



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: December 5, 2006

RE: Toyota Industrial Equipment Manufacturing, Inc. / 005-17756-00040

FROM: Nisha Sizemore
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, Room 1049, 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:

- (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 impracticable 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.



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PART 70 OPERATING PERMIT RENEWAL OFFICE OF AIR QUALITY

**Toyota Industrial Equipment Manufacturing, Inc.
5555 Inwood Drive
Columbus, Indiana 47202**

(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. This permit also addresses certain new source review requirements for existing equipment and is intended to fulfill the new source review procedures pursuant to 326 IAC 2-2 and 326 IAC 2-7-10.5, applicable to those conditions.

Operation Permit No.: T 005-17756-00040	
Issued by: Original signed by Nisha Sizemore, Chief Permits Branch Office of Air Quality	Issuance Date: December 5, 2006 Expiration Date: December 5, 2011

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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 industrial lift truck manufacturing source.

Responsible Official:	Senior Vice President of Engineering, Quality & Administration
Source Address:	5555 Inwood Drive, Columbus, IN 47202
Mailing Address:	P.O. Box 2487, Columbus, IN 47202-2487
General Source Phone Number:	(812)342-0060
SIC Code:	3537
County Location:	Bartholomew
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Operating Permit Program Minor Source, under PSD Rules Minor Source, Section 112 of the Clean Air Act

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

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

- (a) One (1) primer coat paint booth, identified as U001, constructed in 1989, equipped with a robotic spray system using air assisted airless, electrostatic spray guns and a horizontal water curtain with a downdraft water-floor followed by a demister as overspray control, exhausting to stacks S001a and S001b, capacity: 30.7 gallons and 327.9 pounds of coatings per hour.
- (b) One (1) top coat paint booth, identified as U002, constructed in 1989, equipped with air-assisted airless, electrostatic spray guns and a horizontal water curtain with a downdraft water-floor followed by a demister as overspray control, exhausting to stacks S002a and S002b, capacity: 30.7 gallons and 327.9 pounds of coatings per hour.
- (d) One (1) touch-up paint booth, identified as U004, constructed in 1989, equipped with air-assisted airless spray guns and dry filters as overspray control, exhausting to stack S004, capacity: 42.1 gallons and 443.8 pounds of coatings per hour.
- (e) One (1) D-line paint booth, identified as U005, constructed in 1996, equipped with air-assisted airless spray guns and dry filters as overspray control, exhausting to stack S005a, capacity: 7.68 gallons and 82.0 pounds of coatings per hour.
- (f) One (1) counter-weight paint line, identified as U013, constructed in 2006, consisting of:
 - (1) One (1) paint booth, identified as U013a, equipped with electrostatic air atomized spray guns and a dry filter as overspray control, exhausting through stack S013b, capacity: 15 gallons of coating per hour.
 - (2) One (1) paint booth, identified as U013b, equipped with electrostatic air atomized spray guns and a dry filter as overspray control, exhausting to stack S013d, capacity:

15 gallons of coating per hour.

- (3) Three (3) infrared ovens, each exhausting to one (1) stack, S013a, S013c and S013e.
- (g) One (1) large parts shot blast cabinet, identified as U009, constructed in 1989, exhausting to a cartridge dust collector (C009) and exiting inside the building, capacity: 132,000 pounds of steel shot per hour.
- (h) One (1) steel shot blast unit, identified as U011, constructed in 1999, exhausting to a cartridge dust collector (C011) and exiting inside the building, capacity: 115,500 pounds of steel shot per hour.
- (i) One (1) steel shot blast unit, identified as U012, constructed in 2004, exhausting to a cartridge dust collector (C012) and exiting inside the building, capacity: 56,500 pounds of steel shot per hour.
- (j) One (1) compressed natural gas (CNG) fueling station for the one (1) time filling of fork lift fuel tanks and the testing of the CNG forklift engines, maximum capacity: one thousand (1,000) forklift fuel tanks per twelve (12) consecutive month period, and heat input capacities no more than 0.521 million British thermal units per hour per engine.

A.3 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) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour. Emission units with a plant-wide total heat input capacity of 149.2 million British thermal units per hour, including two (2) boilers, constructed in 1989, rated at 0.75 million British thermal units per hour, each. [326 IAC 6-2-4]
- (b) Other activities or categories with emissions equal to or less than the insignificant activity thresholds:

One hundred and ninety-four (194) metal inert gas (MIG) welding stations, each operated independently of the others, consisting of one hundred and sixty-seven (167) manual welders with a maximum machine capacity of 36.7 pounds of weld wire per hour, each, twenty-five (25) robotic welders with a maximum capacity of 26.2 pounds of weld wire per hour, each, and two (2) additional welders with a maximum capacity of 15.8 pounds per hour, each. [326 IAC 6-3-2]

A.4 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, 005-17756-00040, 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 13-15-3-3. 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]

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) The "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
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
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 005-17756-00040 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 combined permit, all previous registrations and permits are superseded by this combined new source review and 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
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
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][40 CFR 72]

- (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
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
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
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. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable.

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

Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions shall be controlled according to the plan submitted on March 16, 2006. The plan is included as Attachment A.

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

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted by using ambient air quality modeling pursuant to 326 IAC 1-7-4. The provisions of 326 IAC 1-7-1(3), 326 IAC 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4, and 326 IAC 1-7-5(a), (b), and (d) are not federally enforceable.

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

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
- (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
- (2) If there is a change in the following:
- (A) Asbestos removal or demolition start date;
- (B) Removal or demolition contractor; or
- (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).
- All required notifications shall be submitted to:
- Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251
- 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 Accredited Asbestos Inspector**
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior

to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Accredited Asbestos inspector is not federally enforceable.

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

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

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

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

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

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

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

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

C.11 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. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

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

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

C.13 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(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.14 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 prepared and submitted written emergency reduction plans (ERPs) consistent with safe operating procedures on May 10, 1999.
- (b) 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.15 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.16 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;
 - (3) inspection of the control device, associated capture system, and the process.
- (d) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (e) The Permittee shall maintain the following records:
- (1) monitoring data;
 - (2) monitor performance data, if applicable; and
 - (3) corrective actions taken.

C.17 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5][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 and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ, reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require the certification by the "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.18 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
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 post-marked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

C.19 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.

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

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

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

SECTION D.1 FACILITY OPERATION CONDITIONS

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

- (a) One (1) primer coat paint booth, identified as U001, constructed in 1989, equipped with a robotic spray system using air assisted airless, electrostatic spray guns and a horizontal water curtain with a downdraft water-floor followed by a demister as overspray control, exhausting to stacks S001a and S001b, capacity: 30.7 gallons and 327.9 pounds of coatings per hour.
- (b) One (1) top coat paint booth, identified as U002, constructed in 1989, equipped with air-assisted airless, electrostatic spray guns and a horizontal water curtain with a downdraft water-floor followed by a demister as overspray control, exhausting to stacks S002a and S002b, capacity: 30.7 gallons and 327.9 pounds of coatings per hour.
- (d) One (1) touch-up paint booth, identified as U004, constructed in 1989, equipped with air-assisted airless spray guns and dry filters as overspray control, exhausting to stack S004, capacity: 42.1 gallons and 443.8 pounds of coatings per hour.
- (e) One (1) D-line paint booth, identified as U005, constructed in 1996, equipped with air-assisted airless spray guns and dry filters as overspray control, exhausting to stack S005a, capacity: 7.68 gallons and 82.0 pounds of coatings per hour.
- (f) One (1) counter-weight paint line, identified as U013, constructed in 2006, consisting of:
 - (1) One (1) paint booth, identified as U013a, equipped with electrostatic air atomized spray guns and a dry filter as overspray control, exhausting through stack S013b, capacity: 15 gallons of coating per hour.
 - (2) One (1) paint booth, identified as U013b, equipped with electrostatic air atomized spray guns and a dry filter as overspray control, exhausting to stack S013d, capacity: 15 gallons of coating per hour.
 - (3) Three (3) infrared ovens, each exhausting to one (1) stack, S013a, S013c and S013e.

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

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

D.1.1 Volatile Organic Compound (VOC) [326 IAC 8-2-9]

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

D.1.2 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 five (5) surface coating processes, identified as U001, U002, U004, U005 and U013, 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.1.3 Particulate [326 IAC 6-3-2(d)] [326 IAC 2-2]

- (a) Pursuant to 326 IAC 6-3-2(d), the horizontal water curtains with downdraft water-floors followed by demisters for particulate control shall be operation in accordance with manu-

facturer's specifications and control emissions from the one (1) primer coat paint booth, identified as U001, and one (1) topcoat paint booth, identified as U002, at all times when the paint booths are in operation.

- (b) Pursuant to 326 IAC 6-3-2(d), the dry filters for particulate control shall be operation in accordance with manufacturer's specifications and control emissions from the one (1) touch-up paint booth, identified as U004, one (1) D-Line paint booth, identified as U005, and one (1) counter-weight paint line, identified as U013, at all times when the paint booths are in operation. This will limit the potential to emit PM and PM₁₀ to 11.4 tons per year, each, from the coating operations (U001, U002, U004, U005 and U013).

This condition, in conjunction with Condition D.2.2, will make the source a minor source of PM and PM₁₀ pursuant to 326 IAC 2-2, PSD.

D.1.4 PSD Minor Limit [326 IAC 2-2]

Pursuant to T 005-7545-00040 issued on April 14, 1999, the surface coating facilities at this source (U001, U002, U004, U005, & U013) shall use no more than 245 tons of VOC, total, including coatings, dilution solvents, and cleaning solvents, per twelve (12) consecutive month period, with compliance determined at the end of each month. This usage limit is required to limit the potential to emit of VOC to less than 250 tons per year from the entire source. Compliance with this limit makes this source a minor source of VOC pursuant to 326 IAC 2-2, PSD.

D.1.5 HAPs Minor Limit

- (a) The usage of each individual HAP at the five (5) surface coating processes, identified as U001, U002, U004, U005 and U013, shall not exceed 9.90 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (b) The usage of total HAPs at the five (5) surface coating processes, identified as U001, U002, U004, U005 and U013, shall not exceed 18.0 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

These limits, in conjunction with Conditions D.2.3 and D.3.4, will make the source an area source of HAPs.

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 their control devices.

Compliance Determination Requirements

D.1.7 Volatile Organic Compounds (VOC) [326 IAC 8-1-4] [326 IAC 8-1-2(a)]

Compliance with the VOC content and 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.

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

D.1.8 Monitoring [40 CFR 64]

- (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the dry filters and water curtains. To monitor the performance of the dry filters and water curtains, weekly observations shall be made of the overspray from the touch-up paint booth, primer coat paint booth, top coat paint booth, and counter-weight paint booth stacks while the booth exhausting to that stack is 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.1.9 Record Keeping Requirements

- (a) To document compliance with Conditions D.1.1, D.1.4 and D.1.5, the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC and HAP usage limits and the VOC content limit established in Conditions D.1.1, D.1.4 and D.1.5. Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.
 - (1) The VOC and individual and total HAP content of each coating material and solvent used.
 - (2) The amount of coating material and solvent less water used on a monthly basis.
 - (A) Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.
 - (B) Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents.
 - (3) The cleanup solvent usage for each month;
 - (4) The total VOC, individual HAP, and total HAP usage for each month; and
 - (5) The weight of VOCs, individual HAPs and total HAPs emitted for each compliance period.
- (b) To document compliance with Condition D.1.8, the Permittee shall maintain a log of weekly overspray observations, and daily and monthly inspections.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.10 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.1.4 and D.1.5 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)]: Shot Blasting

- (g) One (1) large parts shot blast cabinet, identified as U009, constructed in 1989, exhausting to a cartridge dust collector (C009) and exiting inside the building, capacity: 132,000 pounds of steel shot per hour.
- (h) One (1) steel shot blast unit, identified as U011, constructed in 1999, exhausting to a cartridge dust collector (C011) and exiting inside the building, capacity: 115,500 pounds of steel shot per hour.
- (i) One (1) steel shot blast unit, identified as U012, constructed in 2004, exhausting to a cartridge dust collector (C012) and exiting inside the building, capacity: 56,500 pounds of steel shot per hour.

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

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

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

- (a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the one (1) large parts shot blast cabinet, identified as U009, shall not exceed 47.2 pounds per hour, when operating at a process weight rate of 132,000 pounds (66.0 tons) per hour.
- (b) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the one (1) steel shot blast unit, identified as U011, shall not exceed 45.9 pounds per hour, when operating at a process weight rate of 115,500 pounds (57.75 tons) per hour.
- (c) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the one (1) steel shot blast unit, identified as U012, shall not exceed 38.5 pounds per hour, when operating at a process weight rate of 56,500 pounds (28.25 tons) per hour.

The pounds per hour limitations in (a) and (b) were 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:

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

The pounds per hour limitation in (c) was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate in excess of 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

D.2.2 PSD Minor Limit [326 IAC 2-2]

- (a) The potential to emit PM from the one (1) large parts shot blast cabinet, identified as U009, shall not exceed 5.28 pounds per hour and the potential to emit PM₁₀ shall not exceed 4.54

pounds per hour.

- (b) The potential to emit PM from the one (1) steel shot blast unit, identified as U011, shall not exceed 4.62 pounds per hour and the potential to emit PM₁₀ shall not exceed 3.97 pounds per hour.
- (c) The potential to emit PM and PM₁₀ from the one (1) steel shot blast unit, identified as U012, shall not exceed 3.4 pounds per hour.

These limitations, in conjunction with Condition D.1.3, will make the source a minor source of PM and PM₁₀ pursuant to 326 IAC 2-2, PSD.

D.2.3 HAPs Minor Limit

- (a) The potential to emit each individual HAP from the one (1) large parts shot blast cabinet, identified as U009, shall not exceed 0.106 pounds per hour and the potential to emit total HAPs shall not exceed 0.212 pounds per hour.
- (b) The potential to emit each individual HAP from the one (1) steel shot blast unit, identified as U011, shall not exceed 0.092 pounds per hour and the potential to emit total HAPs shall not exceed 0.184 pounds per hour.
- (c) The potential to emit each individual HAP from the one (1) steel shot blast unit, identified as U012, shall not exceed 0.005 pounds per hour and the potential to emit total HAPs shall not exceed 0.009 pounds per hour.

These limits, in conjunction with Conditions D.1.5 and D.3.4, will make the source an area source of HAPs.

D.2.4 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 facility and their control devices.

Compliance Determination Requirements

D.2.5 Particulate Control [326 IAC 2-7-6(6)]

- (a) In order to comply with Conditions D.2.1, D.2.2 and D.2.3, the dust collector (C009) must be in operation at all times and control emissions from the one (1) large parts shot blast cabinet, identified as U009, at all times when U009 is in operation.
- (b) In order to comply with Conditions D.2.1, D.2.2 and D.2.3, the dust collector (C011) must be in operation at all times and control emissions from the one (1) steel shot blast unit, identified as U011, at all times when U011 is in operation.
- (c) In order to comply with Conditions D.2.1, D.2.2 and D.2.3, the dust collector (C012) must be in operation at all times and control emissions from the one (1) steel shot blast unit, identified as U012, at all times when U012 is in operation.
- (d) In the event that filter failure is observed in a multi-compartment dust collector, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

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

D.2.6 Visible Emissions Notations

- (a) Visible emission notations of the shot blaster exhausts shall be performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable 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.

D.2.7 Dust Collector Parametric Monitoring [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)] [40 CFR 64]

- (a) The Permittee shall record the pressure drop across the dust collectors used in conjunction with the three (3) shot blast units, identified as U009, U011 and U012, at least once per day when the shot blast unit exhausting to that dust collector is in operation. When for any one reading, the pressure drop across the dust collector is outside the normal range of 1.0 and 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.
- (b) The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.2.8 Broken or Failed Dust Collector Detection

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

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

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

D.2.9 Record Keeping Requirements

- (a) To document compliance with Condition D.2.6, the Permittee shall maintain records of visible emission notations of the dust collector stack exhausts once per day when exhausting to the atmosphere.
- (b) To document compliance with Condition D.2.7, the Permittee shall maintain records once per day of the pressure drop during normal operation when venting to the atmosphere.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.3 FACILITY OPERATION CONDITIONS

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

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour. Emission units with a plant-wide total heat input capacity of 149.2 million British thermal units per hour, including two (2) boilers, constructed in 1989, rated at 0.75 million British thermal units per hour, each. [326 IAC 6-2-4]
- (b) Other activities or categories with emissions equal to or less than the insignificant activity thresholds:
- One hundred and ninety-four (194) metal inert gas (MIG) welding stations, each operated independently of the others, consisting of one hundred and sixty-seven (167) manual welders with a maximum machine capacity of 36.7 pounds of weld wire per hour, each, twenty-five (25) robotic welders with a maximum capacity of 26.2 pounds of weld wire per hour, each, and two (2) additional welders with a maximum capacity of 15.8 pounds per hour, each. [326 IAC 6-3-2]

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

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

D.3.1 Particulate [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4(a) (Particulate Emission Limitations for Sources of Indirect Heating), the PM emissions from the two (2) 0.75 million British thermal units per hour heat input boilers shall be limited to 0.6 pounds per million British thermal units heat input, each.

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

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the welding operations, shall not exceed the limitations calculated by the following:

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

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

or

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

$$E = 55.0 P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

D.3.3 HAPs Minor Limit

The total weld wire and rod usage shall not exceed 20,000,000 pounds per twelve (12) consecutive month period, with compliance determined at the end of each month, the individual HAP emissions shall not exceed 0.000318 pounds per pound of weld wire or rod used and the total HAP emissions shall not exceed 0.000320 pounds per pound of weld wire or rod used.

This limit, in conjunction with Conditions D.1.5 and D.2.3, will make the source an area source of HAPs.

D.3.4 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 the welding operations.

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

D.3.5 Record Keeping Requirements

- (a) To document compliance with Condition D.3.3, the Permittee shall maintain monthly records the amount of weld wire or rod used.

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

D.3.6 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.3.3 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).

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

**PART 70 OPERATING PERMIT
CERTIFICATION**

Source Name: Toyota Industrial Equipment Manufacturing, Inc.
Source Address: 5555 Inwood Drive, Columbus, IN 47202
Mailing Address: P.O. Box 2487, Columbus, IN 47202-2487
Part 70 Permit No.: T 005-17756-00040

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
Indianapolis, Indiana 46204-2251
Phone: 317-233-0178
Fax: 317-233-6568**

**PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT**

Source Name: Toyota Industrial Equipment Manufacturing, Inc.
Source Address: 5555 Inwood Drive, Columbus, IN 47202
Mailing Address: P.O. Box 2487, Columbus, IN 47202-2487
Part 70 Permit No.: T 005-17756-00040

This form consists of 2 pages

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<input type="checkbox"/> This is an emergency as defined in 326 IAC 2-7-1(12) C 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 C The Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-6568), 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

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

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

A certification is not required for this report.

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

Part 70 Quarterly Report

Source Name: Toyota Industrial Equipment Manufacturing, Inc.
Source Address: 5555 Inwood Drive, Columbus, IN 47202
Mailing Address: P.O. Box 2487, Columbus, IN 47202-2487
Part 70 Permit No.: T 005-17756-00040
Facilities: Five (5) Surface Coating Processes (U001, U002, U004, U005, & U013)
Parameter: VOC usage
Limit: 245 tons of VOC, total, including coatings, dilution solvents, and cleaning solvents, per twelve (12) consecutive month period, with compliance determined at the end of each month

YEAR: _____

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

- No deviation occurred in this month.
- Deviation/s occurred in this month.
Deviation has been reported on: _____

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

Attach a signed certification to complete this report.

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

Part 70 Quarterly Report

Source Name: Toyota Industrial Equipment Manufacturing, Inc.
 Source Address: 5555 Inwood Drive, Columbus, IN 47202
 Mailing Address: P.O. Box 2487, Columbus, IN 47202-2487
 Part 70 Permit No.: T 005-17756-00040
 Facilities: Five (5) Surface Coating Processes (U001, U002, U004, U005, & U013)
 Parameter: Individual HAP usage
 Limit: 9.90 tons of each individual HAP, total, including coatings, dilution solvents, and cleaning solvents, per twelve (12) consecutive month period, with compliance determined at the end of each month

YEAR: _____

Month	Individual HAP Usage (tons)	Individual HAP Usage (tons)	Individual HAP Usage (tons)
	This Month	Previous 11 Months	12 Month Total

- No deviation occurred in this month.
- Deviation/s occurred in this month.
 Deviation has been reported on: _____

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

Attach a signed certification to complete this report.

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

Part 70 Quarterly Report

Source Name: Toyota Industrial Equipment Manufacturing, Inc.
Source Address: 5555 Inwood Drive, Columbus, IN 47202
Mailing Address: P.O. Box 2487, Columbus, IN 47202-2487
Part 70 Permit No.: T 005-17756-00040
Facilities: Five (5) Surface Coating Processes (U001, U002, U004, U005, & U013)
Parameter: Total HAP usage
Limit: 18.0 tons of any combination of HAPs, total, including coatings, dilution solvents, and cleaning solvents, per twelve (12) consecutive month period, with compliance determined at the end of each month

YEAR: _____

Month	Total HAPs Usage (tons)	Total HAPs Usage (tons)	Total HAPs Usage (tons)
	This Month	Previous 11 Months	12 Month Total

- No deviation occurred in this month.
- Deviation/s occurred in this month.
Deviation has been reported on: _____

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

Attach a signed certification to complete this report.

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

Part 70 Quarterly Report

Source Name: Toyota Industrial Equipment Manufacturing, Inc.
Source Address: 5555 Inwood Drive, Columbus, IN 47202
Mailing Address: P.O. Box 2487, Columbus, IN 47202-2487
Part 70 Permit No.: T 005-17756-00040
Facilities: Welding Operations
Parameter: Total weld wire and rod usage
Limit: 20,000,000 pounds per twelve (12) consecutive month period, with compliance determined at the end of each month

YEAR: _____

Month	Total weld wire and rod usage (tons)	Total weld wire and rod usage (tons)	Total weld wire and rod usage (tons)
	This Month	Previous 11 Months	12 Month Total

- No deviation occurred in this month.
- Deviation/s occurred in this month.
Deviation has been reported on: _____

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

Attach a signed certification to complete this report.

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

**PART 70 OPERATING PERMIT
 QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: Toyota Industrial Equipment Manufacturing, Inc.
 Source Address: 5555 Inwood Drive, Columbus, IN 47202
 Mailing Address: P.O. Box 2487, Columbus, IN 47202-2487
 Part 70 Permit No.: T 005-17756-00040

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

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

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

Form Completed By: _____

Title/Position: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

**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:	Toyota Industrial Equipment Manufacturing, Inc.
Source Location:	5555 Inwood Drive, Columbus, IN 47202
County:	Bartholomew
SIC Code:	3537
Operation Permit No.:	T 005-7545-00040
Operation Permit Issuance Date:	April 14, 1999
Permit Renewal No.:	T 005-17756-00040
Permit Reviewer:	CarrieAnn Paukowits

The Office of Air Quality (OAQ) has reviewed a Part 70 Operating Permit Renewal application from Toyota Industrial Equipment Manufacturing, Inc. relating to the operation of a stationary industrial lift truck manufacturing source.

This Part 70 operating permit contains provisions intended to satisfy the requirements of the construction permit rules.

Permitted Emission Units and Pollution Control Equipment

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

- (a) One (1) primer coat paint booth, identified as U001, constructed in 1989, equipped with a robotic spray system using air assisted airless, electrostatic spray guns and a horizontal water curtain with a downdraft water-floor followed by a demister as overspray control, exhausting to stacks S001a and S001b, capacity: 30.7 gallons and 327.9 pounds of coatings per hour.
- (b) One (1) top coat paint booth, identified as U002, constructed in 1989, equipped with air-assisted airless, electrostatic spray guns and a horizontal water curtain with a downdraft water-floor followed by a demister as overspray control, exhausting to stacks S002a and S002b, capacity: 30.7 gallons and 327.9 pounds of coatings per hour.
- (d) One (1) touch-up paint booth, identified as U004, constructed in 1989, equipped with air-assisted airless spray guns and dry filters as overspray control, exhausting to stack S004, capacity: 42.1 gallons and 443.8 pounds of coatings per hour.
- (e) One (1) D-line paint booth, identified as U005, constructed in 1996, equipped with air-assisted airless spray guns and dry filters as overspray control, exhausting to stack S005a, capacity: 7.68 gallons and 82.0 pounds of coatings per hour.
- (f) One (1) counter-weight paint line, identified as U013, constructed in 2006, consisting of:
 - (1) One (1) paint booth, identified as U013a, equipped with electrostatic air atomized spray guns and a dry filter as overspray control, exhausting through stack S013b, capacity: 15 gallons of coating per hour.
 - (2) One (1) paint booth, identified as U013b, equipped with electrostatic air atomized spray guns and a dry filter as overspray control, exhausting to stack S013d, capacity: 15 gallons of coating per hour.

- (3) Three (3) infrared ovens, each exhausting to one (1) stack, S013a, S013c and S013e.
- (g) One (1) large parts shot blast cabinet, identified as U009, constructed in 1989, exhausting to a cartridge dust collector (C009) and exiting inside the building, capacity: 132,000 pounds of steel shot per hour.
- (h) One (1) steel shot blast unit, identified as U011, constructed in 1999, exhausting to a cartridge dust collector (C011) and exiting inside the building, capacity: 115,500 pounds of steel shot per hour.
- (i) One (1) steel shot blast unit, identified as U012, constructed in 2004, exhausting to a cartridge dust collector (C012) and exiting inside the building, capacity: 56,500 pounds of steel shot per hour.
- (j) One (1) compressed natural gas (CNG) fueling station for the one (1) time filling of fork lift fuel tanks and the testing of the CNG forklift engines, maximum capacity: one thousand (1,000) forklift fuel tanks per twelve (12) consecutive month period, and heat input capacities no more than 0.521 million British thermal units per hour per engine.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted emission units operating at this source during this review process.

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

There are no proposed emission units during this review process.

Emission Units and Pollution Control Equipment Removed

The following facilities have been removed from the source and are not included in the proposed permit:

One (1) counter-weight paint booth, identified as U003, constructed in 1993, equipped with air-assisted airless spray guns and a water curtain followed by a baffle demister as overspray control, exhausting to stacks S003a and S003b, capacity: 30.7 gallons and 327.9 pounds of coatings per hour.

Insignificant Activities

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour. Emission units with a plant-wide total heat input capacity of 149.2 million British thermal units per hour, including two (2) boilers, constructed in 1989, rated at 0.75 million British thermal units per hour, each.
- (b) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons. The one (1) gasoline fuel transfer facility was constructed after July 1, 1989, is equipped with a 2,000 gallon tank, and has a maximum gasoline throughput of 43,347 gallons per year.

- (c) A petroleum (diesel) fuel, other than gasoline, dispensing facility, having a storage capacity of less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month.
- (d) VOC and HAP storage containers storing lubricating oil, hydraulic oils, machining oils, and machining fluids.
- (e) Equipment used exclusively for filling drums, pails or other packaging containers with lubricating oils, waxes, and greases.
- (f) Application of oils, greases lubricants or other nonvolatile materials applied as temporary protective coatings.
- (g) Machining where an aqueous cutting coolant continuously floods the machining interface.
- (h) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6. Two (2) parts cleaners, using non-VOC materials, with capacities of 60 and 80 gallons.
- (i) Cleaners and solvents characterized as follows:
 - (1) having a vapor pressure equal to or less than 2 kilopascals; 15 millimeters of mercury; or 0.3 pounds per square inch measured at 38°C (100°F); or
 - (2) having a vapor pressure equal to or less than 0.7 kilopascals; 5 millimeters of mercury; or 0.1 pounds per square inch measured at 20°C (68°F); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months.
- (j) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches and soldering equipment.
- (k) Closed loop heating and cooling systems.
- (l) Infrared cure equipment.
- (m) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to one percent (1%) by volume.
- (n) Any operation using aqueous solutions containing less than one percent (1%) by weight of VOCs excluding HAPs.
- (o) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (p) Heat exchanger cleaning and repair.
- (q) Paved and unpaved roads and parking lots with public access.
- (r) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.
- (s) Purge double block and bleed valves.
- (t) Other activities or categories with emissions equal to or less than the insignificant activity thresholds:

- (1) One (1) powder coat line, identified as I011, controlled by a two (2)-stage filtration system consisting of HEPA filters in series, integral to the line, and exhausting inside the building, including the following:
 - (A) One (1) five (5)-stage iron phosphate spray washer, with a capacity of 16,933 gallons of alkaline materials per year;
 - (B) One (1) hot water generator, with a heat input capacity of 4 million British thermal units per hour;
 - (C) One (1) natural gas-fired drying oven and bake/cure oven, with a heat input capacity of 2 million British thermal units per hour; and
 - (D) One (1) self-contained powder coat room containing two (2) reclaim booths and one (1) non-reclaim booth with a capacity of 84.0 pounds of powder per hour, per booth and total.
- (2) One (1) powder coat line, identified as I012, controlled by a two (2)-stage filtration system consisting of HEPA filters in series, integral to the line and exhausting inside the building, including the following:
 - (A) One (1) five (5)-stage iron phosphate washer, with a capacity of 15,156 gallons of alkaline materials per year;
 - (B) One (1) natural gas-fired generator with a heat input capacity of 3.5 million British thermal units per hour;
 - (C) Two (2) small parts powder coating reclaim booths with a capacity of 84.0 pounds of powder per hour, per booth and total.
- (3) One hundred and ninety-four (194) metal inert gas (MIG) welding stations, each operated independently of the others, consisting of one hundred and sixty-seven (167) manual welders with a maximum machine capacity of 36.7 pounds of weld wire per hour, each, twenty-five (25) robotic welders with a maximum capacity of 26.2 pounds of weld wire per hour, each, and two (2) additional welders with a maximum capacity of 15.8 pounds per hour, each.
- (4) Miscellaneous uncontrolled hand-held grinding and machining operations including the following: deburring, buffing and polishing.
- (5) One (1) four-stage iron phosphate washer (only), identified as #7 frame washer, installed in 2000, using non-VOC cleaners.

Existing Approvals

The source has been operating under the previous Part 70 Operating Permit 005-7545-00040 issued on April 14, 1999, and the following amendments and modifications:

- (a) First Administrative Amendment No. 005-10989-00040, issued on July 21, 1999;
- (b) Second Administrative Amendment No. 005-11174-00040, issued on September 7, 1999;
- (c) Third Administrative Amendment No. 005-11975-00040, issued on March 30, 2000;

- (d) Fourth Administrative Amendment No. 005-13981-00040, issued on March 19, 2001;
- (e) First Reopening No. 005-13154-00040, issued on October 25, 2001;
- (f) Fifth Administrative Amendment No. 005-14983-00040, issued on October 26, 2001;
- (g) Sixth Administrative Amendment No. 005-15791-00040, issued on April 25, 2002;
- (h) First Minor Permit Modification No. 005-15701-00040, issued on April 29, 2002;
- (i) Seventh Administrative Amendment No. 005-15778-00040, issued on September 23, 2002;
- (j) Eighth Administrative Amendment No. 005-16721-00040, issued on December 27, 2002;
- (k) Ninth Administrative Amendment No. 005-17135-00040, issued on February 10, 2003;
- (l) Tenth Administrative Amendment No. 005-17384-00040, issued on July 1, 2003;
- (m) Eleventh Administrative Amendment No. 005-18541-00040, issued on January 2, 2004;
- (n) First Significant Source Modification No. 005-18706-00040, issued on June 18, 2004;
- (o) First Significant Permit Modification No. 005-18853-00040, issued on July 2, 2004;
- (p) Twelfth Administrative Amendment No. 005-19273-00040, issued on August 4, 2004;
- (q) Thirteenth Administrative Amendment No. 005-20406-00040, issued on January 18, 2005;
- (r) Fourteenth Administrative Amendment No. 005-21014-00040, issued on May 27, 2005;
- (s) Second Significant Permit Modification No. 005-21333-00040, issued on September 16, 2005;
- (t) Second Significant Source Modification No. 005-21912-00040, issued on February 10, 2006; and
- (u) Third Significant Permit Modification No. 005-22010-00040, issued on February 28, 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 proposed permit. All previous registrations and permits are superseded by this permit.

The following terms and conditions from previous approvals have been revised in this Part 70 Operating Permit:

- (a) Condition D.1.4 from T 005-7545-00040 issued on April 14, 1999:
 - (1) The use of each individual HAP at the one (1) counter-weight paint line, identified as U013, including coatings, dilution solvents, and cleaning solvents shall be less than ten (10) tons per twelve (12) consecutive month period with compliance determined at the end of each month. This usage limit is required to limit the potential to emit of each individual HAP to less than ten (10) tons per year. Compliance with this limit makes 326 IAC 2-4.1-1 (New Source Toxics Control) not applicable.

- (2) The use of total HAPs at the one (1) counter-weight paint line, identified as U013, including coatings, dilution solvents, and cleaning solvents shall be less than twenty-five (25) tons per twelve (12) consecutive month period with compliance determined at the end of each month. This usage limit is required to limit the potential to emit of any combination of HAPs to less than twenty-five (25) tons per year. Compliance with this limit makes 326 IAC 2-4.1-1 (New Source Toxics Control) not applicable.

Reason Revised: The applicant has requested limits that make the source an area source of HAPs. Therefore, the limits in this permit will also ensure that the requirements of 326 IAC 2-4.1-1 are not applicable to the one (1) counter-weight paint line, identified as U013.

- (b) Condition D.3.1 from T 005-7545-00040 issued on April 14, 1999:

Pursuant to PC (03) 1733, issued on March 3, 1989, the one (1) maintenance parts washer using mineral spirits with a capacity of sixteen (16) gallons is subject to the requirements of 326 IAC 8-3-2 (Cold Cleaner Operations). Pursuant to this rule, the owner or operator of the one (1) parts washer shall:

- (1) Equip the cleaner with a cover;
- (2) Equip the cleaner with a facility for draining cleaned parts;
- (3) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (4) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (5) Provide a permanent, conspicuous label summarizing the operation requirements;
- (6) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

Reason removed: The one (1) insignificant parts washer using mineral spirits has been removed from this source.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

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

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

An administratively complete Part 70 Operating Permit renewal application for the purposes of this review was received on July 14, 2003. Additional information was received on February 1, 2006, March 16, 2006, May 30, 2006, and July 12, 2006.

Emission Calculations

See Appendix A of this document for detailed emission calculations (pages 1 through 10).

Potential to Emit of the Source

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

The source was issued a Part 70 Operating Permit on April 14, 1999. The table below summarizes the potential to emit, reflecting all limits, of the emission units. Any control equipment is considered enforceable only after issuance of the original Part 70 Operating Permit and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

In addition to the limitations existing in the permit, the applicant has requested a source-wide limitation on HAPs emissions. As a result of these limitations, the source will be considered an area source of HAPs.

Process/Emission Unit	Potential To Emit (tons/yr)						
	PM	PM ₁₀	SO ₂	VOC	CO	NO _x	HAPs
Surface Coating (U001, U002, U004, U005 & U013)	11.4	11.4	0.00	245	0.00	0.00	9.90 individual; 18.0 total
Shot Blasting (U009, U011 & U012)	58.3	52.2	0.00	0.00	0.00	0.00	0.887 individual (Manganese); 1.77 total
Compressed natural gas (CNG) fueling station	0.002	0.005	0.00	0.008	0.969	0.576	0.014 individual (Formaldehyde); 0.019 total
Insignificant Activities excluding welding	5.96	9.69	0.392	4.76	54.9	65.3	1.18 individual (Hexane); 1.93 total
Insignificant Welding	52.0	52.0	0.00	0.00	0.00	0.00	3.18 individual (Manganese); 3.20 total
Total Emissions	128	125	0.392	<250	55.9	65.9	<10 individual; <25 total

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of PM₁₀ and VOC are equal to or greater than one hundred (100) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) Fugitive Emissions
 Pursuant to 326 IAC 2-7-2(e), all fugitive emissions are counted toward the determination of Part 70 Applicability.

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 2002 OAQ emission data, which is the most recent OAQ emission data available for this source.

Pollutant	Actual Emissions (tons/year)
PM	Not reported
PM ₁₀	2.00
SO ₂	0.00
VOC	33.0
CO	3.00
NO _x	4.00
HAP (Ethylene Glycol)	0.128
HAP (Propylene)	0.128
HAP (Manganese)	0.128
HAP (Nickel)	0.003

County Attainment Status

The source is located in Bartholomew County.

Pollutant	Status
PM ₁₀	attainment
PM _{2.5}	attainment
SO ₂	attainment
NO ₂	attainment
8-hour Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and nitrogen oxides (NO_x) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to ozone. Bartholomew County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (b) Bartholomew County has been classified as attainment for PM_{2.5}. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM_{2.5} emissions. Therefore, until the U.S. EPA adopts specific provisions for PSD review for PM_{2.5} emissions, it has directed states to regulate PM₁₀ emissions as a surrogate for PM_{2.5} emissions.

- (c) Bartholomew County has been classified as attainment or unclassifiable in Indiana for all remaining criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (d) On August 7, 2006, a temporary emergency rule took effect redesignating Delaware, Greene, Jackson, Vanderburgh, Vigo and Warrick Counties to attainment for the eight-hour ozone standard, redesignating Lake County to attainment for the sulfur dioxide standard, and revoking the one-hour ozone standard in Indiana. The Indiana Air Pollution Control Board has approved a permanent rule revision to incorporate these changes into 326 IAC 1-4-1. The permanent revision to 326 IAC 1-4-1 will take effect prior to the expiration of the emergency rule.

Part 70 Operating 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 Operating Permits.
- (b) Monitoring and related record keeping requirements which assure that all reasonable information is provided to evaluate continuous compliance with the applicable requirements.

Federal Rule Applicability

- (a) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to emission units that involve a pollutant-specific emission unit and meet the following criteria:
 - (1) has a potential to emit before or after 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 applicability criteria, under 40 CFR 64.1, to each emission unit:

Emission Unit	Control Device Used	Emission Limitation (Y/N)	Uncontrolled PTE (tons/year)	Major Source Threshold (tons/year)	CAM Applicable (Y/N)
One (1) primer coat paint booth (U001)	Horizontal water curtain with a downdraft water-floor followed by a demister for Overspray (PM ₁₀)	Y	267	100	Y
One (1) top coat paint booth (U002)	Horizontal water curtain with a downdraft water-floor followed by a demister for Overspray (PM ₁₀)	Y	267	100	Y
One (1) touch-up paint booth (U004)	Dry filters for Overspray (PM ₁₀)	Y	367	100	Y
One (1) D-line paint booth (U005)	Dry filters for Overspray (PM ₁₀)	Y	66.9	100	N
One (1) paint booth (U013a)	Dry filters for Overspray (PM ₁₀)	Y	131	100	Y
One (1) paint booth (U013b)	Dry filters for Overspray (PM ₁₀)	Y	131	100	Y
One (1) large parts shot blast cabinet (U009)	Cartridge dust collector (C009) (PM ₁₀)	Y	1,989	100	Y
One (1) steel shot blast unit (U011)	Cartridge dust collector (C011) (PM ₁₀)	Y	1,989	100	Y
One (1) steel shot blast unit (U012)	Cartridge dust collector (C012) (PM ₁₀)	Y	851	100	Y
One (1) compressed natural gas (CNG) fueling station	None	N	n/a	100	N
Insignificant Activities	None of the Insignificant Activities require a control device to comply with a limit or permit term		n/a	100	N

The controlled PM₁₀ emissions from each of these processes are less than 100 tons per year, the controlled individual HAP emissions from each shot blast unit is less than ten (10) tons per year, and the controlled total HAP emissions from each shot blast unit is less than twenty-five (25) tons per year. Therefore, these are not considered large units pursuant to 40 CFR 64. None of the facilities at this source require a control device to comply with an emissions limitation or standard for any other pollutant.

CAM Plan for Surface Coating (U001, U002, U004 & U013):

The CAM Plan for the surface coating activities includes the following requirements, which are existing in the Part 70 Operating Permit:

- (1) Daily inspections shall be performed to verify the placement, integrity and particle loading of the dry filters and water curtains. To monitor the performance of the dry filters and water curtains, weekly observations shall be made of the overspray from the touch-up paint booth, primer coat paint booth, top coat paint booth, and counter-weight paint booth stacks while the booth exhausting to that stack is 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.
- (2) 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.

CAM Plan for Shot Blasting (U009, U011 & U012):

The CAM plan for the shot blasters includes daily monitoring of the pressure drop across the dust collectors during normal operation. The pressure drop range is 1.0 to 6.0 inches of water, according to manufacturer's specifications. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

- (b) The requirements of the Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction is Commenced After August 17, 1971, 40 CFR 60.40, Subpart D, (326 IAC 12), are not included in the permit because the capacity of each of the two (2) insignificant boilers is less than 250 million British thermal units per hour.
- (c) The requirements of the Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978, 40 CFR 60.40a, Subpart Da, (326 IAC 12), are not included in the permit because the capacity of each of the two (2) insignificant boilers is less than 250 million British thermal units per hour.
- (d) The requirements of the Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60.40b, Subpart Db, (326 IAC 12), are not included in the permit because because the capacity of each of the two (2) insignificant boilers is less than 100 million British thermal units per hour.
- (e) The requirements of the Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60.40c, Subpart Dc, (326 IAC 12), are not included in the permit because because the capacity of each of the two (2) insignificant boilers is less than 10 million British thermal units per hour.
- (f) The requirements of the National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR 63, Subpart DDDDD are not included in the permit for this source. The two (2) insignificant boilers were constructed prior to January 13, 2003. The applicant has requested a limit on the potential to emit each individual HAP to less than ten (10) tons per year and total

HAPs to less than twenty-five (25) tons per year. As a result of the limits, this source will be an area source of HAPs prior to the September 13, 2007, compliance date for Subpart DDDDD.

- (g) The requirements of the National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, 40 CFR 63, Subpart ZZZZ are not included in the permit for this source. The fork lift engines installed and tested at this source are not stationary engines.
- (h) The requirements of the National Emission Standards for Hazardous Air Pollutants for Engine Test Cells/Stand, 40 CFR 63, Subpart PPPPP are not included in the permit for this source. The fork lift engines tested are already installed in fork lifts. Therefore, there are no test cells or stands.
- (i) The fork lifts coated at this source are not designed to carry passengers or transport property. Therefore, they are not considered automobiles or light duty trucks and the requirements of 40 CFR 60, Subpart MM, Standards of Performance for Automobile and Light Duty Truck Surface Coating Operations, and 40 CFR 63, Subpart IIII, National Emission Standards for Hazardous Air Pollutants: Surface Coating of Automobiles and Light-Duty Trucks, are not included in the permit.
- (j) The insignificant parts washers at this source do not use any halogenated solvents. Therefore, the requirements of 40 CFR 63, Subpart T, National Emission Standards for Halogenated Solvent Cleaning, are not included in the permit.
- (k) The gasoline throughput at the insignificant gasoline fuel transfer and dispensing operation is less than 75,700 liters per day. Therefore, the requirements of 40 CFR 63, Subpart R, National Emission Standards for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations), are not included in the permit for this source.
- (l) The applicant has requested a limit on the potential to emit each individual HAP to less than ten (10) tons per year and total HAPs to less than twenty-five (25) tons per year. As a result of the limits, this source will be an area source of HAPs prior to the January 2, 2007, compliance date for 40 CFR 63, Subpart MMMM, National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products. Therefore, the requirements of that rule are not included in the permit. The following limits will result in this source being an area source of HAPs:
 - (1) The usage of each individual HAP at the five (5) surface coating processes, identified as U001, U002, U004, U005 and U013, shall not exceed 9.90 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
 - (2) The usage of total HAPs at the five (5) surface coating processes, identified as U001, U002, U004, U005 and U013, shall not exceed 18.0 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
 - (3) The potential to emit each individual HAP from the one (1) large parts shot blast cabinet, identified as U009, shall not exceed 0.106 pounds per hour, equivalent to 0.463 tons per year, and the potential to emit total HAPs shall not exceed 0.212 pounds per hour, equivalent to 0.925 tons per year. This is equivalent to the maximum potential to emit when operating the unit at maximum capacity and the dust collector at a control efficiency of 99%. This is the manufacturer recommended minimum control efficiency for the dust collector.
 - (4) The potential to emit each individual HAP from the one (1) steel shot blast unit,

identified as U011, shall not exceed 0.092 pounds per hour, equivalent to 0.405 tons per year, and the potential to emit total HAPs shall not exceed 0.184 pounds per hour, equivalent to 0.806 tons per year. This is equivalent to the maximum potential to emit when operating the unit at maximum capacity and the dust collector at a control efficiency of 99%. This is the manufacturer recommended minimum control efficiency for the dust collector.

- (5) The potential to emit each individual HAP from the one (1) steel shot blast unit, identified as U012, shall not exceed 0.005 pounds per hour, equivalent to 0.851 tons per year, and the potential to emit total HAPs shall not exceed 0.009 pounds per hour, equivalent to 0.039 tons per year. This is equivalent to the maximum potential to emit when operating the unit at maximum capacity and the dust collector at a control efficiency of 99.9%. This is the manufacturer recommended minimum control efficiency for the dust collector. In addition, this unit was previously tested and the control efficiency was 99.9997%.
- (6) The total weld wire and rod usage shall not exceed 20,000,000 pounds per twelve (12) consecutive month period, with compliance determined at the end of each month, the individual HAP emissions shall not exceed 0.000318 pounds per pound of weld wire or rod used and the total HAP emissions shall not exceed 0.000320 pounds per pound of weld wire or rod used. This will limit the potential to emit each individual HAP to 3.18 tons per year and the potential to emit total HAP to less than 3.20 tons per year. The emission limitations used are the AP-42 emission factors (January 1995) for this type of welding.

The surface coating processes do not emit the same individual HAPs as the welding and shot blasting processes. Therefore, the limitations in (1) through (6), above, will limit the potential to emit each individual HAP to less than ten (10) tons per year and the potential to emit total HAPs to less than twenty-five (25) tons per year from the entire source (all facilities listed in this document). See the *Potential to Emit of the Source* section of this document and page 10 of Appendix A of this document for detailed calculations. Any change in coatings at the surface coating operations that leads to the potential usage of Hexane in excess of 8.82 tons per year, Manganese in excess of 5.93 tons per year, or Chromium or Nickel in excess of 9.50 tons per year shall require prior approval. Otherwise, the Permittee will be considered a major source of HAPs and will become subject to the requirements of 40 CFR 63, Subpart Mmmm.

- (m) The insignificant storage tanks at this source have capacities less than seventy-five (75) cubic meters. Therefore, the requirements of 40 CFR 60, Subpart Kb are not included in the permit.

State Rule Applicability – Entire Source

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 pursuant to 326 IAC 2-7, Part 70. In accordance with the compliance schedule in 326 IAC 2-6-3, an emission statement must be submitted by July 1 every three (3) years. 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 alternative opacity limitations), opacity shall meet the following, unless otherwise stated in the permit:

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

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

Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions shall be controlled according to the plan submitted on March 16, 2006. The plan consists of:

- (a) Spraying unpaved surfaces with water, as-needed.
- (b) Maintaining low/reduced speeds on these surfaces to reduce generation of fugitive dust.
- (c) Paving unpaved roads and parking lots with asphalt should fugitive emissions become excessive at the site. Treating with water as needed.

State Rule Applicability – Individual Facilities

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

- (a) Pursuant to T 005-7545-00040 issued on April 14, 1999, the surface coating facilities at this source (U001, U002, U004, U005, & U013) shall use no more than 245 tons of VOC, total, including coatings, dilution solvents, and cleaning solvents, per twelve (12) consecutive month period, with compliance determined at the end of each month. This usage limit is required to limit the potential to emit of VOC to less than 250 tons per year from the entire source (all facilities listed in this document). The unrestricted potential to emit from all other processes is less than five (5) tons per year. Compliance with this limit makes 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.
- (b) The unrestricted potential PM and PM₁₀ emissions are greater than 250 tons per year. The potential to emit is limited as follows:
 - (1) Pursuant to 326 IAC 6-3-2, the overspray control devices are required to operate at all times when the surface coating facilities are in operation. This will limit the potential to emit PM and PM₁₀ to 11.4 tons per year, each, from the coating operations (U001, U002, U004, U005 and U013) based on a transfer efficiency of seventy-five percent (75%) and control efficiencies of 99% for U001 and U002, 99.84% for U004, 92% for U005 and 99.94% for U013.
 - (2) The potential to emit PM from the one (1) large parts shot blast cabinet, identified as U009, shall not exceed 5.28 pounds per hour, equivalent to 23.1 tons per year, and the potential to emit PM₁₀ shall not exceed 4.54 pounds per hour, equivalent to 20.2 tons per year. This is equivalent to the maximum potential to emit when operating the unit at maximum capacity and the dust collector at a control efficiency of 99%. This is the manufacturer recommended minimum control efficiency for the dust collector.
 - (3) The potential to emit PM from the one (1) steel shot blast unit, identified as U011, shall not exceed 4.62 pounds per hour, equivalent to 20.2 tons per year, and the potential to emit PM₁₀ shall not exceed 3.97 pounds per hour, equivalent to 17.4 tons per year. This is equivalent to the maximum potential to emit when operat-

ing the unit at maximum capacity and the dust collector at a control efficiency of 99%. This is the manufacturer recommended minimum control efficiency for the dust collector.

- (4) Pursuant to T 005-7545-00040, issued on April 14, 1999, and SPM 005-18853-00040, issued on July 2, 2004, the potential to emit PM and PM₁₀ from the one (1) steel shot blast unit, identified as U012, shall not exceed 3.4 pounds per hour, equivalent to 14.9 tons per year. Performance tests conducted on January 5, 2005, demonstrated compliance with this limit.

The limitations in (1) through (4) above will limit the total potential to emit PM and PM₁₀ to less than 250 tons per year, each, from the entire source (all facilities listed in this document) (PM: 11.4 tons/yr from coating + 23.1 tons/yr U009 + 20.2 tons/yr U011 + 14.9 tons/yr U012 + 0.002 tons/yr engine testing + 155 tons/yr welding + 5.93 tons/yr other insignificant activities = 231 tons/yr; PM₁₀: 11.4 tons/yr from coating + 20.2 tons/yr U009 + 17.4 tons/yr U011 + 14.9 tons/yr U012 + 0.005 tons/yr engine testing + 155 tons/yr welding + 9.69 tons/yr other insignificant = 229 tons/yr). Therefore, this source is a minor source of PM and PM₁₀ pursuant to 326 IAC 2-2, PSD.

- (c) The unrestricted potential emissions of all other criteria pollutants are less than two hundred-fifty (250) tons per year. Therefore, this source, which is not one of the twenty-eight (28) listed source categories, is a minor source pursuant to 326 IAC 2-2, PSD.

326 IAC 2-4.1-1 (New source toxics control)

- (a) Pursuant to SPM 005-22010-00040, issued on February, 28, 2006, the individual HAP usage at the one (1) counter-weight paint line, identified as U013, is limited to less than ten (10) tons per twelve (12) consecutive month period, with compliance determined at the end of each month, and the total HAPs usage at the one (1) counter-weight paint line, identified as U013, is limited to less than twenty-five (25) tons per twelve (12) consecutive month period, with compliance determined at the end of each month. Therefore, the potential to emit each individual HAP is limited to less than ten (10) tons per year, and 326 IAC 2-4.1 does not apply. The applicant has requested limits that make the source an area source of HAPs, as stated in (e), below. Therefore, the limits in this permit will also ensure that the requirements if 326 IAC 2-4.1-1 are not applicable to the one (1) counter-weight paint line, identified as U013.
- (b) All other coating lines were constructed prior to July 27, 1997. Therefore, the requirements of 326 IAC 2-4.1 are not applicable.
- (c) The one (1) large parts shot blast cabinet, identified as U009, was constructed prior to July 27, 1997. Therefore, the requirements of 326 IAC 2-4.1 are not applicable.
- (d) The two (2) steel shot blast units, identified as U011 and U012, were constructed after July 27, 1997, have potential individual HAP emissions greater than 10 tons per year and potential total HAP emissions greater than 25 tons per year.
 - (1) Due to the way emissions were calculated in the construction approval for U011 (CP005-10284-00040), no HAPs limit was included in the permit. However, total particulate emissions have not exceeded 0.75 tons per year from the total of all coating operations, based on information provided by the applicant. Therefore, the shot blast unit did not operate as a major source of HAPs and did not violate 326 IAC 2-4.1-1.

- (2) The potential to emit PM and PM₁₀ from U012 was limited to 3.4 pounds per hour by the permit, which also limited individual HAP emissions to less than 10 tons per year from each unit and total HAP emissions to less than 25 tons per year.
- (e) The source-wide HAPs emission limitations listed in the “Federal Rule Applicability” section of this document will ensure compliance with the limits that make 326 IAC 2-4.1-1 not applicable.

326 IAC 6-2-4 (Particulate emission limitations for sources of indirect heating)

The allowable PM emissions from the two (2) insignificant natural gas-fired boilers, constructed after 1983, are based upon the following equation:

$$Pt = 1.09/Q^{0.26}$$

where:

Pt = Pounds of particulate matter emitted per million British thermal units (lb/MMBtu) heat input

Q = Total source maximum operating capacity rating in million British thermal units per hour (MMBtu/hr) heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's permit application, except when some lower capacity is contained in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used.

$$Pt = 1.09 / 1.50^{0.26} = 0.98 \text{ lbs PM / MMBtu}$$

This number is greater than the allowable emissions stated in 326 IAC 6-2-4(a). Therefore, the allowable emissions for the boiler shall be 0.6 lbs PM per million British thermal units.

The potential PM emissions from each of the two (2) boilers limited to 0.6 lb PM per million British thermal units are:

$$(0.75 \text{ MMBtu/hr}) \times (8.76 \text{ hr} \times \text{MMcf}) / (\text{MMBtu} \times \text{yr}) = 6.57 \text{ MMcf/yr}$$

$$6.57 \text{ MMcf/yr} \times 12 \text{ lbs/MMcf} = 78.8 \text{ lbs/yr}$$

$$78.8 \text{ lbs/yr} / (0.75 \text{ MMBtu/hr} \times 8760 \text{ hrs/yr}) = 0.012 \text{ lbs PM / MMBtu}$$

Thus, the boilers can comply with the emission limitations of 326 IAC 6-2-4.

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

- (a) Pursuant to 326 IAC 6-3-2(d), the horizontal water curtains with downdraft water-floors followed by demisters for particulate control shall be operation in accordance with manufacturer's specifications and control emissions from the one (1) primer coat paint booth, identified as U001, and one (1) topcoat paint booth, identified as U002, at all times when the paint booths are in operation.
- (b) Pursuant to 326 IAC 6-3-2(d), the dry filters for particulate control shall be operation in accordance with manufacturer's specifications and control emissions from the one (1) touch-up paint booth, identified as U004, one (1) D-Line paint booth, identified as U005,

and one (1) counter-weight paint line, identified as U013, at all times when the paint booths are in operation.

- (c) Pursuant to 326 IAC 6-3-2, the allowable particulate emission rate from the one (1) large parts shot blast cabinet, identified as U009, shall not exceed 47.2 pounds per hour, when operating at a process weight rate of 132,000 pounds (66.0 tons) per hour. This process weight rate is based solely upon the maximum shot throughput rate because the rate of raw materials cleaned is highly variable. The allowable emission rate would be higher including the rate of raw materials cleaned. The potential to emit after control by the dust collector is 5.28 pounds per hour. Therefore, the dust collector (C009) must be in operation at all times and control emissions from the one (1) large parts shot blast cabinet, identified as U009, at all times when U009 is in operation, in order to comply with this limit. This limitation is based upon the following:

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

$$E = 55.0 P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

- (d) Pursuant to 326 IAC 6-3-2, the allowable particulate emission rate from the one (1) steel shot blast unit, identified as U011, shall not exceed 45.9 pounds per hour, when operating at a process weight rate of 115,500 pounds (57.75 tons) per hour. This process weight rate is based solely upon the maximum shot throughput rate because the rate of raw materials cleaned is highly variable. The allowable emission rate would be higher including the rate of raw materials cleaned. The potential to emit after control by the dust collector is 4.62 pounds per hour. Therefore, the dust collector (C011) must be in operation at all times and control emissions from the one (1) steel shot blast unit, identified as U011, at all times when U011 is in operation, in order to comply with this limit. This limitation is based upon the following:

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

$$E = 55.0 P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

- (e) Pursuant to 326 IAC 6-3-2, the allowable particulate emission rate from the one (1) steel shot blast unit, identified as U012, shall not exceed 38.5 pounds per hour, when operating at a process weight rate of 56,500 pounds (28.25 tons) per hour. This process weight rate is based solely upon the maximum shot throughput rate because the rate of raw materials cleaned is highly variable. The allowable emission rate would be higher including the rate of raw materials cleaned. The potential to emit after control by the dust collector is 0.226 pounds per hour. Therefore, the dust collector (C012) must be in operation at all times and control emissions from the one (1) steel shot blast unit, identified as U012, at all times when U012 is in operation, in order to comply with this limit. This limitation is based upon the following:

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

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

- (f) Pursuant to 326 IAC 6-3-2, the allowable particulate emission rate from the insignificant welding operations, shall not exceed the limitations calculated by the following:

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

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

or

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

$$E = 55.0 P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

- (e) The potential emissions from the engines, combustion units, grinding and machining, and powder coat lines are less than 0.551 pounds per hour. Therefore, pursuant to 326 IAC 6-3-1(b)(14), those processes are exempt from the requirements of 326 IAC 6-3.

326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)

The potential SO₂ emissions from this source are less than ten (10) pounds per hour and twenty-five (25) tons per year. Therefore, the requirements of 326 IAC 7-1.1 are not applicable.

326 IAC 8-3 (Organic Solvent Degreasing Operations)

The insignificant parts washers at this source do not use organic solvents. Therefore, the requirements of 326 IAC 8-3 are not applicable. The one (1) insignificant degreaser that did use organic solvents has been removed from the source.

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

The five (5) surface coating processes, identified as U001, U002, U004, U005 and U013, were constructed after November 1, 1980 and have potential VOC emissions greater than 25 tons per year. In addition, three (3) surface coating processes, identified as U004, U005 and U013, were constructed after July 1, 1990. All of the materials coated are metal. Therefore, the requirements of 326 IAC 8-2-9 are applicable to the five (5) surface coating processes, identified as U001, U002, U004, U005 and U013.

Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the volatile organic compound (VOC) content of the coating delivered to the applicator at the five (5) surface coating processes, identified as U001, U002, U004, U005 and U013, shall be limited to 3.5 pounds of VOCs per gallon of coating less water, for forced warm air dried coatings.

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.

Based on the MSDS submitted by the source and calculations made, the spray booth is in compliance with this requirement.

326 IAC 8-4-3 (Petroleum Liquid Storage Facilities)

The insignificant petroleum storage tanks have capacities less than 39,000 gallons. Therefore, the requirements of 326 IAC 8-4-3 are not applicable.

326 IAC 8-4-6 (Gasoline dispensing facilities)

The 550-gallon gasoline tank at this source was installed after July 1, 1989. Pursuant to 326 IAC 8-4-6, a gasoline dispensing facility is defined as, "any facility where gasoline is dispensed into motor vehicle fuel tanks or portable containers from a storage tank with a capacity of two thousand one hundred seventy-six (2,176) liters (five hundred seventy-five (575) gallons) or more. Diesel fuel and kerosene are not considered to be motor vehicle fuels." Since the tank has a capacity less than 575 gallons, the facility is not considered a gasoline dispensing facility and the requirements of 326 IAC 8-4-6 are not applicable.

326 IAC 8-9 (Volatile Organic Liquid Storage Vessels)

The storage vessels at this source do not store volatile organic liquids in Clark, Floyd, Lake, or Porter Counties. Therefore, the requirements of 326 IAC 8-9 are not applicable.

326 IAC 9-1 (Carbon Monoxide Emission Limits)

There is no applicable emission limit in 326 IAC 9-1-2 for any of the facilities at this source. Therefore, the requirements of 326 IAC 9-1 are not applicable.

326 IAC 10-1 (Nitrogen Oxides Control in Clark and Floyd Counties)

This source is not located in Clark or Floyd County. Therefore, the requirements of 326 IAC 10-1 are not applicable.

Testing Requirements

(a) Past stack test

On January 5, 2005, the source conducted a stack test to demonstrate compliance with a 3.4 lb/hr PM and PM₁₀ emission limitation on the one (1) steel shot blast unit, identified as U012, constructed in 2004. These results have been verified by IDEM, OAQ. Based on the stack test results, the one (1) steel shot blast unit, identified as U012, was in compliance with the limit.

(b) Proposed stack test

There are no stack tests required in this renewal. Based on the January 5, 2005 stack test, the shot blast units, which all use the same type of shot and the same type of filters on their control devices, are expected to comply with the limitations in the permit. The control efficiencies used in the calculations were the lowest recommended by the manufacturer and much lower than the control efficiency determined during the stack test.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as

grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also 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:

- (a) The five (5) surface coating processes, identified as U001, U002, U004, U005 and U013, have applicable compliance monitoring conditions as specified below:
 - (1) Daily inspections shall be performed to verify the placement, integrity and particle loading of the dry filters and water curtains. To monitor the performance of the dry filters and water curtains, weekly observations shall be made of the overspray from the touch-up paint booth, primer coat paint booth, top coat paint booth, and counter-weight paint booth stacks while the booth exhausting to that stack is 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.
 - (2) 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.

These monitoring conditions are necessary because the horizontal water curtains with a downdraft water-floor followed by a demister used as overspray control for the one (1) primer paint booth and one (1) top coat paint booth (U001 and U002) and the dry filters used as overspray control for the one (1) D-Line paint booth, one (1) touchup paint booth and one (1) counter-weight paint booth (U004, U005 and U013) must operate properly to ensure compliance with 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), 40 CFR 64 (Compliance Assurance Monitoring), and 326 IAC 2-7 (Part 70), and to make 326 IAC 2-2 (PSD) not applicable.

- (b) The three (3) shot blasters, identified as U009, U011 and U012, have applicable compliance monitoring conditions as specified below:
 - (1) Visible emission notations of the shot blaster exhausts shall be performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal. For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. If abnormal emissions are 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.

- (2) The Permittee shall record the pressure drop across the dust collectors used in conjunction with the three (3) shot blast units, identified as U009, U011 and U012, at least once per day when the shot blast unit exhausting to that dust collector is in operation. When for any one reading, the pressure drop across the dust collector is outside the normal range of 1.0 and 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit. The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.
- (3) For a single compartment dust collector controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
- (4) For a single compartment dust collector controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the emissions unit. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

These monitoring conditions are necessary because the dust collectors must operate properly to ensure compliance with 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes) , 40 CFR 64 (Compliance Assurance Monitoring), and 326 IAC 2-7 (Part 70), to make 326 IAC 2-2 (PSD) not applicable, and to make the source an area source of HAPs.

Conclusion

The operation of this industrial lift truck manufacturing source shall be subject to the conditions of this Part 70 Operating Permit T 005-17756-00040.

**ATTACHMENT A
T 005-17756-00040
FUGITIVE EMISSION CONTROL PLAN**

Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions will be controlled according to the plan for the plant to be operated at the following location.

Toyota Industrial Equipment Manufacturing, Inc. – Columbus, Indiana

1) Current source address (Name and address of the source):

Toyota Industrial Equipment Manufacturing, Inc.
5555 Inwood Drive
Columbus, Indiana 47202

2) Name and address of the owner or operator responsible for the execution of the control plan:

Same as above.

3) Identification of areas that have the potential to emit fugitive particulate matter:

Unpaved Areas

There are a total of three (3) areas on the property that are unpaved – one (1) unpaved road and two (2) unpaved parking lots:

1. First, a 54,020 ft² (146 ft by 370 ft) gravel parking lot near the northeast corner of the property;
2. Second, an 11,100 ft² (100 ft by 110 ft) gravel parking lot which is used to stage/park tractor trailers and is located just southeast of the manufacturing plant; and
3. Third, a gravel service road (~500 feet in length) which leads from the east side of the 11,100 ft² gravel parking lot to a power substation on the east side of the property. Only substation utility personnel use this road to access the substation for service.

4) Map of the source showing unpaved roads, parking lots, etc.:

Refer to attached figure for the location of the unpaved road and unpaved parking lot.

5) Number and mix of vehicular activity that will occur on site:

Unpaved Parking Lot 1: TIEM Associate Parking (54,020 ft²)
Unpaved Parking Lot 2: Semi-Tractor Trucks/Trailers (11,100 ft²)
Unpaved Service Road: Passenger vehicle or utility service truck.

6) Type and quantity of material handled:

Not Applicable.

7) Equipment used to maintain aggregate piles:

Not Applicable.

8) A description of the measures to be implemented to control fugitive particulate matter emissions from emission points identified in Subpart 3:

TIEM will employ Reasonable Available Control Measures to the extent possible to mitigate the generation of fugitive dust. This may include:

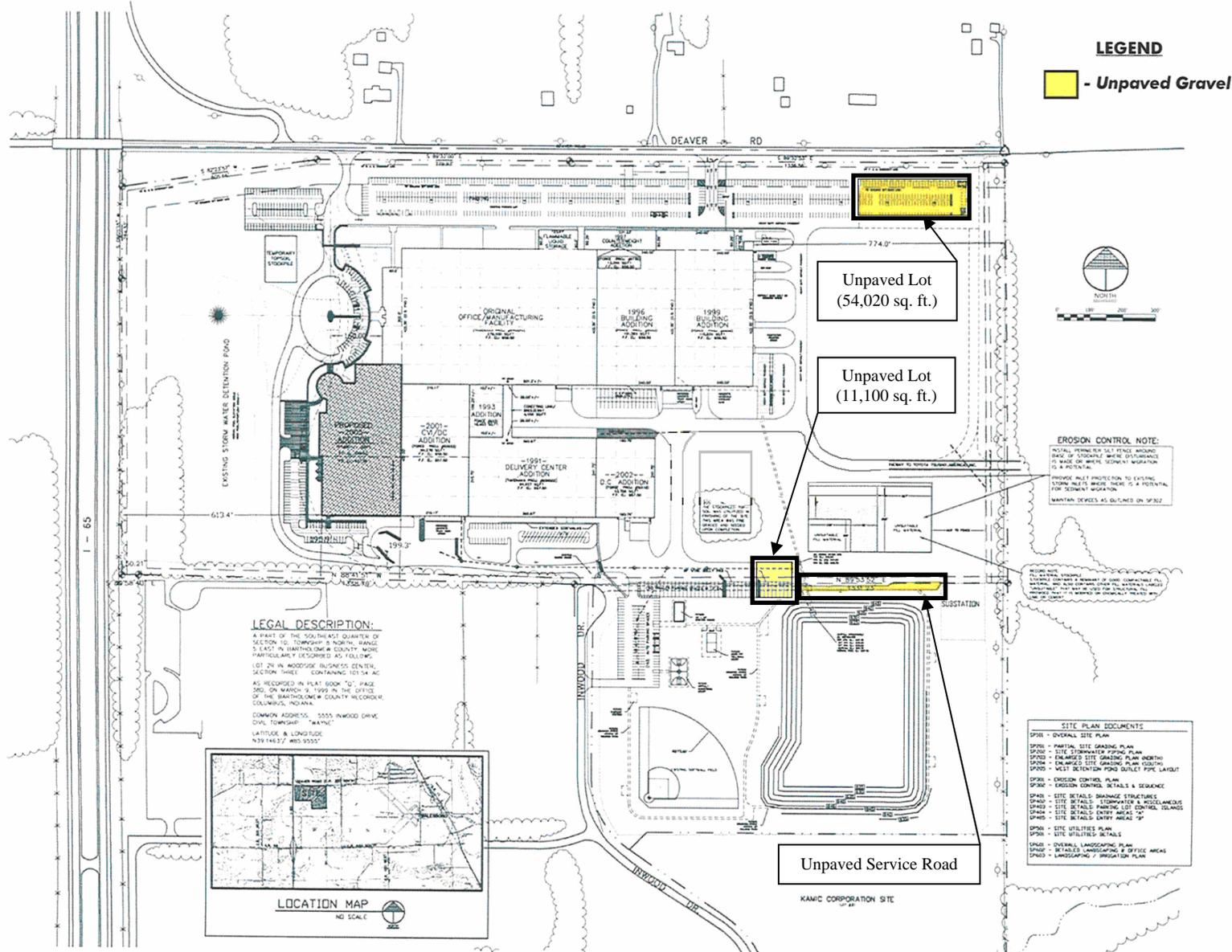
- Spraying unpaved surfaces with water. The frequency of application shall be on an as-needed basis. This will be accomplished with a water truck or equivalent.
- Maintaining low/reduced speeds on these surfaces to reduce the generation of fugitive dust.

9-11) In brief, the following plan will be utilized at this facility:

Paving the unpaved road and/or parking lot with asphalt should fugitive emissions become excessive. Treating with water as needed.

12) Other relevant data that may be requested by the commissioner, to evaluate the effectiveness of the control plan.

TIEM SITE MAP SHOWING UNPAVED AREAS



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

**Company Name: Toyota Industrial Equipment Manufacturing, Inc.
Address City IN Zip: 5555 Inwood Drive, Columbus, IN 47202
Part 70: T 005-17756-00040
Reviewer: CarrieAnn Paukowitz
Application Date: July 14, 2003**

Material	Density (lb/gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Vol (solids)	Gal of Mat (gal/hr)	Maximum (unit/hour)	Flash-off (fraction)	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 tons per year	lb VOC /gal solids	Transfer Efficiency
U001																	
Buff Primer (AXDA204)	11.40	30.240%	0.0%	30.2%	0.0%	82.00%	30.70000		1.000	3.45	3.45	105.83	2540.01	463.55	267.34	4.20	75%
Black Top Coat (KAA0121)	10.80	32.0%	0.0%	32.0%	0.0%	69.99%	30.70000		1.000	3.45	3.45	105.93	2542.40	463.99	247.06	4.93	75%
Grey Polyurethane Enamel (KAA0045)	10.81	29.640%	0.0%	29.6%	0.0%	72.40%	30.70000		1.000	3.20	3.20	98.37	2360.77	430.84	255.68	4.43	75%
Orange Polyurethane Enamel (KAEA019)	9.51	34.720%	0.0%	34.7%	0.0%	61.80%	30.70000		1.000	3.30	3.30	101.37	2432.82	443.99	208.70	5.34	75%
65 AAK474 - Black	9.61	35.8%	0.0%	35.8%	0.0%	58.72%	30.70000		1.000	3.44	3.44	105.74	2537.70	463.13	207.27	5.87	75%
AXA0589 - Black	9.06	37.1%	0.0%	37.1%	0.0%	54.28%	30.70000		1.000	3.36	3.36	103.16	2475.91	451.85	191.60	6.19	75%
AXA0588 - Gray	9.07	37.6%	0.0%	37.6%	0.0%	53.87%	30.70000		1.000	3.41	3.41	104.81	2515.40	459.06	190.14	6.34	75%
AXE0039 - Orange	9.58	34.1%	0.0%	34.1%	0.0%	60.13%	30.70000		1.000	3.27	3.27	100.29	2406.96	439.27	212.23	5.43	75%
U002																	
Buff Primer (AXDA204)	11.40	30.240%	0.0%	30.2%	0.0%	82.00%	30.70000		1.000	3.45	3.45	105.83	2540.01	463.55	267.34	4.20	75%
Black Top Coat (KAA0121)	10.80	32.0%	0.0%	32.0%	0.0%	69.99%	30.70000		1.000	3.45	3.45	105.93	2542.40	463.99	247.06	4.93	75%
Grey Polyurethane Enamel (KAA0045)	10.81	29.640%	0.0%	29.6%	0.0%	72.40%	30.70000		1.000	3.20	3.20	98.37	2360.77	430.84	255.68	4.43	75%
Orange Polyurethane Enamel (KAEA019)	9.51	34.720%	0.0%	34.7%	0.0%	61.80%	30.70000		1.000	3.30	3.30	101.37	2432.82	443.99	208.70	5.34	75%
65 AAK474 - Black	9.61	35.8%	0.0%	35.8%	0.0%	58.72%	30.70000		1.000	3.44	3.44	105.74	2537.70	463.13	207.27	5.87	75%
AXA0589 - Black	9.06	37.1%	0.0%	37.1%	0.0%	54.28%	30.70000		1.000	3.36	3.36	103.16	2475.91	451.85	191.60	6.19	75%
AXA0588 - Gray	9.07	37.6%	0.0%	37.6%	0.0%	53.87%	30.70000		1.000	3.41	3.41	104.81	2515.40	459.06	190.14	6.34	75%
AXE0039 - Orange	9.58	34.1%	0.0%	34.1%	0.0%	60.13%	30.70000		1.000	3.27	3.27	100.29	2406.96	439.27	212.23	5.43	75%
U004																	
Buff Primer (AXDA204)	11.40	30.240%	0.0%	30.2%	0.0%	82.00%	42.10000		1.000	3.45	3.45	145.13	3483.21	635.69	366.61	4.20	75%
Black Top Coat (KAA0121)	10.80	32.0%	0.0%	32.0%	0.0%	69.99%	42.10000		1.000	3.45	3.45	145.27	3486.49	636.28	338.80	4.93	75%
Grey Polyurethane Enamel (KAA0045)	10.81	29.640%	0.0%	29.6%	0.0%	72.40%	42.10000		1.000	3.20	3.20	134.89	3237.41	590.83	350.63	4.43	75%
Orange Polyurethane Enamel (KAEA019)	9.51	34.720%	0.0%	34.7%	0.0%	61.80%	42.10000		1.000	3.30	3.30	139.01	3336.21	608.86	286.19	5.34	75%
65 AAK474 - Black	9.61	35.8%	0.0%	35.8%	0.0%	58.72%	42.10000		1.000	3.44	3.44	145.00	3480.04	635.11	284.24	5.87	75%
AXA0589 - Black	9.06	37.1%	0.0%	37.1%	0.0%	54.28%	42.10000		1.000	3.36	3.36	141.47	3395.30	619.64	262.75	6.19	75%
AXA0588 - Gray	9.07	37.6%	0.0%	37.6%	0.0%	53.87%	42.10000		1.000	3.41	3.41	143.73	3449.45	629.53	260.74	6.34	75%
AXE0039 - Orange	9.58	34.1%	0.0%	34.1%	0.0%	60.13%	42.10000		1.000	3.27	3.27	137.53	3300.75	602.39	291.04	5.43	75%
U005																	
Buff Primer (AXDA204)	11.40	30.240%	0.0%	30.2%	0.0%	82.00%	7.68000		1.000	3.45	3.45	26.48	635.42	115.96	66.88	4.20	75%
Black Top Coat (KAA0121)	10.80	32.0%	0.0%	32.0%	0.0%	69.99%	7.68000		1.000	3.45	3.45	26.50	636.01	116.07	61.81	4.93	75%
Grey Polyurethane Enamel (KAA0045)	10.81	29.640%	0.0%	29.6%	0.0%	72.40%	7.68000		1.000	3.20	3.20	24.61	590.58	107.78	63.96	4.43	75%
Orange Polyurethane Enamel (KAEA019)	9.51	34.720%	0.0%	34.7%	0.0%	61.80%	7.68000		1.000	3.30	3.30	25.36	608.60	111.07	52.21	5.34	75%
65 AAK474 - Black	9.61	35.8%	0.0%	35.8%	0.0%	58.72%	7.68000		1.000	3.44	3.44	26.45	634.84	115.86	51.85	5.87	75%
AXA0589 - Black	9.06	37.1%	0.0%	37.1%	0.0%	54.28%	7.68000		1.000	3.36	3.36	25.81	619.38	113.04	47.93	6.19	75%
AXA0588 - Gray	9.07	37.6%	0.0%	37.6%	0.0%	53.87%	7.68000		1.000	3.41	3.41	26.22	629.26	114.84	47.57	6.34	75%
AXE0039 - Orange	9.58	34.1%	0.0%	34.1%	0.0%	60.13%	7.68000		1.000	3.27	3.27	25.09	602.13	109.89	53.09	5.43	75%
U013a - Paint Booth 1																	
Buff Primer (AXDA204)	11.40	30.240%	0.0%	30.2%	0.0%	82.00%	15.0		1.000	3.45	3.45	51.71	1241.05	226.49	130.62	4.20	75%
Black Top Coat (KAA0121)	10.80	32.0%	0.0%	32.0%	0.0%	69.99%	15.0		2.000	3.45	3.45	51.76	2484.43	453.41	120.71	9.86	75%
Grey Polyurethane Enamel (KAA0045)	10.81	29.640%	0.0%	29.6%	0.0%	72.40%	15.0		1.000	3.20	3.20	48.06	1153.47	210.51	124.93	4.43	75%
Orange Polyurethane Enamel (KAEA019)	9.51	34.720%	0.0%	34.7%	0.0%	61.80%	15.0		1.000	3.30	3.30	49.53	1188.67	216.93	101.97	5.34	75%
65 AAK474 - Black	9.61	35.8%	0.0%	35.8%	0.0%	58.72%	15.0		1.000	3.44	3.44	51.66	1239.92	226.29	101.27	5.87	75%
AXA0589 - Black	9.06	37.1%	0.0%	37.1%	0.0%	54.28%	15.0		1.000	3.36	3.36	50.41	1209.73	220.78	93.62	6.19	75%
AXA0588 - Gray	9.07	37.6%	0.0%	37.6%	0.0%	53.87%	15.0		1.000	3.41	3.41	51.21	1229.02	224.30	92.90	6.34	75%
AXE0039 - Orange	9.58	34.1%	0.0%	34.1%	0.0%	60.13%	15.0		1.000	3.27	3.27	49.00	1176.04	214.63	103.69	5.43	75%
U013b - Paint Booth 2																	
Buff Primer (AXDA204)	11.40	30.240%	0.0%	30.2%	0.0%	82.00%	15.0		1.000	3.45	3.45	51.71	1241.05	226.49	130.62	4.20	75%
Black Top Coat (KAA0121)	10.80	32.0%	0.0%	32.0%	0.0%	69.99%	15.0		2.000	3.45	3.45	51.76	2484.43	453.41	120.71	9.86	75%
Grey Polyurethane Enamel (KAA0045)	10.81	29.640%	0.0%	29.6%	0.0%	72.40%	15.0		1.000	3.20	3.20	48.06	1153.47	210.51	124.93	4.43	75%
Orange Polyurethane Enamel (KAEA019)	9.51	34.720%	0.0%	34.7%	0.0%	61.80%	15.0		1.000	3.30	3.30	49.53	1188.67	216.93	101.97	5.34	75%
65 AAK474 - Black	9.61	35.8%	0.0%	35.8%	0.0%	58.72%	15.0		1.000	3.44	3.44	51.66	1239.92	226.29	101.27	5.87	75%
AXA0589 - Black	9.06	37.1%	0.0%	37.1%	0.0%	54.28%	15.0		1.000	3.36	3.36	50.41	1209.73	220.78	93.62	6.19	75%
AXA0588 - Gray	9.07	37.6%	0.0%	37.6%	0.0%	53.87%	15.0		1.000	3.41	3.41	51.21	1229.02	224.30	92.90	6.34	75%
AXE0039 - Orange	9.58	34.1%	0.0%	34.1%	0.0%	60.13%	15.0		1.000	3.27	3.27	49.00	1176.04	214.63	103.69	5.43	75%
Cleanup																	
TEM112	6.76	100.00%	0.0%	100.0%	0.0%	0.00%	0.35000	15.000	1.000	6.76	6.76	35.49	851.76	155.45	0.00	n/a	75%

Note that the Polyurethane Enamels (KAA0121, KAA0054 and KAEA019) are mixed with CTC0075. The information in these calculations represents the "as applied" data.

State Potential Emissions	Add worst case coating to all solvents	Uncontrolled Emissions	Control Efficiency U001 & U002	Control Efficiency U004	Control Efficiency U005	Control Efficiency U013	Controlled Emissions
		523	15028	2743	1229		
		0	0	0	99.00%		
		0	0	0	99.84%		
		0	0	0	92.00%		
		0	0	0	99.94%		
		523	15028	2743	11.4		

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) * Flash-off
 Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day) * Flash-off
 Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hrs/yr) * (1 ton/2000 lbs) * Flash-off
 Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1-Transfer efficiency) * (8760 hrs/yr) * (1 ton/2000 lbs)
 Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids) * Flash-off
 Total = Worst Coating + Sum of all solvents used

Company Name: **Toyota Industrial Equipment Manufacturing, Inc.**
 Address City IN Zip: **5555 Inwood Drive, Columbus, IN 47202**
 Part 70: **T 005-17756-00040**
 Reviewer: **CarrieAnn Paukowits**
 Application Date: **July 14, 2003**

Material	Density (lb/gal)	Gal of Mat (gal/hr)	Maximum (unit/hour)	Flash-off (fraction)	Weight % Glycol Ethers	Weight % Naphthalene	Glycol Ethers Emissions (tons/yr)	Naphthalene Emissions (tons/yr)	Total Emissions (tons/yr)
U001									
Buff Primer (AXDA204)	11.40	30.70000		1.00	0.00%	0.00%	0.00	0.00	0.00
Black Top Coat (KAA0121)	10.80	30.70000		1.00	5.00%	0.00%	72.61	0.00	72.61
Grey Polyurethane Enamel (KAA0045)	10.81	30.70000		1.00	2.80%	0.00%	40.70	0.00	40.70
Orange Polyurethane Enamel (KAEA019)	9.51	30.70000		1.00	3.70%	0.00%	47.31	0.00	47.31
65 AAK474 - Black	9.61	30.70000		1.00	5.00%	0.00%	64.61	0.00	64.61
AXA0589 - Black	9.06	30.70000		1.00	0.00%	1.00%	60.91	0.00	60.91
AXA0588 - Gray	9.07	30.70000		1.00	0.00%	1.00%	0.00	12.20	12.20
AXE0039 - Orange	9.58	30.70000		1.00	0.00%	1.00%	0.00	12.88	12.88
U002									
Buff Primer (AXDA204)	11.4	30.70000		1.00	0.00%	0.00%	0.00	0.00	0.00
Black Top Coat (KAA0121)	10.8	30.70000		1.00	5.00%	0.00%	72.61	0.00	72.61
Grey Polyurethane Enamel (KAA0045)	10.8	30.70000		1.00	2.80%	0.00%	40.70	0.00	40.70
Orange Polyurethane Enamel (KAEA019)	9.5	30.70000		1.00	3.70%	0.00%	47.31	0.00	47.31
65 AAK474 - Black	9.6	30.70000		1.00	5.00%	0.00%	64.61	0.00	64.61
AXA0589 - Black	9.1	30.70000		1.00	0.00%	1.00%	60.91	0.00	60.91
AXA0588 - Gray	9.1	30.70000		1.00	0.00%	1.00%	0.00	12.20	12.20
AXE0039 - Orange	9.6	30.70000		1.00	0.00%	1.00%	0.00	12.88	12.88
U004									
Buff Primer (AXDA204)	11.4	42.10000		1.00	0.00%	0.00%	0.00	0.00	0.00
Black Top Coat (KAA0121)	10.8	42.10000		1.00	5.00%	0.00%	99.57	0.00	99.57
Grey Polyurethane Enamel (KAA0045)	10.8	42.10000		1.00	2.80%	0.00%	55.81	0.00	55.81
Orange Polyurethane Enamel (KAEA019)	9.5	42.10000		1.00	3.70%	0.00%	64.88	0.00	64.88
65 AAK474 - Black	9.6	42.10000		1.00	5.00%	0.00%	88.60	0.00	88.60
AXA0589 - Black	9.1	42.10000		1.00	0.00%	1.00%	83.53	0.00	83.53
AXA0588 - Gray	9.1	42.10000		1.00	0.00%	1.00%	0.00	16.72	16.72
AXE0039 - Orange	9.6	42.10000		1.00	0.00%	1.00%	0.00	17.67	17.67
U005									
Buff Primer (AXDA204)	11.4	7.68000		1.00	0.00%	0.00%	0.00	0.00	0.00
Black Top Coat (KAA0121)	10.8	7.68000		1.00	5.00%	0.00%	18.16	0.00	18.16
Grey Polyurethane Enamel (KAA0045)	10.8	7.68000		1.00	2.80%	0.00%	10.18	0.00	10.18
Orange Polyurethane Enamel (KAEA019)	9.5	7.68000		1.00	3.70%	0.00%	11.84	0.00	11.84
65 AAK474 - Black	9.6	7.68000		1.00	5.00%	0.00%	16.16	0.00	16.16
AXA0589 - Black	9.1	7.68000		1.00	0.00%	1.00%	15.24	0.00	15.24
AXA0588 - Gray	9.1	7.68000		1.00	0.00%	1.00%	0.00	3.05	3.05
AXE0039 - Orange	9.6	7.68000		1.00	0.00%	1.00%	0.00	3.22	3.22
U013a - Paint Booth 1									
Buff Primer (AXDA204)	11.4	15.00000		1.00	0.00%	0.00%	0.00	0.00	0.00
Black Top Coat (KAA0121)	10.8	15.00000		1.00	5.00%	0.00%	35.48	0.00	35.48
Grey Polyurethane Enamel (KAA0045)	10.8	15.00000		1.00	2.80%	0.00%	19.89	0.00	19.89
Orange Polyurethane Enamel (KAEA019)	9.5	15.00000		1.00	3.70%	0.00%	23.12	0.00	23.12
65 AAK474 - Black	9.6	15.00000		1.00	5.00%	0.00%	31.57	0.00	31.57
AXA0589 - Black	9.1	15.00000		1.00	0.00%	1.00%	29.76	0.00	29.76
AXA0588 - Gray	9.1	15.00000		1.00	0.00%	1.00%	0.00	5.96	5.96
AXE0039 - Orange	9.6	15.00000		1.00	0.00%	1.00%	0.00	6.29	6.29
U013b - Paint Booth 2									
Buff Primer (AXDA204)	11.4	15.00000		1.00	0.00%	0.00%	0.00	0.00	0.00
Black Top Coat (KAA0121)	10.8	15.00000		1.00	5.00%	0.00%	35.48	0.00	35.48
Grey Polyurethane Enamel (KAA0045)	10.8	15.00000		1.00	2.80%	0.00%	19.89	0.00	19.89
Orange Polyurethane Enamel (KAEA019)	9.5	15.00000		1.00	3.70%	0.00%	23.12	0.00	23.12
65 AAK474 - Black	9.6	15.00000		1.00	5.00%	0.00%	31.57	0.00	31.57
AXA0589 - Black	9.1	15.00000		1.00	0.00%	1.00%	29.76	0.00	29.76
AXA0588 - Gray	9.1	15.00000		1.00	0.00%	1.00%	0.00	5.96	5.96
AXE0039 - Orange	9.6	15.00000		1.00	0.00%	1.00%	0.00	6.29	6.29
Cleanup									
TEM112	6.8	0.35000	15.000	1.00	0.00%	0.00%	0.00	0.00	0.00

Note that the Polyurethan Enamels (KAA0121, KAA0054 and KAEA019) are mixed with CTC0075. The information in these calculations represents the "as applied" data.

Total State Potential Emissions

TOTALS:	(tons/yr):	334	59.2	334
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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

**Appendix A: Emission Calculations
Abrasive Blasting**

Company Name: Toyota Industrial Equipment Manufacturing, Inc.
Address City IN Zip: 5555 Inwood Drive, Columbus, IN 47202
Part 70: T 005-17756-00040
Reviewer: CarrieAnn Paukowits
Application Date: July 14, 2003

Table 1 - Emission Factors for Abrasives

Abrasive	Emission Factor	
	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	

HAP Emission Factors for Steel Shot

lb Manganese/lb PM	0.02
lb Chromium/lb PM	0.01
lb Nickel/lb PM	0.01

Hourly Emissions

Shot blater	Potential Shot Usage (lbs/hr)	Uncontrolled Potential PM Emissions (lbs/hr)	Uncontrolled Potential PM10 Emissions (lbs/hr)	Uncontrolled Potential Mn Emissions (lbs/hr)	Uncontrolled Potential Cr Emissions (lbs/hr)	Uncontrolled Potential Ni Emissions (lbs/hr)	Particulate Control Efficiency (%)	Controlled Potential PM Emissions (lbs/hr)	Controlled Potential PM10 Emissions (lbs/hr)	Controlled Potential Mn Emissions (lbs/hr)	Controlled Potential Cr Emissions (lbs/hr)	Controlled Potential Ni Emissions (lbs/hr)
U009	132000.0	528	454	10.6	5.28	5.28	99.0%	5.28	4.54	0.106	0.053	0.053
U011	115500.0	462	397	9.24	4.62	4.62	99.0%	4.62	3.97	0.092	0.046	0.046
U012	56500.0	226	194	4.52	2.26	2.26	99.9%	0.226	0.194	0.005	0.002	0.002
Total		1216	1046	24.3	12.2	12.2		10.1	8.71	0.203	0.101	0.101

Annual Emissions

Shot blater	Uncontrolled Potential PM Emissions (tons/yr)	Uncontrolled Potential PM10 Emissions (tons/yr)	Uncontrolled Potential Mn Emissions (tons/yr)	Uncontrolled Potential Cr Emissions (tons/yr)	Uncontrolled Potential Ni Emissions (tons/yr)	Particulate Control Efficiency (%)	Controlled Potential PM Emissions (tons/yr)	Controlled Potential PM10 Emissions (tons/yr)	Controlled Potential Mn Emissions (tons/yr)	Controlled Potential Cr Emissions (tons/yr)	Controlled Potential Ni Emissions (tons/yr)
U009	2313	1989	46.3	23.1	23.1	99.0%	23.1	19.9	0.463	0.231	0.231
U011	2024	1740	40.5	20.2	20.2	99.0%	20.2	17.4	0.405	0.202	0.202
U012	990	851	19.8	9.90	9.90	99.9%	0.990	0.851	0.020	0.010	0.010
Total	5326	4580	107	53.3	53.3		44.4	38.1	0.887	0.444	0.444

METHODOLOGY

Emission Factors from Stappa Alapco, Section 3 "Abrasive Blasting"

HAP emissions factors assume same HAP composition in steel shot as in steel

Uncontrolled emissions = shot usage * emission factor

Controlled emissions = shot usage * emission factor * (1-control efficiency)

**Appendix A: Emission Calculations
Natural Gas-fired Reciprocating Engines**

Company Name: Toyota Industrial Equipment Manufacturing, Inc.
Address City IN Zip: 5555 Inwood Drive, Columbus, IN 47202
Part 70: T 005-17756-00040
Reviewer: CarrieAnn Paukowits
Application Date: July 14, 2003

Worst case fuel usage

Fuel consumption (g/kW h)*	258
Shaft Output (kW)*	43
Fuel consumption (g/h)	11094
Fuel consumption (lb/hr)	24.5
Energy content CNG	21,300 Btu/lb CNG
Heat input capacity (MMBtu/hr)	0.521

* From charts provided by the applicant

Four stroke Lean Burn Engines

Heat Input Capacity

MM Btu/yr

521.0

Emission Factor in lb/MMBtu	Pollutant					
	PM	PM10	SO2	NOx	VOC	CO
7.71E-05	9.99E-03	5.88E-04	4.08E+00	1.18E-01	3.17E-01	
Potential Emission in tons/yr	0.00002	0.003	0.0002	1.06	0.031	0.083

Four stroke Rich Burn Engines

Heat Input Capacity

MM Btu/yr

521.0

Emission Factor in lb/MMBtu	Pollutant					
	PM	PM10	SO2	NOx	VOC	CO
9.50E-03	1.94E-02	5.88E-04	2.21E+00	2.96E-02	3.72E+00	
Potential Emission in tons/yr	0.002	0.005	0.000	0.576	0.008	0.969

Worst case emissions for project	PM	PM10	SO2	NOx	VOC	CO
	0.002	0.005	0.0002	0.576	0.008	0.969

HAP	Emission Factor Four stroke lean burn (lb/MMBtu)	Emission Factor Four stroke rich burn (lb/MMBtu)	Potential to Emit (tons/yr)
1,1,2,2-Tetrachloroethane	4.00E-05	2.53E-05	1.04E-05
1,1,2-Trichloroethane	3.18E-05	1.53E-05	8.28E-06
1,1-Dichloroethane	2.36E-05	1.13E-05	6.15E-06
1,2-Dichloroethane	2.36E-05	1.13E-05	6.15E-06
1,2-Dichloropropane	2.69E-05	1.30E-05	7.01E-06
1,3-Butadiene	2.67E-04	6.63E-04	1.73E-04
1,3-Dichloropropene	2.64E-05	1.27E-05	6.88E-06
2,2,4-Trimethylpentane	2.50E-04	0.00E+00	6.51E-05
Acetaldehyde	8.36E-03	2.79E-03	2.18E-03
Acrolein	5.14E-03	2.63E-03	1.34E-03
Benzene	4.40E-04	1.58E-03	4.12E-04
Biphenyl	2.12E-04	0.00E+00	5.52E-05
Carbon Tetrachloride	3.67E-05	1.77E-05	9.56E-06
Chlorobenzene	3.04E-05	1.29E-05	7.92E-06
Chloroethane	1.87E-06	0.00E+00	4.87E-07
Chloroform	2.85E-05	1.37E-05	7.42E-06
Ethylbenzene	3.97E-05	2.48E-05	1.03E-05
Ethylene Dibromide	4.43E-05	2.13E-05	1.15E-05
Formaldehyde	5.28E-02	2.05E-02	1.38E-02
Methanol	2.50E-03	3.06E-03	7.97E-04
Methylene Chloride	2.00E-05	4.12E-05	1.07E-05
n-Hexane	1.11E-03	0.00E+00	2.89E-04
Naphthalene	7.44E-05	9.71E-05	2.53E-05
Phenol	2.40E-05	0.00E+00	6.25E-06
Styrene	2.36E-05	1.19E-05	6.15E-06
Toluene	4.08E-04	5.58E-04	1.45E-04
Vinyl Chloride	1.49E-05	7.18E-06	3.88E-06
Xylene	1.84E-04	1.95E-04	5.08E-05
Total HAPs:			0.019

Methodology

Emission Factors are from AP 42 Tables 3.2-1, 3.2-2 and 3.2-3, revised July 2000

Emission (tons/yr) = [Heat input rate (MMBtu/hr) x Emission Factor (lb/MMBtu)] * 8760 hr/yr / (2,000 lb/ton)

**Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Small Industrial Boiler**

**Company Name: Toyota Industrial Equipment Manufacturing, Inc.
Address City IN Zip: 5555 Inwood Drive, Columbus, IN 47202
Part 70: T 005-17756-00040
Reviewer: CarrieAnn Paukowits
Application Date: July 14, 2003**

Heat Input Capacity
MMBtu/hr

Potential Throughput
MMCF/yr

149.20

1307

Emission Factor in lb/MMCF	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	1.90	7.60	0.600	100 **see below	5.50	84.0
Potential Emission in tons/yr	1.24	4.97	0.392	65.3	3.59	54.9

*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

Emission Factor in lb/MMcf	HAPs - Organics				
	Benzene	Dichlorobenze	Formaldehyde	Hexane	Toluene
	0.00210	0.00120	0.07500	1.80000	0.00340
Potential Emission in tons/yr	0.001372	0.000784	0.049012	1.176293	0.002222

Emission Factor in lb/MMcf	HAPs - Metals					Total
	Lead	Cadmium	Chromium	Manganese	Nickel	
	0.0005	0.0011	0.0014	0.0004	0.0021	
Potential Emission in tons/yr	0.00033	0.00072	0.00091	0.00025	0.00137	1.23

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

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

Company Name: Toyota Industrial Equipment Manufacturing, Inc
 Address City IN Zip: 5555 Inwood Drive, Columbus, IN 47202
 Part 70: T 005-17756-00040
 Reviewer: CarrieAnn Paukowitz
 Application Date: July 14, 2003

Provided by the Applicant

Emission Unit ID (Stack ID)	Emission Unit Description	Product Material Used	a Potential Annual Usage (gallons)	Density (lb/gal)	b VOC Content % (w/w)	c % Solids (% w/w)	e % Solids Emitted	d VOC Potential To Emit - PTE		f PM / PM10 Potential To Emit (PTE)	
								(lb/yr)	(TPY)	(lb/yr)	(TPY)
I011a,b (S011a,b)	5-Stage Iron Phosphate Washer - Stage 1	Nalco Texolite 1391SL	6,569	10.05	0.0	34.3	5.0	0.0	0.00	1,131.8	0.57
	5-Stage Iron Phosphate Washer - Stage 3	Nalco Globrite 704DS	5,276	10.41	0.0	36.2	5.0	0.0	0.00	994.1	0.50
	5-Stage Iron Phosphate Washer - Stage 5	Nalco Sealtext 8800NCS	502	8.40	4.29	4.7	5.0	180.9	0.09	9.9	0.00
VOC Emission Totals (I011):								181	0.090	2,136	1.07

Emission Unit ID (Stack ID)	Emission Unit Description	Product Material Used	a Potential Annual Usage (gallons)	Density (lb/gal)	b VOC Content % (w/w)	c % Solids (% w/w)	e % Solids Emitted	d VOC Potential To Emit - PTE		f PM / PM10 Potential To Emit (PTE)	
								(lb/yr)	(TPY)	(lb/yr)	(TPY)
I012	5-Stage Iron Phosphate Washer - Stage 1	Nalco Texolite 1391SL	8,526	10.05	0.0	34.3	5.0	0.0	0.00	1,469.1	0.73
	5-Stage Iron Phosphate Washer - Stage 3	Nalco Globrite 704DS	7,704	10.41	0.0	36.2	5.0	0.0	0.00	1,451.6	0.73
	5-Stage Iron Phosphate Washer - Stage 5	Nalco Sealtext 8800NCS	703	8.40	4.29	4.7	5.0	253.2	0.13	13.9	0.01
VOC Emission Totals (I012):								253	0.127	2,935	1.47

Emission Unit ID (Stack ID)	Emission Unit Description	Product Material Used	a Potential Annual Usage (gallons)	Density (lb/gal)	b VOC Content % (w/w)	c % Solids (% w/w)	e % Solids Emitted	d VOC Potential To Emit - PTE		f PM / PM10 Potential To Emit (PTE)	
								(lb/yr)	(TPY)	(lb/yr)	(TPY)
#7 Frame Washer	4-Stage Iron Phosphate Washer - Stage 1	Nalco Texolite 1391SL	7,962	10.05	0.0	34.3	5.0	0.0	0.00	1,371.9	0.69
	4-Stage Iron Phosphate Washer - Stage 3	Nalco Globrite 704DS	7,194	10.41	0.0	36.2	5.0	0.0	0.00	1,355.6	0.68
	NA	Nalco Sealtext 8800NCS	0	NA	NA	NA	NA	NA	NA	NA	NA
VOC Emission Totals (#7 Frame Washer):								253	0.253	4,306	2.15

Emission Unit ID (Stack ID)	d VOC Potential To Emit - PTE (lb/yr)	d VOC Potential To Emit - PTE (TPY)	f PM / PM10 Potential To Emit (PTE) (lb/yr)	f PM / PM10 Potential To Emit (PTE) (TPY)
VOC Emission Totals (I011):	181	0.090	2,136	1.07
VOC Emission Totals (I012):	253	0.127	2,935	1.47
VOC Emission Totals (#7 Frame Washer):	253	0.253	4,306	2.15
VOC Emission Totals (I011 + I012 + #7 Frame Washer):	687	0.470	9,377	4.69

a Quantities based on an operating schedule of 8,760 hours/year. Normal operating schedule is 8 hours/day, 5 days/week, 50 weeks/year (2,000 hours year).

b VOC and solids data obtained from Product Vendor (Nalco). There are no HAPs associated with these products.

c Conservative estimate based on U.S. EPA HEW Study on particulate emissions from chemical metal treatment. (Particulate emissions from chemical metal treatment are calculated based on 5% of the solids contained in the product material used being dispersed to the atmosphere as particulate matter).

d PTE for VOC assumes that 100% of the VOC contained in the product is emitted to the atmosphere and is calculated according to the following:

$$\begin{aligned} \text{VOC (lb/yr)} &= (\text{Potential annual usage, gallons/yr}) * (\text{Density, lb mat/l gal}) * (\% \text{ w/w of VOC, lb VOC/lb mat}) / 100 \\ &= (\text{gallons/yr}) * (\text{lb mat/l gal}) * (\% \text{ VOC/lb mat}) / 100 \\ &= \text{lb VOC/yr} \end{aligned}$$

e PTE for particulate matter (PM) assumes that all PM is PM10 and is calculated according to the following:

$$\begin{aligned} \text{PM/PM}_{10} \text{ (lb/yr)} &= (\text{Potential annual usage, gallons/yr}) * (\text{Density, lb mat/l gal}) * (\% \text{ Solids in Mat'l, lb solids/lb mat'l}) / 100 * (\% \text{ Solids Emitted}) / 100 \\ &= (\text{gallons/yr}) * (\text{lb mat'l/gal}) * (\text{lb solids/lb mat'l}) / 100 * (5\% \text{ or } 5/100) \\ &= \text{lb PM}_{10}/\text{yr} \end{aligned}$$

Potential Usage

Emission Unit ID (Stack ID)	Emission Unit Description	Product Material Used	2005 Annual Usage (gallons)	Prorated Potential Usage (gallons)	Tank Capacity (gallons)			Fraction of Total Tank Volume			Potential Tank Usage (gallons)			
					I011	I012	#7 Frame	I011	I012	#7 Frame	I011	I012	#7 Frame	Total
I011	Stage 1	Nalco Texolite 1391SL	5,264	23,056	990	1285	1200	0.285	0.370	0.345	6568.6	8525.9	7961.9	23,056
	Stage 3	Nalco Globrite 704DS	4,606	20,174	880	1285	1200	0.262	0.382	0.357	5275.9	7704.0	7194.4	20,174
#7 Frame Washer	Stage 5	Nalco Sealtext 8800NCS	275	1,205	550	770	0	0.417	0.583	0.000	501.88	702.6	0.0	1,205

Totals: 12,346 16,932 15,156 44,435

Appendix A: Federal Potential Emissions Calculations
Particulate Emissions
Powder Coating

Company Name: Toyota Industrial Equipment Manufacturing, Inc.
Address City IN Zip: 5555 Inwood Drive, Columbus, IN 47202
Part 70: T 005-17756-00040
Reviewer: CarrieAnn Paukowitz
Application Date: July 14, 2003

Provided by the Applicant

Emission Unit ID (Stack ID)	Emission Unit Description	Maximum Powder Usage (lb/hr)	^a Maximum Powder Usage (TPY)	Transfer Efficiency (%)	^b Maximum Material Overspray (lb/hr)	^b Primary Filter Efficiency (%)	^b Secondary Filter Efficiency (%)	^c PM / PM ₁₀ Potential To Emit (PTE)	
								(lb/yr)	(TPY)
I011f (C011a,b)	Dry Powder Coat Line: Powder Coat Booth No.1 (Reclaim)	84.0	368	96	3.36	94.38	98.0	33.08	0.017
I011f (C011a,b)	Dry Powder Coat Line: Powder Coat Booth No.2 (Reclaim)	84.0	368	96	3.36	94.38	98.0	33.08	0.017
I011f (C011a,b)	Dry Powder Coat Line: Powder Coat Booth No.3 (Non-Reclaim)	84.0	368	96	3.36	94.38	98.0	33.08	0.017
^{d,e} PM/PM₁₀ Emission Totals for I011 (exhausting to climate controlled room equipped with own HVAC system):								33.1	0.017
I012f (C012a,b)	Dry Powder Coat Line: Powder Coat Booth No.1 (Reclaim)	84.0	368	96	3.36	94.38	98.0	33.08	0.017
I012f (C012a,b)	Dry Powder Coat Line: Powder Coat Booth No.2 (Reclaim)	84.0	368	96	3.36	94.38	98.0	33.08	0.017
^{d,f} PM/PM₁₀ Emission Totals for I012 (exhausting to climate controlled room equipped with own HVAC system):								33.1	0.017
^d PM/PM₁₀ Emission Totals for I011 + I012:								66.2	0.033

^a Potential usage based on an operating schedule of 8,760 hours/year. Normal operating schedule is 8 hours/day, 5 days/week, 50 weeks/year (2,000 hours year).

^b Material Overspray (lb/hr) is based on a transfer efficiency of 96% and is calculated according to the following:

Overspray (lb/hr)
= (Maximum hourly usage, lb/hr) * (1-transfer efficiency, %) / 100
= Maximum amount (lb/hr) of material overspray

Primary and Secondary filters efficiencies consist of the following: Primary filters (94.38%) and Secondary filters (98%)

^c PTE for particulate matter (PM) assumes that all PM is PM₁₀ and is calculated according to the following:

PM/PM₁₀ (lb/yr)
= (Maximum material overspray, lb/hr) * (1 - Primary filter efficiency, %) * (1 - Secondary filter efficiency, %) * (8,760 hr/yr)
= (lb/hr) * (1 - primary filter efficiency/100) * (1 - secondary filter efficiency/100) * (8,760 hr/yr)
= lb PM₁₀/yr

^d PTE for particulate matter (PM) is negligible. Emissions calculated in the table above are based on powder coat booths integrated with a two-stage filtration system consisting of both primary and secondary filters and are located within a climate-controlled room equipped with its own HVAC system having no ambient exhaust. This applies to both insignificant units I011 & I012.

^e Insignificant Emission Unit I011 is equipped with two (3) separate powder coat booths; however, TIEM can only spray in one (1) booth at any given time.

^f Insignificant Emission Unit I012 is equipped with two (2) separate powder coat booths; however, TIEM can only spray in one (1) booth at any given time.

**Appendix A: Emissions Calculations
From Insignificant Activities other than Combustion**

Company Name: Toyota Industrial Equipment Manufacturing, Inc.
Address City IN Zip: 5555 Inwood Drive, Columbus, IN 47202
Part 70: T 005-17756-00040
Reviewer: CarrieAnn Paukowits
Application Date: July 14, 2003

Gasoline Dispensing

Material	Usage 1997 (gallons/yr)	Truck Production 1997	Potential Annual Truck Production	Potential Gasoline Usage (gallons/yr)	Displacement Loss Emission Factor (lb VOC/gallon)	Spill Loss Emission Factor (lb VOC/gallon)	Displacement Loss (tons VOC/yr)	Spill Loss (tons VOC/yr)	Total VOC Emissions (tons/yr)
Gasoline	8500	14601	74460	43347	0.011	0.001	0.238	0.015	0.254

Storage Tanks

Material	Potential Breathing Losses (lbs/yr)	Potential Working Losses (lbs/yr)	Total Potential Tank Emissions (lbs/yr)	Total Potential Tank Emissions (ton/yr)
Gasoline	307	535	842	0.421
Various	15.0	34.0	49.0	0.025
Total:				0.446

Total Potential VOC Emissions: 0.699 tons/yr

METHODOLOGY**Gasoline Dispensing**

Emissions = gasoline usage (scaled to maximum production) * (displacement loss emission factor + spill loss emission factor)

Storage Tanks

Provided by the applicant. Based on capacity, throughput, product stored, and type of tank.

Appendix A: Emissions Calculations
Insignificant Welding

Company Name: Toyota Industrial Equipment Manufacturing, Inc.
Address City IN Zip: 5555 Inwood Drive, Columbus, IN 47202
Part 70: T 005-17756-00040
Reviewer: CarrieAnn Paukowits
Application Date: July 14, 2003

PROCESS	Number of Stations	Max. electrode consumption per station (lbs/hr)	EMISSION FACTORS* (lb pollutant/lb electrode)				EMISSIONS (lbs/hr)				HAPS (lbs/hr)
			PM = PM10	Mn	Ni	Cr	PM = PM10	Mn	Ni	Cr	
WELDING											
Metal Inert Gas (MIG)(carbon steel) (E70S)	167	36.7	0.0052	0.000318	0.000001	0.000001	31.870	1.949	0.006	0.0061289	1.961
Metal Inert Gas (MIG)(carbon steel) (E70S)	25	26.2	0.0052	0.000318	0.000001	0.000001	3.406	0.208	0.001	0.000655	0.210
Metal Inert Gas (MIG)(carbon steel) (E70S)	2	15.8	0.0052	0.000318	0.000001	0.000001	0.164	0.010	0.000	0.0000316	0.010
EMISSION TOTALS											
Potential Emissions lbs/hr							35.44	2.17	0.01	0.01	2.18
Potential Emissions lbs/day							850.57	52.02	0.16	0.16	52.3
Potential Emissions tons/year							155.23	9.49	0.030	0.030	9.55

METHODOLOGY

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 lbs.

Welding Limit

PROCESS	Number of Stations	Max. electrode consumption per station (lbs/yr)	EMISSION FACTORS* (lb pollutant/lb electrode)				EMISSIONS (lbs/yr)				HAPS (lbs/yr)
			PM = PM10	Mn	Ni	Cr	PM = PM10	Mn	Ni	Cr	
WELDING											
Metal Inert Gas (MIG)(carbon steel) (E70S)	1	20000000	0.0052	0.000318	0.000001	0.000001	104000	6360	20.00	20.00	6400
EMISSION TOTALS											
Potential Emissions lbs/hr							104000	6360	20.00	20.00	6400
Potential Emissions tons/year							52.0	3.18	0.010	0.010	3.20

Total Emissions

Company Name: Toyota Industrial Equipment Manufacturing, Inc.
Address City IN Zip: 5555 Inwood Drive, Columbus, IN 47202
Part 70: T 005-17756-00040
Reviewer: CarrieAnn Paukowits
Application Date: July 14, 2003

Unrestricted Potential

	PM	PM10	SO2	VOC	Nox	CO	Total HAPs	Glycol Ethers	Naphthalene	Formaldehyde	Manganese	Chromium	Nickel	Hexane
Surface Coating	1229	1229	0.00	2743	0.00	0.00	334	334	59.2	0.000	0.00	0.00	0.00	0.00
Shot blasting	5326	4580	0.00	0.00	0.00	0.00	213	0.00	0.00	0.00	107	53.3	53.3	0.00
Engine testing	0.002	0.005	0.000	0.008	0.576	0.969	0.019	0.00	0.00	0.014	0.00	0.00	0.00	0.00
Insignificant Activities														
Combustion	1.24	4.97	0.392	3.59	65.3	54.9	1.23	0.00	0.00	0.049	0.00	0.00	0.00	1.18
Fuel transfer	0.00	0.00	0.00	0.254	0.00	0.00	0.254	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Storage	0.00	0.00	0.00	0.446	0.00	0.00	0.446	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phosphate Wash	4.69	4.69	0.00	0.470	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Powder coating	0.033	0.033	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Welding	155	155	0.00	0.00	0.00	0.00	9.55	0.00	0.00	0.00	9.49	0.030	0.030	0.00
Total	6717	5975	0.392	2747	65.9	55.9	558	334	59.2	0.063	116	53.3	53.3	1.18

Potential after Controls

	PM	PM10	SO2	VOC	Nox	CO	Total HAPs	Glycol Ethers	Naphthalene	Formaldehyde	Manganese	Chromium	Nickel	Hexane
Surface Coating	11.4	11.4	0.00	2743	0.00	0.00	334	334	59.2	0.000	0.00	0.00	0.00	0.00
Shot blasting	44.4	38.1	0.00	0.00	0.00	0.00	1.77	0.00	0.00	0.00	0.887	0.444	0.444	0.00
Engine testing	0.002	0.005	0.00	0.008	0.576	0.969	0.019	0.00	0.00	0.014	0.00	0.00	0.00	0.00
Insignificant Activities														
Combustion	1.24	4.97	0.392	3.59	65.3	54.9	1.23	0.00	0.00	0.049	0.00	0.00	0.00	1.18
Fuel transfer	0.00	0.00	0.00	0.254	0.00	0.00	0.254	0.00	0.00	0.00	0.00	0.00	0.00	0.00
storage	0.00	0.00	0.00	0.446	0.00	0.00	0.446	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phosphate Wash	4.69	4.69	0.00	0.470	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Powder coating	0.033	0.033	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Welding	155	155	0.00	0.00	0.00	0.00	9.6	0.00	0.00	0.00	9.49	0.03	0.03	0.00
Total	217	215	0.392	2747	65.9	55.9	347	334	59.2	0.063	10.4	0.473	0.473	1.18

Limited Potential to Emit

	PM	PM10	SO2	VOC	Nox	CO	Total HAPs	Glycol Ethers	Naphthalene	Formaldehyde	Manganese	Chromium	Nickel	Hexane
Surface Coating	11.4	11.4	0.00	245	0.00	0.00	18.0	9.90	9.90	0.00	0.00	0.00	0.00	0.00
Shot blasting	58.3	52.2	0.00	0.00	0.00	0.00	1.77	0.00	0.00	0.00	0.887	0.444	0.444	0.00
Engine testing	0.002	0.005	0.000	0.008	0.576	0.969	0.019	0.00	0.00	0.014	0.00	0.00	0.00	0.00
Insignificant Activities														
Combustion	1.24	4.97	0.392	3.59	65.3	54.9	1.23	0.00	0.00	0.049	0.00	0.00	0.00	1.18
Fuel transfer	0.00	0.00	0.00	0.254	0.00	0.00	0.254	0.00	0.00	0.00	0.00	0.00	0.00	0.00
storage	0.00	0.00	0.00	0.446	0.00	0.00	0.446	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phosphate Wash	4.69	4.69	0.00	0.470	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Powder coating	0.033	0.033	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Welding	52.0	52.0	0.00	0.00	0.00	0.00	3.20	0.00	0.00	0.00	3.18	0.010	0.010	0.00
Total	128	125	0.392	249.8	65.9	55.9	24.9	9.90	9.90	0.063	4.07	0.454	0.454	1.18