INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant

DATE: July 12, 2005

RE: Eaton Corporation / 141-20858-00057

FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-17-3-4 and 326 IAC 2, this approval is effective immediately, unless a petition for stay of effectiveness is filed and granted, 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 4-21.5-3-7 and IC 13-15-7-3 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 Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

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

Enclosures
FNPER-MOD.dot 1/10/05

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July 12, 2005

Mr. James F. Seaver
Eaton Corporation, Heavy-Duty Transmission Division, Forge Plant
2930 Foundation Drive
South Bend, IN 46628

Re: **141-20858-00057**
First Minor Revision to
FESOP 141-13952-00057

Dear Mr. Seaver:

Eaton Corporation, Heavy-Duty Transmission Division, Forge Plant was issued a permit on February 19, 2002, for a stationary metal product forging and fabricating source. A letter requesting changes to this permit was received on February 28, 2005. Pursuant to the provisions of 326 IAC 2-8-11.1, a Minor Permit Revision to this permit is hereby approved as described in the attached Technical Support Document.

The revision consists of the following:

(a) Addition of the following insignificant activities to produce graphite electrodes and bevel gear teeth dies:

(1) Two (2) Gleason straight bevel gear generators, with reciprocating blades, using a liquid dielectric oil coolant.

(2) One (1) Gleason pressure angle tool grinder, using a liquid dielectric oil coolant.

(3) One (1) Gleason gear tester.

(4) Two (2) Charmilles Electrical Discharge Machine (EDM) plunge systems, using a liquid dielectric oil coolant, equipped with a fume collector for controlling fumes and oil mist, exhausting through SV-16.

(b) The addition of the following insignificant activity:

A laboratory as defined in 326 IAC 2-7-1(21)(D).

(c) Reconstruction of the one (1) shot blast machine, identified as EU-9, and one (1) shot blast machine, identified as EU-8.

(d) Relocation of the one (1) thru blast system, identified as EU-20, next to the one (1) table blast system, identified as EU-19, so that they will exhaust to the same cartridge dust collector, which exhausts indoors.

(e) The addition of a Trinco blast cabinet for cleaning and peening the beveled gear forging dies.

(f) A reduction in the number of facilities that must be routinely tested since some units are identical.

(g) This source is not located in Lake or Porter County with the potential to emit greater than twenty-five (25) tons per year of NO_X, does not emit five (5) tons per year or more of lead and does not require a Part 70 Operating Permit. Therefore, the requirements of 326 IAC 2-6, Emission Reporting, have been removed from the permit.

(h) St. Joseph County has been designated as nonattainment for the 8-hour ozone standard. Therefore, Section A.1 of the permit has been revised. There are no additional changes to the permit as a result of this designation.

(i) The phone number and OAQ section name has been updated in Condition B.23, Annual Fee Payment.

(j) The IDEM, OAQ, address has been updated in the permit.

The following construction conditions are applicable to the proposed project:

1. General Construction Conditions
The data and information supplied with the application shall be considered part of this source modification approval. Prior to any proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Quality (OAQ).

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

3. Effective Date of the Permit
Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

4. Pursuant to 326 IAC 2-1.1-9 (Revocation), the Commissioner may revoke this approval 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.

5. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.

Pursuant to 326 IAC 2-8-11.1, this permit shall be revised by incorporating the minor permit revision into the permit. All other conditions of the permit shall remain unchanged and in effect. For your convenience, the entire revised FESOP, with all revisions and amendments made to it, is being provided.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact CarrieAnn Paukowits, c/o OAQ, 100 North Senate Avenue, Indianapolis, Indiana, 46204, at 631-691-3395 or in Indiana at 1-800-451-6027 (ext 631-691-3395).

Sincerely,

Original signed by
Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

Attachments
CAP/MES
cc: File - St. Joseph County
U.S. EPA, Region V
St. Joseph County Health Department
Northern Regional Office
Air Compliance Section Inspector - Rick Reynolds
Compliance Branch
Administrative and Development Section
Technical Support and Modeling - Michele Boner

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

Eaton Corporation, Heavy-Duty Transmission Division, Forge Plant
2930 Foundation Drive
South Bend, Indiana 46628

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

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

Operation Permit No.: F 141-13952-00057	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: February 19, 2002 Expiration Date: February 19, 2007

First Administrative Amendment No. 141-17369-00057, issued on June 19, 2003
First Significant Permit Revision No. 141-17787-00057, issued on September 22, 2003

Minor Permit Revision No.: 141-20858-00057	Conditions Affected: A.1, A.2, A.3, B.23, D.1.1, D.1.2, D.1.5, D.1.6, D.1.7, D.1.8, D.1.9, D.1.10, D.1.11, D.2.2, D.3.1 Conditions Added: D.1.12 and all five (5) FESOP Quarterly Report forms Conditions Removed: C.19 (the remainder of Section C has been renumbered)
Issued by: Original signed by Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: July 12, 2005

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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 metal product forging and fabricating source.

Authorized Individual:	EHS Manager
Source Address:	2930 Foundation Drive, South Bend, Indiana 46628
Mailing Address:	2930 Foundation Drive, South Bend, Indiana 46628
General Source Phone Number:	(574) 283-5006
SIC Code:	3462
County Location:	St. Joseph
Source Location Status:	Nonattainment for ozone based on the 8-hour standard Attainment for all remaining criteria pollutants
Source Status:	Federally Enforceable State Operating Permit (FESOP) Minor Source, under PSD Rules; Minor Source, Section 112 of the Clean Air Act

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

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

(a) One (1) shot blast machine, identified as EU-8, constructed in 1980 and to be reconstructed in 2005/2006, equipped with a cartridge dust collector and exhausting through stack SV-4**,** which exhausts inside the building, capacity: 28 cubic feet, with a maximum process weight rate of 3.324 tons per hour.

(b) One (1) shot blast machine, identified as EU-9, constructed in 1997 and reconstructed in 2004, equipped with a cartridge dust collector and exhausting through stack SV-5, which exhausts inside the building, capacity: 34 cubic feet, with a maximum process weight rate of 3.324 tons per hour.

(c) Six (6) forge press cells, identified as EU-1 through EU-6, controlled by five (5) hydrostatic precipitators (rotoclones), each cell is equipped with one (1) load tub lift and bowl loader, with a total of two (2) meter boxes, and twenty-one (21) induction coils, with three (3) forge press cells (EU-1 through EU-3) exhausting to stack SV-1 and three (3) forge press cells (EU-4 through EU-6) exhausting to stack SV-2, maximum capacity: 4.05 tons of steel billets per hour, total.

(d) One (1) forge press cell, identified as EU-13, constructed in 1998, controlled by a hydrostatic precipitator (rotoclone), equipped with one (1) load tub lift, one (1) meter box, one (1) bowl loader, and four (4) induction coils, exhausting to stack SV-9, maximum capacity: 1.04 tons of steel billets per hour.

(e) One (1) 3,000-ton forge press cell (Serial No. 21601), identified as EU-14, constructed in 1999, controlled by a hydrostatic precipitator (rotoclone) and including five (5) induction coils with a maximum temperature up to 2,250°F, two (2) inverters, one (1) billet load system, one

(1) transform conveyor and one (1) cool down conveyor, exhausting through stack SV-9, maximum capacity: 1.04 tons of steel billets per hour.

(f) One (1) table blast system, identified as EU-19, equipped with a cartridge dust collector shared with the thru blast system and exhausting through stack SV-15, which exhausts inside the building, maximum process weight rate: 2,000 pounds per hour.

(g) One (1) thru blast system, identified as EU-20, equipped with a cartridge dust collector shared with the table blast system and exhausting through stack SV-15, which exhausts inside the building, maximum process weight rate: 6,650 pounds per hour.

(h) One (1) Trinco blast cabinet, identified as EU-23, equipped with a baghouse dust collector and exhausting through stack SV-14, which exhausts inside the building, capacity: 0.5 unit and 500 pounds per hour.

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

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

(a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour (total capacity is approximately 28.0 million British thermal units per hour). There are no boilers at this source.

(b) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6, including two (2) maintenance parts washers with capacities less than 80 gallons each and using only non-halogenated solvents. [326 IAC 8-3]

(c) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment. [326 IAC 6-1]

(d) Natural draft cooling towers not regulated under a NESHAP.

(e) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.

(f) Paved roads and parking lots with public access.

(g) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4,000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations. Specifically including the following equipment, with dry processes exhausting to bag/barrel filters and wet processes having self-contained coolant reservoirs, with equipment in the die set up area exhausting to stack SV-7 and equipment in the tool room exhausting to stack SV-8: [326 IAC 6-1]

(1) Engin 20 X 54 lathe
(2) Engin 16 X 102 lathe
(3) Two (2) 12" wheel grinders
(4) Jet abrasive cut off saw
(5) Vertical band saw

(6) Norton surface grinder
(7) Vertical belt polisher
(8) Two (2) Taft Peirce surface grinders
(9) Cincinnati tool grinder
(10) ID/OD grinder
(11) Making tool grinder
(12) US Electric double end grinder
(13) Two (2) double end tool grinders
(14) Powermatic belt/disc grinder
(15) Abrasive wheel cut off saw
(16) 10" double end tool grinder
(17) 4 Ft. radial drill press
(18) Engin 10 X 30 Lathe
(19) Bridgeport mill vertical 9 X 42 mill
(20) Engin lathe
(21) Enterprise horizontal mill
(22) Giddings 10TF CNC lathe
(23) Giddings 15TF CNC
(24) Marvel horizontal saw
(25) Madison grinder
(26) OKK mill
(27) Bridgeport vertical mill
(28) Four (4) drill presses
(29) Arbor press
(30) Johansson drill press
(31) Clausing 15" lathe
(32) Clausing band saw
(33) Kondia power mill
(34) Monarch 18" CNC lathe
(35) Cinn 273A grinder
(36) Heem 18" vertical saw
(37) Dewalt 12" radial saw
(38) Wadtkin 12" table saw
(39) Empire sand blast cabinet
(40) 3012U band saw
(41) 16" Boring mill
(42) Mazak CNC milling machine
(43) Okuma CNC Lathe LB35II
(44) Okuma CNC Lath L1420
(45) Mitsubishi DWC90HA wire EDM
(46) Dake movable bed arbor machine

(h) Welders for maintenance - have manganese compounds in rod. Small amount of spray cans are used to mark containers for maintenance (Rustoleum) which contains toluene and xylene. [326 IAC 6-1]

(i) Oil recovery system.

(j) Two (2) electric Tool room heat treat cabinets

(k) Water evaporator

(l) One (1) plastic blast system, identified as EU-10, constructed in 1994, controlled by a baghouse and Hepa filter, and exhausting to stack SV-6. [326 IAC 6-1], and

(m) Three (3) Nishijimax NHC100 CNC billet cutoff saws.

(n) Facilities to produce graphite electrodes and bevel gear teeth dies, including: [326 IAC 6-1]

(1) Two (2) Gleason straight bevel gear generators, with reciprocating blades, using a liquid dielectric oil coolant.

(2) One (1) Gleason pressure angle tool grinder, using a liquid dielectric oil coolant.

(3) One (1) Gleason gear tester.

(4) Two (2) Charmilles Electrical Discharge Machine (EDM) plunge systems, using a liquid dielectric oil coolant, equipped with a fume collector for controlling fumes and oil mist, exhausting through stack SV-16.

(o) A laboratory as defined in 326 IAC 2-7-1(21)(D).

SECTION B GENERAL CONDITIONS

B.1 Permit No Defense [IC 13]

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(b) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1). Upon request, the Permittee shall also furnish to IDEM, OAQ,

copies of records required to be kept by this permit or, for information claimed to be confidential, the Permittee may furnish such records directly to the U. S. EPA along with a claim of confidentiality. [326 IAC 2-8-4(5)(E)]

(c) The Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

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

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

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

(a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for:

(1) Enforcement action;

(2) Permit termination, revocation and reissuance, or modification; and

(3) Denial of a permit renewal application.

(b) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(c) 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.

B.11 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.

(c) An authorized individual is defined at 326 IAC 2-1.1-1(1).

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

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. All certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than April 15 of each year to:

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

(b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(c) The annual compliance certification report shall include the following:

(1) The appropriate identification of each term or condition of this permit that is the basis of the certification;

(2) The compliance status;

(3) Whether compliance was continuous or intermittent;

(4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-8-4(3); and

(5) Such other facts as specified in Sections D of this permit, IDEM, OAQ, may require to determine the compliance status of the source.

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

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

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall 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) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.

(c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept 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.14 Emergency Provisions [326 IAC 2-8-12]

(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-8-12.

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describes the following:

(1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;

(2) The permitted facility was at the time being properly operated;

(3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ / Northern 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 No.: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or
Telephone No.: 317-233-5674 (ask for Compliance Section)
Facsimile No.: 317-233-5967
Regional Office Telephone No.: 574-245-4870
Regional Office Facsimile No.: 574-245-4877

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

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

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

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

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

(A) A description of the emergency;

(B) Any steps taken to mitigate the emissions; and

(C) Corrective actions taken.

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

(6) The Permittee immediately took all reasonable steps to correct the emergency.

(c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

(d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

(e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 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.

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

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

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

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists inde-

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

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

(c) Emergencies shall be included in the Quarterly Deviation and Compliance Monitoring Report.

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

(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a FESOP modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)] The notification by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:

(1) That this permit contains a material mistake.

(2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.

(3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]

(c) Proceedings by IDEM, OAQ, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-8-8(b)]

(d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

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

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

Request for renewal shall be submitted to:

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

(b) Timely Submittal of Permit Renewal [326 IAC 2-8-3]

(1) A timely renewal application is one that is:

(A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and

(B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(2) If IDEM, OAQ, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.

(c) Right to Operate After Application for Renewal [326 IAC 2-8-9]
If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAQ, takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ, any additional information identified as needed to process the application.

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

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

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

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

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

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

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

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

(1) The changes are not modifications under any provision of Title I of the Clean Air Act;

(2) Any approval required by 326 IAC 2-8-11.1 has been obtained;

(3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total

emissions);

(4) The Permittee notifies the:

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

and

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

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

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

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

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

(1) A brief description of the change within the source;

(2) The date on which the change will occur;

(3) Any change in emissions; and

(4) Any permit term or condition that is no longer applicable as a result of the change.

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

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

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

B.20 Permit Revision Requirement [326 IAC 2-8-11.1]
A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-8-11.1.

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

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) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

(c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

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

(e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

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

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

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

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

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

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-11(b)(3)]

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

(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.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

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

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) Any change or modification that increases the potential to emit PM to 250 tons per year or more shall cause this source to become a major source pursuant to 326 IAC 2-2, PSD, and shall require prior OAQ approval.

(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.2 Opacity [326 IAC 5-1]

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

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

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

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

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

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

Except as otherwise provided by statute, rule or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

C.7 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.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

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

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

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

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

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

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

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

All required notifications shall be submitted to:

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

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

(e) Procedures for Asbestos Emission Control
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4 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) Indiana Accredited Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement that the inspector be accredited is federally enforceable.

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

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

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

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

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

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

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

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ, not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the source 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.10 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. 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.11 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 upon issuance of this permit. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment.

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

C.12 Maintenance of Emission Monitoring Equipment [326 IAC 2-8-4(3)(A)(iii)]

(a) In the event that a breakdown of the emission monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no often less than once an hour until such time as the continuous monitor is back in operation.

(b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

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

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

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

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

(b) Whenever a condition in this permit requires the measurement of a temperature, flow rate, or pH level, the instrument employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.

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

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

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

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

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

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

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

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

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

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

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

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

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

C.16 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68.215]

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

(a) A compliance schedule for meeting the requirements of 40 CFR 68; or

(b) As a part of the annual compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP).

All documents submitted pursuant to this condition shall include the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

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

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

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

(b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:

(1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or

(2) If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.

(3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, the IDEM, OAQ shall be promptly notified of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.

(4) Failure to take reasonable response steps shall constitute a violation of the permit.

(c) The Permittee is not required to take any further response steps for any of the following reasons:

(1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.

(2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied.

(3) An automatic measurement was taken when the process was not operating.

(4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.

(d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.

(e) The Permittee shall record all instances when response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

(f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

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

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.

(c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

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

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

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

(a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

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

(a) The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "authorized individual" as defined by 326 IAC2-1.1-1(1).

(b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

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

(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, any quarterly or semi-annual report required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. The report does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(e) Reporting periods are based on calendar years.

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

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

(a) Persons opening appliances for maintenance, service, repair or disposal must comply with the required practices pursuant to 40 CFR 82.156

(b) Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

(c) Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1 FACILITY OPERATION CONDITIONS

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

(a) One (1) shot blast machine, identified as EU-8, constructed in 1980 and to be reconstructed in 2005/2006, equipped with a cartridge dust collector and exhausting through stack SV-4**,** which exhausts inside the building, capacity: 28 cubic feet, with a maximum process weight rate of 3.324 tons per hour.

(b) One (1) shot blast machine, identified as EU-9, constructed in 1997 and reconstructed in 2004, equipped with a cartridge dust collector and exhausting through stack SV-5, which exhausts inside the building, capacity: 34 cubic feet, with a maximum process weight rate of 3.324 tons per hour.

(f) One (1) table blast system, identified as EU-19, equipped with a cartridge dust collector shared with the thru blast system and exhausting through stack SV-15, which exhausts inside the building, maximum process weight rate: 2,000 pounds per hour.

(g) One (1) thru blast system, identified as EU-20, equipped with a cartridge dust collector shared with the table blast system and exhausting through stack SV-15, which exhausts inside the building, maximum process weight rate: 6,650 pounds per hour.

(h) One (1) Trinco blast cabinet, identified as EU-23, equipped with a baghouse dust collector and exhausting through stack SV-14, which exhausts inside the building, capacity: 0.5 unit and 500 pounds per hour.

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

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

D.1.1 Particulate Matter (PM) [326 IAC 6-1-2(a)]

(a) Pursuant to 326 IAC 6-1-2(a) (Nonattainment Area Particulate Limitations), particulate matter (PM) emissions from each of the two (2) shot blast machines (EU-8 and EU-9) shall be limited to seven-hundredths (0.07) gram per dry standard cubic meter (g/dscm) (0.03 grain per dry standard cubic foot (dscf)).

(b) Pursuant to 326 IAC 6-1-2(a) (County Specific Particulate Matter Limitations), particulate matter (PM) emissions from the one (1) table blast system (EU-19) and one (1) thru blast system (EU-20) shall be limited to seven-hundredths (0.07) gram per dry standard cubic meter (g/dscm) (three-hundredths (0.03) grain per dry standard cubic foot (dscf)).

(c) Pursuant to 326 IAC 6-1-2(a) (County Specific Particulate Matter Limitations), particulate matter (PM) emissions from the one (1) Trinco blast cabinet, identified as EU-23, shall be limited to seven-hundredths (0.07) gram per dry standard cubic meter (g/dscm) (three-hundredths (0.03) grain per dry standard cubic foot (dscf)).

D.1.2 Particulate Matter (PM_{10}) [326 IAC 2-8-4]

(a) In order to comply with 326 IAC 2-8, FESOP, the potential to emit PM_{10} from the two (2) shot blast machines, identified as EU-8 and EU-9, one (1) table blast system, identified as EU-19, one (1) thru blast system, identified as EU-20, and one (1) Trinco blast cabinet, identified as EU-23, shall be limited to 0.0026 pound per pound of abrasive input at each unit. These limits, in conjunction with the abrasive input limits in (b) through (e) of this condition will result in PM_{10} emissions of 95.7 tons per year from blasting. Together with Condition D.2.2(a), this

condition shall limit the potential to emit PM_{10} to less than one hundred (100) tons per year from the total of all facilities at this source. Therefore, the requirements of 326 IAC 2-7 do not apply.

(b) In order to comply with 326 IAC 2-8, FESOP, the amount of abrasive input to each of the two (2) shot blast machines, identified as EU-8 and EU-9, shall not exceed 5,519 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

(c) In order to comply with 326 IAC 2-8, FESOP, the amount of abrasive input to one (1) table blast system, identified as EU-19, shall not exceed 5,519 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

(d) In order to comply with 326 IAC 2-8, FESOP, the amount of abrasive input to one (1) thru blast system, identified as EU-20, shall not exceed 22,076 tons per twelve (12)consecutive month period, with compliance determined at the end of each month.

(e) In order to comply with 326 IAC 2-8, FESOP, the amount of abrasive input to one (1) Trinco blast cabinet, identified as EU-23, shall not exceed 3,692 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

D.1.3 Nonapplicable Condition

Condition D.1.2 from FESOP 141-5555-00057, issued on December 11, 1996, which states that the PM_{10} emissions from the entire source shall not exceed 8.25 tons per month; Therefore, the requirements of 326 IAC 2-7 do not apply, is not applicable because the PM_{10} hourly limits in Condition D.1.2 of this permit will be sufficient to show that the requirements of 326 IAC 2-7 do not apply. Therefore, Condition D.1.2 from FESOP 141-5555-00057, is hereby rescinded.

D.1.4 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 these facilities and any control devices.

Compliance Determination Requirements

D.1.5 Testing Requirements [326 IAC 2-8-5(a)(1), (4)] [326 IAC 2-1.1-11]

(a) In order to demonstrate compliance with Conditions D.1.1 and D.1.2 the Permittee shall perform PM and PM_{10} testing of one of the two (2) shot blast machines (EU-8 and EU-9) utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. PM_{10} includes filterable and condensible PM_{10}. Testing shall be conducted in accordance with Section C- Performance Testing.

(b) Within two hundred and seventy (270) days after initial startup, in order to demonstrate compliance with Conditions D.1.1(b) and D.1.2, the Permittee shall perform PM and PM_{10} testing for the one (1) thru blast system (EU-20) utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. PM_{10} includes filterable and condensible PM_{10}. Testing shall be conducted in accordance with Section C- Performance Testing.

(c) Within two hundred and seventy (270) days after initial startup, in order to demonstrate compliance with Conditions D.1.1(c) and D.1.2, the Permittee shall perform PM and PM_{10} testing for the one (1) Trinco blast cabinet (EU-23) utilizing methods as approved by the Commissioner. PM_{10} includes filterable and condensible PM_{10}. Testing shall be conducted in accordance with Section C- Performance Testing.

D.1.6 Particulate

(a) In order to comply with Conditions D.1.1 and D.1.2, the cartridge dust collector for particulate control shall be in operation and control emissions from the one (1) shot blast machine, identified as EU-8, at all times when the shot blast machine (EU-8) is in operation.

(b) In order to comply with Conditions D.1.1 and D.1.2, the cartridge dust collector for particulate control shall be in operation and control emissions from the one (1) shot blast machine, identified as EU-9, at all times when the shot blast machine (EU-9) is in operation.

(c) In order to comply with Conditions D.1.1 and D.1.2, the cartridge dust collector for particulate control shall be in operation and control emissions from the one (1) table blast system, identified as EU-19, at all times when the one (1) table blast system (EU-19) is in operation.

(d) In order to comply with Conditions D.1.1 and D.1.2, the cartridge dust collector for particulate control shall be in operation and control emissions from the one (1) thru blast system, identified as EU-20, at all times when the one (1) thru blast system (EU-20) is in operation.

(e) In order to comply with Conditions D.1.1 and D.1.2, the baghouse dust collector for particulate control shall be in operation and control emissions from the one (1) Trinco blast cabinet, identified as EU-23, at all times when the one (1) Trinco blast cabinet (EU-23) is in operation.

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 shot blasting (EU-8, EU-9, EU-19, EU-20 and EU-23) stack exhausts (SV-4, SV-5, SV-14 and SV-15) 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) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

D.1.8 Parametric Monitoring

(a) The Permittee shall record the total static pressure drop across the cartridge dust collectors used in conjunction with the two (2) shot blast machines (EU-8 and EU-9), at least once per day when the shot blast machines are in operation when venting to the atmosphere. When for any one reading, the pressure drop across the dust collector is outside the normal range of 1.0 and 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading

that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

(b) The Permittee shall record the total static pressure drop across the cartridge dust collector used in conjunction with the one (1) table blast system (EU-19) and the one (1) through blast system (EU-20), at least once per day when the blasting is in operation when venting to the atmosphere. When or any one reading, the pressure drop across the dust collector is outside the normal range of 1.0 and 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan -Failure to Take Response. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

(c) The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the one (1) Trinco blast cabinet (EU-23) at least once per day when the Trinco blast cabinet is in operation when venting to the atmosphere. When or any one reading, the pressure drop across the baghouse is outside the normal range of 1.0 and 3.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Failure to Take Response. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

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

D.1.9 Baghouse and Cartridge Inspections

An inspection shall be performed each calendar quarter of all bags and cartridges controlling the blasters(EU-8, EU-9, EU-19, EU-20 and EU-23) when venting to the atmosphere. A baghouse or cartridge inspection shall be performed within three (3) months of redirecting vents to the atmosphere and every three (3) months thereafter. Inspections are optional when venting indoors. Inspections required by this condition shall not be performed in consecutive months. All defective bags and cartridges shall be replaced.

D.1.10 Broken or Failed Bag and Cartridge Detection

In the event that bag or cartridge failure has been observed:

(a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit. If operations continue after bag failure is observed and it will be 10 days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any

response actions taken up to the time of notification.

(b) For single compartment dust collectors, if failure is indicated by a significant drop in the dust collector's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

D.1.11 Record Keeping Requirements

(a) To document compliance with Condition D.1.7, the Permittee shall maintain daily records of visible emission notations of the blasters (EU-8, EU-9, EU-19, EU-20 and EU-23) stack exhausts.

(b) To document compliance with Condition D.1.8, the Permittee shall maintain daily records of the total static pressure drop across the cartridge dust collectors and baghouse when exhausting to the atmosphere.

(c) To document compliance with Condition D.1.9, the Permittee shall maintain records of the results of the inspections required under Condition D.1.9 and the dates the vents are redirected.

(d) To document compliance with Condition D.1.4, the Permittee shall maintain of records of any additional inspections prescribed by the Preventive Maintenance Plan.

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

D.1.12 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.2 (b) through (e) shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

SECTION D.2 FACILITY OPERATION CONDITIONS

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

(c) Six (6) forge press cells, identified as EU-1 through EU-6, controlled by five (5) hydrostatic precipitators (rotoclones), each cell is equipped with one (1) load tub lift and bowl loader, with a total of two (2) meter boxes, and twenty-one (21) induction coils, with three (3) forge press cells (EU-1 through EU-3) exhausting to stack SV-1 and three (3) forge press cells (EU-4 through EU-6) exhausting to stack SV-2, maximum capacity: 4.05 tons of steel billets per hour, total.

(d) One (1) forge press cell, identified as EU-13, constructed in 1998, controlled by a hydrostatic precipitator (rotoclone), equipped with one (1) load tub lift, one (1) meter box, one (1) bowl loader, and four (4) induction coils, exhausting to stack SV-9, maximum capacity: 1.04 tons of steel billets per hour.

(e) One (1) 3000-ton forge press cell (Serial No. 21601), identified as EU-14, constructed in 1999, controlled by a hydrostatic precipitator (rotoclone) and including five (5) induction coils with a maximum temperature up to 2250EF, two (2) inverters, one (1) billet load system, one (1) transform conveyor and one (1) cool down conveyor, exhausting through stack SV-9, maximum capacity: 1.04 tons of steel billets per hour.

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

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

D.2.1 Particulate Matter (PM) [326 IAC 6-1-2(a)]

Pursuant to 326 IAC 6-1-2(a)(Nonattainment Area Particulate Limitations), particulate matter (PM) emissions from each of the eight (8) forge press cells (EU-1 through EU-6, EU-13 and EU-14) shall be limited to 0.03 grain per dry standard cubic foot, equivalent to 0.425 pounds per hour from the two (2) forge press cells identified as EU-13 and EU-14, when operating at a flow rate of 1,654 actual cubic feet per minute, 0.478 pounds per hour from the three (3) forge press cells, identified as EU-1 through EU-3, when operating at a flow rate of 1,859 actual cubic feet per minute, and 0.414 pounds per hour from the three (3) forge press cells identified as EU-4 through EU-6, when operating at a flow rate of 1,610 actual cubic feet per minute.

D.2.2 Particulate Matter (PM_{10}) [326 IAC 2-8-4]

In order to comply with 326 IAC 2-8, FESOP, the PM_{10} emissions from the total of the eight (8) forge press cells shall not exceed 0.005 pounds per hour. This will result in PM_{10} emissions of less than 0.021 tons per year from the eight (8) forge press cells. Together with Condition D.1.2(a), this condition shall limit the potential to emit PM_{10} to less than one hundred (100) tons per year from the total of all facilities at this source. Therefore, the requirements of 326 IAC 2-7 do not apply.

D.2.3 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

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

Compliance Determination Requirements

D.2.4 Particulate Matter (PM and PM_{10})

(a) Pursuant to FESOP 141-5555-00057, issued on December 11, 1996, and in order to comply with Conditions D.2.1 and D.2.2, the hydrostatic precipitators (rotoclones) for PM and PM_{10} control shall be in operation at all times when the six (6) forge press cells (EU-1 through EU-6) are in operation.

(b) Pursuant to FESOP 141-5555-00057, issued on December 11, 1996, and in order to comply with Conditions D.2.1 and D.2.2, the hydrostatic precipitator (rotoclone) for PM and PM_{10} control shall be in operation at all times when the one (1) forge press cell (EU-13) is in operation.

(c) Pursuant to FESOP 141-5555-00057, issued on December 11, 1996, and in order to comply with Conditions D.2.1 and D.2.2, the hydrostatic precipitator (rotoclone) for PM and PM_{10} control shall be in operation at all times when the one (1) forge press cell (EU-14) is in operation.

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

D.2.5 Visible Emissions Notations

(a) Visible emissions notations of the forge press cells (EU-1 - EU-6, EU-13 and EU-14) stack exhausts (SV-1, SV-2 and SV-9) shall be performed once per shift 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) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

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

D.2.6 Record Keeping Requirements

(a) To document compliance with Condition D.2.5, the Permittee shall maintain records of visible emission notations of the forge press cells (EU-1 - EU-6, EU-13 and EU-14) stack exhausts (SV-1, SV-2 and SV-9) once per shift.

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

SECTION D.3 FACILITY OPERATION CONDITIONS

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

(a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour (total capacity is approximately 28.0 million British thermal units per hour). There are no boilers at this source.

(b) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6, including two (2) maintenance parts washers with capacities less than 80 gallons each and using only non-halogenated solvents. [326 IAC 8-3]

(c) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment. [326 IAC 6-1]

(d) Natural draft cooling towers not regulated under a NESHAP.

(e) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.

(f) Paved roads and parking lots with public access.

(g) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4,000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations. Specifically including the following equipment, with dry processes exhausting to bag/barrel filters and wet processes having self-contained coolant reservoirs, with equipment in the die set up area exhausting to stack SV-7 and equipment in the tool room exhausting to stack SV-8: [326 IAC 6-1]

(1) Engin 20 X 54 lathe
(2) Engin 16 X 102 lathe
(3) Two (2) 12" wheel grinders
(4) Jet abrasive cut off saw
(5) Vertical band saw
(6) Norton surface grinder
(7) Vertical belt polisher
(8) Two (2) Taft Peirce surface grinders
(9) Cincinnati tool grinder
(10) ID/OD grinder
(11) Making tool grinder
(12) US Electric double end grinder
(13) Two (2) double end tool grinders
(14) Powermatic belt/disc grinder
(15) Abrasive wheel cut off saw
(16) 10" double end tool grinder
(17) 4 Ft. radial drill press
(18) Engin 10 X 30 Lathe
(19) Bridgeport mill vertical 9 X 42 mill
(20) Engin lathe
(21) Enterprise horizontal mill
(22) Giddings 10TF CNC lathe

(23) Giddings 15TF CNC
(24) Marvel horizontal saw
(25) Madison grinder
(26) OKK mill
(27) Bridgeport vertical mill
(28) Four (4) drill presses
(29) Arbor press
(30) Johansson drill press
(31) Clausing 15" lathe
(32) Clausing band saw
(33) Kondia power mill
(34) Monarch 18" CNC lathe
(35) Cinn 273A grinder
(36) Heem 18" vertical saw
(37) Dewalt 12" radial saw
(38) Wadtkin 12" table saw
(39) Empire sand blast cabinet
(40) 3012U band saw
(41) 16" Boring mill
(42) Mazak CNC milling machine
(43) Okuma CNC Lathe LB35II
(44) Okuma CNC Lath L1420
(45) Mitsubishi DWC90HA wire EDM
(46) Dake movable bed arbor machine

(h) Welders for maintenance - have manganese compounds in rod. Small amount of spray cans are used to mark containers for maintenance (Rustoleum) which contains toluene and xylene. [326 IAC 6-1]

(i) Oil recovery system.

(j) Two (2) electric Tool room heat treat cabinets

(k) Water evaporator

(l) One (1) plastic blast system, identified as EU-10, constructed in 1994, controlled by a baghouse and Hepa filter, and exhausting to stack SV-6.[326 IAC 6-1], and

(m) Three (3) Nishijimax NHC100 CNC billet cutoff saws.

(n) Facilities to produce graphite electrodes and bevel gear teeth dies, including: [326 IAC 6-1]

(1) Two (2) Gleason straight bevel gear generators, with reciprocating blades, using a liquid dielectric oil coolant.
(2) One (1) Gleason pressure angle tool grinder, using a liquid dielectric oil coolant.
(3) One (1) Gleason gear tester.
(4) Two (2) Charmilles Electrical Discharge Machine (EDM) plunge systems, using a liquid dielectric oil coolant, equipped with a fume collector for controlling fumes and oil mist, exhausting through stack SV-16.

(o) A laboratory as defined in 326 IAC 2-7-1(21)(D).

(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.3.1 Particulate Matter (PM) [326 IAC 6-1-2(a)]

Pursuant to 326 IAC 6-1-2(a)(Nonattainment Area Particulate Limitations), particulate matter (PM) emissions from the:

(a) equipment exhausting through Stack SV-7,

(b) equipment exhausting through Stack SV-8,

(c) three (3) Nishijimax NHC100 CNC billet cutoff saws, and

(d) graphite electrodes and bevel gear teeth die production facilities

each, shall be limited to 0.03 grain per dry standard cubic foot.

D.3.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-5]

(a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaner degreaser without remote solvent reservoirs, in St. Joseph County, shall ensure that the following requirements are met:

(1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:

(A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF));

(B) The solvent is agitated; or

(C) The solvent is heated.

(2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.

(3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).

(4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.

(5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9EC) (one hundred twenty degrees Fahrenheit (120EF)):

(A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.

(B) A water cover when solvent is used is insoluble in, and heavier than, water.

(C) Other systems of demonstrated equivalent control such as a refrigerated chiller of carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.

(b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility without remote solvent reservoirs, in St. Joseph County, shall ensure that the following operating requirements are met:

(1) Close the cover whenever articles are not being handled in the degreaser.

(2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.

(3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

Compliance Determination Requirements

D.3.3 Particulate Matter (PM and PM_{10})

In order to comply with Condition D.3.1, the control devices for PM and PM_{10} control shall be in operation at all times when the insignificant grinding and machining and plastic blast system are in operation.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) CERTIFICATION

Source Name: Eaton Corporation, Heavy-Duty Transmission Division, Forge Plant
Source Address: 2930 Foundation Drive, South Bend, Indiana 46628
Mailing Address: 2930 Foundation Drive, South Bend, Indiana 46628
FESOP No.: F 141-13952-00057

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

Please check what document is being certified:

Annual Compliance Certification Letter

Test Result (specify) _____

Report (specify) _____

Notification (specify) _____

Affidavit (specify) _____

Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
Signature:
Printed Name:
Title/Position:
Phone:
Date:

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

FESOP Quarterly Report

Source Name: Eaton Corporation, Heavy-Duty Transmission Division, Forge Plant
Source Address: 2930 Foundation Drive, South Bend, Indiana 46628
Mailing Address: 2930 Foundation Drive, South Bend, Indiana 46628
FESOP No.: F 141-13952-00057
Facility: One (1) shot blast machine, identified as EU-8
Parameter: Abrasive input
Limit: 5,519 tons per twelve (12) consecutive month period, with compliance determined at the end of each month

YEAR:_____

	Abrasive input (tons)	Abrasive input (tons)	Abrasive input (tons)
Month	This Month	Previous 11 Months	12 Month Total

☐ No deviation occurred in this month.

☐ Deviation/s occurred in this month.
Deviation has been reported on _____

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

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

FESOP Quarterly Report

Source Name: Eaton Corporation, Heavy-Duty Transmission Division, Forge Plant
Source Address: 2930 Foundation Drive, South Bend, Indiana 46628
Mailing Address: 2930 Foundation Drive, South Bend, Indiana 46628
FESOP No.: F 141-13952-00057
Facility: One (1) shot blast machine, identified as EU-9
Parameter: Abrasive input
Limit: 5,519 tons per twelve (12) consecutive month period, with compliance determined at the end of each month

YEAR:_____

Month	Abrasive input (tons)	Abrasive input (tons)	Abrasive input (tons)
	This Month	Previous 11 Months	12 Month Total

☐ No deviation occurred in this month.

☐ Deviation/s occurred in this month.
Deviation has been reported on _____

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

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

FESOP Quarterly Report

Source Name: Eaton Corporation, Heavy-Duty Transmission Division, Forge Plant
Source Address: 2930 Foundation Drive, South Bend, Indiana 46628
Mailing Address: 2930 Foundation Drive, South Bend, Indiana 46628
FESOP No.: F 141-13952-00057
Facility: One (1) table blast system, identified as EU-19
Parameter: Abrasive input
Limit: 5,519 tons per twelve (12) consecutive month period, with compliance determined at the end of each month

YEAR:_____

Month	Abrasive input (tons)	Abrasive input (tons)	Abrasive input (tons)
	This Month	Previous 11 Months	12 Month Total

☐ No deviation occurred in this month.

☐ Deviation/s occurred in this month.
Deviation has been reported on _____

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

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

FESOP Quarterly Report

Source Name: Eaton Corporation, Heavy-Duty Transmission Division, Forge Plant
Source Address: 2930 Foundation Drive, South Bend, Indiana 46628
Mailing Address: 2930 Foundation Drive, South Bend, Indiana 46628
FESOP No.: F 141-13952-00057
Facility: One (1) thru blast system, identified as EU-20
Parameter: Abrasive input
Limit: 22,076 tons per twelve (12) consecutive month period, with compliance determined at the end of each month

YEAR:_____

Month	Abrasive input (tons)	Abrasive input (tons)	Abrasive input (tons)
	This Month	Previous 11 Months	12 Month Total

☐ No deviation occurred in this month.

☐ Deviation/s occurred in this month.
Deviation has been reported on _____

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

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

FESOP Quarterly Report

Source Name: Eaton Corporation, Heavy-Duty Transmission Division, Forge Plant
Source Address: 2930 Foundation Drive, South Bend, Indiana 46628
Mailing Address: 2930 Foundation Drive, South Bend, Indiana 46628
FESOP No.: F 141-13952-00057
Facility: One (1) Trinco blast cabinet, identified as EU-23
Parameter: Abrasive input
Limit: 3,692 tons per twelve (12) consecutive month period, with compliance determined at the end of each month

YEAR:_____

Month	Abrasive input (tons)	Abrasive input (tons)	Abrasive input (tons)
	This Month	Previous 11 Months	12 Month Total

☐ No deviation occurred in this month.

☐ Deviation/s occurred in this month.
Deviation has been reported on _____

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

COMPLIANCE BRANCH
100 North Senate Avenue
Indianapolis, Indiana 46204
Phone: 317-233-5674
Fax: 317-233-5967

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
EMERGENCY OCCURRENCE REPORT

Source Name: Eaton Corporation, Heavy-Duty Transmission Division, Forge Plant
Source Address: 2930 Foundation Drive, South Bend, Indiana 46628
Mailing Address: 2930 Foundation Drive, South Bend, Indiana 46628
FESOP No.: F 141-13952-00057

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

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

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: Eaton Corporation, Heavy-Duty Transmission Division, Forge Plant
Source Address: 2930 Foundation Drive, South Bend, Indiana 46628
Mailing Address: 2930 Foundation Drive, South Bend, Indiana 46628
FESOP No.: F 141-13952-00057

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

Page 1 of 2

This report is an affirmation that the source has met all the requirements stated in this permit. 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. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do 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".
NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.
THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

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

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

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:	

No deviation occurred in this quarter.

Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Form Completed By: _____

Title/Position: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Minor Permit Revision to a Federally Enforceable State Operating Permit

Source Background and Description

Source Name:	**Eaton Corporation, Heavy-Duty Transmission Division, Forge Plant**
Source Location:	**2930 Foundation Drive, South Bend, Indiana 46628**
County:	**St. Joseph**
SIC Code:	**3462**
Operation Permit No.:	**F 141-13952-00057**
Operation Permit Issuance Date:	**February 19, 2002**
Significant Permit Revision No.:	**MPR 141-20858-00057**
Permit Reviewer:	**CarrieAnn Paukowits**

The Office of Air Quality (OAQ) has reviewed a minor permit revision application from Eaton Corporation, Heavy-Duty Transmission Division, Forge Plant relating to the following:

(a) The applicant is proposing to construct and operate facilities to produce graphite electrodes and bevel gear teeth dies. This will consist of the construction and operation of the following emission units and pollution control devices:

(1) Two (2) Gleason straight bevel gear generators, with reciprocating blades, using a liquid dielectric oil coolant.

(2) One (1) Gleason pressure angle tool grinder, using a liquid dielectric oil coolant.

(3) One (1) Gleason gear tester.

(4) Two (2) Charmilles Electrical Discharge Machine (EDM) plunge systems, using a liquid dielectric oil coolant, equipped with a fume collector for controlling fumes and oil mist, exhausting through SV-16.

The gear generator, tool grinder, and EDMs are all wet processes with negligible emissions. There are no emissions from the gear tester. Therefore, these are insignificant activities.

(b) The applicant is also proposing to construct the following insignificant activity:

A laboratory as defined in 326 IAC 2-7-1(21)(D).

(c) In 2004, the Permittee reconstructed the one (1) shot blast machine, identified as EU-9, which was initially constructed in 1997. Pursuant to 326 IAC 1-2-65, “An emissions unit shall be considered to be reconstructed when the fixed capital cost of the new components exceed fifty percent (50%) of the fixed capital cost of a comparable entirely new emissions unit.” The unit was rebuilt from top to bottom. Therefore, it was more than 50% of the cost of an entirely new unit. The shot blast machine is now equipped with a Jet Pulse Slide in Cartridge dust collector, which exhausts inside the building. Because the dust collector exhausts indoors, the applicant requested that the testing requirements be removed from the permit. These requirements will not be removed. The testing is required to determine compliance with 326 IAC 6-1 and the limits that make 326 IAC 2-7, Part 70, not applicable. However, the Permittee will only be required to test one of the two (2) shot blast machines, EU-8 or EU-9. Please see the “Testing Requirements” section of this document for a detailed explanation.

(d) The Permittee is proposing to rebuild the one (1) shot blast machine, identified as EU-8, to be identical to the one (1) shotblast machine, identified as EU-9, with the exception of the size of the unit (28 cubic feet vs. 34 cubic feet). The control device will be the same, and the throughput is the same due to the source-wide capacity.

(e) The Permittee is proposing to move the one (1) thru blast system, identified as EU-20, next to the one (1) table blast system, identified as EU-19, so that they will exhaust to the same cartridge dust collector, which exhausts indoors. The applicant also requested that the initial testing requirement be removed from the permit. The testing is required to determine compliance with 326 IAC 6-1 and the limits that make 326 IAC 2-7, Part 70, not applicable. Therefore, it will not be removed. However, the Permittee will only be required to test one of the two (2) systems, EU-19 or EU-20. Please see the "Testing Requirements" section of this document for a detailed explanation.

(f) The Permittee is proposing to add a Trinco blast cabinet for cleaning and peening the beveled gear forging dies. The description is as follows:

One (1) Trinco blast cabinet, identified as EU-23, equipped with a baghouse dust collector and exhausting through stack SV-14, which exhausts inside, capacity: 0.5 unit and 500 pounds per hour.

As a result of these changes, Conditions A.2 and A.3 of the permit are revised as follows (deleted language appears as ~~strikeouts~~, new language appears in bold):

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

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

(a) One (1) shot blast machine, identified as EU-8, constructed in 1980 **and to be reconstructed in 2005/2006**, equipped with a ~~baghouse~~ **cartridge dust collector** and exhausting through stack SV-4**, which exhausts inside the building**, capacity: 28 cubic feet, with a maximum process weight rate of 3.324 tons per hour.

(b) One (1) shot blast machine, identified as EU-9, constructed in 1997 **and reconstructed in 2004**, equipped with a ~~baghouse~~ **cartridge dust collector** and exhausting through stack SV-5**, which exhausts inside the building**, capacity: 34 cubic feet, with a maximum process weight rate of 3.324 tons per hour.

(c) Six (6) forge press cells, identified as EU-1 through EU-6, controlled by five (5) hydrostatic precipitators (rotoclones), each cell is equipped with one (1) load tub lift and bowl loader, with a total of two (2) meter boxes, and twenty-one (21) induction coils, with three (3) forge press cells (EU-1 through EU-3) exhausting to stack SV-1 and three (3) forge press cells (EU-4 through EU-6) exhausting to stack SV-2, maximum capacity: 4.05 tons of steel billets per hour, total.

(d) One (1) forge press cell, identified as EU-13, constructed in 1998, controlled by a hydrostatic precipitator (rotoclone), equipped with one (1) load tub lift, one (1) meter box, one (1) bowl loader, and four (4) induction coils, exhausting to stack SV-9, maximum capacity: 1.04 tons of steel billets per hour.

(e) One (1) 3,000-ton forge press cell (Serial No. 21601), identified as EU-14, constructed in 1999, controlled by a hydrostatic precipitator (rotoclone) and including five (5) induction coils with a maximum temperature up to 2,250°F, two (2) inverters, one (1) billet load system, one (1) transform conveyor and one (1) cool down conveyor, exhausting through stack SV-9, maximum capacity: 1.04 tons of steel billets per hour.

(f) One (1) table blast system, identified as EU-19, equipped with a ~~baghouse~~ **cartridge dust collector shared with the thru blast system** and exhausting through stack SV-~~14~~**15, which exhausts inside the building**, maximum process weight rate: 2,000 pounds per hour.

(g) One (1) thr**u**~~ough~~ blast system, identified as EU-20, equipped with a ~~baghouse~~ **cartridge dust collector shared with the table blast system** and exhausting through stack SV-15**, which exhausts inside the building**, maximum process weight rate: 6,650 pounds per hour.

(h) One (1) Trinco blast cabinet, identified as EU-23, equipped with a baghouse dust collector and exhausting through stack SV-14, which exhausts inside the building, capacity: 0.5 unit and 500 pounds per hour.

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

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

(a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour (total capacity is approximately 28.0 million British thermal units per hour). There are no boilers at this source.

(b) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6, including two (2) maintenance parts washers with capacities less than 80 gallons each and using only non-halogenated solvents. [326 IAC 8-3]

(c) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment. [326 IAC 6-1]

(d) Natural draft cooling towers not regulated under a NESHAP.

(e) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.

(f) Paved roads and parking lots with public access.

(g) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4,000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations. Specifically including the following equipment, with dry processes exhausting to bag/barrel filters and wet processes having self-contained coolant reservoirs, with equipment in the die set up area exhausting to stack SV-7 and equipment in the tool room exhausting to stack SV-8: [326 IAC 6-1]

(1) Engin 20 X 54 lathe
(2) Engin 16 X 102 lathe
(3) Two (2) 12" wheel grinders
(4) Jet abrasive cut off saw
(5) Vertical band saw
(6) Norton surface grinder
(7) Vertical belt polisher
(8) Two (2) Taft Peirce surface grinders

(9) Cincinnati tool grinder
(10) ID/OD grinder
(11) Making tool grinder
(12) US Electric double end grinder
(13) Two (2) double end tool grinders
(14) Powermatic belt/disc grinder
(15) Abrasive wheel cut off saw
(16) 10" double end tool grinder
(17) 4 Ft. radial drill press
(18) Engin 10 X 30 Lathe
(19) Bridgeport mill vertical 9 X 42 mill
(20) Engin lathe
(21) Enterprise horizontal mill
(22) Giddings 10TF CNC lathe
(23) Giddings 15TF CNC
(24) Marvel horizontal saw
(25) Madison grinder
(26) OKK mill
(27) Bridgeport vertical mill
(28) Four (4) drill presses
(29) Arbor press
(30) Johansson drill press
(31) Clausing 15" lathe
(32) Clausing band saw
(33) Kondia power mill
(34) Monarch 18" CNC lathe
(35) Cinn 273A grinder
(36) Heem 18" vertical saw
(37) Dewalt 12" radial saw
(38) Wadtkin 12" table saw
(39) Empire sand blast cabinet
(40) 3012U band saw
(41) 16" Boring mill
(42) Mazak CNC milling machine
(43) Okuma CNC Lathe LB35II
(44) Okuma CNC Lath L1420
(45) Mitsubishi DWC90HA wire EDM
(46) Dake movable bed arbor machine

(h) Welders for maintenance - have manganese compounds in rod. Small amount of spray cans are used to mark containers for maintenance (Rustoleum) which contains toluene and xylene. [326 IAC 6-1]

(i) Oil recovery system.
(j) Two (2) electric Tool room heat treat cabinets

(k) Water evaporator

(l) One (1) plastic blast system, identified as EU-10, constructed in 1994, controlled by a baghouse and Hepa filter, and exhausting to stack SV-6. [326 IAC 6-1], and

(m) Three (3) Nishijimax NHC100 CNC billet cutoff saws.

(n) Facilities to produce graphite electrodes and bevel gear teeth dies, including:

(1) Two (2) Gleason straight bevel gear generators, with reciprocating blades, using a liquid dielectric oil coolant.

(2) One (1) Gleason pressure angle tool grinder, using a liquid dielectric oil coolant.

(3) One (1) Gleason gear tester.

(4) Two (2) Charmilles Electrical Discharge Machine (EDM) plunge systems, using a liquid dielectric oil coolant, equipped with a fume collector for controlling fumes and oil mist, exhausting through stack SV-16.

(o) A laboratory as defined in 326 IAC 2-7-1(21)(D).

History

Eaton Corporation, Heavy-Duty Transmission Division, Forge Plant was issued a Federally Enforceable State Operating Permit (FESOP) on February 19, 2002. A first Administrative Amendment (141-17369) was issued on June 19, 2003, and a Significant Permit Revision (141-17787) was issued on September 22, 2003. On February 28, 2005, Eaton Corporation, Heavy-Duty Transmission Division, Forge Plant submitted an application to the OAQ requesting to add new facilities, revise descriptive information and remove testing conditions from their permit.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the FESOP Minor Permit Revision 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 February 28, 2005. Additional information was received on March 30, May 5, and May 24, 2005.

Emission Calculations

See pages 1 through 6 of Appendix A of this document for detailed emissions calculations.

Potential To Emit of Modification

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source 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.

This table reflects the PTE before controls for this revision. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	**Potential To Emit** (tons/year)
PM	14.8
PM_{10}	12.7
SO_2	0.00
VOC	0.00
CO	0.00
NO_X	0.00

HAPs	**Potential To Emit** (tons/year)
Manganese	0.165
Chromium	0.032
Nickel	0.025
HCl (from the lab)	Negligible
TOTAL	0.222

The values in this table represent the unrestricted potential emissions from the one (1) proposed Trinco blast cabinet. The reconstruction of the two (2) shot blasters, identified as EU-8 and EU-9, do not increase the potential to emit of any regulated pollutant from the source (see the final table on page 6 of Appendix A of this document). Therefore, pursuant to 326 IAC 1-2-42(3), the reconstruction is not considered a modification.

Justification for Revision

The FESOP is being revised through a FESOP Minor Permit Revision. This revision is being performed pursuant to 326 IAC 326 IAC 2-8-11.1(d)(4) since the potential to emit PM and PM_{10} from the modification is less than twenty-five (25) tons per year and equal to or greater than five (5) tons per year.

Potential to Emit of the Entire Source 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.

	Potential To Emit (tons/year)						
Process/emission unit	**PM**	**PM_{10}**	**SO_2**	**VOC**	**CO**	**NO_x**	**HAPs**
Table blast system, EU-19	22.1	12.5	0.00	0.00	0.00	0.00	0.332
Thru blast system, EU-20	88.3	49.9	0.00	0.00	0.00	0.00	1.33
Shot blast machine, EU-8	22.1	12.5	0.00	0.00	0.00	0.00	0.332
Shot blast machine, EU-9	22.1	12.5	0.00	0.00	0.00	0.00	0.332
Trinco blast cabinet, EU-23	14.8	8.34	0.00	0.00	0.00	0.00	0.222
Forge press cells	2.68	0.021	0.00	0.00	0.00	0.00	0.00
Insignificant activities	3.00	3.00	1.00	5.00	10.0	15.0	1.00
Total Emissions	175	98.8	1.00	5.00	10.0	15.0	3.55

The values in the table represent the unrestricted potential emissions for all pollutants, other than PM_{10}, which is limited by the permit. The PM_{10} limits are being revised through this minor permit revision. The total potential to emit of the source will not increase as a result of the revised limitations.

County Attainment Status

The source is located in St. Joseph County.

Pollutant	Status
$PM_{2.5}$	attainment
PM_{10}	attainment
SO_2	attainment
NO_2	attainment
1-Hour Ozone	attainment
8-Hour Ozone	nonattainment
CO	attainment
Lead	attainment

(a) Volatile organic compounds (VOC) and nitrogen oxides (NO_X) 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 NO_X emissions are considered when evaluating the rule applicability relating to the ozone standards. St. Joseph County has been designated as nonattainment for the 8-hour ozone standard. Therefore, VOC and NO_X emissions were reviewed pursuant to the requirements of 326 IAC 2-3, Emission Offset.

(b) St. Joseph County has been classified as unclassifiable or attainment for $PM_{2.5}$. U.S. EPA has not yet establised the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for $PM_{2.5}$ emissions. Therefore, until the U.S.EPA adopts specific provisions for PSD review for $PM_{2.5}$ emissions, it has directed states to regulate PM_{10} emissions as surrogate for $PM_{2.5}$ emissions. See the State Rule Applicability section of this document.

(c) St. Joseph County has been classified as attainment or unclassifiable in Indiana for all remaining 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 section of this document.

Federal Rule Applicability

(a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this proposed revision.

(b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14, 326 IAC 20, 40 CFR 61 and 40 CFR Part 63) applicable to this proposed revision.

State Rule Applicability - Individual Facilities

326 IAC 2-3 (Emission Offset)

The unrestricted potential VOC and NO_X emissions from this source are still less than 100 tons per year. Therefore, the requirements of 326 IAC 2-3, Emission Offset, are still not applicable.

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

The unrestricted potential emissions of the remaining criteria pollutants are less than 250 tons per year. Therefore, the source is a minor source pursuant to 326 IAC 2-2, PSD. In the FESOP, the PM emissions from the total of the four (4) existing blasters were limited to 43.8 pounds per hour, equivalent to 192 tons per year. According to Appendix A, the unrestricted emissions from all blasting operations are only 169 tons per year. Therefore, this source does not require a limit to remain a minor source pursuant to 326 IAC 2-2, PSD.

326 IAC 2-6 (Emission Reporting)

This source is not located in Lake or Porter County with the potential to emit greater than twenty-five (25) tons per year of NO_X, does not emit five (5) tons per year or more of lead and does not require a Part 70 Operating Permit. Therefore, the requirements of 326 IAC 2-6 do not apply.

326 IAC 2-8 (FESOP)

In the FESOP, the PM_{10} emissions from the total of the four (4) existing blasters were limited to 21.89 pounds per hour, equivalent to 95.9 tons per year. These limits have been revised to separate limits for each unit. This will also facilitate compliance determination and monitoring. The resulting limitation is 95.7 tons per year from the total of all blasters, and less than one hundred (100) tons per year from the entire source. The individual limitations are proportional to the potential emissions from each unit. The specific limitations are as follows:

(a) The PM_{10} emissions from the one (1) Trinco blast cabinet shall not exceed 0.00226 pound per pound of abrasive input to the Trinco blast cabinet and the amount of abrasive (shot) input shall not exceed 3,692 tons per twelve (12) consecutive month period, with compliance determined at the end of each month. This will limit the potential PM_{10} emissions from the one (1) Trinco blast cabinet to 8.34 tons per year. The abrasive input limitation is equivalent to the maximum capacity of the unit based on the calculations in Appendix A of this document. Since the PM_{10} emissions from the one (1) Trinco blast cabinet, after control by the bag filter, is 0.000003 pound per pound of abrasive, the one (1) Trinco blast cabinet will comply with this rule. In order to comply with this limitation, the dust collector must be in

operation and control emissions from the Trinco blast cabinet at all times when the Trinco blast cabinet is in operation.

(b) The PM_{10} emissions from the one (1) shot blast machine, identified as EU-9, shall not exceed 0.00226 pound per pound of abrasive input to the shot blast machine and the amount of abrasive (shot) input shall not exceed 5,519 tons per twelve (12) consecutive month period, with compliance determined at the end of each month. This will limit the potential PM_{10} emissions from the one (1) shot blast machine to 12.5 tons per year. The abrasive input limitation is equivalent to the maximum capacity of the unit based on the calculations in Appendix A of this document. Since the PM_{10} emissions from the one (1) shot blast machine, after control by the cartridge dust collector, is 0.000007 pound per pound of abrasive, the one (1) shot blast machine will comply with this rule. In order to comply with this limitation, the dust collector must be in operation and control emissions from the shot blast machine at all times when the shot blast machine is in operation.

(c) The PM_{10} emissions from the one (1) shot blast machine, identified as EU-8, shall not exceed 0.00226 pound per pound of abrasive input to the shot blast machine and the amount of abrasive (shot) input shall not exceed 5,519 tons per twelve (12) consecutive month period, with compliance determined at the end of each month. This will limit the potential PM_{10} emissions from the one (1) shot blast machine to 12.5 tons per year. The abrasive input limitation is equivalent to the maximum capacity of the unit based on the calculations in Appendix A of this document. Since the PM_{10} emissions from the one (1) shot blast machine, after control by the cartridge dust collector, is 0.000007 pound per pound of abrasive, the one (1) shot blast machine will comply with this rule. In order to comply with this limitation, the dust collector must be in operation and control emissions from the shot blast machine at all times when the shot blast machine is in operation.

(d) The PM_{10} emissions from the one (1) table blast system, identified as EU-19, shall not exceed 0.00226 pound per pound of abrasive input to the table blast system and the amount of abrasive (shot) input shall not exceed 5,519 tons per twelve (12) consecutive month period, with compliance determined at the end of each month. This will limit the potential PM_{10} emissions from the one (1) table blast system to 12.5 tons per year. The abrasive input limitation is equivalent to the maximum capacity of the unit based on the calculations in Appendix A of this document. Since the PM_{10} emissions from the one (1) table blast system, after control by the cartridge dust collector, is 0.000007 pound per pound of abrasive, the one (1) table blast system will comply with this rule. In order to comply with this limitation, the dust collector must be in operation and control emissions from the table blast system at all times when the table blast system is in operation.

(e) The PM_{10} emissions from the one (1) thru blast system, identified as EU-20, shall not exceed 0.00226 pound per pound of abrasive input to the thru blast system and the amount of abrasive (shot) input shall not exceed 22,076 tons per twelve (12) consecutive month period, with compliance determined at the end of each month. This will limit the potential PM_{10} emissions from the one (1) thru blast system to 49.9 tons per year. The abrasive input limitation is equivalent to the maximum capacity of the unit based on the calculations in Appendix A of this document. Since the PM_{10} emissions from the one (1) thru blast system, after control by the cartridge dust collector, is 0.000007 pound per pound of abrasive, the one (1) thru blast system will comply with this rule. In order to comply with this limitation, the dust collector must be in operation and control emissions from the thru blast system at all times when the thru blast system is in operation.

326 IAC 6-1 (County Specific Particulate Matter Limitations)

This source, located in St. Joseph County, is not specifically listed in Sections 8.1 through 18 of 326 IAC 6-1, but has the potential to emit one hundred (100) tons or more of particulate matter per year. Therefore, the requirements of 326 IAC 6-1 are applicable.

(a) Pursuant to 326 IAC 6-1-2(a), particulate matter emissions from the insignificant graphite electrodes and bevel gear teeth dies production facilities shall not exceed seven-hundredths (0.07) gram per dry standard cubic meter (g/dscm) (three-hundredths (0.03) grain per dry standard cubic foot (dscf)). Since the emissions from these processes are negligible, they will comply with this rule.

(b) Pursuant to 326 IAC 6-1-2(a), particulate matter emissions from the one (1) shot blast machine, identified as EU-9, shall not exceed seven-hundredths (0.07) gram per dry standard cubic meter (g/dscm) (three-hundredths (0.03) grain per dry standard cubic foot (dscf)). In order to comply with this rule, the dust collector must be in operation and control emissions from the shot blast machine at all times when the shot blast machine is in operation.

(c) Pursuant to 326 IAC 6-1-2(a), particulate matter emissions from the one (1) shot blast machine, identified as EU-8, shall not exceed seven-hundredths (0.07) gram per dry standard cubic meter (g/dscm) (three-hundredths (0.03) grain per dry standard cubic foot (dscf)). In order to comply with this rule, the dust collector must be in operation and control emissions from the shot blast machine at all times when the shot blast machine is in operation.

(d) Pursuant to 326 IAC 6-1-2(a), particulate matter emissions from the one (1) Trinco blast cabinet, shall not exceed seven-hundredths (0.07) gram per dry standard cubic meter (g/dscm) (three-hundredths (0.03) grain per dry standard cubic foot (dscf)). In order to comply with this rule, the dust collector must be in operation and control emissions from the Trinco blast cabinet at all times when the Trinco blast cabinet is in operation.

(e) Pursuant to 326 IAC 6-1-2(a), particulate matter emissions from the one (1) table blast system, identified as EU-19, shall not exceed seven-hundredths (0.07) gram per dry standard cubic meter (g/dscm) (three-hundredths (0.03) grain per dry standard cubic foot (dscf)). In order to comply with this rule, the dust collector must be in operation and control emissions from the table blast system at all times when the table blast system is in operation. The limitations of 326 IAC 6-1 are already in the permit for this unit. However, the equivalent pounds per hour has changed due to the change in pollution control and flow rate.

(f) Pursuant to 326 IAC 6-1-2(a), particulate matter emissions from the one (1) thru blast system, identified as EU-20, shall not exceed seven-hundredths (0.07) gram per dry standard cubic meter (g/dscm) (three-hundredths (0.03) grain per dry standard cubic foot (dscf)). In order to comply with this rule, the dust collector must be in operation and control emissions from the thru blast system at all times when the table blast system is in operation. The limitations of 326 IAC 6-1 are already in the permit for this unit. However, the equivalent pounds per hour has changed due to the change in pollution control and flow rate.

Testing Requirements

(a) The one (1) shot blaster, identified as EU-9, has been completely reconstructed, and the one (1) shot blaster, identified as EU-8, will be completely reconstructed. The new units exhaust inside. Although the two (2) shot blasters have different physical size capacities, they have the same raw material and abrasive capacities, are used to clean the same type of parts, use exactly the same abrasive and exactly the same control system. Therefore, the emissions from each should be identical. In addition, the emission limitations are the same for each of

the two (2) shot blast machines. Therefore, only one of the machines will need to be tested. Stack testing is still required to demonstrate compliance with 326 IAC 6-1, and the limitations that make the source a minor source pursuant to 326 IAC 2-7, Part 70.

(b) Although the one (1) thru blast and one (1) table blast exhaust inside, a stack test is still required to demonstrate compliance with 326 IAC 6-1 and the limitations that make the source a minor source pursuant to 326 IAC 2-7, Part 70. The two (2) units have different capacities in terms of pounds of abrasive per hour and pounds of parts per hour. However, the FESOP emission limitation in the permit are in terms of pounds of PM_{10} per pound abrasive, and the units use the same type of abrasive and blast the same types of parts. Therefore, the emissions would be proportional to the amount of abrasive used. Thus, the Permittee will only be required to test one of the units. The Permittee will be required to test the one (1) thru blast system (EU-20), which has much higher potential emissions due to the amount of shot used.

(c) An initial stack test is required for the proposed Trinco blast cabinet to demonstrate compliance with 326 IAC 6-1, and the limits that make the source a minor source pursuant to 326 IAC 2-7, Part 70.

(d) The applicant may petition to skip a test if the emissions detected during the test are less than half of the allowable emissions pursuant to the permit.

Proposed Changes

The permit language is changed to read as follows (deleted language appears as ~~strikeouts~~, new language appears in bold):

Changes to Section A:

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

The Permittee owns and operates a stationary metal product forging and fabricating source.

Authorized Individual:	~~James Seaver~~ **EHS Manager**
Source Address:	2930 Foundation Drive, South Bend, Indiana 46628
Mailing Address:	2930 Foundation Drive, South Bend, Indiana 46628
General Source Phone Number:	(~~219~~ **574**) 283-5006
SIC Code:	3462
County Location:	St. Joseph
Source Location Status:	**Nonattainment for ozone based on the 8-hour standard** Attainment for all **remaining** criteria pollutants
Source Status:	Federally Enforceable State Operating Permit (FESOP) Minor Source, under PSD Rules; Minor Source, Section 112 of the Clean Air Act

The changes to A.2 and A.3 are shown on pages 2 through 5 of this document.

Changes to Section B:

The phone number and OAQ section name has been updated in Condition B.23, Annual Fee Payment, as follows:

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

(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-~~0425~~ **4230** (ask for OAQ, ~~Technical Support and Modeling~~ **Billing, Licensing, and Training** Section), to determine the appropriate permit fee.

Changes to Section C:

This source is not located in Lake or Porter County with the potential to emit greater than twenty-five (25) tons per year of NO_X, does not emit five (5) tons per year or more of lead and does not require a Part 70 Operating Permit. Therefore, the requirements of 326 IAC 2-6, Emission Reporting, have been removed from the permit.

~~C.19 Emission Statement [326 IAC 2-6] [326 IAC 2-8-4(3)]~~

~~(a) The Permittee shall submit an emission statement certified pursuant to the requirements of 326 IAC 2-6. This statement must be received in accordance with the compliance schedule specified in 326 IAC 2-6-3 and must comply with the minimum requirements specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8). The statement must be submitted to:~~

~~Indiana Department of Environmental Management~~
~~Technical Support and Modeling Section, Office of Air Quality~~
~~100 North Senate Avenue, P.O. Box 6015~~
~~Indianapolis, Indiana 46206-6015~~

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

~~(b) The emission statement required by this permit shall be considered timely if the date post-marked 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.~~

The remainder of Section C has been renumbered.

Changes to Section D.1:

SECTION D.1 FACILITY OPERATION CONDITIONS

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

(a) One (1) shot blast machine, identified as EU-8, constructed in 1980 **and to be reconstructed in 2005/2006**, equipped with a ~~baghouse~~ **cartridge dust collector** and exhausting through stack SV-4**, which exhausts inside the building**, capacity: 28 cubic feet, with a maximum process weight rate of 3.324 tons per hour.

(b) One (1) shot blast machine, identified as EU-9, constructed in 1997 **and reconstructed in 2004**, equipped with a ~~baghouse~~ **cartridge dust collector** and exhausting through stack SV-5**, which exhausts inside the building**, capacity: 34 cubic feet, with a maximum process weight rate of 3.324 tons per hour.

(f) One (1) table blast system, identified as EU-19, equipped with a ~~baghouse~~ **cartridge dust collector shared with the thru blast system** and exhausting through stack SV-~~14~~**15, which exhausts inside the building**, maximum process weight rate: 2,000 pounds per hour.

(g) One (1) thr**u**~~ough~~ blast system, identified as EU-20, equipped with a ~~baghouse~~ **cartridge dust collector shared with the table blast system** and exhausting through stack SV-15**, which exhausts inside the building**, maximum process weight rate: 6,650 pounds per hour.

(h) One (1) Trinco blast cabinet, identified as EU-23, equipped with a baghouse dust collector and exhausting through stack SV-14, which exhausts inside the building, capacity: 0.5 unit and 500 pounds per hour.

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

D.1.1 Particulate Matter (PM) [326 IAC 6-1-2(a)]

(a) Pursuant to 326 IAC 6-1-2(a) (Nonattainment Area Particulate Limitations), particulate matter (PM) emissions from each of the two (2) shot blast machines (EU-8 and EU-9) shall be limited to **seven-hundredths (0.07) gram per dry standard cubic meter (g/dscm) (**0.03 grain per dry standard cubic foot **(dscf))**~~, equivalent to 0.996 pounds per hour from the one (1) shot blast machine~~**s** ~~identified as EU-8, when operating at a flow rate of 3,907 actual cubic feet per minute, and 1.53 pounds per hour from the one (1) shot blast machine identified as EU-9, when operating at a flow rate of 6,136 actual cubic feet per minute~~.

(b) Pursuant to 326 IAC 6-1-2(a) (County Specific Particulate Matter Limitations), particulate matter (PM) emissions from the one (1) table blast system (EU-19) shall be limited to seven-hundredths (0.07) gram per dry standard cubic meter (g/dscm) (three-hundredths (0.03) grain per dry standard cubic foot (dscf))~~, equivalent to 0.566 pounds per hour when operating at a flow rate of 2,200 dry standard cubic feet per minute~~.

(c) Pursuant to 326 IAC 6-1-2(a) (County Specific Particulate Matter Limitations), particulate matter (PM) emissions from the one (1) **Trinco blast cabinet, identified as EU-23,** ~~through blast system (EU-20)~~ shall be limited to seven-hundredths (0.07) gram per dry standard cubic meter (g/dscm) (three-hundredths (0.03) grain per dry standard cubic foot (dscf))~~, equivalent to 1.29 pounds per hour when operating at a flow rate of 5,000 dry standard cubic feet per minute~~.

D.1.2 Particulate Matter (~~PM and~~ PM_{10}) [326 IAC 2-8-4] ~~[326 IAC 2-2]~~ ~~[40 CFR 52.21]~~

(a) ~~Pursuant to FESOP 141-5555-00057, issued on December 11, 1996, and in~~ **In** order to comply with 326 IAC 2-8, FESOP, the **potential to emit** PM_{10} ~~emissions~~ from the **two (2) shot blast machines, identified as EU-8 and EU-9, one (1) table blast system, identified as EU-19, one (1) thru blast system, identified as EU-20, and one (1) Trinco blast cabinet, identified as EU-23, shall be limited to 0.0026 pound per pound of abrasive input at each unit.** ~~total of the four (4) shot blasting machines (EU-8, EU-9, EU-19 and EU-20) shall not exceed 21.89 pounds per hour. This~~ **These limits, in conjunction with the abrasive input limits in (b) through (e) of this condition** will result in PM_{10} emissions of ~~less than 95.9~~ **95.7** tons per year from ~~the four (4) shot~~ blasting ~~machines~~. Together with Condition D.2.2(a), this condition shall limit the potential to emit PM_{10} to less than one hundred (100) tons per year from the total of all facilities at this source. Therefore, the requirements of 326 IAC 2-7 do not apply.

~~(b) The potential to emit PM from the total of the four (4) shot blasting machines (EU-8, EU-9, EU-19 and EU-20) shall not exceed 43.8 pounds per hour. This will result in PM emissions of less than 192 tons per year from the total of the four (4) shot blasting units. Together with Condition D.2.2(b) this condition shall limit the potential to emit PM to less than 250 tons per year from the total of all facilities at this source. Therefore, the requirements of 326 IAC 2-2, PSD, do not apply.~~

(b) In order to comply with 326 IAC 2-8, FESOP, the amount of abrasive input to each of the two (2) shot blast machines, identified as EU-8 and EU-9, shall not exceed 5,519 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

(c) In order to comply with 326 IAC 2-8, FESOP, the amount of abrasive input to one (1) table blast system, identified as EU-19, shall not exceed 5,519 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

(d) In order to comply with 326 IAC 2-8, FESOP, the amount of abrasive input to one (1) thru blast system, identified as EU-20, shall not exceed 22,076 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

(e) In order to comply with 326 IAC 2-8, FESOP, the amount of abrasive input to one (1) Trinco blast cabinet, identified as EU-23, shall not exceed 3,692 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

D.1.5 Testing Requirements [326 IAC 2-8-5(a)(1), (4)] [326 IAC 2-1.1-11]

(a) ~~During the period between July 29, 2002 and January 25, 2003, in~~ **In** order to demonstrate compliance with Conditions D.1.1 and D.1.2 the Permittee shall perform PM and PM_{10} testing of **one of** the two (2) shot blast machines (EU-8 and EU-9) utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. PM_{10} includes filterable and condensible PM_{10}. Testing shall be conducted in accordance with Section C- Performance Testing.

(b) Within two hundred and seventy (270) days after initial startup, in order to demonstrate compliance with Conditions D.1.1(b)~~, D.1.1(c),~~ and D.1.2, the Permittee shall perform PM and PM_{10} testing for the ~~one (1) table blast system (EU-19) and the~~ one (1) ~~through~~ **thru** blast system (EU-20) utilizing methods as approved by the Commissioner. **This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration.** PM_{10} includes filterable and condensible PM_{10}. Testing shall be conducted in accordance with Section C- Performance Testing.

(c) Within two hundred and seventy (270) days after initial startup, in order to demonstrate compliance with Conditions D.1.1(c) and D.1.2, the Permittee shall perform PM and PM_{10} testing for the one (1) Trinco blast cabinet (EU-23) utilizing methods as approved by the Commissioner. PM_{10} includes filterable and condensible PM_{10}. Testing shall be conducted in accordance with Section C- Performance Testing.

D.1.6 Particulate ~~Matter (PM and PM_{10})~~

(a) ~~Pursuant to FESOP 141-5555-00057, issued on December 11, 1996, and in~~ **In** order to comply with Conditions D.1.1 and D.1.2, the ~~baghouse~~ **cartridge dust collector** for ~~PM and PM_{10}~~ **particulate** control shall be in operation **and control emissions from the one (1) shot blast machine, identified as EU-8,** at all times when the shot blast machine (EU-8) is in operation.

(b) ~~Pursuant to FESOP 141-5555-00057, issued on December 11, 1996, and in~~ **In** order to comply with Conditions D.1.1 and D.1.2, the ~~baghouse~~ **cartridge dust collector** for ~~PM and PM_{10}~~ **particulate** control shall be in operation **and control emissions from the one (1) shot blast machine, identified as EU-9,** at all times when the shot blast machine (EU-9) is in operation.

(c) In order to comply with Conditions D.1.1~~(a)~~ and D.1.2, the ~~baghouse~~ **cartridge dust collector** for particulate control shall be in operation **and control emissions from the one (1) table blast system, identified as EU-19,** at all times when the one (1) table blast system (EU-19) is in operation.

(d) In order to comply with Conditions D.1.1~~(b)~~ and D.1.2, the ~~baghouse~~ **cartridge dust collector** for particulate control shall be in operation **and control emissions from the one (1) thru blast system, identified as EU-20,** at all times when the one (1) thr~~o~~u~~gh~~ blast system (EU-20) is in operation.

(e) In order to comply with Conditions D.1.1 and D.1.2, the baghouse dust collector for particulate control shall be in operation and control emissions from the one (1) Trinco blast cabinet, identified as EU-23, at all times when the one (1) Trinco blast cabinet (EU-23) is in operation.

D.1.7 Visible Emissions Notations

(a) Visible emission notations of the shot blasting (EU-8, EU-9, EU-19**,** ~~and~~ EU-20**, and EU-23**) stack exhausts (SV-4, SV-5, SV-14 and SV-15) shall be performed once per ~~shift~~ **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) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

D.1.8 Parametric Monitoring

(a) The Permittee shall record the total static pressure drop across the ~~baghouses~~ **cartridge dust collectors** used in conjunction with the two (2) shot blast machines (EU-8 and EU-9), at least once per ~~shift~~ **day** when the shot blast machines are in operation when venting to the atmosphere. When for any one reading, the pressure drop across the ~~baghouse~~ **dust collector** is outside the normal range of ~~3.0~~ **1.0** and 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a **deviation from** ~~violation of~~ this permit.

(b) The Permittee shall record the total static pressure drop across the ~~baghouses~~ **cartridge dust collector** used in conjunction with the one (1) table blast system (EU-19) and the one (1) through blast system (EU-20), at least once per ~~shift~~ **day** when the blasting is in operation when venting to the atmosphere. When or any one reading, the pressure drop across the ~~baghouse~~ **dust collector** is outside the normal range of ~~0.50 and 1.00~~ 1**.0 and 6.0** inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Failure to Take Response. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan -Preparation, Implementation, Records, and Reports, shall be considered a **deviation from** ~~violation of~~ this permit.

(c) The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the one (1) Trinco blast cabinet (EU-23) at least once per day when the Trinco blast cabinet is in operation when venting to the atmosphere. When or any one reading, the pressure drop across the baghouse is outside the normal range of 1.0 and 3.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Failure to Take Response. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan -Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

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

D.1.9 Baghouse **and Cartridge** Inspections

An inspection shall be performed each calendar quarter of all bags **and cartridges** controlling the ~~shot~~ blast**ers** ~~machines~~ (EU-8, EU-9, EU-19**,** ~~and~~ EU-20 **and EU-23**) when venting to the atmosphere. A baghouse **or cartridge** inspection shall be performed within three (3) months of redirecting vents to the atmosphere and every three (3) months thereafter. Inspections are optional when venting indoors. Inspections required by this condition shall not be performed in consecutive months. All defective bags **and cartridges** shall be replaced.

D.1.10 Broken or Failed Bag **and Cartridge** Detection

In the event that bag **or cartridge** failure has been observed:

(a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit. If operations continue after bag failure is observed and it will be 10 days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

(b) For single compartment ~~baghouses~~ **dust collectors**, if failure is indicated by a significant drop in the ~~baghouse~~ **dust collector**'s pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

D.1.11 Record Keeping Requirements

(a) To document compliance with Condition D.1.7, the Permittee shall maintain **daily** records of visible emission notations of the ~~shot~~ blast**ers** ~~machines~~ (EU-8, EU-9, EU-19**,** ~~and~~ EU-20 **and EU-23**) stack exhausts ~~(SV-4, SV-5, SV-14 and SV-15) once per shift~~.

(b) To document compliance with Condition D.1.8, the Permittee shall maintain ~~the following:~~

~~(1) Weekly~~ **daily** records of the ~~following operational parameters during normal operation when venting to the atmosphere:~~

~~(A) Inlet and outlet differential~~ **total** static pressure **drop across the cartridge dust collectors and baghouse when exhausting to the atmosphere**~~.; and~~

~~(B) Cleaning cycle operation.~~

~~(2) Documentation of the dates vents are redirected.~~

~~(b)~~**(c)** To document compliance with Condition D.1.9, the Permittee shall maintain records of the results of the inspections required under Condition D.1.9 and the dates the vents are redirected.

(d) To document compliance with Condition D.1.4, the Permittee shall maintain of records of any additional inspections prescribed by the Preventive Maintenance Plan.

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

D.1.12 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.2 (b) through (e) shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Changes to Section D.2:

D.2.2 Particulate Matter (~~PM and~~ PM_{10}) [326 IAC 2-8-4] ~~[326 IAC 2-2]~~ ~~[40 CFR 52.21]~~

~~(a)~~ In order to comply with 326 IAC 2-8, FESOP, the PM_{10} emissions from the total of the eight (8) forge press cells shall not exceed 0.005 pounds per hour. This will result in PM_{10} emissions of less than 0.021 tons per year from the eight (8) forge press cells. Together with Condition D.1.2(a), this condition shall limit the potential to emit PM_{10} to less than one hundred (100) tons per year from the total of all facilities at this source. Therefore, the requirements of 326 IAC 2-7 do not apply.

~~(b) The potential to emit PM from the total of the eight (8) forge press cells shall not exceed 0.613 pounds per hour, which is equivalent to potential to emit PM before controls. This will result in PM emissions of 2.68 tons per year from the total of the eight (8) forge press cells. Together with Condition D.1.2(b), this condition shall limit the potential to emit PM to less than 250 tons per year from the total of all facilities at this source. Therefore, the requirements of 326 IAC 2-2, PSD, do not apply.~~

Changes to Section D.3:

SECTION D.3 FACILITY OPERATION CONDITIONS

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

(a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour (total capacity is approximately 28.0 million British thermal units per hour). There are no boilers at this source.

(b) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6, including two (2) maintenance parts washers with capacities less than 80 gallons each and using only non-halogenated solvents. [326 IAC 8-3]

(c) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment. [326 IAC 6-1]

(d) Natural draft cooling towers not regulated under a NESHAP.

(e) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.

(f) Paved roads and parking lots with public access.

(g) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4,000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations. Specifically including the following equipment, with dry processes exhausting to bag/barrel filters and wet processes having self-contained coolant reservoirs, with equipment in the die set up area exhausting to stack SV-7 and equipment in the tool room exhausting to stack SV-8: [326 IAC 6-1]

(1) Engin 20 X 54 lathe

(2) Engin 16 X 102 lathe

(3) Two (2) 12" wheel grinders

(4) Jet abrasive cut off saw

(5) Vertical band saw

(6) Norton surface grinder

(7) Vertical belt polisher

(8) Two (2) Taft Peirce surface grinders

(9) Cincinnati tool grinder

(10) ID/OD grinder

(11) Making tool grinder

(12) US Electric double end grinder

(13) Two (2) double end tool grinders

(14) Powermatic belt/disc grinder

(15) Abrasive wheel cut off saw

(16) 10" double end tool grinder

(17) 4 Ft. radial drill press

(18) Engin 10 X 30 Lathe

(19) Bridgeport mill vertical 9 X 42 mill

(20) Engin lathe

(21) Enterprise horizontal mill

(22) Giddings 10TF CNC lathe

(23) Giddings 15TF CNC

(24) Marvel horizontal saw

(25) Madison grinder

(26) OKK mill

(27) Bridgeport vertical mill

(28) Four (4) drill presses

(29) Arbor press

(30) Johansson drill press

(31) Clausing 15" lathe

(32) Clausing band saw

(33) Kondia power mill

(34) Monarch 18" CNC lathe

(35) Cinn 273A grinder

(36) Heem 18" vertical saw

(37) Dewalt 12" radial saw

(38) Wadtkin 12" table saw

(39) Empire sand blast cabinet

(40) 3012U band saw

(41) 16" Boring mill

(42) Mazak CNC milling machine

(43) Okuma CNC Lathe LB35II

(44) Okuma CNC Lath L1420

(45) Mitsubishi DWC90HA wire EDM

(46) Dake movable bed arbor machine

(h) Welders for maintenance - have manganese compounds in rod. Small amount of spray cans are used to mark containers for maintenance (Rustoleum) which contains toluene and xylene. [326 IAC 6-1]

(i) Oil recovery system.

(j) Two (2) electric Tool room heat treat cabinets

(k) Water evaporator

(l) One (1) plastic blast system, identified as EU-10, constructed in 1994, controlled by a baghouse and Hepa filter, and exhausting to stack SV-6.[326 IAC 6-1], and

(m) Three (3) Nishijimax NHC100 CNC billet cutoff saws.

(n) Graphite electrodes and bevel gear teeth die production facilities, including: [326 IAC 6-1]

(1) Two (2) Gleason straight bevel gear generators, with reciprocating blades, using a liquid dielectric oil coolant.

(2) One (1) Gleason pressure angle tool grinder, using a liquid dielectric oil coolant.

(3) One (1) Gleason gear tester.

(4) Two (2) Charmilles Electrical Discharge Machine (EDM) plunge systems, using a liquid dielectric oil coolant, equipped with a fume collector for controlling fumes and oil mist, exhausting through stack SV-16.

(o) A laboratory as defined in 326 IAC 2-7-1(21)(D).

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

D.3.1 Particulate Matter (PM) [326 IAC 6-1-2(a)]

Pursuant to 326 IAC 6-1-2(a)(Nonattainment Area Particulate Limitations), particulate matter (PM) emissions from the:

(a) equipment exhausting through Stack SV-7,

(b) equipment exhausting through Stack SV-8, ~~and~~

(c) three (3) Nishijimax NHC100 CNC billet cutoff saws, **and**

(d) graphite electrodes and bevel gear teeth die production facilities.

each, shall be limited to 0.03 grain per dry standard cubic foot.

Changes to forms:

Five (5) report forms (one (1) for each blaster) for Condition D.1.12 have also been added to the permit.

Changes to IDEM, OAQ, address:

The IDEM, OAQ, address has been updated in all places in the permit as follows:

100 North Senate Avenue~~, P.O. Box 6015~~
Indianapolis, Indiana ~~46206-6015~~ **46204**

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

FESOP Quarterly Report

Source Name: Eaton Corporation, Heavy-Duty Transmission Division, Forge Plant
Source Address: 2930 Foundation Drive, South Bend, Indiana 46628
Mailing Address: 2930 Foundation Drive, South Bend, Indiana 46628
FESOP No.: F 141-13952-00057
Facility: One (1) shot blast machine, identified as EU-8
Parameter: Abrasive input
Limit: 5,519 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

YEAR: _____

Month	Abrasive input (tons)	Abrasive input (tons)	Abrasive input (tons)
	This Month	Previous 11 Months	12 Month Total

☐ No deviation occurred in this month.

☐ Deviation/s occurred in this month.
Deviation has been reported on: _____

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

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

FESOP Quarterly Report

Source Name: Eaton Corporation, Heavy-Duty Transmission Division, Forge Plant
Source Address: 2930 Foundation Drive, South Bend, Indiana 46628
Mailing Address: 2930 Foundation Drive, South Bend, Indiana 46628
FESOP No.: F 141-13952-00057
Facility: One (1) shot blast machine, identified as EU-9
Parameter: Abrasive input
Limit: 5,519 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

YEAR: _____

Month	Abrasive input (tons)	Abrasive input (tons)	Abrasive input (tons)
	This Month	Previous 11 Months	12 Month Total

☐ No deviation occurred in this month.

☐ Deviation/s occurred in this month.
Deviation has been reported on: _____

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

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

FESOP Quarterly Report

Source Name: Eaton Corporation, Heavy-Duty Transmission Division, Forge Plant
Source Address: 2930 Foundation Drive, South Bend, Indiana 46628
Mailing Address: 2930 Foundation Drive, South Bend, Indiana 46628
FESOP No.: F 141-13952-00057
Facility: One (1) table blast system, identified as EU-19
Parameter: Abrasive input
Limit: 5,519 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

YEAR: _____

Month	Abrasive input (tons)	Abrasive input (tons)	Abrasive input (tons)
	This Month	Previous 11 Months	12 Month Total

☐ No deviation occurred in this month.

☐ Deviation/s occurred in this month.
Deviation has been reported on: _____

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

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

FESOP Quarterly Report

Source Name: Eaton Corporation, Heavy-Duty Transmission Division, Forge Plant
Source Address: 2930 Foundation Drive, South Bend, Indiana 46628
Mailing Address: 2930 Foundation Drive, South Bend, Indiana 46628
FESOP No.: F 141-13952-00057
Facility: One (1) thru blast system, identified as EU-20
Parameter: Abrasive input
Limit: 22,076 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

YEAR: _____

Month	Abrasive input (tons)	Abrasive input (tons)	Abrasive input (tons)
	This Month	Previous 11 Months	12 Month Total

☐ No deviation occurred in this month.

☐ Deviation/s occurred in this month.
Deviation has been reported on: _____

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

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

FESOP Quarterly Report

Source Name: Eaton Corporation, Heavy-Duty Transmission Division, Forge Plant
Source Address: 2930 Foundation Drive, South Bend, Indiana 46628
Mailing Address: 2930 Foundation Drive, South Bend, Indiana 46628
FESOP No.: F 141-13952-00057
Facility: One (1) Trinco blast cabinet, identified as EU-23
Parameter: Abrasive input
Limit: 3,692 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

YEAR: _____

Month	Abrasive input (tons)	Abrasive input (tons)	Abrasive input (tons)
	This Month	Previous 11 Months	12 Month Total

☐ No deviation occurred in this month.

☐ Deviation/s occurred in this month.
Deviation has been reported on: _____

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

Conclusion

The construction and operation of this proposed revision shall be subject to the conditions of the attached proposed FESOP Minor Permit Revision No. 141-20858-00057.

Appendix A: Emission Calculations
Abrasive Blasting - Confined
Trinco blast cabinet, EU-23

Company Name: Eaton Corporation, Heavy-Duty Transmission Division, Forge Plant
Address City IN Zip: 2930 Foundation Drive, South Bend, Indiana 46628
Permit Number: MPR 141-20858-00057
Reviewer: CarrieAnn Paukowits
Application Date: February 28, 2005

Table 1 - Emission Factors for Abrasives

	Emission Factor	
Abrasive	lb PM / lb abrasive	lb PM10 / lb PM
Sand	0.041	0.70
Grit	0.010	0.70
Steel Shot	0.004	0.86
Other	0.010	

Table 2 - Density of Abrasives (lb/ft3)

Abrasive	Density (lb/ft3)
Al oxides	160
Sand	99
Steel	487

Table 3 - Sand Flow Rate (FR1) Through Nozzle (lb/hr)

Flow rate of Sand Through a Blasting Nozzle as a Function of Nozzle pressure and Internal Diameter

	Nozzle Pressure (psig)							
Internal diameter, in	30	40	50	60	70	80	90	100
1/8	28	35	42	49	55	63	70	77
3/16	65	80	94	107	122	135	149	165
1/4	109	138	168	195	221	255	280	309
5/16	205	247	292	354	377	420	462	507
3/8	285	355	417	477	540	600	657	720
7/16	385	472	560	645	755	820	905	940
1/2	503	615	725	835	945	1050	1160	1265
5/8	820	990	1170	1336	1510	1680	1850	2030
3/4	1140	1420	1670	1915	2160	2400	2630	2880
1	2030	2460	2900	3340	3780	4200	4640	5060

Calculations

Adjusting Flow Rates for Different Abrasives and Nozzle Diameters

Flow Rate (FR) = Abrasive flow rate (lb/hr) with internal nozzle diameter (ID)		
FR1 = Sand flow rate (lb/hr) with internal nozzle diameter (ID1) From Table 3 =	309	
D = Density of abrasive (lb/ft3) From Table 2 =	270	
D1 = Density of sand (lb/ft3) =	99	
ID = Actual nozzle internal diameter (in) =	0.25	
ID1 = Nozzle internal diameter (in) from Table 3 =	0.25	
Flow Rate (FR) (lb/hr) =	**842.7**	per nozzle

Uncontrolled Emissions (E, lb/hr)

EF = emission factor (lb PM/ lb abrasive) From Table 1 =	0.004	110 Steel Shot
FR = Flow Rate (lb/hr) =	842.7	
w = fraction of time of wet blasting =	0	%
N = number of nozzles =	1	
PM10 Emission Factor (lb PM10/lb PM) from Table 1 =	0.86	
Weight % Manganese =	1.30%	
Weight % Chromium =	0.25%	
Weight % Nickel =	0.20%	

	PM	PM10	Manganese	Chromium	Nickel	Total HAPs	
Uncontrolled Emissions =	**3.37**	**2.90**	**0.038**	**0.007**	**0.006**	**0.051**	**lb/hr**
	14.8	**12.7**	**0.165**	**0.032**	**0.025**	**0.222**	**ton/yr**
Control Efficiency =	**99%**	**99%**					
Controlled Emissions =	**0.034**	**0.029**	**0.038**	**0.007**	**0.006**	**0.051**	**lb/hr**
	0.148	**0.127**	**0.165**	**0.032**	**0.025**	**0.222**	**ton/yr**

METHODOLOGY

Emission Factors from STAPPA/ALAPCO "Air Quality Permits", Vol. I, Section 3 "Abrasive Blasting" (1991 edition)
Flow Rate (FR) (lb/hr) = FR1 x (ID/ID1)2 x (D/D1)
PM Emissions (lbs/hr) = EF x FR x (1-w/200)
PM Ton/yr = lb/hr X 8760 hr/yr X ton/2000 lb
w should be entered in as a whole number (if w is 50%, enter 50)
PM10 Tons/yr = PM tons/yr x PM10 Emission Factor
HAP Tons/yr = PM tons/yr x Weight % HAP

Appendix A: Emission Calculations
Abrasive Blasting - Confined
Shot blast machine (34 cubic feet), EU-9

Company Name: Eaton Corporation, Heavy-Duty Transmission Division, Forge Plant
Address City IN Zip: 2930 Foundation Drive, South Bend, Indiana 46628
Permit Number: MPR 141-20858-00057
Reviewer: CarrieAnn Paukowits
Application Date: February 28, 2005

Table 1 - Emission Factors for Abrasives

	Emission Factor	
Abrasive	lb PM / lb abrasive	lb PM10 / lb PM
Sand	0.041	0.70
Grit	0.010	0.70
Steel Shot	0.004	0.86
Other	0.010	

Table 2 - Density of Abrasives (lb/ft3)

Abrasive	Density (lb/ft3)
Al oxides	160
Sand	99
Steel	487

Table 3 - Sand Flow Rate (FR1) Through Nozzle (lb/hr)

Flow rate of Sand Through a Blasting Nozzle as a Function of Nozzle pressure and Internal Diameter

	Nozzle Pressure (psig)							
Internal diameter, in	30	40	50	60	70	80	90	100
1/8	28	35	42	49	55	63	70	77
3/16	65	80	94	107	122	135	149	165
1/4	109	138	168	195	221	255	280	309
5/16	205	247	292	354	377	420	462	507
3/8	285	355	417	477	540	600	657	720
7/16	385	472	560	645	755	820	905	940
1/2	503	615	725	835	945	1050	1160	1265
5/8	820	990	1170	1336	1510	1680	1850	2030
3/4	1140	1420	1670	1915	2160	2400	2630	2880
1	2030	2460	2900	3340	3780	4200	4640	5060

Calculations

Adjusting Flow Rates for Different Abrasives and Nozzle Diameters

Flow Rate (FR) = Abrasive flow rate (lb/hr) with internal nozzle diameter (ID)	
FR1 = Sand flow rate (lb/hr) with internal nozzle diameter (ID1) From Table 3 =	462
D = Density of abrasive (lb/ft3) From Table 2 =	270
D1 = Density of sand (lb/ft3) =	99
ID = Actual nozzle internal diameter (in) =	0.3125
ID1 = Nozzle internal diameter (in) from Table 3 =	0.3125

Flow Rate (FR) (lb/hr) = **1260** per nozzle

Uncontrolled Emissions (E, lb/hr)

EF = emission factor (lb PM/ lb abrasive) From Table 1 =	0.004	330 Steel Shot
FR = Flow Rate (lb/hr) =	1260	
w = fraction of time of wet blasting =	0	%
N = number of nozzles =	1	
PM10 Emission Factor (lb PM10/lb PM) from Table 1 =	0.86	
Weight % Manganese =	1.30%	
Weight % Chromium =	0.25%	
Weight % Nickel =	0.20%	

	PM	PM10	Manganese	Chromium	Nickel	Total HAPs	
Uncontrolled Emissions =	**5.04**	**4.33**	**0.056**	**0.011**	**0.009**	**0.076**	**lb/hr**
	22.1	**19.0**	**0.247**	**0.047**	**0.038**	**0.332**	**ton/yr**
Control Efficiency =	**99.8%**	**99.8%**					
Controlled Emissions =	**0.010**	**0.009**	**0.056**	**0.011**	**0.009**	**0.076**	**lb/hr**
	0.044	**0.038**	**0.247**	**0.047**	**0.038**	**0.332**	**ton/yr**

METHODOLOGY

Emission Factors from STAPPA/ALAPCO "Air Quality Permits", Vol. I, Section 3 "Abrasive Blasting" (1991 edition)
Flow Rate (FR) (lb/hr) = FR1 x (ID/ID1)2 x (D/D1)
PM Emissions (lbs/hr) = EF x FR x (1-w/200)
PM Ton/yr = lb/hr X 8760 hr/yr X ton/2000 lb
w should be entered in as a whole number (if w is 50%, enter 50)
PM10 Tons/yr = PM tons/yr x PM10 Emission Factor
HAP Tons/yr = PM tons/yr x Weight % HAP

Appendix A: Emission Calculations
Abrasive Blasting - Confined
Shot blast machine (28 cubic feet), EU-8

Company Name: Eaton Corporation, Heavy-Duty Transmission Division, Forge Plant
Address City IN Zip: 2930 Foundation Drive, South Bend, Indiana 46628
Permit Number: MPR 141-20858-00057
Reviewer: CarrieAnn Paukowits
Application Date: February 28, 2005

Table 1 - Emission Factors for Abrasives

	Emission Factor	
Abrasive	lb PM / lb abrasive	lb PM10 / lb PM
Sand	0.041	0.70
Grit	0.010	0.70
Steel Shot	0.004	0.86
Other	0.010	

Table 2 - Density of Abrasives (lb/ft3)

Abrasive	Density (lb/ft3)
Al oxides	160
Sand	99
Steel	487

Table 3 - Sand Flow Rate (FR1) Through Nozzle (lb/hr)

Flow rate of Sand Through a Blasting Nozzle as a Function of Nozzle pressure and Internal Diameter

	Nozzle Pressure (psig)							
Internal diameter, in	30	40	50	60	70	80	90	100
1/8	28	35	42	49	55	63	70	77
3/16	65	80	94	107	122	135	149	165
1/4	109	138	168	195	221	255	280	309
5/16	205	247	292	354	377	420	462	507
3/8	285	355	417	477	540	600	657	720
7/16	385	472	560	645	755	820	905	940
1/2	503	615	725	835	945	1050	1160	1265
5/8	820	990	1170	1336	1510	1680	1850	2030
3/4	1140	1420	1670	1915	2160	2400	2630	2880
1	2030	2460	2900	3340	3780	4200	4640	5060

Calculations

Adjusting Flow Rates for Different Abrasives and Nozzle Diameters

Flow Rate (FR) = Abrasive flow rate (lb/hr) with internal nozzle diameter (ID)	
FR1 = Sand flow rate (lb/hr) with internal nozzle diameter (ID1) From Table 3 =	462
D = Density of abrasive (lb/ft3) From Table 2 =	270
D1 = Density of sand (lb/ft3) =	99
ID = Actual nozzle internal diameter (in) =	0.3125
ID1 = Nozzle internal diameter (in) from Table 3 =	0.3125

Flow Rate (FR) (lb/hr) = **1260** per nozzle

Uncontrolled Emissions (E, lb/hr)

EF = emission factor (lb PM/ lb abrasive) From Table 1 =	0.004	330 Steel Shot
FR = Flow Rate (lb/hr) =	1260	
w = fraction of time of wet blasting =	0	%
N = number of nozzles =	1	
PM10 Emission Factor (lb PM10/lb PM) from Table 1 =	0.86	
Weight % Manganese =	1.30%	
Weight % Chromium =	0.25%	
Weight % Nickel =	0.20%	

	PM	PM10	Manganese	Chromium	Nickel	Total HAPs	
Uncontrolled Emissions =	**5.04**	**4.33**	**0.056**	**0.011**	**0.009**	**0.076**	**lb/hr**
	22.1	**19.0**	**0.247**	**0.047**	**0.038**	**0.332**	**ton/yr**
Control Efficiency =	**99.8%**	**99.8%**					
Controlled Emissions =	**0.010**	**0.009**	**0.056**	**0.011**	**0.009**	**0.076**	**lb/hr**
	0.044	**0.038**	**0.247**	**0.047**	**0.038**	**0.332**	**ton/yr**

METHODOLOGY

Emission Factors from STAPPA/ALAPCO "Air Quality Permits", Vol. I, Section 3 "Abrasive Blasting" (1991 edition)
Flow Rate (FR) (lb/hr) = FR1 x (ID/ID1)2 x (D/D1)
PM Emissions (lbs/hr) = EF x FR x (1-w/20(
PM Ton/yr = lb/hr X 8760 hr/yr X ton/2000 lb
w should be entered in as a whole number (if w is 50%, enter 50)
PM10 Tons/yr = PM tons/yr x PM10 Emission Factor
HAP Tons/yr = PM tons/yr x Weight % HAP

Appendix A: Emission Calculations
Abrasive Blasting - Confined
Table blast system EU-19

Company Name: Eaton Corporation, Heavy-Duty Transmission Division, Forge Plant
Address City IN Zip: 2930 Foundation Drive, South Bend, Indiana 46628
Permit Number: MPR 141-20858-00057
Reviewer: CarrieAnn Paukowits
Application Date: February 28, 2005

Table 1 - Emission Factors for Abrasives

	Emission Factor	
Abrasive	lb PM / lb abrasive	lb PM10 / lb PM
Sand	0.041	0.70
Grit	0.010	0.70
Steel Shot	0.004	0.86
Other	0.010	

Table 2 - Density of Abrasives (lb/ft3)

Abrasive	Density (lb/ft3)
Al oxides	160
Sand	99
Steel	487

Table 3 - Sand Flow Rate (FR1) Through Nozzle (lb/hr)

Flow rate of Sand Through a Blasting Nozzle as a Function of Nozzle pressure and Internal Diameter

	Nozzle Pressure (psig)							
Internal diameter, in	30	40	50	60	70	80	90	100
1/8	28	35	42	49	55	63	70	77
3/16	65	80	94	107	122	135	149	165
1/4	109	138	168	195	221	255	280	309
5/16	205	247	292	354	377	420	462	507
3/8	285	355	417	477	540	600	657	720
7/16	385	472	560	645	755	820	905	940
1/2	503	615	725	835	945	1050	1160	1265
5/8	820	990	1170	1336	1510	1680	1850	2030
3/4	1140	1420	1670	1915	2160	2400	2630	2880
1	2030	2460	2900	3340	3780	4200	4640	5060

Calculations

Adjusting Flow Rates for Different Abrasives and Nozzle Diameters

Flow Rate (FR) = Abrasive flow rate (lb/hr) with internal nozzle diameter (ID)		
FR1 = Sand flow rate (lb/hr) with internal nozzle diameter (ID1) From Table 3 =	462	
D = Density of abrasive (lb/ft3) From Table 2 =	270	
D1 = Density of sand (lb/ft3) =	99	
ID = Actual nozzle internal diameter (in) =	0.3125	
ID1 = Nozzle internal diameter (in) from Table 3 =	0.3125	
Flow Rate (FR) (lb/hr) =	**1260**	per nozzle

Uncontrolled Emissions (E, lb/hr)

EF = emission factor (lb PM/ lb abrasive) From Table 1 =	0.004	110 Steel Shot
FR = Flow Rate (lb/hr) =	1260	
w = fraction of time of wet blasting =	0	%
N = number of nozzles =	1	
PM10 Emission Factor (lb PM10/lb PM) from Table 1 =	0.86	
Weight % Manganese =	1.30%	
Weight % Chromium =	0.25%	
Weight % Nickel =	0.20%	

	PM	PM10	Manganese	Chromium	Nickel	Total HAPs	
Uncontrolled Emissions =	**5.0**	**4.33**	**0.056**	**0.011**	**0.009**	**0.076**	**lb/hr**
	22.1	**19.0**	**0.247**	**0.047**	**0.038**	**0.332**	**ton/yr**
Control Efficiency =	**99.8%**	**99.8%**					
Controlled Emissions =	**0.010**	**0.009**	**0.056**	**0.011**	**0.009**	**0.076**	**lb/hr**
	0.044	**0.038**	**0.247**	**0.047**	**0.038**	**0.332**	**ton/yr**

METHODOLOGY

Emission Factors from STAPPA/ALAPCO "Air Quality Permits", Vol. I, Section 3 "Abrasive Blasting" (1991 edition)
Flow Rate (FR) (lb/hr) = FR1 x (ID/ID1)2 x (D/D1)
PM Emissions (lbs/hr) = EF x FR x (1-w/200)
PM Ton/yr = lb/hr X 8760 hr/yr X ton/2000 lb
w should be entered in as a whole number (if w is 50%, enter 50)
PM10 Tons/yr = PM tons/yr x PM10 Emission Factor
HAP Tons/yr = PM tons/yr x Weight % HAP

Appendix A: Emission Calculations
Abrasive Blasting - Confined
Thru blast system, EU-20

Company Name: Eaton Corporation, Heavy-Duty Transmission Division, Forge Plant
Address City IN Zip: 2930 Foundation Drive, South Bend, Indiana 46628
Permit Number: MPR 141-20858-00057
Reviewer: CarrieAnn Paukowits
Application Date: February 28, 2005

Table 1 - Emission Factors for Abrasives

	Emission Factor	
Abrasive	lb PM / lb abrasive	lb PM10 / lb PM
Sand	0.041	0.70
Grit	0.010	0.70
Steel Shot	0.004	0.86
Other	0.010	

Table 2 - Density of Abrasives (lb/ft3)

Abrasive	Density (lb/ft3)
Al oxides	160
Sand	99
Steel	487

Table 3 - Sand Flow Rate (FR1) Through Nozzle (lb/hr)

Flow rate of Sand Through a Blasting Nozzle as a Function of Nozzle pressure and Internal Diameter

	Nozzle Pressure (psig)							
Internal diameter, in	30	40	50	60	70	80	90	100
1/8	28	35	42	49	55	63	70	77
3/16	65	80	94	107	122	135	149	165
1/4	109	138	168	195	221	255	280	309
5/16	205	247	292	354	377	420	462	507
3/8	285	355	417	477	540	600	657	720
7/16	385	472	560	645	755	820	905	940
1/2	503	615	725	835	945	1050	1160	1265
5/8	820	990	1170	1336	1510	1680	1850	2030
3/4	1140	1420	1670	1915	2160	2400	2630	2880
1	2030	2460	2900	3340	3780	4200	4640	5060

Calculations

Adjusting Flow Rates for Different Abrasives and Nozzle Diameters

Flow Rate (FR) = Abrasive flow rate (lb/hr) with internal nozzle diameter (ID)	
FR1 = Sand flow rate (lb/hr) with internal nozzle diameter (ID1) From Table 3 =	462
D = Density of abrasive (lb/ft3) From Table 2 =	270
D1 = Density of sand (lb/ft3) =	99
ID = Actual nozzle internal diameter (in) =	0.3125
ID1 = Nozzle internal diameter (in) from Table 3 =	0.3125

Flow Rate (FR) (lb/hr) = **1260** per nozzle

Uncontrolled Emissions (E, lb/hr)

EF = emission factor (lb PM/ lb abrasive) From Table 1 =	0.004	110 Steel Shot
FR = Flow Rate (lb/hr) =	1260	
w = fraction of time of wet blasting =	0	%
N = number of nozzles =	4	
PM10 Emission Factor (lb PM10/lb PM) from Table 1 =	0.86	
Weight % Manganese =	1.30%	
Weight % Chromium =	0.25%	
Weight % Nickel =	0.20%	

	PM	PM10	Manganese	Chromium	Nickel	Total HAPs	
Uncontrolled Emissions =	**20.16**	**17.34**	**0.225**	**0.043**	**0.035**	**0.303**	**lb/hr**
	88.3	**75.9**	**0.987**	**0.190**	**0.152**	**1.329**	**ton/yr**
Control Efficiency =	**99.8%**	**99.8%**					
Controlled Emissions =	**0.040**	**0.035**	**0.225**	**0.043**	**0.035**	**0.303**	**lb/hr**
	0.177	**0.152**	**0.987**	**0.190**	**0.152**	**1.329**	**ton/yr**

METHODOLOGY

Emission Factors from STAPPA/ALAPCO "Air Quality Permits", Vol. I, Section 3 "Abrasive Blasting" (1991 edition)
Flow Rate (FR) (lb/hr) = FR1 x (ID/ID1)2 x (D/D1)
PM Emissions (lbs/hr) = EF x FR x (1-w/200)
PM Ton/yr = lb/hr X 8760 hr/yr X ton/2000 lb
w should be entered in as a whole number (if w is 50%, enter 50)
PM10 Tons/yr = PM tons/yr x PM10 Emission Factor
HAP Tons/yr = PM tons/yr x Weight % HAP

Appendix A: Emission Calculations
Summary of Emissions

Company Name: Eaton Corporation, Heavy-Duty Transmission Division, Forge Plant
Address City IN Zip: 2930 Foundation Drive, South Bend, Indiana 46628
Permit Number: MPR 141-20858-00057
Reviewer: CarrieAnn Paukowits
Application Date: February 28, 2005

	Unrestricted Potential Emissions						
	PM	PM10	Manganese	Chromium	Nickel	Total HAPs	
Trinco blast cabinet, EU-23	14.8	12.7	0.165	0.032	0.025	0.222	ton/yr
Shot blast machine, EU-9	22.1	19.0	0.247	0.047	0.038	0.332	ton/yr
Shot blast machine, EU-8	22.1	19.0	0.247	0.047	0.038	0.332	ton/yr
Total of New and Reconstructed Units	58.9	50.7	0.659	0.127	0.101	0.89	ton/yr
Table blast system, EU-19	22.1	19.0	0.247	0.047	0.038	0.332	ton/yr
Thru blast system, EU-20	88.3	75.9	0.987	0.190	0.152	1.33	ton/yr
Total of Existing/Unchanged Units	110	94.9	1.23	0.237	0.190	1.66	ton/yr
Total of all Blasters	169	146	1.89	0.364	0.291	2.55	ton/yr

	Controlled Emissions						
	PM	PM10	Manganese	Chromium	Nickel	Total HAPs	
Trinco blast cabinet, EU-23	0.148	0.127	0.165	0.032	0.025	0.222	ton/yr
Shot blast machine, EU-9	0.044	0.038	0.247	0.047	0.038	0.332	ton/yr
Shot blast machine, EU-8	0.044	0.038	0.247	0.047	0.038	0.332	ton/yr
Total of New and Reconstructed Units	0.236	0.203	0.659	0.127	0.101	0.89	ton/yr
Table blast system, EU-19	0.044	0.038	0.247	0.047	0.038	0.332	ton/yr
Thru blast system, EU-20	0.177	0.152	0.99	0.190	0.152	1.33	ton/yr
Total of Existing/Unchanged Units	0.221	0.190	1.23	0.237	0.190	1.66	ton/yr
Total of all Blasters	0.457	0.393	1.89	0.364	0.291	2.55	ton/yr

	Limited Potential to Emit after Issuance						
	PM	PM10	Manganese	Chromium	Nickel	Total HAPs	
Trinco blast cabinet, EU-23	14.8	8.34	0.165	0.032	0.025	0.222	ton/yr
Shot blast machine, EU-9	22.1	12.5	0.247	0.047	0.038	0.332	ton/yr
Shot blast machine, EU-8	22.1	12.5	0.247	0.047	0.038	0.332	ton/yr
Total of New and Reconstructed Units	58.9	33.3	0.659	0.127	0.101	0.89	ton/yr
Table blast system, EU-19	22.1	12.5	0.247	0.047	0.038	0.332	ton/yr
Thru blast system, EU-20	88.3	49.9	0.99	0.190	0.152	1.33	ton/yr
Total of Existing/Unchanged Units	110	62.4	1.234	0.237	0.190	1.66	ton/yr
Total of all Blasters	169	95.7	1.89	0.364	0.291	2.55	ton/yr
Total of Forge Press Cells	2.68	0.021	0.00	0.00	0.00	0.00	ton/yr
Total of all Insignificant Activities	3.00	3.00	1.00	1.00	1.00	1.00	ton/yr
Entire Source Total	175	98.8	2.89	1.36	1.29	3.55	ton/yr

	Net Change in the Potential to Emit from Reconstructed Units Only						
	PM	PM10	Manganese	Chromium	Nickel	Total HAPs	
Shot blast machine, EU-9	22.1	19.0	0.247	0.047	0.038	0.332	ton/yr
Shot blast machine, EU-8	22.1	19.0	0.247	0.047	0.038	0.332	ton/yr
Total Unrestricted Potential of Reconstructed Units	44.2	38.0	0.494	0.095	0.076	0.664	ton/yr
Limited Potential to Emit of the Reconstructed Units before the Reconstruction*	192	95.9	unknown	unknown	unknown	unknown	ton/yr
Net Change	-148	-57.9	unknown	unknown	unknown	unknown	ton/yr

*The limited potential to emit of the reconstructed units before reconstruction is the limited potential to emit from all shot blasters in the permit. The shot blasters were limited together.