INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant

DATE: November 25, 2008

RE: Dexter Axle Company / 113-26682-00008

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

Notice of Decision: Approval - Effective Immediately

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

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

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

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

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

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

Enclosures
FNPER.dot12/03/07

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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Federally Enforceable State Operating Permit Renewal
OFFICE OF AIR QUALITY

Dexter Axle Company
500 South Seventh Street
Albion, Indiana 46701

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

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

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

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

Operation Permit No.: F113-26682-00008	
Issued by: **Originally signed by** Iryn Calilung, Section Chief Permits Branch Office of Air Quality	Issuance Date: November 25, 2008 Expiration Date: November 25, 2018

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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 brake and axle component manufacturing plant.

Source Address:	500 South Seventh Street, Albion, Indiana 46701
Mailing Address:	P.O. Box 108, Albion, Indiana, 46701
General Source Phone Number:	(574) 266-7356
SIC Code:	3714
County Location:	Noble
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Federally Enforceable State Operating Permit Program Minor Source, under PSD and Emission Offset Rules Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

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

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

(a) One (1) shoe dip tank constructed in 1974, identified as EU-06, exhausting to Stack 6, nominal capacity: 2,034 brake shoes per hour.

(b) One (1) metal backing plate dip tank, identified as EU-07, constructed in 2000, exhausting to Stack 7, nominal capacity: 923 metal backing plates per hour.

(c) One (1) spray paint booth constructed in 1969, identified as EU-11, equipped with five (5) high volume low pressure (HVLP) spray guns and dry filters to control particulate overspray, exhausting to Stack 11, nominal capacity: 429 metal brake parts per hour.

(d) One (1) spray paint booth constructed in 1973, identified as EU-12, equipped with ten (10) high volume low pressure (HVLP) spray guns and dry filters to control particulate overspray, exhausting to Stack 12, nominal capacity: 429 metal brake parts per hour.

(e) One (1) spray paint booth, identified as EU-15, equipped with eleven (11) high volume low pressure (HVLP) spray guns and dry filters to control particulate overspray, exhausting to Stack 15, nominal capacity: 429 metal brake parts per hour.

(f) One (1) adhesive application and curing process, constructed in 2007, identified as ACO-2, equipped with one (1) natural gas-fired adhesive oven, exhausting to Stack 17, nominal capacity: 1,580 brake linings per hour, nominal heat input capacity: 2 million British thermal units per hour.

(g) One (1) natural gas-fired cure oven, constructed in 2007, identified as CO-1, exhausting to Stack 16, nominal capacity: 1,580 brake linings per hour, nominal heat input capacity: 2 million British thermal units per hour;

(h) One (1) covered conveyor system, identified as EU-2, constructed in 2007, with particulate matter controlled by baghouse VFR-2 and exhausting to the indoors, which conveys dry frictional material to mixer (EU-1) at a nominal capacity of 535 pounds per hour and consisting of the following emission units:

(1) Seven (7) frictional dry material feed bins, constructed in 2007, identified as HML-1, HML-2, HML-3, HML-4, HML-5, HML-6, and TS-1, with particulate matter controlled by cartridge dust filter RVF-1 and exhausting to the indoors, nominal capacity: 172 pounds per hour total;

(2) Three (3) bulk bag feed bins, constructed in 2007, identified as BBS-1, BBS-2, and BBS-3, with particulate matter controlled by baghouse DCF-3 and exhausting to the indoors, nominal capacity: 253 pounds per hour total;

(3) One (1) bag dump station, construct in 2007, identified as BDS-1, with particulate matter controlled by cartridge dust filer BVF-4 and exhausting to the indoors, nominal capacity: 37 pounds per hour;

(4) One (1) fiberglass blowing system, constructed in 2007, identified as RM-1, with particulate matter controlled by baghouse VFR-2 and exhausting to the indoors, nominal capacity: 73 pounds per hour;

(i) One (1) mixer, constructed in 2007, identified as EU-1, with particulate matter controlled by baghouse VFR-2 and exhausting to the indoors, nominal capacity: 640 pounds per hour;

(j) One (1) grinding system, constructed in 1975, identified as EU-14, equipped with six (6) grinders and dry filters for particulate control, exhausting inside, nominal capacity: 1,800 pounds of friction material 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:

(a) Natural gas-fired combustion sources, nominally rated at 40.68 million British thermal units per hour total, consisting of the following:

(1) Three (3) air makeup units, nominal heat input capacity: 5.00 million British thermal units per hour each;

(2) Eight (8) heaters/air conditioners, nominal heat input capacity: 0.475 million British thermal units per hour each;

(3) Twenty-five (25) natural gas-fired space heaters, nominal heat input capacity: 0.150 million British thermal units per hour each;

(4) Three (3) bonders, nominal heat input capacity: 0.800 million British thermal units per hour each;

(5) Three (3) parts washers, nominal heat input capacity: 0.650 million British thermal units per hour each;

(6) One (1) parts washer, nominal heat input capacity: 0.880 million British thermal units per hour;

(7) One (1) parts washer, nominal heat input capacity: 1.80 million British thermal units per hour;

(8) One (1) parts washer, nominal heat input capacity: 4.80 million British thermal units per hour;

(9) Three (3) office furnaces, nominal heat input capacity: 0.080 million British thermal units per hour each;

(10) One (1) natural gas-fired boiler, constructed in 2007, exhausting to Stack 18, nominal heat input capacity: 0.16 million British thermal units per hour; and

(11) Four (4) natural gas-fired heaters, constructed in 2007, nominal heat input capacity: 0.475 million British thermal units per hour each.

(12) One (1) natural gas-fired Building 1 parts washer, with a nominal heat input capacity of 0.8 million British thermal units per hour. This washer uses a non-VOC and a non-HAP spray cleaner.

(13) One (1) natural gas-fired Building 2 parts washer, with a nominal heat input capacity of 1.8 million British thermal units per hour. This washer uses a non-VOC and a non-HAP spray cleaner.

(14) Eight (8) natural gas-fired Building 2 heating and air conditioning units, each are nominally rated at 0.175 million British thermal units per hour for a nominal total of 1.4 million British thermal units per hour.

(e) Three (3) metal inert gas (MIG) welding stations, using L50 welding wire, nominal capacity: 6.00 pounds of welding wire per hour each.

(f) Grinding and machining operation 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, consisting of the following:

(1) One (1) bullard system, consisting of eight (8) bullard machines, equipped with dry filters for particulate control, nominal capacity: 85 parts (3,443 pounds) per hour.

(g) Paved and unpaved roads and parking lots with public access.

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

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

SECTION B GENERAL CONDITIONS

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

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

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

(a) This permit, F113-26682-00008, is issued for a fixed term of ten (10) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.

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

B.3 Term of Conditions [326 IAC 2-1.1-9.5]

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

(a) the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or

(b) the emission unit to which the condition pertains permanently ceases operation.

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

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

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

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

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

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

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

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

(b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

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

(a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by an "authorized individual" of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.

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

B.9 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

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

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

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

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

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

(2) The compliance status;

(3) Whether compliance was continuous or intermittent;

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

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

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

B.10 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.11 Preventive Maintenance Plan [326 IAC 1-6-3][326 IAC 2-8-4(9)][326 IAC 2-8-5(a)(1)]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall maintain and implement Preventive Maintenance Plans (PMPs) including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

(b) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMPs do not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

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

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

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

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

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

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

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, and 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 Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or
Telephone Number: 317-233-0178 (ask for Compliance Section)
Facsimile Number: 317-233-6865

Northern Regional Office phone: (574) 245-4870; fax: (574) 245-4877**.**

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

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

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

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

(A) A description of the emergency;

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

(C) Corrective actions taken.

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

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

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

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

(e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.

(f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.

(g) Operations may continue during an emergency only if the following conditions are met:

(1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

(2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:

(A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and

(B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

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

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

B.13 Prior Permits Superseded [326 IAC 2-1.1-9.5]

(a) All terms and conditions of permits established prior to F113-26682-00008 and issued pursuant to permitting programs approved into the state implementation plan have been either:

(1) incorporated as originally stated,

(2) revised, or

(3) deleted.

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

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

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

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

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

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

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

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

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

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

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

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

(1) That this permit contains a material mistake.

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

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

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

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

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

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

Request for renewal shall be submitted to:

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

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

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

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

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

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

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

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

B.19 Operational Flexibility [326 IAC 2-8-15][326 IAC 2-8-11.1]

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

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

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

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

(4) The Permittee notifies the:

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

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)

77 West Jackson Boulevard
Chicago, Illinois 60604-3590

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16][326 IAC 2-1.1-7]

(a) The Permittee shall pay annual fees to IDEM, OAQ within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.

(b) Failure to pay may result in administrative enforcement action or revocation of this permit.

(c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

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

(a) The requirements to obtain a permit modification under 326 IAC 2-8-11.1 are satisfied by this permit for the proposed emission units, control equipment or insignificant activities in Sections A.2 and A.3.

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

B.25 Credible Evidence [326 IAC 2-8-4(3)][326 IAC 2-8-5][62 FR 8314] [326 IAC 1-1-6]

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

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

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

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

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

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

(a) Pursuant to 326 IAC 2-8:

(1) The potential to emit any regulated pollutant, except particulate matter (PM), from the entire source shall be limited to less than one hundred (100) tons per twelve (12) consecutive month period.

(2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and

(3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.

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

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

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

C.3 Opacity [326 IAC 5-1]

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

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

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

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

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

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

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

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

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

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

C.7 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
MC 61-52 IGCN 1003
Indianapolis, Indiana 46204-2251

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

(e) Procedures for Asbestos Emission Control
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

(f) Demolition and Renovation
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).

(g) Indiana Licensed 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 Licensed Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos.

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

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

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

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

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted

by IDEM, OAQ if the Permittee submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.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 by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

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

C.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 within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

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

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

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

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

C.12 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

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

C.13 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-8-4(3)][326 IAC 2-8-5(1)]

(a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale.

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

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

C.14 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68]

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

C.15 Response to Excursions or Exceedances [326 IAC 2-8-4] [326 IAC 2-8-5]

(a) Upon detecting an excursion or exceedance, the Permittee shall restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

(b) The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Corrective actions may include, but are not limited to, the following:

(1) initial inspection and evaluation;

(2) recording that operations returned to normal without operator action (such as through response by a computerized distribution control system); or

(3) any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

(c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:

(1) monitoring results;

(2) review of operation and maintenance procedures and records; and/or

(3) inspection of the control device, associated capture system, and the process.

(d) Failure to take reasonable response steps shall be considered a deviation from the permit.

(e) The Permittee shall maintain the following records:

(1) monitoring data;

(2) monitor performance data, if applicable; and

(3) corrective actions taken.

C.16 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4][326 IAC 2-8-5]

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

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

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

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

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

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

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

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

C.18 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

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

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

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

(c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

(d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(e) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

Stratospheric Ozone Protection

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

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

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

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

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

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(a) One (1) shoe dip tank constructed in 1974, identified as EU-06, exhausting to Stack 6, nominal capacity: 2,034 brake shoes per hour.

(b) One (1) metal backing plate dip tank, identified as EU-07, constructed in 2000, exhausting to Stack 7, nominal capacity: 923 metal backing plates per hour.

(c) One (1) spray paint booth constructed in 1969, identified as EU-11, equipped with five (5) high volume low pressure (HVLP) spray guns and dry filters to control particulate overspray, exhausting to Stack 11, nominal capacity: 429 metal brake parts per hour.

(d) One (1) spray paint booth constructed in 1973, identified as EU-12, equipped with ten (10) high volume low pressure (HVLP) spray guns and dry filters to control particulate overspray, exhausting to Stack 12, nominal capacity: 429 metal brake parts per hour.

(e) One (1) spray paint booth, identified as EU-15, equipped with eleven (11) high volume low pressure (HVLP) spray guns and dry filters to control particulate overspray, exhausting to Stack 15, nominal capacity: 429 metal brake parts per hour.

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

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

D.1.1 Volatile Organic Compounds (VOC) [326 IAC 2-8-4] [326 IAC 2-2]

The total VOC usage for the one (1) shoe dip tank (EU-06), one (1) metal backing plate dip tank (EU-07), three (3) spray paint booths (EU-11, EU-12, and EU-15), and one adhesive application and curing process (ACO-2) (Section D.2), shall not exceed 62.65 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

Compliance with this limit, combined with the potential emissions of VOC from all other emission units as this source, will limit the source-wide total potential to emit VOC to less than 100 tons per 12 consecutive month period and render the requirements of 326 IAC 2-7 (Part 70 Permits) and 326 IAC 2-2 (PSD) not applicable.

D.1.2 Volatile Organic Compounds (VOC) [326 IAC 8-2-9]

Pursuant to 326 IAC 8-2-9, the owner or operator shall not allow the discharge into the atmosphere VOC from the one (1) metal backing plate dip tank, identified as EU-07, and one (1) spray paint booth, identified as EU-15, in excess of three and five-tenths (3.5) pounds of VOC per gallon of coating, excluding water, delivered to the applicator for air dried or forced warm air dried coatings.

D.1.3 Volatile Organic Compounds (VOC) Limitations, Clean-up Requirements [326 IAC 8-2-9]

Pursuant to 326 IAC 8-2-9(f), all solvents sprayed from the application equipment of EU-07 and EU-15 during cleanup or color changes shall be directed into containers. Said containers shall be closed as soon as the solvent spraying is complete. In addition, all waste solvent shall be disposed of in such a manner that minimizes evaporation.

D.1.4 Particulate Matter (PM) and Particulate Matter Less Than Ten Microns (PM_{10}) [326 IAC 2-8-11.1 (d)(5)(E)] [326 IAC 2-8-4] [326 IAC 2-2]

Pursuant to 326 IAC 2-8-11.1(d)(5)(E), the input of solids to spray paint booth (EU-15) shall not

exceed 99.6 tons per twelve (12) consecutive month period with compliance determined at the end of each month, equivalent to 24.9 tons of PM and PM_{10} per year each, based on a minimum transfer efficiency and minimum control efficiency of fifty percent (50%) each.

Compliance with these limits, combined with the potential PM and PM10 emissions from all other emission units at this source, shall limit the source-wide potential to emit PM and PM10 to less than two hundred fifty (250) tons per year and one hundred (100) tons per year, respectively, and render the requirements of 326 IAC 2-2 (PSD) and 326 IAC 2-7 (Part 70 Permits) not applicable.

D.1.5 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the PM from the three (3) spray paint booths (EU-11, EU-12, and EU-15) shall not exceed the pound per hour emission rate established as E in the following formula:

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

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

D.1.6 Particulate [326 IAC 6-3-2(d)]

Pursuant to 326 IAC 6-3-2(d), particulate from the three (3) spray paint booths (EU-11, EU-12, and EU-15) shall be controlled by dry filters, and the Permittee shall operate the control device in accordance with manufacturer(s) specifications.

D.1.7 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for EU-11, EU-12, and EU-15 as well as any control devices.

Compliance Determination Requirements

D.1.8 Volatile Organic Compounds (VOC) [326 IAC 8-1-2] [326 IAC 8-1-4]

Compliance with the VOC requirements for all surface coating operations as well as the content limitation for EU-07 and EU-15 contained in Conditions D.1.1 and D.1.2 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) by preparing or obtaining from the manufacturer the copies of the “as supplied” and “as applied” VOC data sheets. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

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

D.1.9 Monitoring

(a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the surface coating booth stacks (Stacks 11, 12, and 15) while one or more of the booths are in operation. If a condition exists which should result in a response step, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

(b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. When there is a noticeable change in overspray emissions, or when evidence of overspray emissions is observed, the Permittee shall take reasonable response steps in accordance with Section C -

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

(c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

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

D.1.10 Record Keeping Requirements

(a) To document compliance with Conditions D.1.1 and D.1.2, the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC requirement and content limits established in Conditions D.1.1 and D.1.2. Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.

(1) The VOC content of each coating material and solvent used.

(2) The amount of coating material and solvent less water used on a monthly basis.

(A) Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.

(B) Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents.

(3) The cleanup solvent usage for each month;

(4) The total VOC usage for each month; and

(5) The weight of VOC emitted for each compliance period.

(b) To document compliance with Condition D.1.4, the Permittee shall maintain records of the input of solids to EU-15 each month.

(c) To document compliance with Condition D.1.9, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections.

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

D.1.11 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.1.1 and D.1.4 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 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(f) One (1) adhesive application and curing process, constructed in 2007, identified as ACO-2, equipped with one (1) natural gas-fired adhesive oven, exhausting to Stack 17, nominal capacity: 1,580 brake linings per hour, nominal heat input capacity: 2 million British thermal units per hour.

(g) One (1) natural gas-fired cure oven, constructed in 2007, identified as CO-1, exhausting to Stack 16, nominal capacity: 1,580 brake linings per hour, nominal heat input capacity: 2 million British thermal units per hour;

(h) One (1) covered conveyor system, identified as EU-2, constructed in 2007, with particulate matter controlled by baghouse VFR-2 and exhausting to the indoors, which conveys dry frictional material to mixer (EU-1) at a nominal capacity of 535 pounds per hour and consisting of the following emission units:

(1) Seven (7) frictional dry material feed bins, constructed in 2007, identified as HML-1, HML-2, HML-3, HML-4, HML-5, HML-6, and TS-1, with particulate matter controlled by cartridge dust filter RVF-1 and exhausting to the indoors, nominal capacity: 172 pounds per hour total;

(2) Three (3) bulk bag feed bins, constructed in 2007, identified as BBS-1, BBS-2, and BBS-3, with particulate matter controlled by baghouse DCF-3 and exhausting to the indoors, nominal capacity: 253 pounds per hour total;

(3) One (1) bag dump station, construct in 2007, identified as BDS-1, with particulate matter controlled by cartridge dust filer BVF-4 and exhausting to the indoors, nominal capacity: 37 pounds per hour;

(4) One (1) fiberglass blowing system, constructed in 2007, identified as RM-1, with particulate matter controlled by baghouse VFR-2 and exhausting to the indoors, nominal capacity: 73 pounds per hour;

(i) One (1) mixer, constructed in 2007, identified as EU-1, with particulate matter controlled by baghouse VFR-2 and exhausting to the indoors, nominal capacity: 640 pounds per hour;

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

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

D.2.1 Volatile Organic Compounds (VOC) [326 IAC 2-8-4] [326 IAC 2-2]

The total VOC usage for the one (1) shoe dip tank (EU-06), one (1) metal backing plate dip tank (EU-07), three (3) spray paint booths (EU-11, EU-12, and EU-15) (Section D.1), and one adhesive application and curing process (ACO-2), shall not exceed the limit contained in Condition D.1.1 of this permit.

D.2.2 Volatile Organic Compounds (VOC) Limitations [326 IAC 8-1-6] [326 IAC 2-8-4]

(a) The potential to emit VOC from the brake lining mixture used in the cure oven process (emission unit CO-1) shall not exceed 195 pounds of VOC per ton of resin used.

(b) The total resin usage for the cure oven process (emission unit CO-1) shall not exceed 255.43 tons of resin per twelve (12) consecutive month period with compliance determined at the end of each month.

Compliance with these limits will limit the cure oven process (emission unit CO-1) to less than 24.9 tons per 12 consecutive month period and render the requirements of 326 IAC 8-1-6 (BACT) and 326 IAC 2-7 (Part 70 Permits) not applicable.

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

D.2.3 Record Keeping Requirements

(a) To document compliance with Condition D.2.1, the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC content and VOC emission limitations established in Condition D.4.1. Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.

(1) The VOC content of each coating material and solvent used.

(2) The amount of coating material and solvent less water used on a monthly basis.

(A) Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.

(B) Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents.

(3) The cleanup solvent usage for each month;

(4) The total VOC usage for each month; and

(5) The weight of VOC emitted for each compliance period.

(b) To document compliance with Condition D.2.2, the Permittee shall maintain records of the total resin usage for each month. Records maintained for resin usage shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC emission limitations established in Condition D.2.2. Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.

.

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

D.2.4 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.2.1 and D.2.2(b) shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(j) One (1) grinding system, constructed in 1975, identified as EU-14, equipped with six (6) grinders and dry filters for particulate control, exhausting inside, nominal capacity: 1,800 pounds of friction material per hour.

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

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

D.3.1 Particulate Matter Less Than Ten Microns (PM_{10}) [326 IAC 2-8-4] [326 IAC 2-2]

The PM_{10} emission rates from the one (1) grinding system, identified as EU-14, shall not exceed 12.0 pounds per hour. Compliance with this limit, combined with the potential PM10 emissions from all other emission units at this source, shall limit the source-wide potential to emit PM10 to less than one hundred (100) tons per year and render the requirements of 326 IAC 2-2 (PSD) and 326 IAC 2-7 (Part 70 Permits) not applicable.

D.3.2 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate from the one (1) grinding system, identified as EU-14, shall not exceed 3.82 pounds per hour when operating at a process weight rate of 0.900 tons per hour.

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

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

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

Compliance with this limit, combined with the potential PM emissions from all other emission units at this source, shall limit the source-wide potential to emit PM to less than two hundred fifty (250) tons per year and render the requirements of 326 IAC 2-2 (PSD) not applicable.

D.3.3 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 one (1) grinding system, identified as EU-14 and its control device.

Compliance Determination Requirements

D.3.4 Particulate Control

In order to comply with Conditions D.3.1 and D.3.2, the dry filters for particulate control shall be in operation and control emissions from the one (1) grinding system, identified as EU-14, at all times that the one (1) grinding system, identified as EU-14, is in operation.

D.3.5 Testing Requirements [326 IAC 2-8-5(a)(1), (4)] [326 IAC 2-1.1-11]

(a) For any change or modification that causes the exhaust from the one (1) grinding system, identified as EU-14 to vent to the outside atmosphere, within one hundred eighty (180) days after the change or modification, in order to demonstrate compliance with Condition D.3.1, the Permittee shall perform PM testing on EU-14 utilizing methods as approved by the commissioner.

(b) For any change or modification that causes the exhaust from the one (1) grinding system, identified as EU-14 to vent to the outside atmosphere, within 180 days of publication of the new or revised condensable PM test method(s) referenced in the U.S. EPA's Final Rule for Implementation of the New Source Review (NSR) Program for Particulate Matter Less Than 2.5 Micrometers ($PM_{2.5}$), signed May 8th, 2008, in order to demonstrate compliance with Condition D.3.1, the Permittee shall perform $PM_{2.5}$ and PM_{10} testing on the exhaust for EU-14 utilizing methods as approved by the Commissioner. When venting to the outside atmosphere, the test shall be repeated at least once every five (5) years from the date of the valid compliance demonstration. Testing when venting to the outside atmosphere, shall be conducted in accordance with Section C - Performance Testing.

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

D.3.6 Monitoring

(a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the dry filters. To monitor the performance of the dry filters, weekly observations shall be made of the visible emissions from the one (1) grinding system, identified as EU-14, when exhausting to the outside atmosphere. If a condition exists which should result in a response step, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

(b) The Permittee shall implement an operator-training program.

(1) All operators that perform grinding operations using grinding equipment shall be trained in the proper set-up and operation of the particulate control system. All existing operators shall be trained upon issuance of FESOP 113-26682-00008 if training was not completed within the last twelve (12) months. All new operators shall be trained within thirty (30) days of hiring or transfer.

(2) Training shall include proper filter alignment, filter inspection on a daily basis, maintenance, and trouble shooting practices. The training program shall be written and include a description of the methods to be used at the completion of initial and refresher training to demonstrate and document successful completion. Copies of the training program, the list of trained operators and training records shall be maintained on site or available within one (1) hour for inspection by IDEM, OAQ.

(3) All operators shall be given refresher training annually.

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

D.3.7 Record Keeping Requirements

(a) To document compliance with Condition D.3.6(a), the Permittee shall maintain records of the results of the inspections required under Condition D.3.6(a).

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

SECTION D.4 EMISSIONS UNIT OPERATION CONDITIONS

Insignificant Activities:

(a) Source-wide natural gas-fired combustion, nominally rated at 40.72 million British thermal units per hour total, consisting of the following:

(1) Three (3) air makeup units, nominal heat input capacity: 5.00 million British thermal units per hour each;

(2) Eight (8) heaters/air conditioners, nominal heat input capacity: 0.475 million British thermal units per hour each;

(3) Twenty-five (25) natural gas-fired space heaters, nominal heat input capacity: 0.150 million British thermal units per hour each;

(4) Three (3) bonders, nominal heat input capacity: 0.800 million British thermal units per hour each;

(5) Three (3) parts washers, nominal heat input capacity: 0.650 million British thermal units per hour each;

(6) One (1) parts washer, nominal heat input capacity: 0.880 million British thermal units per hour;

(7) One (1) parts washer, nominal heat input capacity: 1.80 million British thermal units per hour;

(8) One (1) parts washer, nominal heat input capacity: 4.80 million British thermal units per hour;

(9) Three (3) office furnaces, nominal heat input capacity: 0.080 million British thermal units per hour each;

(10) One (1) natural gas-fired boiler, approved for construction in 2007, exhausting to Stack 18, nominal heat input capacity: 0.16 million British thermal units per hour; and

(11) Four (4) natural gas-fired heaters, approved for construction in 2007, nominal heat input capacity: 0.475 million British thermal units per hour each.

(b) Three (3) metal inert gas (MIG) welding stations, using L50 welding wire, nominal capacity: 6.00 pounds of welding wire per hour each.

(c) Paved and unpaved roads and parking lots with public access.

(d) Grinding and machining operation 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, consisting of the following:

One (1) bullard system, consisting of eight (8) bullard machines, equipped with dry filters for particulate control, nominal capacity: 85 parts (3,443 pounds) per hour.

(e) One (1) natural gas-fired Building 1 parts washer, with a nominal heat input capacity of 0.8 million British thermal units per hour. This washer uses a non-VOC and a non-HAP spray cleaner.

(f) One (1) natural gas-fired Building 2 parts washer, with a nominal heat input capacity of 1.8 million British thermal units per hour. This washer uses a non-VOC and a non-HAP spray cleaner.

(g) Eight (8) natural gas-fired Building 2 heating and air conditioning units, each are nominally rated at 0.175 million British thermal units per hour for a nominal total of 1.4 million British thermal units per hour.

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

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

D.4.1 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate from the insignificant bullard system, shall not exceed 5.90 pounds per hour when operating at a process weight rate of 1.72 tons per hour.

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

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

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

Compliance Determination Requirements

D.4.2 Particulate Control

In order to comply with Condition D.4.1, the dry filters for particulate control shall be in operation and control emissions from the insignificant bullard system at all times that the insignificant bullard system is in operation.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) CERTIFICATION

Source Name: Dexter Axle Company
Source Address: 500 South Seventh Street, Albion, Indiana 46701
Mailing Address: P.O. Box 108, Albion, Indiana, 46701
FESOP Permit No.: F113-26682-00008

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

Please check what document is being certified:

☐ Annual Compliance Certification Letter

☐ Test Result (specify)_____

☐ Report (specify)_____

☐ Notification (specify)_____

☐ Affidavit (specify)_____

☐ Other (specify)_____

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

Signature:

Printed Name:

Title/Position:

Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
Phone: 317-233-0178
Fax: 317-233-6865

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
EMERGENCY OCCURRENCE REPORT

Source Name: Dexter Axle Company
Source Address: 500 South Seventh Street, Albion, Indiana 46701
Mailing Address: P.O. Box 108, Albion, Indiana, 46701
FESOP Permit No.: F113-26682-00008

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

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

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

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

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

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

Form Completed by:_____

Title / Position:_____

Date:_____

Phone: _____

A certification is not required for this report.

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

FESOP Quarterly Report

Source Name: Dexter Axle Company
Source Address: 500 South Seventh Street, Albion, Indiana 46701
Mailing Address: P.O. Box 108, Albion, Indiana, 46701
FESOP Permit No.: F113-26682-00008
Facility: Spray Paint Booth (EU-15)
Parameter: Input of solids
Limit: Not to exceed 99.6 tons per twelve consecutive month period with compliance determined at the end of each month, equivalent to 24.9 tons of PM and PM_{10} per year each.

YEAR:_____

Month	Input of Solids (tons)	Input of Solids (tons)	Input of Solids (tons)
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

☐ No deviation occurred in this quarter.

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

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

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

FESOP Quarterly Report

Source Name: Dexter Axle Company
Source Address: 500 South Seventh Street, Albion, Indiana 46701
Mailing Address: PO Box 108, Albion, Indiana 46701
FESOP Permit No.: F113-17172-00008
Facility: One (1) adhesive application and curing process (ACO-2), one (1) shoe dip tank (EU-06), one (1) metal backing plate dip tank (EU-07), and three (3) spray paint booths (EU-11, EU-12, and EU-15)
Parameter: VOC Usage
Limit: Not to exceed 62.65 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

YEAR:_____

Month	VOC Usage (tons)	VOC Usage (tons)	VOC Usage (tons)
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

☐ No deviation occurred in this quarter.

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

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

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

FESOP Quarterly Report

Source Name: Dexter Axle Company
Source Address: 500 South Seventh Street, Albion, Indiana 46701
Mailing Address: PO Box 108, Albion, Indiana 46701
FESOP Permit No.: F113-17172-00008
Facility: One (1) Natural Gas-Fired Cure Oven (CO-1)
Parameter: Resin Usage
Limit: Not to exceed 255.43 tons of resin per twelve (12) consecutive month period, with compliance determined at the end of each month.

YEAR:_____

Month	Resin Usage (tons)	Resin Usage (tons)	Resin Usage (tons)
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

☐ No deviation occurred in this quarter.

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

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

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

Source Name: Dexter Axle Company
Source Address: 500 South Seventh Street, Albion, Indiana 46701
Mailing Address: P.O. Box 108, Albion, Indiana, 46701
FESOP Permit No.: F113-26682-00008

Months: _____ to _____ Year: _____

This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked ANo deviations occurred this reporting period@.

□ NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

□ THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

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

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

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

Form Completed by:_____

Title / Position:_____

Date:_____

Phone: _____

Attach a signed certification to complete this report.

Indiana Department of Environmental Management
Office of Air Quality

Addendum to the Technical Support Document (ATSD) for a Federally Enforceable State Operating Permit Renewal

Source Background and Description

Source Name:	**Dexter Axle Company**
Source Location:	**500 South Seventh Street, Albion, IN 46701**
County:	**Noble**
SIC Code:	**3714**
Permit Renewal No.:	**113-26682-00008**
Permit Reviewer:	**Jason R. Krawczyk**

On October 22, 2008, the Office of Air Quality (OAQ) had a notice published in News-Sun newspaper in Kendallville, Indiana, stating that Dexter Axle Company had applied for a FESOP Renewal for their brake and axel component manufacturing plant and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

Comments and Responses

On November 7, 2008, Ms. Barbara Jacobs submitted comments to IDEM, OAQ on the draft FESOP Renewal.

The Technical Support Document (TSD) is used by IDEM, OAQ for historical purposes. IDEM, OAQ does not make any changes to the original TSD, but the Permit will have the updated changes. The comments and revised permit language are provided below with deleted language as ~~strikeouts~~ and new language **bolded**.

Comment 1:

Resident expressed concerns over odor and overspray residue on her property.

Response to Comment 1:

IDEM, OAQ recognizes that these matters are of great personal concern to the commenter and other local residents. However, IDEM, OAQ does not have authority to regulate odor. This matter is under the separate authority of local government units, such as the county health department. IDEM, OAQ is required to issue air pollution control permits to sources that have indicated that they can comply with all applicable air pollution control requirements, whether or not the local government unit has made zoning or construction approvals.

However, odors might be an indicator that the source is out of compliance, please contact the current Compliance Inspector, Doyle Houser, at (574) 245-4870 or IDEM's Northern Regional Office at (800) 753-5519 to file an odor complaint or a complaint regarding overspray residue. In addition, IDEM's Complaint Clearinghouse provides more information regarding filing complaints is available at IDEM's website at http://www.in.gov/idem/5274.htm.

No changes were made as a result of this comment.

IDEM Contact

(a) Questions regarding this proposed FESOP Renewal can be directed to Jason R. Krawczyk at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 234-5175 or toll free at 1-800-451-6027 extension 4-5175.

(b) A copy of the permit is available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/

(c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: www.idem.in.gov

Indiana Department of Environmental Management
Office of Air Quality

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

Source Description and Location

Source Name:	**Dexter Axle Company**
Source Location:	**500 South Seventh Street, Albion, IN 46701**
County:	**Noble**
SIC Code:	**3714**
Permit Renewal No.:	**113-26682-00008**
Permit Reviewer:	**Jason R. Krawczyk**

The Office of Air Quality (OAQ) has reviewed the operating permit renewal application from Dexter Axle Company relating to the operation of a brake and axle component manufacturing plant.

Background and Description of Permitted Emission Units and New Source Construction

On June 23, 2008, Dexter Axle Company submitted an application to the OAQ requesting to renew its operating permit. Dexter Axle Company was issued FESOP 113-17172-00008 on March 23, 2004.

The source consists of the following permitted emission unit(s):

(a) One (1) shoe dip tank constructed in 1974, identified as EU-06, exhausting to Stack 6, nominal capacity: 2,034 brake shoes per hour.

(b) One (1) metal backing plate dip tank, identified as EU-07, constructed in 2000, exhausting to Stack 7, nominal capacity: 923 metal backing plates per hour.

(c) One (1) spray paint booth constructed in 1969, identified as EU-11, equipped with five (5) high volume low pressure (HVLP) spray guns and dry filters to control particulate overspray, exhausting to Stack 11, nominal capacity: 429 metal brake parts per hour.

(d) One (1) spray paint booth constructed in 1973, identified as EU-12, equipped with ten (10) high volume low pressure (HVLP) spray guns and dry filters to control particulate overspray, exhausting to Stack 12, nominal capacity: 429 metal brake parts per hour.

(e) One (1) spray paint booth, identified as EU-15, equipped with eleven (11) high volume low pressure (HVLP) spray guns and dry filters to control particulate overspray, exhausting to Stack 15, nominal capacity: 429 metal brake parts per hour.

(f) One (1) adhesive application and curing process, constructed in 2007, identified as ACO-2, equipped with one (1) natural gas-fired adhesive oven, exhausting to Stack 17, nominal capacity: 1,580 brake linings per hour, nominal heat input capacity: 2 million British thermal units per hour.

(g) One (1) natural gas-fired cure oven, constructed in 2007, identified as CO-1, exhausting to Stack 16, nominal capacity: 1,580 brake linings per hour, nominal heat input capacity: 2 million British thermal units per hour;

(h) One (1) covered conveyor system, identified as EU-2, constructed in 2007, with particulate matter controlled by baghouse VFR-2 and exhausting to the indoors, which conveys dry frictional material to mixer (EU-1) at a nominal capacity of 535 pounds per hour and consisting of the following emission units:

(1) Seven (7) frictional dry material feed bins, constructed in 2007, identified as HML-1, HML-2, HML-3, HML-4, HML-5, HML-6, and TS-1, with particulate matter controlled by cartridge dust filter RVF-1 and exhausting to the indoors, nominal capacity: 172 pounds per hour total;

(2) Three (3) bulk bag feed bins, constructed in 2007, identified as BBS-1, BBS-2, and BBS-3, with particulate matter controlled by baghouse DCF-3 and exhausting to the indoors, nominal capacity: 253 pounds per hour total;

(3) One (1) bag dump station, construct in 2007, identified as BDS-1, with particulate matter controlled by cartridge dust filer BVF-4 and exhausting to the indoors, nominal capacity: 37 pounds per hour;

(4) One (1) fiberglass blowing system, constructed in 2007, identified as RM-1, with particulate matter controlled by baghouse VFR-2 and exhausting to the indoors, nominal capacity: 73 pounds per hour;

(i) One (1) mixer, constructed in 2007, identified as EU-1, with particulate matter controlled by baghouse VFR-2 and exhausting to the indoors, nominal capacity: 640 pounds per hour;

(j) One (1) grinding system, constructed in 1975, identified as EU-14, equipped with six (6) grinders and dry filters for particulate control, exhausting inside, nominal capacity: 1,800 pounds of friction material per hour.

The source consists of the following insignificant activities:

(a) Natural gas-fired combustion sources, nominally rated at 40.68 million British thermal units per hour total, consisting of the following:

(1) Three (3) air makeup units, nominal heat input capacity: 5.00 million British thermal units per hour each;

(2) Eight (8) heaters/air conditioners, nominal heat input capacity: 0.475 million British thermal units per hour each;

(3) Twenty-five (25) natural gas-fired space heaters, nominal heat input capacity: 0.150 million British thermal units per hour each;

(4) Three (3) bonders, nominal heat input capacity: 0.800 million British thermal units per hour each;

(5) Three (3) parts washers, nominal heat input capacity: 0.650 million British thermal units per hour each;

(6) One (1) parts washer, nominal heat input capacity: 0.880 million British thermal units per hour;

(7) One (1) parts washer, nominal heat input capacity: 1.80 million British thermal units per hour;

(8) One (1) parts washer, nominal heat input capacity: 4.80 million British thermal units per hour;

(9) Three (3) office furnaces, nominal heat input capacity: 0.080 million British thermal units per hour each;

(10) One (1) natural gas-fired boiler, constructed in 2007, exhausting to Stack 18, nominal heat input capacity: 0.16 million British thermal units per hour; and

(11) Four (4) natural gas-fired heaters, constructed in 2007, nominal heat input capacity: 0.475 million British thermal units per hour each.

(12) One (1) natural gas-fired Building 1 parts washer, with a nominal heat input capacity of 0.8 million British thermal units per hour. This washer uses a non-VOC and a non-HAP spray cleaner.

(13) One (1) natural gas-fired Building 2 parts washer, with a nominal heat input capacity of 1.8 million British thermal units per hour. This washer uses a non-VOC and a non-HAP spray cleaner.

(14) Eight (8) natural gas-fired Building 2 heating and air conditioning units, each are nominally rated at 0.175 million British thermal units per hour for a nominal total of 1.4 million British thermal units per hour.

(e) Three (3) metal inert gas (MIG) welding stations, using L50 welding wire, nominal capacity: 6.00 pounds of welding wire per hour each.

(f) Grinding and machining operation 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, consisting of the following:

(1) One (1) bullard system, consisting of eight (8) bullard machines, equipped with dry filters for particulate control, nominal capacity: 85 parts (3,443 pounds) per hour.

(g) Paved and unpaved roads and parking lots with public access.

Unpermitted Emission Units and Pollution Control Equipment

There have been no unpermitted emission units constructed and/or operated without a permit at the source since the last approval.

Emission Units and Pollution Control Equipment Removed From the Source

There have been no emission units or pollution control equipment removed from the source since the last approval.

Existing Approvals

Since the issuance of the FESOP (113-17172-00008) on March 23, 2004, the source has constructed or has been operating under the following approvals as well:

(a) First Minor Permit Revision No. 113-19334-00008, issued on June 25, 2004

(b) Second Minor Permit Revision No. 113-19132-00008, issued on June 30, 2004

(c) First Administrative Amendment No. 113-19295-00008, issued on July 27, 2004

(d) First Significant Permit Revision No. 113-20098-00008, issued on June 16, 2005

(e) Second Administrative Amendment No. 113-21461-00008, issued on June 30, 2005

(f) Second Significant Permit Revision No.: F113-24912-00008, issued on October 5, 2007

During the review of the FESOP renewal, the source submitted an additional application on August 12, 2008 for the following permit revision:

(a) The potential to emit VOC from the brake lining mixture used in the cure oven process (emission unit CO-1) shall not exceed ~~440~~ **195** pounds of VOC per ton of resin used.

(b) The total resin usage for the cure oven process (emission unit CO-1) shall not exceed ~~113.2~~ **255.43** tons of resin per twelve (12) consecutive month period with compliance determined at the end of each month.

The requested revisions will continue to limit the cure oven process (emission unit CO-1) to less than 24.9 tons per 12 consecutive month period and render the requirements of 326 IAC 8-1-6 (BACT) and 326 IAC 2-7 (Part 70 Permits) not applicable.

All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either incorporated as originally stated, revised, or deleted by this permit. All previous registrations and permits are superseded by this permit.

The following terms and conditions from previous approvals have been revised in FESOP Renewal 113-26682-00008:

(a) Testing Requirements

The requirement to perform an initial performance test for the uncontrolled VOC emissions from the cure oven process (emission unit CO-1) within 180 days after initial startup of the cure oven has been removed. The initial testing was performed on April 14, 2008.

Enforcement Issues

There are no enforcement actions pending.

Emission Calculations

See Appendix A of this document for detailed emission calculations.

County Attainment Status

The source is located in Noble County

Pollutant	Designation
SO_2	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O_3	Unclassifiable or attainment effective June 15, 2004, for the 8-hour ozone standard.[1]
PM_{10}	Unclassifiable effective November 15, 1990.
NO_2	Cannot be classified or better than national standards.
Pb	Not designated.

[1]Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005.
Unclassifiable or attainment effective April 5, 2005, for PM2.5.

(a) Ozone Standards

(1) On October 25, 2006, the Indiana Air Pollution Control Board finalized a rule revision to 326 IAC 1-4-1 revoking the one-hour ozone standard in Indiana.

(2) On September 6, 2007, the Indiana Air Pollution Control Board finalized a temporary emergency rule to re-designate Allen, Clark, Elkhart, Floyd, LaPorte, and St. Joseph as attainment for the 8-hour ozone standard.

(3) On November 9, 2007, the Indiana Air Pollution Control Board finalized a temporary emergency rule to re-designate Boone, Clark, Elkhart, Floyd, LaPorte, Hamilton, Hancock, Hendricks, Johnson, Madison, Marion, Morgan, Shelby, and St. Joseph as attainment for the 8-hour ozone standard.

(4) Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to ozone. Noble County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(b) PM2.5
Noble County has been classified as attainment for PM2.5. On May 8, 2008 U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for PM2.5 emissions, and the effective date of these rules was July 15th, 2008. Indiana has three years from the publication of these rules to revise its PSD rules, 326 IAC 2-2, to include those requirements. The May 8, 2008 rule revisions require IDEM to regulate PM10 emissions as a surrogate for PM2.5 emissions until 326 IAC 2-2 is revised.

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

(d) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 or 326 IAC 2-3, fugitive emissions are not counted toward the determination of PSD and Emission Offset applicability.

Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source.

Pollutant	tons/year
PM	Greater than 250
PM_{10}	Greater than 100, Greater than 250
SO_2	Less than 100
VOC	Greater than 100, Less than 250
CO	Less than 100
NO_x	Less than 100

(1) Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant". US EPA has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions.

HAPs	tons/year
Single	Greater than 10
Combined	Greater than 25

Appendix A of this TSD reflects the unrestricted potential emissions of the source.

(a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of PM10 and VOC is equal to or greater than 100 tons per year. The source is subject to the provisions of 326 IAC 2-7. However, the source has agreed to limit their PM10 and VOC emissions to less than Title V levels, therefore the source will be issued a FESOP.

(b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of all other criteria pollutants are less than 100 tons per year.

(c) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is equal to or greater than ten (10) tons per year and/or the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is equal to or greater than twenty-five (25) tons per year. However, the source has agreed to limit their single HAP emissions and total HAP emissions below Title V limits. Therefore, the source will be issued a FESOP

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

Potential to Emit After Issuance

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

Process/Emission Unit	Potential To Emit of the Entire Source After Issuance of FESOP (tons/year)								
	PM	PM10*	PM2.5*	SO_2	NOx	VOC	CO	Total HAPs	Worst Single HAP
Shoe Dip (EU-06)$^{\alpha}$	negl.	negl.	negl.	negl.	negl.	62.65	negl.	0.32	0.32 Formaldehyde
Backing Dip Tank (EU-07)$^{\alpha}$	negl.	negl.	negl.	negl.	negl.		negl.	negl.	negl.
Spray Booth (EU-11)$^{\alpha}$	2.24	2.24	2.24	negl.	negl.		negl.	negl.	negl.
Spray Booth (EU-12)$^{\alpha}$	2.24	2.24	2.24	negl.	negl.		negl.	negl.	negl.
Spray Booth (EU-15)$^{\alpha}$	24.90	24.90	24.90	negl.	negl.		negl.	negl.	negl.
Adhesive Application and Curing Process (ACO-2)$^{\alpha}$	negl.	negl.	negl.	negl.	negl.		negl.	0.99	0.83 Phenol
Cure Oven (CO-1)$^{\beta}$	negl.	negl.	negl.	negl.	negl.	24.90	negl.	1.00	0.50 Ethyl Benzene
Covered Conveyor System (EU-02)	1.17	1.17	1.17	negl.	negl.	negl.	negl.	negl.	negl.
Mixer (EU-1)	1.40	1.40	1.40	negl.	negl.	negl.	negl.	negl.	negl.
Grinding (U-14)$^{\chi}$	16.73	52.56	52.56	negl.	negl.	negl.	negl.	negl.	negl.
Source-Wide Insignificant Natural Gas Combustion	0.37	1.49	1.49	0.12	19.57	1.08	16.44	0.37	0.35 Hexane
Insignificant MIG Welding	1.90	1.90	1.90	negl.	negl.	negl.	negl.	negl.	negl.
Insignificant Bullard System	12.82	1.28	1.28	negl.	negl.	negl.	negl.	negl.	negl.
Unpaved Roads (Fugitive)$^{\Delta}$	10.81	2.76	0.28	negl.	negl.	negl.	negl.	negl.	negl.
Total PTE After Issuance	63.77	89.17	89.17	0.12	19.57	88.63	16.44	2.68	0.83 Phenol
Title V Major Source Thresholds	NA	100	250	100	100	100	100	25	10
PSD Major Source Thresholds	250	250	250	250	250	250	250	NA	NA

negl. = negligible

* Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant". PM10 emissions are assumed to be equal to PM2.5 emissions.

α Total combined VOC emissions from EU-06, EU-07, EU-11, EU-12, EU-15, and ACO-2 shall not exceed 62.25 tons per year.

β Total VOC emissions from CO-1 shall not exceed 24.90 tons per year.

Δ Fugitive emissions are not counted toward the determination of Title V or PSD applicability. Unpaved Roads PM, PM10, and PM2.5 emissions were calculated using emission factors from AP-42, Ch 13.2.2 (11/2006).

χ The PM Potential to Emit from grinding (EU-14) has been modified from the 52.6 tons per year listed in SPR 113-24912-00008 to 16.73 tons per year. This change reflects the allowable emissions as determined using the equation found in 326 IAC 6-3-2.

(a) This existing stationary source is not major for PSD because the emissions of each criteria pollutant are less than two hundred fifty (<250) tons per year, and it is not one of the twenty-eight (28) listed source categories.

Compliance with 326 IAC 6-3-2 Particulate Emission Limitations shall limit PM to less than 250 tons per year and shall render 326 IAC 2-2 not applicable.

(b) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 or 326 IAC 2-3, fugitive emissions are not counted toward the determination of PSD.

Federal Rule Applicability

New Source Performance Standards (NSPS)

(a) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in the permit for this source.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

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

Compliance Assurance Monitoring (CAM)

(c) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is not included in the permit, because the potential to emit of the source is limited to less than the Title V major source thresholds and the source is not required to obtain a Part 70 or Part 71 permit.

State Rule Applicability Determination

The following state rules are applicable to the entire source:

(a) 326 IAC 1-6-3 (Preventive Maintenance Plan)
The source is subject to 326 IAC 1-6-3.

(b) 326 IAC 1-5-2 (Emergency Reduction Plans)
The source is subject to 326 IAC 1-5-2.

(c) 326 IAC 2-6 (Emission Reporting)
This source is located in Noble County and the potential to emit of each criteria pollutant is less than one hundred (100) tons per year. Therefore, 326 IAC 2-6 does not apply.

(d) 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
The unlimited potential to emit of HAPs from the emission units is less than ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year for a combination of HAPs. Therefore, the source is not subject to the requirements of 326 IAC 2-4.1.

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

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

(2) 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.

(f) 326 IAC 6-4 (Fugitive Dust Emissions Limitations)
Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions Limitations), the source 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.

The following state rules are applicable to the individual facilities:

Spray Coating (EU-06, EU-07, EU-11, EU-12, EU-15)

(g) 326 IAC 2-8-4 / 326 IAC 2-2 (Volatile Organic Compounds (VOC))
The total VOC usage for the one (1) shoe dip tank (EU-06), one (1) metal backing plate dip tank (EU-07), three (3) spray paint booths (EU-11, EU-12, and EU-15), and one adhesive application and curing process (ACO-2), shall not exceed 62.65 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

Compliance with this limit, combined with the potential emissions of VOC from all other emission units as this source, will limit the source-wide total potential to emit VOC to less than 100 tons per 12 consecutive month period and render the requirements of 326 IAC 2-7 (Part 70 Permits) and 326 IAC 2-2 (PSD) not applicable.

(h) 326 IAC 8-2-9 (Volatile Organic Compounds)

(1) Pursuant to 326 IAC 8-2-9, the owner or operator shall not allow the discharge into the atmosphere VOC from the one (1) metal backing plate dip tank, identified as EU-07, and one (1) spray paint booth, identified as EU-15, in excess of three and five-tenths (3.5) pounds of VOC per gallon of coating, excluding water, delivered to the applicator for air dried or forced warm air dried coatings.

(2) Pursuant to 326 IAC 8-2-9(f), all solvents sprayed from the application equipment of EU-07 and EU-15 during cleanup or color changes shall be directed into containers. Said containers shall be closed as soon as the solvent spraying is complete. In addition, all waste solvent shall be disposed of in such a manner that minimizes evaporation.

(i) 326 IAC 2-8-11.1(d)(5)(E) / 326 IAC 2-8-4 / 326 IAC 2-2 (Particulate Matter (PM) and Particulate Matter Less Than Ten Microns (PM_{10}))

Pursuant to 326 IAC 2-8-11.1(d)(5)(E), the input of solids to spray paint booth (EU-15) shall not exceed 99.6 tons per twelve (12) consecutive month period with compliance determined at the end of each month, equivalent to 24.9 tons of PM and PM_{10} per year each, based on a minimum transfer efficiency and minimum control efficiency of fifty percent (50%) each.

Compliance with these limits, combined with the potential PM and PM10 emissions from all other emission units at this source, shall limit the source-wide potential to emit PM and PM10 to less than two hundred fifty (250) tons per year and one hundred (100) tons per year, respectively, and render the requirements of 326 IAC 2-2 (PSD) and 326 IAC 2-7 (Part 70 Permits) not applicable.

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

(1) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the PM from the three (3) spray paint booths (EU-11, EU-12, and EU-15) shall not exceed the pound per hour emission rate established as E in the following formula:

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

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

(2) Pursuant to 326 IAC 6-3-2(d), particulate from the three (3) spray paint booths (EU-11, EU-12, and EU-15) shall be controlled by dry filters, and the Permittee shall operate the control device in accordance with manufacturer(s) specifications.

Adhesive Application and Curing Process (ACO-2)

(l) 326 IAC 2-8-4 / 326 IAC 2-2 (Volatile Organic Compounds (VOC))
The total VOC usage for the one (1) shoe dip tank (EU-06), one (1) metal backing plate dip tank (EU-07), three (3) spray paint booths (EU-11, EU-12, and EU-15), and one adhesive application and curing process (ACO-2), shall not exceed 62.65 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

Compliance with this limit, combined with the potential emissions of VOC from all other emission units as this source, will limit the source-wide total potential to emit VOC to less than 100 tons per 12 consecutive month period and render the requirements of 326 IAC 2-7 (Part 70 Permits) and 326 IAC 2-2 (PSD) not applicable.

Cure Oven (CO-1)

(m) 326 IAC 8-1-6 / 326 IAC 2-8-4 (Volatile Organic Compounds (VOC) Limitations)

(1) The potential to emit VOC from the brake lining mixture used in the cure oven process (emission unit CO-1) shall not exceed 195 pounds of VOC per ton of resin used.

(2) The total resin usage for the cure oven process (emission unit CO-1) shall not exceed 255.43 tons of resin per twelve (12) consecutive month period with compliance determined at the end of each month.

SPR 113-24912-00008 limited potential VOC from the cure oven process (CO-1) to 440 pounds of VOC per ton of resin used and total resin usage to 255.43 tons of resin per twelve (12) consecutive month period. Based on the stack test performed April 14, 2008, the pounds of VOC per ton of resin used was determined to be much lower than the estimated 440 pounds of VOC per ton of resin used. During the renewal application process, Dexter Axle Company submitted an additional permit application to decrease the VOC per ton of resin used limit from 440 pounds to 195 pounds of VOC per ton of resin used. The application also requested that the total resin usage be increased from 113.2 to 255.43 tons per consecutive twelve month period. Because the pounds of VOC per ton of resin used is lower than expected, Dexter Axle is able to use more resin without increasing potential emissions. The VOC potential to emit from CO-1 is still being limited to 24.9 tons per year.

Compliance with these limits will limit the cure oven process (emission unit CO-1) to less than 24.9 tons per 12 consecutive month period and render the requirements of 326 IAC 8-1-6 (BACT) and 326 IAC 2-7 (Part 70 Permits) not applicable.

Covered Conveyor System (EU-2)

(n) 326 IAC 6-3-2 (Particulate Emission Limitations, Work Practices, and Control Technologies)
Pursuant to 326 IAC 6-3-2(b)(14), the following emission units are exempt from the requirements of 326 IAC 6-3. The one (1) bag dump system (BDS-1), the fiberglass blowing system (RM-1), the three (3) bulk bag feed bin (BBS-1, BBS-2, and BBS-3), and the seven (7) frictional dry material feed bins (HML-1 through HML-6 and TS-1) because each have potential particulate emissions less than 0.551 pounds per hour.

Mixer (EU-1)

(o) 326 IAC 6-3-2 (Particulate Emission Limitations, Work Practices, and Control Technologies)

Pursuant to 326 IAC IAC 6-3-2(b)(14), emission uni EU-1 is exempt from the requirements of 326 IAC 6-3 because it has potential particulate emissions less than 0.551 pounds per hour.

Grinding System (EU-14)

(p) 326 IAC 2-8-4 / 326 IAC 2-2 (Particulate Matter Less Than Ten Microns)
The PM_{10} emission rates from the one (1) grinding system, identified as EU-14, shall not exceed 12.0 pounds per hour. Compliance with this limit, combined with the potential PM10 emissions from all other emission units at this source, shall limit the source-wide potential to emit PM10 to less than one hundred (100) tons per year and render the requirements of 326 IAC 2-2 (PSD) and 326 IAC 2-7 (Part 70 Permits) not applicable.

(q) 326 IAC 6-3-2 (Particulate Emission Limitations, Work Practices, and Control Technologies)
Pursuant to 326 IAC 6-3-2, the particulate from the one (1) grinding system, identified as EU-14, shall not exceed 3.82 pounds per hour when operating at a process weight rate of 0.900 tons per hour.

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

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

The dry filters shall be in operation at all times that the grinding system EU-14 is in operation.

Compliance with this limit, combined with the potential PM emissions from all other emission units at this source, shall limit the source-wide potential to emit PM to less than two hundred fifty (250) tons per year and render the requirements of 326 IAC 2-2 (PSD) not applicable.

Insignificant Activities

(r) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate from the insignificant bullard system, shall not exceed 5.90 pounds per hour when operating at a process weight rate of 1.72 tons per hour.

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

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

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

The fabric filters shall be in operation at all times that the bullard system is in operation.

Compliance Determination, Monitoring and Testing Requirements

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance with all applicable state and federal rules on a continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a continuous demonstration. When this occurs, IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-8-4. As a result, Compliance Determination Requirements are included in the permit. The Compliance Determination Requirements in Section D of the permit are those conditions that are found directly within state and federal rules and the violation of which serves as grounds for enforcement action.

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

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

Emission Unit/ Control	Parameter	Frequency	Provisions	Excursions and Exceedances
EU-11, EU-12, EU-15	Filter Particulate Loading	Daily		Response Steps
	Stack Overspray Emissions	Weekly		Response Steps
	Rooftop / Ground Coating & Overspray Emissions	Monthly		Response Steps
EU-14	Filter Particulate Loading	Daily		Response Steps
	Visible Emissions	Weekly	If venting to outside atmosphere	Response Steps

(b) The testing requirements applicable to this source are as follows:

Testing Requirements				
Emission Unit	**Control Device**	**Pollutant**	**Provisions**	**Frequency of Testing**
EU-14	Dry Filters	PM, PM_{10}, $PM_{2.5}$	If change to EU-14 causes venting to outside atmosphere	Once every 5 years
CO-1	No Control Device	VOC	Within 180 days after initial startup	Obligation Completed Stack Test performed April 14, 2008

Conclusion and Recommendation

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 June 23, 2008.

The operation of this source shall be subject to the conditions of the attached proposed FESOP Renewal and New Source Review No. 113-26682-00008. The staff recommends to the Commissioner that this FESOP Renewal and New Source Review be approved.

IDEM Contact

(a) Questions regarding this proposed permit can be directed to Jason R. Krawczyk at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 234-5175 or toll free at 1-800-451-6027 extension 4-5175.

(b) A copy of the findings is available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/

(c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: www.idem.in.gov

SUMMARY OF EMISSIONS

Company Name: Dexter Axle Company
Address City IN Zip: 500 South Seventh Street, Albion, IN 46701
Permit Number: 113-26682-00008
Plt ID: 113-00008
Reviewer: Jason R. Krawczyk
Date: August 25, 2008

Uncontrolled Emissions (Tons/Yr)

Pollutant	Combustion	CO-1	ACO-2	Surface Coating					Grinding	Welding	Covered Conveyor	Mixer	Bullard System	Unpaved Roads (Fugitive) [3]	Total PTE	
				EU-06	EU-07	EU-11	EU-12	EU-15								
PM	0.37	-	-	0.00	0.00	27.95	27.95	27.95	275.94	1.90	1.17	1.40	128.20	21.63	492.83	
PM10	1.49	-	-	0.00	0.00	27.95	27.95	27.95	275.94	1.90	1.17	1.40	12.82	5.51	378.57	
PM2.5	1.49	-	-	0.00	0.00	27.95	27.95	27.95	275.94	1.90	1.17	1.40	12.82	0.55	378.57	
VOC	1.08	76.24	16.50	26.25	24.50	6.69	6.69	6.69	-	-	-	-	-	-	164.63	
NOx	19.57	-	-	-	-	-	-	-	-	-	-	-	-	-	19.57	
SO2	0.12	-	-	-	-	-	-	-	-	-	-	-	-	-	0.12	
CO	16.44	-	-	-	-	-	-	-	-	-	-	-	-	-	16.44	
Single HAP	0.35	1.52	-	0.32	-	-	-	-	-	0.00	-	-	-	-	1.52	Ethyl Benzene
Combined HAPs	0.37	3.05	0.99	0.32	-	-	-	-	-	0.00	-	-	-	-	4.73	

Controlled Emissions (Tons/Yr)

Pollutant	Combustion	CO-1	ACO-2	Surface Coating					Grinding	Welding	Covered Conveyor	Mixer	Bullard System	Unpaved Roads (Fugitive) [3]	Total PTE	
				EU-06	EU-07	EU-11	EU-12	EU-15								
PM	0.37	-	-	0.00	0.00	2.24	2.24	24.90	0.03	1.90	0.00	0.00	12.82	10.81	44.49	
PM10	1.49	-	-	0.00	0.00	2.24	2.24	24.90	0.03	1.90	0.00	0.00	1.28	2.76	34.07	
PM2.5	1.49	-	-	0.00	0.00	2.24	2.24	24.90	0.03	1.90	0.00	0.00	1.28	0.28	34.07	
VOC	1.08	76.24	16.50	26.25	24.50	6.69	6.69	6.69	-	-	-	-	-		164.63	
NOx	19.57	-	-	-	-	-	-	-	-	-	-	-	-		19.57	
SO2	0.12	-	-	-	-	-	-	-	-	-	-	-	-		0.12	
CO	16.44	-	-	-	-	-	-	-	-	-	-	-	-		16.44	
Single HAP	0.35	1.52	-	0.32	-	-	-	-	-	0.00	-	-	-		1.52	Ethyl Benzene
Combined HAPs	0.37	3.05	0.99	0.32	-	-	-	-	-	0.00	-	-	-		4.73	

Limited PTE (Tons/Yr)

Pollutant	Combustion	CO-1	ACO-2	Surface Coating					Grinding	Welding	Covered Conveyor	Mixer	Bullard System	Unpaved Roads (Fugitive) [3]	Total PTE	
				EU-06	EU-07	EU-11	EU-12	EU-15								
PM [2]	0.37	-	-	0.00	0.00	2.24	2.24	24.90	16.73	1.90	1.17	1.40	12.82	10.81	63.77	
PM10 [2]	1.49	-	-	0.00	0.00	2.24	2.24	24.90	52.56	1.90	1.17	1.40	1.28	2.76	89.17	
PM2.5	1.49	-	-	0.00	0.00	2.24	2.24	24.90	52.56	1.90	1.17	1.40	1.28	0.28	89.17	
VOC [1]	1.08	24.90	62.65						-	-	-	-	-	-	88.63	
NOx	19.57	-	-	-	-	-	-	-	-	-	-	-	-	-	19.57	
SO2	0.12	-	-	-	-	-	-	-	-	-	-	-	-	-	0.12	
CO	16.44	-	-	-	-	-	-	-	-	-	-	-	-	-	16.44	
Single HAP	0.35	0.50	0.83	0.32	-	-	-	-	-	0.00	-	-	-	-	0.83	Phenol
Combined HAPs	0.37	1.00	0.99	0.32	-	-	-	-	-	0.00	-	-	-	-	2.68	

Note:

(1) Emission Units EU-06, EU-07, EU-11, EU-12, EU-15, and ACO-2 have a combined limited potential to emit after issuance of 62.25 tons per year VOC

(2)Condition D.1.4 of the permit limits the input of solids to EU-15 to 99.6 tons per twelve (12) consecutive month period with compliance determined at the end of each month, which is the equivalent to 24.9 tons of Particulate per year, based on a minimum transfer efficiency and minimum control efficiency of fifty percent (50%).

(3)Fugitive Emissions are not counted toward the determination of Part 70 or PSD applicablility.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
From Insignificant Activities

Company Name: Dexter Axle Company
Address City IN Zip: 500 South Seventh Street, Albion, IN 46701
Permit Number: 113-26682-00008
Plt ID: 113-00008
Reviewer: Jason R. Krawczyk
Date: August 25, 2008

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr	Emission Units
15.00	131.4	(3) air make-up units @ 3.0 MMBtu each
3.80	33.3	(8) heaters/air conditioners @ 0.475 MMBtu each
3.75	32.9	(25) space heaters @ 0.15 MMBtu each
2.40	21.0	(3) bonders @ 0.8 MMBtu each
1.95	17.1	(3) parts washers @ 0.65 MMBtu each
0.88	7.7	(1) parts washer @ 0.88 MMBtu
1.80	15.8	(1) parts washer @ 1.8 MMBtu
4.80	42.0	(1) parts washer @ 4.8 MMBtu
0.24	2.1	(3) office furnaces @ 0.08 MMBtu each
0.16	1.4	(1) boiler @ 0.16 MMBtu
1.90	16.6	(4) heaters @ 0.475 MMBtu each
0.80	7.0	(1) building 1 parts washer @ 0.8 MMBtu
1.80	15.8	(1) building 2 parts washer @ 1.8 MMBtu
1.40	12.3	(8) building 2 heating/air conditioning units @ 0.175 MMBtu each
40.68	356.4	

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.34	1.35	0.11	17.82	0.98	14.97

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
See page 3 for HAPs emissions calculations.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
HAPs Emissions

Company Name: **Dexter Axle Company**
Address City IN Zip: **500 South Seventh Street, Albion, IN 46701**
Permit Number: **113-26682-00008**
Plt ID: **113-00008**
Reviewer: **Jason R. Krawczyk**
Date: **August 25, 2008**

	HAPs - Organics				
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	3.742E-04	2.138E-04	1.336E-02	3.207E-01	6.058E-04

	HAPs - Metals				
	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	8.909E-05	1.960E-04	2.494E-04	6.771E-05	3.742E-04

Methodology is the same as page 2.

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Appendix A: Emissions Calculations
VOC and HAPs
From Cure Oven (CO-1)

Company Name: Dexter Axle Company
Address City IN Zip: 500 South Seventh Street, Albion, Indiana 46701
Permit Number: 113-26682-00008
Plt ID: 113-00008
Reviewer: Jason R. Krawczyk
Date: August 25, 2008

Potential to Emit (Unlimited)												
Material	Density (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year
Carbolite Resin	7.5	20.00%	0.0%	20.0%	0.0%	0.00%	0.007335	1580.000	1.502	17.41	417.77	76.24
									Total	**17.41**	**417.77**	**76.24**

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating less Water (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating less Water (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating less Water (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)

Potential to Emit (Unlimited)													
Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Ethyl Benzene*	Weight % Phenol	Weight % Xylene*	Weight % Toluene*	Weight % Formaldehyde	Ethyl Benzene Emissions (ton/yr)	Phenol Emissions (ton/yr)	Xylene Emissions (ton/yr)	Toluene Emissions (ton/yr)	Formaldehyde Emissions (ton/yr)
Carbolite Resin	7.5	0.007335	1580.00	2.00%	0.00%	1.00%	1.00%	0.00%	1.52	0.00	0.76	0.76	0.00
								Total	**1.52**	**0.00**	**0.76**	**0.76**	**0.00**
								Total HAPs	**3.05**				

METHODOLOGY

Potential HAPs (Tons per Year) = Weight % HAPs * Potential Unlimited VOC tons per year

* Carbolite Resin contains Naptha (CAS # 8030-30-6). According to 40 CFR 63 aliphatic solvent types typically have an organic HAP composition (% by mass) of 1% Xylene, 1% Toluene, and 1% Ethylbenzene

Appendix A: Emissions Calculations
Natural Gas Combustion Only
From Cure Oven (CO-1)

Company Name: **Dexter Axle Company**
Address City IN Zip: **500 South Seventh Street, Albion, IN 46701**
Permit Number: **113-26682-00008**
Plt ID: **113-00008**
Reviewer: **Jason R. Krawczyk**
Date: **August 25, 2008**

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr	Emission Units
2.00	17.5	(1) cure oven CO1 @ 2.0 MMBtu

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.02	0.07	0.01	0.88	0.05	0.74

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
See page 6 for HAPs emissions calculations.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
From Cure Oven (CO-1)
HAPs Emissions

Company Name: **Dexter Axle Company**
Address City IN Zip: **500 South Seventh Street, Albion, IN 46701**
Permit Number: **113-26682-00008**
Plt ID: **113-00008**
Reviewer: **Jason R. Krawczyk**
Date: **August 25, 2008**

	HAPs - Organics				
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	1.840E-05	1.051E-05	6.570E-04	1.577E-02	2.978E-05

	HAPs - Metals				
	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	4.380E-06	9.636E-06	1.226E-05	3.329E-06	1.840E-05

Methodology is the same as page 5.

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Appendix A: Emissions Calculations
VOC and HAPs
From Adhesive Oven (ACO-2)

Company Name: Dexter Axle Company
Address City IN Zip: 500 South Seventh Street, Albion, Indiana 46701
Permit Number: 113-26682-00008
Plt ID: 113-00008
Reviewer: Jason R. Krawczyk
Date: August 25, 2008

Potential to Emit (Unlimited)												
Material	Density (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year
Adhesive	8.1	52.00%	0.0%	52.0%	0.0%	0.00%	0.000565	1580.000	4.22	3.77	90.41	16.50
									Total	**3.77**	**90.41**	**16.50**

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating less Water (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating less Water (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating less Water (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)

Potential to Emit (Unlimited)													
Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Ethyl Benzene*	Weight % Phenol	Weight % Xylene*	Weight % Toluene*	Weight % Formaldehyde	Ethyl Benzene Emissions (ton/yr)	Phenol Emissions (ton/yr)	Xylene Emissions (ton/yr)	Toluene Emissions (ton/yr)	Formaldehyde Emissions (ton/yr)
Adhesive	8.1	0.000565	1580.00	0.00%	5.00%	0.00%	0.00%	1.00%	0.00	0.83	0.00	0.00	0.17
								Total	**0.00**	**0.83**	**0.00**	**0.00**	**0.17**
								Total HAPs	**0.99**				

METHODOLOGY

Potential HAPs (Tons per Year) = Weight % HAPs * Potential Unlimited VOC tons per year

Appendix A: Emissions Calculations
Natural Gas Combustion Only
From Adhesive Oven (ACO-2)

Company Name: **Dexter Axle Company**
Address City IN Zip: **500 South Seventh Street, Albion, IN 46701**
Permit Number: **113-26682-00008**
Plt ID: **113-00008**
Reviewer: **Jason R. Krawczyk**
Date: **August 25, 2008**

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr	Emission Units
2.00	17.5	(1) adhesive application & curing process ACO2 @ 2.0 MMBtu

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.02	0.07	0.01	0.88	0.05	0.74

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
See page 3 for HAPs emissions calculations.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
From Adhesive Oven (ACO-2)
HAPs Emissions

Company Name: **Dexter Axle Company**
Address City IN Zip: **500 South Seventh Street, Albion, IN 46701**
Permit Number: **113-26682-00008**
Plt ID: **113-00008**
Reviewer: **Jason R. Krawczyk**
Date: **August 25, 2008**

	HAPs - Organics				
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	1.840E-05	1.051E-05	6.570E-04	1.577E-02	2.978E-05

	HAPs - Metals				
	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	4.380E-06	9.636E-06	1.226E-05	3.329E-06	1.840E-05

Methodology is the same as page 2.

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Appendix A: Emissions Calculations
VOC and Particulate Emissions
From Surface Coating Operations

Company Name: Dexter Axle Company
Address City IN Zip: 500 South Seventh Street, Albion, Indiana 46701
Permit Number: 113-26682-00008
Plt ID: 113-00008
Reviewer: Jason R. Krawczyk
Date: August 25, 2008

Potential to Emit of Existing Units (Unlimited)

Material	Density (lbs/gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (units/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC (pounds per hour)	Potential VOC (pounds per day)	Potential VOC (tons per year)	Uncontrolled Particulate PTE (tons/yr)	Controlled Particulate PTE (tons/yr)*	lbs VOC/gal solids	Transfer Efficiency	PM Control Efficiency
Shoe Dip Tank EU-06																		
BSL 79-30	7.05	70.35%	61.99%	8.4%	0.00%	0.00%	0.005	2034	0.59	0.59	5.99	144	26.3	0.00	0.00	N/A	100.00%	92.00%
Backing Dip Tank EU-07																		
Black Backing	8.61	68.42%	56.69%	11.73%	0.00%	0.00%	0.006	923	1.01	1.01	5.6	134	24.5	0.00	0.00	N/A	100.00%	92.00%
Spray Booth EU-11																		
Black (water based)	11.38	53.80%	52.29%	1.51%	0.00%	37.14%	0.0055	429	0.17	0.17	0.41	9.7	1.8	13.58	1.09	0.46	75.00%	92.00%
Tan (water based)	12.12	41.50%	40.16%	1.34%	0.00%	42.0%	0.0065	429	0.162	0.162	0.45	10.9	1.98	21.65	1.73	0.39	75.00%	92.00%
Red Enamel (water based)	11.58	42.50%	41.06%	1.44%	0.00%	43.2%	0.0065	429	0.167	0.167	0.46	11.2	2.04	20.33	1.63	0.39	75.00%	92.00%
Red Oxide (water based)	12.28	43.00%	41.63%	1.37%	0.00%	41.0%	0.0085	429	0.168	0.168	0.61	14.7	2.69	27.95	2.24	0.41	75.00%	92.00%
Blue Lacquer (water based)	8.43	76.84%	63.65%	13.2%	0.00%	22.7%	0.0032	429	1.11	1.11	1.53	36.6	6.69	2.93	0.23	4.90	75.00%	92.00%
Spray Booth EU-12																		
Black Enamel (water based)	11.38	53.80%	52.29%	1.51%	0.00%	37.14%	0.0055	429	0.17	0.17	0.41	9.7	1.8	13.58	1.09	0.46	75.00%	92.00%
Tan (water based)	12.12	41.50%	40.16%	1.34%	0.00%	42.0%	0.0065	429	0.162	0.162	0.45	10.9	1.98	21.65	1.73	0.39	75.00%	92.00%
Red Enamel (water based)	11.58	42.50%	41.06%	1.44%	0.00%	43.2%	0.0065	429	0.167	0.167	0.46	11.2	2.04	20.33	1.63	0.39	75.00%	92.00%
Red Oxide (water based)	12.28	43.00%	41.63%	1.37%	0.00%	41.0%	0.0085	429	0.168	0.168	0.61	14.7	2.69	27.95	2.24	0.41	75.00%	92.00%
Blue Lacquer (water based)	8.43	76.84%	63.65%	13.2%	0.00%	22.7%	0.0032	429	1.11	1.11	1.53	36.6	6.69	2.93	0.23	4.90	75.00%	92.00%
Spray Booth EU-15																		
Black Enamel (water based)	11.38	53.80%	52.29%	1.51%	0.00%	37.14%	0.0055	429	0.17	0.17	0.41	9.7	1.8	13.58	1.09	0.46	75.00%	92.00%
Tan (water based)	12.12	41.50%	40.16%	1.34%	0.00%	42.0%	0.0065	429	0.162	0.162	0.45	10.9	1.98	21.65	1.73	0.39	75.00%	92.00%
Red Enamel (water based)	11.58	42.50%	41.06%	1.44%	0.00%	43.2%	0.0065	429	0.167	0.167	0.46	11.2	2.04	20.33	1.63	0.39	75.00%	92.00%
Red Oxide (water based)	12.28	43.00%	41.63%	1.37%	0.00%	41.0%	0.0085	429	0.168	0.168	0.61	14.7	2.69	27.95	24.90	0.41	75.00%	92.00%
Blue Lacquer (water based)	8.43	76.84%	63.65%	13.2%	0.00%	22.7%	0.0032	429	1.11	1.11	1.53	36.6	6.69	2.93	0.23	4.90	75.00%	92.00%
Potential to Emit			**Add worst case coating to all solvents**							**Total:**	**16.17**	**387.99**	**70.81**	**83.85**	**29.37**			

Notes:

* Condition D.1.4 of the permit limits the input of solids to EU-15 to 99.6 tons per twelve (12) consecutive month period with compliance determined at the end of each month, which is the equivalent to 24.9 tons of Particulate per year, based on a minimum transfer efficiency and minimum control efficiency of fifty percent (50%).

Methodology:

Pounds of VOC per Gallon Coating less Water = (Density (lbs/gal) * Weight % Organics) / (1-Volume % water)

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

Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lbs/gal) * Gal of Material (gal/unit) * Maximum (units/hr)

Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lbs/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)

Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lbs/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)

Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)

Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)

Total = Worst Coating + Sum of all solvents used

Appendix A: Emission Calculations
HAP Emissions
From Surface Coating Operations

Company Name: **Dexter Axle Company**
Address City IN Zip: **500 South Seventh Street, Albion, Indiana 46701**
Permit Number: **113-26682-00008**
Plt ID: **113-00008**
Reviewer: **Jason R. Krawczyk**
Date: **August 25, 2008**

Material	Density (lbs/gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Formaldehyde (%)	Formaldehyde Emissions (tons/yr)
Shoe Dip Tank EU-06					
Shoe Dip	7.09	0.005	2034	0.100%	0.316
				Total HAPs:	**0.316**

Methodology:
HAPS emission rate (tons/yr) = Density (lbs/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs

Appendix A: Emissions Calculations
Particulate Emissions From Grinding

Company Name: **Dexter Axle Company**
Address City IN Zip: **500 South Seventh Street, Albion, Indiana 46701**
Permit Number: **113-26682-00008**
Plt ID: **113-00008**
Reviewer: **Jason R. Krawczyk**
Date: **August 25, 2008**

Shoe Grinding Systems

Emission Unit	Capacity (lbs/hr)	Percentage (%) of Capacity Collected	Potential to Emit PM/PM10/PM2.5 Before Controls (lbs/hr)	Potential to Emit PM/PM10/PM2.5 Before Controls (tons/yr)	Control Efficiency(%)	Potential to Emit PM/PM10PM2.5 After Controls (tons/yr)
EU-14	1800	3.50%	63.0	275.94	99.99%	0.028

Note that the grinding systems are controlled by a HEPA Filtration System

Methodology
The Percentage Capacity Collected is based on the amount of non-asbestos material processed through the grinding system
Potential to Emit PM and PM-10 Before Controls (lbs/hr) = Capcity (lbs/hr) * Percentage (%) Capacity Collected
Potential to Emit PM and PM-10 Before Controls (tons/yr) = Potential to Emit PM and PM-10 (lbs/hr) * (1 ton/2,000 lbs) * (8,760 hrs/yr)
Potential to Emit PM and PM-10 After Controls (tons/yr) = Potential to Emit PM and PM-10 Before Controls (tons/yr) * (1 - Control Effiency %)
Asbestos has been replaced with Friction Material at this Emission Unit.
Friction Material does not contain any HAPs

Appendix A: Emissions Calculations
Emissions from Welding

Company Name: Dexter Axle Company
Address City IN Zip: 500 South Seventh Street, Albion, Indiana 46701
Permit Number: 113-26682-00008
Plt ID: 113-00008
Reviewer: Jason R. Krawczyk
Date: August 25, 2008

PROCESS	Number of Stations	Max. electrode consumption per station	EMISSION FACTORS * (lb pollutant / lb electrode)				EMISSIONS (lb/hr)				TOTAL HAPS (lb/hr)
WELDING		(lbs/hr)	PM = PM10	Mn	Ni	Cr	PM = PM10	Mn	Ni	Cr	
Metal Inert Gas (MIG)(L50)	3	6	0.0241	0.000034		0.00001	0.434	0.0006	0.000	0.0002	0.001
EMISSION TOTALS							PM = PM10	Mn	Ni	Cr	Total HAPs
Potential Emissions lbs/hr							0.434	0.0006	0.000	0.0002	0.001
Potential Emissions lbs/day							10.4	0.015	0.00	0.004	0.019
Potential Emissions tons/year							**1.90**	0.0027	0.000	0.0008	**0.004**

Methodology:

*Emission Factors are default values for carbon steel unless a specific electrode type is noted in the Process column. Consult AP-42 or other reference for different electrode types.

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

Emissions, lbs/day = emissions, lbs/hr x 24 hrs/day

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

Welding and other flame cutting emission factors are from an internal training session document.

See AP-42, Chapter 12.19 for additional emission factors for welding.

Appendix A: Emissions Calculations
Particulate Emissions From Bullard System

Company Name: **Dexter Axle Company**
Address City IN Zip: **500 South Seventh Street, Albion, Indiana 46701**
Permit Number: **113-26682-00008**
Plt ID: **113-00008**
Reviewer: **Jason R. Krawczyk**
Date: **August 25, 2008**

Insignificant Machining

Emission Unit	Capacity	Weight of Part	Process Weight Rate		Emission Factors		PTE PM Before Controls		PTE PM-10/PM2.5 Before Controls		Control Efficiency	PTE PM After Controls	PTE PM10/PM2.5 After Controls
Bullard System	(parts/hr)	(lbs/part)	(lbs/hr)	(tons/hr)	PM (lbs/ton)	PM10 / PM2.5 (lbs/ton)	(lbs/hr)	(tons/yr)	(lbs/hr)	(tons/yr)	(%)	(tons/yr)	(tons/yr)
	85	40.51	3443	1.72	17	1.7	29.27	128	2.93	12.82	90.00%	12.82	1.28

Methodology:
Weight Rate (tons/hr) = Capacity * Weight of Part (lbs/part) = Weight Rate (lbs/hr) * (1 ton/2000lbs)
Potential to Emit PM or PM10 Before Controls (tons/yr) = Weight Rate (tons/hr) * PM or PM-10 Emission Factor (lbs/ton) * (2000lbs/ton)
Potential to Emit PM and PM-10 After Controls (tons/yr) = Potential to Emit PM and PM-10 Before Controls (tons/yr) * (1 - Control Effiency %)
PM and PM-10 Emission Factors are from FIRES 6.23 SCC# 3-04-003-40 For Grinding and Machining of Gray Iron

Appendix A: Emissions Calculations
Particulate Emissions from Covered Conveyor System (EU-2)

Company Name: **Dexter Axle Company**
Address City IN Zip: **500 South Seventh Street, Albion, Indiana 46701**
Permit Number: **113-26682-00008**
Plt ID: **113-00008**
Reviewer: **Jason R. Krawczyk**
Date: **August 25, 2008**

Potential to Emit from Material Handling Process					
Facility/Operation	Throughput (lb/hr)	Emission Factor [a, b] (lb/ton)	Uncontrolled PM/PM10/PM2.5 Emissions (ton/yr)	Control Efficiency (%)	Controlled PM/PM10/PM2.5 Emissions (ton/yr)
Frictional Dry Ingredient Feed Bins, HML-1 through HML-6 and TS-1 exhausting to RVF-1	172	PM = 1 PM10 = 1 PM2.5 = 1	0.37668	99.98%	7.53E-05
Bulk Bag Feed Bins, BBS-1 through BBS-3 exhausting to DCF-3	253	PM = 1 PM10 = 1 PM2.5 = 1	0.55407	99.90%	5.54E-04
Bag Dump Station, BDS-1 exhausting to BVF-4	37	PM = 1 PM10 = 1 PM2.5 = 1	0.08103	99.90%	8.10E-05
Fiberglass Blowing System, RM-1 exhausting to VFR-2	73	PM = 1 PM10 = 1 PM2.5 = 1	0.15987	99.90%	1.60E-04
		Total	**1.17**		**8.70E-04**

METHODOLOGY

PM/PM10/PM2.5 Uncontrolled Emissions (ton/yr) = Throughput (lb/hr) * 1/2000 (ton/lb) * Emission Factor (lb/ton) * 8760 hours * 1/2000 (ton/lb)
PM/PM10/PM2.5 Controlled Emissions (ton/yr) = PM/PM10 Uncontrolled Emissions (ton/yr) * (1-Efficiency of Control Device %)
[a]PM/PM10 emission factor provided by source and is greater than any similar emission factor found in AP-42 for the types of material handled during this process
[b]US EPA has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions

Appendix A: Emissions Calculations
Particulate Emissions from Mixer EU-1

Company Name: **Dexter Axle Company**
Address City IN Zip: **500 South Seventh Street, Albion, Indiana 46701**
Permit Number: **113-26682-00008**
Plt ID: **113-00008**
Reviewer: **Jason R. Krawczyk**
Date: **August 25, 2008**

Potential to Emit from Material Handling Process					
Facility/Operation	Throughput (lb/hr)	Emission Factor [a, b] (lb/ton)	Uncontrolled PM/PM10/PM2.5 Emissions (ton/yr)	Control Efficiency (%)	Controlled PM/PM10/PM2.5 Emissions (ton/yr)
Mixer, (EU-1) exhausting to VFR-2	640	PM = 1 PM10 = 1 PM2.5 = 1	1.4016	99.90%	1.40E-03
		Total	**1.40**		**1.40E-03**

METHODOLOGY

PM/PM10/PM2.5 Uncontrolled Emissions (ton/yr) = Throughput (lb/hr) * 1/2000 (ton/lb) * Emission Factor (lb/ton) * 8760 hours * 1/2000 (ton/lb)
PM/PM10/PM2.5 Controlled Emissions (ton/yr) = PM/PM10 Uncontrolled Emissions (ton/yr) * (1-Efficiency of Control Device %)
[a]PM/PM10 emission factor provided by source and is greater than any similar emission factor found in AP-42 for the types of material handled during this process.
[b]US EPA has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions

Appendix A: Emissions Calculations
Limited Emissions
Fugitive Dust Emissions - Unpaved Roads

Company Name: **Dexter Axle Company**
Address City IN Zip: **500 South Seventh Street, Albion, Indiana 46701**
Permit Number: **113-26682-00008**
Plt ID: **113-00008**
Reviewer: **Jason R. Krawczyk**
Date: **August 25, 2008**

Unpaved Roads

The following calculations determine the amount of emissions created by unpaved roads, based on 8,760 hours of use and AP-42, Ch 13.2.2 (12/2003).

Vehicle Type	Trips per Hour	Maximum Weight of Vehicle and Load (tons/trip)	Maximum trips per year (trip/yr)	Total Weight driven per year (ton/yr)	Maximum one-way distance (feet/trip)	Maximum one-way distance (mi/trip)	Maximum one-way miles (miles/yr)
Semi w/ Tractor Trailer	3.0	30	2.63E+04	7.88E+05	1848	0.350	9198.0
Forklift	1	4.5	8.76E+03	3.94E+04	528	0.100	876.0
Total			**3.50E+04**	**8.28E+05**			**1.01E+04**

Average Vehicle Weight Per Trip = 23.6 tons/trip
Average Miles Per Trip = 0.288 miles/trip

Unmitigated Emission Factor, Ef = k*[(s/12)^a]*[(W/3)^b] (Equation 1a from AP-42 13.2.2)

	PM	PM10	PM2.5	
where k =	4.9	1.5	0.15	lb/mi = particle size multiplier (AP-42 Table 13.2.2-2 for Industrial Roads)
s =	4.8	4.8	4.8	% = mean % silt content of unpaved roads (AP-42 Table 13.2.2-3 Sand/Gravel Processing Plant Road)
a =	0.7	0.9	0.9	= constant (AP-42 Table 13.2.2-2)
W =	23.6	23.6	23.6	tons = average vehicle weight (provided by source)
b =	0.45	0.45	0.45	= constant (AP-42 Table 13.2.2-2)

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, Eext = E * [(365 - P)/365]
Mitigated Emission Factor, Eext = E * [(365 - P)/365]
where P = 125 days of rain greater than or equal to 0.01 inches (see Fig. 13.2.2-1)

	PM	PM10	PM2.5	
Unmitigated Emission Factor, Ef =	6.53	1.66	0.17	lb/mile
Mitigated Emission Factor, Eext =	4.29	1.09	0.11	lb/mile
Dust Control Efficiency =	50%	50%	50%	(pursuant to control measures outlined in fugitive dust control plan)

Vehicle Type	Unmitigated PTE of PM (tons/yr)	Unmitigated PTE of PM10 (tons/yr)	Unmitigated PTE of PM2.5 (tons/yr)	Mitigated PTE of PM (tons/yr)	Mitigated PTE of PM10 (tons/yr)	Mitigated PTE of PM (tons/yr)	Controlled PTE of PM (tons/yr)	Controlled PTE of PM10 (tons/yr)	Controlled PTE of PM (tons/yr)
Semi w/ Tractor Trailer	30.03	7.65	0.77	19.75	5.03	0.50	9.87	2.52	0.25
Forklift	2.86	0.73	0.07	1.88	0.48	0.05	0.94	0.24	0.02
Totals	**32.89**	**8.38**	**0.84**	**21.63**	**5.51**	**0.55**	**10.81**	**2.76**	**0.28**

Note:
The calculations determine the amount of emissions created by unpaved roads, based on 8,760 hours of use and AP-42, Ch 13.2.2 (12/2003).
Fugitive Emissions are not counted toward the determination of Part 70 or PSD applicablility.

Methodology:
Maximum Weight of Vehicle and Load (tons/trip) = [Maximum Weight of Vehicle (tons/trip)] + [Maximum Weight of Load (tons/trip)]
Maximum trips per year (trip/yr) = [Throughput (tons/yr)] / [Maximum Weight of Load (tons/trip)]
Total Weight driven per year (ton/yr) = [Maximum Weight of Vehicle and Load (tons/trip)] * [Maximum trips per year (trip/yr)]
Maximum one-way distance (mi/trip) = [Maximum one-way distance (feet/trip) / [5280 ft/mile]
Maximum one-way miles (miles/yr) = [Maximum trips per year (trip/yr)] * [Maximum one-way distance (mi/trip)]
Average Vehicle Weight Per Trip (ton/trip) = SUM[Total Weight driven per year (ton/yr)] / SUM[Maximum trips per year (trip/yr)]
Average Miles Per Trip (miles/trip) = SUM[Maximum one-way miles (miles/yr)] / SUM[Maximum trips per year (trip/yr)]
Unmitigated PTE (tons/yr) = (Maximum one-way miles (miles/yr)) * (Unmitigated Emission Factor (lb/mile)) * (ton/2000 lbs)
Mitigated PTE (tons/yr) = (Maximum one-way miles (miles/yr)) * (Mitigated Emission Factor (lb/mile)) * (ton/2000 lbs)
Controlled PTE (tons/yr) = (Mitigated PTE (tons/yr)) * (1 - Dust Control Efficiency)

Abbreviations:
PM = Particulate Matter
PM10 = Particulate Matter (<10 um)
PM2.5 = Particulate Matter (< 2.5 um)
PTE = Potential to Emit