



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: April 29, 2005
RE: Carman Industries, Inc. / 019-19403-00088
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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MINOR SOURCE OPERATING PERMIT OFFICE OF AIR QUALITY

**Carman Industries, Inc.
1005 West Riverside Drive
Jeffersonville, Indiana 47130**

(herein known as the Permittee) is hereby authorized to 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 2-1.1, (326 IAC 2-5.1 if new source), 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Operation Permit No.: MSOP 019-19403-00088	
Issued by: Original signed by Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: April 29, 2005 Expiration Date: April 29, 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 owns and operates stationary steel material handling equipment manufacturing facility for the conveyor and conveying equipment manufacturing industry.

Authorized Individual: Production Manager
Source Address: 1005 West Riverside Drive, Jeffersonville, Indiana 47130
Mailing Address: 1005 West Riverside Drive, Jeffersonville, Indiana 47130
General Source Phone: 812-288-4731
SIC Code: 3535
County Location: Clark
Source Location Status: Attainment for 1-hour Ozone
Nonattainment for 8-hour Ozone
Attainment area for all other criteria pollutants
Source Status: Minor Source Operating Permit
Minor Source, under PSD and Emission Offset;
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 operate the following emissions units and pollution control devices:

- (a) one (1) paint spray booth, identified as S-1, utilizing an air atomized spray application system, with a maximum capacity of 481.77 pounds of coating per hour using dry filters for particulate control, exhausting through stack #S-1;
- (b) eleven (11) welding stations, utilizing metal inert gas, with a maximum hourly consumption of 3.73 pounds of wire per hour at each station;
- (c) one (1) flame-cutting station, utilizing oxyacetylene, with a maximum metal cutting rate of 20 inches per minute; and
- (d) one (1) sand blasting room, identified as S-2, utilizing a mechanical blaster, with a maximum blast rate of 1000 pounds of Black Beauty abrasives per hour, using a dust collector for particulate matter control, exhausting through stack #S-2.

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 operate 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 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.5 Modification to Permit [326 IAC 2]

All requirements and conditions of this operating 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.6 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, IN 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.7 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.8 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.9 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] [IC 13-17-3-2][IC 13-30-3-1]

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

- (a) Enter upon the Permittee's premises where a 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.10 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 an 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.11 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.12 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 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 thirty percent (30%) 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 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.5 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.6 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

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

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue,
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.7 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 not later than forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAQ, if the Permittee submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.8 Compliance Requirements [326 IAC 2-1.1-11]

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

Compliance Monitoring Requirements

C.9 Compliance Monitoring [326 IAC 2-1.1-11]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. All monitoring and record keeping requirements not already legally required shall be implemented when operation begins.

C.10 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11]

- (a) Whenever a condition in this permit requires the measurement of total static pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (2%) of full scale reading.
- (b) The Permittee may request the IDEM, OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

C.11 Compliance Response Plan - Preparation and Implementation

- (a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP shall be submitted to IDEM, OAQ upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and comprised of:
 - (1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected timeframe for taking reasonable response steps.
 - (2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan, the Permittee shall amend its Compliance Response Plan to include such response steps taken.
- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:
 - (1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or
 - (2) If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.
 - (3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, and it will be ten (10) days or more until the unit or device will be shut down, then the Permittee shall promptly notify the IDEM, OAQ of the expected date of the shut down. The notification shall also include the status of the applicable compliance monitoring parameter with respect to normal, and the results of the response actions taken up to the time of notification.
 - (4) Failure to take reasonable response steps shall be considered a deviation from the permit.

- (c) The Permittee is not required to take any further response steps for any of the following reasons:
 - (1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for a minor permit modification to the permit, and such request has not been denied.
 - (3) An automatic measurement was taken when the process was not operating.
 - (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

C.12 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.13 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.14 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.15 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [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) Unless otherwise specified in this permit, any quarterly or semi-annual report required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. The report does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) 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:

- (a) one (1) paint spray booth, identified as S-1, utilizing an air atomized spray application system, with a maximum capacity of 481.77 pounds of coating per hour using dry filters for particulate control, exhausting through stack #S-1;

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

Emission Limitations and Standards

D.1.1 Volatile Organic Compounds (VOC) Limitations and Emission Offset [326 IAC 8-2-9] [326 IAC 2-3]

Pursuant to 326 IAC 8-2-9, the use of VOC, including coatings, dilution solvents, and cleaning solvents shall be limited to less than 15 pounds per day. Compliance with this limit shall make 326 IAC 8-2-9 and 326 IAC 2-3 (Emission Offset) not applicable.

D.1.2 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to CP 019-9372-00088, issued on November 8, 1999 and 326 IAC 6-3-2, the PM from the one (1) paint spray booth, identified as S-1, shall not exceed the pound per hour emission rate established as E in the following formula:

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

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

D.1.3 Particulate [326 IAC 6-3-2(d)]

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

- (a) Particulate from the surface coating 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.

D.1.4 Preventive Maintenance Plan [326 IAC 1-6-3]

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

Compliance Determination Requirements

D.1.5 Volatile Organic Compounds (VOC)

Compliance with the VOC content and usage limitations contained in Condition D.1.1 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer.

D.1.6 VOC Emissions

Compliance with Condition D.1.1 shall be demonstrated within 30 days of the end of each day based on the total volatile organic compound usage for the day.

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

D.1.7 Record Keeping Requirements

- (a) To document compliance with Condition D.1.1, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken daily and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.1.1. Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.
- (1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
 - (2) The total amount of the coatings used for each day;
 - (3) The cleanup solvent usage for each day; and
 - (4) The total VOC usage for each day.
- (b) To document compliance with Conditions D.1.3 and D.1.4, the Permittee shall maintain records of overspray observations and any additional inspections prescribed by the Preventive Maintenance Plan.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (d) one (1) sand blasting room, identified as S-2, utilizing a mechanical blaster, with a maximum blast rate of 1000 pounds of Black Beauty abrasives per hour, using a dust collector for particulate matter control, exhausting through stack #S-2.

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

Emission Limitations and Standards

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

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from one (1) sand blasting room, identified as S-2, shall not exceed 2.58 pounds per hour when operating at a process weight rate of 0.5 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

D.2.2 Preventive Maintenance Plan [326 IAC 1-6-3]

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

Compliance Determination Requirement

D.2.3 Particulate Control

In order to comply with D.2.1, the dust collector for particulate control shall be in operation and control emissions from the sand blasting room at all times that the sand blasting operations are in operation.

Compliance Monitoring Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.2.4 Visible Emissions Notations

- (a) Daily visible emission notations of the sand blasting room stack exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation and Implementation shall be considered a deviation from this permit.

D.2.5 Parametric Monitoring

The Permittee shall record the total static pressure drop across the dust collector controlling the sand blasting room at least daily when the sand blasting is in operation when venting to the atmosphere. When for any one reading, the pressure drop across the dust collector is outside the normal range of 3.0 and 7.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports. 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 - Compliance Response Plan - Preparation and Implementation shall be considered a deviation from this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

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

D.2.6 Record Keeping Requirements

- (a) To document compliance with Condition D.2.4, the Permittee shall maintain records of visible emission notations of the sand blasting room's stack exhaust daily.
- (b) To document compliance with Condition D.2.2, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.
- (c) To document compliance with Condition D.2.5, the Permittee shall maintain daily records of the total static pressure drop during normal operation when venting to the atmosphere.
- (d) 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 Compliance Data Section

Company Name: Carman Industries, Inc.
Location: 1005 Riverside Drive, Jeffersonville, Indiana 47130
Permit No.: 019-19403-00088
Source/Facility: One (1) paint spray booth
Pollutant: VOC
Limit: VOC usage less than 15 pounds per day.

Month: _____ Year: _____

Day	Usage this day (ton/day)	Usage for the last 365-day period	Day	Usage this day (ton/day)	Usage for the last 365-day period
1			17		
2			18		
3			19		
4			20		
5			21		
6			22		
7			23		
8			24		
9			25		
10			26		
11			27		
12			28		
13			29		
14			30		
15			31		
16			TOTAL		

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

**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:	Carman Industries, Inc.
Address:	1005 West Riverside Drive, Jeffersonville, Indiana 47130
City:	Jeffersonville
Phone #:	812-288-4731
MSOP #:	019-19403-00088

I hereby certify that **[source]** is still in operation.
 no longer in operation.

I hereby certify that **[source]** is in compliance with the requirements of MSOP 019-19403-00088.
 not in compliance with the requirements of MSOP 019-19403-00088.

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: ____/____/19____ _____ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION: _____

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE ____/____/19____ _____ 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

PAGE 1 OF 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

Addendum to the Technical Support Document (TSD) for a Minor Source Operating Permit (MSOP)

Source Background and Description

Source Name: Carman Industries, Inc.
Source Location: 1005 West Riverside Drive, Jeffersonville, Indiana 47130
County: Clark
SIC Code: 3535
Operation Permit No.: M019-19403-00088
Permit Reviewer: Femi Ogunsola / EVP

On February 4, 2005, the Office of Air Quality (OAQ) had a notice published in the Evening News in Jeffersonville, Indiana, stating that Carman Industries, Inc. had applied for a Minor Source Operating Permit (MSOP) to operate a steel material handling equipment manufacturing facility for the conveyor and conveying equipment manufacturing industry. The notice also stated that OAQ proposed to issue a Minor Source Operating Permit for this operation and provided information on how the public could review the proposed MSOP 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 MSOP should be issued as proposed. The public notice ended on March 6, 2005.

On March 2, Elizabeth Hill of Bruce Carter Associates, L.L.C., Elkhart, Indiana, on behalf of Carman Industries, Inc., submitted comments on the proposed MSOP permit. The summary of the comments and corresponding responses is as follows (bolded language has been added and the language with a line through it has been deleted). The Table of Contents has been modified to reflect these changes.

Comment 1

Condition D.2.5 Parametric Monitoring indicates the normal range for the pressure drop across the dust collector is between 3.0 and 6.0 inches of water. The manufacturer's specification for this process is between 3.0 and 7.0 inches. Please update this condition to reflect this change.

Response to Comment 1

IDEM, OAQ agrees that the Condition D.2.5, Parametric Monitoring should reflect the manufacturer's specification for the pressure drop across the dust collector since this is the normal range for the operation of the dust collector would operate. In addition, IDEM, OAQ has decided to change the parametric monitoring frequency from once per shift to once per day. Therefore, the Condition D.2.5 has been revised as follows:

D.2.5 Parametric Monitoring

The Permittee shall record the total static pressure drop across the dust collector controlling the sand blasting room at least ~~once per shift~~ **daily** when the sand blasting is in operation when venting to the atmosphere. When for any one reading, the pressure drop across the dust collector is outside the normal range of 3.0 and ~~6.0~~ **7.0** inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports. 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 - Compliance Response Plan - Preparation and Implementation shall be considered a deviation from this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

Upon further review, OAQ has determined the following changes will be made to the permit (where language deleted is shown with strikeout and that which is added is shown in bold):

1. Indiana was required to incorporate credible evidence provisions into state rules consistent with the SIP call published by U.S. EPA in 1997 (62 FR 8314). Indiana has incorporated the credible evidence provision in 326 IAC 1-1-6. This rule is effective March 16, 2005; therefore, the condition reflecting this rule will be incorporated into your permit as follows:

B.12 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.

2. IDEM, OAQ has decided to change the parametric monitoring frequency from once per shift to once per day.

D.2.4 Visible Emissions Notations

- (a) ~~Once per shift~~ **Daily** visible emission notations of the sand blasting room stack exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

D.2.6 Record Keeping Requirements

- (a) To document compliance with Condition D.2.4, the Permittee shall maintain records of visible emission notations of the sand blasting room's stack exhaust ~~once per shift~~ **daily**.
- (b) To document compliance with Condition D.2.2, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.
- (c) To document compliance with Condition D.2.5, the Permittee shall maintain records **daily** ~~once per shift~~ of the total static pressure drop during normal operation when venting to the atmosphere.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

3. Conditions A.1 and D.1.1 have been revised as followed to correct the typographical errors.

A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

The Permittee owns and operates stationary steel material handling equipment manufacturing facility for the conveyor and conveying equipment manufacturing industry.

Authorized Individual: Production Manager
Source Address: 1005 West Riverside Drive, Jeffersonville, Indiana 47130
Mailing Address: 1005 West Riverside Drive, Jeffersonville, Indiana 47130
General Source Phone: 812-288-4731
SIC Code: 3535
County Location: Clark
Source Location Status: Attainment for 1-hour Ozone
Nonattainment for 8-hour Ozone
Attainment area for all other criteria pollutants
Source Status: Minor Source Operating Permit
Minor Source, under PSD and ~~Nonattainment NSR~~ **Emission Offset**;
Minor Source, Section 112 of the Clean Air Act
Not 1 of 28 Source Categories.

D.1.1 Volatile Organic Compounds (VOC) Limitations and ~~Nonattainment New Source Review Limit~~
Emission Offset [326 IAC 8-2-9] [326 IAC 2-1.1-5 **2-3**]

Pursuant to 326 IAC 8-2-9, the use of VOC, including coatings, dilution solvents, and cleaning solvents shall be limited to less than 15 pounds per day. Compliance with this limit shall make 326 IAC 8-2-9 and **326 IAC 2-3 (Emission Offset)** not applicable.

4. The letterhead has been changed to reflect the names of the current State Governor and IDEM's commissioner. Also IDEM address has been changed to the new address on the letterhead and the entire permit.

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

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

Source Background and Description

Source Name:	Carman Industries, Inc.
Source Location:	1005 West Riverside Drive, Jeffersonville, Indiana 47130
County:	Clark
SIC Code:	3535
Operation Permit No.:	019-19403-00088
Permit Reviewer:	Femi Ogunsola/EVP

The Office of Air Quality (OAQ) has reviewed an application from Carman Industries, Inc. relating to the construction and operation of steel material handling equipment manufacturing facility for the conveyor and conveying equipment manufacturing industry.

Permitted Emission Units and Pollution Control Equipment

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

- (a) one (1) paint spray booth, identified as S-1, utilizing an air atomized spray application system, with a maximum capacity of 481.77 pounds of coating per hour using dry filters for particulate control, exhausting through stack #S-1;
- (b) eleven (11) welding stations, utilizing metal inert gas, with a maximum hourly consumption of 3.73 pounds of wire per hour at each station;
- (c) one (1) flame-cutting station, utilizing oxyacetylene, with a maximum metal cutting rate of 20 inches per minute; and
- (d) one (1) sand blasting room, identified as S-2, utilizing a mechanical blaster, with a maximum blast rate of 1000 pounds of Black Beauty abrasives per hour, using a dust collector for particulate matter control, exhausting through stack #S-2.

Unpermitted Emission Units and Pollution Control Equipment

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

Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

- (a) CP 019-9372-00088 issued on November 8, 1999.

All conditions from previous approvals were incorporated into this permit.

Enforcement Issue

There are no enforcement actions pending.

Stack Summary

Stack ID	Operation	Height (ft)	Diameter (ft)	Flow Rate (acfm)	Temperature (°F)
S-1	Surface Coating	22.67	34	1500	Ambient
S-2	Shot Blasting	11.0	36	1000	Ambient

Recommendation

The staff recommends to the Commissioner that the 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 July 26, 2004.

Emission Calculations

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

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	49.13
PM-10	49.13
SO ₂	0.00
VOC	13.20
CO	0.00
NO _x	0.00

HAP=s	Unrestricted Potential Emissions (tons/yr)
Xylene (Single Worst Case)	2.29
Toluene	1.63
Methyl Ethyl Ketone	0.75
O-Xylene	0.16
M-Xylene	0.42
P-Xylene	0.18
Ethylene Benzene	0.56
2-Butoxyethanol	1.14
TOTAL	7.22

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of pollutants are less than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-6.1. An MSOP will be issued.
- (b) 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 Clark County.

Pollutant	Status
PM-10	attainment
SO ₂	attainment
NO ₂	attainment
1-hour Ozone	attainment
8-hour Ozone	Basic Non-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 the ozone standards. Clark County has been designated as nonattainment for the 8-hour ozone standard. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for nonattainment new source review.
- (b) Clark County has been classified as attainment or unclassifiable for PM₁₀, SO₂, NO₂, CO and Lead. 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

Existing Source PSD, Part 70, or FESOP 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	2.77
PM-10	2.77
SO ₂	0.00
VOC	13.20
CO	0.00
NO _x	0.00
Single HAP	2.29
Combination HAPs	7.22

- (a) This existing source is not a major stationary source because no nonattainment regulated pollutant is emitted at a rate of 100 tons per year or greater and it is not in one of the 28 listed source categories.
- (b) These emissions were based on MSOP application submitted by the company.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source, including the emissions from this permit 019-19403-00088, is still 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 status is based on all the air approvals issued to the source. This status has been verified by the OAQ inspector assigned to the source.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (b) This source is not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP), 40 CFR 63, Subpart M for Surface Coating of Miscellaneous Metal Parts and Products, due to single worst case and total of combination of HAP potential emission level. The single worst case HAP Xylene is less than ten (10) tons per year and the combined total HAP is less than twenty five (25) tons per year.

State Rule Applicability – Entire Source

326 IAC 2-6 (Emission Reporting)

This source is located in Clark County and the potential to emit of any regulated pollutants (such as PM10 and VOC) is less than one hundred (100) tons per year. 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 thirty percent (30%) 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 – Individual Facilities

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

The source is not subject to 326 IAC 2-4.1-1, as it does not emit single HAP at a rate of 10 tons per year nor emit a combination of HAPs at a rate of 25 tons per year.

326 IAC 6-3-2 (Process Operations)

On June 12, 2002, revisions to 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes) became effective; this rule was previously referred to as 326 IAC 6-3 (Process Operations). As of the date this permit is being issued these revisions have not been approved by EPA into the Indiana State Implementation Plan (SIP); therefore, the following requirements from the previous version of 326 IAC 6-3 (Process Operations) which has been approved into the SIP will remain applicable requirements until the revisions to 326 IAC 6-3 are approved into the SIP and the condition is modified in a subsequent permit action.

Pursuant to 019-9372-00088 issued on November 8, 1999, and 40 CFR 52 Subpart P, the particulate matter (PM) from the paint spray booth shall be limited by the following:

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

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

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

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

Pursuant to CP 019-9372-00088, issued on November 8, 1999 and 326 IAC 6-3-2, the particulate from the sand blasting room shall be limited to 2.58 pounds per hour when operating at a process weight rate of 0.50 tons per hour based on the following formula:

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

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

$$E = 4.10 (0.50)^{0.67} = 2.58 \text{ lbs/hr}$$

The dust collector shall be in operation at all times the sand blasting room is in operation, in order to comply with this limit.

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

The paint spray booth, S-1, is not subject to 326 IAC 8-2-9 because Carman Industries, Inc., located in Clark County, will limit coating and solvent usage in the surface coating operation such that actual emissions will not exceed 15 pounds per day before add-on controls for each surface coating facility to be permitted. Therefore, 326 IAC 8-2-9 does not apply.

Compliance Requirements

Permits issued under 326 IAC 2-6 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-6.1.5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

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

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

1. The sand blasting room has applicable compliance monitoring conditions as specified below:
 - (a) Once per shift visible emissions notations of the sand blasting room stack exhaust shall be performed during normal daylight operations. A trained employee will 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 start up 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. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when an abnormal emissions is observed.
 - (b) The Permittee shall record the total static pressure drop across the dust collector controlling the sand blasting room at least once per shift when the sand blasting is in operation when venting to the atmosphere. When for any one reading, the pressure drop across the dust collector is outside the normal range of 3.0 and 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports. 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 - Compliance Response Plan - Preparation and Implementation shall be considered a deviation from this permit.

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

Conclusion

The operation of this steel material handling equipment manufacturing facility for the conveyor and conveying equipment manufacturing industry shall be subject to the conditions of the **Minor Source Operating Permit 019-19403-00088**.

Appendix A: Emission Calculations

Company Name: Carman Industries, Inc.
Address City IN Zip: 1005 West Riverside Dr., Jeffersonville, IN 47130
Permit #: MSOP 019-19403-00088
Reviewer: Femi Ogunsola/EVP
Date: 08/30/04

Uncontrolled Potential Emissions (tons/year)					
Pollutant	Surface Coating Operation Emissions	Emissions Generating Activity			TOTAL
		Welding and Oxygen Cutting Emissions	Mechanical Blasting Emissions	Mechanical Blasting Emissions	
PM	2.63	2.70	43.80	49.13	
PM10	2.63	2.70	43.80	49.13	
SO2	0.00	0.00	0.00	0.00	
NOx	0.00	0.00	0.00	0.00	
VOC	13.20	0.00	0.00	13.20	
CO	0.00	0.00	0.00	0.00	
total HAPs	7.12	0.10	0.00	7.22	
worst case single HAP	2.29	0.09	0.00	2.38	
Total emissions based on rated capacity at 8,760 hours/year.					
Controlled Potential Emissions (tons/year)					
Pollutant	Surface Coating Operation Emissions	Emissions Generating Activity			TOTAL
		Welding and Oxygen Cutting Emissions	Mechanical Blasting Emissions	Mechanical Blasting Emissions	
PM	0.07	2.70	0.004	2.77	
PM10	0.07	2.70	0.004	2.77	
SO2	0.00	0.00	0.00	0.00	
NOx	0.00	0.00	0.00	0.00	
VOC	13.20	0.00	0.00	13.20	
CO	0.00	0.00	0.00	0.00	
total HAPs	7.12	0.10	0.00	7.22	
worst case single HAP	2.29	0.09	0.00	2.29	
Total emissions based on rated capacity at 8,760 hours/year, after control.					

**Appendix A: Emission Calculations
VOC and Particulate
From Surface Coating Operations**

Company Name: Carman Industries, Inc.
Address City IN Zip: 1005 West Riverside Dr., Jeffersonville, IN 47130
Permit #: MSQP 019-19403-00088
Reviewer: Femi Ogunsola/EVP
Date: 08/30/04

Material (as applied)	Process	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Vol (solids)	Gal of Mat (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential tons/yr	Ib VOC /gal solids	Transfer Efficiency	Actual Usage gallyr	Actual VOC Usage** lb/day	Actual VOC Usage** tons/yr
PRIMERS																				
Steel II Epoxy Primer (R-T-S)	4210-A/B	10.60	19.81%	0.00%	19.81%	0.00%	50.00%	0.00029	409.00	2.10	2.10	0.25	5.98	1.09	2.21	8.40	50.00%	4.00	0.04	0.00
Intergard 251	4900	11.37	31.00%	0.00%	31.00%	0.00%	50.23%	0.00029	409.00	3.52	3.52	0.42	10.03	1.83	2.04	14.03	50.00%	15.00	0.25	0.03
Interfac 290	297	10.87	34.71%	0.00%	34.71%	0.00%	41.17%	0.00029	409.00	3.77	3.77	0.45	10.74	1.96	1.84	18.33	50.00%	234.00	4.24	0.44
Interzinc 351	351GA	7.66	30.18%	0.00%	30.18%	0.00%	26.45%	0.00025	409.00	2.31	2.31	0.24	5.67	1.04	1.20	17.47	50.00%	15.00	0.17	0.02
TOPCOATS																				
Silicone Acrylic	4900	7.18	80.50%	0.00%	80.50%	0.00%	11.02%	0.00025	409.00	5.78	5.78	0.59	14.18	2.59	0.31	104.90	50.00%	15.00	0.42	0.04
Industrial Enamel Safety Yellow	654Y37	8.62	43.00%	0.00%	43.00%	0.00%	41.80%	0.00025	409.00	3.71	3.71	0.38	9.10	1.66	1.10	17.73	50.00%	10.00	0.18	0.02
KEM ABA Epoxy Ester	861W101	9.07	43.70%	0.00%	43.70%	0.00%	37.10%	0.00025	409.00	3.96	3.96	0.41	9.73	1.78	1.14	21.37	50.00%	1.00	0.02	0.00
TILE-CLAD II Epoxy (R-T-S)	B62W101B60V70	19.64	82.10%	0.10%	82.00%	0.13%	90.60%	0.00025	409.00	16.13	16.10	1.65	39.52	7.27	0.79	35.63	50.00%	4.00	0.31	0.03
Quick Dry Enamel Motor Blue	F7716	7.76	65.20%	0.00%	65.20%	0.00%	28.40%	0.00025	409.00	5.06	5.06	0.52	12.42	2.21	0.60	35.63	50.00%	2.00	0.05	0.01
Steel II Epoxy Coating (R-T-S)	4907-A/B	9.50	20.00%	0.00%	20.00%	0.00%	36.00%	0.00025	409.00	1.90	1.90	0.19	4.66	0.85	1.70	10.56	50.00%	4.00	0.04	0.00
Advantage 900	909	10.00	51.68%	44.30%	7.38%	53.18%	36.15%	0.00025	409.00	1.58	0.74	0.08	1.81	0.33	1.08	4.08	50.00%	57.00	0.43	0.04
Intergard 410	4910	13.80	26.00%	0.00%	26.00%	0.00%	50.18%	0.00025	409.00	3.59	3.59	0.37	8.80	1.61	2.29	14.30	50.00%	10.00	0.17	0.02
Intergard 740	4310	11.81	34.53%	0.00%	34.53%	0.00%	51.48%	0.00025	409.00	4.08	4.08	0.42	10.01	1.83	1.73	15.84	50.00%	45.00	0.88	0.09
Interfac 665	2510	9.32	44.10%	0.00%	44.10%	0.00%	35.95%	0.00025	409.00	4.11	4.11	0.42	10.09	1.84	1.17	22.90	50.00%	88.00	1.74	0.18
Interfac 800	80010	10.62	25.43%	0.00%	25.43%	0.00%	60.38%	0.00025	409.00	2.70	2.70	0.28	6.63	1.21	1.77	8.95	50.00%	4.00	0.05	0.01
Interfac 670	38475	13.35	22.11%	0.00%	22.11%	0.00%	61.50%	0.00025	409.00	2.95	2.95	0.30	7.24	1.32	2.33	9.60	50.00%	8.00	0.11	0.01
Inertthane 990	99010	12.79	21.88%	0.00%	21.88%	0.00%	36.15%	0.00025	409.00	2.80	2.80	0.29	6.87	1.25	2.24	15.48	50.00%	3.00	0.04	0.00
SOLVENTS																				
Silicone Reducer	70	7.42	79.30%	0.00%	79.30%	0.00%	15.17%	0.00025	409.00	5.88	5.88	0.60	14.44	2.64	0.34	77.67	50.00%	2.00	0.06	0.01
Super EPO-MAR Reducer	1299	7.26	100.00%	0.00%	100.00%	0.00%	0.00%	0.00025	409.00	7.26	7.26	0.74	17.82	3.25	0.00	NA	50.00%	215.00	7.50	0.26
MEK	RBK10	6.68	100.00%	0.00%	100.00%	0.00%	0.00%	0.00025	409.00	6.68	6.68	0.68	16.39	2.99	0.00	NA	50.00%	1.00	0.03	0.00
Epoxy Thinner	6811-5	7.20	100.00%	0.00%	100.00%	0.00%	0.00%	0.00025	409.00	7.20	7.20	0.74	17.67	3.22	0.00	NA	50.00%	5.00	0.17	0.01
CLEAN-UP SOLVENT																				
Xylene	UN1307	7.25	100.00%	0.00%	100.00%	0.00%	0.00%	0.00006	409.00	7.25	7.25	0.18	4.27	0.78	0.00	NA	50.00%	55.00	1.92	0.07
* Total Worst Case State Potential Emissions:																				
												3.01	72.35	13.20	2.63					
** Carman has one spray booth in which only one primer, one topcoat and one solvent are used each day.																				
Total Worst Case State Potential Emissions = 1 Primer (Interfac 290) + 1 Topcoat (TILE-CLAD II Epoxy R-T-S) + 1 Solvent (Super EPO-MAR Reducer) + Clean-up Solvent (Xylene)																				
** Actual production of Carman Industries, Inc. is 10 hours per day, 4 days per week, and 52 weeks per year.																				

Federal Potential Emissions (controlled):									
Control Efficiency:	VOC		PM		Controlled VOC lbs per Day		Controlled VOC tons per Year		Controlled PM tons/yr
	NA	97.17%	NA	97.17%	72.35	13.20	0.07		
Total Federal Potential Emissions:									
<p>Methodology: Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water) Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics) Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day) Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hrs/yr) * (1 ton/2000 lbs) Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (1-Weight % Volatiles) * (1-Transfer efficiency) * (8760 hrs/yr) * (1 ton/2000 lbs) Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids) * Transfer Efficiency Controlled emission rate = uncontrolled emission rate * (1 - control efficiency) Total Worst Case Actual Usage (lb/day) = pounds of VOC per gallon less water * actual usage (gallyr) * (1 yr/52 weeks) * (1 week/ 4 days) Total Worst Case Actual Usage (tons/yr) = pounds of VOC per gallon less water * actual usage (gallyr) * (1 ton/2000 pounds)</p>									

HAP Emission Calculations
For Worst Case Surface Coating Solvents

Company Name: Carman Industries, Inc.
Address City IN Zip: 1005 West Riverside Dr., Jeffersonville, IN 47130
Permit #: MSOP 019-19403-00088
Reviewer: Femi Ogunisola/EVP
Date: 08/30/04

Material	Density (Lb/Gal)	Gal of Mat (gall/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % Toluene	Weight % Methyl Ethyl Ketone	Weight % O-Xylene	Weight % M-Xylene	Weight % P-Xylene	Weight % Ethyl Benzene	Weight % 2-Butoxyethanol	Xylene Emissions (tons/yr)	Toluene Emissions (tons/yr)	Methyl Ethyl Ketone Emissions (tons/yr)	O-Xylene Emissions (tons/yr)	M-Xylene Emissions (tons/yr)	P-Xylene Emissions (tons/yr)	Ethyl Benzene Emissions (tons/yr)	2-Butoxyethanol Emissions (tons/yr)	TOTAL HAP EMISSIONS (tons/yr)	
SuperEPO-MAR Reducer	7.26	0.00025	409.00	0.00%	50.00%	23.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	1.63	0.75	0.00	0.00	0.00	0.00	0.00	0.00	2.37
TILE-CLAD II Epoxy (R-T-S)	19.64	0.00025	409.00	26.00%	0.00%	0.00%	0.00%	0.00%	0.00%	5.00%	13.00%	2.29	0.00	0.00	0.00	0.00	0.00	0.44	0.00	1.14	3.87
Interiac 290	10.87	0.00029	409.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Xylene	7.25	0.00006	409.00	0.00%	0.00%	0.00%	20.30%	53.30%	23.30%	15.80%	0.00%	0.00	0.00	0.00	0.16	0.42	0.18	0.12	0.00	0.00	0.88
* Total Worst Case State Potential Emissions												2.29	1.63	0.75	0.16	0.42	0.18	0.56	1.14	0.00	7.12

* Carman has one spray booth in which only one primer, one topcoat, and one solvent are used each day.

Total Worst Case State Potential Emissions = 1 Primer (Interiac 290) + 1 Topcoat (TILE CLAD II Epoxy) + 1 Solvent (Super EPO-MAR Reducer) + Clean-up Solvent (Xylene)

METHODOLOGY

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

**Appendix A: Emission Calculations
Welding and Oxygen Cutting of Metal**

Company Name: Carman Industries, Inc.
Address City IN Zip: 1005 West Riverside Dr., Jeffersonville, IN 47130
Permit #: MSOP 019-19403-00088
Reviewer: Femi Ogunsola/EVP
Date: 08/30/04

FOR WELDING STATION

Type of Welding	Number of Stations	Maximum Hourly Consumption of wire per Station (lb/hr)	Emission Factors				Emissions			
			PM-10 lb/lb	Manganese lb/lb	Chromium lb/lb	Nickel lb/lb	PM-10 tons/yr	Manganese tons/yr	Chromium tons/yr	Nickel tons/yr
Metal Inert Gas	11	3.73	0.0055	0.0005	---	---	0.09	---	---	0.09

Methodology:
 Emissions (tons/yr) = Number of Stations * Maximum Consumption per Station (lbs/hr) * (8,760 hr/yr) * (1 ton/2,000 lbs)
 Emission Factors from SARA 313 Reporting Guide

FOR CUTTING STATION

Type of Flame-Cutting	Number of Stations	Maximum Metal Cutting Rate (in/min) for cutting metal 1 in. thick	Emission Factors				Emissions			
			PM-10 lb/1000 in	Manganese lb/1000 in	Chromium lb/1000 in	Nickel lb/1000 in	PM-10 tons/yr	Manganese tons/yr	Chromium tons/yr	Nickel tons/yr
Oxyacetylene	1	40.00	0.1622	0.0005	0.0003	0.0001	1.71	0.01	0.00	0.01

Methodology:
 Emissions (tons/yr) = Number of Stations * Maximum Rate (in/min) * Emission Factor (lb/1,000 in) * (60 min/hr) * (8760 hr/yr) * (1 ton/2,000 lbs) * (1/1000)
 Emission Factors from SARA 313 Reporting Guide

Appendix A: Emission Calculations
Mechanical Blasting

Company Name: Carman Industries, Inc.
Address City IN Zip: 1005 West Riverside Dr., Jeffersonville, IN 47130
Permit #: MSOP 019-19403-00088
Reviewer: Femi Ogunsola/EVP
Date: 08/30/04

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/ft ³)
Al oxides	160
Sand	99
Steel	487
Black Beauty	131.06

Calculations

Potential PM Emissions (E, lb/hr)

EF = emission factor (lb PM/ lb abrasive) From Table 1 =
FR = Flow Rate (lb abrasive/hr) =

0.010
1000.00

Potential PM Emissions =	10.00 lb/hr
	43.80 ton/yr

Controlled Emissions (C, lb/hr) for PM

CE = control efficiency =

99.99%

Controlled PM Emissions =	0.001 lb/hr
	0.004 ton/yr

METHODOLOGY

Emission Factors from Stappa Alapco, Section 3 "Abrasive Blasting"
Ton/yr = lb/hr X 8760 hr/yr X ton/2000 lbs
E = EF x FR
C = E x (1-CE)