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

Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant

DATE: May 13, 2005

RE: Dutchmen Manufacturing, Inc / 039-19951-00380

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 RENEWAL
OFFICE OF AIR QUALITY

Dutchmen Manufacturing, Inc.
305 Steury Avenue
Goshen, Indiana 46526

(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 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Operation Permit No.: MSOP 039-19951-00380	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: May 13, 2005 Expiration Date: May 13, 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 a stationary travel trailer manufacturing source that produces trailer cabinet parts, slide-out, pre-finished, and finished travel trailers.

Authorized Individual:	President
Source Address:	305 Steury Avenue, Goshen, Indiana, 46526
Mailing Address:	2164 Caragana Court, Goshen, Indiana 46526
General Source Phone:	(574)- 534 - 1224
SIC Code:	3792
County Location:	Elkhart
Source Location Status:	Basic Nonattainment area for 8 Hour Ozone Attainment area for all other criteria pollutants
Source Status:	Minor Source Operating Permit Minor Source, under PSD Rules; Minor Source, Section 112 of the Clean Air Act

A.2 Emissions Units and Pollution Control Equipment Summary

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

Assembly Building

Woodworking operations consist of: three (3) band saws, one (1) chop saw, one (1) drill press, three (3) grinder benches, eighteen (18) mitre saws, one (1) double mitre saw, three (3) radial arm saws, two (2) routers, three (3) table saws and one (1) belt sander.

Chassis Frame with Floor Preparation

(a) One (1) woodworking and surface coating operation, equipped with a cyclone, identified as P1, exhausting through vents V1 and V2, with a maximum throughput of 1,125 pounds of preassembled frames per hour, 126 pounds of plywood per hour and 144 pounds of panelboard per hour and a maximum production capacity of 1.2 travel trailers per hour.

Cabinets and Mill

(b) One (1) woodworking and surface coating operation, equipped with two (2) cyclones, identified as P1 and P2, exhausting through vents V1 and V2, with a maximum throughput of 154.8 pounds of wood per hour, 626.4 pounds of panelboard per hour, 43.2 pounds of plywood per hour, and 216 pounds of stiles per hour, and a maximum production capacity of 1.2 travel trailers per hour.

Slide-Out Assembly and Installation

(c) One (1) woodworking and surface coating operation, equipped with two (2) cyclones, identified as P1 and P2, exhausting through vents V1 and V2, with a maximum

throughput of 28.8 pounds of Luan per hour, 356.4 pounds of wood per hour, 82.8 pounds of panelboard per hour and 28.8 pounds of plywood per hour, and a maximum production capacity of 1.2 travel trailers per hour.

Prefinished Travel Trailers (Unit Assembly) Operation

(d) One (1) woodworking and surface coating operation, equipped with two (2) cyclones, identified as P1 and P2, exhausting through vents V1 and V2, with a maximum throughput of 432 pounds of wood per hour, 82.8 pounds of panelboard per hour and 126 pounds of plywood per hour and a maximum production capacity of 1.2 travel trailers per hour.

Final Finish Building

Finished Travel Trailers

(e) One (1) woodworking and surface coating operation consisting of one (1) chop saw and one (1) radial arm saw, equipped with a cyclone, identified as P3, and one (1) stand-by baghouse, identified as P4, exhausting through vents V3 through V5, with a maximum throughput of 18.0 pounds of wood per hour and 9.0 pounds of panelboard per hour, and a maximum production capacity of 1.2 travel trailers per hour.

Welding

(f) One (1) MIG welding station, capacity: .354 pounds of wire per hour.

(g) Two (2) stick welding stations, capacity: 1.0 and 7.0 electrodes per hour.

(h) One (1) oxyacetylene flame cutting station, capacity: 0.167 inches per minute at a thickness of 0.375 inches.

Stick and Tin Assembly Building (Relocated from Maple City Plant)

(i) One (1) inside tote, installed in 1993, capacity: 330 gallons of adhesive.

(j) One (1) inside above ground storage tank, capacity: 250 gallons of hydraulic oil.

(k) One (1) outside above ground storage tank, installed in 1991, capacity: 250 gallons of diesel fuel.

(l) Two (2) outside above ground storage tanks, installed in 1991, capacity: 300 gallons of unleaded gasoline each.

Middlebury Lite Final Finish (Relocated from Dutchmen Manufacturing, CR 38, Goshen, IN)

(m) One (1) painting area where travel trailers' cabinets, walls, prefinished and assembled campers are coated using aerosol cans, with a maximum capacity of 1.125 units per hour.

(n) Woodworking operation, with a maximum throughput of 828.966 pounds per hour of wood. This operation consists of the following equipment:

(1) Nine (9) Chop Saws equipped with one (1) portable baghouse identified as M-P6
(2) Two (2) Table Saws equipped with one (1) cyclone, identified as M-P5

(3) One (1) Belt Sander
(4) One (1) Pin Router equipped with one (1) cyclone, identified as M-P5
(5) One (1) Band Saw equipped with one (1) cyclone, identified as M-P5
(6) One (1) Drill Press
(7) Two (2) Radial Arms Saws equipped with one (1) cyclone, identified as M-P5
(8) One (1) Grinder
(9) One (1) Plasma Cutter

These units also use portable back-up baghouse as pollution control equipment, identified as M-P7.

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 46206-6015

(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 maintain and implement Preventive Maintenance Plans (PMPs) including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

(b) 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 PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The 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 46206-6015

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] [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.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 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 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

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 ambient air quality modeling pursuant to 326 IAC 1-7-4.

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 46206-6015

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 than180 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 46206-6015

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

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

C.11 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 2-6.1-2]

(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 46206-6015

(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 report required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. The reports do 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 EMMISIONS UNITS OPERATION CONDITIONS

Emissions Unit Description:

Assembly Building

Woodworking operations consist of: three (3) band saws, one (1) chop saw, one (1) drill press, three (3) grinder benches, eighteen (18) mitre saws, one (1) double mitre saw, three (3) radial arm saws, two (2) routers, three (3) table saws and one (1) belt sander.

Chassis Frame with Floor Preparation

(a) One (1) woodworking and surface coating operation, equipped with a cyclone, P1, exhausting through vents V1 and V2, throughput: 1,125 pounds of preassembled frames per hour, 126 pounds of plywood per hour and 144 pounds of panel board per hour, capacity: 1.2 travel trailers per hour.

Cabinets and Mill

(b) One (1) woodworking and surface coating operation, equipped with two (2) cyclones, known as P1 and P2, exhausting through vents V1 and V2, throughput: 154.8 pounds of wood per hour, 626.4 pounds of panel board per hour, 43.2 pounds of plywood per hour, and 216 pounds of stiles per hour, capacity: 1.2 travel trailers per hour.

Slide-Out Assembly and Installation

(c) One (1) woodworking and surface coating operation, equipped with two (2) cyclones, known as P1 and P2, exhausting through vents V1 and V2, throughput: 28.8 pounds of Luan per hour, 356.4 pounds of wood per hour, 82.8 pounds of panel board per hour and 28.8 pounds of plywood per hour, capacity: 1.2 travel trailers per hour

Prefinished Travel Trailer (Unit Assembly) Operation

(d) One (1) woodworking and surface coating operation, equipped with two (2) cyclones, known as P1 and P2, exhausting through vents V1 and V2, throughput: 432 pounds of wood per hour, 82.8 pounds of panel board per hour and 126 pounds of plywood per hour, capacity: 1.2 travel trailers per hour

Final Finish Building

Finished Travel Trailers

(e) One (1) woodworking and surface coating operation, equipped with a cyclone, known as P3, and one (1) stand-by baghouse, known as P4, exhausting through vents V3 through V5, throughput: 18.0 pounds of wood per hour and 9.0 pounds of panel board per hour, capacity: 1.2 travel trailers per hour

(f) Woodworking operations consist of: one (1) chop saw and (1) radial arm saw

Middlebury Lite Final Finish

(m) One (1) painting area where travel trailers' cabinets, walls, prefinished, and assembled campers are coated using aerosol cans, with a capacity of 1.123 units per hour. There are no exhaust stacks, and

(n) Woodworking operation, equipped with one (1) cyclone, identified as M-P5, and one (1)

portable baghouse, identified as M-P6 and one (1) portable baghouse which is a back-up pollution control equipment identified as M-P7, maximum throughput of 828.966 pounds per hour, luan is131.170 pounds per hour and plywood is 524.565 pounds per hour. This operation consists of the following equipment:

(1) Nine (9) Chop Saws equipped with one (1) portable baghouse identified as M-P6
(2) Two (2) Table Saws equipped with one (1) cyclone, identified as M-P5
(3) One (1) Belt Sander
(4) One (1) Pin Router equipped with one (1) cyclone, identified as M-P5
(5) One (1) Band Saw equipped with one (1) cyclone, identified as M-P5
(6) One (1) Drill Press
(7) Two (2) Radial Arms Saws equipped with one (1) cyclone, identified as M-P5
(8) One (1) Grinder
(9) One (1) Plasma Cutter

(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 [326 IAC 8-2-9]

Pursuant to 326 IAC 8-2-9, the owner or operator shall not allow the discharge into the atmosphere of VOC in excess of 3.5 pounds of VOC per gallon of coating, excluding water, as delivered to the applicator.

D.1.2 Volatile Organic Compound (VOC) Limitations, Clean-up Requirements [326 IAC 8-2-9]

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

D.1.3 Volatile Organic Compounds (VOC) [326 IAC 8-2-12]

Pursuant to 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating), the surface coating applied to wood furniture and cabinets shall utilize one of the following application methods:

Airless Spray Application
Air Assisted Airless Spray Application
Electrostatic Spray Application
Electrostatic Bell or Disc Application
Heated Airless Spray Application
Roller Coating
Brush or Wipe Application
Dip-and-Drain Application

High Volume Low Pressure (HVLP) Spray Application is an accepted alternative method of application for Air Assisted Airless Spray Application. HVLP spray is the technology used to apply coating to substrate by means of coating application equipment which operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.

D.1.4 Particulate Matter (PM) [326 IAC 6-3-2]

(a) Pursuant to 326 IAC 6-3-2(d), particulate from the surface coating operations at the Chassis Frame with Floor Preparation, Cabinets and Mill, Slide-out Assembly and Installation, Finished Travel Trailer Area, and Middlebury Lite Final Finish production line shall be controlled by a dry filter, water wash, or an equivalent control device. The Permittee shall operate the control devices in accordance with manufacturer's specifications.

(1) 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:

(a) Repair control device so that no overspray is visibly detectable at the exhaust or accumulates on the ground.

(b) 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.

(b) The particulate matter from the woodworking operations at the Assembly Building and Final Finish Building and Middlebury Lite Woodworking Operation shall not exceed at process weight rates of 1,224, 1,221, and less than 100 pounds per hour shall be accomplished by use of the following equation:

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

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

Units for Woodworking:	P (tons / hour)	E (pounds / hour)
Chassis Frame & Floor Preparation	0.698	3.222
Cabinets & Mill	0.520	2.645
Slide-Out Assembly & Installation	0.248	1.611
Unit Assembly	0.320	1.911
Final Finish Building	0.014	0.235
Middlebury Lite Final Finish	0.742	3.357

D.1.5 Particulate [40CFR 52 Subpart P]

Pursuant to 40 CFR 52, Subpart P, and MSOP 039-11784-00380, the particulate matter from the surface coating facilities shall be limited by the following:

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

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

D.1.6 Preventive Maintenance Plan [326 IAC 1-6-3]

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

Compliance Determination Requirements

D.1.7 Particulate [326 IAC 6-3-2]

In order to comply with condition D.1.4:

(1) During woodworking operations the cyclones P1, P2, and P3, and the back-up baghouse P4 (as needed) shall be in operation at all times the woodworking operations associated with the Assembly Building and the Final Finish Building, in order to comply with the aforementioned limits.

(2) Middlebury Lite Woodworking operation is controlled by M-P5, M-P6, and M-P7. In order to comply with the limit, the cyclone shall be in operation

D.1.8 Testing Requirements [326 IAC 2-7-6(1), (6)] [326 IAC 2-1.1-11]

The Permittee is not required to test this emissions unit by this permit. However, IDEM may require compliance testing when necessary to determine if the emissions unit is in compliance. If testing is required by IDEM, compliance with the PM limits specified in Condition D.1.4 shall be determined by a performance test conducted in accordance with Section C – Performance Testing.

D.1.9 Volatile Organic Compounds (VOC)

Compliance with the VOC content and usage limitations contained in Conditions 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.1.10 VOC Emissions

Compliance with Condition D.1.1 shall be demonstrated within 30 days of the end of each month based on the total volatile organic compound usage for the twelve (12) month period**.**

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

D.1.11 Visible Emissions Notations

(a) Daily visible emission notations of the cyclones and/or back-up baghouse 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.1.12 Baghouse Inspections

An inspection shall be performed each calendar quarter of all bags controlling the woodworking operation when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

D.1.13 Broken or Failed Bag Detection

In the event that bag failure has been observed:

(a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation and Implementation shall be considered a deviation from this permit. If operations continue after bag failure is observed and it will be 10 days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

(b) For single compartment baghouses, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced.

D.1.14 Cyclone Inspections

An inspection shall be performed each calendar quarter of all cyclones controlling the woodworking operation when venting to the atmosphere. A cyclone inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors.

D.1.15 Cyclone Failure Detection

In the event that cyclone failure has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation and Implementation shall be considered a deviation from this permit.

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

D.1.16 Record Keeping Requirements

(a) To document compliance with Conditions D.1.1 and D.1.4 the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.1.1 and D.1.4. 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 volume weighted VOC content of the coatings used for each month;

(3) The cleanup solvent usage for each month;

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

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

(b) To document compliance with Condition D.1.10, the Permittee shall maintain records of daily visible emission notations of the woodworking and surface coating stack exhaust.
(c) To document compliance with Condition D.1.11, and D.1.13, the Permittee shall maintain records of the results of inspections required under D.1.11 and D.1.12 and the dates the vents are redirected.
(d) To document compliance with D.1.6

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:	**Dutchmen Manufacturing, Inc.**
Address:	**305 Steury Avenue**
City:	**Goshen, Indiana 46526**
Phone #:	**574.534.1224**
MSOP #:	**039-19951-00380**

I hereby certify that Dutchmen Manufacturing, Inc. is ☐ still in operation.
☐ no longer in operation.

I hereby certify that Dutchmen Manufacturing, Inc. is
☐ in compliance with the requirements of MSOP **039-19951-00380**.
☐ not in compliance with the requirements of MSOP **039-19951-00380**.

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 PERMI 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:

_____
_____

PAGE 2 OF 2

Appendix A

Emission Calculations for:

Dutchmen Manufacturing, Inc.
305 Steury Avenue
Goshen, Indiana 46526
MSOP Renewal 039-19951-00380

Indiana Department of Environmental Management
Office of Air Quality

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

Source Name:	Dutchmen Manufacturing, Inc..
Source Location:	305 Steury Avenue, Goshen, IN, 46526
County:	Elkhart
SIC Code:	3792
Operation Permit No.:	M 039-19951-00380
Permit Reviewer:	Amy Moreland

On April 2, 2005, the Office of Air Quality (OAQ) had a notice published in the Goshen News, Goshen, Indiana, stating that Dutchmen Manufacturing, Inc. had applied for a Minor Source operating Permit to operate a stationary travel trailer manufacturing source. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

Upon further review, the OAQ has decided to make the following revisions to the permit (bolded language has been added, the language with a line through it has been deleted). The Table Of Contents has been modified to reflect these changes.

Change 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.

Indiana Department of Environmental Management
Office of Air Quality

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

Source Background and Description

Source Name:	**Dutchmen Manufacturing, Inc.**
Source Location:	**305 Steury Avenue, Goshen, Indiana 46526**
County:	**Elkhart**
SIC Code:	**3792**
Operation Permit No.:	**039-11784-00380**
Operation Permit Issuance Date:	**May 25, 2000**
Permit Renewal No.:	**039-19951-00380**
Permit Reviewer:	**Amy Moreland**

The Office of Air Quality (OAQ) has reviewed an application from Dutchmen Manufacturing, Inc. relating to the operation of a stationary travel trailer manufacturing source. The source most recently operated under MSOP 039-11784-00380, which was issued on May 25, 2000.

Permitted Emission Units and Pollution Control Equipment

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

Assembly Building

Woodworking operations consist of: three (3) band saws, one (1) chop saw, one (1) drill press, three (3) grinder benches, eighteen (18) mitre saws, one (1) double mitre saw, three (3) radial arm saws, two (2) routers, three (3) table saws and one (1) belt sander.

Chassis Frame with Floor Preparation

(a) One (1) woodworking and surface coating operation, equipped with a cyclone, identified as P1, exhausting through vents V1 and V2, with a maximum throughput of 1,125 pounds of preassembled frames per hour, 126 pounds of plywood per hour and 144 pounds of panelboard per hour and a maximum production capacity of 1.2 travel trailers per hour.

Cabinets and Mill

(b) One (1) woodworking and surface coating operation, equipped with two (2) cyclones, identified as P1 and P2, exhausting through vents V1 and V2, with a maximum throughput of 154.8 pounds of wood per hour, 626.4 pounds of panelboard per hour, 43.2 pounds of plywood per hour, and 216 pounds of stiles per hour, and a maximum production capacity of 1.2 travel trailers per hour.

Slide-Out Assembly and Installation

(c) One (1) woodworking and surface coating operation, equipped with two (2) cyclones, identified as P1 and P2, exhausting through vents V1 and V2, with a maximum throughput of 28.8 pounds of Luan per hour, 356.4 pounds of wood per hour, 82.8

pounds of panelboard per hour and 28.8 pounds of plywood per hour, and a maximum production capacity of 1.2 travel trailers per hour.

Prefinished Travel Trailers (Unit Assembly) Operation

(d) One (1) woodworking and surface coating operation, equipped with two (2) cyclones, identified as P1 and P2, exhausting through vents V1 and V2, with a maximum throughput of 432 pounds of wood per hour, 82.8 pounds of panelboard per hour and 126 pounds of plywood per hour and a maximum production capacity of 1.2 travel trailers per hour.

Final Finish Building

Finished Travel Trailers

(e) One (1) woodworking and surface coating operation consisting of one (1) chop saw and one (1) radial arm saw, equipped with a cyclone, identified as P3, and one (1) stand-by baghouse, identified as P4, exhausting through vents V3 through V5, with a maximum throughput of 18.0 pounds of wood per hour and 9.0 pounds of panelboard per hour, and a maximum production capacity of 1.2 travel trailers per hour.

Welding

(f) One (1) MIG welding station, capacity: .354 pounds of wire per hour.

(g) Two (2) stick welding stations, capacity: 1.0 and 7.0 electrodes per hour.

(h) One (1) oxyacetylene flame cutting station, capacity: 0.167 inches per minute at a thickness of 0.375 inches.

Stick and Tin Assembly Building (Relocated from Maple City Plant)

(i) One (1) inside tote, installed in 1993, capacity: 330 gallons of adhesive.

(j) One (1) inside above ground storage tank, capacity: 250 gallons of hydraulic oil.

(k) One (1) outside above ground storage tank, installed in 1991, capacity: 250 gallons of diesel fuel.

(l) Two (2) outside above ground storage tanks, installed in 1991, capacity: 300 gallons of unleaded gasoline each.

Middlebury Lite Final Finish (Relocated from Dutchmen Manufacturing, CR 38, Goshen, IN)

(m) One (1) painting area where travel trailers' cabinets, walls, prefinished and assembled campers are coated using aerosol cans, with a maximum capacity of 1.125 units per hour.

(n) Woodworking operation, with a maximum throughput of 828.966 pounds per hour of wood. This operation consists of the following equipment:

(1) Nine (9) Chop Saws equipped with one (1) portable baghouse identified as M-P6
(2) Two (2) Table Saws equipped with one (1) cyclone, identified as M-P5
(3) One (1) Belt Sander
(4) One (1) Pin Router equipped with one (1) cyclone, identified as M-P5
(5) One (1) Band Saw equipped with one (1) cyclone, identified as M-P5

(6) One (1) Drill Press
(7) Two (2) Radial Arms Saws equipped with one (1) cyclone, identified as M-P5
(8) One (1) Grinder
(9) One (1) Plasma Cutter

These units also use portable back-up baghouse as pollution control equipment, identified as M-P7.

Stick and Tin Assembly Building

(o) Six (6) radiant heaters, identified as H1 through H5, H13, rated at 0.150 million British thermal units per hour each, exhausting through stacks H1 - H5 and H13 (formally known as H-14), respectively.

(p) Three (3) space heaters, identified as H6 through H8, rated at 0.100 million British thermal units per hour each, exhausting through stacks H6 - H8, respectively.

(q) Four (4) space heaters, identified as H9 through H12, rated at 0.225 million British thermal units per hour each, exhausting through stacks H9 - H11, respectively.

(r) Seven (7) space heaters, identified as H14 through H20 (formally known as H1 - H7), rated at 0.100 million British thermal units per hour each, exhausting through stacks H14 through H20, respectively.

(s) Seven (7) space heaters, identified as H21 through H27 (formally known as H8 - H14), rated at 0.225 million British thermal units per hour each, exhausting through stacks H21 - H27, respectively.

(t) Two (2) radiant heaters, identified as H28 and H29 (formerly known as H15 and H16), rated at 0.150 million British thermal units per hour each, exhausting through stacks H28 and H29, respectively.

Existing Approvals

The source has been operating under MSOP 039-11784-00380, issued on May 25, 2000, and previous approvals, including, but not limited to, the following:

(a) MSOP 039-18611-00380, First Notice – Only Change, issued on January 27, 2004.

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 (^{o}F)
H1-H5	Heaters	22	0.25	500	200
H6-H8	Heaters	22	0.83	500	150
H9-H11	Heaters	22	0.83	500	235
H13	Heaters	22	0.50	500	200
H14-H20	Heaters	17	0.83	500	175
H21-H27	Heaters	17	083	500	235
H28-H29	Heaters	17	0.83	500	200
V1 & V2	Surface Coating	21	1.95	-	Ambient
V3-V5	Surface Coating	20	1.95	-	Ambient
P1	Cyclone	20	0.83	2,000	Ambient
P2	Cyclone	20	2.17	3,900	Ambient
P3	Cyclone	12	2.17	2,725	Ambient
P4	Baghouse	4	0.5	1,200	Ambient
M-P5	Cyclone	26.5	1.7	2,000	Ambient
M-P6	Portable Baghouse	22.0	53.57	1,200	Ambient
M-P7	Portable Baghouse Back-Up	22.0	53.57	1,200	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 December 8, 2004.

Emission Calculations

See Appendix A, pages 1 through 8 of this document for detailed emission calculations.

Potential to Emit 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, inclulding 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	74.925
PM-10	75.125
SO_2	0.012
VOC	81.14
CO	1.72
NO_x	2.05

HAPs	Potential to Emit (tons/yr)
Xylene	0.430
Toluene	8.98
MEK	5.60
Glycol Ethers	0.400
Hexane	1.437
Cumene	0.150
Methanol	0.010
TOTAL	17.00

(a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of all criteria pollutants are less than 100 tons per year. The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, the source is not subject to the provisions of 326 IAC 2-7.

(b) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of PM-10 and VOC is greater than 25 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-6.1. A MSOP will be issued.

(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 Elkhart 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. Elkhart County has been designated as basic nonattainment for the 8-hour ozone standard.

Therefore, VOC and NOx emissions were reviewed pursuant to the requriements for basic nonattainment new source review.

(b) Elkhart 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.

(c) Fugitive Emissions
Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2 or 2-3 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 the determination of PSD and Emission Offset applicability.

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	6.935
PM-10	6.935
SO_2	0.01
VOC	34.09
CO	0.858
NO_x	2.02
Single HAP	8.98
Combination HAPs	17.0

(a) This existing source is not a major stationary source because no attainment regulated 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. The existing source is not a major source because ther are no nonattainment regulated pollutants emitted at a rate of 100 tons per year or greater and it is not in 1 of the 28 listed source categories.

(b) These emissions were based on on the MSOP Renewal Application submitted by the company.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)
This existing source 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.

Federal Rule Applicability

(a) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in this permit.

(1) There are no steam generating units at this source, therefore the requirements of New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR 60 subpart Dc) are not applicable.

(2) The capacity of the storage tanks are less than 75 cubic meters therefore, 40 CFR part 60 Subpart Kb is not applicable to the source.

(3) The source manufactures travel trailers which are not considered automobiles or light duty trucks therefore 40 CFR part 60 subpart MM does not apply.

(b) 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. The source is not subject to 40 CFR Part 63, Subparts JJ, MMMM, IIII, or QQQQ because this source is not a major source for HAPs.

State Rule Applicability – Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration)

The source is not one of the twenty-eight (28) listed source categories, the source is located in Elkhart County, and the potential to emit of each regulated pollutant is less than 250 tons per year. This source is not a major source pursuant to 326 IAC 2-2, PSD, and the requirements of 326 IAC 2-2 are not applicable.

326 IAC 2-3 (Emissions Offset)

This source is not subject to the 326 IAC 2-3 because it has the potential to emit less than 100 tons of NOx and less than 100 tons of VOC per year.

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

Since the potential to emit each individiual hazardous air pollutant (HAP) is less than ten (10) tons per year and the potential to emit a combination of HAPs is less than 25 tons per year, the requirements of 326 IAC 2-4.1-1 are not applicable.

326 IAC 2-6 (Emission Reporting)

The source is not required to submit an emission statement because it is not at or above Part 70 emission thresholds. 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 – Individual Facilities

326 IAC 6-2 (Particulate Emissions Limitations for Sources of Indirect Heating)

Since there are no boilers, or sources of indirect heating at this source, the requirements of 326 IAC 6-2 are not applicable.

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

(a) 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 Sate Implementation Plan (SIP); therefore, the following requirement from the previous version of 326 IAC 6-3 (Process Operations) which has been approved into the SIP will remain as the applicable requirement until the revisions to 326 IAC 6-3 are approved into the SIP and the condition is modified in a subsequent permit action.

Therefore, pursuant to 40 CFR 52, Subpart P, and MSOP 039-11784-00380, the particulate matter from the surface coating facilities shall be limited by the following:

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

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

(b) Pursuant to 326 IAC 6-3-2(d), particulate from the surface coating operations at the Chassis Frame with Floor Preparation, Cabinets and Mill, Slide-out Assembly and Installation, Finished Travel Trailer Area, and Middlebury Lite Final Finish production line shall be controlled by a dry filter, water wash, or an equivalent control device. The Permittee shall operate the control devices in accordance with manufacturer's specifications.

(1) 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:

(a) Repair control device so that no overspray is visibly detectable at the exhaust or accumulates on the ground.

(b) 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.

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

(a) The particulate matter emissions from the woodworking operations at the Assembly Building and Final Finish Building and Middlebury Lite Woodworking Operation shall be limited by the following equation:

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

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

Unit:	P (tons / hour)	E (pounds / hour)
Chassis Frame & Floor Preparation	0.698	3.222
Cabinets & Mill	0.520	2.645
Slide-Out Assembly & Installation	0.248	1.611
Unit Assembly	0.320	1.911
Final Finish Building	0.014	0.235
Middlebury Lite Final Finish	0.742	3.357

(1) During woodworking operations the cyclones P1, P2, and P3, and the back-up baghouse P4 (as needed) shall be in operation at all times the woodworking operations associated with the Assembly Building and the Final Finish Building, in order to comply with the aforementioned limits.

(2) Middlebury Lite Woodworking operation is controlled by M-P5, M-P6, and M-P7. In order to comply with the limit, the cyclones shall be in operation.

(b) The particulate matter from the welding facilities are not subject to 326 IAC 6-3-2, because less than six hundred twenty-five (625) pounds of rod or wire is consumed per day.

326 IAC 8-1-6 (New facilities: general reduction requirements)

(a) This rule may apply to new facilities as of January 1, 1980. Since the potential VOC emissions from coating plastic, carpet, PVC and glass substrates are less than twenty-five (25) tons per year, 326 IAC 8-1-6 does not apply to this source. Any change or modification which would increase the potential to emit VOC to twenty-five (25) tons per year or more, shall obtain prior approval from IDEM, OAQ.

(b) The Middlebury Lite Travel Trailer Production Line when painting plastic, vinyl and fiberglass has potential VOC emissions of 0.78 tons per year. Therefore, 326 IAC 8-1-6 does not apply.

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

(a) The Chassis and Floor Operation and Unit Assembly Area coats metal and is not subject to this rule because the potential VOC emissions for coating metal is less than fifteen (15) pounds per day. See pages 1 of 8 in the TSD, Appendix A for detailed calculations. Any change or modification which would increase the potential to emit VOC from coating metal at this facility to fifteen (15) pounds per day or more, shall obtain prior approval from IDEM, OAQ.

(b) Middlebury Lite Travel Trailer Production Line is not subject to this rule, because the actual VOC emissions from metal coating are far less than 15 pounds/day (see Page 2 of 8 of TSD Appendix A for detailed calculations).

(c) The Slide-Out Assembly coating operation does not include metal coating. Therefore, this coating operation is not subject to 326 IAC 8-2-9.

(d) Pursuant to 326 IAC 8-2-9(d)(2) (Miscellaneous Metal Coating Operations), the Final Finish Building metal coating operations are subject to 326 IAC 8-2-9 because this operation coats metal under the SIC code 3792, and has PTE of VOC greater than 15 lbs/day. Pursuant to 326 IAC 8-2-9, the owner or operator shall not allow the discharge into the atmosphere of VOC in excess of 3.5 pounds of VOC per gallon of coating, excluding water, as delivered to the applicator.

Solvent sprayed from application equipment during cleanup or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent

spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

326 IAC 8-2-12 (Wood Furniture and Cabinet Coating)

(a) The Cabinets and Mill Operation, Slide Out Assembly Area, Unit Assembly Operations, the Final Finish Facilities, and Middlebury Lite Final Finish Production Line are subject to 326 IAC 8-2-12 (Surface Coating Emission Limitation-Wood Furniture and Cabinet Coating), because each will have actual VOC emissions greater than fifteen (15) pounds per day. See pages 1 and 2 of 8 of TSD Appendix A for detailed calculations for coating wood substrates. Pursuant to this rule, the surface coating applied to wood cabinets shall utilize one of the following application methods:

Airless Spray Application
Air Assisted Airless Spray Application
Electrostatic Spray Application
Electrostatic Bell or Disc Application
Heated Airless Spray Application
Roller Coating
Brush or Wipe Application
Dip-and-Drain Application

High Volume Low Pressure (HVLP) Spray Application is an accepted alternative method of application for Air Assisted Airless Spray Application. HVLP spray is the technology used to apply coating to substrate by means of coating application equipment which operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.

These facilities will be in compliance, because all the methods used (hand/wipe application, low pressure air atomization and aerosol can coating which is equivalent to airless spray system) are among those listed in the rule.

(b) The Chassis Frame with Floor Preparation Area in the Assembly Building, has emissions less than 15 pound per day therefore, 326 IAC 8-2-12 does not apply to this operation.

326 IAC 12 (New Source Performance Standards)

The two above ground storage tanks in the Stick and Tin Assembly area are not subject to 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) as the rule existed prior to October 2003 because these tanks have storage capacities less than 40 cubic meters (10,566 gallons).

Conclusion

The operation of this travel trailer manufacturing source shall be subject to the conditions of the Minor Source Operating Permit Renewal 039-19951-00380.

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

Company Name: Dutchmen Manufacturing, Inc.
Address City IN Zip: 305 Steury Avenue, Goshen, IN 46526
MSOP: 039-19951-00380
Plt ID: 039-00380
Reviewer: Amy Moreland
Date: Feb. 25, 2005

Material	Density (lbs/gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (units/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)	lbs VOC/gal solids	Transfer Efficiency	Substrate Coated
Chassis & Floor*																	
Spray N'Go enamel (touch up)	6.67	76.00%	0.0%	76.0%	0.0%	9.96%	0.048	1.200	5.07	5.07	0.29	7.01	1.28	0.10	50.90	75%	Chassis/Metal
Oatey PVC cement (30234)	7.59	80.00%	70.0%	10.0%	64.0%	25.00%	0.029	1.200	2.11	0.76	0.03	0.63	0.12	0.00	3.04	100%	Pipes/PVC
Cabinets & Mill*											**Subtotal**	**7.64**	**1.39**	**0.10**			
Mobibond MB34	9.49	60.00%	0.0%	60.0%	0.0%	40.00%	0.011	1.200	5.69	5.69	0.08	1.80	0.33	0.00	14.24	100%	Cabinet/Wood
Cyclo silicone C-33	5.92	91.75%	7.5%	84.3%	5.3%	0.00%	0.014	1.200	5.27	4.99	0.08	2.01	0.37	0.01	n/a	75%	Cabinet/Wood
IPS Weld-on Cement (#771)	7.25	73.50%	0.0%	73.5%	0.0%	30.00%	0.007	1.200	5.33	5.33	0.04	1.07	0.20	0.00	17.76	100%	Cabinet/Wood
Cyclo Brake Cleaner (C-111)	6.30	99.60%	36.0%	63.6%	34.3%	0.00%	0.007	1.200	6.10	4.01	0.03	0.81	0.15	0.00	n/a	75%	Cabinet/Wood
Black ABS cement (30892)	7.08	78.00%	0.0%	78.0%	0.0%	22.00%	0.086	1.200	5.52	5.52	0.57	13.68	2.50	0.00	25.10	100%	Pipes/PVC
Oatey cleaner (30766)	6.60	99.00%	0.0%	99.0%	0.0%	0.00%	0.057	1.200	6.53	6.53	0.45	10.73	1.96	0.00	n/a	100%	PVC/Wood
Rectorseal #5	11.42	23.00%	0.0%	23.0%	0.0%	77.00%	0.029	1.200	2.63	2.63	0.09	2.19	0.40	0.00	3.41	100%	Cabinet/Wood
Slide-out Assembly*											**Subtotal**	**32.29**	**5.89**	**0.01**			
Geocel 2300 sealant	7.92	35.00%	0.0%	35.0%	0.0%	61.00%	0.238	1.200	2.77	2.77	0.79	19.00	3.47	0.00	4.54	100%	Slide-out/Wood
Mobibond MB34	9.49	60.00%	0.0%	60.0%	0.0%	40.00%	0.004	1.200	5.69	5.69	0.03	0.66	0.12	0.00	14.24	100%	Cabinet/Wood
Cyclo silicone C-33	5.92	91.75%	7.5%	84.3%	5.3%	0.00%	0.010	1.200	5.27	4.99	0.06	1.44	0.26	0.01	n/a	75%	Slide-out/Wood
Unit Assembly*											**Subtotal**	**21.09**	**3.85**	**0.01**			
901 BA Adhesive	8.40	44.00%	0.0%	44.0%	0.0%	55.00%	1.500	1.200	3.70	3.70	6.65	159.67	29.14	0.00	6.72	100%	Roof/Wood
Self-leveling Sealant 502LS	10.67	25.00%	0.0%	25.0%	0.0%	75.00%	0.840	1.200	2.67	2.67	2.69	64.53	11.78	0.00	3.56	100%	Roof/Wood, Vinyl
Geocel 2300 sealant	7.92	35.00%	0.0%	35.0%	0.0%	61.00%	0.448	1.200	2.77	2.77	1.49	35.77	6.53	0.00	4.54	100%	Cabinet/Wood
Oatey cleaner (30766)	6.60	99.00%	0.0%	99.0%	0.0%	0.00%	0.029	1.200	6.53	6.53	0.23	5.46	1.00	0.00	n/a	100%	Trailer/Wood
Dupont lacquer thinner	6.32	100.00%	0.0%	100.0%	0.0%	0.00%	0.010	1.200	6.32	6.32	0.08	1.82	0.33	0.00	n/a	100%	Trailer/Wood
Mineral Spirits	6.59	100.00%	0.0%	100.0%	0.0%	0.00%	0.029	1.200	6.59	6.59	0.23	5.50	1.00	0.00	n/a	100%	Trailer/Wood,Metal
Econotac Adhesive - #26	6.50	80.00%	0.0%	80.0%	0.0%	20.00%	0.022	1.200	5.20	5.20	0.14	3.29	0.60	0.08	26.00	50%	Cabinet/Wood
Enerbond SF(Ener 45)	10.01	0.00%	0.0%	0.0%	0.0%	100.00%	0.020	1.200	0.00	0.00	0.00	0.00	0.00	0.26	0.00	75%	Cabinet/Wood
Surebond Sealant	11.42	20.00%	13.3%	6.7%	18.3%	82.50%	0.013	1.200	0.94	0.77	0.01	0.29	0.05	0.00	0.93	100%	Trailer/Wood
Foam Cleaner	7.99	95.80%	55.0%	40.8%	52.9%	4.00%	0.020	1.200	6.92	3.26	0.08	1.88	0.34	0.01	81.50	75%	Trailer/Carpet
Final Finish Building											**Subtotal**	**278.21**	**50.77**	**0.35**			
Geocel 2300 sealant	7.92	35.00%	0.0%	35.0%	0.0%	61.00%	0.143	1.200	2.77	2.77	0.48	11.42	2.08	0.00	4.54	100%	Trailer/Wood
Geocel 2000 sealant	8.34	33.50%	15.0%	18.5%	15.0%	66.50%	0.113	1.200	1.82	1.54	0.21	5.02	0.92	0.00	2.32	100%	Trailer/Wood
Bostik Supertak Adhesive (150724)	5.60	90.00%	0.0%	90.0%	0.0%	10.00%	0.029	1.200	5.04	5.04	0.18	4.21	0.77	0.02	50.40	75%	Trailer/Wood
Touch N'Tone Enamel (55721)	5.59	65.00%	0.0%	65.0%	0.0%	13.11%	0.135	1.200	3.63	3.63	0.59	14.13	2.58	0.35	27.72	75%	Trailer/Metal
Cyclo silicone C-33	5.92	91.75%	7.5%	84.3%	5.3%	0.00%	0.072	1.200	5.27	4.99	0.43	10.34	1.89	0.05	n/a	75%	Trailer/Plastic, Wood
1'AYD Spray Silicone 96	5.00	95.00%	40.0%	55.0%	24.1%	5.00%	0.019	1.200	3.62	2.75	0.06	1.50	0.27	0.01	55.00	75%	Trailer/Carpet
Cyclo Brake Cleaner (C-111)	6.30	99.60%	36.0%	63.6%	34.3%	0.00%	0.027	1.200	6.10	4.01	0.13	3.12	0.57	0.00	n/a	75%	Trailer/Carpet
Glass Cleaner #40A	8.30	100.00%	70.0%	30.0%	70.0%	1.00%	0.017	1.200	8.30	2.49	0.05	1.22	0.22	0.00	249.00	75%	Trailer/Glass, Wood
Lacquer Thinner (39395)	6.32	99.70%	0.0%	99.7%	0.0%	0.00%	0.066	1.200	6.30	6.30	0.50	11.98	2.19	0.00	n/a	100%	Trailer/Plastic, Wood
Mineral Spirits	6.59	100.00%	0.0%	100.0%	0.0%	0.00%	0.097	1.200	6.59	6.59	0.77	18.41	3.36	0.00	n/a	100%	Trailer/Wood,Metal
											Subtotal	**81.34**	**14.85**	**0.42**			
State Potential Emissions		**Add worst case coating to all solvents**							**No Controls**		**Total**	**420.58**	**76.76**	**0.885**			

** Assembly Building*

METHODOLOGY

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

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

Company Name: **Dutchmen Manufacturing, Inc.**
Address City IN Zip: **305 Steury Avenue, Goshen, IN 46526**
MSOP: **039-19951-00380**
Plt ID: **039-00380**
Reviewer: **Amy Moreland**
Date: **Feb. 28, 2005**

MIDDLEBURY LITE FINAL FINISH

Material	Density (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency	Substrate
Geocel 2300 sealant	7.9	35.00%	0.0%	35.0%	0.0%	61.00%	0.02840	2.250	2.77	2.77	0.18	4.25	0.78	0.00	4.54	100%	wood
Geocel 2000 sealant	8.3	33.50%	0.0%	33.5%	0.0%	66.50%	0.00400	2.250	2.79	2.79	0.03	0.60	0.11	0.00	4.20	100%	wood
Bostik supertak adhesive	5.6	82.00%	17.1%	64.9%	0.0%	12.20%	0.02280	2.250	3.63	3.63	0.19	4.47	0.82	0.07	29.79	70%	wood
Tite R bond	7.4	98.20%	33.3%	64.9%	0.0%	1.50%	0.00050	2.250	4.82	4.82	0.01	0.13	0.02	0.00	321.04	100%	wood
Touch N Tone enamel	5.6	65.00%	8.8%	56.2%	34.3%	13.11%	0.02530	2.250	4.78	3.14	0.18	4.29	0.78	0.15	23.96	70%	fiberglass
Cyclo silicone	5.9	92.50%	0.8%	91.8%	5.3%	40.00%	0.00010	2.250	5.74	5.43	0.00	0.03	0.01	0.00	13.58	70%	metal
1st AYD vinyl leather	8.3	35.00%	21.0%	14.0%	65.0%	20.00%	0.03530	2.250	3.32	1.16	0.09	2.22	0.40	0.00	5.81	100%	not coating
Parts & Break cleaner	6.3	99.60%	36.0%	63.6%	34.3%	0.00%	0.00430	2.250	6.10	4.01	0.04	0.93	0.17	0.00	0.00	70%	not coating
Glass cleaner	8.3	70.00%	30.0%	40.0%	69.6%	100.00%	0.01030	2.250	10.92	3.32	0.08	1.85	0.34	0.08	3.32	70%	not coating
Dupont lacquer thinner	6.3	100.00%	0.0%	100.0%	0.0%	0.00%	0.00500	2.250	6.32	6.32	0.07	1.71	0.31	0.00	0.00	100%	not coating
Mineral spirits	6.6	100.00%	0.0%	100.0%	0.0%	0.00%	0.01000	2.250	6.59	6.59	0.15	3.56	0.65	0.00	0.00	100%	not coating
		State Potential Emissions				**Add worst case coating to all solvents**						**24.04**	**4.39**	**0.3**			

METHODOLOGY

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

Company Name: **Dutchmen Manufacturing, Inc.**
Address City IN Zip: **305 Steury Avenue, Goshen, IN 46526**
MSOP: **039-19951-00380**
Plt ID: **039-00380**
Reviewer: **Amy Moreland**
Date: **Feb. 25, 2005**

Material	Density (lbs/gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % Toluene	Weight % MEK	Weight % Glycol Ethers	Weight % Hexane	Weight % Cumene	Weight % Methanol	Xylene Emissions (tons/yr)	Toluene Emissions (tons/yr)	MEK Emissions (tons/yr)	Glycol Ethers Emissions (tons/yr)	Hexane Emissions (tons/yr)	Cumene Emissions (tons/yr)	Methanol Emissions (tons/yr)
Chassis & Floor*																	
Spray N'Go enamel (touch up)	6.67	0.048	1.200	5.00%	20.00%	10.00%	0.00%	0.00%	0.00%	0.00%	0.08	0.34	0.17	0.00	0.00	0.00	0.00
Oatey PVC cement (30234)	7.59	0.029	1.200	0.00%	0.00%	2.50%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.03	0.00	0.00	0.00	0.00
Cabinets & Mill*																	
Mobibond MB34	9.49	0.011	1.200	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
Cyclo silicone C-33	5.92	0.014	1.200	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
IPS Weld-on Cement (#771)	7.25	0.007	1.200	0.00%	0.00%	65.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.17	0.00	0.00	0.00	0.00
Cyclo Brake Cleaner (C-111)	6.30	0.007	1.200	0.00%	30.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.07	0.00	0.00	0.00	0.00	0.00
Black ABS cement (30892)	7.08	0.086	1.200	0.00%	0.00%	75.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	2.40	0.00	0.00	0.00	0.00
Oatey cleaner (30766)	6.60	0.057	1.200	0.00%	0.00%	95.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	1.88	0.00	0.00	0.00	0.00
Rectorseal #5	11.42	0.029	1.200	0.00%	0.00%	0.00%	23.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.40	0.00	0.00	0.00
Slide-out Assembly*																	
Geocel 2300 sealant	7.92	0.238	1.200	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
Mobibond MB34	9.49	0.004	1.200	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
Cyclo silicone C-33	5.92	0.010	1.200	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
Unit Assembly*																	
901 BA Adhesive	8.40	1.500	1.200	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
Self-leveling Sealant 502 LS	10.67	0.840	1.200	0.00%	15.80%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	7.44	0.00	0.00	0.00	0.00	0.00
Geocel 2300 sealant	7.92	0.448	1.200	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
Oatey cleaner (30766)	6.60	0.029	1.200	0.00%	0.00%	95.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.96	0.00	0.00	0.00	0.00
Dupont lacquer thinner	6.32	0.010	1.200	0.00%	2.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.01	0.00	0.00	0.00	0.00	0.00
Mineral Spirits	6.59	0.029	1.200	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
Econotac Adhesive - #26	6.50	0.022	1.200	0.00%	0.00%	0.00%	0.00%	35.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.26	0.00	0.00
Enerbond SF(Ener 45)	10.01	0.020	1.200	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
Surebond Sealant	11.42	0.013	1.200	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
Foam Cleaner	7.99	0.020	1.200	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
Final Finish Building																	
Geocel 2300 sealant	7.92	0.143	1.200	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
Geocel 2000 sealant	8.34	0.113	1.200	7.00%	0.00%	0.00%	0.00%	0.00%	3.00%	0.00%	0.35	0.00	0.00	0.00	0.00	0.15	0.00
Bostik Supertak Adhesive (150724	5.60	0.029	1.200	0.00%	0.00%	0.00%	0.00%	40.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.34	0.00	0.00
Touch N'Tone Enamel (55721)	5.59	0.135	1.200	0.00%	15.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.59	0.00	0.00	0.00	0.00	0.00
Cyclo silicone C-33	5.92	0.072	1.200	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
1'AYD Spray Silicone 96	5.00	0.019	1.200	0.00%	0.00%	0.00%	0.00%	60.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.30	0.00	0.00
Cyclo Brake Cleaner (C-111)	6.30	0.027	1.200	0.00%	30.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.27	0.00	0.00	0.00	0.00	0.00
Glass Cleaner #40A	8.30	0.017	1.200	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.80%	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Lacquer Thinner (39395)	6.32	0.066	1.200	0.00%	2.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.04	0.00	0.00	0.00	0.00	0.00
Mineral Spirits	6.59	0.097	1.200	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

Assembly Building

Total State Potential Emissions — Subtotal: **0.43** | **8.76** | **5.60** | **0.40** | **0.90** | **0.15** | **0.01**

Material	Density (lbs/gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % MDI	Weight %	Weight %	Weight %	Weight %	Weight %	Weight %	MDI Emissions (tons/yr)	Emissions (tons/yr)	Emissions (tons/yr)	Emissions (tons/yr)	Emissions (tons/yr)	Emissions (tons/yr)	Emissions (tons/yr)
Roof Assembly																	
Enerbond SF(Ener 45)	10.01	0.020	1.200	6.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.06	0.00	0.00	0.00	0.00	0.00	0.00

Note 10% of the maximum MDI content of 60% from MSDS was used to account for flash off factor.

Total ALL HAPs **16.3** tons/yr

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

Appendix A: Emission Calculations
HAP Emission Calculations

Company Name: Dutchmen Manufacturing, Inc.
Address City IN Zip: 305 Steury Avenue, Goshen, IN 46526
MSOP#: 039-19951-00380
Plt ID: 039-00380
Permit Reviewer: Amy Moreland
Date: Feb. 28, 2005

Material	Density (Lb/Gal)	Gallons of Material	Maximum (unit/hour)	Weight %	Weight %	Weight %	Weight %	Weight %	Weight % Glycol	Weight %	Weight % MEK	Weight % MDI	Weight % Methy-lene	Xylene Emissions	Toluene Emissions	Cumene Emissions	Ethyl Benzene Emissions	Hexane Emissions	Glycol Ethers Emissions	Methanol Emissions	MEK Emissions	MDI Emissions	Methylene Chloride
Middlebury Lite Final Finish		(gal/unit)		Xylene	Toluene	Cumene	Ethyl Benzene	Hexane	Ethers	Methanol			chloride	(ton/yr)	(ton/yr)	(ton/yr)	(ton/yr)	(ton/yr)	(ton/yr)	(ton/yr)	(ton/yr)	(ton/yr)	(ton/yr)
Geocel 2300 sealant	7.9	0.02840	2.250	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	0.00	0.00
Geocel 2000 sealant	8.3	0.00400	2.250	0.00%	0.00%	0.00%	0.00%	0.00%	3.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
Bostik supertak adhesive	5.6	0.02280	2.250	0.00%	0.00%	0.00%	0.00%	40.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00
Tite R bond	7.4	0.00050	2.250	0.00%	2.00%	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
Touch N Tone enamel	5.6	0.02530	2.250	0.00%	10.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cyclo silicone	5.9	0.00010	2.250	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	0.00	0.00
1st AYD vinyl leather	8.3	0.03530	2.250	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	0.00	0.00
Parts & Break cleaner	6.3	0.00430	2.250	0.00%	25.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Glass cleaner	8.3	0.01030	2.250	0.00%	0.00%	0.80%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dupont lacquer thinner	6.3	0.00500	2.250	0.00%	2.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mineral spirits	6.6	0.01000	2.250	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	0.00	0.00
									Total Single HAP Emissions:					0	0.22	0.01	0.0	**0.5**	0.01	0.0	0.0	0.0	0.0
									Total Combined HAPs Emissions:												**0.73**		

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

Appendix A: Emission Calculations
Baghouse Operations

Company Name: **Dutchmen Manufacturing, Inc.**
Address City IN Zip: **305 Steury Avenue, Goshen, IN 46526**
MSOP: **039-19951-00380**
Plt ID: **039-00380**
Reviewer: **Amy Moreland**
Date: **Feb. 25, 2005**

Unit ID	Control Efficiency (%)	Grain Loading per Actual Cubic foot of Outlet Air (grains/cub. ft.)	Gas or Air Flow Rate (acfm.)	Emission Rate before Controls (lb/hr)	Emission Rate before Controls (tons/yr)	Emission Rate after Controls (lb/hr)	Emission Rate after Controls (tons/yr)
P1	99.0%	0.002200	2000.0	3.8	16.52	0.038	0.17
P2	99.0%	0.002200	3900.0	7.4	32.21	0.074	0.32
P3	99.0%	0.002200	2725.0	5.1	22.51	0.051	0.23
P4	99.0%	0.000486	1200.0	0.5	2.19	0.005	0.02
				Total	73.4		0.734

Methodology

Emission Rate in lbs/hr (after controls) = (grains/cub. ft.) (sq. ft.) ((cub. ft./min.)/sq. ft.) (60 min/hr) (lb/7000 grains)
Emission Rate in tons/yr = (lbs/hr) (8760 hr/yr) (ton/2000 lb)

Emission Rate in lbs/hr (before controls) = Emission Rate (after controls): (lbs/hr)/(1-control efficiency)
Emission Rate in tons/yr = (lbs/hr) (8760 hr/yr) (ton/2000 lb)

Allowable Rate of Emissions

	Process Rate (lbs/hr)	Process Weight Rate (tons/hr)	Allowable Emissions (lbs/hr)	Allowable Emissions (tons/yr)	
P1	1224	0.612	2.95	12.9	
P2	1224	0.612	2.95	12.9	
P3	100	0.050	0.551	2.41	(actual Process Weight Rate =27 lbs/hr)
P4	Backup				

Methodology Allowable Emissions = 4.10(Process Weight Rate)^0.67

Appendix A: Welding and Thermal Cutting

Company Name: Dutchmen Manufacturing, Inc.
Address City IN Zip: 305 Steury Avenue, Goshen, IN 46526
MSOP: 039-19951-00380
Plt ID: 039-00380
Reviewer: Amy Moreland
Date: Feb. 28, 2005

PROCESS	Number of Stations	Max. electrode consumption per station		EMISSION FACTORS * (lb pollutant / lb electrode)				EMISSIONS (lb/hr)				TOTAL HAPS (lb/hr)
WELDING		(lbs/hr)		PM = PM10	Mn	Ni	Cr	PM = PM10	Mn	Ni	Cr	
Submerged Arc	0	0		0.036				0.000	0	0.000	0	0.0000000
Metal Inert Gas (MIG)(ER5154)	1	0.354		0.0241	0.000034		0.00001	0.009	1.2036E-05	0.000	0.00000354	0.0000156
Stick (E7018 electrode)	2	0.42		0.0211				0.018	0	0.000	0	0.0000000
Tungsten Inert Gas (TIG)(carbon steel)	0	0		0.0055				0.000	0	0.000	0	0.0000000
Oxyacetylene(carbon steel)	0	0		0.0055				0.000	0	0.000	0	0.0000000

	Number of Stations	Max. Metal Thickness Cut	Max. Metal Cutting Rate	EMISSION FACTORS (lb pollutant/1,000 inches cut, 1" thick)				EMISSIONS (lbs/hr)				TOTAL HAPS (lb/hr)
FLAME CUTTING		(in.)	(in./minute)	PM = PM10	Mn	Ni	Cr	PM = PM10	Mn	Ni	Cr	
Oxyacetylene	1	0.375	0.167	0.1622	0.0005	0.0001	0.0003	0.001	0.000	0.000	0.000	0.0000003
Oxymethane	0	0	0	0.0815	0.0002		0.0002	0.000	0.000	0.000	0.000	0.0000000
Plasma	0	0	0					0.000	0.000	0.000	0.000	0.0000000

EMISSION TOTALS	PM = PM10	Mn	Ni	Cr	Total HAPs
Potential Emissions lbs/hr	0.03	0.00	0.00	0.00	0.00
Potential Emissions lbs/day	0.64	0.00	0.00	0.00	0.00
Potential Emissions tons/year	**0.117668**	0.000054	0.000000	0.000016	0.000070

METHODOLGY

*Emission Factors are default values for carbon steel unless a specific electrode type is noted in the Process column. Consult AP-42 or other reference for different electrode types.
Welding emissions, lb/hr: (# of stations)(max. lbs of electrode used/hr/station)(emission factor, lb. pollutant/lb. of electrode used)
Cutting emissions, lb/hr: (# of stations)(max. metal thickness, in.)(max. cutting rate, in./min.)(60 min./hr.)(emission factor, lb. pollutant/1,000 in. cut, 1" thick)
Emissions, lbs/day = emissions, lbs/hr x 24 hrs/day
Emissions, tons/yr = emissions, lb/hr x 8,760 hrs/day x 1 ton/2,000 lbs.
Plasma cutting emission factors are from the American Welding Society study published in Sweden (March 1994).
Welding and other flame cutting emission factors are from an internal training session document.
See AP-42, Chapter 12.19 for additional emission factors for welding.

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

Company Name: **Dutchmen Manufacturing, Inc.**
Address City IN Zip: **305 Steury Avenue, Goshen, IN 46526**
MSOP: **039-19951-00380**
Plt ID: **039-00380**
Reviewer: **Amy Moreland**
Date: **Feb. 28, 2005**

		Each	Total
		mmBtu/hr	mmBtu/hr
	H1-H5 & H13	0.150	0.900
	H6 - H8	0.100	0.300
	H9 - H12	0.225	0.900
	H14 - H20	0.100	0.700
	H21 - H27	0.225	1.575
	H28 & H29	0.150	0.300
			4.675

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
4.675	40.95

Pollutant

	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.039	0.156	0.012	2.048	0.113	1.720

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

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

Methodology

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

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

See pages 3 & 4 for HAPs emissions calculations.

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

HAPs Emissions

Company Name: **Dutchmen Manufacturing, Inc.**
Address City IN Zip: **305 Steury Avenue, Goshen, IN 46526**
MSOP: **039-19951-00380**
Plt ID: **039-00380**
Reviewer: **Amy Moreland**
Date: **25-Feb**

HAPs - Organics

	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	4.300E-05	2.457E-05	1.536E-03	3.686E-02	6.962E-05

HAPs - Metals

	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	1.024E-05	2.252E-05	2.867E-05	7.781E-06	4.300E-05

Methodology is the same as page 7.

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