INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We make Indiana a cleaner, healthier place to live.

Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant

DATE: January 16, 2009

RE: Great Dane Trailers, Inc. / 021-26419-00008

FROM: Matthew Stuckey, Deputy 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, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3-7 and IC 13-15-6-1(b) or IC 13-15-6-1(a) 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.

For an **initial Title V Operating Permit**, a petition for administrative review must be submitted to the Office of Environmental Adjudication within **thirty (30)** days from the receipt of this notice provided under IC 13-15-5-3, pursuant to IC 13-15-6-1(b).

For a **Title V Operating Permit renewal**, a petition for administrative review must be submitted to the Office of Environmental Adjudication within **fifteen (15)** days from the receipt of this notice provided under IC 13-15-5-3, pursuant to IC 13-15-6-1(a).

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:

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(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.

Pursuant to 326 IAC 2-7-18(d), any person may petition the U.S. EPA to object to the issuance of an initial Title V operating permit, permit renewal, or modification within sixty (60) days of the end of the forty-five (45) day EPA review period. Such an objection must be based only on issues that were raised with reasonable specificity during the public comment period, unless the petitioner demonstrates that it was impractible to raise such issues, or if the grounds for such objection arose after the comment period.

To petition the U.S. EPA to object to the issuance of a Title V operating permit, contact:

U.S. Environmental Protection Agency
401 M Street
Washington, D.C. 20406

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
FNTVOP.dot12/3/07

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

Part 70 Operating Permit Renewal
OFFICE OF AIR QUALITY

Great Dane Trailers
2664 U.S. Highway 40 East
Brazil, Indiana 47834

(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. Noncompliance with any provision of this permit, except any provision specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act. 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 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T021-26419-00008	
Issued by: Inga Collins for DR Donald F. Robin, P.E., Section Chief Permits Branch Office of Air Quality	Issuance Date: January 16, 2009 Expiration Date: January 16, 2014

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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 2-7-4(c)][326 IAC 2-7-5(15)][326 IAC 2-7-1(22)]

The Permittee owns and operates a stationary freight trailer manufacturing operation.

Source Address:	2664 U.S. Highway 40 East, Brazil, Indiana 47834
Mailing Address:	2664 U.S. Highway 40 East, Brazil, IN 47834
General Source Phone Number:	812-443-4711
SIC Code:	3715
County Location:	Clay
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 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 Part 70 Source Definition [326 IAC 2-7-1(22)]

This freight trailer manufacturing company consists of two (2) plants:

(a) Plant 1, the Main Plant, is located at 2664 U.S. Highway 40 East, Brazil, Indiana; and

(b) Plant 2, the Composite Panel Plant, is also located on U.S. Highway 40 East, Brazil, Indiana.

Since the two (2) plants are located on contiguous properties, belong to the same industrial grouping, and operate under common control of the same entity, they will be considered one (1) source, effective from the date of issuance of Part 70 Operating Permit No. T021-7731-00008.

A.3 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)][326 IAC 2-7-5(15)]

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

(a) General Fabrication Booth - One (1) paint booth with two (2) compartments equipped with airless and air assisted airless spray guns capable of a maximum coating delivery rate of 16.25 gallons per hour used to paint metal trailer frame parts. This booth was originally constructed in 1974 and its two (2) compartments have dry filters for particulate overspray control exhausting through two (2) stacks identified as Stacks 1a and 1b.

(b) Fifth Wheel Booth - One (1) paint booth equipped with airless spray guns capable of a maximum coating delivery rate of 4.75 gallons per hour used to paint fifth wheel assemblies. This booth was originally constructed in 1974 and has dry filters for particulate overspray control exhausting through Stack 2.

(c) Reefer Undercoat Booth - One (1) paint booth equipped with airless spray guns capable of a maximum coating delivery rate of 7.25 gallons per hour used to paint the underbody of refrigerator trailers. For trailers with stainless steel underbody parts, the booth is used for abrasive blasting rather than painting with a nominal blast media usage of 20 lb/hr.

This booth was originally constructed in 1978 and has dry filters for particulate overspray control exhausting through Stack 3.

(d) Reefer Bogie Booth - One (1) paint booth equipped with airless spray guns capable of a maximum coating delivery rate of 3.75 gallons per hour used to paint undercarriages for the two (2) refrigerator trailer lines. This booth was originally constructed in 1978 and has dry filters for particulate overspray control exhausting through Stack 4. The Reefer Bogie Booth is also used for Reefer Bogie Touchup operations.

(e) Paint Spray Booth - One (1) paint booth equipped with airless spray guns capable of a maximum coating delivery rate of 1.75 gallons per hour used for specialty coating of trailers. This booth was originally constructed in 1978 and has dry filters for particulate overspray control exhausting through two (2) stacks identified as Stacks 5a and 5b.

(f) Dry Freight Bogie Line Booth - One (1) paint booth equipped with airless spray guns capable of a maximum coating delivery rate of 4.00 gallons per hour used to paint undercarriages for the two (2) dry freight trailer lines. This booth was originally constructed in 1974 and has dry filters for particulate overspray control exhausting through Stack 6.

(g) Dry Freight Undercoat Booth - One (1) paint booth equipped with airless spray guns capable of a maximum coating delivery rate of 20.5 gallons per hour used to paint the underbody of dry freight trailers. For trailers with stainless steel underbody parts, the booth is used for abrasive blasting rather than painting with a nominal blast media usage of 40 lb/hr. This booth was originally constructed in 1974 and has dry filters for particulate overspray control exhausting through Stack 7. The Dry Freight Undercoat Booth is also used for Dry Freight Stall activities which consist of final detailing and/or touch-up of the trailers.

(h) LOL Bogie Booth - One (1) paint booth equipped with airless spray guns capable of a maximum coating delivery rate of 3.50 gallons per hour used to paint the undercarriages for the large order line trailers. This booth was originally constructed in 1984 and has dry filters for particulate overspray control exhausting through Stack 8.

(i) LOL Undercoat Booth - One (1) paint booth equipped with airless spray guns capable of a maximum coating delivery rate of 12.0 gallons per hour used to paint the underbody of large order line trailers. For trailers with stainless steel underbody parts, the booth is used for abrasive blasting rather than painting with a nominal blast media usage of 20 lb/hr. This booth was originally constructed in 1984 and has dry filters for particulate overspray control exhausting through Stack 9.

(j) Welding Operations - The following welding activities are part of the trailer manufacturing processes:

(1) Twenty-two (22) oxy-acetylene stick welders;

(2) two (2) submerged arc welding (SAW) units; and

(3) one hundred sixty-two (162) gas metal arc welding (GMAW) units.

(k) One (1) shotblaster with a maximum throughput capacity of 2177 pounds of steel parts per hour and a fabric filter for particulate matter control exhausting inside the plant building.

(l) One (1) intake air heater associated with the MPL Undercoat/Bogie Booth having a maximum capacity to combust natural gas, or LPG as a backup fuel, of 21.56 million British thermal unit (MMBtu) per hour.

A.4 Specifically Regulated Insignificant Activities
[326 IAC 2-7-1(21)][326 IAC 2-7-4(c)][326 IAC 2-7-5(15)]

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

(a) The following equipment related to manufacturing activities not resulting in the emission of HAP's: brazing equipment, cutting torches, soldering equipment, welding equipment. [326 IAC 6-3-2

(b) 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 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations. [326 IAC 6-3-2; covered under C.1]

(c) The following activities whose potential uncontrolled emissions meet the exemption levels specified in 326 IAC 2-1.1-3(d)(1):

(1) One (1) Paint bake off oven equipped with natural gas fired primary and secondary burners rated at 0.625 million British thermal units per hour, each, with a maximum throughput capacity of 50 pounds of paint per hour and a 0.625 million British thermal units per hour natural gas fired thermal oxidizer for control. [326 IAC 4-2]

A.5 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

(a) It is a major source, as defined in 326 IAC 2-7-1(22);

(b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-7-1]

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 2-7-5(2)][326 IAC 2-1.1-9.5][326 IAC 2-7-4(a)(1)(D)][IC 13-15-3-6(a)]

(a) This permit, T021-26419-00008, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date 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, including any permit shield provided in 326 IAC 2-7-15, 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 2-7-7] [IC 13-17-12]

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 2-7-5(5)]

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 2-7-5(6)(D)]

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

B.7 Duty to Provide Information [326 IAC 2-7-5(6)(E)]

(a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). 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 2-7-4(f)][326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]

(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 the "responsible official" 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) A "responsible official" is defined at 326 IAC 2-7-1(34).

B.9 Annual Compliance Certification [326 IAC 2-7-6(5)]

(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

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

(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 2-7-5(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 the "responsible official" as defined by 326 IAC 2-7-1(34).

B.10 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)][326 IAC 2-7-6(1) and (6)][326 IAC 1-6-3]

(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 the "responsible official" as defined by 326 IAC 2-7-1(34).

(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.11 Emergency Provisions [326 IAC 2-7-16]

(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.

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a 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, 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

(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 2-7-5(3)(C)(ii) and must contain the following:

(A) A description of the emergency;

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

(C) Corrective actions taken.

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

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

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

(d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). 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 2-7-4(c)(9) 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 2-7 and any other applicable rules.

(g) 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.

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

B.12 Permit Shield [326 IAC 2-7-15][326 IAC 2-7-20][326 IAC 2-7-12]

(a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced 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 Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

This permit shield does not extend to applicable requirements which are promulgated after the date of issuance of this permit unless this permit has been modified to reflect such new requirements.

(b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.

(c) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.

(d) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:

(1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;

(2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;

(3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and

(4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.

(e) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).

(f) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, has issued the modifications. [326 IAC 2-7-12(c)(7)]

(g) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, has issued the modification. [326 IAC 2-7-12(b)(8)]

B.13 Prior Permits Superseded [326 IAC 2-1.1-9.5][326 IAC 2-7-10.5]

(a) All terms and conditions of permits established prior to T021-26419-00008 and issued pursuant to permitting programs approved into the state implementation plan have been either:

(1) incorporated as originally stated,

(2) revised under 326 IAC 2-7-10.5, or

(3) deleted under 326 IAC 2-7-10.5.

(b) Provided that all terms and conditions are accurately reflected in this permit, all previous registrations and permits are superseded by this Part 70 operating permit.

B.14 Termination of Right to Operate [326 IAC 2-7-10][326 IAC 2-7-4(a)]

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 2-7-3 and 326 IAC 2-7-4(a).

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(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 the "responsible official" as defined by 326 IAC 2-7-1(34).

(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 2-7-5(6)(C)][326 IAC 2-7-8(a)][326 IAC 2-7-9]

(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 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 2-7-5(6)(C)] The notification by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(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 2-7-9(a)(3)]

(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 2-7-9(b)]

(d) The reopening and revision of this permit, under 326 IAC 2-7-9(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 2-7-9(c)]

B.17 Permit Renewal [326 IAC 2-7-3][326 IAC 2-7-4][326 IAC 2-7-8(e)]

(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 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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 2-7 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 Modification [326 IAC 2-7-11][326 IAC 2-7-12]

(a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 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 the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.19 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)][326 IAC 2-7-12(b)(2)]

(a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.

(b) Notwithstanding 326 IAC 2-7-12(b)(1) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

B.20 Operational Flexibility [326 IAC 2-7-20][326 IAC 2-7-10.5]

(a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b),(c), or (e) 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 preconstruction approval required by 326 IAC 2-7-10.5 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 2-7-20(b),(c), or (e). 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 2-7-20(b)(1), (c)(1), and (e)(2).

(b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

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

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

(3) Any change in emissions; and

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

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

(c) Emission Trades [326 IAC 2-7-20(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 2-7-20(c).

(d) Alternative Operating Scenarios [326 IAC 2-7-20(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 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.

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

B.21 Source Modification Requirement [326 IAC 2-7-10.5]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-7-10.5.

B.22 Inspection and Entry [326 IAC 2-7-6][IC 13-14-2-2][IC 13-30-3-1][IC 13-17-3-2]

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

(a) Enter upon the Permittee's premises where a Part 70 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 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 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 substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

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

B.23 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

(a) The Permittee must comply with the requirements of 326 IAC 2-7-11 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 the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.24 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)][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) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.

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

B.25 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][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 2-7-5(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 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.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

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

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

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

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

C.6 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 the "responsible official" as defined by 326 IAC 2-7-1(34).

(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. The requirement to use an Indiana Licensed Asbestos inspector is not federally enforceable.

Testing Requirements [326 IAC 2-7-6(1)]

C.7 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 the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(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.8 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 2-7-5(1)][326 IAC 2-7-6(1)]

C.9 Compliance Monitoring [326 IAC 2-7-5(3)][326 IAC 2-7-6(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 or ninety (90) days of initial start-up, whichever is later. 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 the "responsible official" as defined by 326 IAC 2-7-1(34).

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

C.10 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.11 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(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 2-7-5][326 IAC 2-7-6]

C.12 Risk Management Plan [326 IAC 2-7-5(12)] [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.13 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

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

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

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

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

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

The ERP does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

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

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

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

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

C.14 Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]

(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.15 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5][326 IAC 2-7-6]

(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 the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.16 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]

(a) Pursuant to 326 IAC 2-6-3(b)(3), starting in 2006 and every three (3) years thereafter, the Permittee shall submit by July 1 an emission statement covering the previous calendar year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:

(1) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);

(2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1(32) ("Regulated pollutant, which is used only for purposes of Section 19 of this rule") from the source, for purpose of fee assessment.

The statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue
MC 61-50 IGCN 1003
Indianapolis, Indiana 46204-2251

The emission statement does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The emission statement 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.17 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]

(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 or ninety (90) days of initial startup, whichever is later.

C.18 General Reporting Requirements [326 IAC 2-7-5(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 the "responsible official" as defined by 326 IAC 2-7-1(34).

(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 the "responsible official" as defined by 326 IAC 2-7-1(34).

(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 [326 IAC 2-7-5(15)]:

(a) General Fabrication Booth - One (1) paint booth with two (2) compartments equipped with airless and air assisted airless spray guns capable of a maximum coating delivery rate of 16.25 gallons per hour used to paint metal trailer frame parts. This booth was originally constructed in 1974 and its two (2) compartments have dry filters for particulate overspray control exhausting through two (2) stacks identified as Stacks 1a and 1b.

(b) Fifth Wheel Booth - One (1) paint booth equipped with airless spray guns capable of a maximum coating delivery rate of 4.75 gallons per hour used to paint fifth wheel assemblies. This booth was originally constructed in 1974 and has dry filters for particulate overspray control exhausting through Stack 2.

(c) Reefer Undercoat Booth - One (1) paint booth equipped with airless spray guns capable of a maximum coating delivery rate of 7.25 gallons per hour used to paint the underbody of refrigerator trailers. For trailers with stainless steel underbody parts, the booth is used for abrasive blasting rather than painting with a nominal blast media usage of 20 lb/hr. This booth was originally constructed in 1978 and has dry filters for particulate overspray control exhausting through Stack 3.

(d) Reefer Bogie Booth - One (1) paint booth equipped with airless spray guns capable of a maximum coating delivery rate of 3.75 gallons per hour used to paint undercarriages for the two (2) refrigerator trailer lines. This booth was originally constructed in 1978 and has dry filters for particulate overspray control exhausting through Stack 4. The Reefer Bogie Booth is also used for Reefer Bogie Touchup operations.

(e) Paint Spray Booth - One (1) paint booth equipped with airless spray guns capable of a maximum coating delivery rate of 1.75 gallons per hour used for specialty coating of trailers. This booth was originally constructed in 1978 and has dry filters for particulate overspray control exhausting through two (2) stacks identified as Stacks 5a and 5b.

(f) Dry Freight Bogie Line Booth - One (1) paint booth equipped with airless spray guns capable of a maximum coating delivery rate of 4.00 gallons per hour used to paint undercarriages for the two (2) dry freight trailer lines. This booth was originally constructed in 1974 and has dry filters for particulate overspray control exhausting through Stack 6.

(g) Dry Freight Undercoat Booth - One (1) paint booth equipped with airless spray guns capable of a maximum coating delivery rate of 20.5 gallons per hour used to paint the underbody of dry freight trailers. For trailers with stainless steel underbody parts, the booth is used for abrasive blasting rather than painting with a nominal blast media usage of 40 lb/hr. This booth was originally constructed in 1974 and has dry filters for particulate overspray control exhausting through Stack 7. The Dry Freight Undercoat Booth is also used for Dry Freight Stall activities, which consist of final detailing and/or touch-up of the trailers.

(h) LOL Bogie Booth - One (1) paint booth equipped with airless spray guns capable of a maximum coating delivery rate of 3.50 gallons per hour used to paint the undercarriages for the large order line trailers. This booth was originally constructed in 1984 and has dry filters for particulate overspray control exhausting through Stack 8.

Facility Description [326 IAC 2-7-5(15)]:

(i) LOL Undercoat Booth - One (1) paint booth equipped with airless spray guns capable of a maximum coating delivery rate of 12.0 gallons per hour used to paint the underbody of large order line trailers. For trailers with stainless steel underbody parts, the booth is used for abrasive blasting rather than painting with a nominal blast media usage of 20 lb/hr. This booth was originally constructed in 1984 and has dry filters for particulate overspray control exhausting through Stack 9.

(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 2-7-5(1)]

D.1.1 PSD Minor Limit [326 IAC 2-2]

In order to render the requirement of 326 IAC 2-2 (PSD) not applicable, the input of VOC, including coatings, dilution solvents, and cleaning solvents to the following operations, General Fabrication Booth, Fifth Wheel Booth, Reefer Undercoat Booth, Reefer Bogie Booth, Paint Spray Booth, Dry Freight Bogie Booth, Dry Freight Undercoat Booth, Large Order Line (LOL) Bogie Booth and Large Order Line (LOL) Undercoat Booth shall not exceed 249 tons per twelve (12) consecutive month period with compliance determined at the end of each month

Compliance with the above limit, combined with the potential to emit VOC from other emission units at the source, shall limit the VOC from the entire source to less than 250 tons per twelve (12) consecutive month period and render 326 IAC 2-2 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:

Large Order Line (LOL) Bogie Booth; and
Large Order Line (LOL) Undercoat Booth

in excess of four and three-tenths (4.3) pounds of VOC per gallon of coating, excluding water, as delivered to the applicator for clear coats, and three and five-tenths (3.5) pounds of VOC per gallon of coating, excluding water, as delivered to the applicator for all other coatings (based on those coatings being air dried or forced warm air dried).

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

Pursuant to 326 IAC 8-2-9(f), all solvents sprayed from the application equipment of the:

Large Order Line (LOL) Bogie Booth; and
Large Order Line (LOL) Undercoat Booth.

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 Hazardous Air Pollutant (HAP) Minor Limit [40 CFR Part 63, Subpart MMMM]

In order to render the requirement 40 CFR Part 63, Subpart MMMM and Subpart A not applicable, the use of any single HAP and total combination of HAPs at the surface coating processes (General Fabrication Booth, Fifth Wheel Booth, Reefer Undercoat Booth, Reefer Bogie Booth, Paint Spray Booth, Dry Freight Bogie Booth, Dry Freight Undercoat Booth, Large Order Line (LOL) Bogie Booth, and Large Order Line (LOL) Undercoat Booth) shall not exceed 9 tons

for any single HAP and 24 tons for any combination of HAPS per twelve (12) consecutive month period with compliance determined at the end of each month.

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

Pursuant to 326 IAC 6-3-2(d), particulate from the:

General Fabrication Booth;
Fifth Wheel Booth;
Reefer Undercoat Booth;
Reefer Bogie Booth;
Paint Spray Booth;
Dry Freight Bogie Booth;
Dry Freight Undercoat Booth;
Large Order Line (LOL) Bogie Booth; and
Large Order Line (LOL) Undercoat Booth.

shall be controlled by a dry particulate filters and the Permittee shall operate the control device in accordance with manufacturer's specifications.

D.1.6 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

Compliance Determination Requirements

D.1.7 Volatile Organic Compounds (VOC) [326 IAC 8-1-2]

Compliance with the VOC content limit in condition D.1.2 shall be determined pursuant to 326 IAC 8-1-2(a)(7), using a volume weighted average of coatings on a daily basis. This volume weighted average shall be determined by the following equation:

$$A = [\sum (c) \times U) / \sum U]$$

Where: A is the volume weighted average in pounds VOC per gallon less water as applied;
C is the VOC content of the coating in pounds VOC per gallon less water as applied; and
U is the usage rate of the coating in gallons per day.

D.1.8 Volatile Organic Compounds (VOC) and Hazardous Air Pollutants (HAPs)

Compliance with the VOC and HAP usage limitations contained in Conditions D.1.1 and D.1.4 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.

D.1.9 Particulate Control – Abrasive Blasting

In order to comply with Condition C.1, the dry filters for particulate control shall be in operation and control emissions from the:

Reefer Undercoat Booth;
Dry Freight Undercoat Booth; and
Large Order Line (LOL) Undercoat Booth.

at all times that the respective abrasive blasters are in operation.

Compliance Monitoring Requirements [326 IAC 2-7-5(1)][326 IAC 2-7-6(1)]

D.1.10 Monitoring

(a) When the paint booths are in operation, 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 1a & b, 2, 3, 4, 5a & b, 6, 7, 8, and 9 while the respective booth(s) 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 stacks 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.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.11 Record Keeping Requirements

(a) To document compliance with Condition D.1.1, the Permittee shall maintain records in accordance with (1) through (5) below for the:

General Fabrication Booth;
Fifth Wheel Booth;
Reefer Undercoat Booth;
Reefer Bogie Booth;
Paint Spray Booth;
Dry Freight Bogie Booth; and
Dry Freight Undercoat Booth.

Records maintained for (1) through (5) shall be taken monthly and shall be complete and sufficient to establish compliance for these booths with the VOC usage limit and/or the VOC emission limit established in Condition D.1.1. 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 in each booth 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 in each booth for each month;

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

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

(b) To document compliance with Conditions D.1.1 and D.1.2, the Permittee shall maintain records in accordance with (1) through (6) below for the:

Large Order Line (LOL) Bogie Booth; and
Large Order Line (LOL) Undercoat Booth.

Records maintained for (1) through (6) shall be taken daily or monthly, as prescribed, and shall be complete and sufficient to establish compliance with the VOC content limits, the VOC usage limit and/or the VOC emission limit established in Conditions D.1.1 and D.1.2 for these booths. 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 less water.

(2) The amount of coating material and solvent used less water in each booth on a daily 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 volume weighted VOC content of the coatings used in each booth for each day;

(4) The cleanup solvent usage in each booth for each month;

(5) The combined total VOC usage for each month; and

(6) The combined weight of VOCs emitted for each compliance period.

(c) To document compliance with Condition D.1.4, 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 HAP usage limits and/or the HAP emission limits established in Condition D.1.4. Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.

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

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

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

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

(3) The cleanup solvent usage for each month;

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

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

(d) To document compliance with Condition D.1.10, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections.

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

D.1.12 Reporting Requirements

A quarterly summary of the information to document compliance with 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 the “responsible official” as defined by 326 IAC 2-7-1(34).

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

(j) Welding Operations - The following welding activities are part of the trailer manufacturing processes:

(a) fifteen (15) oxy-acetylene stick welders
(b) two (2) submerged arc welding (SAW) units
(c) one hundred sixty-two (162) gas metal arc welding (GMAW) units

(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 2-7-5(1)]

D.2.1 Particulate [326 IAC 6-3-2]

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

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

SECTION D.3 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

(k) One (1) shotblaster with a maximum throughput capacity of 2177 pounds of steel parts per hour and a fabric filter for particulate matter control exhausting inside the plant building

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

Emission Limitations and Standards [326 IAC 2-7-5(1)]

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

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the shotblaster shall not exceed 4.34 pounds per hour when operating at a process weight rate of 2177 pounds per hour.

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

Interpolation of the data for the process weight rate up to 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.3.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

Compliance Determination Requirements

D.3.3 Particulate Control

To comply with condition D.3.1, the fabric filter for particulate control shall be in operation and control emissions from the shotblaster at all times that the shotblaster is in operation.

SECTION D.4 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

One (1) Paint bake off oven equipped with natural gas fired primary and secondary burners rated at 0.625 million British thermal units per hour, each, with a maximum throughput capacity of 50 pounds of paint per hour and a 0.625 million British thermal units per hour natural gas fired thermal oxidizer for control.

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

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.4.1 Incinerators [326 IAC 4-2]

Pursuant to 326 IAC 4-2-2, the paint bake off oven shall:

(1) consist of primary and secondary chambers or the equivalent;
(2) be equipped with a primary burner unless burning wood products;
(3) comply with 326 IAC 5-1 and 326 IAC 2;
(4) be maintained properly as specified by the manufacturer and approved by the commissioner;
(5) be operated according to the manufacturer's recommendations and only burn waste approved by the commissioner;
(6) comply with other state and/or local rules or ordinances regarding installation and operation of incinerators;
(7) be operated so that emissions of hazardous material including, but not limited to, viable pathogenic bacteria, dangerous chemicals or gasses, or noxious odors are prevented;
(8) not emit particulate matter in excess of five-tenths (0.5) pounds of particulate matter per one thousand (1,000) pounds of dry exhaust gas at standard conditions corrected to fifty percent (50%) excess air; and
(9) not create a nuisance or a fire hazard.

If any of the above result, the burning shall be terminated immediately.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
PART 70 OPERATING PERMIT
CERTIFICATION

Source Name: Great Dane Trailers
Source Address: 2664 U.S. Highway 40 East, Brazil, Indiana 47834
Mailing Address: 2664 U.S. Highway 40 East, Brazil, IN 47834
Part 70 Permit No.: T021-26419-00008

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:
Phone:
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

PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT

Source Name: Great Dane Trailers
Source Address: 2664 U.S. Highway 40 East, Brazil, Indiana 47834
Mailing Address: 2664 U.S. Highway 40 East, Brazil, IN 47834
Part 70 Permit No.: T021-26419-00008

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
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

Part 70 Quarterly Report

Source Name:	Great Dane Trailers
Source Address:	2664 U.S. Highway 40 East, Brazil, Indiana 47834
Mailing Address:	2664 U.S. Highway 40 East, Brazil, IN 47834
Part 70 Permit No.:	T021-26419-00008
Facility:	General Fabrication, Fifth Wheel, Reefer Undercoat, Reefer Bogie, Paint Spray, Dry Freight Bogie, Dry Freight Undercoat, Large Order Line (LOL) Bogie, and Large Order Line (LOL) Undercoat
Parameter:	Volatile Organic Compounds (VOC)
Limit:	combined shall use less than 249 tons of VOC, including coatings, dilution solvents, and cleaning solvents, per twelve (12) consecutive month period

QUARTER : YEAR:

Month	Column 1	Column 2	Column 1 + Column 2
	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

Part 70 Quarterly Report

Source Name:	Great Dane Trailers
Source Address:	2664 U.S. Highway 40 East, Brazil, Indiana 47834
Mailing Address:	2664 U.S. Highway 40 East, Brazil, IN 47834
Part 70 Permit No.:	T021-26419-00008
Facility:	General Fabrication, Fifth Wheel, Reefer Undercoat, Reefer Bogie, Paint Spray, Dry Freight Bogie, Dry Freight Undercoat, Large Order Line (LOL) Bogie, and Large Order Line (LOL) Undercoat
Parameter:	Hazardous Air Pollutants (HAPs)
Limit:	combined shall use less than 24.9 tons of HAPs, including coatings, dilution solvents, and cleaning solvents, per twelve (12) consecutive month period

QUARTER : YEAR:

Month	Column 1	Column 2	Column 1 + Column 2
	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
PART 70 OPERATING PERMIT
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Great Dane Trailers
Source Address: 2664 U.S. Highway 40 East, Brazil, Indiana 47834
Mailing Address: 2664 U.S. Highway 40 East, Brazil, IN 47834
Part 70 Permit No.: T021-26419-00008

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 "No deviations occurred this reporting period".

☐ NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

☐ THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

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

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

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

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 (TSD)
for a Part 70 Operating Permit Renewal

Source Description and Location

Source Name:	**Great Dane Trailers**
Source Location:	**2664 East US Highway 40, Brazil, IN 47834**
County:	**Clay**
SIC Code:	**3715**
Permit Renewal No.:	**T021-26419-00008**
Permit Reviewer:	**Bruce Farrar**

Public Notice Information

On November 25, 2008, the Office of Air Quality (OAQ) had a notice published in the Brazil Times in Brazil, Indiana, stating that the Great Dane Trailers had applied for a renewal to their Part 70 Operating Permit issued on February 26, 2004. The notice also stated that OAQ proposed to issue a permit for this operation 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 Received

On November 24, 2008, OAQ received comments from Mr. Tim Pittman of Great Dane Trailers. The comments are summarized in the subsequent pages, with IDEM's corresponding responses.

The IDEM does not amend the Technical Support Document (TSD). The TSD is maintained to document the original review. This addendum to the TSD is used to document responses to comments and changes made from the time the permit was drafted until a final decision is made.

The summary of the comments and IDEM, OAQ responses, including changes to the permit (language deleted is shown in ~~strikeout~~ and language added is shown in **bold**) are as follows:

Comment 1:

The Technical Support Document on page 12 of 13 does not reflect the change in wording as modified in condition D.1.10

IDEM Response 1:

The Technical Support Document has been modified to reflect condition D.1.10 as follows:

Compliance Determination and Monitoring Requirements

***

All of the paint booths at the source have applicable compliance monitoring conditions as specified below:

(a) **When the paint booths are in operation,** ~~D~~daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the surface coating booth stack(s) **1a & b, 2, 3, 4, 5a & b, 6, 7, 8, and 9,** while the respective booth(s) are in operation. ~~The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports,~~ **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 stacks and the presence of overspray on the rooftops and the nearby ground. ~~The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step.~~ **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 - ~~Compliance Response Plan - Preparation, Implementation, Records, and Reports,~~ **Response to Excursions or Exceedances,** shall be considered a deviation from this permit.

(c) ***

(d) ***

(e) ***

(f) ***

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Part 70 Operating Permit Renewal

Source Background and Description

Source Name:	**Great Dane Trailers**
Source Location:	**2664 East US Highway 40, Brazil, IN 47834**
County:	**Clay**
SIC Code:	**3715**
Permit Renewal No.:	**T021-26419-00008**
Permit Reviewer:	**Bruce Farrar**

The Office of Air Quality (OAQ) has reviewed the operating permit renewal application from Great Dane Trailers relating to the operation of a trailer manufacturing facility.

History

On April 15, 2008, Great Dane Trailers submitted an application to the OAQ requesting to renew its operating permit.

Source Definition

This freight trailer manufacturing company consists of two (2) plants:

(a) Plant 1, the Main Plant, is located at 2664 U.S. Highway 40 East, Brazil, Indiana; and

(b) Plant 2, the Thermacube/Duratemp Plant, is also located on U.S. Highway 40 East, Brazil, Indiana.

Since the two (2) plants are located on contiguous properties, belong to the same industrial grouping, and operate under common control of the same entity, they will be considered one (1) source, effective from the date of issuance of this Part 70 permit.

Permitted Emission Units and Pollution Control Equipment

(a) General Fabrication Booth - One (1) paint booth with two (2) compartments equipped with airless and air assisted airless spray guns capable of a maximum coating delivery rate of 16.25 gallons per hour used to paint metal trailer frame parts. This booth was originally constructed in 1974 and its two (2) compartments have dry filters for particulate overspray control exhausting through two (2) stacks identified as Stacks 1a and 1b.

(b) Fifth Wheel Booth - One (1) paint booth equipped with airless spray guns capable of a maximum coating delivery rate of 4.75 gallons per hour used to paint fifth wheel assemblies. This booth was originally constructed in 1974 and has dry filters for particulate overspray control exhausting through Stack 2.

(c) Reefer Undercoat Booth - One (1) paint booth equipped with airless spray guns capable of a maximum coating delivery rate of 7.25 gallons per hour used to paint the underbody of refrigerator trailers. For trailers with stainless steel underbody parts, the booth is used for abrasive blasting rather than painting with a nominal blast media usage of 20 lb/hr. This booth was originally constructed in 1978 and has dry filters for particulate overspray control exhausting through Stack 3.

(d) Reefer Bogie Booth - One (1) paint booth equipped with airless spray guns capable of a maximum coating delivery rate of 3.75 gallons per hour used to paint undercarriages for the two (2) refrigerator trailer lines. This booth was originally constructed in 1978 and has dry filters for particulate overspray control exhausting through Stack 4. The Reefer Bogie Booth is also used for Reefer Bogie Touchup operations.

(e) Paint Spray Booth - One (1) paint booth equipped with airless spray guns capable of a maximum coating delivery rate of 1.75 gallons per hour used for specialty coating of trailers. This booth was originally constructed in 1978 and has dry filters for particulate overspray control exhausting through two (2) stacks identified as Stacks 5a and 5b.

(f) Dry Freight Bogie Line Booth - One (1) paint booth equipped with airless spray guns capable of a maximum coating delivery rate of 4.00 gallons per hour used to paint undercarriages for the two (2) dry freight trailer lines. This booth was originally constructed in 1974 and has dry filters for particulate overspray control exhausting through Stack 6.

(g) Dry Freight Undercoat Booth - One (1) paint booth equipped with airless spray guns capable of a maximum coating delivery rate of 20.5 gallons per hour used to paint the underbody of dry freight trailers. For trailers with stainless steel underbody parts, the booth is used for abrasive blasting rather than painting with a nominal blast media usage of 40 lb/hr. This booth was originally constructed in 1974 and has dry filters for particulate overspray control exhausting through Stack 7. The Dry Freight Undercoat Booth is also used for Dry Freight Stall activities which consist of final detailing and/or touch-up of the trailers.

(h) LOL Bogie Booth - One (1) paint booth equipped with airless spray guns capable of a maximum coating delivery rate of 3.50 gallons per hour used to paint the undercarriages for the large order line trailers. This booth was originally constructed in 1984 and has dry filters for particulate overspray control exhausting through Stack 8.

(i) LOL Undercoat Booth - One (1) paint booth equipped with airless spray guns capable of a maximum coating delivery rate of 12.0 gallons per hour used to paint the underbody of large order line trailers. For trailers with stainless steel underbody parts, the booth is used for abrasive blasting rather than painting with a nominal blast media usage of 20 lb/hr. This booth was originally constructed in 1984 and has dry filters for particulate overspray control exhausting through Stack 9.

(j) Welding Operations - The following welding activities are part of the trailer manufacturing processes:

(1) Twenty-two (22) oxy-acetylene stick welders;

(2) two (2) submerged arc welding (SAW) units; and

(3) one hundred sixty-two (162) gas metal arc welding (GMAW) units.

(k) One (1) shotblaster with a maximum throughput capacity of 2177 pounds of steel parts per hour and a fabric filter for particulate matter control exhausting inside the plant building.

(l) One (1) intake air heater associated with the MPL Undercoat/Bogie Booth having a maximum capacity to combust natural gas, or LPG as a backup fuel, of 21.56 million British thermal unit (MMBtu) per hour.

Emission Units and Pollution Control Equipment Removed From the Source

(a) MPL Undercoat/Bogie Booth - One (1) paint booth equipped with airless spray guns capable of a maximum coating delivery rate of 8.25 gallons per hour used to paint the underbody and associated components, sometimes including undercarriages, of the trailers assembled on the multipurpose line. For trailers with stainless steel underbody parts, the booth is used for abrasive blasting rather than painting with a nominal blast media usage of 20 lb/hr. This booth was originally constructed in 1993, modified in 1997, and has dry filters for particulate overspray control exhausting through two (2) stacks identified as Stacks 10a and 10b. The 21.6 MMBtu heater is still located in the building, but not being used.

(b) Duratemp Spray Booth - One (1) paint booth equipped with airless spray guns capable of a maximum coating delivery rate of 4.00 gallons per hour used to paint extrusions and components of Duratemp floor panels. This booth was originally constructed in 1994 and has dry filters for particulate overspray control exhausting through Stack 11.

(c) One (1) Hammermill with a maximum capacity of 2500 pounds of scrap wood per hour.

Insignificant Activities

(a) The following equipment related to manufacturing activities not resulting in the emission of HAP's: brazing equipment, cutting torches, soldering equipment, welding equipment. [326 IAC 6-3-2]

(b) 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 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations. [326 IAC 6-3-2]

(c) The following activities whose potential uncontrolled emissions meet the exemption levels specified in 326 IAC 2-1.1-3(d)(1):

(1) One (1) Paint bake off oven equipped with natural gas fired primary and secondary burners rated at 0.625 million British thermal units per hour, each, with a maximum throughput capacity of 50 pounds of paint per hour and a 0.625 million British thermal units per hour natural gas fired thermal oxidizer for control. [326 IAC 4-2]

Existing Approvals

Since the issuance of the Part 70 Operating Permit (T021-7731-00008) on February 26, 2004, the source has constructed or has been operating under the following approvals as well:

(a) Administrative Amendment No. 021-20263-00008 issued on July 20, 2005; and

(b) Significant Permit Modification No. 021-22928-00008 issued on October 18, 2006.

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.

Emission Calculations

The calculations submitted by the applicant have been verified and found to be accurate and correct. These calculations are provided in Appendix A of this document.

County Attainment Status

The source is located in Clay 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.	

(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. Clay 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
Clay 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 15, 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
Clay County has been classified as attainment or unclassifiable in Indiana for SO_2, CO NO_2, and Lead. 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	174.79
PM_{10}	175.29
SO_2	0.10
VOC	607.3
CO	8.10
NO_x	9.70

HAPs	tons/year
Xylene	43.42
Toluene	18.99
1,2,4- Triemthyl benzene	14.9
Ethylbenzene	4.28
Manganese Alkanoate	1.61
Manganese	1.27
Total	**87.58**

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

The Permittee has agreed that they are major for Part 70 Permits 326 IAC 2-7 for VOC and PM/PM_{10}, and Hazardous Air Pollutants 326 IAC 20.

(a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of VOC and PM/PM_{10} is equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

(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. Therefore, the source is subject to the provisions of 326 IAC 2-7.

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

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 2005 OAQ emission data.

Pollutant	Actual Emissions (tons/year)
PM	0.67
PM_{10}	0.67
SO_2	--
VOC	84.08
CO	--
NO_x	--
HAP (specify)	--

Part 70 Permit Conditions

This source is subject to the requirements of 326 IAC 2-7, pursuant to which the source has to meet the following:

(a) Emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of issuance of Part 70 permits.

(b) Monitoring and related record keeping requirements which assume that all reasonable information is provided to evaluate continuous compliance with the applicable requirements.

Potential to Emit After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the emission units. Any control equipment is considered federally enforceable only after issuance of this Part 70 permit renewal, and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

	Potential to Emit (tons/year)						
Process/ Emission Unit	**PM**	**PM_{10}**	**SO_2**	**VOC**	**CO**	**NO_X**	**HAP**
01 General Fabrication	44.83	44.83	---	180.68	---	---	22.12 (Xylene) 41.79 (total)
02 Fifth Wheel	36.77	36.77	---	130.63	---	---	19.5 (Xylene) 33.96 (total)
03 Reefer Undercoat	13.89	13.89	---	49.82	---	---	1.48 (Toluene) 2.64 (total)
04 Reefer Bogie	8.22	8.22	---	25.31	---	---	0.28 (Triemthyl benzene) 0.54 (total)
04 Reefer Bogie Touch-up	0.23	0.23	---	0.15	---	---	0.02 (Xylene) 0.03 (total)
05 Paint Spray PSB	0.49	0.49	---	8.07	---	---	2.38 (Toluene) 3.42 (total)
06 Bogie Line	11.03	11.03	---	37.55	---	---	0.43 (1,2,4-Triemthyl benzene) 0.83 (total)

	Potential to Emit (tons/year)						
Process/ Emission Unit	**PM**	**PM_{10}**	**SO_2**	**VOC**	**CO**	**NO_X**	**HAP**
07 Dry Freight Undercoat	30.95	30.95	---	133.64	---	---	1.06 (1,2,4-Triemthyl benzene) 1.74 (total)
07 Dry Freight Stall	0.73	0.73	---	4.69	---	---	0.01 (1,2,4-Triemthyl benzene) 0.02 (total)
08 LOL Bogie	1.29	1.29	---	2.37	---	---	0.32 (Xylene) 0.40 (total)
09 LOL Under Coat	11.4	11.4	---	34.51	---	---	0.48 (1,2,4-Triemthyl benzene) 0.76 (total)
Welding	9.15	9.15	---	---	---	---	1.27(Manganese and total)
21.6 MMBtu/hr Heater and 0.625MMBtu/hr Bake Off Oven	0.18	0.74	0.06	0.54	7.9	9.73	0.17 (Hexane) 0.18 (total)
Shotblaster	0.21	0.21	---	---	---	---	---
Total	**169.38**	**169.93**	**0.06**	**>250**	**7.9**	**9.73**	**87.58**
Major Source Threshold	**250**	**250**	**250**	**250**	**250**	**250**	

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

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

Federal Rule Applicability

(a) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to existing emission units that involve a pollutant-specific emission unit and meet the following criteria:

(1) has a potential to emit before controls equal to or greater than the major source threshold for the pollutant involved;

(2) is subject to an emission limitation or standard for that pollutant; and

(3) uses a control device, as defined in 40 CFR 64.1, to comply with that emission limitation or standard.

The following table is used to identify the applicability of each of the criteria, under 40 CFR 64.1, to each existing emission unit and specified pollutant subject to CAM:

Emission Unit / Pollutant	Control Device Used	Emission Limitation (Y/N)	Uncontrolled PTE (tons/year)	Controlled PTE (tons/year)	Part 70 Major Source Threshold (tons/year)	CAM Applicable (Y/N)	Large Unit (Y/N)
01 General Fabrication (PM/PM10)	dry filters	Y	44.83	0.04	100	N	N
02 Fifth Wheel (PM/PM10)	dry filters	Y	36.77	0.04	100	N	N
03 Reefer Undercoat (PM/PM10)	dry filters	Y	13.89	0.01	100	N	N
04 Reefer Bogie (PM/PM10)	dry filters	Y	8.22	0.0	100	N	N
04 Reefer Bogie Touch-up (PM/PM10)	dry filters	Y	0.23	0.0	100	N	N
05 Paint Spray PSB (PM/PM10)	dry filters	Y	0.49	0.0	100	N	N
06 Bogie Line (PM/PM10)	dry filters	Y	11.03	0.01	100	N	N
07 Dry Freight Undercoat (PM/PM10)	dry filters	Y	30.95	0.03	100	N	N
07 Dry Freight Stall (PM/PM10)	dry filters	Y	0.73	0.0	100	N	N
08 LOL Bogie (PM/PM10)	dry filters	Y	1.29	0.0	100	N	N
09 LOL Under Coat (PM/PM10)	dry filters	Y	11.4	0.01	100	N	N
Shotblaster (PM/PM10)	Fabric Filter	Y	0.21	0.21	100	N	N

* VOC emissions were not included in CAM caluclations, because there are no VOC emission control devices.

Based on this evaluation, the requirements of 40 CFR Part 64, CAM are not applicable to any of the existing units as part of this Part 70 permit renewal.

(b) The requirements of the New Source Performance Standard for Standards of Performance for Storage Vessels for Petroleum Liquids for which construction, reconstruction, or modification commenced after June 11, 1973, and prior to May 19, 1978, 40 CFR 60, Subpart K, are not included in the permit for the tanks T9-T14. Construction of these units were after June 11, 1973 and prior to May 19, 1978.

(c) The requirements of the New Source Performance Standard for Standards of Performance for Storage Vessels for Petroleum Liquids for which construction, reconstruction, or modification commenced after May 18, 1978, and prior to July 23, 1984, 40 CFR 60, Subpart Kb, are not included in the permit for tanks T1-T8. Construction of these units commenced after July 23, 1984.

(d) This source is subject to the National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products (40 CFR Part 63, Subpart MMMM), which is incorporated by reference as 326 IAC 20-80. The source has opted to limit the usage of any combination of HAPs and any single HAP at the surface coating processes to less than 24 and less than 9 tons per twelve (12) consecutive month period, respectively. Compliance with these limits shall limit sourcewide emissions of any combination of HAPs and any single HAP to less than 25 and less than 10 tons per twelve (12) consecutive month period, respectively. Therefore, the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP), 326 IAC 20, (40 CFR Part 63, Subpart MMMM (Surface Coating of Miscellaneous Metal Parts and Products) do not apply to this source.

(e) The source is not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants for Halogenated Solvent Cleaning , (40 CFR 63 Subpart T), because the conveyorized unit is a phosphate based parts cleaner and halogenated solvents are not used.

(f) The source is not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants for Hazardous Waste Combustors, (40 CFR 63 Subpart EEE), do not apply to the paint burn-off oven since this operation because it is not a hazardous waste combustion process as defined by such rules.

State Rule Applicability - Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration (PSD) Requirements)
In order to render the requirement of 326 IAC 2-2 (PSD) not applicable, the input of VOC, including coatings, dilution solvents, and cleaning solvents to the following operations, General Fabrication Booth, Fifth Wheel Booth, Reefer Undercoat Booth, Reefer Bogie Booth, Paint Spray Booth, Dry Freight Bogie Booth, Dry Freight Undercoat Booth, Large Order Line (LOL) Bogie Booth and Large Order Line (LOL) Undercoat Booth shall not exceed 249 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

Compliance with the above limit, combined with the potential to emit VOC from other emission units at the source, shall limit the VOC from the entire source to less than 250 tons per twelve (12) consecutive month period and render 326 IAC 2-2 not applicable.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAPs)
The operation of facility will emit less than ten (10) tons per year for a single HAP and less than twenty-five (25) tons per year for a combination of HAPs.

326 IAC 2-6 (Emission Reporting)
This source is subject to 326 IAC 2-6 (Emission Reporting) because it is required to have an operating permit under 326 IAC 2-7, Part 70 program. Pursuant to this rule, the Permittee shall submit an emission statement certified pursuant to the requirements of 326 IAC 2-6. In accordance with the compliance schedule specified in 326 IAC 2-6-3, an emission statement must be submitted triennially by July 1 beginning in 2006 and every 3 years/every year after. Therefore, the next emission statement for this source must be submitted by July 1, 2009. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4.

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:

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

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

326 IAC 6-4 (Fugitive Dust Emissions Limitations)
This rule requires the source not generate fugitive dust to the extent that some portion of the material escapes beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located.

326 IAC 8-6 (Organic Solvent Emission Limitations)
The source is not subject to this rule because the source was built prior to the rule applicability date October 7, 1974.

State Rule Applicability - Individual Facilities

326 IAC 4-2 (Incinerators)
Pursuant to 326 IAC 4-2-2, the paint bake off oven shall:

(1) consist of primary and secondary chambers or the equivalent;
(2) be equipped with a primary burner unless burning wood products;
(3) comply with 326 IAC 5-1 and 326 IAC 2;
(4) be maintained properly as specified by the manufacturer and approved by the commissioner;
(5) be operated according to the manufacturer's recommendations and only burn waste approved by the commissioner;
(6) comply with other state and/or local rules or ordinances regarding installation and operation of incinerators;
(7) be operated so that emissions of hazardous material including, but not limited to, viable pathogenic bacteria, dangerous chemicals or gasses, or noxious odors are prevented;
(8) not emit particulate matter in excess of five-tenths (0.5) pounds of particulate matter per one thousand (1,000) pounds of dry exhaust gas at standard conditions corrected to fifty percent (50%) excess air; and
(9) not create a nuisance or a fire hazard.

If any of the above result, the burning shall be terminated immediately.

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes) - Small process operations
Pursuant to 326 IAC 6-3-2(e)(2), the allowable particulate emissions rate 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.

Specifically, particulate emissions from the abrasive blasting operations conducted in the undercoat booths of the Dry Freight, Refer, Large Order and Multi-Purpose lines shall not exceed 0.551 pounds per hour. The dry filters for these booths must be properly maintained and shall be in place and operating at all times that an abrasive blaster is operated.

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

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes) - Shotblaster
Pursuant to 326 IAC 6-3-2, the allowable particulate emission rate from the shotblaster shall not exceed 4.34 pounds per hour when operating at a process weight rate of 2177 pounds per hour.

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

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

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

The fabric filter shall be in operation at all times the shotblaster is in operation in order to comply with this limit.

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes) - Welding Operations
Pursuant to 326 IAC 6-3-2, the particulate matter (PM) emissions from the welding operations shall be limited by the following:

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

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

The insignificant welding operations are exempt from 326 6-3 because the rod usage is less than 625 pounds of rod per day.

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes) - Grinding Operations
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. This condition is covered under C.1 of the Part 70 permit.

326 IAC 8-2-1 through 8-2-8 and 8-2-11
Article 8-2-1 through 8-2-8 and 8-2-11 rules are not applicable to the General Fabrication, Fifth Wheel, Dry Freight Undercoat, Dry Freight Bogie, Reefer Undercoat, Reefer Bogie and Paint Spray Booths because they were constructed prior to January 1, 1980, and are not located in Clark, Floyd, Lake, Marion, Porter, Elkhart or St. Joseph County.

326 IAC 8-2-9 (Miscellaneous Metal Coating)
Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the volatile organic compound (VOC) content of coating delivered to the applicators of the Large Order Line (LOL) and Bogie and Undercoat Booths shall be limited to the following when coating miscellaneous metal:

Coatings	Limit (pounds of VOC/gallon of coating less water delivered to the applicator)
Clear Coat	4.3
Air Dried Coat	3.5

Solvent sprayed from application equipment during cleanup or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

326 IAC 8-3 (Organic Solvent Degreasing Operations)
The requirements of 326 IAC 8-3 do not apply to the conveyorized degreaser/cleaner because it was constructed prior to January 1, 1980 and was not located in Clark, Elkhart Floyd, Lake, Marion, Porter or St. Joseph County.

326 IAC 8-4-3 (Petroleum liquid storage facilities)
The storage tanks at Great Dane Trailers are not subject to the requirements of 326 IAC 8-4-3 (Petroleum liquid storage facilities) because the tanks each have a capacity of less than 39,000 gallons (and, additionally, Tanks T9-T14 were constructed prior to January 1, 1980 and located in Clay County).

Compliance Determination and Monitoring Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with all applicable state and federal rules on a continuous basis. All state and federal rules contain compliance provisions; however, these provisions do not always fulfill the requirement for a continuous demonstration. When this occurs, IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, Compliance Determination Requirements are included in the permit. The Compliance Determination Requirements in Section D of the permit are those conditions that are found directly within state and federal rules and the violation of which serves as grounds for enforcement action.

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

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

All of the paint booths at the source have applicable compliance monitoring conditions as specified below:

(a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the surface coating booth stack(s) while the respective booth(s) are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

(b) Monthly inspections shall be performed of the coating emissions from the stacks and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

(c) Compliance with the VOC content limit in condition D.1.2 shall be determined pursuant to 326 IAC 8-1-2(a)(7), using a volume weighted average of coatings on a daily basis. This volume weighted average shall be determined by the following equation:

$$A = [\sum (c_i) \times U) / \sum U]$$

Where: A is the volume weighted average in pounds VOC per gallon less water as applied; C is the VOC content of the coating in pounds VOC per gallon less water as applied; and U is the usage rate of the coating in gallons per day.

(d) Compliance with the VOC and HAP usage limitations contained in Conditions D.1.1 and D.1.4 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.

(e) In order to comply with Condition C.1, the dry filters for particulate control shall be in operation and control emissions from the:

Reefer Undercoat Booth;
Dry Freight Undercoat Booth; and
Large Order Line (LOL) Undercoat Booth;

at all times that the respective abrasive blasters are in operation.

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

These monitoring conditions are necessary because the filters for the paint booths must operate properly to ensure compliance with 326 IAC 6-3 (Process Operations) and 326 IAC 2-7 (Part 70).

Recommendation

The staff recommends to the Commissioner that the Part 70 Operating Permit Renewal be approved. This recommendation is based on the following facts and conditions:

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

An application for the purposes of this review was received on April 5, 2008. Additional information was received on May 15, 2008 and August 12, 2008.

Conclusion

The operation of this freight trailer manufacturing company shall be subject to the conditions of the attached Part 70 Operating Permit Renewal No. T021-26419-00008.

Appendix A: Emission Calculations

Summary Page

Company Name: Great Dane Trailers
Address City IN Zip: 2664 East US Highway 40, Brazil, IN 47834
TV: T021-26419-00008
Plt ID: 021-00008
Reviewer: Bruce Farrar
Application Rec.: August 11, 2008

Uncontrolled Potential Emissions (tons/year)

Emissions Generating Activity

Pollutant	01 General	02 Fifth	03 Reefer	04 Reefer	04 Reefer	05 Paint	06 Bogie	07 Dry Freight	07 DF	08 LOL	09 LOL	Welding	21.6 heater	Shotblaster	**TOTAL**
	Fabrication	Wheel	Undercoat	Bogie	Bogie Touch-up	Spray Booth	Line	Undercoat	Stall	Bogie	Undercoat		.625 Oven		
PM	44.83	36.77	13.89	8.22	0.23	0.49	11.03	30.95	0.73	1.29	11.40	9.15	0.18	0.21	169.38
PM10	44.83	36.77	13.89	8.22	0.23	0.49	11.03	30.95	0.73	1.29	11.40	9.15	0.74	0.21	169.93
SO2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.06
NOx	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.73	0.00	9.73
VOC	180.68	130.63	49.82	25.31	0.15	8.07	37.55	133.52	4.69	2.37	34.51	0.00	0.54	0.00	607.84
CO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.90	0.00	7.90
total HAPs	41.79	33.96	2.64	0.54	0.03	3.42	0.83	1.74	0.02	0.40	0.76	1.27	0.18	0.00	87.58
worst case single HAP	22.12	19.50	1.48	0.28	0.02	2.38	0.43	1.06	0.01	0.32	0.48	1.27	0.17	0.00	
	Xylene	Xylene	Toluene	Triemthyl benzene	Xylene	Toluene	1,2,4- Triemthyl benzene	1,2,4- Triemthyl benzene	1,2,4- Triemthyl benzene	Xylene	1,2,4- Triemthyl benzene	Manganese	Hexane		

Total emissions based on rated capacity at 8,760 hours/year.

Controlled Potential Emissions (tons/year)

Emissions Generating Activity

Pollutant	01 General	02 Fifth	03 Reefer	04 Reefer	04 Reefer	05 Paint	06 Bogie	07 Dry Freight	07 DF	08 LOL	09 LOL	Welding	21.3 heater	Shotblaster	TOTAL
	Fabrication	Wheel	Undercoat	Bogie	Bogie Touch-up	Spray Booth	Line	Undercoat	Stall	Bogie	Undercoat				
PM	0.04	0.04	0.01	0.01	2.3126E-04	4.9286E-04	0.01	0.03	7.3365E-04	1.2906E-03	0.01	9.15	0.18	0.21	0.15
PM10	0.04	0.04	0.01	0.01	2.3126E-04	4.9286E-04	0.01	0.03	7.3365E-04	1.2906E-03	0.01	9.15	0.74	0.21	0.15
SO2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00
NOx	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.73	0.00	0.00
VOC	180.68	130.63	49.82	25.31	0.15	8.07	37.55	133.52	4.69	2.37	34.51	0.00	0.54	0.00	607.84
CO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.90	0.00	0.00
total HAPs	41.79	33.96	2.64	0.54	0.03	3.42	0.83	1.74	0.02	0.40	0.76	1.27	0.18	0.00	87.58
worst case single HAP	22.12	19.50	1.48	0.28	0.02	2.38	0.43	1.06	0.01	0.32	0.48	1.27	0.17	0.00	
	Xylene	Xylene	Toluene	Triemthyl benzene	Xylene	Toluene	1,2,4- Triemthyl benzene	1,2,4- Triemthyl benzene	1,2,4- Triemthyl benzene	Xylene	1,2,4- Triemthyl benzene	Manganese	Hexane		

Total emissions based on rated capacity at 8,760 hours/year.

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

Company Name: Great Dane Trailers
Address City IN Zip: 2664 East US Highway 40, Brazil, IN 47834
Permit Number: T021-26419-00008
Plt ID: 021-00008
Reviewer: Bruce Farrar
Date: April 22, 2008

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	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
CEC0067 Epoxy Catalyst	7.8	38.17%	0.0%	38.2%	0.0%	56.07%	0.08300	4.250	2.98	2.98	1.05	25.21	4.60	0.75	5.31	90%
EUY0215 Epoxy Primer Base	13.7	26.13%	0.0%	26.1%	0.0%	48.28%	0.59800	4.250	3.58	3.58	9.10	218.35	39.85	11.27	7.41	90%
AAA0850 Alkyd Primer	12.6	25.73%	0.0%	25.7%	0.0%	54.85%	1.88400	4.250	3.24	3.24	25.96	623.00	113.70	32.82	5.91	90%
Nason 481-16 Flush Thinner (1)	6.8	100.00%	0.0%	100.0%	0.0%	0.00%	0.17800	4.250	6.80	6.80	5.14	123.46	22.53	0.00	0.00	90%

State Potential Emissions **Add worst case coating to all solvents** **41.25** **990.03** **180.68** **44.83**
Controlled PM with filter (99.9% efficient) **0.04**
CEC0034 Epoxy Catalyst and EUY0215 Epoxy Primer base are mixed at a 1:1 ratio

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/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)
Controlled Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)*(1-dry filter efficiency)
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 Emission Calculations

01 General Fabrication Booth

Company Name: **Great Dane Trailers**
Address City IN Zip: **2664 E US 40 Brazil, IN 47834**
Permit Number: **T021-26419-00008**
Plt ID: **021-00008**
Permit Reviewer: **Bruce Farrar**
Date: **August 11, 2008**

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % Toluene	Weight % Formaldehyde	Weight % Ethylbenzene	Weight % Cobalt Soap	Xylene Emissions (ton/yr)	Toluene Emissions (ton/yr)	Formaldehyde Emissions (ton/yr)	Ethylbenzene Emissions (ton/yr)	Cobalt Soap Emissions (ton/yr)
AAA0850 Alkyd Primer*	12.6	1.88400	4.25	5.00%			1.00%	0.10%	22.04	0.00	0.00	0.02	0.44
EUY0215 Epoxy Primer Base	13.7	0.59800	4.25	0.05%		0.28%	0.01%		0.08	0.00	0.43	0.00	0.00
481-16 Flush Thinner	6.8	0.17800	4.25		50.70%				0.00	11.39	0.00	0.00	0.00
Total State Potential Emissions									**22.12**	**11.39**	**0.43**	**0.02**	**0.44**

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Manganese Alkanoate	Weight % Cumene	Weight % Naphthalene	Weight % 1,2,4-Triemthyl benzene	Manganese Alkanoate Emissions (ton/yr)	Cumene Emissions (ton/yr)	Naphthatene Emissions (ton/yr)	1,2,4-Triemthyl benzene Emissions (ton/yr)	TOTAL
AAA0850 Alkyd Primer*	12.6	1.88400	4.25	0.18%	0.01%		1.44%	0.79	0.04	0.00	6.35	
EUY0215 Epoxy Primer Base	13.7	0.59800	4.25			0.14%		0.00	0.00	0.21	0.00	
481-16 Flush Thinner	6.8	0.17800	4.25					0.00	0.00	0.00	0.00	
Total State Potential Emissions								**0.79**	**0.04**	**0.21**	**6.35**	**41.79**

METHODOLOGY

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

* Glycol Ethers emissions have been deleted, because Ethylene Glycol Monobutyl Ether Acetate (CAS 112-07-2) is not on HAPs list.

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

Company Name: Great Dane Trailers
Address City IN Zip: 2664 East US Highway 40, Brazil, IN 47834
Permit Number: T021-26419-00008
Plt ID: 021-00008
Reviewer: Bruce Farrar
Date: April 22, 2008

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	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
Dry-Flex YXA 0269	10.8	25.69%	0.0%	25.7%	0.0%	57.29%	0.36300	4.250	2.77	2.77	4.28	102.73	18.75	5.42	4.84	90%
AAA0850 HS Gray Primer	12.6	25.73%	0.0%	25.7%	0.0%	54.85%	1.66700	4.250	3.24	3.24	22.97	551.25	100.60	29.04	5.91	90%
BCG1218-61 Undercoat	10.9	24.00%	0.0%	24.0%	0.0%	70.00%	0.03300	4.250	2.62	2.62	0.37	8.81	1.61	0.51	3.74	90%
Z-Guard 8000 Undercoat	10.9	24.50%	0.0%	24.5%	0.0%	69.38%	0.04700	4.250	2.67	2.67	0.53	12.80	2.34	1.80	3.85	75%
Nason 481-16 Flush Thinner (1)	6.8	100.00%	0.0%	100.0%	0.0%	0.00%	0.05799	4.250	6.80	6.80	1.68	40.22	7.34	0.00	0.00	75%

State Potential Emissions	**Add worst case coating to all solvents**	**29.83**	**715.80**	**130.63**	**36.77**
Controlled PM with filter (99.9% efficient)					**0.04**

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/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)
Controlled Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)*(1-dry filter efficiency)
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 Emission Calculations
02 Fifth Wheel

Company Name: **Great Dane Trailers**
Address City IN Zip: **2664 E US 40 Brazil, IN 47834**
Permit Number: **T021-26419-00008**
Plt ID: **021-00008**
Permit Reviewer: **Bruce Farrar**
Date: **August 11, 2008**

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % Toluene	Weight % Ethylbenzene	Weight % Cobalt Soap	Xylene Emissions (ton/yr)	Toluene Emissions (ton/yr)	Ethylbenzene Emissions (ton/yr)	Cobalt Soap Emissions (ton/yr)
AAA0850 HS Gray Primer	12.6	1.66700	4.25	5.00%		1.00%	0.10%	19.50	0.00	3.90	0.39
Dry-Flex YXA0269	11.2	0.36300	4.25					0.00	0.00	0.00	0.00
BCG-1218-61 Undercoat	10.9	0.03300	4.25					0.00	0.00	0.00	0.00
481-16 Flush Thinner	6.8	0.05799	4.25		50.70%			0.00	3.71	0.00	0.00
State Potential Emissions								**19.50**	**3.71**	**3.90**	**0.39**

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Manganese Alkanoate	Weight % Cumene	Weight % 1,2,4-Triemthyl benzene	Manganese Emissions (ton/yr)	Cumene Emissions (ton/yr)	1,2,4-Triemthyl benzene Emissions (ton/yr)	TOTAL
AAA0850 HS Gray Primer	12.6	1.66700	4.25	0.18%	0.01%	1.44%	0.70	0.04	5.62	
Dry-Flex YXA0269	11.2	0.36300	4.25			0.13%	0.00	0.00	0.10	
BCG-1218-61 Undercoat	10.9	0.03300	4.25				0.00	0.00	0.00	
481-16 Flush Thinner	6.8	0.05799	4.25				0.00	0.00	0.00	
State Potential Emissions							**0.70**	**0.04**	**5.72**	**33.96**

METHODOLOGY

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

* Glycol Ethers emissions have been deleted, because Ethylene Glycol Monobutyl Ether Acetate (CAS 112-07-2) is not on HAPs list.

Appendix A: Emissions Calculations
VOC and Particulate
From Surface Coating Operations
03 Reefer Under Coat

Company Name: Great Dane Trailers
Address City IN Zip: 2664 East US Highway 40, Brazil, IN 47834
Permit Number: T021-26419-00008
Plt ID: 021-00008
Reviewer: Bruce Farrar
Date: April 22, 2008

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	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
AAA0850 HS Primer	12.6	25.73%	0.0%	25.7%	0.0%	54.85%	0.121	1.250	3.24	3.24	0.49	11.77	2.15	0.62	5.91	90%
Valspar Enamel Topcoats	10.7	32.03%	0.0%	32.0%	0.0%	52.55%	0.250	1.250	3.43	3.43	1.07	25.75	4.70	1.00	6.53	90%
CTC 0075Urethane Activator	9.1	16.06%	0.0%	16.1%	0.0%	79.69%	0.008	1.250	1.46	1.46	0.01	0.35	0.06	0.03	1.83	90%
Valspar Urethane Topcoats	11.6	29.88%	0.0%	29.9%	0.0%	52.46%	0.034	1.250	3.47	3.47	0.15	3.54	0.65	0.15	6.61	90%
duPont Imron 2000 Topcoats	15.0	22.40%	0.0%	22.4%	0.0%	56.00%	0.010	1.250	3.36	3.36	0.04	1.00	0.18	0.06	6.00	90%
DryFlex YXA0269 Gray	11.2	24.11%	0.0%	24.1%	0.0%	57.50%	1.838	1.250	2.70	2.70	6.20	148.90	27.17	8.55	4.70	90%
DryFlex YXA0082 Blk	10.8	25.69%	0.0%	25.7%	0.0%	57.29%	0.788	1.250	2.77	2.77	2.73	65.59	11.97	3.46	4.84	90%
duPont Imron 2000 Activator	9.0	25.00%	0.0%	25.0%	0.0%	69.80%	0.003	1.250	2.25	2.25	0.01	0.20	0.04	0.01	3.22	90%
ason 481-16 Flush Thinner (1	6.8	100.00%	0.0%	100.0%	0.0%	0.00%	0.078	1.250	6.80	6.80	0.66	15.91	2.90	0.00	0.00	90%

State Potential Emissions **Add worst case coating to all solvents** **11.38** **273.00** **49.82** **13.89**
Controlled PM with filter (99.9% efficient) **0.01**

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/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)
Controlled Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)*(1-dry filter efficiency)
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 Emission Calculations
03 Reefer Undercoat

Company Name: Great Dane Trailers
Address City IN Zip: 2664 E US 40 Brazil, IN 47834
Permit Number: T021-26419-00008
Plt ID: 021-00008
Permit Reviewer: Bruce Farrar
Date: August 11, 2008

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % Toluene	Weight % Ethylbenzene	Weight % Cobalt Soap	Weight % Manganese Alkanoate	Xylene Emissions (ton/yr)	Toluene Emissions (ton/yr)	Ethylbenzene Emissions (ton/yr)	Cobalt Soap Emissions (ton/yr)	Manganese Alkanoate Emissions (ton/yr)
AAA0850 HS Gray Primer	12.6	0.12100	1.25	5.00%		1.00%	0.10%	0.18%	0.42	0.00	0.08	0.00	0.01
AAMG350 Valspar Enamel Topcoats	9.6	0.25000	1.25	0.05%	0.05%		0.03%	0.12%	0.01	0.01	0.0000E+00	0.00	0.02
Dryflex YXA0082 Black	10.8	0.78800	1.25	0.01%	0.00%	0.01%	0.00%		0.00	0.00	4.6422E-03	0.00	0.00
Dryflex YXA0269 Gray	11.2	1.83800	1.25	0.00%	0.00%				0.00	0.00	0.0000E+00	0.00	0.00
CTCC075.2000 Urethane Activator	9.1	0.00800	1.25	0.19%	0.00%				0.00	0.00	0.0000E+00	0.00	0.00
KAA0013 Valspar Urethane Topcoats	11.0	0.03400	1.25	0.10%	0.04%				0.00	0.00	0.0000E+00	0.00	0.00
481-16 Nason Flush Thinner	6.8	0.07800	1.25		50.70%				0.00	1.47	0.0000E+00	0.00	0.00
194S Dupont Imron 2K activator	9.0	0.00300	1.25						0.00	0.00	0.0000E+00	0.00	0.00
Total State Potential Emissions									**0.43**	**1.48**	**0.09**	**0.00**	**0.03**

Appendix A: Emission Calculations
HAP Emission Calculations
03 Reefer Undercoat (Continue)

Company Name: **Great Dane Trailers**
Address City IN Zip: **2664 E US 40 Brazil, IN 47834**
Permit Number: **T021-26419-00008**
Plt ID: **021-00008**
Permit Reviewer: **Bruce Farrar**
Date: **August 11, 2008**

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Methyl Isobutyl Ketone	Weight % Cumene	Weight % Hexamethylene Diisocyanate	Weight % 1,2,4-Triemthyl benzene	Methyl Isobutyl Ketone Emissions (ton/yr)	Cumene Emissions (ton/yr)	Hexamethylene Diisocyanate Emissions (ton/yr)	1,2,4-Triemthyl benzene Emissions (ton/yr)	
AAA0850 HS Gray Primer	12.6	0.12100	1.25		0.01%		1.44%	0.00	0.0000E+00	0.0000E+00	0.12	
AAMG350 Valspar Enamel Topcoats	9.6	0.25000	1.25	0.29%	0.01%		0.53%	0.04	0.0000E+00	0.0000E+00	0.07	
Dryflex YXA0082 Black	10.8	0.78800	1.25	0.00%	0.00%	0.00%	0.45%	0.00	0.0000E+00	0.0000E+00	0.21	
Dryflex YXA0269 Gray	11.2	1.83800	1.25	0.00%	0.00%	0.00%	0.13%	0.00	0.0000E+00	0.0000E+00	0.15	
CTCC075.2000 Urethane Activator	9.1	0.00800	1.25	0.37%	0.09%	0.19%	1.87%	0.00	0.0000E+00	7.5813E-04	0.01	
KAA0013 Valspar Urethane Topcoats	11.0	0.03400	1.25	0.15%	0.03%		0.96%	0.00	0.0000E+00	0.0000E+00	0.02	
481-16 Nason Flush Thinner	6.8	0.07800	1.25					0.00	0.0000E+00	0.0000E+00	0.00	
194S Dupont Imron 2K activator	9.0	0.00300	1.25			0.20%		0.00	0.0000E+00	2.9499E-04	0.00	**TOTAL**
Total State Potential Emissions								**0.04**	**0.00**	**0.00**	**0.57**	**2.64**

METHODOLOGY
HAPS emission rate (tons/yr) = Density (lb/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs
* Glycol Ethers emissions have been deleted, because Ethylene Glycol Monobutyl Ether Acetate (CAS 112-07-2) is not on HAPs list.

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

Company Name: Great Dane Trailers
Address City IN Zip: 2664 East US Highway 40, Brazil, IN 47834
Permit Number: T021-26419-00008
Plt ID: 021-00008
Reviewer: Bruce Farrar
Date: April 22, 2008

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	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
Dry-Flex YXA 0082	10.8	25.69%	0.0%	25.7%	59.9%	57.29%	0.42700	1.400	6.91	2.77	1.66	39.81	7.26	2.10	4.84	90%
Dry-Flex YXA 0269	11.2	24.11%	0.0%	24.1%	0.0%	57.50%	0.81800	1.400	2.70	2.70	3.09	74.22	13.54	4.26	4.70	90%
Valspar Urethane Topcoats	11.6	29.88%	0.0%	29.9%	0.0%	52.48%	0.01400	1.400	3.47	3.47	0.07	1.63	0.30	0.07	6.60	90%
CTC 0075 TC Activator	9.1	16.06%	0.0%	16.1%	0.0%	79.69%	0.00200	1.400	1.46	1.46	0.00	0.10	0.02	0.01	1.83	90%
AAA0850 HS Gray Primer	12.6	25.73%	0.0%	25.7%	0.0%	54.85%	0.05000	1.400	3.24	3.24	0.23	5.45	0.99	0.29	5.91	90%
Valspar Enamel Topcoats	9.6	35.58%	0.0%	35.6%	0.0%	51.91%	0.04000	1.400	3.42	3.42	0.19	4.59	0.84	0.15	6.58	90%
Dupont Imron 2000 topcoats	15.0	22.40%	0.0%	22.4%	0.0%	56.00%	0.02480	1.400	3.36	3.36	0.12	2.80	0.51	0.18	6.00	90%
Dupont Imron 2000 activators	9.0	25.00%	0.0%	25.0%	0.0%	69.80%	0.00600	1.400	2.25	2.25	0.02	0.45	0.08	0.02	3.22	90%
BCG1218-61 Undercoat	10.9	24.00%	0.0%	24.0%	0.0%	70.00%	0.01300	1.400	2.62	2.62	0.05	1.14	0.21	0.07	3.74	90%
Z-Guard 8000 Undercoat	10.9	24.50%	0.0%	24.5%	0.0%	69.38%	0.09500	1.400	2.67	2.67	0.36	8.52	1.56	0.48	3.85	90%
Acetone Flush Thinner	6.6	0.00%	0.0%	0.0%	0.0%	0.00%	0.14520	1.400	0.00	0.00	0.00	0.00	0.00	0.59	0.00	90%

State Potential Emissions	**Add worst case coating to all solvents**	**5.78**	**138.71**	**25.31**	**8.22**
Controlled PM with filter (99.9% efficient)					**0.01**

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/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)
Controlled Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)*(1-dry filter efficiency)
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 Emission Calculations
04 Reefer Bogie

Company Name: Great Dane Trailers
Address City IN Zip: 2664 East US Highway 40, Brazil, IN 47834
Permit Number: T021-26419-00008
Plt ID: 021-00008
Permit Reviewer: Bruce Farrar
Date: August 12, 2008

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % Toluene	Weight % Ethylbenzene	Weight % Cobalt Soap	Xylene Emissions (ton/yr)	Toluene Emissions (ton/yr)	Ethylbenzene Emissions (ton/yr)	Cobalt Soap Emissions (ton/yr)	TOTAL
AAA0850 HS Gray Primer	12.6	0.05000	1.40	5.00%		1.00%	0.10%	0.19	0.00	0.04	0.00	
Valspar AAMG350 Enamel Topcoats	9.6	0.04000	1.40	0.05%	0.05%		0.03%	1.1810E-03	1.1810E-03	0.0000E+00	7.0861E-04	
Dry Flex YXA0082	10.8	0.42700	1.40	0.01%		0.01%		2.8174E-03	0.0000E+00	2.8174E-03	0.0000E+00	
Dry Flex YXA0269	11.2	0.81800	1.40					0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	
CTCC075.2K Urethane Activator	9.1	0.00200	1.40	0.19%				2.1228E-04	0.0000E+00	0.0000E+00	0.0000E+00	
Valspar Urethane Topcoat KAA0013	11.0	0.01400	1.40	0.10%	0.04%			9.4347E-04	3.7739E-04	0.0000E+00	0.0000E+00	
194S Imron 2K activator	9.0	0.00600	1.40					0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	
Total State Potential Emissions								**0.20**	**0.00**	**0.04**	**0.00**	**0.54**

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Manganese Alkanoate	Weight % Methyl Isobutyl Ketone	Weight % Cumene	Weight % Hexamethylene Diisocyanate	Weight % 1,2,4-Triemthyl benzene	Manganese Alkanoate Emissions (ton/yr)	Methyl Isobutyl Ketone Emissions (ton/yr)	Cumene Emissions (ton/yr)	Hexamethylene Diisocyanate Emissions (ton/yr)	1,2,4-Triemthyl benzene Emissions (ton/yr)
AAA0850 HS Gray Primer	12.6	0.05000	1.40	0.18%		0.01%		1.44%	0.01	0.00	3.8540E-04	0.00E+00	0.06
Valspar AAMG350 Enamel Topcoats	9.6	0.04000	1.40	0.12%	0.29%	0.01%		0.53%	2.8345E-03	0.01	2.3620E-04	0.00E+00	0.01
Dry Flex YXA0082	10.8	0.42700	1.40					0.45%	0.0000E+00	0.00	0.0000E+00	0.00E+00	0.13
Dry Flex YXA0269	11.2	0.81800	1.40					0.13%	0.0000E+00	0.00	0.0000E+00	0.00E+00	0.07
CTCC075.2K Urethane Activator	9.1	0.00200	1.40		0.37%	0.09%	0.19%	1.87%	0.0000E+00	0.00	1.0055E-04	2.12E-04	2.0893E-03
Valspar Urethane Topcoat KAA0013	11.0	0.01400	1.40		0.15%	0.03%		0.96%	0.0000E+00	0.00	2.8304E-04	0.00E+00	0.01
194S Imron 2K activator	9.0	0.00600	1.40				0.20%		0.0000E+00	0.00	0.0000E+00	6.61E-04	0.0000E+00
Total State Potential Emissions									**0.01**	**0.01**	**1.0052E-03**	**8.7306E-04**	**0.28**

METHODOLOGY

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

* Glycol Ethers emissions have been deleted, because Ethylene Glycol Monobutyl Ether Acetate (CAS 112-07-2) is not on HAPs list.

Appendix A: Emissions Calculations
VOC and Particulate
From Surface Coating Operations
04 Reefer Bogie Touch Up

Company Name: **Great Dane Trailers**
Address City IN Zip: **2664 East US Highway 40, Brazil, IN 47834**
Permit Number: **T021-26419-00008**
Plt ID: **021-00008**
Reviewer: **Bruce Farrar**
Date: **April 22, 2008**

Note: Not sure if this area is applicable - area is not used

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	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
Dry-Flex YXA 0269	11.2	24.11%	0.0%	24.1%	0.0%	57.50%	0.00599	1.000	2.70	2.70	0.02	0.39	0.07	0.11	4.70	50%
AAA0850 HS Gray Primer	12.6	25.73%	0.0%	25.7%	0.0%	54.85%	0.00584	1.000	3.24	3.24	0.02	0.45	0.08	0.12	5.91	50%

State Potential Emissions	**Add worst case coating to all solvents**	**0.04**	**0.84**	**0.15**	**0.23**
Controlled PM with filter (99.9% efficient)					**2.3126E-04**

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/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)
Controlled Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)*(1-dry filter efficiency)
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 Emission Calculations
Reefer Boggie Touch up

Company Name: **Great Dane Trailers**
Address City IN Zip: **2664 E US 40 Brazil, IN 47834**
Permit Number: **T021-26419-00008**
Plt ID: **021-00008**
Permit Reviewer: **Bruce Farrar**
Date: **August 11, 2008**

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % Ethylbenzene	Weight % Cobalt Soap	Weight % Manganese Alkanoate	Weight % Cumene	Weight % 1,2,4-Triemthyl benzene	Xylene Emissions (ton/yr)	Ethylbenzene Emissions (ton/yr)	Cobalt Soap Emissions (ton/yr)	Manganese Alkanoate Emissions (ton/yr)	Cumene Emissions (ton/yr)	1,2,4-Triemthyl Benzene Emissions (ton/yr)	
AAA0850 HS Gray Primer	12.6	0.00599	1.00	5.00%	1.00%	0.10%	0.18%	0.01%	1.44%	0.02	3.2979E-03	3.2979E-04	5.9362E-04	3.2979E-05	4.7490E-03	
YXA0269 Dry Flex Gray	11.2	0.00584	1.00						0.13%	0.00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	3.7376E-04	
																TOTAL
State Potential Emissions										**0.02**	**3.2979E-03**	**3.2979E-04**	**5.9362E-04**	**3.2979E-05**	**0.01**	**0.03**

METHODOLOGY

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

* Glycol Ethers emissions have been deleted, because Ethylene Glycol Monobutyl Ether Acetate (CAS 112-07-2) is not on HAPs list.

Appendix A: Emissions Calculations
VOC and Particulate
From Surface Coating Operations
05 Paint Spray Booth

Company Name: Great Dane Trailers
Address City IN Zip: 2664 East US Highway 40, Brazil, IN 47834
Permit Number: T021-26419-00008
Plt ID: 021-00008
Reviewer: Bruce Farrar
Date: April 22, 2008

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	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
KA-2549 Primer A	7.3	81.30%	0.0%	81.3%	0.0%	18.70%	0.16900	0.330	5.93	5.93	0.33	7.94	1.45	0.03	31.74	90%
KA-2549 Primer B	7.4	69.70%	0.0%	69.7%	0.0%	30.30%	0.04200	0.330	5.16	5.16	0.07	1.72	0.31	0.01	17.02	90%
CTC 0075 Urethane Activator	9.1	16.06%	0.0%	16.1%	0.0%	79.69%	0.00700	0.330	1.46	1.46	0.00	0.08	0.01	0.01	1.83	90%
Valspar Urethane Topcoats	11.6	29.88%	0.0%	29.9%	0.0%	52.46%	0.03400	0.330	3.47	3.47	0.04	0.93	0.17	0.04	6.61	90%
Dupont Imron 2000 Ureth Topcoats	15.0	22.40%	0.0%	22.4%	0.0%	56.00%	1.12800	0.000	3.36	3.36	0.00	0.00	0.00	0.00	6.00	90%
Imron 2000 Ureth Activator	9.0	25.00%	0.0%	25.0%	0.0%	69.80%	0.35500	0.330	2.25	2.25	0.26	6.33	1.15	0.35	3.22	90%
Valspar Enamel Topcoats	9.6	35.58%	0.0%	35.6%	0.0%	51.91%	0.05800	0.330	3.42	3.42	0.07	1.57	0.29	0.05	6.58	90%
Nasoff 481-16 flush thinner	6.8	100.00%	0.0%	100.0%	0.0%	0.00%	0.47600	0.330	6.80	6.80	1.07	25.64	4.68	0.00	0.00	90%

State Potential Emissions **Add worst case coating to all solvents** **1.84** **44.20** **8.07** **0.49**
Controlled PM with filter (99.9% efficient) **4.9286E-04**

The CEC 0034 Epoxy primer catalyst and EUY 0215 base are mixed at a 1:1 ration; the KAWX 058 urethane topcoat base and the CTC 0075 catalyst are mixed a 7:1 ratio

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/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)
Controlled Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)*(1-dry filter efficiency)
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 Emission Calculations
05 Paint Spray Booth
Company Name: Great Dane Trailers
Address City IN Zip: 2664 E US 40 Brazil, IN 47834
Permit Number: T021-26419-00008
Plt ID: 021-00008
Permit Reviewer: Bruce Farrar
Date: August 11, 2008

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % Toluene	Weight % Ethylbenzene	Weight % Cobalt Soap	Weight % Manganese Alkanoate	Weight % Methyl Isobutyl Ketone	Xylene Emissions (ton/yr)	Toluene Emissions (ton/yr)	Ethylbenzene Emissions (ton/yr)	Cobalt Soap Emissions (ton/yr)	Manganese Alkanoate Emissions (ton/yr)	Methyl Isobutyl Ketone Emissions (ton/yr)
Valspar Enamel Topcoats	9.6	0.05800	0.33	0.05%	0.05%		0.03%	0.12%	0.29%	4.04E-04	4.0366E-04	0.0000E+00	2.4219E-04	9.6878E-04	2.3412E-03
CTCC075.2000	9.1	0.00700	0.33	0.19%	0.00%				0.37%	1.75E-04	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	3.4104E-04
Nason 481-16 Flush Thinner	6.8	0.47600	0.33		50.70%					0.00E+00	2.37	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Dupont Imron 2K 194S Activator	9.0	0.35500	0.33							0.00E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
KA-2549A	6.7	0.16900	0.33		1.00%					0.00E+00	0.02	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
KA-2549B	7.5	0.16900	0.33			0.10%				0.00E+00	0.00E+00	1.8394E-03	0.0000E+00	0.0000E+00	0.0000E+00
State Potential Emissions										**0.00**	**2.38**	**0.00**	**0.00**	**0.00**	**0.00**

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Cumene	Weight % Hexamethylene Diisocyanate	Weight % Methyl Alcohol	Weight % 1,2,4-Triemthyl benzene	Weight % Zinc Chromate	Weight % N-butyl alcohol	Cumene Emissions (ton/yr)	Hexamethylene Diisocyanate Emissions (ton/yr)	Methyl Alcohol Emissions (ton/yr)	1,2,4-Triemthyl benzene Emissions (ton/yr)	Zinc Chromate Emissions (ton/yr)	N-butyl alcohol Emissions (ton/yr)	TOTAL
Valspar Enamel Topcoats	9.6	0.05800	0.33	0.01%			0.53%			8.0731E-05	0.0000E+00	0.0000E+00	4.2788E-03	0.0000E+00	0.0000E+00	
CTCC075.2000	9.1	0.00700	0.33	0.09%	0.19%		1.87%			8.2956E-05	1.7513E-04	0.0000E+00	1.7236E-03	0.0000E+00	0.0000E+00	
Nason 481-16 Flush Thinner	6.8	0.47600	0.33							0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	
Dupont Imron 2K 194S Activator	9.0	0.35500	0.33		0.20%					0.0000E+00	0.01	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	
KA-2549A	6.7	0.16900	0.33			1.00%			39.00%	0.0000E+00	0.0000E+00	0.02	0.0000E+00	0.0000E+00	0.64	
KA-2549B	7.5	0.16900	0.33			2.00%		7.50%	10.00%	0.0000E+00	0.0000E+00	0.04	0.0000E+00	0.14	0.18	
State Potential Emissions										**0.00**	**0.01**	**0.05**	**0.01**	**0.14**	**0.82**	**3.42**

METHODOLOGY

HAPS emission rate (tons/yr) = Density (lb/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs
* Glycol Ethers emissions have been deleted, because Ethylene Glycol Monobutyl Ether Acetate (CAS 112-07-2) is not on HAPs list.

Appendix A: Emissions Calculations
VOC and Particulate
From Surface Coating Operations
06 DF Bogie Line

Company Name: Great Dane Trailers
Address City IN Zip: 2664 East US Highway 40, Brazil, IN 47834
Permit Number: T021-26419-00008
Plt ID: 021-00008
Reviewer: Bruce Farrar
Date: April 22, 2008

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	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
Dry-Flex YXA 0082	10.8	25.69%	0.0%	25.7%	0.0%	57.29%	0.34000	2.850	2.77	2.77	2.69	64.52	11.78	3.41	4.84	90%
Dry-Flex YXA 0269	11.3	24.11%	0.0%	24.1%	0.0%	57.50%	0.54500	2.850	2.71	2.71	4.21	101.11	18.45	5.81	4.72	90%
Valspar Enamel Topcoats	9.6	35.58%	0.0%	35.6%	0.0%	51.91%	0.03000	2.850	3.42	3.42	0.29	7.01	1.28	0.23	6.58	90%
CTC 0075 TC Activator	9.2	16.05%	0.0%	16.1%	0.0%	79.65%	0.00800	2.850	1.47	1.47	0.03	0.80	0.15	0.08	1.85	90%
AAA-0850 HS Gray Primer	12.6	25.73%	0.0%	25.7%	0.0%	54.85%	0.03400	2.850	3.24	3.24	0.31	7.54	1.38	0.40	5.91	90%
BCG 1400V Undercoat	10.9	24.00%	0.0%	24.0%	0.0%	70.00%	0.03400	2.850	2.62	2.62	0.25	6.08	1.11	0.35	3.74	90%
Z-Guard 8000 Undercoat	10.9	24.50%	0.0%	24.5%	0.0%	69.38%	0.04800	2.850	2.67	2.67	0.37	8.77	1.60	0.49	3.85	90%
Valspar Urethane Topcoats	11.6	29.88%	0.0%	29.9%	0.0%	52.46%	0.01438	2.850	3.47	3.47	0.14	3.41	0.62	0.15	6.61	90%
CorrGuard A	9.1	0.00%	0.0%	0.0%	0.0%	100.00%	0.00000	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	90%
CorrGuard B	8.4	0.00%	0.0%	0.0%	0.0%	100.00%	0.00000	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	90%
Acetone Flush Thinner	6.6	0.00%	0.0%	100.0%	0.0%	0.00%	0.01438	2.850	6.60	6.60	0.27	6.49	1.18	0.12	0.00	90%
State Potential Emissions			**Add worst case coating to all solvents**								**8.57**	**205.74**	**37.55**	**11.03**		
Controlled PM with filter (99.9% efficient)														**0.01**		

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/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)
Controlled Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)*(1-dry filter efficiency)
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 Emission Calculations
06 DF Bogie Line

Company Name: Great Dane Trailers
Address City IN Zip: 2664 E US 40 Brazil, IN 47834
Permit Number: T021-26419-00008
Plt ID: 021-00008
Permit Reviewer: Bruce Farrar
Date: August 11, 2008

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % Toluene	Weight % Ethylbenzene	Weight % Cobalt Soap	Weight % Manganese Alkanoate	Xylene Emissions (ton/yr)	Toluene Emissions (ton/yr)	Ethylbenzene Emissions (ton/yr)	Cobalt Soap Emissions (ton/yr)	Manganese Alkanoate Emissions (ton/yr)
AAA0850 HS Gray Primer	12.6	0.03400	2.85	5.00%		1.00%	0.10%	0.18%	0.27	0.0000E+00	0.05	0.01	0.01
CorrGuard A	9.1	0.00100	2.85						0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Valspar Enamel Topcoats	9.6	0.03000	2.85	0.05%	0.05%		0.03%	0.12%	1.8032E-03	1.8032E-03	0.0000E+00	1.0819E-03	4.3276E-03
Dry-Flex YXA0082	10.8	0.34000	2.85	0.01%	0.00%	0.01%	0.00%	0.00%	4.5668E-03	0.0000E+00	4.5668E-03	0.0000E+00	0.0000E+00
Dry-FlexYXA0269	11.3	0.54500	2.85	0.00%	0.00%	0.00%	0.00%	0.00%	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
CTCC075.2000 Valspar Urethane Activator	9.1	0.00800	2.85	0.19%	0.00%				1.7285E-03	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Valspar Urethane Topcoats	11.6	0.01438	2.85	0.05%	0.02%				1.0393E-03	4.1573E-04	0.0000E+00	0.0000E+00	0.0000E+00
Total State Potential Emissions									**0.28**	**2.2189E-03**	**0.06**	**0.01**	**0.01**

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Methyl Isobutyl Ketone	Weight % Cumene	Weight % Hexamethylene Diisocyanate	Weight % Naphthalene	Weight % 1,2,4-Triemthyl benzene	Methyl Isobutyl Ketone Emissions (ton/yr)	Cumene Emissions (ton/yr)	Hexamethylene Diisocyanate Emissions (ton/yr)	Naphthalene Emissions (ton/yr)	1,2,4-Triemthyl benzene Emissions (ton/yr)	TOTAL
AAA0850 HS Gray Primer	12.6	0.03400	2.85		0.01%			1.44%	0.0000E+00	5.3350E-04	0.0000E+00	0.0000E+00	0.08	
CorrGuard A	9.1	0.00100	2.85			18.00%			0.0000E+00	0.0000E+00	0.02	0.0000E+00	0.0000E+00	
Valspar Enamel Topcoats	9.6	0.03000	2.85	0.29%	0.01%			0.53%	0.01	3.6063E-04	0.0000E+00	0.0000E+00	0.02	
Dry-Flex YXA0082	10.8	0.34000	2.85				0.01%	0.45%	0.0000E+00	0.0000E+00	0.0000E+00	4.5668E-03	0.21	
Dry-FlexYXA0269	11.3	0.54500	2.85					0.13%	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.10	
CTCC075.2000 Valspar Urethane Activator	9.1	0.00800	2.85	0.37%	0.09%	0.19%		1.87%	3.3661E-03	8.1878E-04	1.7285E-03	0.0000E+00	0.02	
Valspar Urethane Topcoats	11.6	0.01438	2.85	0.05%	0.02%			0.53%	1.0393E-03	4.1573E-04	0.0000E+00	0.0000E+00	0.01	
Total State Potential Emissions									**0.01**	**2.1287E-03**	**0.02**	**4.5668E-03**	**0.43**	**0.83**

METHODOLOGY

HAPS emission rate (tons/yr) = Density (lb/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs
* Glycol Ethers emissions have been deleted, because Ethylene Glycol Monobutyl Ether Acetate (CAS 112-07-2) is not on HAPs list.

Appendix A: Emissions Calculations
VOC and Particulate
From Surface Coating Operations
07 Dry Freight Under Coat

Company Name: Great Dane Trailers
Address City IN Zip: 2664 East US Highway 40, Brazil, IN 47834
Permit Number: T021-26419-00008
Plt ID: 021-00008
Reviewer: Bruce Farrar
Date: April 22, 2008

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	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
AAA-0850 HS Primer	12.6	25.73%	0.0%	25.7%	0.0%	54.85%	0.06300	2.000	3.24	3.24	0.41	9.80	1.79	0.52	5.91	90%
BCG-1400V undercoat	10.9	24.00%	0.0%	24.0%	0.0%	70.00%	0.89600	2.000	2.62	2.62	4.69	112.51	20.53	6.50	3.74	90%
CTC-0075 Urethane Activator	9.1	16.06%	0.0%	16.1%	0.0%	79.69%	0.09500	2.000	1.46	1.46	0.28	6.66	1.22	0.64	1.83	90%
Valspar Urethane Topcoats	11.6	29.88%	0.0%	29.9%	0.0%	52.46%	0.63500	2.000	3.47	3.47	4.40	105.65	19.28	4.52	6.61	90%
Dupont Imron 2000 Ureth Topcoats	15.0	22.40%	0.0%	22.4%	0.0%	56.00%	0.00800	2.000	3.36	3.36	0.05	1.29	0.24	0.08	6.00	90%
Dry-Flex YXA-00082	10.8	25.69%	0.0%	25.7%	0.0%	57.29%	0.54600	2.000	2.77	2.77	3.03	72.71	13.27	3.84	4.84	90%
Valspar Enamel Topcoats	9.6	35.58%	0.0%	35.6%	0.0%	51.91%	0.16400	2.000	3.42	3.42	1.12	26.89	4.91	0.89	6.58	90%
Dry-Flex YXA-0269	11.2	24.11%	0.0%	24.1%	0.0%	57.50%	1.32400	2.000	2.70	2.70	7.15	171.61	31.32	9.86	4.70	90%
Dupont Imron 2000 Ureth Activator	9.0	25.00%	0.0%	25.0%	0.0%	69.80%	0.00200	2.000	2.25	2.25	0.01	0.22	0.04	0.01	3.22	90%
Acetone Flush Thinner	6.6	0.00%	0.0%	100.0%	0.0%	0.00%	0.70800	2.000	6.60	6.60	9.35	224.29	40.93	4.09	0.00	90%

State Potential Emissions **Add worst case coating to all solvents** **30.48** **731.64** **133.52** **30.95**
Controlled PM with filter (99.9% efficient) **0.03**

The KAWX 058 topcoat and CTC 0075 activator are mixed at a 7:1 ratio

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/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)
Controlled Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)*(1-dry filter efficiency)
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 Emission Calculations
07 Dry Freight Undercoat

Company Name: Great Dane Trailers
Address City IN Zip: 2664 E US 40 Brazil, IN 47834
Permit Number: T021-26419-00008
Plt ID: 021-00008
Permit Reviewer: Bruce Farrar
Date: August 11, 2008

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % Toluene	Weight % Ethylbenzene	Weight % Cobalt Soap	Weight % Manganese Alkanoate	Xylene Emissions (ton/yr)	Toluene Emissions (ton/yr)	Ethylbenzene Emissions (ton/yr)	Cobalt Soap Emissions (ton/yr)	Manganese Alkanoate Emissions (ton/yr)
AAA0850 HS Gray Primer	12.6	0.06300	2.00	5.00%		1.00%	0.10%	0.18%	0.35	0.00	0.07	0.01	0.01
Valspar Enamel Topcoats	9.6	0.16400	2.00	0.05%	0.05%		0.03%	0.12%	0.01	0.01	0.0000E+00	4.1505E-03	0.02
Valspar Dry-flex YXA0082	10.8	0.54600	2.00	0.01%		0.01%	0.00%	0.00%	0.01	0.00	0.01	0.0000E+00	0.00
Valspar Dry-Flex YXA0269	11.2	1.32400	2.00						0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
CTCC075.2k Valspar Urethane Activator	9.1	0.09500	2.00	0.19%					0.01	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Valspar Urethane Topcoats	11.6	0.63500	2.00	0.05%	0.02%				0.03	0.01	0.0000E+00	0.0000E+00	0.0000E+00
Dupont Imron 2K urethane activator	9.0	0.00200	2.00						0.00	0.00	0.0000E+00	0.0000E+00	0.0000E+00
Total State Potential Emissions									**0.41**	**0.02**	**0.07**	**0.01**	**0.03**

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Methyl Isobutyl Ketone	Weight % Cumene	Weight % Hexamethylene Diisocyanate	Weight % Naphthalene	Weight % 1,2,4-Triemthyl benzene	Methyl Isobutyl Ketone Emissions (ton/yr)	Cumene Emissions (ton/yr)	Hexamethylene Diisocyanate Emissions (ton/yr)	Naphthalene Emissions (ton/yr)	1,2,4- Triemthyl benzene Emissions (ton/yr)	TOTAL
AAA0850 HS Gray Primer	12.6	0.06300	2.00		0.01%			1.44%	0.0000E+00	6.9371E-04	0.0000E+00	0.0000E+00	0.10	
Valspar Enamel Topcoats	9.6	0.16400	2.00	0.29%	0.01%			0.53%	0.04	1.3835E-03	0.0000E+00	0.0000E+00	0.07	
Valspar Dry-flex YXA0082	10.8	0.54600	2.00	0.00%			0.01%	0.45%	0.0000E+00	0.0000E+00	0.0000E+00	0.01	0.23	
Valspar Dry-Flex YXA0269	11.2	1.32400	2.00	0.00%				0.13%	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.17	
CTCC075.2k Valspar Urethane Activator	9.1	0.09500	2.00	0.37%	0.09%	0.19%		1.87%	0.03	0.01	0.01	0.0000E+00	0.14	
Valspar Urethane Topcoats	11.6	0.63500	2.00	0.05%	0.02%			0.53%	0.03	0.01	0.0000E+00	0.0000E+00	0.34	
Dupont Imron 2K urethane activator	9.0	0.00200	2.00			0.20%			0.0000E+00	0.0000E+00	3.1466E-04	0.0000E+00	0.0000E+00	
Total State Potential Emissions									**0.10**	**0.02**	**0.01**	**0.01**	**1.06**	**1.74**

METHODOLOGY
HAPS emission rate (tons/yr) = Density (lb/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs
* Glycol Ethers emissions have been deleted, because Ethylene Glycol Monobutyl Ether Acetate (CAS 112-07-2) is not on HAPs list.

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

Company Name: **Great Dane Trailers**
Address City IN Zip: **2664 East US Highway 40, Brazil, IN 47834**
Permit Number: **T021-26419-00008**
Plt ID: **021-00008**
Reviewer: **Bruce Farrar**
Date: **April 22, 2008**

Note: Not sure if this is needed or its purpose

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	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
AAA-0850 HS Primer	12.6	25.73%	0.0%	25.7%	0.0%	54.85%	0.00058	2.000	3.24	3.24	0.00	0.09	0.02	0.01	5.91	75%
Dry-Flex YXA-0082	10.8	25.69%	0.0%	25.7%	0.0%	57.29%	0.00476	2.000	2.77	2.77	0.03	0.63	0.12	0.08	4.84	75%
Dry-Flex YXA-0269	11.2	24.11%	0.0%	24.1%	0.0%	57.50%	0.00180	2.000	2.70	2.70	0.01	0.23	0.04	0.03	4.70	75%
Valspar Urethane Topcoats	11.6	29.88%	0.0%	29.9%	0.0%	52.46%	0.00766	2.000	3.47	3.47	0.05	1.27	0.23	0.14	6.61	75%
Valspar Ureth Activator	9.1	16.06%	0.0%	16.1%	0.0%	79.69%	0.00108	2.000	1.46	1.46	0.00	0.08	0.01	0.02	1.83	75%
Valspar Enamel Topcoats	9.6	35.58%	0.0%	35.6%	0.0%	51.91%	0.00222	2.000	3.42	3.42	0.02	0.36	0.07	0.03	6.58	75%
Acetone Flush Thinner	6.6	0.00%	0.0%	100.0%	0.0%	0.00%	0.07265	2.000	6.60	6.60	0.96	23.02	4.20	0.42	0.00	90%

State Potential Emissions	**Add worst case coating to all solvents**	**1.07**	**25.69**	**4.69**	**0.73**
Controlled PM with filter (99.9% efficient)					**7.3365E-04**

The KAWX 058 topcoat and CTC 0075 activator are mixed at a 7:1 ratio

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/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)
Controlled Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)*(1-dry filter efficiency)
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 Emission Calculations
07 DF Undercoat Stalls

Company Name: **Great Dane Trailers**
Address City IN Zip: **2664 E US 40 Brazil, IN 47834**
Permit Number: **T021-26419-00008**
Plt ID: **021-00008**
Permit Reviewer: **Bruce Farrar**
Date: **August 11, 2008**

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % Toluene	Weight % Ethylbenzene	Weight % Cobalt Soap	Weight % Manganese Alkanoate	Xylene Emissions (ton/yr)	Toluene Emissions (ton/yr)	Ethylbenzene Emissions (ton/yr)	Cobalt Soap Emissions (ton/yr)	Manganese Alkanoate Emissions (ton/yr)
Acetone Flush Thinner	6.6	0.07265	2.00						0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
AAA0850 HS Gray Primer	12.6	0.00058	2.00	5.00%		1.00%	0.10%	0.18%	3.1933E-03	0.0000E+00	6.3866E-04	6.3866E-05	1.1496E-04
Valspar Enamel Topcoats	9.6	0.00022	2.00	0.05%	0.05%		0.03%	0.12%	9.2795E-06	9.2795E-06	0.0000E+00	0.0000E+00	2.2271E-05
Valspar Dry-flexYXA0083	10.8	0.00476	2.00	0.01%		0.01%		0.00%	4.4867E-05	0.0000E+00	4.4867E-05	4.1698E-10	0.0000E+00
Valspar Dry-Flex YXA0269	11.2	0.00180	2.00			0.00%			0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
CTCC075.2k Valspar Urethane Activator	9.1	0.00108	2.00	0.19%					1.6376E-04	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Valspar Urethane Topcoats	11.6	0.00766	2.00	0.05%	0.02%				3.8852E-04	1.5541E-04	0.0000E+00	0.0000E+00	0.0000E+00
Total State Potential Emissions									**3.7997E-03**	**1.6469E-04**	**6.8352E-04**	**6.3866E-05**	**1.3723E-04**

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Methyl Isobutyl Ketone	Weight % Cumene	Weight % Hexamethylene Diisocyanate	Weight % Naphthalene	Weight % 1,2,4-Triemthyl benzene	Methyl Isobutyl Ketone Emissions (ton/yr)	Cumene Emissions (ton/yr)	Hexamethylene Diisocyanate Emissions (ton/yr)	Naphthalene Emissions (ton/yr)	1,2,4- Triemthyl benzene Emissions (ton/yr)	TOTAL
Acetone Flush Thinner	6.6	0.07265	2.00						0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	
AAA0850 HS Gray Primer	12.6	0.00058	2.00		0.01%			1.44%	0.0000E+00	6.3866E-06	0.0000E+00	0.0000E+00	9.1967E-04	
Valspar Enamel Topcoats	9.6	0.00022	2.00	0.29%	0.01%			0.53%	5.3821E-05	1.8559E-06	0.0000E+00	0.0000E+00	9.8362E-05	
Valspar Dry-flexYXA0083	10.8	0.00476	2.00	0.00%			0.01%	0.45%	0.0000E+00	0.0000E+00	0.0000E+00	4.4867E-05	2.0190E-03	
Valspar Dry-Flex YXA0269	11.2	0.00180	2.00	0.00%				0.13%	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	2.3040E-04	
CTCC075.2k Valspar Urethane Activator	9.1	0.00108	2.00	0.37%	0.09%	0.19%		1.87%	3.1890E-04	7.7569E-05	1.6376E-04	0.0000E+00	1.6117E-03	
Valspar Urethane Topcoats	11.6	0.00766	2.00	0.05%	0.02%			0.53%	3.8852E-04	1.5541E-04	0.0000E+00	0.0000E+00	4.1183E-03	
Total State Potential Emissions									**7.6123E-04**	**2.4122E-04**	**1.6376E-04**	**4.4867E-05**	**8.9974E-03**	**0.02**

METHODOLOGY

HAPS emission rate (tons/yr) = Density (lb/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * Weight % HAP * 8760 hrs/yr *

* Glycol Ethers emissions have been deleted, because Ethylene Glycol Monobutyl Ether Acetate (CAS 112-07-2) is not on HAPs list.

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

Company Name: Great Dane Trailers
Address City IN Zip: 2664 East US Highway 40, Brazil, IN 47834
Permit Number: T021-26419-00008
Plt ID: 021-00008
Reviewer: Bruce Farrar
Date: April 22, 2008

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	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
BCG1400V Undercoat	10.9	24.00%	0.0%	24.0%	0.0%	70.00%	0.06400	1.000	2.62	2.62	0.17	4.02	0.73	0.23	3.74	90%
Dry-Flex YXA-0082	10.8	25.69%	25.7%	0.0%	0.0%	57.29%	0.16701	1.000	0.00	0.00	0.00	0.00	0.00	0.59	0.00	90%
AAA-0850 HS Gray Primer	12.6	25.73%	0.0%	25.7%	0.0%	54.85%	0.11500	1.000	3.24	3.24	0.37	8.95	1.63	0.47	5.91	90%

State Potential Emissions	**Add worst case coating to all solvents**	**0.54**	**12.96**	**2.37**	**1.29**
Controlled PM with filter (99.9% efficient)					**1.2906E-03**

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/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)
Controlled Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)*(1-dry filter efficiency)
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 Emission Calculations
08 LOL Bogie

Company Name: Great Dane Trailers
Address City IN Zip: 2664 E US 40 Brazil, IN 47834
Permit Number: T021-26419-00008
Plt ID: 021-00008
Permit Reviewer: Bruce Farrar
Date: August 11, 2008

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % Ethylbenzene	Weight % Cobalt Soap	Xylene Emissions (ton/yr)	Ethylbenzene Emissions (ton/yr)	Cobalt Soap Emissions (ton/yr)
AAA0850 HS Gray Primer	12.6	0.11500	1.00	5.00%	1.00%	0.10%	0.32	0.06	0.01
Dry Flex YXA0082	10.8	0.16701	1.00	0.01%	0.01%		7.8710E-04	0.00	0.0000E+00
Total State Potential Emissions							**0.32**	**0.06**	**0.01**

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Manganese Alkanoate	Weight % Cumene	Weight % Naphthalene	Weight % 1,2,4-Triemthyl benzene	Manganese Alkanoate Emissions (ton/yr)	Cumene Emissions (ton/yr)	Naphthalene Emissions (ton/yr)	1,2,4-Triemthyl benzene Emissions (ton/yr)	TOTAL
AAA0850 HS Gray Primer	12.6	0.11500	1.00	0.18%	0.01%		1.44%	0.01	6.3315E-04	0.0000E+00	1.3056E-05	
Dry Flex YXA0082	10.8	0.16701	1.00	0.00%	0.00%	0.01%	0.45%	0.0000E+00	0.0000E+00	7.8710E-04	0.0000E+00	
Total State Potential Emissions								**0.01**	**6.3315E-04**	**7.8710E-04**	**1.3056E-05**	**0.40**

METHODOLOGY

HAPS emission rate (tons/yr) = Density (lb/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 ll
* Glycol Ethers emissions have been deleted, because Ethylene Glycol Monobutyl Ether Acetate (CAS 112-07-2) is not on HAPs list.

Appendix A: Emissions Calculations
VOC and Particulate
From Surface Coating Operations
09 LOL Under Coat

Company Name: Great Dane Trailers
Address City IN Zip: 2664 East US Highway 40, Brazil, IN 47834
Permit Number: T021-26419-00008
Plt ID: 021-00008
Reviewer: Bruce Farrar
Date: April 22, 2008

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	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
AAA0850 HS Primer	12.6	25.73%	0.0%	25.7%	0.0%	54.85%	0.04800	1.000	3.24	3.24	0.16	3.73	0.68	0.20	5.91	90%
BCG-1400V Undercoat	10.9	24.00%	0.0%	0.0%	0.0%	70.00%	0.20200	1.000	0.00	0.00	0.00	0.00	0.00	0.73	0.00	90%
CTC 0075 Urethane Activator	9.1	16.06%	0.0%	16.1%	0.0%	79.69%	0.06700	1.000	1.46	1.46	0.10	2.35	0.43	0.22	1.83	90%
Valspar Urethane Topcoat	11.6	29.88%	0.0%	29.9%	0.0%	52.46%	0.42300	1.000	3.47	3.47	1.47	35.19	6.42	1.51	6.61	90%
Dry-Flex YXA 0082	10.8	25.69%	0.0%	25.7%	0.0%	57.29%	0.68000	1.000	2.77	2.77	1.89	45.28	8.26	2.39	4.84	90%
Dry-Flex YXA 0269	11.2	24.11%	0.0%	24.1%	0.0%	57.50%	1.28000	1.000	2.70	2.70	3.46	82.95	15.14	4.77	4.70	90%
Valspar Enamel Topcoats	9.6	35.58%	0.0%	35.6%	0.0%	51.91%	0.21600	1.000	3.42	3.42	0.74	17.71	3.23	0.59	6.58	90%
Imron 2000 Ureth Topcoats	15.0	22.40%	0.0%	22.4%	0.0%	56.00%	0.01900	1.000	3.36	3.36	0.06	1.53	0.28	0.10	6.00	90%
Dupont Imron 2000 Ureth Activator	9.0	25.00%	0.0%	25.0%	0.0%	69.80%	0.00600	1.000	2.25	2.25	0.01	0.32	0.06	0.02	3.22	90%
Acetone Flush thinner	6.6	0.00%	0.0%	0.0%	0.0%	0.00%	0.30416	1.000	0.00	0.00	0.00	0.00	0.00	0.88	0.00	90%

State Potential Emissions	**Add worst case coating to all solvents**	**7.88**	**189.07**	**34.51**	**11.40**
Controlled PM with filter (99.9% efficient)					**0.01**

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/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)
Controlled Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)*(1-dry filter efficiency)
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 Emission Calculations

09 LOL Under Coat

Company Name: Great Dane Trailers
Address City IN Zip: 2664 East US Highway 40, Brazil, IN 47834
Permit Number: T021-26419-00008
Plt ID: 021-00008
Reviewer: Bruce Farrar
Date: August 11, 2008

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % Toluene	Weight % Ethylbenzene	Weight % Cobalt Soap	Weight % Manganese Alkanoate	Xylene Emissions (ton/yr)	Toluene Emissions (ton/yr)	Ethylbenzene Emissions (ton/yr)	Cobalt Soap Emissions (ton/yr)	Manganese Alkanoate Emissions (ton/yr)
AAA0850 HS Gray Primer	12.6	0.04800	1.00	5.00%		1.00%	0.10%	0.18%	0.13	0.0000E+00	0.03	2.6427E-03	4.7569E-03
Valspar Enamel Topcoats	9.6	0.21600	1.00	0.05%	0.05%		0.03%	0.12%	0.00	4.5554E-03	0.0000E+00	2.7332E-03	0.01
Dry-FlexYXA0082	10.8	0.68000	1.00	0.01%		0.01%			0.00	0.0000E+00	3.2048E-03	0.0000E+00	0.0000E+00
Dry-Flex YXA0269	11.2	1.28000	1.00	0.00%					0.00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Valspar Urethane Activator	9.1	0.06700	1.00	0.19%					0.01	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Valspar 2000 Urethane Topcoat	11.6	0.42300	1.00	0.05%	0.02%				0.01	4.2909E-03	0.0000E+00	0.0000E+00	0.0000E+00
Imron 2000 Urethane Activator	9.0	0.06000	1.00						0.00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Total State Potential Emissions									**0.16**	**0.01**	**0.03**	**0.01**	**0.02**

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Methyl Isobutyl Ketone	Weight % Cumene	Weight % Hexamethylene Diisocyanate	Weight % Naphthalene	Weight % 1,2,4-Triemthyl benzene	Methyl Isobutyl Ketone Emissions (ton/yr)	Cumene Emissions (ton/yr)	Hexamethylene Diisocyanate Emissions (ton/yr)	Naphthalene Emissions (ton/yr)	1,2,4-Triemthyl benzene Emissions (ton/yr)	TOTAL
AAA0850 HS Gray Primer	12.6	0.04800	1.00		0.01%			1.44%	0.0000E+00	2.6427E-04	0.0000E+00	0.0000E+00	0.04	
Valspar Enamel Topcoats	9.6	0.21600	1.00	0.29%	0.01%			0.53%	0.03	9.1108E-04	0.0000E+00	0.0000E+00	0.05	
Dry-FlexYXA0082	10.8	0.68000	1.00	0.00%			0.01%	0.45%	0.00	0.0000E+00	0.0000E+00	3.2048E-03	0.14	
Dry-Flex YXA0269	11.2	1.28000	1.00	0.00%				0.13%	0.00	0.0000E+00	0.0000E+00	0.0000E+00	0.08	
Valspar Urethane Activator	9.1	0.06700	1.00	0.37%	0.09%	0.19%		1.87%	0.01	2.4061E-03	0.01	0.0000E+00	0.05	
Valspar 2000 Urethane Topcoat	11.6	0.42300	1.00	0.05%	0.02%			0.53%	0.01	4.2909E-03	0.0000E+00	0.0000E+00	0.11	
Imron 2000 Urethane Activator	9.0	0.06000	1.00			0.20%			0.00	0.0000E+00	4.7199E-03	0.0000E+00	0.0000E+00	
Total State Potential Emissions									**0.05**	**0.01**	**0.01**	**3.2048E-03**	**0.48**	**0.76**

METHODOLOGY

HAPS emission rate (tons/yr) = Density (lb/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs
* Glycol Ethers emissions have been deleted, because Ethylene Glycol Monobutyl Ether Acetate (CAS 112-07-2) is not on HAPs list.

Appendix A: Emissions Calculations
Welding and Thermal Cutting

Company Name: Great Dane Trailers
Address City IN Zip: 2664 East US Highway 40, Brazil, IN 47834
Permit Number: T021-26419-00008
Plt ID: 021-00008
Reviewer: Bruce Farrar
Date: August 11, 2008

PROCESS	Number of Stations	Max. electrode consumption per station (lbs/hr)	EMISSION FACTORS* (lb pollutant/lb electrode)				EMISSIONS (lbs/hr)				HAPS (lbs/hr)
WELDING			PM = PM10	Mn	Ni	Cr	PM = PM10	Mn	Ni	Cr	
Submerged Arc	2	10	0.036	0.011			0.720	0.220	0.000	0	0.220
Stick (E7018 electrode)	22	1.65	0.0211	0.0009			0.766	0.033	0.000	0	0.033
gas metal arc welding (GMAW) units*	116	1	0.0052	0.00032	0.000001	0.000001	0.603	0.037	0.000	0.000116	0.037
EMISSION TOTALS											
Potential Emissions lbs/hr							2.09				0.29
Potential Emissions lbs/day							50.14				6.96
Potential Emissions tons/year							9.15				1.27

METHODOLOGY
* GMAW welding assumes using E70S electrode type @ one rod per hour per welder
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/year x 1 ton/2,000 lb

Appendix A: Emissions Calculations
Natural Gas Combustion Only
21.6 Heater and .625 Bake Off Oven

Company Name: **Great Dane Trailers**
Address City IN Zip: **2664 East US Highway 40, Brazil, IN 47834**
Permit Number: **T021-26419-00008**
Plt ID: **021-00008**
Reviewer: **Bruce Farrar**
Date: **August 11, 2008**

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
22.2	194.7

	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	0.18	0.74	0.06	9.73	0.54	8.18

*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 27 for HAPs emissions calculations.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
21.6 Heater and .625 Bake Off Oven
HAPs Emissions

Company Name: Great Dane Trailers
Address City IN Zip: 2664 East US Highway 40, Brazil, IN 47834
Permit Number: T021-26419-00008
Plt ID: 021-00008
Reviewer: Bruce Farrar
Date: August 11, 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	2.044E-04	1.168E-04	7.301E-03	1.752E-01	3.310E-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	4.867E-05	1.071E-04	1.363E-04	3.699E-05	2.044E-04

Methodology is the same as page 26.

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: Emission Calculations
Shotblaster

Company Name: Great Dane Trailers
Address City IN Zip: 2664 East US Highway 40
Permit Number: 021-26419-00008
Plt ID: 021-00008
Reviewer: Bruce Farrar
Date: June 6, 2008

Table 1 - Emission Factors for Abrasives

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

Table 2 - Density of Abrasives (lb/ft3)

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

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

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

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

Calculations

Uncontrolled Emissions (E, lb/hr)

EF = emission factor (lb PM/ lb abrasive) From Table 1 =	0.004	
FR = Flow Rate (lb/hr) =	12.000	
w = fraction of time of wet blasting =	0	%
N = number of nozzles =	1	

Uncontrolled Emissions =	**0.05**	**lb/hr**
	0.21	**ton/yr**

METHODOLOGY

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