



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 20, 2005
RE: Sabre Manufacturing, LLC / MSOP 149-21049-00026
FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, 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 1/10/05



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**NEW SOURCE CONSTRUCTION PERMIT
AND MINOR SOURCE OPERATING PERMIT
OFFICE OF AIR QUALITY**

**Sabre Manufacturing, LLC
5420 East State Road 8
Knox, Indiana 46534**

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

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-5.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Operation Permit No.:149-21049-00026	
Issued by: Original signed by Paul Dubenetzky, Chief Permits Branch Office of Air Quality	Issuance Date: June 20, 2005 Expiration Date: June 20, 2010

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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 and A.2 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 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

The Permittee plans to construct and operate a stationary steel tank fabrication and painting operation.

Authorized Individual: General Manager
Source Address: 5420 East State Road 8, Knox, Indiana 46534
Mailing Address: 5420 East State Road 8, Knox, Indiana 46534
General Source Phone: (574) 595-5380
SIC Code: 3443
County Location: Starke
Source Location Status: Attainment for all criteria pollutants
Source Status: Minor Source Operating Permit
Minor Source, under PSD Rules;
Minor Source, Section 112 of the Clean Air Act
Not 1 of 28 Source Categories

A.2 Emissions Units and Pollution Control Equipment Summary

This stationary source is approved to construct and operate the following emissions units and pollution control devices:

- (a) One (1) enclosed abrasive blasting booth with two abrasive spray nozzles for cleaning steel tanks, identified as EP-01, to be constructed in 2005, with a maximum combined blast rate of 11,760 pounds of steel grit per hour, with a maximum capacity to clean 0.1 steel tanks per hour, with emissions controlled by a dust collector, and exhausting inside the blasting booth.
- (b) One (1) surface coating booth for painting steel tanks using HVLP application methods, identified as EP-02, to be constructed in 2005, with a maximum capacity of coating 0.1 steel tanks per hour, with particulate emissions controlled by dry filters, and exhausting through four (4) stacks (S-01, S-02, S-03, S-04).
- (c) One (1) tank degreasing and cleaning operation, identified as EP-03, to be constructed in 2005, using 3.96 pounds of VOC per tank, with uncontrolled emissions exhausting inside the building.
- (d) Welding and cutting operations for fabricating tanks from steel plate, consisting of cutting torches and MIG welders, identified as EP-05, to be constructed in 2005, using a maximum of 80 pounds of ER70S welding wire per tank, with uncontrolled emissions exhausting inside the building.
- (e) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million Btu per hour, consisting of one (1) space heater, identified as EP-04, with a maximum heat input capacity of 4 MMBtu/hr, and exhausting through stack S-05.

- (f) VOC and HAP storage containers, consisting of storage tanks with capacity less than or equal to one thousand (1,000) gallons and annual throughputs equal to or less than twelve thousand (12,000) gallons.

SECTION B GENERAL CONDITIONS

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1.1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

B.1 Permit No Defense [IC 13]

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

B.2 Definitions

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 2-1.1-1 shall prevail.

B.3 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.

B.4 Revocation of Permits [326 IAC 2-1.1-9(5)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this permit if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

B.5 Permit Term and Renewal [326 IAC 2-6.1-7(a)][326 IAC 2-1.1-9.5]

This permit 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 of this permit do not affect the expiration date.

The Permittee shall apply for an operation permit renewal at least ninety (90) days prior to the expiration date. If a timely and sufficient permit application for a renewal has been made, this permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.

B.6 Modification to Permit [326 IAC 2]

Notwithstanding the Section B condition entitled "Minor Source Operating Permit", all requirements and conditions of this construction permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

B.7 Minor Source Operating Permit [326 IAC 2-6.1]

This document shall also become a minor source operating permit pursuant to 326 IAC 2-6.1 when, prior to start of operation, the following requirements are met:

- (a) The attached Affidavit of Construction shall be submitted to the Office of Air Quality (OAQ), Permit Administration & Development Section.
 - (1) If the Affidavit of Construction verifies that the facilities covered in this Construction Permit were constructed as proposed in the application, then the facilities may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM.
 - (2) If actual construction of the emission units differs from the construction proposed in the application, the source may not begin operation until the permit has been revised pursuant to 326 IAC 2-6.1-6 and an Operation Permit Validation Letter is issued.

- (b) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.
- (c) Upon receipt of the Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section, the Permittee shall attach it to this document.
- (d) The operation permit will be subject to annual operating permit fees pursuant to 326 IAC 2-1.1-7(Fees).

B.8 Annual Notification [326 IAC 2-6.1-5(a)(5)]

- (a) Annual notification shall be submitted to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.
- (b) Noncompliance with any condition must be specifically identified. If there are any permit conditions or requirements for which the source is not in compliance at any time during the year, the Permittee must provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be, achieved. The notification must be signed by an authorized individual.
- (c) The annual notice shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in the format attached no later than March 1 of each year to:

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

- (d) The notification 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.

B.9 Preventive Maintenance Plan [326 IAC 1-6-3]

- (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 (this time frame is determined on a case by case basis but no more than ninety (90) days) after issuance of this permit, including the following information on each emissions unit:
 - (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
Indianapolis, Indiana 46204

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

- (b) The Permittee shall implement the PMPs, including any required record keeping, as necessary to ensure that failure to implement a PMP does not cause or contribute to an exceedance of any limitation on emissions or potential to emit.
- (c) A copy of the PMP's 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 PMP whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMP does not require the certification by an “authorized individual” as defined by 326 IAC 2-1.1-1(1).
- (d) 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.10 Permit Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]

- (a) Permit revisions are governed by the requirements of 326 IAC 2-6.1-6.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

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

Any such application shall be certified by an “authorized individual” as defined by 326 IAC 2-1.1-1.

- (c) The Permittee shall notify the OAQ within thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]
- (d) No permit amendment or modification is required for the addition, operation or removal of a non-road engine, as defined in 40 CFR 89.2.

B.11 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)] [326 IAC 2-6.1-5(a)(4)] [IC 13-14-2-2] [IC13-17-3-2][IC 13-30-3-1]

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

- (a) Enter upon the Permittee's premises where a permitted 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 this title or the conditions of this permit or any operating permit revisions;
- (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 processes, emissions units (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit or any operating permit revisions;
- (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.12 Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]

Pursuant to [326 IAC 2-6.1-6(d)(3)]:

- (a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAQ, Permits Branch, within thirty (30) days of the change.
- (b) The written notification shall be sufficient to transfer the permit to the new owner by a notice-only change pursuant to 326 IAC 2-6.1-6(d)(3).
- (c) IDEM, OAQ, shall issue a revised permit.

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

B.13 Annual Fee Payment [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.
- (b) 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.14 Credible Evidence [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

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 Permit Revocation [326 IAC 2-1.1-9]

Pursuant to 326 IAC 2-1.1-9 (Revocation of Permits), this permit to construct and operate may be revoked for any of the following causes:

- (a) Violation of any conditions of this permit.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.
- (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.
- (d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
- (e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

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 non-overlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.4 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted by using good engineering practices (GEP) pursuant to 326 IAC 1-7-3.

C.5 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least

thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
 - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
 - (2) If there is a change in the following:
 - (A) Asbestos removal or demolition start date;
 - (B) Removal or demolition contractor; or
 - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

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

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by an "authorized individual" as defined by 326 IAC 2-7-1(34).

- (e) **Procedures for Asbestos Emission Control**
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Demolition and renovation**
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).
- (g) **Indiana Accredited Asbestos Inspector**
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Accredited Asbestos inspector is not federally enforceable.

Testing Requirements

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

- (a) Compliance testing on new emissions units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

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

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

no later than thirty-five (35) days prior to the intended test date.

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual date.
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ (and local agency) not later than forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAQ, (and local agency), 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.7 Compliance Requirements [326 IAC 2-1.1-11]

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

Compliance Monitoring Requirements

C.8 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.9 Actions Related to Noncompliance Demonstrated by a Stack Test

- (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 emissions unit 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 re-testing in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the re-testing deadline.

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

The response action documents submitted pursuant to this condition do not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1.

Record Keeping and Reporting Requirements

C.10 Malfunctions Report [326 IAC 1-6-2]

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

- (a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) or appointed representative upon request.
- (b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAQ, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.
- (c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).
- (d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.11 General Record Keeping Requirements [326 IAC 2-6.1-5]

- (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 when operation begins.

C.12 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-5] [IC 13-14-1-13]

- (a) Reports required by conditions in Section D of this permit shall be submitted to:

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

- (b) 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.

- (c) 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.

SECTION D.1

EMISSIONS UNITS OPERATION CONDITIONS

Emissions Unit Description [326 IAC 2-6.1-5(a)(1)]:

- (a) One (1) enclosed abrasive blasting booth with two abrasive spray nozzles for cleaning steel tanks, identified as EP-01, to be constructed in 2005, with a maximum combined blast rate of 11,760 pounds of steel grit per hour, with a maximum capacity to clean 0.1 steel tanks per hour, with emissions controlled by a dust collector, and exhausting inside the blasting booth.

(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 2-6.1-5(a)(1)]

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

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the abrasive blasting booth (EP-01) shall not exceed 5.53 pounds per hour when operating at a process weight rate of 1.56 tons per hour.

The pounds per hour limitation was 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:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour;
and P = process weight rate in tons per hour

Compliance Determination Requirements

D.1.2 Particulate Control

In order to comply with Condition D.1.1, the dust collector for particulate control shall be in operation and control emissions from the abrasive blasting booth at all times that the abrasive blasting booth is in operation.

SECTION D.2

EMISSIONS UNITS OPERATION CONDITIONS

Emissions Unit Description [326 IAC 2-6.1-5(a)(1)]:

- (b) One (1) surface coating booth for painting steel tanks using HVLP application methods, identified as EP-02, to be constructed in 2005, with a maximum capacity of coating 0.10 steel tanks per hour (17.5 tanks per week), with particulate emissions controlled by dry filters, and exhausting through four (4) stacks (S-01, S-02, S-03, S-04).

(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 2-6.1-5(a)(1)]

D.2.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-9]

Pursuant to 326 IAC 8-2-9, the Permittee shall not allow the discharge into the atmosphere VOC in excess of three and five-tenths (3.5) pounds of VOC per gallon of coating, excluding water, as delivered to the applicator at the surface coating booth (EP-02).

D.2.2 Volatile Organic Compound (VOC) Limitations, Clean-up Requirements [326 IAC 8-2-9]

Pursuant to 326 IAC 8-2-9(f), all solvents sprayed from the application equipment of the surface coating booth (EP-02) during cleanup or color changes shall be directed into containers. Said containers shall be closed as soon as the solvent spraying is complete. In addition, all waste solvent shall be disposed of in such a manner that minimizes evaporation.

D.2.3 Particulate [326 IAC 6-3-2(d)]

- (a) Particulate from the surface coating booth (EP-02) shall be controlled by a dry particulate filter, and the Permittee shall operate the control device in accordance with manufacturer's specifications.
- (b) If overspray is visibly detected at the exhaust or accumulates on the ground, the Permittee shall inspect the control device and do either of the following no later than four (4) hours after such observation:
- (1) Repair control device so that no overspray is visibly detectable at the exhaust or accumulates on the ground.
 - (2) Operate equipment so that no overspray is visibly detectable at the exhaust or accumulates on the ground.
- (c) If overspray is visibly detected, the Permittee shall maintain a record of the action taken as a result of the inspection, any repairs of the control device, or change in operations, so that overspray is not visibly detected at the exhaust or accumulates on the ground. These records must be maintained for five (5) years.

Compliance Determination Requirements

D.2.4 Volatile Organic Compounds (VOC)[326 IAC 8-1-2] [326 IAC 8-1-4]

Compliance with the VOC content contained in condition D.21 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) by preparing or obtaining from the manufacturer the copies of the "as supplied" and "as applied" VOC data sheets. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

Record Keeping Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.2.5 Record Keeping Requirements

- (a) To document compliance with Condition D.2.1, the Permittee shall maintain records in accordance with (1) through (3) below. Records maintained for (1) through (3) shall be taken as stated below and shall be complete and sufficient to establish compliance with the VOC usage limit established in Condition D.2.1.
 - (1) The VOC content of each coating material and dilution solvent used excluding water.
 - (2) The amount of coating material and dilution solvent used on monthly basis.
 - (A) Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.
 - (B) Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents; and
 - (3) The VOC content in pounds of VOC per gallon of coating, excluding water, for each coating delivered to the applicator at the surface coating booth EP-02.
- (b) To document compliance with Condition D.2.3(c), the Permittee shall maintain a record of any inspections performed under Condition D.2.3(c) and the actions taken.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.3

EMISSIONS UNITS OPERATION CONDITIONS

Emissions Unit Description [326 IAC 2-6.1-5(a)(1)]:

- (c) One (1) tank degreasing and cleaning operation, identified as EP-03, to be constructed in 2005, using 3.96 pounds of VOC per tank, with uncontrolled emissions exhausting inside the building.
- (d) Welding and cutting operations for fabricating tanks from steel plate, consisting of cutting torches and MIG welders, identified as EP-05, to be constructed in 2005, using a maximum of 80 pounds of ER70S welding wire per tank, with uncontrolled emissions exhausting inside the building.
- (e) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million Btu per hour, consisting of one (1) space heater, identified as EP-04, with a maximum heat input capacity of 4 MMBtu/hr, and exhausting through stack S-05.
- (f) VOC and HAP storage containers, consisting of storage tanks with capacity less than or equal to one thousand (1,000) gallons and annual throughputs equal to or less than twelve thousand (12,000) gallons.

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

There are no state or federal requirements applicable to these emission units.

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

**MINOR SOURCE OPERATING PERMIT
ANNUAL NOTIFICATION**

This form should be used to comply with the notification requirements under 326 IAC 2-6.1-5(a)(5).

Company Name:	Sabre Manufacturing, LLC
Address:	5420 East State Road 8
City:	Knox, Indiana 46534
Phone #:	(574) 595-5380
MSOP #:	M149-21049-00026

I hereby certify that Sabre Manufacturing, LLC is still in operation.
 no longer in operation.

I hereby certify that Sabre Manufacturing, LLC is in compliance with the requirements of MSOP 149-21049-00026.
 not in compliance with the requirements of MSOP 149-21049-00026.

Authorized Individual (typed):
Title:
Signature:
Date:

If there are any conditions or requirements for which the source is not in compliance, provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be achieved.

Noncompliance:

MALFUNCTION REPORT

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
FAX NUMBER - 317 233-5967**

**This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6
and to qualify for the exemption under 326 IAC 1-6-4.**

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE IT HAS POTENTIAL TO EMIT 25 TONS/YEAR PARTICULATE MATTER ?_____, 25 TONS/YEAR SULFUR DIOXIDE ?_____, 25 TONS/YEAR NITROGEN OXIDES?_____, 25 TONS/YEAR VOC ?_____, 25 TONS/YEAR HYDROGEN SULFIDE ?_____, 25 TONS/YEAR TOTAL REDUCED SULFUR ?_____, 25 TONS/YEAR REDUCED SULFUR COMPOUNDS ?_____, 25 TONS/YEAR FLUORIDES ?_____, 100TONS/YEAR CARBON MONOXIDE ?_____, 10 TONS/YEAR ANY SINGLE HAZARDOUS AIR POLLUTANT ?_____, 25 TONS/YEAR ANY COMBINATION HAZARDOUS AIR POLLUTANT ?_____, 1 TON/YEAR LEAD OR LEAD COMPOUNDS MEASURED AS ELEMENTAL LEAD ?_____, OR IS A SOURCE LISTED UNDER 326 IAC 2-5.1-3(2) ?_____. EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION _____.

THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC _____ OR, PERMIT CONDITION # _____ AND/OR PERM LIMIT OF _____

THIS INCIDENT MEETS THE DEFINITION OF 'MALFUNCTION' AS LISTED ON REVERSE SIDE ? Y N

THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT ? Y N

COMPANY: _____ PHONE NO. () _____
LOCATION: (CITY AND COUNTY) _____
PERMIT NO. _____ AFS PLANT ID: _____ AFS POINT ID: _____ INSP: _____
CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON: _____

DATE/TIME MALFUNCTION STARTED: ____/____/20____ _____ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION: _____

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE ____/____/20____ _____ AM/PM

TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO2, VOC, OTHER: _____

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: _____

MEASURES TAKEN TO MINIMIZE EMISSIONS: _____

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL* SERVICES: _____

CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS: _____

CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT: _____

INTERIM CONTROL MEASURES: (IF APPLICABLE) _____

MALFUNCTION REPORTED BY: _____ TITLE: _____
(SIGNATURE IF FAXED)

MALFUNCTION RECORDED BY: _____ DATE: _____ TIME: _____

*SEE PAGE 2

Please note - This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

326 IAC 1-6-1 Applicability of rule

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

326 IAC 1-2-39 "Malfunction" definition

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

***Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

**Indiana Department of Environmental Management
Office of Air Quality**

Technical Support Document (TSD) for a
New Source Construction and Minor Source Operating Permit

Source Background and Description

Source Name:	Sabre Manufacturing, LLC
Source Location:	5420 East State Road 8, Knox, Indiana 46534
County:	Starke
SIC Code:	3443
Permit No.:	M149-21049-00026
Permit Reviewer:	ERG/ST

The Office of Air Quality (OAQ) has reviewed an application from Sabre Manufacturing, LLC relating to the construction and operation of a stationary steel tank fabrication and painting operation.

New Emission Units and Pollution Control Equipment

The application includes information relating to the construction and operation of the following emission units and pollution control devices:

- (a) One (1) enclosed abrasive blasting booth with two abrasive spray nozzles for cleaning steel tanks, identified as EP-01, to be constructed in 2005, with a maximum combined blast rate of 11,760 pounds of steel grit per hour, with a maximum capacity to clean 0.1 steel tanks per hour, with emissions controlled by a dust collector, and exhausting inside the blasting booth.
- (b) One (1) surface coating booth for painting steel tanks using HVLP application methods, identified as EP-02, to be constructed in 2005, with a maximum capacity of coating 0.1 steel tanks per hour, with particulate emissions controlled by dry filters, and exhausting through four (4) stacks (S-01, S-02, S-03, S-04).
- (c) One (1) tank degreasing and cleaning operation, identified as EP-03, to be constructed in 2005, using 3.96 pounds of VOC per tank, with uncontrolled emissions exhausting inside the building.
- (d) Welding and cutting operations for fabricating tanks from steel plate, consisting of cutting torches and MIG welders, identified as EP-05, to be constructed in 2005, using a maximum of 80 pounds of ER70S welding wire per tank, with uncontrolled emissions exhausting inside the building.
- (e) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million Btu per hour, consisting of one (1) space heater, identified as EP-04, with a maximum heat input capacity of 4 MMBtu/hr, and exhausting through stack S-05.
- (f) VOC and HAP storage containers, consisting of storage tanks with capacity less than or equal to one thousand (1,000) gallons and annual throughputs equal to or less than twelve thousand (12,000) gallons.

Note: One steel tank weighs 15 tons (30,000 pounds). The source is able to fabricate, clean and paint a maximum of 10 tanks per 96 hour work week.

Existing Approvals

This is the first permit to be issued to this source at this location.

Air Pollution Control Justification as an Integral Part of the Process

The company has submitted the following justification such that the dust collector and air recirculation ducting be considered as an integral part of the abrasive blasting booth:

(1) Abrasive blasting operations occur within an enclosed booth. Steel tanks are placed within the booth. Operators with breathing helmets enter the booth. The doors are closed, and the dust collector is started, creating a negative pressure inside the booth. Safety interlocks allow the operators to begin blasting operations only if the dust collector is operating. Expended steel grit falls to the floor of the blasting booth and is swept up later for reuse. Airborne particulate is exhausted out of the booth and through the dust collector. The filtered air is ducted back into the blasting booth. There is no conventional exhaust to outside the booth or outside the building. Any emissions are fugitive.

(2) The dust collector is considered integral to the process because:

The blasting booth with emissions controls is purchased as a single unit from a manufacturer. The control panel is designed such that the blasting process cannot commence until after the dust collector is started, the abrasive reclaim system is started and the chamber doors are closed. Work doors and personnel doors are equipped with safety limit switches and interlocked to the control panel to shut down blasting should the doors be opened during the blasting process. The abrasive reclaim system is equipped with an optical motion sensor and interlocked to the control panel which shuts down the blast operation should there be a failure with the abrasive recovery system. The abrasive blasting guns are equipped with safety interlocks that shut down the blast operation if the operator should fall or the guns be dropped. The Breco cartridge style pulse jet dust collector has a filtering efficiency rated at 99.999%, re-circulating the filtered air back into the sealed abrasive blasting booth.

IDEM, OAQ has evaluated the justifications and determined that the dust collection equipment will not be considered as an integral part of the abrasive blasting process. The safety interlocks could be disabled and/or the booth exhaust could be redirected. Therefore, the permitting level will be determined using the potential to emit before the dust collection equipment.

Enforcement Issue

There are no enforcement actions pending.

Stack Summary

Stack ID	Operation	Height (ft)	Dimensions (ft)	Flow Rate (acfm)	Temperature (°F)
S-01	Painting	20	2.5 x 2.5 Rect.	17,117	100°F above ambient temperature
S-02	Painting	20	2.5 x 2.5 Rect.	17,117	
S-03	Painting	20	2.5 x 2.5 Rect.	17,117	
S-04	Painting	20	2.5 x 2.5 Rect.	17,117	
S-05	Heater	20	1.5 Round	2,000	300°F

Recommendation

The staff recommends to the Commissioner that the construction and operation be approved. This recommendation is based on the following facts and conditions:

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

A complete application for the purposes of this review was received on March 30, 2005

Emission Calculations

See Appendix A of this document for detailed emission calculations (pages 1 through 5).

Potential to Emit of the Source Before Controls

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

Pollutant	Potential to Emit (tons/yr)
PM	186
PM-10	70.9
SO ₂	negligible
VOC	38.1
CO	1.5
NO _x	1.8

HAPs	Potential to Emit (tons/yr)
Toluene	7.77
MEK	6.73
Xylene	4.67
Total	19.2

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of PM10 and VOC are less than 100 tons per year but greater than 25 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-6.1. An MSOP will be issued.
- (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, the potential to emit of a single HAP is less than ten (10) tons per year and the potential to emit of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, the source is not subject to 326 IAC 2-7 (Part 70).
- (c) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

County Attainment Status

The source is located in Starke County.

Pollutant	Status
PM-10	Attainment
PM 2.5	Attainment or Unclassifiable
SO ₂	Attainment
NO ₂	Attainment
1-hour Ozone	Attainment
8-hour Ozone	Attainment
CO	Attainment
Lead	Attainment

- (a) Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to ozone. Starke County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability for the source section.
- (b) Starke County has been classified as unclassifiable or attainment for PM2.5. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM2.5 emissions. Therefore, until the U.S.EPA adopts specific provisions for PSD review for PM2.5 emissions, it has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions. See the State Rule Applicability for the source section.
- (c) Starke County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability for the source section.

Source Status

New Source PSD Definition (emissions after controls, based on 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/yr)
PM	15.4
PM-10	14.3
SO ₂	Negligible
VOC	38.1
CO	1.5
NO _x	1.8
Single HAP	7.77
Combination HAPs	19.2

This new source is not a major stationary source because no attainment pollutant is emitted at a rate of 250 tons per year or greater and it is not in one of the 28 listed source categories. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

Air Quality Impacts From Minor Sources

Modeling Overview

IDEM, OAQ, has conducted a modeling analysis of the Limited Potential to Emit (PTE) criteria pollutants from this proposed source to estimate whether or not the Limited PTE criteria pollutants will cause or contribute to a violation of any National Ambient Air Quality Standard (NAAQS).

Modeling Results – Criteria Pollutants

The modeling results indicate that the Limited PTE criteria pollutants from this proposed source will not exceed the National Ambient Air Quality Standards (NAAQS).

The results of the modeling analysis are included as Appendix B – Minor Source Criteria Pollutant Modeling – Screening Form.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This new source is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than 100 tons per year,
- (b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
- (c) any combination of HAPs is less than 25 tons per year.

This is the first air approval issued to this source.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in this permit.
- (b) The steel tanks produced at this source are not subject to the New Source Performance Standard (NSPS), 40 CFR 60, Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for which Construction, Reconstruction, or Modification Commenced After July 23, 1984, because these tanks are not used to store volatile organic liquids while they are onsite.
- (c) The VOC and HAP storage containers used to store paints and solvents at this source are not subject to the New Source Performance Standard (NSPS), 40 CFR 60, Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for which Construction, Reconstruction, or Modification Commenced After July 23, 1984, because these tanks have a maximum capacity less than 75 cubic meters.
- (d) The steel tank surface coating operations at this source are not subject to the New Source Performance Standard (NSPS), 40 CFR 60, Subpart SS - Standards of Performance for Industrial Surface Coating: Large Appliances (326 IAC 12), because, pursuant to the definitions in 40 CFR 60.451, the steel tanks painted at this source are not large appliances.
- (e) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP)(326 IAC 14, 20 and 40 CFR Part 61, 63) included in this permit.

- (f) The metal surface coating operations are not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants for Miscellaneous Metal Parts and Products Surface Coating Operations (40 CFR 63, Subpart M) because this source is not a major source of HAPs (i.e., the source does not have the potential to emit ten (10) tons per year or greater of a single HAP or 25 tons per year or greater of a combination of HAPs) as defined in 40 CFR 63, Subpart A. Any change that would increase HAP emissions to greater than ten (10) tons per year of a single HAP or greater than twenty-five (25) tons per year of a combination of HAPs requires prior approval from IDEM, OAQ.
- (g) The tank degreasing and cleaning operation at this source are not subject to the National Emission Standards for Halogenated Solvent Cleaning (326 IAC 20-6, 40 CFR 63, Subpart T) because these operations do not use a solvent containing methylene chloride, perchlorethylene, trichlorethylene, 1,1,1-trichlorethane, carbon tetrachloride, chloroform or any combination of these halogenated HAP solvents in a total concentration greater than five percent (5%) by weight as a cleaning or drying agent.

State Rule Applicability – Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration)

This source is not in 1 of the 28 source categories and this source is not an affected source in regard to the New Source Performance Standards that were in effect on August 7, 1980, therefore, fugitive emissions are not counted towards applicability of PSD.

The source is located in Starke County and the potential to emit for PM, PM₁₀, SO₂, NO_x, CO and VOC is less than 250 tons per year. Therefore, this source is a minor source under PSD.

326 IAC 2-4.1-1 (New Source Toxics Control)

This source is not installing any new major sources of HAPs. Therefore the requirements of 326 IAC 2-4.1 do not apply.

326 IAC 2-6 (Emission Reporting)

This source is located in Starke County and is not required to operate under a Part 70 Permit. Therefore, 326 IAC 2-6 does 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.

State Rule Applicability – Abrasive Blasting Booth (EP-01)

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

Pursuant to 326 IAC 6-3-2, the particulate emissions from the abrasive blasting operations (EP-01) shall be limited to 5.53 lb/hr based on a process weight rate of 3,125 lbs/hour.

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 dust collector shall be in operation at all times the abrasive blasting booth (EP-01) is in operation, in order to comply with this limit.

State Rule Applicability – Surface Coating Booth (EP-02)

326 IAC 8-1-6 (General Reduction Requirements)

The requirements of 326 IAC 8-1-6 do not apply to the surface coating booth (EP-02) because this facility is already regulated by another Article 8 rule.

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

The surface coating booth (EP-02) applies surface coatings to miscellaneous metal parts, and has actual emissions of greater than fifteen (15) pounds of VOC per day. (See Appendix A, page 1).

Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the volatile organic compound (VOC) content of coating delivered to the applicator at the surface coating booth (EP-02) shall be limited to 3.5 pounds of VOCs per gallon of coating less water for extreme performance coatings.

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

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

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

Pursuant to 326 IAC 6-3-2(d):

- (a) Particulate from the surface coating booth (EP-02) shall be controlled by a dry particulate filter, and the Permittee shall operate the control device in accordance with manufacturer's specifications.
- (b) If overspray is visibly detected at the exhaust or accumulates on the ground, the Permittee shall inspect the control device and do either of the following no later than four (4) hours after such observation:
 - (1) Repair control device so that no overspray is visibly detectable at the exhaust or accumulates on the ground.
 - (2) Operate equipment so that no overspray is visibly detectable at the exhaust or accumulates on the ground.

If overspray is visibly detected, the Permittee shall maintain a record of the action taken as a result of the inspection, any repairs of the control device, or change in operations, so that overspray is not visibly detected at the exhaust or accumulates on the ground. These records must be maintained for five (5) years.

State Rule Applicability – Tank Degreasing and Cleaning Operation (EP-03)

326 IAC 8-1-6 (General Reduction Requirements)

The potential to emit of VOC of the tank degreasing and cleaning operation (EP-03) is less than 25 tons per year. Therefore, the requirements of 326 IAC 8-1-6 do not apply to this facility.

326 IAC 8-2 (Surface Coating Emission Limitations)

The tank degreasing and cleaning operation (EP-03) do not apply surface coatings and is not of a type described in Sections 2 through 13 of this rule. Therefore, the requirements of 326 IAC 8-2 do not apply to this facility.

326 IAC 8-3 (Organic Solvent Degreasing Operations)

The tank degreasing and cleaning operation (EP-03) applies organic solvents to large steel tanks using manual application methods. This operation is not a “Cold Cleaner Degreaser”, “Open Top Vapor Degreaser”, or a “Conveyorized Degreaser”, as those terms are defined in 326 IAC 8. Therefore, the requirements of 326 IAC 8-3 do not apply to the tank degreasing and cleaning operations.

State Rule Applicability – Welding, Cutting Torches (EP-05)

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

Pursuant to 326 IAC 6-3-1(b)(9), the metal welding operations, identified as EP-05, are exempt from the requirements of 326 IAC 6-3-2 because these welding operations consume less than 625 pounds of wire per day.

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

Pursuant to 326 IAC 6-3-1(b)(10), the metal cutting operations, identified as EP-05, are exempt from the requirements of 326 IAC 6-3-2 because these cutting operations cut less than three-thousand four hundred (3,400) inches of stock of one (1) inch thickness or less per hour.

State Rule Applicability – VOC and HAP Storage Containers

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

The VOC and HAP storage tanks are not located in Clark, Floyd, Lake or Porter Counties. Therefore, the requirements of 326 IAC 8-9 do not apply to these tanks.

326 IAC 12 (New Source Performance Standards)

The VOC and HAP storage tanks are not subject to the requirements of 326 IAC 12 because they have a volume less than 40 cubic meters (less than 10,567 gallons). 326 IAC 12 incorporates by reference the July 1, 2002 version of 40 CFR 60, Subpart Kb, that predates the revisions made to 40 CFR 60, Subpart Kb on October 15, 2003.

State Rule Applicability – Steel Tanks

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

The source is not located in Clark, Floyd, Lake or Porter Counties. Therefore, the requirements of 326 IAC 8-9 do not apply to the steel tanks.

326 IAC 12 (New Source Performance Standards)

The steel tanks manufactured at this source are not subject to the requirements of 326 IAC 12 because they are not used to store volatile organic liquids while they are onsite. 326 IAC 12 incorporates by reference the July 1, 2002 version of 40 CFR 60, Subpart Kb, that predates the revisions made to 40 CFR 60, Subpart Kb on October 15, 2003.

Conclusion

The construction and operation of this stationary steel tank fabrication and painting operation shall be subject to the conditions of the New Source Construction and Minor Source Operating Permit M149-21049-00026.

OFFICE OF AIR QUALITY

Minor Source Criteria Pollutant Modeling Screening Form - Raw Data

General Permit Information

Permit Number: 149-21049-00026

Company Name: Sabre Manufacturing, LLC

City: Knox, Indiana 46534

County: Starke

Permit Reviewer: ERG / Stephen Treimel

Date results are needed: NA

Source Specific Information

TABLE 1 - Criteria Pollutant Emission Rates (lb/hr) - based on the highest allowable emissions rate

Stack ID	CO	NO _x	PM ₁₀	Pb	SO ₂
S-01	0	0	3	0	0
S-02	0	0	0.43	0	0
S-03	0	0	0.92	0	0
S-04	0	0	0.92	0	0

Totals:

0	0	5.27	0	0
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**TABLE 2 - Stack Information: (All heights are from ground level)
For non-circular stacks, take the average of the stack dimensions as the stack diameter.**

Stack ID	Stack Height (ft)	Flow Rate (acfm)	Stack Temp. (°F)	Stack Diameter (ft)
S-01	20	17117	160	2.5
S-02	20	17117	160	2.5
S-03	20	17117	160	2.5
S-04	20	17117	160	2.5
0				
0				
0				

Closest building related to stack:		
Height (ft)	Width (ft)	Length (ft)

Closest Property Line (Distance in feet): _____ No building (Please check if this applies)

OFFICE OF AIR QUALITY

Minor Source Criteria Pollutant Modeling Screening Form - Modeling Results

General Permit Information

Permit Number: 149-21049-00026
Company Name: Sabre Manufacturing, LLC **Model Used (Please check one):**
City: Knox, Indiana 46534 **SCREEN** **ISCST**
County: Starke **Date Modeling Completed:** 4/13/2005
Permit Reviewer: ERG / Stephen Treimel **Modeler:** ERG/ ST
Date results are needed: NA

Modeling Results

TABLE 3 - Criteria Pollutants - Maximum Concentration (ug/m3):

Averaging Period	CO	NOX	PM10	Pb	SO2
1-hour modeled concentration					
NAAQ Standard	40000				
PASS or FAIL	PASS				
3-hour modeled concentration					
NAAQ Standard					1300
PASS or FAIL					PASS
8-hour modeled concentration					
NAAQ Standard	10000				
PASS or FAIL	PASS				
24-hour modeled concentration			46.9		PASS
NAAQ Standard			150		365
PASS or FAIL			PASS		PASS
Quarterly modeled concentration					
NAAQ Standard				1.5	
PASS or FAIL				PASS	
Annual modeled concentration			9.4		
NAAQ Standard		100	50		80
PASS or FAIL		PASS	PASS		PASS

Appendix A: Emissions Calculations
VOC and Particulate Emissions from Surface Coating and Cleaning Operations

Company Name: Sabre Manufacturing, LLC
Address: 5420 East State Road 8, Knox, Indiana 46534
NSC/MSOP: 149-21049-00026
Reviewer: ERG/ST
Date: April 25, 2005

Emission Unit ID	Process ID	Material	Density (lbs/gal)	Weight % Volatile (H ₂ O & Organics)	Weight % Water	Weight % Organics	Weight % Solids	Maximum Usage (gals/unit)	Maximum Throughput (units/hr)	Pounds VOC per Gallon of Coating	PTE of VOC (tons/yr)	Actual VOC Emissions (lbs/day) ^d	Transfer Efficiency ^a	PTE of PM/PM10 Uncontrolled (tons/yr) ^b	Control Efficiency ^c	PTE of PM/PM10 Controlled (tons/yr)
EP-02	Tank Liner	309/310	10.2	0.8%	0.0%	0.8%	99.2%	30.0	0.1	0.08	1.11	4.07	70%	41.5	80%	8.29
	Undercoat	ZTG-20060B	11.0	22.0%	0.0%	22.0%	78.0%	5.00	0.1	2.42	5.52	20.2	70%	5.87	80%	1.17
	Primer	Unibond 116	10.8	43.4%	35.2%	8.2%	56.6%	15.0	0.1	0.89	6.09	22.2	70%	12.6	80%	2.51
	Topcoat	Unibond 116	10.8	43.4%	35.2%	8.2%	56.6%	15.0	0.1	0.89	6.09	22.2	70%	12.6	80%	2.51
EP-03	Cleanup	Carboline #2	7.1	100%	0.0%	100%	0.0%	3.00	0.1	7.10	9.72	35.5	100%	0.0	80%	0.0
		Xylene	6.8	100%	0.0%	100%	0.0%	1.50	0.1	6.83	4.67	17.1	100%	0.0	80%	0.0
		MEK	7.0	100%	0.0%	100%	0.0%	1.50	0.1	7.00	4.79	17.5	100%	0.0	80%	0.0
Totals										EP-02	18.8	68.7		72.5		14.5
										EP-03	19.2	70.1		0.0		0.0

^a Coatings are applied with HVLP spray application methods.

^b Assume all PM emissions are equal to PM10.

^c Particulate emissions from the spray booths are controlled with dry filter.

^d Source will operate 16 hours per day.

METHODOLOGY

Pounds VOC per gallon of coating (lbs/gal) = Density (lbs/gal) x Weight % Organics

PTE of VOC (tons/yr) = Density (lbs/gal) x Weight % Organics x Max. Usage (gals/unit) x Max. Throughput (units/hr) x 8760 (hrs/yr) x 1 ton/2000 lbs

PTE of PM/PM10 Uncontrolled (tons/yr) = Density (lbs/gal) x Weight % Solids x Max. Usage (gals/unit) x Max. Throughput (units/hr) x (1- Transfer Efficiency %) x 8760 hrs/yr x 1 ton/2000 lbs

PTE of PM/PM10 Controlled (tons/yr) = Density (lbs/gal) x Weight % Solids x Max. Usage (gals/unit) x Max. Throughput (units/hr) x (1- Transfer Efficiency %) x (1-Control Efficiency %) x 8760 hrs/yr x 1 ton/2000 lbs

Actual VOC Emissions (lbs/day) = SUM for all materials(Density (lbs/gal) x Weight % Organics x Max. Usage (gals/unit) x Max. Throughput (units/hr) x 16 hours/day

Appendix A: Emission Calculations
HAP Emissions from Surface Coating and Cleaning Operations

Company Name: Sabre Manufacturing, LLC
Address: 5420 East State Road 8, Knox, Indiana 46534
NSC/MSOP: 149-21049-00026
Reviewer: ERG/ST
Date: April 25, 2005

Emission Unit ID	Process ID	Material	Density (lbs/gal)	Weight % Toluene	Weight % Xylene	Weight % MEK	Maximum Usage (gals/unit)	Maximum Throughput (units/hr)	PTE of Toluene (tons/yr)	PTE of Xylene (tons/yr)	PTE of MEK (tons/yr)
EP-02	Tank Liner	309/310	10.2	0.0%	0.0%	0.0%	30.0	0.1	0.00	0.00	0.00
	Undercoat	ZTG-20060B	11.0	0.0%	0.0%	0.0%	5.00	0.1	0.00	0.00	0.00
	Primer	Unibond 116	10.8	0.0%	0.0%	0.0%	15.0	0.1	0.00	0.00	0.00
	Topcoat	Unibond 116	10.8	0.0%	0.0%	0.0%	15.0	0.1	0.00	0.00	0.00
EP-03	Cleanup	Carboline #2	7.1	80%	0.0%	20%	3.00	0.1	7.77	0.00	1.94
		Xylene	6.8	0.0%	100%	0.0%	1.50	0.1	0.00	4.67	0.00
		MEK	7.0	0.0%	0.0%	100%	1.50	0.1	0.00	0.00	4.79
Totals									7.77	4.67	6.73

METHODOLOGY

PTE of HAPS (tons/yr) = Density (lbs/gal) x Max. Usage (gals/unit) x Max. Throughput (units/hr) x Weight % HAP x 8760 hrs/yr x 1 ton/2000 lbs

Appendix A: Emission Calculations
Particulate Emissions from Abrasive Blasting Operations

Company Name: Sabre Manufacturing, LLC
Address: 5420 East State Road 8, Knox, Indiana 46534
NSC/MSOP: 149-21049-00026
Reviewer: ERG/ST
Date: April 25, 2005

Emission Unit	Maximum Capacity (tons/hr)	PM Emission Factor (lbs PM/ton)	PM10 Emission Factor (lbs PM10/ton)	PTE of PM Uncontrolled (tons/yr)	PTE of PM10 Uncontrolled (tons/yr)	Control Efficiency (%)	PTE of PM Controlled (tons/yr)	PTE of PM10 Controlled (tons/yr)
EP-01	1.56	17	1.70	116	11.6	99.0%	1.16	0.12

Emission factors from FIRE 6.24 (SCC 3-04-003-40) "Grey Iron Foundries, Grinding and Cleaning (Shotblasting)"
 Each tank weighs 15 tons. The maximum capacity of the blasting/cleaning operation is 10 tanks per 96 hours.
 15 tons per tank x 10 tanks per 96 hours = 150 tons per 96 hours = 1.56 tons per hour

Methodology

Maximum Capacity (tons/hr) = Tank Weight (tons/tank) x Maximum Production Rate (10 tanks/96 hrs)

PTE of PM/PM10 Uncontrolled (tons/yr) = Maximum Capacity (tons/hr) x Emission Factor (lbs/ton) x 8760 (hrs/yr) x 1 ton/2,000 lbs

PTE of PM/PM10 Controlled (tons/yr) = Maximum Capacity (tons/hr) x Emission Factor (lbs/ton) x 8760 (hrs/yr) x 1 ton/2,000 lbs x (1 - Control Efficiency %)

**Appendix A: Emissions Calculations
Natural Gas Fired Space Heater**

Company Name: Sabre Manufacturing, LLC
Address: 5420 East State Road 8, Knox, Indiana 46534
NSC/MSOP: 149-21049-00026
Reviewer: ERG/ST
Date: April 25, 2005

Emission Unit Description	Total Heat Input Capacity (MMBtu/hr)	Total Maximum Potential Throughput (MMCF/yr)
Space Heater	4.00	35.0

Emission Factors (lbs/MMCF)						
PM*	PM10*	SO ₂	NO _x **	CO	VOC	HAPs
7.6	7.6	0.6	100	84	5.5	1.89

Potential To Emit (tons/yr)							
Emission Unit ID	PM	PM10	SO ₂	NO _x	CO	VOC	HAPs
EP-04	0.13	0.13	0.01	1.75	1.47	0.10	0.033

* PM and PM10 emission factor are for condensable and filterable PM and PM10 combined.

**Emission factor for NOx: Uncontrolled = 100 lb/MMCF

Emission factors are from AP-42, Chapter 1.4 - Natural Gas Combustion, Tables 1.4-1, 1.4-2, 1.4-3 and 1.4-4. SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03. (AP-42 Supplement D 7/98)

1 MMBtu = 1,000,000 Btu

1 MMCF = 1,000,000 cubic feet of gas

All emission factors are based on normal firing.

Methodology

Max. Potential Throughput (MMCF/yr) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

PTE (tons/yr) = Max. Potential Throughput (MMCF/yr) x Emission Factor (lbs/MMCF) x 1 ton/2,000 lbs

**Appendix A: Emission Calculations
Particulate and HAP Emissions from Welding Operations**

Company Name: Sabre Manufacturing, LLC
Address: 5420 East State Road 8, Knox, Indiana 46534
Permit Number: 149-21049-00026
Reviewer: ERG/ST
Date: April 25, 2005

Type of Welder	Electrode Usage Rate (lbs/tank)	Production Rate (tanks/hr)	PM/PM10 Emission Factor (lbs PM10/1,000 lbs electrode)	Manganese Emission Factor (lbs Mn/1,000 lbs electrode)	PTE of PM/PM10 Uncontrolled (lbs/hr)	PTE of PM/PM10 Uncontrolled (tons/yr)	PTE of Manganese Uncontrolled (tons/yr)
Manual	80	0.1	5.2	0.318	0.04	0.18	0.01

Assume all PM emissions are equal to PM10.

Emission factors are from AP 42, Chapter 12.19, Electric Arc Welding, Tables 12.19-1 and 12.19-2 (1/95).

Methodology

PTE PM/PM10/Mn Uncontrolled (tons/yr) = Electrode Usage (lbs/tank) x Production Rate (tanks/hr) x Emission Factor (lbs/1,000 lbs electrode) x 8760 (hrs/yr) x 1 ton/2,000 lbs