



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: June 11, 2007
RE: Manchester Tank & Equipment Company / 039-24288-00115
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 according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

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

Enclosures
FNPER.dot 03/23/06



Mitchell E. Daniels, Jr.

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100 North Senate Avenue

MC61-53 IGCN 1003

Indianapolis, Indiana 46204-2251

(317) 232-8603

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Federally Enforceable State Operating Permit OFFICE OF AIR QUALITY

**Manchester Tank & Equipment Company
3630 Manchester Drive
Elkhart, Indiana 46514**

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

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

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

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

Operation Permit No.: F 039-24288-00115	
Original Signed By: Nisha Sizemore, Chief Permits Branch Office of Air Quality	Issuance Date: June 11, 2007 Expiration Date: June 11, 2012

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SECTION A

SOURCE SUMMARY

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

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

The Permittee owns and operates a stationary pressure vessels manufacturing source.

Source Address:	3630 Manchester Drive, Elkhart, Indiana 46514
Mailing Address:	3630 Manchester Drive, Elkhart, Indiana 46514
General Source Phone Number:	(574) 295-8200
SIC Code:	3443
County Location:	Elkhart
Source Location Status:	Nonattainment for 8-hour ozone Attainment for all other criteria pollutants
Source Status:	Federally Enforceable State Operating Permit Program Minor Source, under PSD Emission Offset Rules Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

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

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

- (a) One (1) mechanical shot blaster, identified as SB1, installed prior to 1977, using a cartridge dust collector for particulate control, exhausting to the atmosphere, capacity: 109 tanks per hour and 1,400 pounds per hour of stainless steel shot.
- (b) One (1) mechanical shot blaster, identified as SB2, installed in 1976, using a cartridge dust collector for particulate control, exhausting to the atmosphere, capacity: 218 tanks per hour and 2,800 pounds per hour of steel shot.
- (c) One (1) mechanical shot blaster, identified as SB3, installed in 2000, using a cartridge dust collector for particulate control, exhausting to the atmosphere, capacity: 100 tanks per hour and 5,600 pounds per hour of steel shot.
- (d) One (1) powder coating operation, identified as PC1, installed in 1991, equipped with electrostatic air atomized spray applicators and dry filters for particulate control, exhausting indoors, capacity: 100 tanks per hour.
- (e) One (1) powder coating operation, identified as PC2, installed in 2000, equipped with electrostatic air atomized spray applicators and dry filters for particulate control, exhausting indoors, capacity: 327 tanks per hour.
- (f) One (1) welding operation, identified as W1, consisting of:
 - (1) Fifty-five (55) gas metal arc welding stations, installed in 1976, capacity: 15.5 pounds of aluminum or steel per hour; and
 - (2) Seven (7) submerged arc welding stations, installed in 1976, capacity: 15.5 pounds of steel per hour.

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

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

- (a) Natural gas-fired combustion sources with capacities less than ten (10) million British thermal units per hour, consisting of:
 - (1) Eight (8) air make-up units, rated at 22.03 million British thermal units per hour, total.
 - (2) Six (6) natural gas-fired washers, rated at 8.35 million British thermal units per hour, total.
 - (3) Thirteen (13) natural gas-fired space heaters, rated at 2.67 million British thermal units per hour, total.
 - (4) Three (3) natural gas-fired ovens, rated at 3.53 million British thermal units per hour, total.
 - (5) Four (4) natural gas-fired furnaces, rated at 18.74 million British thermal units per hour, total.
 - (6) One (1) natural gas-fired emergency back-up generator, rated at 1.4 million British thermal units per hour.
 - (7) One natural gas-fired turbine engine, rated at 1.1 million British thermal units per hour.
- (b) One (1) aerosol coating operation, identified as AC, using an aerosol application method, capacity: 0.011 gallons of paint per hour.
- (c) One (1) plasma cutting station, identified as PC, installed in 2001, capacity: 2.2 inches per minute with a maximum metal thickness of 2 inches.

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

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

SECTION B GENERAL CONDITIONS

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

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

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

(a) This permit, F 039-24288-00115, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

B.10 Compliance Order Issuance [326 IAC 2-8-5(b)]

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

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

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, 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.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

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

The PMP extension notification does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMPs do not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

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

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation except as provided in 326 IAC 2-8-12.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
- (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

- (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ and Northern Regional Office within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or
Telephone Number: 317-233-0178 (ask for Compliance Section)
Facsimile Number: 317-233-6865
Northern Regional Office phone: (574) 245-4870; fax: (574) 245-4877

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

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

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

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

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

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

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

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

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

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

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

- (a) All terms and conditions of permits established prior to F 039-24288-00115 and issued pursuant to permitting programs approved into the state implementation plan have been either:
 - (1) incorporated as originally stated,
 - (2) revised, or
 - (3) deleted.
- (b) All previous registrations and permits are superseded by this permit.

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

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

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

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

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

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

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

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

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

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

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

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

Request for renewal shall be submitted to:

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

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

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

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

- (a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

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

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

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

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

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

and

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

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

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

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

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

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

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

B.21 Inspection and Entry [326 IAC 2-8-5(a)(2)] [IC 13-14-2-2] [IC 13-17-3-2] [IC13-30-3-1]

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

- (a) Enter upon the Permittee's premises where a FESOP source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

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

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

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

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

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

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

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

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

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

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

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

B.24 Credible Evidence [326 IAC 2-8-4(3)] [326 IAC 2-8-5] [62 FR 8314] [326 IAC 1-1-6]

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

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

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

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

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

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

(a) Pursuant to 326 IAC 2-8:

- (1) The potential to emit any regulated pollutant, except particulate matter (PM), from the entire source shall be limited to less than one hundred (100) tons per twelve (12) consecutive month period. This limitation shall also satisfy the requirements of 326 IAC 2-3 (Emission Offset);
- (2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and
- (3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.

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

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

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

C.3 Opacity [326 IAC 5-1]

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

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

monitor) in a six (6) hour period.

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

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

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

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

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

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

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

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

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

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

All required notifications shall be submitted to:

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

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

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

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

C.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 an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

Compliance Requirements [326 IAC 2-1.1-11]

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

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

sioner or the U.S. EPA.

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

C.11 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]

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

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

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

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

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

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

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

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

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

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

C.14 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

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

- (a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.
- (b) These ERPs shall be submitted for approval to:

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

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

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

- (c) If the ERP is disapproved by IDEM, OAQ, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.
- (d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.
- (e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.
- (f) Upon direct notification by IDEM, OAQ that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

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

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

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

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

- (2) review of operation and maintenance procedures and records;
- (3) inspection of the control device, associated capture system, and the process.
- (d) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (e) The Permittee shall maintain the following records:
 - (1) monitoring data;
 - (2) monitor performance data, if applicable; and
 - (3) corrective actions taken.

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

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

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

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

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

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

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

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

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

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

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

Stratospheric Ozone Protection

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

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

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

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Mechanical Shot Blasters and Powder Coating

- (a) One (1) mechanical shot blaster, identified as SB1, installed prior to 1977, using a cartridge dust collector for particulate control, exhausting to the atmosphere, capacity: 109 tanks per hour and 1,400 pounds per hour of stainless steel shot.
- (b) One (1) mechanical shot blaster, identified as SB2, installed in 1976, using a cartridge dust collector for particulate control, exhausting to the atmosphere, capacity: 218 tanks per hour and 2,800 pounds per hour of steel shot.
- (c) One (1) mechanical shot blaster, identified as SB3, installed in 2000, using a cartridge dust collector for particulate control, exhausting to the atmosphere, capacity: 100 tanks per hour and 5,600 pounds per hour of steel shot.
- (d) One (1) powder coating operation, identified as PC1, installed in 1991, equipped with electrostatic air atomized spray applicators and dry filters for particulate control, exhausting indoors, capacity: 100 tanks per hour.
- (e) One (1) powder coating operation, identified as PC2, installed in 2000, equipped with electrostatic air atomized spray applicators and dry filters for particulate control, exhausting indoors, capacity: 327 tanks per hour.

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

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

D.1.1 Particulate [326 IAC 6-3-2]

- (a) Pursuant to 326 IAC 6-3-2, the allowable particulate emission rates from mechanical shot blasters, identified as SB1, SB2, and SB3, shall not exceed 7.90, 12.6 and 11.4 pounds per hour, respectively, when operating at process weight rates of 2.66, 5.32 and 4.60 tons per hour, respectively. The pounds per hour limitations were calculated using 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:

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

- (b) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rates from the powder coating operations, identified as PC-1 and PC-2, shall not exceed 6.09 and 13.46 and pounds per hour, respectively, when operating at process weight rates of 1.80 and 5.90 tons per hour, respectively. The pounds per hour limitations were calculated using 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:

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

D.1.2 FESOP [326 IAC 2-8-4]

Pursuant to 326 IAC 2-8-4, the mechanical shot blasters, identified as SB1, SB2, and SB3, shall limit PM₁₀ emissions to 0.48, 0.96, and 1.93, pounds per hour, respectively. Compliance with these PM₁₀ emission limits combined with the unrestricted potential to emit PM₁₀ from the remainder of the facilities at this source assures that the potential PM₁₀ from the entire source shall be less than one hundred (100) tons per year. Therefore, this source is not subject to the requirements of 326 IAC 2-7.

D.1.3 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

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

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

D.1.4 Particulate Control

- (a) In order to comply with Condition D.1.1(a) and D.1.2, the cartridge dust collector for particulate control shall be in operation and control emissions from the mechanical shot blasters, identified as SB1, SB2, SB3, at all times that the mechanical shot blasters are in operation.
- (b) In the event that dust collector failure is observed in a multi-compartment cartridge 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 2-8-4] [326 IAC 2-8-5(a)(1)]

D.1.5 Visible Emissions Notations

- (a) Visible emission notations of the mechanical shot blasters, identified as SB1, SB2, and SB3, exhaust shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable 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.1.6 Dust Collector Parametric Monitoring [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

- (a) The Permittee shall record the pressure drop across the dust collectors used in conjunction with the mechanical shot blasters, identified as SB1, SB2, and SB3, at least once per day when the mechanical shot blasters are in operation. When for any one reading, the pressure drop across the dust collector is outside the normal range of 1.0 and 4.0 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.1.7 Broken or Failed Cartridge Dust Collector Detection

- (a) For a single compartment cartridge 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 cartridge 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 mechanical shot blasters. 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).

Cartridge Dust Collector failure can be indicated by a significant drop in the cartridge 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 Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.1.8 Record Keeping Requirements

- (a) To document compliance with Condition D.1.5, the Permittee shall maintain a daily record of visible emission notations of the mechanical shot blasters, identified as SB1, SB2, and SB3, exhaust. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).
- (b) To document compliance with Condition D.1.6, the Permittee shall maintain a daily record of the pressure drop across the dust collector controlling the mechanical shot blasters, identified as SB1, SB2, and SB3. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that day).
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

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

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

Source Name: Manchester Tank & Equipment Company
Source Address: 3630 Manchester Drive, Elkhart, Indiana 46514
Mailing Address: 3630 Manchester Drive, Elkhart, Indiana 46514
FESOP No.: F 039-24288-00115

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

Please check what document is being certified:

- Annual Compliance Certification Letter
- Test Result (specify) _____
- Report (specify) _____
- Notification (specify) _____
- Affidavit (specify) _____
- Other (specify) _____

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

Signature:

Printed Name:

Title/Position:

Date:

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

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

Source Name: Manchester Tank & Equipment Company
Source Address: 3630 Manchester Drive, Elkhart, Indiana 46514
Mailing Address: 3630 Manchester Drive, Elkhart, Indiana 46514
FESOP No.: F 039-24288-00115

This form consists of 2 pages

Page 1 of 2

- | |
|---|
| <input type="checkbox"/> This is an emergency as defined in 326 IAC 2-7-1(12) <ul style="list-style-type: none">• The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and• The Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16 |
|---|

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

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

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

Page 2 of 2

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

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

A certification is not required for this report.

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

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: Manchester Tank & Equipment Company
Source Address: 3630 Manchester Drive, Elkhart, Indiana 46514
Mailing Address: 3630 Manchester Drive, Elkhart, Indiana 46514
FESOP No.: F 039-24288-00115

Months: _____ to _____ Year: _____

Page 1 of 2

<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: _____

A certification is not required for this report.

Indiana Department of Environmental Management Office of Air Quality

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

Source Name: Manchester Tank & Equipment Company
Source Location: 3630 Manchester Drive, Elkhart, Indiana 46514
County: Elkhart
FESOP: F 039-24288-00115
SIC Code: 3443
Permit Reviewer: Brian J. Pedersen/MES

On May 4, 2007, the Office of Air Quality (OAQ) had a notice published in the Elkhart Truth in Elkhart, Indiana, stating that Manchester Tank & Equipment Company had applied for a Federally Enforceable State Operating Permit (FESOP) to operate a stationary pressure vessels manufacturing source with cartridge dust collectors and dry filters used for particulate control. The notice also stated that OAQ proposed to issue a FESOP for this operation and provided information on how the public could review the proposed FESOP and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this FESOP should be issued as proposed.

On June 1, 2007, Mr. Danny Balthes of Manchester Tank & Equipment Company submitted comments on the proposed FESOP. The comments are as follows (the permit language, if changed, has deleted language as ~~strikeouts~~ and new language **bolded**):

Comment 1:

Please revise the emission factor for submerged arc welding on page three (3) of Appendix A to the TSD. Manchester prefers that the permit reflect the emission factors used across all Manchester facilities. Manchester uses the AP-42 Emission Factor of 0.050 lbs PM / 1000 lbs electrode found in Table 12.19-1, rather than the draft TSD emission factor of 0.036 lbs PM / lb electrode.

Response 1:

The emission factor of 0.050 lbs PM / 1000 lbs of electrode is an AP-42 emission factor for submerged arc welding and this emission factor has been used across all Manchester facilities. Therefore, to reflect this change two (2) revised spreadsheets are enclosed as an Addendum to Appendix A. This change also affects the potential to emit of the source as follows:

Potential to Emit After Issuance

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

Process/emission unit	Potential To Emit (tons/year)						
	PM	PM ₁₀	SO ₂	VOC	CO	NO _x	HAPs
Shot Blasting/SB1, SB2, and SB3	172	Limited to a total of 14.77	-	-	-	-	-
Powder Coating/PC1 and PC2	12.2	12.2	-	-	-	-	-
Welding and Flame Cutting Operation/W1	13.9 20.5	13.9 20.5	-	-	-	-	2.67
Insignificant Plasma Cutting Station/PC	negligible	negligible	-	-	-	-	negligible
Insignificant Combustion	0.553	2.21	0.175	1.60	24.5	29.1	0.550
Insignificant Aerosol Coating Operation/AC	0.035	0.035	-	0.246	-	-	0.084
Total Emissions	199 205	Less than 100	0.175	1.86	24.5	29.1	3.30

Comment 2:

Manchester uses cartridge type filter systems to control particulate emissions from shot blasting operations. While this is accurately reflected in the emission unit descriptions, Conditions D.1.6 and D.1.8 erroneously refer to a baghouse. Please revise these conditions to state the use of dust collectors in lieu of baghouses.

Response 2:

The following typographical errors in Conditions D.1.6 and D.1.8 shall be amended as follows:

D.1.6 Dust Collector Parametric Monitoring [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

- (a) The Permittee shall record the pressure drop across the dust collectors used in conjunction with the mechanical shot blasters, identified as SB1, SB2, and SB3, at least once per day when the mechanical shot blasters are in operation. When for any one reading, the pressure drop across the **dust collector** baghouse is outside the normal range of 1.0 and 4.0 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.1.8 Record Keeping Requirements

- (a) To document compliance with Condition D.1.5, the Permittee shall maintain a daily record of visible emission notations of the mechanical shot blasters, identified as SB1, SB2, and SB3, exhaust. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation; (e.g. i.e. the process did not operate that day).

- (b) To document compliance with Condition D.1.6, the Permittee shall maintain a daily record of the pressure drop across the **dust collector baghouse** controlling the mechanical shot blasters, identified as SB1, SB2, and SB3. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading, (e.g. i.e. the process did not operate that day).
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

**Addendum to Appendix A: Emissions Calculations
Welding and Thermal Cutting (Revised)**

**Company Name: Manchester Tank & Equipment Company
Address City IN Zip: 3630 Manchester Drive, Elkhart, IN 46514
Permit Number: F 039-24288-00115
Reviewer: Brian J. Pedersen
Date: June 8, 2007**

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												
Submerged Arc (carbon steel)	7	6		0.00005	0.011			0.002	0.462	0.000	0	0.462
Metal Inert Gas (MIG)(ER5154)	29	15.5		0.00241	0.00003		0.00001	1.083	0.013	0.000	0.004495	0.018
Metal Inert Gas (MIG)(E70S)	26	15.5		0.0052	0.000318	0.000001	0.000001	2.096	0.128	0.000	0.000403	0.129
Tungsten Inert Gas (TIG)(carbon steel)	0	0		0.0055	0.0005			0.000	0.000	0.000	0	0.000
Oxyacetylene(carbon steel)	0	0		0.0055	0.0005			0.000	0.000	0.000	0	0.000
FLAME CUTTING	Number of Stations	Max. Metal Thickness Cut (in.)	Max. Metal Cutting Rate (in./minute)	EMISSION FACTORS (lb pollutant/1,000 inches cut, 1" thick)**				EMISSIONS (lbs/hr)				HAPS (lbs/hr)
				PM = PM10	Mn	Ni	Cr	PM = PM10	Mn	Ni	Cr	
Oxyacetylene	0	0	0	0.1622	0.0005	0.0001	0.0003	0.000	0.000	0.000	0.000	0.000
Oxymethane	0	0	0	0.0815	0.0002		0.0002	0.000	0.000	0.000	0.000	0.000
Plasma**	1	2	2.2	0.0039				0.001	0.000	0.000	0.000	0.000
EMISSION TOTALS												
Potential Emissions lbs/hr								3.18	0.60	0.00	0.00	0.61
Potential Emissions lbs/day								76.36	14.49	0.01	0.12	14.61
Potential Emissions tons/year								13.9	2.64	0.00	0.02	2.67

METHODOLOGY

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

**Emission Factor for plasma cutting from American Welding Society (AWS). Trials reported for wet cutting of 8 mm thick mild steel with 3.5 m/min cutting speed (at 0.2 g/min emitted). Therefore, the emission factor for plasma cutting is for 8 mm thick rather than 1 inch, and the maximum metal thickness is not used in calculating the emissions.

Using AWS average values: (0.25 g/min)/(3.6 m/min) x (0.0022 lb/g)/(39.37 in./m) x (1,000 in.) = 0.0039 lb/1,000 in. cut, 8 mm thick

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

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

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.

**Addendum to Appendix A: Emissions Calculations
Revised Summary of Emissions**

Company Name: Manchester Tank & Equipment Company
Address City IN Zip: 3630 Manchester Drive, Elkhart, IN 46514
Permit Number: F 039-24288-00115
Reviewer: Brian J. Pedersen
Date: June 8, 2007

Summary of Emissions

Uncontrolled Potential Emissions

	PM (tons/yr)	PM-10 (tons/yr)	SO2 (tons/yr)	NOx (tons/yr)	VOC (tons/yr)	CO (tons/yr)	Combination HAPs (tons/yr)
Shot Blasting							
SB1	24.5	20.8	0.00	0.00	0.00	0.00	0.00
SB2	49.1	41.7	0.00	0.00	0.00	0.00	0.00
SB3	98.1	83.4	0.00	0.00	0.00	0.00	0.00
Powder Coating							
PC1	2.85	2.85	0.00	0.00	0.00	0.00	0.00
PC2	9.31	9.31	0.00	0.00	0.00	0.00	0.00
Welding	13.9	13.9	0.00	0.00	0.00	0.00	2.67
Aerosol Coatings	0.350	0.350	0.00	0.00	0.246	0.00	0.084
Insignificant Combustion	0.554	2.21	0.175	29.5	1.60	24.5	0.550
Total	199	175	0.175	29.5	1.85	24.5	3.30

Controlled Potential Emissions

	PM (tons/yr)	PM-10 (tons/yr)	SO2 (tons/yr)	NOx (tons/yr)	VOC (tons/yr)	CO (tons/yr)	Combination HAPs (tons/yr)
Shot Blasting							
SB1	0.245	0.208	0.00	0.00	0.00	0.00	0.00
SB2	0.491	0.417	0.00	0.00	0.00	0.00	0.00
SB3	0.981	0.834	0.00	0.00	0.00	0.00	0.00
Powder Coating							
PC1	0.285	0.285	0.00	0.00	0.00	0.00	0.00
PC2	0.931	0.931	0.00	0.00	0.00	0.00	0.00
Welding	13.9	13.9	0.00	0.00	0.00	0.00	2.67
Aerosol Coatings	0.350	0.350	0.00	0.00	0.246	0.00	0.084
Insignificant Combustion	0.554	2.21	0.175	29.5	1.60	24.5	0.550
Total	17.7	19.1	0.175	29.5	1.85	24.5	3.30

Indiana Department of Environmental Management
Office of Air Quality

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

Source Background and Description

Source Name:	Manchester Tank & Equipment Company
Source Location:	3630 Manchester Drive, Elkhart, Indiana 46514
County:	Elkhart
SIC Code:	3443
Operation Permit No.:	F 039-24288-00115
Permit Reviewer:	Brian J. Pedersen

The Office of Air Quality (OAQ) has reviewed the operating permit application from Manchester Tank & Equipment Company relating to the operation of a stationary pressure vessels manufacturing source:

History

On February 2, 2007, Manchester Tank & Equipment Company submitted applications to the OAQ requesting to transition to a FESOP from a Permit by Rule.

Permitted Emission Units and Pollution Control Equipment

- (a) One (1) mechanical shot blaster, identified as SB1, installed prior to 1977, using a cartridge dust collector for particulate control, exhausting to the atmosphere, capacity: 109 tanks per hour and 1,400 pounds per hour of stainless steel shot.
- (b) One (1) mechanical shot blaster, identified as SB2, installed in 1976, using a cartridge dust collector for particulate control, exhausting to the atmosphere, capacity: 218 tanks per hour and 2,800 pounds per hour of steel shot.
- (c) One (1) mechanical shot blaster, identified as SB3, installed in 2000, using a cartridge dust collector for particulate control, exhausting to the atmosphere, capacity: 100 tanks per hour and 5,600 pounds per hour of steel shot.
- (d) One (1) powder coating operation, identified as PC1, installed in 1991, equipped with electrostatic air atomized spray applicators and dry filters for particulate control, exhausting indoors, capacity: 100 tanks per hour.
- (e) One (1) powder coating operation, identified as PC2, installed in 2000, equipped with electrostatic air atomized spray applicators and dry filters for particulate control, exhausting indoors, capacity: 327 tanks per hour.
- (f) One (1) welding operation, identified as W1, consisting of:
 - (1) Fifty-five (55) gas metal arc welding stations, installed in 1976, capacity: 15.5 pounds of aluminum or steel per hour; and
 - (2) Seven (7) submerged arc welding stations, installed in 1976, capacity: 15.5 pounds of steel per hour.

Emission Units and Pollution Control Equipment Constructed and/or Operated without a Permit

There are no emission units or pollution control equipment constructed and/or operated without a permit during this review process.

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 capacities less than ten (10) million British thermal units per hour, consisting of:
 - (1) Eight (8) air make-up units, rated at 22.03 million British thermal units per hour, total.
 - (2) Six (6) natural gas-fired washers, rated at 8.35 million British thermal units per hour, total.
 - (3) Thirteen (13) natural gas-fired space heaters, rated at 2.67 million British thermal units per hour, total.
 - (4) Three (3) natural gas-fired ovens, rated at 3.53 million British thermal units per hour, total.
 - (5) Four (4) natural gas-fired furnaces, rated at 18.74 million British thermal units per hour, total.
 - (6) One (1) natural gas-fired emergency back-up generator, rated at 1.4 million British thermal units per hour.
 - (7) One natural gas-fired turbine engine, rated at 1.1 million British thermal units per hour.
- (b) One (1) aerosol coating operation, identified as AC, using an aerosol application method, capacity: 0.011 gallons of paint per hour.
- (c) One (1) plasma cutting station, identified as PC, installed in 2001, capacity: 2.2 inches per minute with a maximum metal thickness of 2 inches.

Existing Approvals

The source has been operating under the Permit by Rule 039-23625-00115, issued on November 2, 2006.

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

All terms and conditions from the Permit by Rule 039-23625-00115 shall be superseded by this FESOP because upon the issuance of this FESOP 039-24288-00115 all conditions related to the Permit by Rule are obsolete.

Enforcement Issue

There are no enforcement actions pending.

Emission Calculations

See pages 1 through 9 of Appendix A of this document for detailed emission calculations.

County Attainment Status

The source is located in Elkhart County.

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

- (a) Elkhart County has been classified as unclassifiable or 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. See the State Rule Applicability – Entire Source section.
- (b) Volatile organic compounds (VOC) and nitrogen oxides (NO_x) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to the ozone standards. Elkhart County has been designated as nonattainment for the 8-hour ozone standard. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements of 326 IAC 2-3, Emission Offset. See the State Rule Applicability - Entire Source section of this document.
- (c) Elkhart County has been classified as attainment or unclassifiable in Indiana for all remaining criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability for the source section.
- (d) On October 25, 2006, the Indiana Air Pollution Control Board finalized a rule revision to 326 IAC 1-4-1 revoking the one-hour ozone standard in Indiana.
- (e) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 or 326 IAC 2-3 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive emissions are not counted toward determination of PSD or Emission Offset applicability.

Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source.

Pollutant	tons/year
PM	205
PM ₁₀	181
SO ₂	0.175
VOC	1.85
CO	24.5
NO _x	29.5

HAPs	tons/year
Manganese	2.64
Hexane	0.524
Toluene	0.045
Xylene	0.036
Chromium	0.022
Formaldehyde	0.022
Ethyl Benzene	0.004
Nickel	0.003
Benzene	0.0006
Dichlorobenzene	0.0003
Cadmium	0.0003
Lead	0.0001
Total	3.30

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of PM₁₀ is equal to or greater than 100 tons per year. The source is subject to the provisions of 326 IAC 2-7. However, the source has agreed to limit their PM₁₀ emissions to less than Title V levels, therefore the source will be issued a FESOP.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of all other criteria pollutants are less than 100 tons per year.
- (c) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is less than twenty-five (25) tons per year.

Actual Emissions

No previous emission data has been received from the source.

Potential to Emit After Issuance

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

Process/emission unit	Potential To Emit (tons/year)						
	PM	PM ₁₀	SO ₂	VOC	CO	NO _x	HAPs
Shot Blasting/SB1, SB2, and SB3	172	Limited to a total of 14.77	-	-	-	-	-
Powder Coating/PC1 and PC2	12.2	12.2	-	-	-	-	-
Welding and Flame Cutting Operation/W1	20.5	20.5	-	-	-	-	2.67
Insignificant Plasma Cutting Station/PC	negligible	negligible	-	-	-	-	negligible
Insignificant Combustion	0.553	2.21	0.175	1.60	24.5	29.1	0.550
Insignificant Aerosol Coating Operation/AC	0.035	0.035	-	0.246	-	-	0.084
Total Emissions	205	Less than 100	0.175	1.86	24.5	29.1	3.30

- (a) This existing stationary source is not major for PSD because the emissions of each criteria pollutant are less than two hundred fifty (<250) tons per year, and it is not one of the twenty-eight (28) listed source categories.
- (b) This existing stationary source is not major for Emission Offset because the emissions of the nonattainment pollutant, VOC, are less than one hundred (<100) tons per year.
- (c) Fugitive Emissions
 Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 or 326 IAC 2-3, fugitive emissions are not counted toward the determination of PSD and Emission Offset applicability.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in the permit for this source.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP)(326 IAC 14, 20 and 40 CFR Part 61, 63) included in the permit for this source.

State Rule Applicability – Entire Source

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

The uncontrolled potential to emit of all regulated attainment pollutants are less than two hundred fifty (250) tons per year and it is not one of the twenty-eight (28) listed source categories. Therefore, it is a minor source under 326 IAC 2-2 (PSD).

326 IAC 2-3 (Emission Offset)

The uncontrolled potential to emit of VOC is less than one hundred (100) tons per year and it is not one of the twenty-eight (28) listed source categories. Therefore, it is a minor source under 326 IAC 2-3 (Emission Offset).

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

The operation of a stationary pressure vessels manufacturing source will emit less than ten (10) tons per year of a single HAP and twenty-five (25) tons per year of a combination of HAPs. Therefore, the requirements of 326 IAC 2-4.1 does not apply.

326 IAC 2-6 (Emission Reporting)

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

326 IAC 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 2-8-4 (FESOP)

Pursuant to 326 IAC 2-8-4, the mechanical shot blasters, identified as SB1, SB2, and SB3, shall limit PM₁₀ emissions to 0.48, 0.96, and 1.93, pounds per hour, respectively. The source can comply with these limits through the use of the cartridge dust collectors, located at SB1, SB2, and SB3. Compliance with these PM₁₀ emission limits combined with the unrestricted potential to emit PM₁₀ from the remainder of the facilities at this source assures that the potential PM₁₀ from the entire source shall be less than one hundred (100) tons per year. Therefore, this source is not subject to the requirements of 326 IAC 2-7.

State Rule Applicability – Individual Facilities

326 IAC 6-3-2 (Particulate emission limitations, work practices and control technologies)

The powder coating operations, identified as PC1 and PC2, are not subject to the requirements of 326 IAC 6-3-2(d) (Particulate emission limitations, work practices and control technologies) because surface coating is defined as the application of a solvent or water-based coating to a surface that imparts protective, functional, or decorative films in which the application emits, or has the potential to emit, particulate.

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

- (a) Pursuant to 326 IAC 6-3-2, the allowable particulate emission rates from mechanical shot blasters, identified as SB1, SB2, and SB3, shall not exceed 7.90, 12.6 and 11.4 pounds per hour, respectively, when operating at process weight rates of 5,324, 10,648 and 9,200 pounds per hour, respectively (2.66, 5.32 and 4.60 tons per hour, respectively).

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:

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

The mechanical shot blasters, identified as SB1 and SB2

The potential to emit particulate before controls from the mechanical shot blasters, identified as SB1 and SB2, from page 1 of 9 of Appendix A is 4.76 and 9.52 pounds per hour, respectively, which is less than 7.90 and 12.6 pounds per hour.

The mechanical shot blaster, identified as SB3, shall have the cartridge dust collector in operation at all times when the mechanical shot blaster, identified as SB3, is in operation. The potential to emit particulate after controls from the mechanical shot blaster, identified as SB3, from page 1 of 9 of Appendix A is 0.190 pounds per hour, which is less than 11.4 pounds per hour.

Therefore, the mechanical shot blasters, identified as SB1, SB2, and SB3, can each comply with this rule.

- (b) Pursuant to 326 IAC 6-3-2, the allowable particulate emission rate from the powder coating operations, identified as PC-1 and PC-2, shall not exceed 6.09 and 13.46 and pounds per hour, respectively, when operating at process weight rates of 3,606.5 and 11,793.25 pounds per hour, respectively (1.80 and 5.90 tons per hour, respectively).

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:

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

The potential to emit particulate before controls from the powder coating operations, identified as PC-1 and PC-2, from page 2 of 9 of Appendix A is 0.65 and 2.13 pounds per hour, respectively, which is less than 6.09 and 13.46 pounds per hour. Therefore, the powder coating operations, identified as PC-1 and PC-2, can comply with this rule.

- (c) Each welding station within the one (1) welding operation, identified as W1, consumes less than 625 pounds of weld wire or rod per day. Therefore, pursuant to 326 IAC 6-3-1 (b)(9), each welding station within the one (1) welding operation, identified as W1, is exempt from the requirements of 326 IAC 6-3.
- (d) The plasma cutting station, identified as PC, installed in 2001, is exempt from the requirements of 326 IAC 6-3 pursuant to 326 IAC 6-3-1(b)(14) due to its potential emissions being less than 0.551 pounds per hour of particulate.

State Rule Applicability – Insignificant Activities

326 IAC 6-3-2 (Particulate emission limitations, work practices and control technologies)

The insignificant aerosol coating operation, identified as AC, not otherwise exempt in 326 IAC 6-3-2(b)(5 - 8) uses less than five (5) gallons of coatings per day. Therefore, pursuant to 326 IAC 6-3-1(b)(15), the insignificant aerosol coating operation, identified as AC, is exempt from the requirements of 326 IAC 6-3.

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

The unrestricted potential VOC emissions from the insignificant aerosol coating operation, identified as AC, are less than fifteen (15) pounds per day. Therefore, the insignificant aerosol coating operation, identified as AC, is not subject to the requirements of 326 IAC 8-2-9 or any record keeping requirements.

Compliance Determination and Monitoring Requirements

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

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

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

The mechanical shot blasters, identified as SB1, SB2, and SB3, have applicable compliance monitoring conditions as specified below:

- (a) Visible emission notations of the mechanical shot blasting exhaust shall be performed once per day during normal daylight operations. 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.
- (b) The Permittee shall record the pressure drop across the cartridge dust collectors used in conjunction with the mechanical shot blasters, identified as SB1, SB2, and SB3, at least

once per day when the mechanical shot blasters, identified as SB1, SB2, and SB3, are in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 1.0 and 4.0 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.

- (c) For a single compartment cartridge 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).

For a single compartment cartridge 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 mechanical shot blaster. 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).

Cartridge dust collector failure can be indicated by a significant drop in the cartridge 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.

The cartridge dust collectors for the mechanical shot blasters, identified as SB1, SB2, and SB3, must operate properly to ensure compliance with 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes) and 326 IAC 2-8 (FESOP).

Conclusion

The operation of this stationary pressure vessels manufacturing source shall be subject to the conditions of the **FESOP 039-24288-00115**.

Abrasive Blasting - Confined

Company Name: Manchester Tank & Equipment Company
 Address City IN Zip: 3630 Manchester Drive, Elkhart, IN 46514
 Permit Number: F 039-24288-00115
 Reviewer: Brian J. Pedersen
 Date: April 18, 2007

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	

Table 2 - Density of Abrasives (lb/ft3)

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

PM Emissions

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

	SB1	SB2	SB3
EF	0.004	0.004	0.004
FR	1400.0	2800.0	5600.0
w	0	0	0
N	1	1	1

Uncontrolled Emissions =	5.60	11.20	22.40	lb/hr
	24.5	49.1	98.1	ton/yr
Controlled Emissions =	0.056	0.112	0.224	lb/hr
	0.245	0.491	0.981	ton/yr

Dust Collector 99% Control Efficiency

PM₁₀ Emissions

EF = emission factor (lb PM₁₀/ lb abrasive) From Table 1 =
 FR = Flow Rate (lb/hr) =
 w = fraction of time of wet blasting =
 N = number of nozzles =

	SB1	SB2	SB3
EF	0.003	0.003	0.003
FR	1400	2800	5600
w	0	0	0
N	1	1	1

Uncontrolled Emissions =	4.76	9.52	19.04	lb/hr
	20.8	41.7	83.4	ton/yr
Controlled Emissions =	0.048	0.095	0.190	lb/hr
	0.208	0.417	0.834	ton/yr

Dust Collector 99% Control Efficiency

METHODOLOGY

Emission Factors from STAPPA/ALAPCO "Air Quality Permits", Vol. I, Section 3 "Abrasive Blasting" (1991 edition)

Ton/yr = lb/hr X 8760 hr/yr X ton/2000 lbs

Flow Rate (FR) (lb/hr) = FR1 x (ID/ID1)² x (D/D1)

E = EF x FR x (1-w/200) x N

w should be entered in as a whole number (if w is 50%, enter 50)

Appendix A: Emissions Calculations
 Particulate
 From Surface Coating Operations

Company Name: Manchester Tank & Equipment Company
 Address City IN Zip: 3630 Manchester Drive, Elkhart, IN 46514
 Permit Number: F 039-24288-00115
 Reviewer: Brian J. Pedersen
 Date: March 22, 2007

Material	Weight % Solids	Pounds of Mat. (lbs/unit)	Maximum (unit/hour)	Uncontrolled Particulate Potential (lbs/hour)	Uncontrolled Particulate Potential (tons/yr)	Particulate Controlled (lbs/hour)	Particulate Controlled (tons/yr)	Transfer Efficiency	Control Efficiency
Powder Coating									
PC1									
Blue Streak II	100%	0.65	100	0.65	2.85	0.07	0.28	90%	90%
PC2									
Blue Streak II	100%	0.65	327	2.13	9.31	0.21	0.93	90%	90%
Total				2.78	12.2	0.278	1.22		

METHODOLOGY

Uncontrolled Particulate Potential (lbs/hour) = Weight % Solids * Pounds of Material (lbs/unit) * Maximum (units/hour) * (1-transfer efficiency)
 Controlled Particulate Potential (lbs/hour) = Uncontrolled Particulate Potential (lbs/hour) * (1-control efficiency)
 Uncontrolled Particulate Potential (tons/year) = Weight % Solids * Pounds of Material * Maximum (units/hour) * (1-transfer efficiency) * (8760 hours/year) * (1 ton/2000 pounds)
 Controlled Particulate Potential (tons/year) = Uncontrolled Particulate Potential * (1-Control Efficiency)
 There are no VOC emissions associated with this operation because powder coating is being used.

Appendix A: Emissions Calculations
 VOC, HAP and Particulate
 From Insignificant Aerosol Coating Operations

Company Name: Manchester Tank & Equipment Company
 Address City IN Zip: 3630 Manchester Drive, Elkhart, IN 46514
 Permit Number: F 039-24288-00115
 Reviewer: Brian J. Pedersen
 Date: April 18, 2007

Material	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat (gal/year)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
Aerosol Coatings															
98-28 Gloss Orange Spruce 473	6.1	85.000%	0.0%	85.0%	0.0%	15.00%	22.0	5.19	5.19	0.01	0.31	0.057	0.004	34.57	65%
98-2 White Spruce 473	6.3	85.000%	0.0%	85.0%	0.0%	15.00%	39.0	5.31	5.31	0.02	0.57	0.104	0.006	35.42	85%
CF Coatings	8.6	54.000%	0.0%	54.0%	0.0%	46.00%	37.0	4.63	4.63	0.02	0.47	0.086	0.026	10.07	85%

Add worst case coating to all solvents

Uncontrolled 1.35
 Controlled 1.35

Material	Density (Lb/Gal)	Gallons of Material (gal/year)	Weight % Ethyl Benzene	Weight % Toluene	Weight % Xylene	Ethyl Benzene Emissions (ton/yr)	Toluene Emissions (ton/yr)	Xylene Emissions (ton/yr)	Total Emissions (ton/yr)
Aerosol Coatings									
98-28 Gloss Orange Spruce 473	6.1	22.0	0.00%	19.00%	2.50%	0.00	0.013	0.002	0.014
98-2 White Spruce 473	6.3	39.0	0.00%	19.00%	2.50%	0.00	0.023	0.003	0.026
CF Coatings	8.6	37.0	2.50%	5.00%	20.0%	0.004	0.008	0.032	0.044
Total			0.004	0.044	0.036	0.004	0.044	0.036	0.084

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/year) * (1 yr/8760 hrs)
 Potential VOC Pounds per Day = Potential VOC Pounds per Hour * (24 hrs/day)
 Potential VOC Tons per Year = Potential VOC Pounds per Hour * (8760 hrs/yr) * (1 ton/2000lbs)
 Particulate Potential Tons per Year = (gal/yr) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) * (1 ton/2000 lbs)
 Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)
 Total = Worst Coating + Sum of all solvents used

HAPS emission rate (tons/yr) = Density (lb/gal) * Gal of Material (gal/year) * Weight % HAP * 1 ton/2000 lbs

Appendix A: Emissions Calculations
 Natural Gas Combustion Only
 MMBTU/HR <100

Company Name: Manchester Tank & Equipment Company
 Address City IN Zip: 3630 Manchester Drive, Elkhart, IN 46514
 Permit Number: F 039-24288-00115
 Reviewer: Brian J. Pedersen
 Date: April 18, 2007

Emission Unit	Total Heat Input Capacity (MMBtu/hr)
Eight (8) Air Make-up Units	22.0
Six (6) Washers	8.35
Thirteen (13) Heaters	2.67
Three (3) Ovens	3.53
One (1) Gas Turbine	1.10
Four (4) Furnaces	28.7
Total	66.4

Heat Input Capacity
 MMBtu/hr

66.4

Potential Throughput
 MMCF/yr

582

Emission Factor in lb/MMCF	Pollutant				
	PM*	PM10*	SO2	NOx	CO
Potential Emission in tons/yr	1.90	7.60	0.600	100 **see below	84.0
	0.553	2.21	0.175	29.1	24.4

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

Methodology

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

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

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

Company Name: Manchester Tank & Equipment Company
 Address City IN Zip: 3630 Manchester Drive, Elkhart, IN 46514
 Permit Number: F 039-24288-00115
 Reviewer: Brian J. Pedersen
 Date: April 18, 2007

		HAPs - Organics			
Emission Factor in lb/MMcf	Benzene 0.00210	Dichlorobenzene 0.00120	Formaldehyde 0.07500	Hexane 1.80000	Toluene 0.00340
Potential Emission in tons/yr	0.0006	0.0003	0.022	0.524	0.001
		HAPs - Metals			
Emission Factor in lb/MMcf	Lead 0.0005	Cadmium 0.0011	Chromium 0.0014	Manganese 0.0004	Nickel 0.0021
Potential Emission in tons/yr	0.0001	0.0003	0.0004	0.0001	0.0006
					Total 0.549

Methodology is the same as page 5.

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

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

Emergency Generator (based on 500 hours)
Company Name: Manchester Tank & Equipment Company
Address City IN Zip: 3630 Manchester Drive, Elkhart, IN 46514
Permit Number: F 039-24288-00115
Reviewer: Brian J. Pedersen
Date: April 18, 2007

Heat Input Capacity
 MMBtu/hr

1.4

Potential Throughput
 MMCF/yr

12

Emission Factor in lb/MMCF	Pollutant				
	PM*	PM10*	SO2	NOx	CO
1.90	7.60	0.600	100 **see below	5.50	84.0
Potential Emission in tons/yr	0.001	0.003	0.0002	0.035	0.029

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

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

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
 Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03
 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton* (500 hours/8760 hours);

See page 8 for HAPs emissions calculations.

Appendix A: Emissions Calculations
 Natural Gas Combustion Only
 MM BTU/HR <100
 Emergency Generator (based on 500 hours)
 HAPs Emissions

Company Name: Manchester Tank & Equipment Company
 Address City IN Zip: 3630 Manchester Drive, Elkhart, IN 46514
 Permit Number: F 039-24288-00115
 Reviewer: Brian J. Pedersen
 Date: April 18, 2007

HAPs - Organics					
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	0.00210	0.00120	0.07500	1.80000	0.00340
Potential Emission in tons/yr	0.000001	0.000000	0.000026	0.000630	0.000001

HAPs - Metals					
	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	0.0005	0.0011	0.0014	0.0004	0.0021
Potential Emission in tons/yr	0.0000002	0.0000004	0.0000005	0.0000001	0.0000007
					Total
					0.001

Methodology is the same as page 7.

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

**Appendix A: Emissions Calculations
Summary of Emissions**

Company Name: Manchester Tank & Equipment Company
Address City IN Zip: 3630 Manchester Drive, Elkhart, IN 46514
Permit Number: F 039-24288-00115
Reviewer: Brian J. Pedersen
Date: May 1, 2007

Summary of Emissions

Uncontrolled Potential Emissions

	PM (tons/yr)	PM-10 (tons/yr)	SO2 (tons/yr)	NOx (tons/yr)	VOC (tons/yr)	CO (tons/yr)	Combination HAPs (tons/yr)
Shot Blasting							
SB1	24.5	20.8	0.00	0.00	0.00	0.00	0.00
SB2	49.1	41.7	0.00	0.00	0.00	0.00	0.00
SB3	98.1	83.4	0.00	0.00	0.00	0.00	0.00
Powder Coating							
PC1	2.85	2.85	0.00	0.00	0.00	0.00	0.00
PC2	9.31	9.31	0.00	0.00	0.00	0.00	0.00
Welding	20.5	20.5	0.00	0.00	0.00	0.00	2.67
Aerosol Coatings	0.350	0.350	0.00	0.00	0.246	0.00	0.084
Insignificant Combustion	0.554	2.21	0.175	29.5	1.60	24.5	0.550
Total	205	181	0.175	29.5	1.85	24.5	3.30

Controlled Potential Emissions

	PM (tons/yr)	PM-10 (tons/yr)	SO2 (tons/yr)	NOx (tons/yr)	VOC (tons/yr)	CO (tons/yr)	Combination HAPs (tons/yr)
Shot Blasting							
SB1	0.245	0.208	0.00	0.00	0.00	0.00	0.00
SB2	0.491	0.417	0.00	0.00	0.00	0.00	0.00
SB3	0.981	0.834	0.00	0.00	0.00	0.00	0.00
Powder Coating							
PC1	0.285	0.285	0.00	0.00	0.00	0.00	0.00
PC2	0.931	0.931	0.00	0.00	0.00	0.00	0.00
Welding	20.5	20.5	0.00	0.00	0.00	0.00	2.67
Aerosol Coatings	0.350	0.350	0.00	0.00	0.246	0.00	0.084
Insignificant Combustion	0.554	2.21	0.175	29.5	1.60	24.5	0.550
Total	24.3	25.7	0.175	29.5	1.85	24.5	3.30