



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant

DATE: May 14, 2008

RE: Jasper Engine Exchange, Inc. / 025-25750-00012

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

Notice of Decision: Approval - Effective Immediately

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

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

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

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

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

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

Enclosures
FNPER.dot12/03/07



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NEW SOURCE REVIEW AND FEDERALLY ENFORCEABLE STATE OPERATING PERMIT RENEWAL OFFICE OF AIR QUALITY

**Jasper Engine Exchange, Inc.
6400 East Industrial Lane
Leavenworth, Indiana 47137**

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

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

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.

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

Operation Permit No.: F025-25750-00012	
Issued by/Original Signed By:	Issuance Date: May 14, 2008
	Expiration Date: May 14, 2018
Matthew Stuckey, Chief Permits Branch Office of Air Quality	

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SECTION A SOURCE SUMMARY

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

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

The Permittee owns and operates a stationary automotive engine, transmission, and vehicle parts remanufacturing plant.

Source Address:	6400 East Industrial Lane, Leavenworth, Indiana 47137
Mailing Address:	P.O. Box 650, Jasper, Indiana 47547
General Source Phone Number:	(812) 482-1041
SIC Code:	371435197537
County Location:	Crawford
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Federally Enforceable State Operating Permit Program Minor Source, under PSD and Emission Offset Rules Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

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

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

- (a) Two (2) black beauty sand blasters (identified as BLA020 and BLA021), constructed in 1998, each with a maximum nozzle flow rate of 1,020 pounds of grit per hour, controlled by baghouses DUC044 and BLA021, respectively, and venting into the building. Baghouse DUC044 is capable of venting to the atmosphere.
- (b) One (1) abrasive blasting unit using coal slag as the blast media (identified as BLA022), constructed in 2004, with a maximum process rate of 1,020 pounds of parts per hour, controlled by baghouse BLA022, and venting into the building.
- (c) Three (3) steel shot blasters (identified as BLA026, BLA027, and BLA028), constructed in 1998, each with a maximum process rate of 800 pounds of steel per hour, controlled by baghouses DUC040, DUC044, and DUC029, respectively, and venting into the building.
- (d) One (1) soda blaster cabinet (identified as BLA035), constructed in 1999, with a maximum abrasive usage of 12.5 pounds of parts per hour and a maximum process rate of 1,200 pounds of parts per hour, controlled by a new baghouse DUC044, and venting inside the building.
- (e) One (1) soda blaster cabinet (identified as BLA036), constructed in 1999, with a maximum abrasive usage of 12.5 pounds per hour and a maximum process rate of 1,200 pounds of parts per hour, controlled by a baghouse DUC044, and venting into the building.
- (f) One (1) abrasive blasting unit using steel shot as the blast media (identified as BLA044), constructed in 2004, with a maximum process rate of 1,020 pounds of parts per hour, controlled by baghouse DUC044, and venting either into the building or to the atmosphere.

- (g) One (1) plastic pellet blaster (identified as BLA046), constructed in 2004, with a maximum process rate of 1,020 pounds of parts per hour, controlled by baghouse BLA046, and venting into the building.
- (h) One (1) abrasive blasting unit using aluminum oxide as the blast media (identified as BLA047), constructed in 2004, with a maximum process rate of 1,020 pounds of parts per hour, controlled by baghouse BLA047, and venting into the building.
- (i) One (1) plastic bead blaster using plastic shot as the blast media (identified as BLA061), approved for construction in 2007, with a maximum abrasive usage of 108 pounds per hour and a maximum process rate of 1,200 pounds of parts per hour, controlled by baghouse BLA061, and venting inside the building.
- (j) One (1) soda blaster cabinet (identified as BLA062), approved for construction in 2007, with a maximum abrasive usage of 12.5 pounds per hour and a maximum process rate of 1,200 pounds of parts per hour, controlled by an existing baghouse DUC020, and venting inside the building.
- (k) One (1) plastic bead blaster cabinet (identified as BLA067), approved for construction in 2007, with a maximum abrasive usage of 108 pounds per hour and a maximum process rate of 1,200 pounds of parts per hour, controlled by an existing baghouse DUC044, and venting inside the building.
- (l) One (1) abrasive blasting unit (identified as BLA070), using plastic bead media, approved for construction in 2008, with a maximum abrasive usage of 108 pounds per hour and maximum rate of 1,200 parts per hour, controlled by an existing baghouse DUC044, and venting inside the building.
- (m) One (1) salt bath cleaning line, constructed in 1998, with a maximum throughput rate of 16,000 pounds of parts per hour, consisting of the following:
 - (1) Two (2) molten salt cleaning tanks (identified as KOL013 and KOL014), each with a maximum capacity of 1,200 gallons and each heated by a 2.5 MMBtu/hr natural gas burner, both controlled by a wet scrubber KOL015.
 - (2) Two (2) acid derust tanks (identified as KOL016 and KOL017), each with a maximum capacity of 1,800 gallons.
 - (3) One (1) acid rinsing tank (identified as KOL018), with a maximum capacity of 1,200 gallons.
 - (4) One (1) alkaline derusting tank (identified as KOL019), with a maximum capacity of 1,200 gallons.
 - (5) One (1) alkaline rinsing tank (identified as KOL020), with a maximum capacity of 1,200 gallons.
 - (6) One (1) quenching tank (identified as KOL021), with a maximum capacity of 1,800 gallons.
 - (7) One (1) hot rinsing tank (identified as KOL022), with a maximum capacity of 1,800 gallons.
- (n) One (1) surface coating booth (identified as PTB006), constructed in 1999, with a maximum capacity of 145 engines and transmissions per day, equipped with High

Volume Low Pressure (HVLP) spray guns, coating metal substrate, and using dry filters for overspray control.

- (o) One (1) surface coating booth (identified as PTB010), constructed in 2004, with a maximum capacity of 30 torque converters per hour, equipped with High Volume Low Pressure (HVLP) spray guns, coating metal substrate, and using dry filters for overspray control.
- (p) One (1) surface coating booth (identified as PTB011), approved for construction in 2008, with a maximum capacity of 10 remanufactured automotive engines per hour, equipped with High Volume Low Pressure (HVLP) spray guns and using dry filters for overspray control.
- (q) Two (2) natural gas-fired boilers, each with a maximum heat input capacity of 17 million British thermal units (MMBtu) per hour, constructed after 1990, and exhausting to stacks FEQ016 and FEQ017, respectively. These units are affected units under 40 CFR 60, Subpart Dc.
- (r) Four (4) natural gas-fired internal combustion engines, constructed in 2004, each with a maximum rate of 0.725 MMBtu/hr.

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

This stationary source also includes the following insignificant activities:

- (a) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment, including the following: [326 IAC 6-3-2]
 - (1) Metal Inert Gas (MIG) stations.
 - (2) Stick welding stations.
 - (3) Tungsten Inert Gas (TIG) stations.
 - (4) Three (3) oxyacetylene flame-cutting operations, with a maximum cutting rate of 2 inches per minute.
 - (5) Two (2) plasma cutters.
 - (6) One (1) hub welding station.

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

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

SECTION B GENERAL CONDITIONS

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

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

B.2 Revocation of Permits [326 IAC 2-1.1-9(5)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this permit if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

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

- (a) This permit, F025-25750-00012, is issued for a fixed term of ten (10) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.
- (b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, until the renewal permit has been issued or denied.

B.4 Term of Conditions [326 IAC 2-1.1-9.5]

Notwithstanding the permit term of a permit to construct, a permit to operate, or a permit modification, any condition established in a permit issued pursuant to a permitting program approved in the state implementation plan shall remain in effect until:

- (a) the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or
- (b) the emission unit to which the condition pertains permanently ceases operation.

B.5 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.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 an "authorized individual" as defined by 326 IAC 2-1.1-1(1). Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.
- (b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of

requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

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

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

B.10 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

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

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

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

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

B.11 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.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 maintain and implement Preventive Maintenance Plans (PMPs) including the following information on each facility:
- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.
- (b) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMPs do not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

B.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 describe the following:
- (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
 - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, and Southwest Regional Office within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

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

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

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

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

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

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

The notification which shall be submitted by the Permittee does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

- (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
- (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
 - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

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

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

B.14 Prior Permits Superseded [326 IAC 2-1.1-9.5]

- (a) All terms and conditions of permits established prior to F025-25750-00012 and issued pursuant to permitting programs approved into the state implementation plan have been either:
- (1) incorporated as originally stated,
 - (2) revised, or
 - (3) deleted.
- (b) All previous registrations and permits are superseded by this permit.

B.15 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.16 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]

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

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

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

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

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

B.17 Permit Modification, Reopening, Revocation and Reissuance, or Termination
[326 IAC 2-8-4(5)(C)][326 IAC 2-8-7(a)][326 IAC 2-8-8]

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Federally Enforceable State Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)] The notification by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:
 - (1) That this permit contains a material mistake.
 - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
 - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]
- (c) Proceedings by IDEM, OAQ to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-8-8(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

B.18 Permit Renewal [326 IAC 2-8-3(h)]

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

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

- (b) A timely renewal application is one that is:

- (1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
- (2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.19 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
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

Any such application shall be certified by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.20 Operational Flexibility [326 IAC 2-8-15][326 IAC 2-8-11.1]

- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-8-15(b) through (d) without a prior permit revision, if each of the following conditions is met:
 - (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
 - (2) Any approval required by 326 IAC 2-8-11.1 has been obtained;
 - (3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
 - (4) The Permittee notifies the:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

and

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

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

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

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

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

B.21 Source Modification Requirement [326 IAC 2-8-11.1]

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

B.22 Inspection and Entry [326 IAC 2-8-5(a)(2)][IC 13-14-2-2][IC 13-17-3-2][IC 13-30-3-1]

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

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

pollution control equipment), practices, or operations regulated or required under this permit;

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

B.23 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
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

The application which shall be submitted by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.24 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.25 Advanced Source Modification Approval [326 IAC 2-8-4(11)] [326 IAC 2-1.1-9]

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

B.26 Credible Evidence [326 IAC 2-8-4(3)][326 IAC 2-8-5][62 FR 8314] [326 IAC 1-1-6]

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

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

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

Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

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

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

(a) Pursuant to 326 IAC 2-8:

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

(b) The potential to emit particulate matter (PM) from the entire source shall be limited to less than two hundred fifty (250) tons per twelve (12) consecutive month period. This limitation shall make the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

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

(d) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

C.3 Opacity [326 IAC 5-1]

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

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A,

Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

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

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

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

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

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

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

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

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

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

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

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

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

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

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue
MC 61-52 IGCN 1003
Indianapolis, Indiana 46204-2251

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

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

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

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

- (a) Compliance testing on new emissions units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

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

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

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

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

Compliance Requirements [326 IAC 2-1.1-11]

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

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

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

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

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

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

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

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

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

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

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

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

- (a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale.
- (b) The Permittee may request that the IDEM, OAQ approve the use of an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.

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

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

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

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

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

- (2) monitor performance data, if applicable; and
- (3) corrective actions taken.

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

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall 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 twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

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

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

C.18 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]

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

C.19 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

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

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (e) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

Stratospheric Ozone Protection

C.20 Compliance with 40 CFR 82 and 326 IAC 22-1

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

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

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (a) Two (2) black beauty sand blasters (identified as BLA020 and BLA021), constructed in 1998, each with a maximum nozzle flow rate of 1,020 pounds of grit per hour, controlled by baghouses DUC044 and BLA021, respectively, and venting into the building. Baghouse DUC044 is capable of venting to the atmosphere.
- (b) One (1) abrasive blasting unit using coal slag as the blast media (identified as BLA022), constructed in 2004, with a maximum process rate of 1,020 pounds of parts per hour, controlled by baghouse BLA022, and venting into the building.
- (c) Three (3) steel shot blasters (identified as BLA026, BLA027, and BLA028), constructed in 1998, each with a maximum process rate of 800 pounds of steel per hour, controlled by baghouses DUC040, DUC044, and DUC029, respectively, and venting into the building.
- (d) One (1) soda blaster cabinet (identified as BLA035), constructed in 1999, with a maximum abrasive usage of 12.5 pounds of parts per hour and a maximum process rate of 1,200 pounds of parts per hour, controlled by a new baghouse DUC044, and venting inside the building.
- (e) One (1) soda blaster cabinet (identified as BLA036), constructed in 1999, with a maximum abrasive usage of 12.5 pounds per hour and a maximum process rate of 1,200 pounds of parts per hour, controlled by a baghouse DUC044, and venting into the building.
- (f) One (1) abrasive blasting unit using steel shot as the blast media (identified as BLA044), constructed in 2004, with a maximum process rate of 1,020 pounds of parts per hour, controlled by baghouse DUC044, and venting either into the building or to the atmosphere.
- (g) One (1) plastic pellet blaster (identified as BLA046), constructed in 2004, with a maximum process rate of 1,020 pounds of parts per hour, controlled by baghouse BLA046, and venting into the building.
- (h) One (1) abrasive blasting unit using aluminum oxide as the blast media (identified as BLA047), constructed in 2004, with a maximum process rate of 1,020 pounds of parts per hour, controlled by baghouse BLA047, and venting into the building.
- (i) One (1) plastic bead blaster using plastic shot as the blast media (identified as BLA061), approved for construction in 2007, with a maximum abrasive usage of 108 pounds per hour and a maximum process rate of 1,200 pounds of parts per hour, controlled by baghouse BLA061, and venting inside the building.
- (j) One (1) soda blaster cabinet (identified as BLA062), approved for construction in 2007, with a maximum abrasive usage of 12.5 pounds per hour and a maximum process rate of 1,200 pounds of parts per hour, controlled by an existing baghouse DUC020, and venting inside the building.
- (k) One (1) plastic bead blaster cabinet (identified as BLA067), approved for construction in 2007, with a maximum abrasive usage of 108 pounds per hour and a maximum process rate of 1,200 pounds of parts per hour, controlled by an existing baghouse DUC044, and venting inside the building.

Emission Units Description (Continued):

- (l) One (1) abrasive blasting unit (identified as BLA070), using plastic bead media, approved for construction in 2008, with a maximum abrasive usage of 108 pounds per hour and maximum rate of 1,200 parts per hour, controlled by an existing baghouse DUC044, and venting inside the building.

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

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

D.1.1 PM10 Limit [326 IAC 2-8-4] [326 IAC 2-2]

Pursuant to FESOP #025-8935-00012, issued March 6, 1998 and 326 IAC 2-8-4 (FESOP), the allowable PM10 emissions from the baghouses, which are used to control the emissions from the blasters and the soda blast cabinets, shall not exceed the limits listed in the table below.

Baghouse ID	Process ID	PM10 Emission Limit (lbs/hour)
BLA021	BLA021	1.46
BLA022	BLA022	1.46
BLA046	BLA046	1.46
BLA047	BLA047	0.46
BLA061	BLA061	1.71
DUC020	BLA035	1.71
DUC029	BLA028	0.46
DUC040	BLA026	0.46
DUC044	BLA020	9.35
	BLA027	
	BLA035	
	BLA036	
	BLA044	
	BLA067	
	BLA070	

Compliance with these limits, in conjunction with PM10 limitations in Section D.2 and the potential to emit of the remaining emission units, limits, the PM10 emissions from the entire source are limited to less than 100 tons per year. Therefore, the requirements of 326 IAC 2-7 and 326 IAC 2-2 do not apply.

D.1.2 PM Limit [326 IAC 2-2]

Pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration), the allowable PM emissions from the baghouses, which are used to control the blasters and soda blast cabinets, shall not exceed the pounds per hour rate listed in the table below:

Baghouse ID	Process ID	PM Emission Limit (lbs/hour)
BLA021	BLA021	4.02
BLA022	BLA022	4.02
BLA046	BLA046	4.02
BLA047	BLA047	4.02
BLA061	BLA061	4.71
DUC020	BLA035	4.71
DUC029	BLA028	1.27
DUC040	BLA026	1.27
DUC044	BLA020	25.8
	BLA027	
	BLA035	
	BLA036	
	BLA044	
	BLA067	
	BLA070	

Compliance with these limits, in conjunction with PM limitations in Section D.2 and the potential to emit of the remaining emission units, limits, the PM emissions from the entire source are limited to less than 250 tons per year. Therefore, the requirements of 326 IAC 2-2 do not apply.

D.1.3 Minor Permit Revision Requirements [326 IAC 2-8-11.1]

Pursuant to MPR 025-20288-00012, issued December 15, 2004, and MPR 025-24111-00012, issued February 26, 2007:

- (a) BLA022, BLA047, BLA061, BLA062, and BLA035 shall be controlled using particulate air pollution control devices achieving and maintaining a minimum ninety-nine percent (99%) efficiency.
- (b) Visible emissions from units BLA022, BLA047, BLA061, BLA062, and BLA035 shall not exceed 0% opacity.

Compliance with these limits renders the requirements of 326 IAC 2-8-11-1(f) (Significant Permit Revision) not applicable to BLA022, BLA047, BLA061, BLA062, and BLA035.

D.1.4 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e) (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emissions from each blaster and soda blast cabinet shall not exceed the pounds per hour rate listed in the table below:

Process ID	Throughput Rate (lbs/hr)	PM Emission Limit (lbs/hr)
BLA020	1,020	2.61
BLA021	1,020	2.61
BLA022	1,020	2.61
BLA026	800	2.22
BLA027	800	2.22

Process ID	Throughput Rate (lbs/hr)	PM Emission Limit (lbs/hr)
BLA028	800	2.22
BLA035	1,200	2.91
BLA036	1,200	2.91
BLA044	1,020	2.61
BLA046	1,020	2.61
BLA047	1,020	2.61
BLA061	1,200	2.91
BLA062	1,200	2.91
BLA067	1,200	2.91
BLA070	1,200	2.91

The pounds per hour limitation was calculated using the following equation:

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:

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

D.1.5 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

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

Compliance Determination Requirements

D.1.6 Particulate and PM10 Emissions

- (a) In order to comply with Conditions D.1.1 and D.1.2, the baghouses used for particulate control shall be in operation and control emissions from the blasters and the soda blast cabinets at all times the blasters and the soda blast cabinets are in operation.
- (b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

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

D.1.7 Visible Emissions Notations

- (a) Visible emission notations of the stack exhaust from all baghouses shall be performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable steps in accordance with Section C – Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

D.1.8 Parametric Monitoring

The Permittee shall record the pressure drop across all baghouses at least once per day when an emission unit that it controls is in operation and venting to the atmosphere. When for any one reading, the pressure drop across baghouses is outside the normal range of 0.5 and 8.5 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C – Response to Exceedances or Excursions. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Exceedances or Excursions, shall be considered a deviation from this permit.

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

D.1.9 Broken or Failed Bag Detection

- (a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
- (b) For a single compartment baghouses controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Bag failure can be indicated by a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

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

D.1.10 Record Keeping Requirements

- (a) To document compliance with Condition D.1.6, the Permittee shall maintain records of visible emission notations of the stack exhaust from all baghouses. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).
- (b) To document compliance with Condition D.1.7, the Permittee shall maintain the following operational parameters for all baghouses:
 - (1) The Permittee shall maintain a daily record of the pressure drop across the baghouse controlling the process. The Permittee shall include in its daily record

when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that day).

- (2) Documentation of the dates vents are redirected.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (m) One (1) salt bath cleaning line, constructed in 1998, with a maximum throughput rate of 16,000 pounds of parts per hour, consisting of the following:
- (1) Two (2) molten salt cleaning tanks (identified as KOL013 and KOL014), each with a maximum capacity of 1,200 gallons and each heated by a 2.5 MMBtu/hr natural gas burner, both controlled by a wet scrubber KOL015.
 - (2) Two (2) acid derust tanks (identified as KOL016 and KOL017), each with a maximum capacity of 1,800 gallons.
 - (3) One (1) acid rinsing tank (identified as KOL018), with a maximum capacity of 1,200 gallons.
 - (4) One (1) alkaline derusting tank (identified as KOL019), with a maximum capacity of 1,200 gallons.
 - (5) One (1) alkaline rinsing tank (identified as KOL020), with a maximum capacity of 1,200 gallons.
 - (6) One (1) quenching tank (identified as KOL021), with a maximum capacity of 1,800 gallons.
 - (7) One (1) hot rinsing tank (identified as KOL022), with a maximum capacity of 1,800 gallons.

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

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

D.2.1 PM10 Limit [326 IAC 2-2][326 IAC 2-8]

Pursuant to 326 IAC 2-8-4 (FESOP), the PM10 emissions from the salt bath cleaning line shall not exceed 0.39 pounds per hour. Compliance with this limit, in conjunction with PM10 limitations in Section D.1 and the potential to emit of the remaining emission units, limits the PM10 emissions from the entire source to less than 100 tons per year. Therefore, the requirements of 326 IAC 2-7 and 326 IAC 2-2 are not applicable.

D.2.2 PM Limit [326 IAC 2-2]

Pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration), the PM emissions from the salt bath cleaning line shall not exceed 0.39 pounds per hour. Compliance with this limit, in conjunction with PM limitations in Section D.1 and the potential to emit of the remaining emission units, limits the PM emissions from the entire source to less than 100 tons per year. Therefore, the requirements of 326 IAC 2-2 are not applicable.

D.2.3 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e) (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emissions from the salt cleaning line shall not exceed 16.5 pounds per hour when operating at a process weight rate of 16,000 pounds per hour.

The pounds per hour limitation was calculated with the following equation:

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:

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

D.2.4 Particulate and PM10 Emissions

In order to comply with Conditions D.2.1 and D.2.2, scrubber KOL015 shall be in operation at all times that the salt bath cleaning line is in operation.

D.2.5 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

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

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

D.2.6 Visible Emissions Notations

- (a) Visible emission notations of the scrubber (KOL015) stack exhaust shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable steps in accordance with Section C – Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

D.2.7 Parametric Monitoring

The Permittee shall monitor and record the pressure drop and flow rate of the scrubber KOL015, at least once per day when the associated salt bath cleaning line is in operation. When for any one reading, the pressure drop across any of the scrubbers is outside the normal range of 32 and 48 inches of water, or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Exceedances or Excursions. When for any one reading, the flow rate of the scrubber is less than the normal minimum of 165 gallons per minute, or a minimum established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Exceedances or Excursions. A pressure reading that is outside the above mention range or a flow rate that is below the above mentioned minimum is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Exceedances or Excursions shall be considered a deviation from this permit.

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

[Note: Based on manufacturer's information, to maintain the manifold pressure in the range of 7.0 to 8.5 psig ensures the minimum flow rate of 165 gallons per minute for the scrubber.]

D.2.8 Failure Detection

In the event that a scrubber malfunction has been observed:

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). Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

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

D.2.9 Record Keeping Requirements

- (a) To document compliance with Condition D.2.6, the Permittee shall maintain records of visible emission notations of the scrubber stack exhaust. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).
- (b) To document compliance with Condition D.2.7, the Permittee shall maintain records of the following operational parameters for scrubber KOL015 once per day during normal operation:
 - (1) The Permittee shall maintain a daily record of the pressure drop across the baghouse controlling the process. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g., the process did not operate that day).
 - (2) The Permittee shall maintain a daily record of the flow rate across the baghouse controlling the process. The Permittee shall include in its daily record when a flow rate reading is not taken and the reason for the lack of a flow rate reading (e.g. the process did not operate that day).
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (n) One (1) surface coating booth (identified as PTB006), constructed in 1999, with a maximum capacity of 145 engines and transmissions per day, equipped with High Volume Low Pressure (HVLP) spray guns, coating metal substrate, and using dry filters for overspray control.
- (o) One (1) surface coating booth (identified as PTB010), constructed in 2004, with a maximum capacity of 30 torque converters per hour, equipped with High Volume Low Pressure (HVLP) spray guns, coating metal substrate, and using dry filters for overspray control.
- (p) One (1) surface coating booth (identified as PTB011), approved for construction in 2008, with a maximum capacity of 10 remanufactured automotive engines per hour, equipped with High Volume Low Pressure (HVLP) spray guns, coating metal substrate, and using dry filters for overspray control.

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

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

D.3.1 Particulate [326 IAC 6-3-2 (d)]

Pursuant to 326 IAC 6-3-2(d), particulates from the surface coating operations PTB006, PTB010 and PTB013 shall be controlled by a dry particulate filters, and the Permittee shall operate the control device in accordance with manufacturer's specifications.

D.3.2 Volatile Organic Compound (VOC) [326 IAC 8-2-9]

Pursuant to 326 IAC 8-2-9, the owner or operator shall not allow the discharge into the atmosphere of VOC in excess of three and five-tenths (3.5) pounds of VOC per gallon of coating, excluding water, as delivered to the applicator.

D.3.3 Volatile Organic Compound (VOC) Limitations, Clean-up Requirements [326 IAC 8-2-9]

Pursuant to 326 IAC 8-2-9(f), all solvents sprayed from the application equipment of PTB006, PTB010, and PTB011 during cleanup or color changes shall be directed into containers. Said containers shall be closed as soon as the solvent spraying is complete. In addition, all waste solvent shall be disposed of in such a manner that minimizes evaporation.

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

D.3.4 Record Keeping Requirements

- (a) To document compliance with Condition D.3.2, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.3.2. Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.
 - (1) The VOC content of each coating material and solvent used.
 - (2) The amount of coating material and solvent less water used on monthly basis.
 - (A) Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.

- (B) Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
- (4) The cleanup solvent usage for each month;
- (5) The total VOC usage for each month; and
- (6) The weight of VOCs emitted for each compliance period.
- (b) To document compliance with Condition D.3.4, the Permittee shall maintain a log of weekly overspray observations and daily and monthly inspections.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.3.5 Monitoring

- (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the surface coating booth stack while one or more of the booths are in operation. Section C - Response to Excursions and Exceedances shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance Section C - Response to Excursions and Exceedances, shall be considered a deviation from this permit.
- (b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Response to Excursions and Exceedances for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Section C - Response to Excursions and Exceedances shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Response to Excursions and Exceedances, shall be considered a deviation from this permit.
- (c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

SECTION D.4 FACILITY OPERATION CONDITIONS

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

- (q) Two (2) natural gas-fired boilers, each with a maximum heat input capacity of 17 million British thermal units (MMBtu) per hour, constructed after 1990, and exhausting to stacks FEQ016 and FEQ017, respectively.

(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.4.1 Particulate [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate emission limitations for sources of indirect heating: emission limitations for facilities specified in 326 IAC 6-2-1 (b)), the particulate emissions from each 17 MMBtu/hr boiler shall not exceed 0.44 pounds per MMBtu input.

This limitation is based on the following equation:

$$Pt = \frac{1.09}{Q^{0.26}} \quad \text{Where } Pt = \text{emission rate limit (lbs/MMBtu)} \\ Q = \text{total source heat input capacity (MMBtu/hr)}$$

D.4.2 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 boilers.

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

D.4.3 General Provisions Relating to New Source Performance Standards [326 IAC 12-1] [40 CFR Part 60, Subpart A]

- (a) Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60 Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1 for the two (2) natural gas-fired boiler (Unit ID#2), except as otherwise specified in 40 CFR Part 60, Subpart Dc.

- (b) Pursuant to 40 CFR 60.19, the Permittee shall submit all required notifications and reports to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue,
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

D.4.4 Standard of Performance for Small Industrial-Commercial-Institutional Steam Generating Units Requirements [40 CFR Part 60, Subpart Dc]

The Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, which are incorporated by reference as 326 IAC 12, for the two (2) natural gas-fueled boilers, included as Attachment A of this permit:

- (a) 40 CFR 60.40c(a)
(b) 40 CFR 60.41c
(c) 40 CFR 60.48c (b)-(e), (f)(1), (g), (i), (j)

SECTION D.5

FACILITY OPERATION CONDITIONS

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

- (a) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment, including the following:
- (1) Metal Inert Gas (MIG) stations.
 - (2) Stick welding stations.
 - (3) Tungsten Inert Gas (TIG) stations.
 - (4) Three (3) oxyacetylene flame-cutting operations, with a maximum cutting rate of 2 inches per minute.
 - (5) Two (2) plasma cutters.
 - (6) One (1) hub welding station.

(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.5.1 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e) (Particulate Emissions Limitations for Manufacturing Processes), the allowable particulate emissions from each of the welding processes shall not exceed the allowable emission rate based on the following equation:

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:

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

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

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

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

Source Name: Jasper Engine Exchange, Inc.
Source Address: 6400 East Industrial Lane, Leavenworth, Indiana 47137
Mailing Address: P.O. Box 650, Jasper, Indiana 47547
FESOP Permit No.: F025-25750-00012

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
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
Phone: 317-233-0178
Fax: 317-233-6865**

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

Source Name: Jasper Engine Exchange, Inc.
Source Address: 6400 East Industrial Lane, Leavenworth, Indiana 47137
Mailing Address: P.O. Box 650, Jasper, Indiana 47547
FESOP Permit No.: F025-25750-00012

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 317-233-0178, ask for Compliance Section); and• The Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16 |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

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

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

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

Page 2 of 2

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

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

A certification is not required for this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF AIR QUALITY
 COMPLIANCE DATA SECTION
 FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
 QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: Jasper Engine Exchange, Inc.
 Source Address: 6400 East Industrial Lane, Leavenworth, Indiana 47137
 Mailing Address: P.O. Box 650, Jasper, Indiana 47547
 FESOP Permit No.: F025-25750-00012

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

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

ATTACHMENT A

**PART 60—STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES
Subpart Dc-Standards of Performance for Small Industrial Commercial-Institutional Steam
Generating Units (40 CFR 60.40(c))**

PART 70 OPERATING PERMIT OFFICE OF AIR QUALITY

**Jasper Engine Exchange, Inc.
6400 East Industrial Lane
Leavenworth, Indiana 47137
025-25750-00012**

Attachment A

Subpart Dc—Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units

Source: 72 FR 32759, June 13, 2007, unless otherwise noted.

§ 60.40c Applicability and delegation of authority.

(a) Except as provided in paragraph (d) of this section, the affected facility to which this subpart applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/hr)) or less, but greater than or equal to 2.9 MW (10 MMBtu/hr).

(b) In delegating implementation and enforcement authority to a State under section 111(c) of the Clean Air Act, §60.48c(a)(4) shall be retained by the Administrator and not transferred to a State.

(c) Steam generating units that meet the applicability requirements in paragraph (a) of this section are not subject to the sulfur dioxide (SO₂) or particulate matter (PM) emission limits, performance testing requirements, or monitoring requirements under this subpart (§§60.42c, 60.43c, 60.44c, 60.45c, 60.46c, or 60.47c) during periods of combustion research, as defined in §60.41c.

(d) Any temporary change to an existing steam generating unit for the purpose of conducting combustion research is not considered a modification under §60.14.

(e) Heat recovery steam generators that are associated with combined cycle gas turbines and meet the applicability requirements of subpart GG or KKKK of this part are not subject to this subpart. This subpart will continue to apply to all other heat recovery steam generators that are capable of combusting more than or equal to 2.9 MW (10 MMBtu/hr) heat input of fossil fuel but less than or equal to 29 MW (100 MMBtu/hr) heat input of fossil fuel. If the heat recovery steam generator is subject to this subpart, only emissions resulting from combustion of fuels in the steam generating unit are subject to this subpart. (The gas turbine emissions are subject to subpart GG or KKKK, as applicable, of this part).

(f) Any facility covered by subpart AAAA of this part is not covered by this subpart.

(g) Any facility covered by an EPA approved State or Federal section 111(d)/129 plan implementing subpart BBBB of this part is not covered by this subpart.

§ 60.41c Definitions.

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

Annual capacity factor means the ratio between the actual heat input to a steam generating unit from an individual fuel or combination of fuels during a period of 12 consecutive calendar months and the potential heat input to the steam generating unit from all fuels had the steam generating unit been operated for 8,760 hours during that 12-month period at the maximum design heat input capacity. In the case of steam generating units that are rented or leased, the actual heat input shall be determined based on the combined heat input from all operations of the affected facility during a period of 12 consecutive calendar months.

Coal means all solid fuels classified as anthracite, bituminous, subbituminous, or lignite by the American Society of Testing and Materials in ASTM D388 (incorporated by reference, see §60.17), coal refuse, and petroleum coke. Coal-derived synthetic fuels derived from coal for the purposes of creating useful heat, including but not limited to solvent refined coal, gasified coal, coal-oil mixtures, and coal-water mixtures, are also included in this definition for the purposes of this subpart.

Coal refuse means any by-product of coal mining or coal cleaning operations with an ash content greater than 50 percent (by weight) and a heating value less than 13,900 kilojoules per kilogram (kJ/kg) (6,000 Btu per pound (Btu/lb) on a dry basis.

Cogeneration steam generating unit means a steam generating unit that simultaneously produces both electrical (or mechanical) and thermal energy from the same primary energy source.

Combined cycle system means a system in which a separate source (such as a stationary gas turbine, internal combustion engine, or kiln) provides exhaust gas to a steam generating unit.

Combustion research means the experimental firing of any fuel or combination of fuels in a steam generating unit for the purpose of conducting research and development of more efficient combustion or more effective prevention or control of air pollutant emissions from combustion, provided that, during these periods of research and development, the heat generated is not used for any purpose other than preheating combustion air for use by that steam generating unit (i.e., the heat generated is released to the atmosphere without being used for space heating, process heating, driving pumps, preheating combustion air for other units, generating electricity, or any other purpose).

Conventional technology means wet flue gas desulfurization technology, dry flue gas desulfurization technology, atmospheric fluidized bed combustion technology, and oil hydrodesulfurization technology.

Distillate oil means fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D396 (incorporated by reference, see §60.17).

Dry flue gas desulfurization technology means a SO₂ control system that is located between the steam generating unit and the exhaust vent or stack, and that removes sulfur oxides from the combustion gases of the steam generating unit by contacting the combustion gases with an alkaline reagent and water, whether introduced separately or as a premixed slurry or solution and forming a dry powder material. This definition includes devices where the dry powder material is subsequently converted to another form. Alkaline reagents used in dry flue gas desulfurization systems include, but are not limited to, lime and sodium compounds.

Duct burner means a device that combusts fuel and that is placed in the exhaust duct from another source (such as a stationary gas turbine, internal combustion engine, kiln, etc.) to allow the firing of additional fuel to heat the exhaust gases before the exhaust gases enter a steam generating unit.

Emerging technology means any SO₂ control system that is not defined as a conventional technology under this section, and for which the owner or operator of the affected facility has received approval from the Administrator to operate as an emerging technology under §60.48c(a)(4).

Federally enforceable means all limitations and conditions that are enforceable by the Administrator, including the requirements of 40 CFR parts 60 and 61, requirements within any applicable State implementation plan, and any permit requirements established under 40 CFR 52.21 or under 40 CFR 51.18 and 51.24.

Fluidized bed combustion technology means a device wherein fuel is distributed onto a bed (or series of beds) of limestone aggregate (or other sorbent materials) for combustion; and these materials are forced upward in the device by the flow of combustion air and the gaseous products of combustion. Fluidized bed combustion technology includes, but is not limited to, bubbling bed units and circulating bed units.

Fuel pretreatment means a process that removes a portion of the sulfur in a fuel before combustion of the fuel in a steam generating unit.

Heat input means heat derived from combustion of fuel in a steam generating unit and does not include the heat derived from preheated combustion air, recirculated flue gases, or exhaust gases from other sources (such as stationary gas turbines, internal combustion engines, and kilns).

Heat transfer medium means any material that is used to transfer heat from one point to another point.

Maximum design heat input capacity means the ability of a steam generating unit to combust a stated maximum amount of fuel (or combination of fuels) on a steady state basis as determined by the physical design and characteristics of the steam generating unit.

Natural gas means: (1) A naturally occurring mixture of hydrocarbon and nonhydrocarbon gases found in geologic formations beneath the earth's surface, of which the principal constituent is methane; or (2) liquefied petroleum (LP) gas, as defined by the American Society for Testing and Materials in ASTM D1835 (incorporated by reference, see §60.17).

Noncontinental area means the State of Hawaii, the Virgin Islands, Guam, American Samoa, the Commonwealth of Puerto Rico, or the Northern Mariana Islands.

Oil means crude oil or petroleum, or a liquid fuel derived from crude oil or petroleum, including distillate oil and residual oil.

Potential sulfur dioxide emission rate means the theoretical SO₂ emissions (nanograms per joule (ng/J) or lb/MMBtu heat input) that would result from combusting fuel in an uncleaned state and without using emission control systems.

Process heater means a device that is primarily used to heat a material to initiate or promote a chemical reaction in which the material participates as a reactant or catalyst.

Residual oil means crude oil, fuel oil that does not comply with the specifications under the definition of distillate oil, and all fuel oil numbers 4, 5, and 6, as defined by the American Society for Testing and Materials in ASTM D396 (incorporated by reference, see §60.17).

Steam generating unit means a device that combusts any fuel and produces steam or heats water or any other heat transfer medium. This term includes any duct burner that combusts fuel and is part of a combined cycle system. This term does not include process heaters as defined in this subpart.

Steam generating unit operating day means a 24-hour period between 12:00 midnight and the following midnight during which any fuel is combusted at any time in the steam generating unit. It is not necessary for fuel to be combusted continuously for the entire 24-hour period.

Wet flue gas desulfurization technology means an SO₂ control system that is located between the steam generating unit and the exhaust vent or stack, and that removes sulfur oxides from the combustion gases of the steam generating unit by contacting the combustion gases with an alkaline slurry or solution and forming a liquid material. This definition includes devices where the liquid material is subsequently converted to another form. Alkaline reagents used in wet flue gas desulfurization systems include, but are not limited to, lime, limestone, and sodium compounds.

Wet scrubber system means any emission control device that mixes an aqueous stream or slurry with the exhaust gases from a steam generating unit to control emissions of PM or SO₂.

Wood means wood, wood residue, bark, or any derivative fuel or residue thereof, in any form, including but not limited to sawdust, sanderdust, wood chips, scraps, slabs, millings, shavings, and processed pellets made from wood or other forest residues.

§ 60.42c Standard for sulfur dioxide (SO₂).

(a) Except as provided in paragraphs (b), (c), and (e) of this section, on and after the date on which the performance test is completed or required to be completed under §60.8, whichever date comes first, the owner or operator of an affected facility that combusts only coal shall neither: cause to be discharged into the atmosphere from the affected facility any gases that contain SO₂ in excess of 87 ng/J (0.20 lb/MMBtu) heat input or 10 percent (0.10) of the potential SO₂ emission rate (90 percent reduction), nor cause to be discharged into the atmosphere from the affected facility any gases that contain SO₂ in excess of 520 ng/J (1.2 lb/MMBtu) heat input. If coal is combusted with other fuels, the affected facility shall neither: cause to be discharged into the atmosphere from the affected facility any gases that contain SO₂ in excess of 87 ng/J (0.20 lb/MMBtu) heat input or 10 percent (0.10) of the potential SO₂ emission rate (90 percent reduction), nor cause to be discharged into the atmosphere from the affected facility any gases that contain SO₂ in excess of the emission limit is determined pursuant to paragraph (e)(2) of this section.

(b) Except as provided in paragraphs (c) and (e) of this section, on and after the date on which the performance test is completed or required to be completed under §60.8, whichever date comes first, the owner or operator of an affected facility that:

(1) Combusts only coal refuse alone in a fluidized bed combustion steam generating unit shall neither:

(i) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO₂ in excess of 87 ng/J (0.20 lb/MMBtu) heat input or 20 percent (0.20) of the potential SO₂ emission rate (80 percent reduction); nor

(ii) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO₂ in excess of

SO₂in excess of 520 ng/J (1.2 lb/MMBtu) heat input. If coal is fired with coal refuse, the affected facility subject to paragraph (a) of this section. If oil or any other fuel (except coal) is fired with coal refuse, the affected facility is subject to the 87 ng/J (0.20 lb/MMBtu) heat input SO₂emissions limit or the 90 percent SO₂reduction requirement specified in paragraph (a) of this section and the emission limit is determined pursuant to paragraph (e)(2) of this section.

(2) Combusts only coal and that uses an emerging technology for the control of SO₂emissions shall neither:

(i) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO₂in excess of 50 percent (0.50) of the potential SO₂emission rate (50 percent reduction); nor

(ii) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO₂in excess of 260 ng/J (0.60 lb/MMBtu) heat input. If coal is combusted with other fuels, the affected facility is subject to the 50 percent SO₂reduction requirement specified in this paragraph and the emission limit determined pursuant to paragraph (e)(2) of this section.

(c) On and after the date on which the initial performance test is completed or required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that combusts coal, alone or in combination with any other fuel, and is listed in paragraphs (c)(1), (2), (3), or (4) of this section shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO₂in excess of the emission limit determined pursuant to paragraph (e)(2) of this section. Percent reduction requirements are not applicable to affected facilities under paragraphs (c)(1), (2), (3), or (4).

(1) Affected facilities that have a heat input capacity of 22 MW (75 MMBtu/hr) or less.

(2) Affected facilities that have an annual capacity for coal of 55 percent (0.55) or less and are subject to a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor for coal of 55 percent (0.55) or less.

(3) Affected facilities located in a noncontinental area.

(4) Affected facilities that combust coal in a duct burner as part of a combined cycle system where 30 percent (0.30) or less of the heat entering the steam generating unit is from combustion of coal in the duct burner and 70 percent (0.70) or more of the heat entering the steam generating unit is from exhaust gases entering the duct burner.

(d) On and after the date on which the initial performance test is completed or required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that combusts oil shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO₂in excess of 215 ng/J (0.50 lb/MMBtu) heat input; or, as an alternative, no owner or operator of an affected facility that combusts oil shall combust oil in the affected facility that contains greater than 0.5 weight percent sulfur. The percent reduction requirements are not applicable to affected facilities under this paragraph.

(e) On and after the date on which the initial performance test is completed or required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that combusts coal, oil, or coal and oil with any other fuel shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO₂in excess of the following:

(1) The percent of potential SO₂emission rate or numerical SO₂emission rate required under paragraph (a) or (b)(2) of this section, as applicable, for any affected facility that

(i) Combusts coal in combination with any other fuel;

(ii) Has a heat input capacity greater than 22 MW (75 MMBtu/hr); and

(iii) Has an annual capacity factor for coal greater than 55 percent (0.55); and

(2) The emission limit determined according to the following formula for any affected facility that combusts coal, oil, or coal and oil with any other fuel:

$$E_s = \frac{(K_a H_a + K_b H_b + K_c H_c)}{(H_a + H_b + H_c)}$$

Where:

E_s = SO₂ emission limit, expressed in ng/J or lb/MMBtu heat input;

K_a = 520 ng/J (1.2 lb/MMBtu);

K_b = 260 ng/J (0.60 lb/MMBtu);

K_c = 215 ng/J (0.50 lb/MMBtu);

H_a = Heat input from the combustion of coal, except coal combusted in an affected facility subject to paragraph (b)(2) of this section, in Joules (J) [MMBtu];

H_b = Heat input from the combustion of coal in an affected facility subject to paragraph (b)(2) of this section, in J (MMBtu); and

H_c = Heat input from the combustion of oil, in J (MMBtu).

(f) Reduction in the potential SO₂ emission rate through fuel pretreatment is not credited toward the percent reduction requirement under paragraph (b)(2) of this section unless:

(1) Fuel pretreatment results in a 50 percent (0.50) or greater reduction in the potential SO₂ emission rate; and

(2) Emissions from the pretreated fuel (without either combustion or post-combustion SO₂ control) are equal to or less than the emission limits specified under paragraph (b)(2) of this section.

(g) Except as provided in paragraph (h) of this section, compliance with the percent reduction requirements, fuel oil sulfur limits, and emission limits of this section shall be determined on a 30-day rolling average basis.

(h) For affected facilities listed under paragraphs (h)(1), (2), or (3) of this section, compliance with the emission limits or fuel oil sulfur limits under this section may be determined based on a certification from the fuel supplier, as described under §60.48c(f), as applicable.

(1) Distillate oil-fired affected facilities with heat input capacities between 2.9 and 29 MW (10 and 100 MMBtu/hr).

(2) Residual oil-fired affected facilities with heat input capacities between 2.9 and 8.7 MW (10 and 30 MMBtu/hr).

(3) Coal-fired facilities with heat input capacities between 2.9 and 8.7 MW (10 and 30 MMBtu/hr).

(i) The SO₂ emission limits, fuel oil sulfur limits, and percent reduction requirements under this section apply at all times, including periods of startup, shutdown, and malfunction.

(j) Only the heat input supplied to the affected facility from the combustion of coal and oil is counted under this section. No credit is provided for the heat input to the affected facility from wood or other fuels or for heat derived from exhaust gases from other sources, such as stationary gas turbines, internal combustion engines, and kilns.

§ 60.43c Standard for particulate matter (PM).

(a) On and after the date on which the initial performance test is completed or required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that commenced construction, reconstruction, or modification on or before February 28, 2005, that combusts coal or combusts mixtures of coal with other fuels and has a heat input capacity of 8.7 MW (30 MMBtu/hr) or greater, shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of the following emission limits:

(1) 22 ng/J (0.051 lb/MMBtu) heat input if the affected facility combusts only coal, or combusts coal with other fuels and has an annual capacity factor for the other fuels of 10 percent (0.10) or less.

(2) 43 ng/J (0.10 lb/MMBtu) heat input if the affected facility combusts coal with other fuels, has an annual capacity factor for the other fuels greater than 10 percent (0.10), and is subject to a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor greater than 10 percent (0.10) for fuels other than coal.

(b) On and after the date on which the initial performance test is completed or required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that commenced construction, reconstruction, or modification on or before February 28, 2005, that combusts wood or combusts mixtures of wood with other fuels (except coal) and has a heat input capacity of 8.7 MW (30 MMBtu/hr) or greater, shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of the following emissions limits:

(1) 43 ng/J (0.10 lb/MMBtu) heat input if the affected facility has an annual capacity factor for wood greater than 30 percent (0.30); or

(2) 130 ng/J (0.30 lb/MMBtu) heat input if the affected facility has an annual capacity factor for wood of 30 percent (0.30) or less and is subject to a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor for wood of 30 percent (0.30) or less.

(c) On and after the date on which the initial performance test is completed or required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that combusts coal, wood, or oil and has a heat input capacity of 8.7 MW (30 MMBtu/hr) or greater shall cause to be discharged into the atmosphere from that affected facility any gases that exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity.

(d) The PM and opacity standards under this section apply at all times, except during periods of startup, shutdown, or malfunction.

(e)(1) On and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that commences construction, reconstruction, or modification after February 28, 2005, and that combusts coal, oil, wood, a mixture of these fuels, or a mixture of these fuels with any other fuels and has a heat input capacity of 8.7 MW (30 MMBtu/hr) or greater shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of 13 ng/J (0.030 lb/MMBtu) heat input, except as provided in paragraphs (e)(2), (e)(3), and (e)(4) of this section.

(2) As an alternative to meeting the requirements of paragraph (e)(1) of this section, the owner or operator of an affected facility for which modification commenced after February 28, 2005, may elect to meet the requirements of this paragraph. On and after the date on which the initial performance test is completed or required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that commences modification after February 28, 2005 shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of both:

(i) 22 ng/J (0.051 lb/MMBtu) heat input derived from the combustion of coal, oil, wood, a mixture of these fuels, or a mixture of these fuels with any other fuels; and

(ii) 0.2 percent of the combustion concentration (99.8 percent reduction) when combusting coal, oil, wood, a mixture of these fuels, or a mixture of these fuels with any other fuels.

(3) On and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that commences modification after February 28, 2005, and that combusts over 30 percent wood (by heat input) on an annual basis and has a heat input capacity of 8.7 MW (30 MMBtu/hr) or greater shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of 43 ng/J (0.10 lb/MMBtu) heat input.

(4) On and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, an owner or operator of an affected facility that commences construction, reconstruction, or modification after February 28, 2005, and that combusts only oil that contains no more than 0.50 weight percent sulfur or a mixture of 0.50 weight percent sulfur oil with other fuels not subject to a PM standard under §60.43c and not using a post-combustion technology (except a wet scrubber) to reduce PM or SO₂ emissions is not subject to the PM limit in this section.

§ 60.44c Compliance and performance test methods and procedures for sulfur dioxide.

(a) Except as provided in paragraphs (g) and (h) of this section and §60.8(b), performance tests required under §60.8 shall be conducted following the procedures specified in paragraphs (b), (c), (d), (e), and (f) of this section, as applicable. Section 60.8(f) does not apply to this section. The 30-day notice required in §60.8(d) applies only to the initial performance test unless otherwise specified by the Administrator.

(b) The initial performance test required under §60.8 shall be conducted over 30 consecutive operating days of the steam generating unit. Compliance with the percent reduction requirements and SO₂emission limits under §60.42c shall be determined using a 30-day average. The first operating day included in the initial performance test shall be scheduled within 30 days after achieving the maximum production rate at which the affect facility will be operated, but not later than 180 days after the initial startup of the facility. The steam generating unit load during the 30-day period does not have to be the maximum design heat input capacity, but must be representative of future operating conditions.

(c) After the initial performance test required under paragraph (b) of this section and §60.8, compliance with the percent reduction requirements and SO₂emission limits under §60.42c is based on the average percent reduction and the average SO₂emission rates for 30 consecutive steam generating unit operating days. A separate performance test is completed at the end of each steam generating unit operating day, and a new 30-day average percent reduction and SO₂emission rate are calculated to show compliance with the standard.

(d) If only coal, only oil, or a mixture of coal and oil is combusted in an affected facility, the procedures in Method 19 of appendix A of this part are used to determine the hourly SO₂emission rate (E_{ho}) and the 30-day average SO₂emission rate (E_{ao}). The hourly averages used to compute the 30-day averages are obtained from the CEMS. Method 19 of appendix A of this part shall be used to calculate E_{ao}when using daily fuel sampling or Method 6B of appendix A of this part.

(e) If coal, oil, or coal and oil are combusted with other fuels:

(1) An adjusted E_{ho}(E_{ho0}) is used in Equation 19–19 of Method 19 of appendix A of this part to compute the adjusted E_{ao}(E_{ao0}). The E_{ho0} is computed using the following formula:

$$E_{ho0} = \frac{E_{ho} - E_w(1 - X_k)}{X_k}$$

Where:

E_{ho0} = Adjusted E_{ho}, ng/J (lb/MMBtu);

E_{ho} = Hourly SO₂emission rate, ng/J (lb/MMBtu);

E_w = SO₂concentration in fuels other than coal and oil combusted in the affected facility, as determined by fuel sampling and analysis procedures in Method 9 of appendix A of this part, ng/J (lb/MMBtu). The value E_wfor each fuel lot is used for each hourly average during the time that the lot is being combusted. The owner or operator does not have to measure E_wif the owner or operator elects to assume E_w= 0.

X_k = Fraction of the total heat input from fuel combustion derived from coal and oil, as determined by applicable procedures in Method 19 of appendix A of this part.

(2) The owner or operator of an affected facility that qualifies under the provisions of §60.42c(c) or (d) (where percent reduction is not required) does not have to measure the parameters E_wor X_kif the owner or operator of the affected facility elects to measure emission rates of the coal or oil using the fuel sampling and analysis procedures under Method 19 of appendix A of this part.

(f) Affected facilities subject to the percent reduction requirements under §60.42c(a) or (b) shall determine compliance with the SO₂emission limits under §60.42c pursuant to paragraphs (d) or (e) of this section, and shall determine compliance with the percent reduction requirements using the following procedures:

(1) If only coal is combusted, the percent of potential SO₂emission rate is computed using the following formula:

$$\%P_s = 100 \left(1 - \frac{\%R_g}{100} \right) \left(1 - \frac{\%R_f}{100} \right)$$

Where:

$\%P_s$ = Potential SO_2 emission rate, in percent;

$\%R_g$ = SO_2 removal efficiency of the control device as determined by Method 19 of appendix A of this part, in percent; and

$\%R_f$ = SO_2 removal efficiency of fuel pretreatment as determined by Method 19 of appendix A of this part, in percent.

(2) If coal, oil, or coal and oil are combusted with other fuels, the same procedures required in paragraph (f)(1) of this section are used, except as provided for in the following:

(i) To compute the $\%P_s$, an adjusted $\%R_g$ ($\%R_{g0}$) is computed from E_{ao0} from paragraph (e)(1) of this section and an adjusted average SO_2 inlet rate (E_{ai0}) using the following formula:

$$\%R_{g0} = 100 \left(1 - \frac{E_{ao0}}{E_{ai0}} \right)$$

Where:

$\%R_{g0}$ = Adjusted $\%R_g$, in percent;

E_{ao0} = Adjusted E_{ao} , ng/J (lb/MMBtu); and

E_{ai0} = Adjusted average SO_2 inlet rate, ng/J (lb/MMBtu).

(ii) To compute E_{ai0} , an adjusted hourly SO_2 inlet rate (E_{hi0}) is used. The E_{hi0} is computed using the following formula:

$$E_{hi0} = \frac{E_{hi} - E_w(1 - X_k)}{X_k}$$

Where:

E_{hi0} = Adjusted E_{hi} , ng/J (lb/MMBtu);

E_{hi} = Hourly SO_2 inlet rate, ng/J (lb/MMBtu);

E_w = SO_2 concentration in fuels other than coal and oil combusted in the affected facility, as determined by fuel sampling and analysis procedures in Method 19 of appendix A of this part, ng/J (lb/MMBtu). The value E_w for each fuel lot is used for each hourly average during the time that the lot is being combusted. The owner or operator does not have to measure E_w if the owner or operator elects to assume $E_w = 0$; and

X_k = Fraction of the total heat input from fuel combustion derived from coal and oil, as determined by applicable procedures in Method 19 of appendix A of this part.

(g) For oil-fired affected facilities where the owner or operator seeks to demonstrate compliance with the fuel oil sulfur limits under §60.42c based on shipment fuel sampling, the initial performance test shall consist of sampling and analyzing the oil in the initial tank of oil to be fired in the steam generating unit to demonstrate that the oil contains 0.5 weight percent sulfur or less. Thereafter, the owner or operator of the affected facility shall sample the oil in the fuel tank after each new shipment of oil is received, as described under §60.46c(d)(2).

(h) For affected facilities subject to §60.42c(h)(1), (2), or (3) where the owner or operator seeks to demonstrate compliance with the SO₂ standards based on fuel supplier certification, the performance test shall consist of the certification, the certification from the fuel supplier, as described under §60.48c(f), as applicable.

(i) The owner or operator of an affected facility seeking to demonstrate compliance with the SO₂ standards under §60.42c(c)(2) shall demonstrate the maximum design heat input capacity of the steam generating unit by operating the steam generating unit at this capacity for 24 hours. This demonstration shall be made during the initial performance test, and a subsequent demonstration may be requested at any other time. If the demonstrated 24-hour average firing rate for the affected facility is less than the maximum design heat input capacity stated by the manufacturer of the affected facility, the demonstrated 24-hour average firing rate shall be used to determine the annual capacity factor for the affected facility; otherwise, the maximum design heat input capacity provided by the manufacturer shall be used.

(j) The owner or operator of an affected facility shall use all valid SO₂ emissions data in calculating %P_s and E_{h_o} under paragraphs (d), (e), or (f) of this section, as applicable, whether or not the minimum emissions data requirements under §60.46c(f) are achieved. All valid emissions data, including valid data collected during periods of startup, shutdown, and malfunction, shall be used in calculating %P_s or E_{h_o} pursuant to paragraphs (d), (e), or (f) of this section, as applicable.

§ 60.45c Compliance and performance test methods and procedures for particulate matter.

(a) The owner or operator of an affected facility subject to the PM and/or opacity standards under §60.43c shall conduct an initial performance test as required under §60.8, and shall conduct subsequent performance tests as requested by the Administrator, to determine compliance with the standards using the following procedures and reference methods, except as specified in paragraph (c) of this section.

(1) Method 1 of appendix A of this part shall be used to select the sampling site and the number of traverse sampling points.

(2) Method 3 of appendix A of this part shall be used for gas analysis when applying Method 5, 5B, or 17 of appendix A of this part.

(3) Method 5, 5B, or 17 of appendix A of this part shall be used to measure the concentration of PM as follows:

(i) Method 5 of appendix A of this part may be used only at affected facilities without wet scrubber systems.

(ii) Method 17 of appendix A of this part may be used at affected facilities with or without wet scrubber systems provided the stack gas temperature does not exceed a temperature of 160 °C (320 °F). The procedures of Sections 8.1 and 11.1 of Method 5B of appendix A of this part may be used in Method 17 of appendix A of this part only if Method 17 of appendix A of this part is used in conjunction with a wet scrubber system. Method 17 of appendix A of this part shall not be used in conjunction with a wet scrubber system if the effluent is saturated or laden with water droplets.

(iii) Method 5B of appendix A of this part may be used in conjunction with a wet scrubber system.

(4) The sampling time for each run shall be at least 120 minutes and the minimum sampling volume shall be 1.7 dry standard cubic meters (dscm) [60 dry standard cubic feet (dscf)] except that smaller sampling times or volumes may be approved by the Administrator when necessitated by process variables or other factors.

(5) For Method 5 or 5B of appendix A of this part, the temperature of the sample gas in the probe and filter holder shall be monitored and maintained at 160 ±14 °C (320±25 °F).

(6) For determination of PM emissions, an oxygen (O₂) or carbon dioxide (CO₂) measurement shall be obtained simultaneously with each run of Method 5, 5B, or 17 of appendix A of this part by traversing the duct at the same sampling location.

(7) For each run using Method 5, 5B, or 17 of appendix A of this part, the emission rates expressed in ng/J (lb/MMBtu) heat input shall be determined using:

(i) The O₂ or CO₂ measurements and PM measurements obtained under this section, (ii) The dry basis F factor, and

(iii) The dry basis emission rate calculation procedure contained in Method 19 of appendix A of this part.

(8) Method 9 of appendix A of this part (6-minute average of 24 observations) shall be used for determining the opacity of stack emissions.

(b) The owner or operator of an affected facility seeking to demonstrate compliance with the PM standards under §60.43c(b)(2) shall demonstrate the maximum design heat input capacity of the steam generating unit by operating the steam generating unit at this capacity for 24 hours. This demonstration shall be made during the initial performance test, and a subsequent demonstration may be requested at any other time. If the demonstrated 24-hour average firing rate for the affected facility is less than the maximum design heat input capacity stated by the manufacturer of the affected facility, the demonstrated 24-hour average firing rate shall be used to determine the annual capacity factor for the affected facility; otherwise, the maximum design heat input capacity provided by the manufacturer shall be used.

(c) In place of PM testing with EPA Reference Method 5, 5B, or 17 of appendix A of this part, an owner or operator may elect to install, calibrate, maintain, and operate a CEMS for monitoring PM emissions discharged to the atmosphere and record the output of the system. The owner or operator of an affected facility who elects to continuously monitor PM emissions instead of conducting performance testing using EPA Method 5, 5B, or 17 of appendix A of this part shall install, calibrate, maintain, and operate a CEMS and shall comply with the requirements specified in paragraphs (c)(1) through (c)(13) of this section.

(1) Notify the Administrator 1 month before starting use of the system.

(2) Notify the Administrator 1 month before stopping use of the system.

(3) The monitor shall be installed, evaluated, and operated in accordance with §60.13 of subpart A of this part.

(4) The initial performance evaluation shall be completed no later than 180 days after the date of initial startup of the affected facility, as specified under §60.8 of subpart A of this part or within 180 days of notification to the Administrator of use of CEMS if the owner or operator was previously determining compliance by Method 5, 5B, or 17 of appendix A of this part performance tests, whichever is later.

(5) The owner or operator of an affected facility shall conduct an initial performance test for PM emissions as required under §60.8 of subpart A of this part. Compliance with the PM emission limit shall be determined by using the CEMS specified in paragraph (d) of this section to measure PM and calculating a 24-hour block arithmetic average emission concentration using EPA Reference Method 19 of appendix A of this part, section 4.1.

(6) Compliance with the PM emission limit shall be determined based on the 24-hour daily (block) average of the hourly arithmetic average emission concentrations using CEMS outlet data.

(7) At a minimum, valid CEMS hourly averages shall be obtained as specified in paragraph (d)(7)(i) of this section for 75 percent of the total operating hours per 30-day rolling average.

(i) At least two data points per hour shall be used to calculate each 1-hour arithmetic average.

(ii) [Reserved]

(8) The 1-hour arithmetic averages required under paragraph (d)(7) of this section shall be expressed in ng/J or lb/MMBtu heat input and shall be used to calculate the boiler operating day daily arithmetic average emission concentrations. The 1-hour arithmetic averages shall be calculated using the data points required under §60.13(e)(2) of subpart A of this part.

(9) All valid CEMS data shall be used in calculating average emission concentrations even if the minimum CEMS data requirements of paragraph (d)(7) of this section are not met.

(10) The CEMS shall be operated according to Performance Specification 11 in appendix B of this part.

(11) During the correlation testing runs of the CEMS required by Performance Specification 11 in appendix B of this part, PM and O₂(or CO₂) data shall be collected concurrently (or within a 30- to 60-minute period) by both the continuous emission monitors and the test methods specified in paragraph (d)(7)(i) of this section.

(i) For PM, EPA Reference Method 5, 5B, or 17 of appendix A of this part shall be used.

(ii) For O₂(or CO₂), EPA reference Method 3, 3A, or 3B of appendix A of this part, as applicable shall be used.

(12) Quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with procedure 2 in appendix F of this part. Relative Response Audit's must be performed annually and Response Correlation Audits must be performed every 3 years.

(13) When PM emissions data are not obtained because of CEMS breakdowns, repairs, calibration checks, and zero and span adjustments, emissions data shall be obtained by using other monitoring systems as approved by the Administrator or EPA Reference Method 19 of appendix A of this part to provide, as necessary, valid emissions data for a minimum of 75 percent of total operating hours on a 30-day rolling average.

(d) The owner or operator of an affected facility seeking to demonstrate compliance under §60.43c(e)(4) shall follow the applicable procedures under §60.48c(f). For residual oil-fired affected facilities, fuel supplier certifications are only allowed for facilities with heat input capacities between 2.9 and 8.7 MW (10 to 30 MMBtu/hr).

§ 60.46c Emission monitoring for sulfur dioxide.

(a) Except as provided in paragraphs (d) and (e) of this section, the owner or operator of an affected facility subject to the SO₂emission limits under §60.42c shall install, calibrate, maintain, and operate a CEMS for measuring SO₂concentrations and either O₂or CO₂concentrations at the outlet of the SO₂control device (or the outlet of the steam generating unit if no SO₂control device is used), and shall record the output of the system. The owner or operator of an affected facility subject to the percent reduction requirements under §60.42c shall measure SO₂concentrations and either O₂or CO₂concentrations at both the inlet and outlet of the SO₂control device.

(b) The 1-hour average SO₂emission rates measured by a CEMS shall be expressed in ng/J or lb/MMBtu heat input and shall be used to calculate the average emission rates under §60.42c. Each 1-hour average SO₂emission rate must be based on at least 30 minutes of operation, and shall be calculated using the data points required under §60.13(h)(2). Hourly SO₂emission rates are not calculated if the affected facility is operated less than 30 minutes in a 1-hour period and are not counted toward determination of a steam generating unit operating day.

(c) The procedures under §60.13 shall be followed for installation, evaluation, and operation of the CEMS.

(1) All CEMS shall be operated in accordance with the applicable procedures under Performance Specifications 1, 2, and 3 of appendix B of this part.

(2) Quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with Procedure 1 of appendix F of this part.

(3) For affected facilities subject to the percent reduction requirements under §60.42c, the span value of the SO₂CEMS at the inlet to the SO₂control device shall be 125 percent of the maximum estimated hourly potential SO₂emission rate of the fuel combusted, and the span value of the SO₂CEMS at the outlet from the SO₂control device shall be 50 percent of the maximum estimated hourly potential SO₂emission rate of the fuel combusted.

(4) For affected facilities that are not subject to the percent reduction requirements of §60.42c, the span value of the SO₂CEMS at the outlet from the SO₂control device (or outlet of the steam generating unit if no SO₂control device is used) shall be 125 percent of the maximum estimated hourly potential SO₂emission rate of the fuel combusted.

(d) As an alternative to operating a CEMS at the inlet to the SO₂control device (or outlet of the steam generating unit if no SO₂control device is used) as required under paragraph (a) of this section, an owner or operator may elect to determine the average SO₂emission rate by sampling the fuel prior to combustion. As an alternative to operating a CEMS at the outlet from the SO₂control device (or outlet of the steam generating unit if no SO₂control device is used) as required under paragraph (a) of this section, an owner or operator may elect to determine the average SO₂emission rate by using Method 6B of appendix A of this part. Fuel sampling shall be conducted pursuant to either paragraph (d)(1) or (d)(2) of this section. Method 6B of appendix A of this part shall be conducted pursuant to paragraph (d)(3) of this section.

(1) For affected facilities combusting coal or oil, coal or oil samples shall be collected daily in an as-fired condition at the inlet to the steam generating unit and analyzed for sulfur content and heat content according the Method 19 of appendix A of this part. Method 19 of appendix A of this part provides procedures for converting these measurements

into the format to be used in calculating the average SO₂ input rate.

(2) As an alternative fuel sampling procedure for affected facilities combusting oil, oil samples may be collected from the fuel tank for each steam generating unit immediately after the fuel tank is filled and before any oil is combusted. The owner or operator of the affected facility shall analyze the oil sample to determine the sulfur content of the oil. If a partially empty fuel tank is refilled, a new sample and analysis of the fuel in the tank would be required upon filling. Results of the fuel analysis taken after each new shipment of oil is received shall be used as the daily value when calculating the 30-day rolling average until the next shipment is received. If the fuel analysis shows that the sulfur content in the fuel tank is greater than 0.5 weight percent sulfur, the owner or operator shall ensure that the sulfur content of subsequent oil shipments is low enough to cause the 30-day rolling average sulfur content to be 0.5 weight percent sulfur or less.

(3) Method 6B of appendix A of this part may be used in lieu of CEMS to measure SO₂ at the inlet or outlet of the SO₂ control system. An initial stratification test is required to verify the adequacy of the Method 6B of appendix A of this part sampling location. The stratification test shall consist of three paired runs of a suitable SO₂ and CO₂ measurement train operated at the candidate location and a second similar train operated according to the procedures in §3.2 and the applicable procedures in section 7 of Performance Specification 2 of appendix B of this part. Method 6B of appendix A of this part, Method 6A of appendix A of this part, or a combination of Methods 6 and 3 of appendix A of this part or Methods 6C and 3A of appendix A of this part are suitable measurement techniques. If Method 6B of appendix A of this part is used for the second train, sampling time and timer operation may be adjusted for the stratification test as long as an adequate sample volume is collected; however, both sampling trains are to be operated similarly. For the location to be adequate for Method 6B of appendix A of this part 24-hour tests, the mean of the absolute difference between the three paired runs must be less than 10 percent (0.10).

(e) The monitoring requirements of paragraphs (a) and (d) of this section shall not apply to affected facilities subject to §60.42c(h) (1), (2), or (3) where the owner or operator of the affected facility seeks to demonstrate compliance with the SO₂ standards based on fuel supplier certification, as described under §60.48c(f), as applicable.

(f) The owner or operator of an affected facility operating a CEMS pursuant to paragraph (a) of this section, or conducting as-fired fuel sampling pursuant to paragraph (d)(1) of this section, shall obtain emission data for at least 75 percent of the operating hours in at least 22 out of 30 successive steam generating unit operating days. If this minimum data requirement is not met with a single monitoring system, the owner or operator of the affected facility shall supplement the emission data with data collected with other monitoring systems as approved by the Administrator.

§ 60.47c Emission monitoring for particulate matter.

(a) Except as provided in paragraphs (c), (d), (e), and (f) of this section, the owner or operator of an affected facility combusting coal, oil, or wood that is subject to the opacity standards under §60.43c shall install, calibrate, maintain, and operate a COMS for measuring the opacity of the emissions discharged to the atmosphere and record the output of the system.

(b) All COMS for measuring opacity shall be operated in accordance with the applicable procedures under Performance Specification 1 of appendix B of this part. The span value of the opacity COMS shall be between 60 and 80 percent.

(c) Affected facilities that burn only distillate oil that contains no more than 0.5 weight percent sulfur and/or liquid or gaseous fuels with potential sulfur dioxide emission rates of 26 ng/J (0.06 lb/MMBtu) heat input or less and that do not use a post-combustion technology to reduce SO₂ or PM emissions are not required to operate a CEMS for measuring opacity if they follow the applicable procedures under §60.48c(f).

(d) Owners or operators complying with the PM emission limit by using a PM CEMS monitor instead of monitoring opacity must calibrate, maintain, and operate a CEMS, and record the output of the system, for PM emissions discharged to the atmosphere as specified in §60.45c(d). The CEMS specified in paragraph §60.45c(d) shall be operated and data recorded during all periods of operation of the affected facility except for CEMS breakdowns and repairs. Data is recorded during calibration checks, and zero and span adjustments.

(e) An affected facility that does not use post-combustion technology (except a wet scrubber) for reducing PM, SO₂, or carbon monoxide (CO) emissions, burns only gaseous fuels or fuel oils that contain less than or equal to 0.5 weight percent sulfur, and is operated such that emissions of CO to the atmosphere from the affected facility are maintained at levels less than or equal to 0.15 lb/MMBtu on a boiler operating day average basis is not required to operate a COMS for measuring opacity. Owners and operators of affected facilities electing to comply with this

paragraph must demonstrate compliance according to the procedures specified in paragraphs (e)(1) through (4) of this section.

(1) You must monitor CO emissions using a CEMS according to the procedures specified in paragraphs (e)(1)(i) through (iv) of this section.

(i) The CO CEMS must be installed, certified, maintained, and operated according to the provisions in §60.58b(i)(3) of subpart Eb of this part.

(ii) Each 1-hour CO emissions average is calculated using the data points generated by the CO CEMS expressed in parts per million by volume corrected to 3 percent oxygen (dry basis).

(iii) At a minimum, valid 1-hour CO emissions averages must be obtained for at least 90 percent of the operating hours on a 30-day rolling average basis. At least two data points per hour must be used to calculate each 1-hour average.

(iv) Quarterly accuracy determinations and daily calibration drift tests for the CO CEMS must be performed in accordance with procedure 1 in appendix F of this part.

(2) You must calculate the 1-hour average CO emissions levels for each steam generating unit operating day by multiplying the average hourly CO output concentration measured by the CO CEMS times the corresponding average hourly flue gas flow rate and divided by the corresponding average hourly heat input to the affected source. The 24-hour average CO emission level is determined by calculating the arithmetic average of the hourly CO emission levels computed for each steam generating unit operating day.

(3) You must evaluate the preceding 24-hour average CO emission level each steam generating unit operating day excluding periods of affected source startup, shutdown, or malfunction. If the 24-hour average CO emission level is greater than 0.15 lb/MMBtu, you must initiate investigation of the relevant equipment and control systems within 24 hours of the first discovery of the high emission incident and, take the appropriate corrective action as soon as practicable to adjust control settings or repair equipment to reduce the 24-hour average CO emission level to 0.15 lb/MMBtu or less.

(4) You must record the CO measurements and calculations performed according to paragraph (e) of this section and any corrective actions taken. The record of corrective action taken must include the date and time during which the 24-hour average CO emission level was greater than 0.15 lb/MMBtu, and the date, time, and description of the corrective action.

(f) An affected facility that burns only gaseous fuels or fuel oils that contain less than or equal to 0.5 weight percent sulfur and operates according to a written site-specific monitoring plan approved by the appropriate delegated permitting authority is not required to operate a COMS for measuring opacity. This monitoring plan must include procedures and criteria for establishing and monitoring specific parameters for the affected facility indicative of compliance with the opacity standard.

§ 60.48c Reporting and recordkeeping requirements.

(a) The owner or operator of each affected facility shall submit notification of the date of construction or reconstruction and actual startup, as provided by §60.7 of this part. This notification shall include:

(1) The design heat input capacity of the affected facility and identification of fuels to be combusted in the affected facility.

(2) If applicable, a copy of any federally enforceable requirement that limits the annual capacity factor for any fuel or mixture of fuels under §60.42c, or §60.43c.

(3) The annual capacity factor at which the owner or operator anticipates operating the affected facility based on all fuels fired and based on each individual fuel fired.

(4) Notification if an emerging technology will be used for controlling SO₂ emissions. The Administrator will examine the description of the control device and will determine whether the technology qualifies as an emerging technology. In making this determination, the Administrator may require the owner or operator of the affected facility to submit additional information concerning the control device. The affected facility is subject to the provisions of §60.42c(a) or

(b)(1), unless and until this determination is made by the Administrator.

(b) The owner or operator of each affected facility subject to the SO₂emission limits of §60.42c, or the PM or opacity limits of §60.43c, shall submit to the Administrator the performance test data from the initial and any subsequent performance tests and, if applicable, the performance evaluation of the CEMS and/or COMS using the applicable performance specifications in appendix B of this part.

(c) The owner or operator of each coal-fired, oil-fired, or wood-fired affected facility subject to the opacity limits under §60.43c(c) shall submit excess emission reports for any excess emissions from the affected facility that occur during the reporting period.

(d) The owner or operator of each affected facility subject to the SO₂emission limits, fuel oil sulfur limits, or percent reduction requirements under §60.42c shall submit reports to the Administrator.

(e) The owner or operator of each affected facility subject to the SO₂emission limits, fuel oil sulfur limits, or percent reduction requirements under §60.42c shall keep records and submit reports as required under paragraph (d) of this section, including the following information, as applicable.

(1) Calendar dates covered in the reporting period.

(2) Each 30-day average SO₂emission rate (ng/J or lb/MMBtu), or 30-day average sulfur content (weight percent), calculated during the reporting period, ending with the last 30-day period; reasons for any noncompliance with the emission standards; and a description of corrective actions taken.

(3) Each 30-day average percent of potential SO₂emission rate calculated during the reporting period, ending with the last 30-day period; reasons for any noncompliance with the emission standards; and a description of the corrective actions taken.

(4) Identification of any steam generating unit operating days for which SO₂or diluent (O₂or CO₂) data have not been obtained by an approved method for at least 75 percent of the operating hours; justification for not obtaining sufficient data; and a description of corrective actions taken.

(5) Identification of any times when emissions data have been excluded from the calculation of average emission rates; justification for excluding data; and a description of corrective actions taken if data have been excluded for periods other than those during which coal or oil were not combusted in the steam generating unit.

(6) Identification of the F factor used in calculations, method of determination, and type of fuel combusted.

(7) Identification of whether averages have been obtained based on CEMS rather than manual sampling methods.

(8) If a CEMS is used, identification of any times when the pollutant concentration exceeded the full span of the CEMS.

(9) If a CEMS is used, description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specifications 2 or 3 of appendix B of this part.

(10) If a CEMS is used, results of daily CEMS drift tests and quarterly accuracy assessments as required under appendix F, Procedure 1 of this part.

(11) If fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification as described under paragraph (f)(1), (2), (3), or (4) of this section, as applicable. In addition to records of fuel supplier certifications, the report shall include a certified statement signed by the owner or operator of the affected facility that the records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period.

(f) Fuel supplier certification shall include the following information:

(1) For distillate oil:

(i) The name of the oil supplier;

(ii) A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in §60.41c; and

(iii) The sulfur content of the oil.

(2) For residual oil:

(i) The name of the oil supplier;

(ii) The location of the oil when the sample was drawn for analysis to determine the sulfur content of the oil, specifically including whether the oil was sampled as delivered to the affected facility, or whether the sample was drawn from oil in storage at the oil supplier's or oil refiner's facility, or other location;

(iii) The sulfur content of the oil from which the shipment came (or of the shipment itself); and

(iv) The method used to determine the sulfur content of the oil.

(3) For coal:

(i) The name of the coal supplier;

(ii) The location of the coal when the sample was collected for analysis to determine the properties of the coal, specifically including whether the coal was sampled as delivered to the affected facility or whether the sample was collected from coal in storage at the mine, at a coal preparation plant, at a coal supplier's facility, or at another location. The certification shall include the name of the coal mine (and coal seam), coal storage facility, or coal preparation plant (where the sample was collected);

(iii) The results of the analysis of the coal from which the shipment came (or of the shipment itself) including the sulfur content, moisture content, ash content, and heat content; and

(iv) The methods used to determine the properties of the coal.

(4) For other fuels:

(i) The name of the supplier of the fuel;

(ii) The potential sulfur emissions rate of the fuel in ng/J heat input; and

(iii) The method used to determine the potential sulfur emissions rate of the fuel.

(g)(1) Except as provided under paragraphs (g)(2) and (g)(3) of this section, the owner or operator of each affected facility shall record and maintain records of the amount of each fuel combusted during each operating day.

(2) As an alternative to meeting the requirements of paragraph (g)(1) of this section, the owner or operator of an affected facility that combusts only natural gas, wood, fuels using fuel certification in §60.48c(f) to demonstrate compliance with the SO₂ standard, fuels not subject to an emissions standard (excluding opacity), or a mixture of these fuels may elect to record and maintain records of the amount of each fuel combusted during each calendar month.

(3) As an alternative to meeting the requirements of paragraph (g)(1) of this section, the owner or operator of an affected facility or multiple affected facilities located on a contiguous property unit where the only fuels combusted in any steam generating unit (including steam generating units not subject to this subpart) at that property are natural gas, wood, distillate oil meeting the most current requirements in §60.42C to use fuel certification to demonstrate compliance with the SO₂ standard, and/or fuels, excluding coal and residual oil, not subject to an emissions standard (excluding opacity) may elect to record and maintain records of the total amount of each steam generating unit fuel delivered to that property during each calendar month.

(h) The owner or operator of each affected facility subject to a federally enforceable requirement limiting the annual capacity factor for any fuel or mixture of fuels under §60.42c or §60.43c shall calculate the annual capacity factor

individually for each fuel combusted. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of the calendar month.

(i) All records required under this section shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record.

(j) The reporting period for the reports required under this subpart is each six-month period. All reports shall be submitted to the Administrator and shall be postmarked by the 30th day following the end of the reporting period.

Indiana Department of Environmental Management Office of Air Quality

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

Source Background and Description

Source Name:	Jasper Engine Exchange, Inc.
Source Location:	6400 East Industrial Lane, Leavenworth, Indiana 47137
County:	Crawford
SIC Code:	3714, 3519, 7537
Permit Renewal No.:	F025-25750-00012
Permit Reviewer:	ERG/TDP

The Office of Air Quality (OAQ) has reviewed the operating permit renewal application from Jasper Engine Exchange, Inc. relating to the operation of a stationary automotive engine, transmission, and vehicle parts remanufacturing plant.

History

Jasper Engine Exchange, Inc. was issued a FESOP Renewal on November 1, 2002. On January 24, 2007, Jasper Engine Exchange, Inc. submitted application to the OAQ requesting to renew its operating permit. Additional information was received on September 5, 2007 and February 21, 2008, for the construction of one new shot blaster, identified as BLA070, one new paint booth (PTB013), and one engine test stand (GTS011). Additionally, the source requested the removal of ten cleaning tanks and baghouse DUC046.

Permitted Emission Units and Pollution Control Equipment

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

- (a) Two (2) black beauty sand blasters (identified as BLA020 and BLA021), constructed in 1998, each with a maximum nozzle flow rate of 1,020 pounds of grit per hour, controlled by baghouses DUC044 and BLA021, respectively, and venting into the building. Baghouse DUC044 is capable of venting to the atmosphere.
- (b) One (1) abrasive blasting unit using coal slag as the blast media (identified as BLA022), constructed in 2004, with a maximum process rate of 1,020 pounds of parts per hour, controlled by baghouse BLA022, and venting into the building.
- (c) Three (3) steel shot blasters (identified as BLA026, BLA027, and BLA028), constructed in 1998, each with a maximum process rate of 800 pounds of steel per hour, controlled by baghouses DUC040, DUC044, and DUC029, respectively, and venting into the building.
- (d) One (1) soda blaster cabinet (identified as BLA035), constructed in 1999, with a maximum abrasive usage of 12.5 pounds of parts per hour and a maximum process rate of 1,200 pounds of parts per hour, controlled by a new baghouse DUC044, and venting inside the building.
- (e) One (1) soda blaster cabinet (identified as BLA036), constructed in 1999, with a maximum abrasive usage of 12.5 pounds per hour and a maximum process rate of 1,200 pounds of parts per hour, controlled by a baghouse DUC044, and venting into the building.
- (f) One (1) abrasive blasting unit using steel shot as the blast media (identified as BLA044), constructed in 2004, with a maximum process rate of 1,020 pounds of parts per hour,

controlled by baghouse DUC044, and venting either into the building or to the atmosphere.

- (g) One (1) plastic pellet blaster (identified as BLA046), constructed in 2004, with a maximum process rate of 1,020 pounds of parts per hour, controlled by baghouse BLA046, and venting into the building.
- (h) One (1) abrasive blasting unit using aluminum oxide as the blast media (identified as BLA047), constructed in 2004, with a maximum process rate of 1,020 pounds of parts per hour, controlled by baghouse BLA047, and venting into the building.
- (i) One (1) plastic bead blaster using plastic shot as the blast media (identified as BLA061), approved for construction in 2007, with a maximum abrasive usage of 108 pounds per hour and a maximum process rate of 1,200 pounds of parts per hour, controlled by baghouse BLA061, and venting inside the building.
- (j) One (1) soda blaster cabinet (identified as BLA062), approved for construction in 2007, with a maximum abrasive usage of 12.5 pounds per hour and a maximum process rate of 1,200 pounds of parts per hour, controlled by an existing baghouse DUC020, and venting inside the building.
- (k) One (1) plastic bead blaster cabinet (identified as BLA067), approved for construction in 2007, with a maximum abrasive usage of 108 pounds per hour and a maximum process rate of 1,200 pounds of parts per hour, controlled by an existing baghouse DUC044, and venting inside the building.
- (l) One (1) abrasive blasting unit (identified as BLA070), using plastic bead media, approved for construction in 2008, with a maximum abrasive usage of 108 pounds per hour and maximum rate of 1,200 parts per hour, controlled by an existing baghouse DUC044, and venting inside the building.
- (m) One (1) salt bath cleaning line, constructed in 1998, with a maximum throughput rate of 16,000 pounds of parts per hour, consisting of the following:
 - (1) Two (2) molten salt cleaning tanks (identified as KOL013 and KOL014), each with a maximum capacity of 1,200 gallons and each heated by a 2.5 MMBtu/hr natural gas burner, both controlled by a wet scrubber KOL015.
 - (2) Two (2) acid derust tanks (identified as KOL016 and KOL017), each with a maximum capacity of 1,800 gallons.
 - (3) One (1) acid rinsing tank (identified as KOL018), with a maximum capacity of 1,200 gallons.
 - (4) One (1) alkaline derusting tank (identified as KOL019), with a maximum capacity of 1,200 gallons.
 - (5) One (1) alkaline rinsing tank (identified as KOL020), with a maximum capacity of 1,200 gallons.
 - (6) One (1) quenching tank (identified as KOL021), with a maximum capacity of 1,800 gallons.
 - (7) One (1) hot rinsing tank (identified as KOL022), with a maximum capacity of 1,800 gallons.
- (n) One (1) surface coating booth (identified as PTB006), constructed in 1999, with a maximum capacity of 145 engines and transmissions per day, equipped with High Volume Low Pressure (HVLP) spray guns, coating metal substrate, and using dry filters for overspray control.

- (o) One (1) surface coating booth (identified as PTB010), constructed in 2004, with a maximum capacity of 30 torque converters per hour, equipped with High Volume Low Pressure (HVLP) spray guns, coating metal substrate, and using dry filters for overspray control.
- (p) One (1) surface coating booth (identified as PTB011), approved for construction in 2008, with a maximum capacity of 10 remanufactured automotive engines per hour, equipped with High Volume Low Pressure (HVLP) spray guns and using dry filters for overspray control.
- (q) Two (2) natural gas-fired boilers, each with a maximum heat input capacity of 17 million British thermal units (MMBtu) per hour, constructed after 1990, and exhausting to stacks FEQ016 and FEQ017, respectively. These units are affected units under 40 CFR 60, Subpart Dc.
- (r) Four (4) natural gas-fired internal combustion engines, constructed in 2004, each with a maximum rate of 0.725 MMBtu/hr.

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

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

- (q) One (1) abrasive blasting unit (identified as BLA070), using plastic bead media, approved for construction in 2008, with a maximum abrasive usage of 108 pounds per hour and maximum rate of 1,200 parts per hour, controlled by an existing baghouse DUC044, and venting inside the building.
- (r) One (1) surface coating booth (identified as PTB011), approved for construction in 2008, with a maximum capacity of 10 remanufactured automotive engines per hour, equipped with High Volume Low Pressure (HVLP) spray guns, coating metal substrate, and using dry filters for overspray control.

Insignificant Activities

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

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour, including the following:
 - (1) Seven (7) natural gas-fired heaters, identified as ACH016 through ACH022, with a total maximum heat input rate of 0.8 MMBtu/hr.
 - (2) One (1) natural gas-fired head oven (identified as PEQ047) with a maximum heat input rate of 0.06 MMBtu/hr.
 - (3) One (1) test stand, identified as GTS011, approved for construction in 2008, used to test remanufactured engines, with a maximum natural gas heat input of 0.088 MMBtu/hr, consuming a maximum of 85.6 ft³ of natural gas per hour, and used to set up and run a remanufactured engine for a maximum of twelve (12) minutes.
- (b) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment, including the following: [326 IAC 6-3-2]
 - (1) Metal Inert Gas (MIG) stations.

- (2) Stick welding stations.
 - (3) Tungsten Inert Gas (TIG) stations.
 - (4) Three (3) oxyacetylene flame-cutting operations, with a maximum cutting rate of 2 inches per minute.
 - (5) Two (2) plasma cutters.
 - (6) One (1) hub welding station.
- (c) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1% by volume.
- (d) Other emission units, not regulated by a NESHAP, with PM₁₀ and SO₂ emissions less than five (5) pounds per hour or twenty-five (25) pounds per day, CO emissions less than twenty-five (25) pounds per day, lead emissions less than six-tenths (0.6) tons per year or three and twenty-nine (3.29) pounds per day, and emitting greater than one (1) pound per day but less than five (5) pounds per day or one (1) ton per year of a single HAP, or emitting greater than one (1) pound per day but less than twelve and five tenths (12.5) pounds per day or two and five tenths (2.5) ton per year of any combination of HAPs:
- (1) One (1) open top degreaser used for transmission cases and skids (identified as CLT001), with a maximum capacity of 375 gallons mixture of water and water based solvent.
 - (2) One (1) open top degreaser used for aluminum head rinse (identified as CLT011), with a maximum capacity of 175 gallons mixture of water and water based solvent.
 - (3) One (1) open top degreaser used for transmission skid wash (identified as CLT032), with a maximum capacity of 800 gallons mixture of water and water based solvent.
 - (4) One (1) open top degreaser used for transmission prewash (identified as CLT086), with a maximum capacity of 1,800 gallons mixture of water and water based solvent.
 - (5) One (1) open top degreaser used for tumble cleaning of small parts (identified as CLT087), with a maximum capacity of 50 gallons mixture of water and water based solvent.
 - (6) One (1) open top degreaser used for engine block prewash (identified as CLT088), with a maximum capacity of 1,000 gallons mixture of water and water based solvent.
 - (7) One (1) open top degreaser used for head prewash (identified as CLT090), with a maximum capacity of 600 gallons mixture of water and water based solvent.
 - (8) One (1) open top degreaser used for aluminum head wash (identified as CLT092), with a maximum capacity of 175 gallons mixture of water and water based solvent.
 - (9) One (1) open top degreaser used for differential/axle housing wash (identified as CLT096), with a maximum capacity of 375 gallons mixture of water and water based solvent.

- (10) One (1) open top degreaser used for maintenance cleaning (identified as CLT098), with a maximum capacity of 25 gallons mixture of water and water based solvent.
- (11) One (1) open top degreaser used for rinsing axle housings and differentials, (identified as CLT101), with a maximum capacity of 400 gallons mixture of water and water based solvent.
- (12) One (1) open top degreaser used for transmission cases (identified as CLT102), with a maximum capacity of 100 gallons mixture of water and water based solvent.
- (13) One (1) open top degreaser used for small transmission parts (identified as CLT103), with a maximum capacity of 30 gallons mixture of water and water based solvent.
- (14) One (1) open top degreaser used for small transmission parts (identified as CLT106), with a maximum capacity of 30 gallons mixture of water and water based solvent.
- (15) One (1) open top degreaser used for crank wash (identified as CLT110), with a maximum capacity of 350 gallons mixture of water and water based solvent.
- (16) One (1) open top degreaser used for diesel engine blocks (identified as CLT114), with a maximum capacity of 1,100 gallons mixture of water and water based solvent.
- (17) One (1) open top degreaser used for diesel engine parts (identified as CLT115), with a maximum capacity of 1,100 gallons mixture of water and water based solvent.
- (18) One (1) open top degreaser used for vehicle servicing (identified as CLT127), with a maximum capacity of 25 gallons mixture of water and water based solvent.
- (19) One (1) open top degreaser used for aluminum timing cover wash (identified as ADJ007), with a maximum capacity of 440 gallons mixture of water and water based solvent.
- (20) One (1) open top degreaser used for diesel block final wash (identified as ADJ012), with a maximum capacity of 440 gallons mixture of water and water based solvent.
- (21) One (1) open top degreaser used for aluminum head wash (identified as ADJ014), with a maximum capacity of 440 gallons mixture of water and water based solvent.
- (22) One (1) open top degreaser used for iron and steel small parts wash (identified as ADJ016), with a maximum capacity of 400 gallons mixture of water and water based solvent.
- (23) One (1) open top degreaser used for block final wash 1 (identified as ADJ027), with a maximum capacity of 440 gallons mixture of water and water based solvent.
- (24) One (1) open top degreaser used for block final wash 2 (identified as ADJ028), with a maximum capacity of 440 gallons mixture of water and water based solvent.
- (25) One (1) open top degreaser used for head final wash (identified as ADJ029), with a maximum capacity of 440 gallons mixture of water and water based solvent.

- (26) One (1) open top degreaser used for small parts wash (identified as ADJ030), with a maximum capacity of 440 gallons mixture of water and water based solvent.
- (27) One (1) open top degreaser used for aluminum head wash (identified as ADJ031), with a maximum capacity of 440 gallons mixture of water and water based solvent.
- (28) One (1) open top degreaser used for rinsing crankshafts after polishing (identified as CSP006), with a maximum capacity of 30 gallons mixture of water and water based solvent.
- (29) Twenty-two (22) part washers using water-based liquid detergent cleaners.
- (30) Eight (8) part washers using powdered detergent cleaners.

Emission Units and Pollution Control Equipment Removed From the Source

The following insignificant activities have been removed from the source:

- (a) Other emission units, not regulated by a NESHAP, with PM₁₀ and SO₂ emissions less than five (5) pounds per hour or twenty-five (25) pounds per day, CO emissions less than twenty-five (25) pounds per day, lead emissions less than six-tenths (0.6) tons per year or three and twenty-nine (3.29) pounds per day, and emitting greater than one (1) pound per day but less than five (5) pounds per day or one (1) ton per year of a single HAP, or emitting greater than one (1) pound per day but less than twelve and five tenths (12.5) pounds per day or two and five tenths (2.5) ton per year of any combination of HAPs:
 - (1) One (1) open top degreaser used for transmission cases and skids (identified as CLT002), with a maximum capacity of 375 gallons mixture of water and water based solvent.
 - (2) One (1) open top degreaser used for aluminum timing cover rinse (identified as CLT013), with a maximum capacity of 175 gallons mixture of water and water based solvent.
 - (3) One (1) open top degreaser used for transmission parts hand wash (identified as CLT048), with a maximum capacity of 40 gallons of low VOC solvent (VOC < 5%).
 - (4) One (1) open top degreaser used for transmission parts hand wash (identified as CLT051), with a maximum capacity of 40 gallons mixture of water and water based solvent.
 - (5) One (1) open top degreaser used for transmission intermediate wash (identified as CLT089), with a maximum capacity of 1,000 gallons mixture of water and water based solvent.
 - (6) One (1) open top degreaser used for converter wash (identified as CLT091), with a maximum capacity of 1,000 gallons mixture of water and water based solvent.
 - (7) One (1) open top degreaser used for ultrasonic cleaning of small parts (identified as CLT094), with a maximum capacity of 30 gallons mixture of water and water based solvent.
 - (8) One (1) open top degreaser used for small transmission parts (identified as CLT104), with a maximum capacity of 30 gallons mixture of water and water based solvent.

- (9) One (1) open top degreaser used for transmission parts hand wash (identified as CLT108), with a maximum capacity of 40 gallons low VOC solvent (VOC content less than 5%).
- (10) One (1) open top degreaser used for axle and differential cleaning (identified as CLT123), with a maximum capacity of 20 gallons low VOC solvent (VOC < 5%).

Existing Approvals

The source was issued a FESOP Renewal No. 025-15881-00012, on November 1, 2002. The source has since received the following approvals:

- (a) First Administrative Amendment No. 025-19036-00012, issued June 18, 2004.
- (b) First Minor Permit Revision No. 025-20288-00012, issued December 15, 2004.
- (c) Second Administrative Amendment No. 025-19879-00012, issued December 21, 2004.
- (d) Third Administrative Amendment No. 025-22576-00012, issued February 8, 2006.
- (e) First Significant Permit Revision No.: 025-22253-00012, issued April 4, 2006.
- (f) Second Minor Permit Revision No.: 025-24111-00012, issued February 26, 2007.

Enforcement Issue

There are no enforcement actions pending.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
Venting Internally	BLA021, BLA022, BLA026, BLA027, BLA028, BLA036, BLA046, BLA061, BLA062, BLA067, BLA035, BLA070	--	--	--	--
DUC044	BLA020, BLA044	--	--	--	--
FEQ016, FEQ017	Two (2) 17 MMBtu/hr Natural Gas Boilers	24	2	3600	350
KOL015	Wet Scrubber for Salt Bath	34	2.83	22500	80
PTB006, PTB010, PTB011	Paint Booth	--	--	--	Ambient
ACH016	Natural Gas Heater	19	0.25	250	38
ACH017	Natural Gas Heater	19	0.25	27	250
ACH018	Natural Gas Heater	19	0.25	16	250
ACH019	Natural Gas Heater	20	0.25	27	250
ACH020	Natural Gas Heater	20	0.25	38	250
ACH021	Natural Gas Heater	20	0.25	16	250
ACH022	Natural Gas Heater	20	0.25	27	250

"--" No information provided.

Emission Calculations

See Appendix A of this document for detailed emission calculations (pages 1 through 13).

County Attainment Status

The source is located Crawford County.

Pollutant	Status
PM10	Attainment
PM2.5	Attainment
SO ₂	Attainment
NO ₂	Attainment
8-hour Ozone	Attainment
CO	Attainment
Lead	Attainment

- (a) Crawford County has been classified as unclassifiable or attainment for PM2.5. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM2.5 emissions. Therefore, until the U.S. EPA adopts specific provisions for PSD review for PM2.5 emissions, it has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions. See the State Rule Applicability - Entire Source section.
- (b) Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) emissions are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to ozone. Crawford County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability - Entire Source section.
- (c) Crawford County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability - Entire Source section.
- (d) Fugitive Emissions
 Since this type of operation is not one of the 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 toward determination of PSD applicability.
- (e) On October 25, 2006, the Indiana Air Pollution Control Board finalized a rule revision to 326 IAC 1-4-1 revoking the one-hour ozone standard in Indiana.

Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source.

Pollutant	tons/year
PM	688
PM10	654
SO ₂	0.11
VOC	14.6
CO	63.1
NO _x	46.0

HAPs	tons/year
Glycol Ethers	1.14
Total	1.55

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of PM10 is greater than 100 tons per year. However, this source is renewing its FESOP. Therefore, this source will be issued a FESOP Renewal.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is less than twenty-five (25) tons per year.

Fugitive Emissions

Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-7, fugitive emissions are not counted toward the determination of Part 70 applicability.

Actual Emissions

No previous emission data has been received from the source.

Potential to Emit of New Units

Pursuant to 326 IAC 2-7-1(29), Potential to Emit is defined as “the maximum capacity of a stationary source or emission 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, IDEM, or the appropriate local air pollution control agency.”

The following table is used to determine the appropriate permit level under 326 IAC 2-8.11.1 for the revision. This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	PTE of revision (tons/year)
PM	55.0
PM10	55.0
SO ₂	--
VOC	1.40
CO	--
NO _x	--
HAPs	--

'--' = No emissions.

The permit revision is subject to 326 IAC 2-8-11.1(f)(1)(E), because this modification has a potential to emit greater than twenty-five (25) tons per year of PM and PM10.

Potential to Emit After Issuance

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

Process/emission unit	Potential To Emit (tons/year)						
	PM ^c	PM-10 ^d	SO ₂	NOx	VOC	CO	HAPs
BLA021	6.39	6.39	-	-	-	-	-
BLA046	6.39	6.39	-	-	-	-	-
BLA026	2.01	2.01	-	-	-	-	-
BLA028	2.01	2.01	-	-	-	-	-
BLA020, BLA027, BLA035, BLA036, BLA044 BLA067 ^a , BLA070 ^b	41.0	41.0	-	-	-	-	-
BLA061	7.51	7.51	-	-	-	-	-
BLA022	6.39	6.39	-	-	-	-	-
BLA047	6.39	6.39	-	-	-	-	-
BLA062	7.51	7.51	-	-	-	-	-
Salt Bath Cleaning	1.71	1.71	-	-	9.25	-	-
Two (2) 2.5 MMBtu/hr Burners	0.17	0.17	0.01	2.19	0.12	1.84	Negligible
Surface Coating Booths PTB006, PTB010, and PTB011	5.95	5.95	-	-	4.00	-	1.48
Two (2) 17 MMBtu/hr Boilers	1.13	1.13	0.09	14.9	0.82	12.5	Negligible
Four (4) 0.725 MMbtu/hr Engines	0.13	0.13	0.01	28.1	0.38	47.3	Negligible
Engine Test Stand*	0.004	0.004	Negligible	0.85	0.01	1.43	Negligible
Welding	4.40	4.40	Negligible	-	-	-	0.07
Insignificant Combustion	0.03	0.03	0.00	0.38	0.02	0.32	Negligible
Degreasers	-	-	-	-	0.52	-	-
Part 70 Major Source Threshold	-	100	100	100	100	100	Single HAP= 10; Total HAP = 25
PSD Major Source Threshold	250	250	250	250	250	250	
Total Emissions	94.3	95.2	0.11	46.4	14.6	63.1	1.55

^a BLA099, BLA027, BLA035, BLA036, BLA044, BLA067, and BLA070 are units controlled by a single baghouse (DUC044).

^b Blaster BLA070 is new equipment

^c Refer to the State Applicability of this TSD for details (326 IAC 2-2).

^d Refer to the State Applicability of the TSD for details (326 IAC 2-8).

- (a) This existing stationary source is not major for PSD because the emissions of each criteria pollutant are less than two hundred fifty (<250) tons per year, and it is not one of the twenty-eight (28) listed source categories.
- (b) Fugitive Emissions
 Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2, fugitive emissions are not counted toward the determination of PSD applicability.

Federal Rule Applicability

The following federal rules are applicable to the source:

- (a) The two (2) 17 MMBtu/hr boilers are still subject to the New Source Performance Standard, 40 CFR 60, Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units (326 IAC 12) the two boilers were

constructed or modified after June 9, 1989 and each boiler has a maximum design heat input capacity of less than 100 MMBtu per hour but greater than 10 MMBtu per hour.

The existing affected sources, including the two (2) 17 MMBtu per hour boilers, are subject to the following portions of 40 CFR 60, Subpart Dc. Non-applicable portions of the NSPS are not included in the permit.

- (a) 40 CFR 60.40c (a)
- (b) 40 CFR 60.41c
- (c) 40 CFR 60.48c (b)-(e), (f)(1), (g), (i), (j)

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

- (b) The source does not perform any metal coil surface coating operations. Therefore, the New Source Performance Standards for Metal Coil Surface Coating (40 CFR Part 60.460 - 60.466, Subpart TT) are not included in this permit.
- (c) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) included in this permit.
- (d) The solvents used in the degreasing operations (insignificant activities) do not contain any halogenated HAP specified in 40 CFR 63.460. Therefore, the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Halogenated Solvent Cleaning (40 CFR Part 63, Subpart T) are not included in this permit.

State Rule Applicability - Entire Source

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

This source is not subject to the provisions 326 IAC 2-4.1-1 (New Source Toxics Control). It does not have potential to emit of HAP equal to greater than ten (10) tons per year or combination of HAPS equal to or greater than twenty-five (25) tons per year.

326 IAC 2-2 (Prevention of Significant Deterioration)

This source was constructed in 1990 and modified in 1999, 2004, and 2007 with additional modifications planned for 2008. The source is not in 1 of the 28 source categories defined in 326 IAC 2-2-1(gg) and the potential to emit of PM and PM10 before control is greater than two hundred and fifty (250) tons per year.

To ensure that the requirements of 326 IAC 2-2 are not applicable, this source has accepted limits on PM and PM10 emissions such that the PM and PM10 emissions are limited to less than the 250 tons per year PSD major source threshold. The limited potential to emit of PM and PM10 from the shotblasters has been revised to incorporate the removal of baghouse DUC046 and the addition of blaster BLA070.

The PM is limited to less than 249 tons per year. The PM limits were calculated as follows:

$$\begin{aligned} 249 \text{ tons/yr} - 13.5 \text{ tons/yr (insignificant activities)} &= 235.5 \text{ tons/yr} \\ &= 53.8 \text{ lbs/hr} \end{aligned}$$

The PM10 is limited to less than 100 tons per year due to the FESOP provisions discussed later in this document. The PM10 limits were calculated as follows:

$$\begin{aligned} 99 \text{ ton/yr} - 13.5 \text{ ton/yr (insignificant activities)} &= 85.5 \text{ ton/yr} * 2000 \text{ lb/ton} * 1 \text{ yr}/8,760 \text{ hrs} \\ &= 19.52 \text{ lb/hr} \end{aligned}$$

The 53.8 lb/hr from PM and 19.52 lb/hr for PM10 is prorated among the baghouses as follows:

Baghouse ID	Process ID	Emission Limits (lbs/hour)	
		PM	PM10
BLA021	BLA021	4.02	1.46
BLA046	BLA046	4.02	1.46
BLA022	BLA022	4.02	1.46
DUC040	BLA026	1.27	0.46
DUC029	BLA028	1.27	0.46
DUC044	BLA020	25.8	9.35
	BLA027		
	BLA035		
	BLA036		
	BLA044		
	BLA067		
BLA070*			
BLA047	BLA047	4.02	1.46
BLA061	BLA061	4.71	1.71
DUC020	BLA062	4.71	1.71

*The new shotblaster BLA070 is ducted to DUC044.

Methodology:

$$\text{PM10 Emissions, lb/hr} = \frac{\text{shotblaster's baghouse emissions, lb/hr} * \text{total shotblasters PM10 limit, lb/hr}}{\text{total shotblasters' baghouse emissions, lb/hr}}$$

The potential to emit of PM and PM10 emissions from the baghouses used to control the emissions from the shot blaster cabinets shall not exceed the limits listed in the table above.

These emission limits are equivalent to 235.5 tons of PM and 85.5 tons of PM10 per year.

The PM and PM10 emissions from the salt bath cleaning line shall not exceed 0.39 pounds per hour. This limit is equivalent to a total of 1.71 tons of PM/PM10 emissions per year from the cleaning process.

The above combined limits on the abrasive blasters and the salt bath line limit the PM and PM10 emissions, combined with the PM and PM10 emissions from the boilers, the natural gas-fired engines, surface coating facilities, and the insignificant activities from the entire source, to less than 250 tons of PM per year and 100 tons of PM10 per year. Therefore, the requirements of 326 IAC 2-2 are not applicable.

326 IAC 2-6 (Emission Reporting)

This source is located in Crawford county and has a valid FESOP. Therefore, it does not require a Part 70 Permit under 326 IAC 2-7 and has potential to emit of lead (Pb) less than five (5) tons per year. Therefore, this source is not subject to annual or triennial reporting. However, pursuant to 326 IAC 2-6-1(b), this source is subject to additional information requests as provided in 326 IAC 2-6-5.

326 IAC 2-8-4 (FESOP)

The potential PM10 emissions from the entire facility are greater than 100 tons per year. The Permittee was issued a FESOP Renewal No.: 025-15881-00012 on November 1, 2002, which limited the potential to emit of PM10 emissions from the entire facility to less than 100 tons per year. The source was later modified under MPR 025-24111-00012, issued February 26, 2007. The source provided information on September 25, 2007 regarding the addition of one new abrasive blaster. The source provided additional information on February 28, 2008 regarding the removal of baghouse DUC046 and subsequent rerouting of equipment to DUC044. The Permittee has agreed to revise the PM10 limits for the shotblasters to incorporate the removal of baghouse DUC046 and the addition of blaster BLA070. The PM10 limits are based on 99 tons

per year, subtracting the 1.71 tons per year PM10 from the salt bath line, the 5.95 tons per year from surface coating, the 1.11 tons per year from the two (2) natural gas-fired boilers, and the 4.4 tons per year from welding.

Limited PM10 from the above equipment:

$$99 \text{ ton/yr} - 13.5 \text{ ton/yr (insignificant activities)} = 85.5 \text{ ton/yr} * 2000 \text{ lb/ton} * 1 \text{ yr}/8,760 \text{ hrs} = 19.52 \text{ lb/hr}$$

The 19.52 lb/hr limit is prorated among the baghouses as follows:

Baghouse ID	Process ID	PM10 Emission Limit (lbs/hour)
BLA021	BLA021	1.46
BLA022	BLA022	1.46
BLA046	BLA046	1.46
BLA047	BLA047	1.46
BLA061	BLA061	1.71
DUC020	BLA062	1.71
DUC029	BLA028	0.46
DUC040	BLA026	0.46
DUC044	BLA020	9.35
	BLA027	
	BLA035	
	BLA036	
	BLA044	
	BLA067	
	BLA070*	

*The new shotblaster BLA070 is ducted to DUC044.

Methodology:

$$\text{PM10 Emissions, lb/hr} = \frac{\text{shotblaster's baghouse emissions, lb/hr} * \text{total shotblasters PM10 limit, lb/hr}}{\text{total shotblasters' baghouse emissions, lb/hr}}$$

The potential to emit of PM10 emissions from the baghouses used to control the emissions from the shot blaster cabinets shall not exceed the limits listed in the table above.

These emission limits are equivalent to a total of 85.5 tons of PM10 per year.

The PM10 emissions from the salt bath cleaning line shall not exceed 0.39 pounds per hour. This limit is equivalent to a total of 1.71 tons of PM10 emissions per year from the cleaning process.

The above combined limits on the abrasive blasters and the salt bath line limit the PM10 emissions, combined with the PM10 emissions from the boilers, the natural gas-fired engines, surface coating facilities, and the insignificant activities from the entire source, to less than 100 tons per year. Therefore, the requirements of 326 IAC 2-7 do not apply.

326 IAC 2-8-11.1(d)(5) (Minor Permit Revision Requirements)

The blasters BLA022, BLA047, BLA061, BLA062, and BLA035, which were constructed pursuant to MPR 025-20288-00012, issued December 15, 2004, and MPR 025-24111-00012, issued February 26, 2007, are minor modifications under 326 IAC 2-8-11.1(d)(5). Pursuant to 326 IAC 2-8:

- (a) BLA022, BLA047, BLA061, BLA062, and BLA035 shall be controlled using particulate air pollution control devices achieving and maintaining a minimum ninety-nine percent (99%) efficiency.

- (b) Visible emissions from units BLA022, BLA047, BLA061, BLA062, and BLA035 shall not exceed 0% opacity.

Compliance with these limits renders the requirements of 326 IAC 2-8-11-1(f) (Significant Permit Revision) not applicable to BLA022, BLA047, BLA061, BLA062, and BLA035.

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 this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) 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 non overlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 6-4 (Fugitive Dust Emissions)

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

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

This source is not subject to the requirements of 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations) because the potential to emit fugitive particulate matter is negligible.

State Rule Applicability - Blasters and Soda Blast Cabinets

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

Pursuant to 326 IAC 6-3-2(e) (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emissions from each blaster and soda blast cabinet shall not exceed the pounds per hour rate listed in the table below.

Process ID	Throughput Rate (lbs/hr)	PM Emission Limit (lbs/hr)
BLA020	1,020	2.61
BLA021	1,020	2.61
BLA022	1,020	2.61
BLA026	800	2.22
BLA027	800	2.22
BLA028	800	2.22
BLA035	1,200	2.91
BLA036	1,200	2.91
BLA044	1,020	2.61
BLA046	1,020	2.61
BLA047	1,020	2.61
BLA061	1,200	2.91
BLA062	1,200	2.91
BLA067	1,200	2.91
BLA070	1,200	2.91

The pounds per hour limitation was calculated using the following equation:

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:

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

State Rule Applicability - The Salt Bath Cleaning Line

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

Pursuant to 326 IAC 6-3-2, the allowable particulate emissions from the salt bath cleaning line shall be limited to 16.5 lbs/hr when the process weight rate is 16,000 lbs/hr.

The pounds per hour limitation was calculated with the following equation:

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:

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

According to the emission calculations (see Appendix A), the potential to emit PM from the salt cleaning bath line, including the emissions from the cleaning process and the natural gas combustion process in the burners, is less than 16.5 lbs/hr. Therefore, the salt bath cleaning line is in compliance with 326 IAC 6-3-2.

State Rule Applicability - Paint Booths PTB006, PTB010, and PTB011

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

Pursuant to 326 IAC 6-3-2 (d), particulate from the surface coating booths PTB006, PTB010, and PTB011 shall be controlled by a dry particulate filter, and the Permittee shall operate the control device in accordance with manufacturer's specifications.

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

The surface coating operations are not subject to 326 IAC 8-1-6 (New Facilities; General Reduction Requirements), because the potential to emit of VOC from these facilities does not exceed twenty-five (25) tons per year each.

326 IAC 8-2-9 (Miscellaneous Metal Coating)

The surface coating operations are subject to 326 IAC 8-2-9 because these facilities were constructed after July 1, 1990. Pursuant to 326 IAC 8-2-9, the owner or operator shall not allow the discharge of VOC into the atmosphere in excess of three and five-tenths (3.5) pounds per gallons of coating, as delivered to the applicator.

Pursuant to 326 IAC 8-2-9(f), all solvents sprayed from the application equipment of PTB006, PTB010, and PTB011 during clean-up or color changes shall be directed into containers. Said containers shall be closed as soon as the solvent spraying is complete. In addition, all waste solvent shall be disposed of in such a manner that minimizes evaporation.

State Rule Applicability – Two (2) Natural Gas Fired Boilers

326 IAC 6-2-4 (Particulate Matter Emission Limitations for Sources of Indirect Heating)

The two (2) natural gas-fired boilers are subject to the requirements of 326 IAC 6-2-4 (Emission Limitations for Sources of Indirect Heating) because they were constructed after September 21, 1983. Pursuant to 326 IAC 6-2-4, the particulate emissions from the two (2) 17 MMBtu per hour natural gas-fired boilers shall be limited to less than 0.44 pounds per million British thermal unit of heat input, each. This limit was calculated using the following equation:

$$Pt = \frac{1.09}{Q^{0.26}} = \frac{1.09}{(34)^{0.26}} = 0.44 \text{ lb/MMBtu}$$

Where P_t = pounds of particulate emitted per million British thermal unit heat input
 Q = total source maximum operation capacity ($17 + 17 = 34$ MMBtu/hr)

Based on the potential PM emissions calculation in Appendix A, using AP-42 emission factors for natural gas-fired boilers, the boilers are in compliance with 326 IAC 6-2-4.

326 IAC 7-1.1-1 (Sulfur Dioxide Emission Limitations)

The two (2) natural gas-fired boilers are not subject to the requirements of 326 IAC 7-1.1-1 (Sulfur Dioxide Emission Limitations) because they do not have the potential to emit greater than twenty-five (25) tons per year or 10 lbs per hour of sulfur dioxide.

326 IAC 12 (New Source Performance Standards)

The two (2) natural gas-fired boilers are subject to 326 IAC 12 (New Source Performance Standards). 326 IAC 12 incorporates by reference 40 CFR 60, Subpart Dc. The Permittee will comply with the provisions of 40 CFR 60, Subpart Dc as detailed in the Federal Rule Applicability Determination section above.

40 CFR 60, Subpart Dc was recently revised on June 13, 2007. However, pursuant to 326 IAC 1-1-3, the version of the rule referenced by 326 IAC 12 was the version in existence on July 1, 2006. Only the Federal version of the rule applies, if the Federal version is different from the State version.

State Rule Applicability – Welding

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

The welding operations consume more than six hundred twenty-five (625) pounds of wire per day. Therefore, these welding operations are subject to 326 IAC 6-3. Pursuant to 326 IAC 6-3-2(e), the allowable particulate emission rate from the welding operations shall be limited to the pound per hour limitation calculated using the following equation:

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:

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

State Rule Applicability – Degreasers

326 IAC 8-3 (Organic Solvent Degreasing Operations)

The actual VOC emissions from each degreaser are less than 15 pounds per day. Pursuant to 326 IAC 8-1-1(b), the degreasers at this source are exempt from the requirements of 326 IAC 8 (Volatile Organic Compound Rules). Pursuant to 326 IAC 8-1-1(c), a daily record on actual VOC usage for each degreaser is required to demonstrate compliance with this limit.

State Rule Applicability – Insignificant Natural Gas Combustion

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

The insignificant natural gas combustion operations, including the seven (7) heaters, identified as identified as ACH016 through ACH022, the one (1) head oven, identified as PEQ047, the engine test stand, identified as GTS011, and the four (4) natural gas-fired internal combustion engines are not subject to 326 IAC 6-3-2 (Particulate Emissions for Manufacturing Processes). These facilities each have a potential to emit of less than 0.551 pounds particulate per hour, and are exempt pursuant to 326 IAC 6-3-1(b)(14).

Compliance Determination and Monitoring Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with all applicable state and federal rules on a continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the

requirement for a continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, Compliance Determination Requirements are included in the permit. The Compliance Determination Requirements in Section D of the permit are those conditions that are found directly within state and federal rules and the violation of which serves as grounds for enforcement action.

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

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

Control	Parameter	Frequency	Range	Excursions and Exceedances
Baghouses BLA021, BLA046, BLA022, DUC040, DUC029, DUC044, BLA047, BLA061	Water Pressure Drop	Daily	0.5 to 8.5inches	Response Steps
	Visible Emissions		Normal-Abnormal	
Wet Scrubber KOL015	Pressure Drop	Daily	32 and 48 inches	Response Steps
	Flow Rate		greater than 165 gallons per minute	
	Visible Emissions		Normal-Abnormal	

These monitoring conditions are necessary because the baghouses for the abrasive blasters and the wet scrubber for the salt bath cleaning line must operate properly to ensure compliance with 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Operations), 326 IAC 2-2 (PSD) and 326 IAC 2-8 (FESOP).

Testing Requirement

Testing is not required for the baghouse operations because no single emission unit is responsible for a large portion of the total source PM/PM10 emissions. The Permittee will follow compliance determination and monitoring conditions to control particulate emissions and comply with the FESOP and PSD limits.

Recommendation

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

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

An application for the purposes of this review was received on January 24, 2007. Additional information was received on September 5, 2007.

Conclusion

The construction and operation of this stationary automotive engine, transmission, and vehicle parts remanufacturing plant shall be subject to the conditions of the attached FESOP Renewal No. 025-25750-00012.

**Appendix A: Emission Calculations
Particulate Emissions From Shot Blasters**

Company Name: Jasper Engine Exchange, Inc.
Address: 6400 East Industrial Lane, Leavenworth, IN 47137
FESOP Renewal: 025-25750-00012
Reviewer: ERG/TDP
Date: December 11, 2007

Process/Emission Units	Control ID	Max. Throughput Rate (lbs/hour)	** Emission Factor PM (lbs/lb)	** Emission Factor PM10 (lb/lb PM)	PTE of PM Before Control (tons/year)	PTE of PM10 Before Control (tons/year)	Control Efficiency (%)	PTE of PM After Control (tons/year)	PTE of PM10 After Control (tons/year)
Black Beauty Sand Blaster BLA020	DUC044	1020	0.01	0.70	44.7	31.3	99%	0.45	0.31
Black Beauty Sand Blaster BLA021	BLA021	1020	0.01	0.70	44.7	31.3	99%	0.45	0.31
Coal Slag Blaster BLA022	BLA022	1020	0.01	1.00	44.7	44.7	99%	0.45	0.45
Steel Shot Blaster BLA026	DUC040	800	0.004	0.86	14.0	12.1	99%	0.14	0.12
Steel Shot Blaster BLA027	DUC044	800	0.004	0.86	14.0	12.1	99%	0.14	0.12
Steel Shot Blaster BLA028	DUC029	800	0.004	0.86	14.0	12.1	99%	0.14	0.12
Plastic Bead Blaster Machine BLA061	BLA061	1200	0.01	1.00	52.6	52.6	99%	0.53	0.53
Soda Blaster Cabinet BLA062	DUC046	1200	0.01	1.00	52.6	52.6	99%	0.53	0.53
Soda Blaster Cabinet BLA067	DUC046	1200	0.01	1.00	52.6	52.6	99%	0.53	0.53
Soda Blaster Cabinet BLA035	DUC020	1200	0.01	1.00	52.6	52.6	99%	0.53	0.53
Soda Blaster Cabinet BLA036	DUC046	1200	0.01	1.00	52.6	52.6	99%	0.53	0.53
Plastic Pellet Blaster BLA046	BLA046	1020	0.01	1.00	44.7	44.7	99%	0.45	0.45
Plastic Bead Blaster BLA070*	DUC036	1200	0.01	1.00	52.6	52.6	99%	0.53	0.53
Aluminum Oxide Blaster BLA047	BLA047	1020	0.01	1.00	44.7	44.7	99%	0.45	0.45
Steel Shot Blaster BLA044	DUC044	1020	0.004	0.86	17.9	15.4	99%	0.18	0.15
					599	420		4.23	4.20

*New equipment

** Emission factors for PM and PM10 are from STAPPA/ALAPCO "Air Quality Permits", Vol 1, Section 3 "Abrasive Blasting" (1991 Edition)

METHODOLOGY

PTE of PM Before Controls (tons/year) = Max. Process Rate (lbs/hour) * Emission Factor PM (lbs/lb) * 8760 hours/year * 1 ton/2000 lbs

PTE of PM10 Before Controls (tons/year) = PTE PM (tons/yr) * Emission Factor PM10 (lb/lb PM)

PTE of PM/PM10 After Controls (tons/year) = PTE PM/PM10 (tons/yr) * (1-Control Efficiency%)

**Appendix A: Emission Calculations
From Salt Bath Cleaning Line**

Company Name: Jasper Engine Exchange, Inc.
Address: 6400 East Industrial Lane, Leavenworth, IN 47137
FESOP Renewal: 025-25750-00012
Reviewer: ERG/TDP
Date: December 11, 2007

1. From Cleaning Process:

Emissions are from the decomposition of various oils and lubricants from the parts.

Throughput Rate lbs/hr	Scrubber Control Efficiency (for PM/PM10 emission control only)		
	98%		
	Pollutant		
Emission Factor (lbs/lbs)	PM*	PM10*	VOC
16,000	0.001117	0.001117	0.000132
Uncontrolled Potential Emission (lbs/hr)	17.9	17.9	2.11
Uncontrolled Potential Emission (tons/yr)	78.3	78.3	9.25
Potential to Emit (lbs/hr)	0.36	0.36	2.11
Potential to Emit (tons/yr)	1.57	1.57	9.25

* Assume all the PM emissions are PM10 emissions.

Methodology

Emission factors were provided by the Permittee based on the mass balance method and test results from a similar salt bath line.

Uncontrolled Potential Emissions (lbs/hr) = Throughput Rate (lbs/hr) x Emission Factors (lbs/lbs)

Uncontrolled Potential Emissions (tons/yr) = Throughput Rate (lbs/hr) x Emission Factors (lbs/lbs) x 8760 hr/yr x 1 ton/2000 lbs

Potential to Emit (lbs/hr) = Throughput Rate (lbs/hr) x Emission Factors (lbs/lbs) x (1 - Control Efficiency)

Potential to Emit (tons/yr) = Throughput Rate (lbs/hr) x Emission Factors (lbs/lbs) x (1 - Control Efficiency) x 8760 lbs/yr x 1 ton/2000 lbs

2. From Two (2) 2.5 MMBtu/hr Natural Gas-Fired Burners

Heat Input Capacity MMBtu/hr	Potential Throughput					
	MMCF/yr					
5.0	43.8					
	Pollutant					
Emission Factor in lb/MMCF	PM*	PM10*	SO ₂	**NO _x	VOC	CO
	7.6	7.6	0.6	100	5.5	84.0
Potential Emission in tons/yr	0.17	0.17	0.01	2.19	0.12	1.84

*PM and PM10 emission factors are condensable and filterable PM10 combined.

**Emission Factors for NO_x: Uncontrolled = 100, Low NO_x Burner = 50, Low NO_x Burners/Flue gas recirculation = 32

Methodology

All Emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF - 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors from AP-42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (AP-42 Supplement D 3/98)

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

3. Total Emissions from Salt Bath Cleaning Line:

Pollutant	PM	PM10	SO ₂	NO _x	VOC	CO
Total Uncontrolled Potential Emission (tons/yr)	78.4	78.4	0.01	2.19	9.37	1.84
Total Potential to Emit (tons/yr)	1.73	1.73	0.01	2.19	9.37	1.84

**Appendix A: Emission Calculations
VOC and PM Emissions
From the Surface Coating Booth (PTB006)**

**Company Name: Jasper Engine Exchange, Inc.
Address: 6400 East Industrial Lane, Leavenworth, IN 47137
FESOP Renewal: 025-25750-00012
Reviewer: ERG/TDP
Date: December 11, 2007**

Material	Density (Lb/Gal)	Weight % Volatile (H ₂ O & Organics)	Weight % Water	Weight % VOC	Maximum Usage (gal/hour)	Pounds VOC per gallon of coating	Potential VOC (lbs/hr)	Potential VOC (tons/yr)	*PM/PM10 Potential (lb/hr)	*PM/PM10 Potential (ton/yr)	Transfer Efficiency
G. White	9.8	58.60%	45.4%	13.2%	0.24	1.29	0.31	1.37	0.39	1.72	60%
M. T. Gray (F77A503)	8.5	74.00%	56.7%	17.3%	0.24	1.47	0.36	1.56	0.21	0.94	60%
M. T. Gray (77A567)	8.8	63.80%	54.6%	9.2%	0.24	0.81	0.19	0.85	0.31	1.34	60%
**Total(worst case)								1.56		1.72	

* Assume all the PM emissions are PM10 emissions.

** Only one type of coating can be applied for each booth at the same time. Therefore, the worst case scenario is using the highest VOC/PM content coating.

METHODOLOGY

Weight % VOC = Weight % Volatile - Weight % Water

Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % VOC)

Potential VOC (lbs/hr) = Pounds VOC per Gallon coating (lb/gal) * Maximum Usage (gals/hr)

Potential VOC (tons/yr) = Pounds VOC per Gallon coating (lb/gal) * Maximum Usage (gal/hr) * (8760 hr/yr) * (1 ton/2000 lbs)

Potential PM/PM10 (lbs/hr) = Max. Usage (gal/hr) * Density (lbs/gal) * (1- Weight % Volatile) * (1-Transfer efficiency)

Potential PM/PM10 (tons/yr) = Max. Usage (gal/hr) * Density (lbs/gal) * (1- Weight % Volatile) * (1-Transfer efficiency) * (8760 hrs/yr) *(1 ton/2000 lbs)

Appendix A: Emission Calculations
HAPs Emissions
From the Surface Coating Booth (PTB006)

Company Name: Jasper Engine Exchange, Inc.

Address : 6400 East Industrial Lane, Leavenworth, IN 47137

FESOP Renewal: 025-25750-00012

Reviewer: ERG/TDP

Date: December 11, 2007

Material	Density (Lb/Gal)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Weight % MEK	MEK Emissions (tons/yr)	Weight % Glycol Ethers	Glycol Ethers Emissions (tons/yr)	Weight % Triethylamine	Triethylamine Emissions (tons/yr)
G. White	9.8	0.040	6.04	0.0%	0.00	11.0%	1.14	1.5%	0.16
M. T. Gray (F77A503)	8.5	0.040	6.04	2.0%	0.18	10.0%	0.90	0.9%	0.08
M. T. Gray (77A567)	8.8	0.040	6.04	0.0%	0.00	0.0%	0.00	0.0%	0.00
*Total (worst case)					0.18		1.14		0.16

* Only one type of coating can be applied for each booth at the same time. Therefore, the worst case scenario is using the highest HAP content coating.

Total Combination of HAPs Emissions (tons/yr)

METHODOLOGY

HAPs emission rate (tons/yr) = Density (lb/gal) x Gal of Material (gal/unit) x Maximum (unit/hr) x Weight % HAP x 8760 hr/yr x 1 ton/2000 lbs

Appendix A: Emission Calculations
VOC and PM Emissions
From Two (2) Surface Coating Booths (PTB010 and PTB013)

Company Name: Jasper Engine Exchange, Inc.
Address: 6400 East Industrial Lane, Leavenworth, IN 47137
FESOP Renewal: 025-25750-00012
Reviewer: ERG/TDP
Date: December 11, 2007

Material	Density (Lb/Gal)	Weight % Volatile (H ₂ O & Organics)	Weight % Water	Weight % VOC	Maximum Usage (gal/hour)	Pounds VOC per gallon of coating	Potential VOC (lbs/hr)	Potential VOC (tons/yr)	*PM/PM10 Potential (lb/hr)	*PM/PM10 Potential (ton/yr)	Transfer Efficiency
PTB010											
Jasper Gray (F77AC503)	8.9	61.10%	52.1%	9.0%	0.30	0.80	0.2	1.05	0.4	1.81	60%
PTB013***											
Jasper Gray (F77AC503)	8.9	61.10%	52.1%	9.0%	0.40	0.80	0.3	1.40	0.6	2.42	60%

* Assume all the PM emissions are PM10 emissions.

** Only one type of coating can be applied for each booth at the same time. Therefore, the worst case scenario is using the highest VOC/PM content coating.

***New equipment

METHODOLOGY

Weight % VOC = Weight % Volatile - Weight % Water

Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % VOC)

Potential VOC (lbs/hr) = Pounds VOC per Gallon coating (lb/gal) * Maximum Usage (gals/hr)

Potential VOC (tons/yr) = Pounds VOC per Gallon coating (lb/gal) * Maximum Usage (gal/hr) * (8760 hr/yr) * (1 ton/2000 lbs)

Potential PM/PM10 (lbs/hr) = Max. Usage (gal/hr) * Density (lbs/gal) * (1- Weight % Volatile) * (1-Transfer efficiency)

Potential PM/PM10 (tons/yr) = Max. Usage (gal/hr) * Density (lbs/gal) * (1- Weight % Volatile) * (1-Transfer efficiency) * (8760 hrs/yr) *(1 ton/2000 lbs)

**Appendix A: Emission Calculations
Natural Gas Combustion
(MMBtu/hr < 100)
From Two 17 MMBtu/hr Boilers**

Company Name: Jasper Engine Exchange, Inc.
Address: 6400 East Industrial Lane, Leavenworth, IN 47137
FESOP Renewal: 025-25750-00012
Reviewer: ERG/TDP
Date: December 11, 2007

Heat Input Capacity
MMBtu/hr

Potential Throughput
MMCF/yr

34.0

297.8

	Pollutant					
Emission Factor in lb/MMCF	PM*	PM10*	SO2	**NO _x	VOC	CO
	7.6	7.6	0.6	100	5.5	84.0
Potential Emission in tons/yr	1.13	1.13	0.09	14.89	0.82	12.51

*PM and PM10 emission factors are condensable and filterable PM10 combined.

**Emission Factors for NO_x: Uncontrolled = 100, Low NO_x Burner = 50, Low NO_x Burners/Flue gas recirculation = 32

Methodology

All Emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF - 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors from AP-42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (AP-42 Supplement D 3/98)

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

**Appendix A: Emission Calculations
Natural Gas Combustion
(MMBtu/hr < 100)
From Four (4) 0.725 MMBtu/hr Engines**

Company Name: Jasper Engine Exchange, Inc.
Address: 6400 East Industrial Lane, Leavenworth, IN 47137
FESOP Renewal: 025-25750-00012
Reviewer: ERG/TDP
Date: December 11, 2007

Heat Input Capacity
MMBtu/hr

2.90

Emission Factor in lb/MMBtu	Pollutant					
	PM*	PM10**	SO ₂	NO _x ***	VOC	CO***
	9.91E-03	9.91E-03	5.88E-04	2.21	0.0296	3.72
Potential Emission in tons/yr	0.13	0.13	7.47E-03	28.1	0.38	47.3

*PM emission factor is for condensable PM only.
 **Assume all the PM emissions are PM10 emissions.
 ***NOx and CO emissions factors are the emission factors for 90% -105% gas load (worst case).

Methodology

MMBtu = 1,000,000 Btu
 1 CF = 1000 Btu

Emission Factors from AP-42, Chapter 3.2, Table 3.2-3: Uncontrolled Emission Factors for 4-Stroke Rich-Burn Engines, SCC # 2-02-002-53.
 (AP-42 Supplement F 08/2000)

Emission (tons/yr) = Heat Input Capacity x Emission Factor (lb/MMBtu) x 8760 hr/yr x 1 ton/2000 lbs

**Appendix A: Emission Calculations
Natural Gas Combustion
(MMBtu/hr < 100)
From ONE (1) 0.088 Test Stand (GTS011)**

**Company Name: Jasper Engine Exchange, Inc.
Address: 6400 East Industrial Lane, Leavenworth, IN 47137
FESOP Renewal: 025-25750-00012
Reviewer: ERG/TDP
Date: December 11, 2007**

Heat Input Capacity
MMBtu/hr

0.09

Emission Factor in lb/MMBtu	Pollutant					
	PM*	PM10**	SO ₂	NO _x ***	VOC	CO***
	9.91E-03	9.91E-03	5.88E-04	2.21	0.0296	3.72
Potential Emission in tons/yr	3.82E-03	3.82E-03	2.27E-04	0.85	0.01	1.43

*PM emission factor is for condensable PM only.

**Assume all the PM emissions are PM10 emissions.

***NO_x and CO emissions factors are the emission factors for 90% -105% gas load (worst case).

Methodology

MMBtu = 1,000,000 Btu

1 CF = 1000 Btu

Emission Factors from AP-42, Chapter 3.2, Table 3.2-3: Uncontrolled Emission Factors for 4-Stroke Rich-Burn Engines, SCC # 2-02-002-53.
(AP-42 Supplement F 08/2000)

Emission (tons/yr) = Heat Input Capacity x Emission Factor (lb/MMBtu) x 8760 hr/yr x 1 ton/2000 lbs

**Appendix A: Emission Calculations
PM and HAP Emissions
From Welding and Cutting Processes (Insignificant)**

**Company Name: Jasper Engine Exchange, Inc.
Address: 6400 East Industrial Lane, Leavenworth, IN 47137
FESOP Renewal: 025-25750-00012
Reviewer: ERG/TDP
Date: December 11, 2007**

PROCESS	Number of Stations	Max. electrode consumption per station (lbs/hr)	EMISSION FACTORS* (lb pollutant/lb electrode)				EMISSIONS (lbs/hr)				Total HAPS (lbs/hr)	
			PM=PM10	Mn	Ni	Cr	PM = PM10	Mn	Ni	Cr		
WELDING												
Metal Inert Gas (MIG)(carbon steel)	3	9		0.0241	0.000034		0.00001	0.651	0.001	0	0.00027	0.001
Stick (E7018 electrode)	7	1.6		0.0211	0.0009			0.236	0.010	0	0	0.010
Tungsten Inert Gas (TIG)(carbon steel)	7	1.5		0.0055	0.0005			0.058	0.005	0	0	0.005

PROCESS	Number of Stations	Max. Metal Thickness Cut (in.)	Max. Metal Cutting Rate (in./minute)	EMISSION FACTORS* (lb pollutant/1,000 inches cut, 1" thick)**				EMISSIONS (lbs/hr)				Total HAPS (lbs/hr)
				PM=PM10	Mn	Ni	Cr	PM = PM10	Mn	Ni	Cr	
FLAME CUTTING												
Oxyacetylene	3	1.0	2.0	0.1622	0.0005	0.0001	0.0003	0.058	0.000	3.6E-05	0.000	0.000
Plasma**	2	0.25	20	0.0039				0.002	0	0	0	0.000

EMISSION TOTALS	PM = PM10	Mn	Ni	Cr	Total HAPS
Potential Emissions (lbs/hr)	1.01	0.016	0.000	0.000	0.02
Potential Emissions (lbs/day)	24.13	0.394	0.001	0.009	0.40
Potential Emissions (tons/year)	4.40	0.072	1.58E-04	0.002	0.07

*Emission Factors are default values for carbon steel unless a specific electrode type is noted in the Process column.

**Emission Factor for plasma cutting from American Welding Society (AWS). Trials reported for wet cutting of 8 mm thick mild steel with 3.5 m/min cutting speed (at 0.2 g/min emitted). Therefore, the emission factor for plasma cutting is for 8 mm thick
Using AWS average values: (0.25 g/min)/(3.6 m/min) x (0.0022 lb/g)/(39.37 in./m) x (1,000 in.) = 0.0039 lb/1,000 in. cut, 8 mm thick.

METHODOLOGY

Welding emissions (lb/hr) = (# of stations) x (max. lbs of electrode used/hr/station) x (emission factor, lb. pollutant/lb. of electrode used)

Cutting emissions (lb/hr) = (# of stations) x (max. metal thickness, in.) x (max. cutting rate, in./min.) x (60 min./hr.) x (emission factor, lb. pollutant/1,000 in. cut, 1" thick)

Plasma cutting emissions (lb/hr) = (# of stations) x (max. cutting rate, in./min.) x (60 min./hr.) x (emission factor, lb. pollutant/1,000 in. cut, 8 mm thick)

Emissions (lbs/day) = emissions (lbs/hr) x 24 hrs/day

Emissions (tons/yr) = emissions (lb/hr) x 8,760 hrs/year x 1 ton/2,000 lbs.

Appendix A: Emission Calculations
VOC Emissions
From the Open Top Degreasers (Insignificant)

Company Name: Jasper Engine Exchange, Inc.
Address: 6400 East Industrial Lane, Leavenworth, IN 47137
FESOP Renewal: 025-25750-00012
Reviewer: ERG/TDP
Date: December 11, 2007

Unit ID	Purpose of the Degreaser	Capacity (gallons)	Maximum Usage (lbs/yr)	Weight % VOC	*Potential VOC Emissions (tons/yr)
Dry					
ADJ012	Diesel Block Final Wash	440	5200	0.36%	0.0094
ADJ016	Iron and Steel Small Parts Wash	400	650	0.36%	0.0012
ADJ027	Block Final Wash 1	440	5200	0.05%	0.0013
ADJ028	Block Final Wash 2	440	5200	0.05%	0.0013
ADJ029	Head Final Wash	440	5200	0.05%	0.0013
CLT001	Transmission Cases and Skids	375	624	0.05%	0.0002
CLT032	Transmission Skid Wash	800	4200	1.00%	0.0210
CLT086	Transmission Prewash	1800	3400	0.05%	0.0009
CLT087	Tumble Cleaning of Small Parts	50	12480	0.00%	0.0000
CLT088	Engine Block Prewash	1000	5200	0.05%	0.0013
CLT090	Head Prewash	600	5200	0.05%	0.0013
CLT101	Rinsing Axle Housings	400	650	0.05%	0.0002
CLT102	Transmission Cases	100	780	0.05%	0.0002
CLT103	Transmission Small Parts	30	780	0.05%	0.0002
CLT106	Transmission Small Parts	30	1300	0.05%	0.0003
CLT110	Crank Wash	350	650	0.05%	0.0002
CLT114	Diesel Engine Blocks	1100	1300	0.05%	0.0003
CLT115	Diesel Engine Parts	1100	1700	0.05%	0.0004
Liquid					
Unit ID	Purpose of the Degreaser	Capacity (gallons)	Max. Usage (gal/yr)	VOC Content (lbs/gal)	Potential VOC (tons/yr)
ADJ007	Aluminum Timing Cover Wash	440	193	0.00	0.0000
ADJ014	Aluminum Head Wash	440	468	0.00	0.0000
ADJ030	Aluminum Small Parts Wash	440	660	0.0059	0.0019
ADJ031	Aluminum Head Wash	440	715	0.00	0.0000
CLT011	Aluminum Head Rinse	175	65	0.00	0.0000
CLT092	Aluminum Head Wash	175	260	0.00	0.0000
CLT096	Differential/Axle Housing Wash	375	165	0.01	0.0005
CLT098	Maintenance Cleaning	25	50	0.49	0.0123
CLT127	Vehicle Service	25	60	0.00	0.0000
CSP006	Rinsing Crankshafts	30	26	0.00	0.0000
Total	Total				0.06

* Assume all the VOC and HAPs in solvents used are completely emitted.

METHODOLOGY

Potential VOC (tons/yr) = Maximum Usage (lbs/yr) x Weight % VOC x (1 ton/2000 lbs)

Potential HAPs (tons/yr) = Maximum Usage (lbs/yr) x Weight % HAPs x (1 ton/2000 lbs)

**Appendix A: Emission Calculations
Natural Gas Combustion
(MMBtu/hr < 100)
From Seven Heaters and One Head Oven**

Company Name: Jasper Engine Exchange, Inc.
Address: 6400 East Industrial Lane, Leavenworth, IN 47137
FESOP Renewal: 025-25750-00012
Reviewer: ERG/TDP
Date: December 11, 2007

Heat Input Capacity
MMBtu/hr

Potential Throughput
MMCF/yr

0.9

7.5

	Pollutant					
Emission Factor in lb/MMCF	PM*	PM10*	SO2	**NO _x	VOC	CO
	7.6	7.6	0.6	100	5.5	84.0
Potential Emission in tons/yr	0.03	0.03	0.00	0.38	0.02	0.32

*PM and PM10 emission factors are condensable and filterable PM10 combined.

**Emission Factors for NO_x: Uncontrolled = 100, Low NO_x Burner = 50, Low NO_x Burners/Flue gas recirculation = 32

Methodology

All Emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF - 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors from AP-42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (AP-42 Supplement D 3/98)

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

**Appendix A: Emission Calculations
Emissions Summary**

Company Name: Jasper Engine Exchange, Inc.
Address: 6400 East Industrial Lane, Leavenworth, IN 47137
FESOP Renewal: 025-25750-00012
Reviewer: ERG/TDP
Date: December 11, 2007

Unlimited Potential To Emit

Control ID	Blasters Units	PM	PM10	SO₂	NOx	VOC	CO	HAPs
BLA021	BLA021	44.7	31.3					
BLA046	BLA046	44.7	44.7					
DUC040	BLA026	14.0	12.1					
DUC029	BLA028	14.0	12.1					
DUC044	BLA020, BLA027, BLA044	76.6	58.7					
DUC046	BLA036, BLA062, BLA067, BLA070*	210	210					
BLA061	BLA061	52.6	52.6					
BLA022	BLA022	44.7	44.7					
BLA047	BLA047	44.7	44.7					
DUC020	BLA035	52.6	52.6					
	Salt Bath Cleaning Process	78.4	78.4			9.25		
	Two (2) 2.5 MMBtu/hr NG-fired Burners	0.17	0.17	0.01	2.19	0.12	1.84	
	Surface Coating Booth PTB006	1.72	1.72			1.56		1.48
	Surface Coating Booth PTB010	1.81	1.81			1.05		
	Surface Coating Booth PTB013*	2.42	2.42			1.40		
	Two (2) 17 MMBtu/hr NG-fired Boilers	1.13	1.13	0.09	14.9	0.82	12.5	
	Four (4) 0.725 MMBtu/hr NG-fired Engines	0.13	0.13	0.01	28.1	0.38	47.3	
	One (1) Engine Test Stand*	0.004	0.004	0.00	0.85	0.01	1.43	
	Welding	4.40	4.40					0.07
	Insignificant Combustion	0.03	0.03	0.00	0.38	0.02	0.32	
	Degreasers					0.06		
	TOTAL	689	654	0.11	46.4	14.7	63.4	1.55

*New equipment

The limited potential to emit pursuant to 326 IAC 2-8 (FESOP) are from the current FESOP Renewal No.: 025-15881-00012, issued November 1, 2002, except for new blaster identified as BLA061 controlled by new baghouse, also identified as BLA061.

**Appendix A: Emission Calculations
Emissions Summary**

Company Name: Jasper Engine Exchange, Inc.
Address: 6400 East Industrial Lane, Leavenworth, IN 47137
FESOP Renewal: 025-25750-00012
Reviewer: ERG/TDP
Date: December 11, 2007

Limited Potential To Emit Pursuant to the Provisions of 326 IAC 2-8 (FESOP)

Control ID	Blasters Units	PM	PM10	SO ₂	NOx	VOC	CO	HAPs
BLA021	BLA021	5.43	5.43					
BLA046	BLA046	5.43	5.43					
DUC040	BLA026	2.19	2.19					
DUC029	BLA028	2.19	2.19					
DUC044	BLA020, BLA027, BLA044	20.8	20.8					
DUC046	BLA036, BLA062, BLA067, BLA070*	32.9	32.9					
BLA061	BLA061	5.43	5.43					
BLA022	BLA022	5.43	5.43					
BLA047	BLA047	2.19	2.19					
DUC020	BLA035	2.19	2.19					
	Salt Bath Cleaning Process	1.71	1.71			9.25		
	Two (2) 2.5 MMBtu/hr NG-fired Burners	0.17	0.17	0.01	2.19	0.12	1.84	
	Surface Coating Booth PTB006	1.72	1.72			1.56		1.48
	Surface Coating Booth PTB010	1.81	1.81			1.05		
	Surface Coating Booth PTB013*	2.42	2.42			1.40		
	Two (2) 17 MMBtu/hr NG-fired Boilers	1.13	1.13	0.09	14.9	0.82	12.5	
	Four (4) 0.725 MMBtu/hr NG-fired Engines	0.13	0.13	0.01	28.1	0.38	47.3	
	One (1) Engine Test Stand*	0.004	0.004	0.00	0.85	0.011	1.43	
	Welding	4.40	4.40					0.07
	Insignificant Combustion	0.03	0.03	0.00	0.38	0.02	0.32	
	Degreasers					0.06		
	TOTAL	97.6	97.6	0.11	46.4	14.7	63.4	1.55

*New equipment

The limited potential to emit pursuant to 326 IAC 2-8 (FESOP) are from the current FESOP Renewal No.: 025-15881-00012, issued November 1, 2002, except for new blaster identified as BLA061 controlled by new baghouse, also identified as BLA061.