form consists of 2 pages

Page 1 of 2

- | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input type="checkbox"/> This is an emergency as defined in 326 IAC 2-7-1(12) <ul style="list-style-type: none">• The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and• The Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16 |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

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

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

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

Page 2 of 2

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

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

A certification is not required for this report.

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

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

Source Name: Performix Technologies
Source Address: 8151 South Range Road, Kingsford Heights, IN 46346
Mailing Address: 101 Tidewater Road NE, Warren, OH 44483
FESOP No.: 091-20085-00125

Months: _____ to _____ Year: _____

Page 1 of 2

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

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

Form Completed By: _____

Title/Position: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Federally Enforceable State Operating Permit (FESOP)

Source Background and Description

Source Name:	Performix Technologies
Source Location:	8151 South Range Road, Kingsford Heights, IN 46346
County:	LaPorte
SIC Code:	3297
Operation Permit No.:	F091-20085-00125
Permit Reviewer:	Jenny Acker

The Office of Air Quality (OAQ) has reviewed an application from Performix Technologies relating to the operation of briquette manufacturing.

Permitted Emission Units and Pollution Control Equipment

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

- (a) One (1) auto briquette operation consisting of five (5) storage silos and bucket elevators, and conveyors, identified as F001 (constructed in 1994), with a maximum process weight rate of 8.0 tons per hour, using a dust collector (CE1) for PM and PM10 control, and exhausting through one (1) stack identified as S01.
- (b) One (1) batch briquette operation consisting of feed hopper, enclosed mixer and a screener identified as F002 (constructed in 1994), with a maximum process weight rate of 3.2 tons per hour, and exhausting inside the building.
- (c) One (1) hot top compounding operation consisting of two (2) storage silos, storage bin gravity chute and enclosed mixer/hopper, identified as F003 (constructed in 1990), with a maximum process weight rate of 1.25 tons per hour, using a dust collector (CE2) for PM and PM10 control, and exhausting through one (1) stack identified as S02.
- (d) One (1) coarse mixing operation with two (2) enclosed mixers, identified as F004 (constructed in 1990), with a maximum process weight rate of 6.0 tons per hour, and exhausting inside the building.
- (e) One (1) truck load out and conveying operation identified as F005 (constructed in 2000), with a maximum process weight rate of 20.0 tons per hour, using a dust collector (CE3) for PM and PM10 control and exhausting through one (1) stack identified as S03.

Unpermitted Emission Units and Pollution Control Equipment

The source also consists of the following unpermitted emission units:

- (a) Modifications to the Auto Briquette operation (F001) as follows: installation and operation of two (2) weigh hoppers, one (1) mixing tank, one (1) holding tank, and two (2) cambelt conveyors with a maximum process weight of eight (8) tons per hour.

New Emission Units and Pollution Control Equipment

- (a) One (1) dust collector, identified as CE4, to be constructed in 2005 for particulate control of the Batch Briquetter operation (F002), exhausting to stack S04.
- (b) One (1) dust collector, identified as CE5, to be constructed in 2005 for particulate control of the Auto Briquetter operation (F001), exhausting to stack S05.

Emission Units and Pollution Control Equipment After Issuance

- (a) One (1) auto briquette operation identified as F001 (constructed in 1994), with a maximum process weight rate of 8.0 tons per hour, using a dust collectors (CE1 and CE5) for PM and PM10 control, and exhausting through two (2) stacks identified as S01 and S05, consisting of the following equipment and processes: Five (5) storage silos, two (2) weigh hoppers, two (2) briquette silos, one (1) mixer, one (1) holding tank, one (1) briquette press, one (1) Trommel (screener), two (2) loading bins, and various equipment involved in the conveying of material.
- (b) One (1) batch briquette operation identified as F002 (constructed in 1994), with a maximum process weight of 3.2 tons per hour, using a dust collector (CE4) for PM and PM10 control, and exhausting through one (1) stack identified as S04, consisting of the following equipment and processes: one (1) feed hopper, one (1) mixer, one(1) holding hopper, one (1) briquette press, one (1) screener, and various equipment involved in the conveying of material.
- (c) One (1) hot top compounding operation identified as F003 (constructed in 1990), with a maximum process weight rate of 1.25 tons per hour, using a dust collector (CE2) for PM and PM10 control, and exhausting through one (1) stack identified as S02, consisting of the following equipment and processes: two (2) storage silos, one (1) storage bin, one (1) enclosed mixer/hopper, and various equipment involved in the conveying of material.
- (d) One (1) coarse mixing operation identified as F004 (constructed in 1990), with a maximum process weight rate of 6.0 tons per hour, and exhausting inside the building, consisting of two (2) enclosed mixers, and various equipment involved in the conveying of material.
- (e) One (1) truck load out and conveying operation identified as F005 (constructed in 2000), with a maximum process weight rate of 20.0 tons per hour, using a dust collector (CE3) for PM and PM10 control and exhausting through one (1) stack identified as S03.

Insignificant Activities

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(12).

- (a) Propane-fired combustion sources with heat input equal to or less than six million (6,000,000) British thermal units per hour.
- (b) Equipment powered by internal combustion engines of capacity equal to or less than 500,000 British thermal units per hour, except where total capacity of equipment operated by one stationary source exceeds 2,000,000 British thermal units per hour.

- (c) Vessels storing lubricating oil, hydraulic oils, machining oils, and machining fluids.
- (d) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.
- (e) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (f) Paved and unpaved roads and parking lots with public access.

Existing Approvals

The source was issued a Minor Source Operating Permit (MSOP 091-15241-00125) on December 19, 2003.

Enforcement Issue

- (a) IDEM is aware that equipment has been constructed and operated prior to receipt of the proper permit. The subject equipment is listed in this Technical Support Document under the condition entitled "Unpermitted Emission Units and Pollution Control Equipment".
- (b) IDEM is reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (F)
S01	Auto Briquette (F001)	17	1.5	5940	Ambient
S02	Hot Top (F003)	17	1.0	3800	Ambient
S03	Truck Loadout (F005)	14	1.5	7500	Ambient
S04	Batch Briquette (F002)	14	2.0	14000	Ambient
S05	Auto Briquette (F001)	14	2.0	14000	Ambient

Recommendation

The staff recommends to the Commissioner that this Federally Enforceable State Operating Permit be approved. This recommendation is based on the following facts and conditions:

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

An application for the purposes of this review was received on December 29, 2004.

Emission Calculations

See Appendix A pages 1 through 7 of this document for detailed emissions calculations.

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA.”

Pollutant	Potential to Emit of Permitted Units (tons/year)	Increased Potential to Emit due to New Emission Units, and Updated Calculations (tons/year)	Potential to Emit (tons/year)
PM	81.45	93.89	175.34
PM-10	77.17	95.07	172.24
SO ₂	7.62	0.00	7.62
VOC	0.14	0.00	0.14
CO	0.92	0.00	0.92
NOx	5.46	0.00	5.46

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of pollutants are equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7. The source will be issued a FESOP because the source will limit its emissions below the Title V levels.
- (b) Fugitive Emission
 Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980 the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted towards determination of PSD and Emission Offset applicability.

Potential To Emit After Issuance

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

Process/ Emission Unit	Potential to Emit After Issuance (tons/year)						
	PM	PM-10	SO ₂	VOC	CO	NOx	HAPs
Auto Briquette (F001)	1.33	1.02	-	-	-	-	-
Batch Briquette (F002)	0.76	0.63	-	-	-	-	-
Hot Top (F003)	0.23	0.19	-	-	-	-	-
Course Mixer (F004)	1.48	0.73	-	-	-	-	-
Truck Loadout (F005)	1.73	.96	-	-	-	-	-
Fugitive Emissions	1.49	0.39	-	-	-	-	-
Insignificant Activities	0.17	0.17	7.62	0.14	0.92	5.46	Neg.
Total Emissions	7.19	4.10	7.62	0.14	0.92	5.46	Neg.

The following citation requires the air pollution control equipment, dust collectors, be operational. The manufacturer cites 99% efficiency. This will limit the PM and PM-10 emissions as described in the table above. The PTE was calculated at maximum air flow and for a time period of 8760 hours per year. Therefore, no additional limitations on operating time or process parameters will be required.

- (a) Pursuant to 326 IAC 2-8-5, all air pollution control equipment listed in the permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.
- (b) Pursuant to 326 IAC 2-8, PM-10 will be emitted at levels less than 100 tpy.
- (c) Pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration), PM will be emitted at levels less than 250 tpy.

County Attainment Status

The source is located in LaPorte County.

Pollutants	Status (attainment, maintenance attainment, or unclassifiable; severe, moderate, or marginal nonattainment)
PM-2.5	Attainment
PM-10	Attainment
SO ₂	Attainment
NO ₂	Attainment
1-hour Ozone	Attainment
8-hour Ozone	Marginal Attainment
CO	Attainment
Lead	Attainment

- (a) Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to the ozone standards. LaPorte County has been designated as nonattainment for the 8-hour ozone standard. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Emission Offset 326 IAC 2-3.

- (b) LaPorte County has been classified as attainment or unclassifiable for SO₂, PM-10, CO, NO₂, and Lead. Therefore, these emissions were reviewed pursuant to the requirements for the Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (c) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed sources under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Source Status

Emission Offset, PSD, Part 70 or FESOP Definition (emissions after controls, based on 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Actual Emissions (tons/year)
PM	Less than 250
PM-10	Less than 250
SO ₂	Less than 250
VOC	Less than 100
CO	Less than 250
NO _x	Less than 100
HAP (specify)	Neg.

- (a) This source is not a major stationary source because no attainment regulated pollutant is emitted at a rate equal to or greater than 250 tons per year and no nonattainment regulated pollutant is emitted at rate equal to or greater than 100 tons per year, and it is not 1 of the 28 listed source categories.

Federal Rule Applicability

NSPS

- (a) This source does not operate any crushers or grinders. Therefore, pursuant to 40 CFR 60.670(a)(2), 40 CFR Part 60, Subpart 000 (Standards of Performance for Nonmetallic Mineral Processing Plants) does not apply.

NESHAPs

- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this source.

State Rule Applicability - Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration (PSD))

The emissions associated with this source are less than PSD major source levels. Therefore, 326 IAC 2-2 does not apply.

326 IAC 2-3 (Emission Offsets)

The emissions associated with this source are less than the Emission Offset major source levels. Therefore, 326 IAC 2-3 does not apply.

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

The source will emit less than 10 tons per year of a single HAP and/or less than 25 tons per year of a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

326 IAC 2-6 (Emission Reporting)

This source is not required to have an operating permit under 326 IAC 2-7, Part 70 Permit Program, is not located in Lake or Porter County and does not emit lead into the air at levels greater than or equal to five (5) tons per year. Therefore, 326 IAC 2-6 does not apply.

326 IAC 2-8 (FESOP)

Pursuant to 326 IAC 2-8, the source has chosen to limit PM-10 emissions to below 100 tons per year. Therefore, 326 IAC 2-7 (Part 70 Permit Program) will not be applicable.

The Permittee shall be in compliance with this PM10 limit by limiting the units to less than a total of 99 tons of PM10 per twelve (12) consecutive month period. The units shall be limited as follows:

Unit	Control Device	PM10 (pounds/hour)	PM10 (tons/year)
F001 (Auto Briquette Operation)	CE1 (baghouse)	4.45	19.5
	CE5 (baghouse)	4.45	19.5
F002 (Batch Briquette Operation)	CE4 (baghouse)	6.39	28
F003 (Hot Top Compounding)	CE2 (baghouse)	1.82	8
F004 (Coarse Mixing)	None	1.14	5
F005 (Truck Loadout & Conveying)	CE3 (baghouse)	3.65	16
Fugitives and Insignificant Activities	None	PTE is below 0.69	PTE is below 3
	Total	22.59	99

326 IAC 5-1 (Opacity Limitations)

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

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

326 IAC 6-4 (Fugitive Dust Emissions)

This source is subject to 326 IAC 6-4 for fugitive dust emissions. Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions), fugitive dust shall not be visible crossing the boundary or property line of a source. Observances of visible emissions crossing property lines may be refuted by factual data expressed in 326 IAC 6-4-2(1), (2) or (3).

State Rule Applicability - Individual Facilities

326 IAC 6-3-2 (Particulate)

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the following processes shall be limited by the following:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

Emission Unit	Process Weight Rate (tons/hr)	Uncontrolled PM Emissions (lb/hr)	⁽¹⁾ Control Efficiency %	Controlled PM Emissions (lb/hr)	Allowable PM Emissions (326 IAC 6-3-2) (lb/hr)
Auto Briquette (F001)	8.0	17.22	99	.030	16.51
Batch Briquette (F002)	3.2	12.05	99	0.17	8.93
Hot Top Compounding (F003)	1.25	3.28	99	0.05	4.76
Coarse Mixer (F004)	6	0.34	0	0.34	13.62
Truck Loadout and Conveying	20	6.76	99	0.39	30.5

The dust collectors CE1, CE2, CE3, CE4 and CE5 shall be in operation at all times the Auto Briquette, Batch Briquette, Hot Top Compounding, and Truck Loadout and Conveying operations are in operation, in order to comply with this limit.

State Rule Applicability – Insignificant Activities

No applicable regulations.

Testing Requirements

Stack testing for the Auto Briquette, Batch Briquette, Coarse Mixing, and Truck Loadout and Conveying operations is not required because the controlled potential PM emissions (after the control of dust collectors) from the operations are 0.30, 0.17, 0.05, 0.34, and 0.39 lbs PM/hr, respectively which are much less than the allowable 16.51, 8.93, 4.76, 13.62, and 30.5 lbs PM/hr, respectively and each dust collector shall be in operation at all times when the Auto Briquette, Batch Briquette, Hot Top Compounding, and Truck Loadout and Conveying operations are in operation.

Compliance Requirements

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

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

1. The Auto Briquette, Batch Briquette, Hot Top Compounding, and Truck Loadout and Conveying facilities have applicable compliance monitoring conditions as specified below:
 - (a) Visible emission notations of the S01, S02, S03, S04 and S05 stack exhausts shall be performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal. 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. 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. 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. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation and Implementation shall be considered a deviation of this permit.
 - (b) The Permittee shall record the total static pressure drop across the dust collectors (CE1, CE2, CE3, CE4 and CE5) used in conjunction with the Auto Briquette, Batch Briquette, Hot Top Compounding, and Truck Loadout facilities, at least once per day when facilities are in operation. When for any one reading, the pressure drop across the dust collector is outside the normal range of 3.0 and 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation and Implementation shall be considered a deviation of this permit. The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.
 - (c) An inspection shall be performed each calendar quarter of all dust collectors (CE1, CE2, CE3, CE4 and CE5) controlling the briquette manufacturing operation. A dust collector inspection shall be performed within three (3) months of redirecting vents to the atmosphere and every three (3) months thereafter. Inspections are optional when venting to the indoors. Inspections required by this condition shall not be performed in consecutive months. All defective bags shall be replaced
 - (d) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions. Within eight (8) business 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) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation and Implementation shall be considered a deviation of this permit.

- (e) For single compartment dust collectors, if failure is indicated by a significant drop in the dust collector's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced.

These monitoring conditions are necessary because the dust collectors for these facilities must operate properly to ensure compliance with 326 IAC 6-3 (Process Operations) and 326 IAC 2-8 (Federally Enforceable State Operating Permits).

Conclusion

The operation of this briquette manufacturing plant shall be subject to the conditions of the attached Federally Enforceable State Operating Permit (FESOP) No. 091-20085-00125.

**Appendix A: Emissions Calculations
Summary of Emissions**

Company Name: Performix Technologies
Address City IN Zip: 8151 South Range Road, Kingsford Heights, IN 46346
Permit Number: 091-20085-00125
Plt ID: 091-00125
Reviewer: Jenny Acker
Date: 1/10/2005

Uncontrolled Potential Emissions (tons/year)

Pollutant	Emissions Generating Activity							TOTAL
	F001 Emissions	F002 Emissions	F003 Emissions	F004 Emissions	F005 Emissions	Fugitive Emissions Roads & Storage Piles	Insignificant Activities	
PM	75.44	52.79	14.36	1.48	29.60	1.49	0.17	175.34
PM10	75.13	52.67	14.31	0.73	28.84	0.39	0.17	172.24

Uncontrolled Potential Emissions (lbs/hr)

Pollutant	Emissions Generating Activity							TOTAL
	F001 Emissions	F002 Emissions	F003 Emissions	F004 Emissions	F005 Emissions	Fugitive Emissions (Roads & Storage Piles)	Insignificant Activities	
PM	17.22	12.05	3.28	0.34	6.76	0.34	0.04	40.03
PM10	17.15	12.02	3.27	0.17	6.58	0.09	0.04	39.32

Total emissions based on rated capacity at 8,760 hours/year and include IAs and Fugitive Emissions

Potential Emissions (Controlled) (tons/year)

Pollutant	Emissions Generating Activity							TOTAL
	F001 Emissions	F002 Emissions	F003 Emissions	F004 Emissions	F005 Emissions	Fugitive Emissions Roads & Storage Piles	Insignificant Activities	
PM	1.33	0.76	0.23	1.48	1.73	1.49	0.17	7.19
PM10	1.02	0.63	0.19	0.73	0.96	0.39	0.17	4.10

Total emissions based on rated capacity at 8,760 hours/year and include IAs and Fugitive Emissions

Potential Emissions (Controlled) (lbs/hr)

Pollutant	Emissions Generating Activity							TOTAL
	F001 Emissions	F002 Emissions	F003 Emissions	F004 Emissions	F005 Emissions	Fugitive Emissions Roads & Storage Piles	Insignificant Activities	
PM	0.30	0.17	0.05	0.34	0.39	0.97	0.04	2.27
PM10	0.23	0.14	0.04	0.17	0.22	0.09	0.04	0.94

Total emissions based on rated capacity at 8,760 hours/year and include IAs and Fugitive Emissions

Potential Emissions From Insignificant Activities		
Pollutant	lbs/hr	tpy
NOx	1.25	5.46
SO ₂	1.74	7.62
CO	0.21	0.92
VOC	0.03	0.14

**Appendix A: Emissions Calculations
PM and PM10 Emission Calculation
Dust Collectors**

Company Name: Performix Technologies
Address City IN Zip: 8151 South Range Road, Kingsford Heights, IN 46346
Permit Number: 091-20085-00125
Plt ID: 091-00125
Reviewer: Jenny Acker
Date: 1/10/2005

Dust Collector (Emission Unit)	Annual Operating Hours	Operating Flow Rate (scfm)	Outlet Grain Loading (g/dscf)	Material Throughput (tons/hr)	Potential PM & PM-10 Emissions (lb/hr)	Potential PM & PM-10 Emissions (tpy)	Controlled Potential PM & PM-10 Emissions (lb/hr)	Controlled Potential PM & PM-10 Emissions (tpy)
CE1 (F001)	8760	5940	0.001	8	5.09	22.30	0.05	0.22
CE2 (F003)	8760	3800	0.001	1.25	3.26	14.27	0.03	0.14
CE3 (F005)	8760	7500	0.001	20	6.43	28.16	0.06	0.28
CE4 (F002)	8760	14000	0.001	8	12.00	52.56	0.12	0.53
CE5 (F001)	8760	14000	0.001	3.2	12.00	52.56	0.12	0.53
Total PTE for Dust Collector Sources					38.78	169.84	0.39	1.70

PM-10 Emissions are equivalent to PM emissions

Methodology

Controlled Potential PM & PM-10 Emissions (lb/hr) = Operating Flow Rate (scfm) * Grain Loading (g/dscf) * lb/7000 Grain * 60 min/hr

Controlled Potential PM & PM-10 Emissions (tpy) = Controlled Potential PM & PM-10 Emissions (lb/hr) * ton/2000 lbs * 8760 hrs/yr

Potential PM & PM-10 Emissions (lb/hr) = Controlled Potential PM & PM-10 Emissions (lb/hr) / (1-efficiency),

where control efficiency is equal to or greater than 99%

Potential PM & PM-10 Emissions (tpy) = Controlled Potential PM & PM-10 Emissions (lb/hr) / (1-efficiency),

where control efficiency is equal to or greater than 99%

Emission Factors from AP 42, Chapter 11.12 Table 11.12-2, SCC #3-05-011-05,22,24

These calculations address the emission sources that are vented directly to the baghouses. The conveyor systems are not vented directly to the baghouses. Therefore, they are considered separately as conveying emissions, (TSD page 5 of 7)

**Appendix A: Emissions Calculations
PM and PM10 Emission Calculation
Roads**

Company Name: Performix Technologies
Address City IN Zip: 8151 South Range Road, Kingsford Heights, IN 46346
Permit Number: 091-20085-00125
Plt ID: 091-00125
Reviewer: Jenny Acker
Date: 1/10/2005

**** unpaved roads ****

The following calculations determine the amount of emissions created by vehicle traffic on unpaved roads, based on 8,760 hours of use and AP-42, Ch 13.2.2.2

I. Dump Trucks

0.125 trip/hr x 0.14 mile/trip x 2 (round trip) x 8,760 hr/yr = 307 mile/yr

$$E_f = k \cdot [(s/12)^a] \cdot [(W/3)^b] / [(M_{dry}/0.2)^c] \cdot [(365-p)/365] \cdot (S/15)$$

= 3.75 lb PM/mile
 = 0.97 lb PM-10/mile

where k = 10 (particle size multiplier, PM30) (k= 2.6 for PM10)
 s = 4.8 mean % silt content of unpaved plant roads
 a = 0.8 Constant for PM30/PM-10
 W = 38 tons, average vehicle weight
 b = 0.5 Constant for PM30 (b = 0.4 for PM10)
 M_{dry} = 0.2 surface material moisture content, % (default 0.2 (dry conditions) when using rainfall parameter)
 c = 0.4 Constant for PM30 (c = 0.3 for PM10)
 p = 125 number of days with at least 0.01 in of precipitation per year
 S = 5 mph speed limit

PM: $\frac{3.75 \text{ lb/mi} \times 307 \text{ mi/yr}}{2000 \text{ lb/ton}} = 0.57 \text{ tons/yr}$

PM-10: $\frac{0.97 \text{ lb/mi} \times 307 \text{ mi/yr}}{2000 \text{ lb/ton}} = 0.15 \text{ tons/yr}$

Total PM Emissions From Unpaved Roads = 0.57 tons/yr
0.13 lb/hr
Total PM-10 Emissions From Unpaved Roads = 0.15 tons/yr
0.03 lb/hr

**** paved roads ****

II. 40' Semi Truck

0.125 trip/hr x 0.03 mile/trip x 2 (round trip) x 8,760 hr/yr = 66 mile/yr

$$E_f = k \cdot (sL/2)^{0.65} \cdot (W/3)^{1.5}$$

$$= 0.25 \text{ lb PM-10/mile}$$

$$= 1.30 \text{ lb PM/mile}$$

where k = 0.016 (particle size multiplier for PM-10) (k=0.082 for PM-30 or TSP)
 sL = 0.4 mean silt loading (g/m²)
 W = 38 tons average vehicle weight

PM: $\frac{1.30 \text{ lb/mi} \times 66 \text{ mi/yr}}{2000 \text{ lb/ton}} = 0.04 \text{ tons/yr}$

PM-10: $\frac{0.25 \text{ lb/mi} \times 66 \text{ mi/yr}}{2000 \text{ lb/ton}} = 0.01 \text{ tons/yr}$

III. Pneumatic Truck

0.125 trip/hr (in) x 0.14 mile/trip (in) x 8,760 hr/yr = 153 mile/yr
 Total = 153.30 mile/yr

$$E_f = k \cdot [(s/12)^a] \cdot [(W/3)^b] / [(M_{dry}/0.2)^c] \cdot [(365-p)/365] \cdot (S/15)$$

$$= 3.70 \text{ lb PM/mile}$$

$$= 0.96 \text{ lb PM-10/mile}$$

where k = 10 (particle size multiplier, PM30) (k= 2.6 for PM10)
 s = 4.8 mean % silt content of unpaved plant roads
 a = 0.8 Constant for PM30/PM-10
 W = 37 tons, average vehicle weight
 b = 0.5 Constant for PM30 (b = 0.4 for PM10)
 M_{dry} = 0.2 surface material moisture content, % (default 0.2 (dry conditions) when using rainfall parameter)
 c = 0.4 Constant for PM30 (c = 0.3 for PM10)
 p = 125 number of days with at least 0.01 in of precipitation per year
 S = 5 mph speed limit

PM: $\frac{3.70 \text{ lb/mi} \times 153 \text{ mi/yr}}{2000 \text{ lb/ton}} = 0.28 \text{ tons/yr}$

PM-10: $\frac{0.96 \text{ lb/mi} \times 153 \text{ mi/yr}}{2000 \text{ lb/ton}} = 0.07 \text{ tons/yr}$

Total PM Emissions From Paved Roads = 0.90 tons/yr
0.21 lb/hr
Total PM-10 Emissions From Paved Roads = 0.23 tons/yr
0.05 lb/hr

**Appendix A: Emissions Calculations
PM and PM10 Emission Calculation
Conveying, Handling and Storage of Material**

Company Name: Performix Technologies
Address City IN Zip: 8151 South Range Road, Kingsford Heights, IN 46346
Permit Number: 091-20085-00125
Plt ID: 091-00125
Reviewer: Jenny Acker
Date: 1/10/2005

**** conveying / handling ****

Emission Unit	Material Throughput (ton/hr)	Potential PM Emissions (lb/hr)	Potential PM Emissions (tons/yr)	Potential PM10 Emissions (lb/hr)	Potential PM10 Emissions (tons/yr)
F001 ⁽¹⁾	8	0.13	0.58	0.06	0.27
F002 ⁽¹⁾	3.2	0.05	0.23	0.02	0.11
F003 ⁽¹⁾	1.25	0.02	0.09	0.01	0.04
F004 ⁽¹⁾	6	0.10	0.43	0.05	0.20
F005 ⁽²⁾	20	0.33	1.44	0.16	0.68
Total Emissions		0.63	2.78	0.30	1.31

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

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

⁽¹⁾ PM & PM-10 Emissions: Conservatively, 5 mph mean wind speed is assumed for indoor operations.
 $E = k * (0.0032) * ((U/5)^{1.3}) / ((M/2)^{1.4})$
 = 7.80E-03 lb PM-10/ton
 1.65E-02 lb PM/ton
 where k = 0.35 (particle size multiplier for <10um)
 0.74 (particle size multiplier for <30um)
 U = 5 mph mean wind speed
 M = 0.5 material moisture content (%)

⁽²⁾ PM & PM-10 Emissions: Conservatively, 12 mph mean wind speed is assumed for outdoor operations.
 $E = k * (0.0032) * ((U/5)^{1.3}) / ((M/2)^{1.4})$
 = 2.43E-02 lb PM-10/ton
 5.15E-02 lb PM/ton
 where k = 0.35 (particle size multiplier for <10um)
 0.74 (particle size multiplier for <30um)
 U = 12 mph mean wind speed
 M = 0.5 material moisture content (%)

**** Storage ****

The following calculations determine the amount of emissions created by wind erosion of storage stockpiles, based on 8,760 hours of use and USEPA's AP-42 (Pre 1983 Edition), Section 11.2.3.

Material	Silt Content (wt %)	Pile Size (acres)	Storage Capacity (tons)	PM Emissions lb/hr	PM Emissions tons/yr	PM10 Emissions lbs/hr
Slag	1.0	0.030	263	1.47E-03	6.44E-03	5.14E-04
Aluminum Dross	2.0	0.029	66	2.83E-03	1.24E-02	9.92E-04
Carbon	0.0	0.015	20	0.00E+00	0.00E+00	0.00E+00
Aluminum	0.0	0.503	300	0.00E+00	0.00E+00	0.00E+00
Lime	0.0	0.009	225	0.00E+00	0.00E+00	0.00E+00
Stearate	0.0	0.015	40	0.00E+00	0.00E+00	0.00E+00
Rice Hulls	0.0	0.005	125	0.00E+00	0.00E+00	0.00E+00
Perlite	0.0	0.009	20	0.00E+00	0.00E+00	0.00E+00
Vermiculite	0.0	0.007	23	0.00E+00	0.00E+00	0.00E+00
Fluorspar	0.0	0.006	50	0.00E+00	0.00E+00	0.00E+00
Total Emissions				4.30E-03	1.88E-02	1.51E-03

Sample Calculation:

$$E_f = 1.7 \cdot (s/1.5)^3 \cdot (365-p)/235 \cdot (f/15)$$

= 1.16 lb/acre/day

where s = 1 % silt

p = 125 days of rain greater than or equal to 0.01 inches

f = 15 % of wind greater than or equal to 12 mph

PM = 0.006 tons/yr

P M-10: 35% of PM = 0.002 tons/yr

⁽³⁾ PM & PM-10 Emissions: PM and PM-10 emission factors for mixing are from FIRE version 6.23 and for Mixer loading of cement/sand/aggregate.

**** Mixing ****

Coarse Mixers (F004) (Indoor operation)

The following calculations determine the amount of emission created by mixing operation based on 8,760 hours of use. The emission calculation is for Coarse mixer (F004) with combined maximum capacity of 6 tons per hour

Pollutant:	Ef	lb/ton	x	6	ton/hr	x	8,760	hr/yr
				2000		lb/ton		
PM:	40.0E-3	lb/ton	=		1.05 ton/yr			0.24 lb/hr
PM-10:	20.0E-3	lb/ton	=		0.53 ton/yr			0.12 lb/hr

PM and PM-10 emission factors for mixing are from FIRE version 6.23 and for Mixer loading of cement/sand/aggregate.

**Appendix A: Emissions Calculations
PM and PM10 Emission Calculation
Insignificant Activities**

Company Name: Performix Technologies
Address City IN Zip: 8151 South Range Road, Kingsford Heights, IN 46346
Permit Number: 091-20085-00125
Plt ID: 091-00125
Reviewer: Jenny Acker
Date: 1/10/2005

Heat Input Capacity
MMBtu/hr

Potential Throughput
kgals/year

6.00

574.43

Emission Factor in lb/kgal	Pollutant					
	PM*	PM10*	⁽¹⁾ SO2 (lb/MMBtu)	NOx	VOC **TOC value	CO
Potential Emission in tons/yr	0.6	0.6	0.29	19.0	0.5	3.2
	0.2	0.2	7.6	5.5	0.1	0.9

*PM emission factor is filterable PM only. PM10 emission factor is assumed to be the same as PM based on a footnote in Table 1.5-1, therefore PM10 is filterable only as well.

**The VOC value given is TOC. The methane emission factor is 0.2 lb/kgal.

⁽¹⁾ The SO2 emission factor is worst case and equal to diesel fuel.

Methodology

1 gallon of LPG has a heating value of 94,000 Btu

1 gallon of propane has a heating value of 91,500 Btu (use this to convert emission factors to an energy basis for pro (Source - AP-42 (Supplement B 10/96) page 1.5-1)

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal

Emission Factors are from AP42 (Supplement B 10/96), Table 1.5-1 (SCC #1-02-010-02)

Emission (tons/yr) = Throughput (kgals/yr) x Emission Factor (lb/kgal) / 2,000 lb/ton