

Mr. Lee Martin  
Heritage Furniture, A Division of Middlebury Hardwood Products, Inc.  
19881 County Road 146  
New Paris, Indiana 46553

Re: **039-11562**  
First Significant Permit Modification to  
**Part 70 No.: T 039-7682-00437**

Dear Mr. Martin:

Heritage Furniture was issued a permit on December 21, 1998 for a wood furniture manufacturing operation. A letter requesting changes to this permit was received on November 1, 1999. Pursuant to the provisions of 326 IAC 2-7-12, a significant permit modification to this permit is hereby approved as described in the attached Technical Support Document.

As a result of this permit modification, the following changes have been made to the Part 70 operating permit (strikeout indicates deleted language, and new language is bolded);

1. The title page of the Part 70 permit has a second box added to identify this permit modification. It appears as follows:

<b>First Significant Permit Modification: 039-11562</b>	<b>Pages Affected: 5, 30, 34, 35, 37, and 38</b>
<b>Issued by: Paul Dubenetzky, Branch Chief Office of Air Management</b>	<b>Issuance Date:</b>

Also on this page, the IDEM has deleted a rule cite that is no longer necessary in the second paragraph. This paragraph now reads as follows:

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 and ~~326 IAC 2-1-3.2~~ as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

2. Because of the ownership change of this source, two lines in Condition A.1, General Information, have been changed to read as follows:

Responsible Official: ~~Gordon Miller~~ **Chuck Lamb**

Mailing Address: ~~P.O. Box 874, Goshen, IN 46527-0874~~ **19881 County Road 146, New Paris, Indiana 46553**

3. In Section A.2, Emission Units and Pollution Control Equipment Summary, part (g) has been added as follows:

**(g) Five (5) closed wood coating dip tanks, identified as EU-7 through EU-11, each with a maximum rating of 30 units per hour, with fugitive emissions from each dip tank venting internally.**

4. Also, this equipment has been added to the facility description box for Section D.2, and the title line for this section has been rewritten, as follows:

**D.2 FACILITY OPERATION CONDITIONS - 4 spray booths EU-3 thru EU-6 and dip tanks**

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

Four (4) surface coating booths, identified as EU-3, EU-4, EU-5 and EU-6, with a maximum rating of 4.11 units per hour each. Particulate matter emissions shall be controlled by dry filters and then exhausted at Stack/Vent ID #S-3, S-4, S-5 and S-6, respectively.

**Five (5) closed top wood coating dip tanks, identified as EU-7 through EU-11, each with a maximum rating of 30 units per hour, with fugitive emissions from each dip tank venting internally.**

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

And upon further review, the IDEM has also added a statement in parentheses regarding the information contained in the description box.

5. Because of the mailing address change for this source, the Mailing Address line on each reporting form have been revised as follows:

Mailing Address: ~~P.O. Box 874, Goshen, IN 46527-0874~~ **19881 County Road 146, New Paris, Indiana 46553**

All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this modification and the following revised permit pages to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Melissa Groch, OAM, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or call at (800) 451-6027, press 0 and ask for Melissa Groch or extension 3-8397, or dial (317) 233-8397.

Sincerely,

Paul Dubenetzky, Chief  
Permits Branch  
Office of Air Management

Attachments

MMG

cc: File - Elkhart County  
U.S. EPA, Region V  
Elkhart County Health Department  
Northern Regional Office  
Air Compliance Section Inspector - Ray Schick  
Compliance Data Section - Karen Nowak  
Administrative and Development - Janet Mobley  
Technical Support and Modeling - Michele Boner

# PART 70 OPERATING PERMIT OFFICE OF AIR MANAGEMENT

**Heritage Furniture,  
a Division of Middlebury Hardwood Products, Inc.  
19881 C.R. 146 New Paris, Indiana 46553**

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

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments) 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T039-7682-00437	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Management	Issuance Date: December 21, 1998

First Significant Permit Modification: 039-11562	Pages Affected: 5, 30, 34, 35, 37, and 38
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

**SECTION A****SOURCE SUMMARY**

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

**A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]**

The Permittee owns and operates a wood furniture manufacturing operation.

Responsible Official: Chuck Lamb  
 Source Address: 19881 C.R. 146, New Paris, IN 46553  
 Mailing Address: 19881 C.R. 146, New Paris, IN 46553  
 SIC Code: 2511 & 2521  
 County Location: Elkhart  
 County Status: Attainment for all criteria pollutants  
 Source Status: Minor Source under PSD Major Source, Part 70 Permit Program Major Source, Section 112 of the Clean Air Act

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

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

- (a) Woodworking equipment EU-1, with a maximum throughput of 320.64 pounds per hour. Emissions shall be controlled by a cyclone, then exhausted at Stack/Vent ID #S-1.
- (b) Woodworking equipment EU-2, with a maximum throughput of 213.5 pounds per hour. Emissions shall be controlled by a baghouse, then exhausted at Stack/Vent ID #S-2.
- (c) One (1) manual spray booth EU-3, with a maximum rating of 4.11 units per hour. Emissions shall be controlled by dry filters, then exhausted at Stack/Vent ID #S-3.
- (d) One (1) manual spray booth EU-4, with a maximum rating of 4.11 units per hour. Emissions shall be controlled by dry filters, then exhausted at Stack/Vent ID #S-4.
- (e) One (1) manual spray booth EU-5, with a maximum rating of 4.11 units per hour. Emissions shall be controlled by dry filters, then exhausted at Stack/Vent ID #S-5.
- (f) One (1) automatic spray booth EU-6, with a maximum rating of 4.11 units per hour. Emissions shall be controlled by dry filters, then exhausted at Stack/Vent ID #S-6.
- (g) Five (5) closed top wood coating dip tanks, identified as EU-7 through EU-11, each with a maximum rating of 30 units per hour, with fugitive emissions from each dip tank venting internally.

**A.3 Specifically regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]**

This stationary source does not currently have any insignificant activities, as defined in 326 IAC 2-7-1(21) that have applicable requirements.

## D.2 FACILITY OPERATION CONDITIONS - spray booths and dip tanks

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

Four (4) surface coating booths, identified as EU-3, EU-4, EU-5 and EU-6, with a maximum rating of 4.11 units per hour each. Particulate matter emissions shall be controlled by dry filters and then exhausted at Stack/Vent ID #S-3, S-4, S-5 and S-6, respectively.

Five (5) closed top wood coating dip tanks, identified as EU-7 through EU-11, each with a maximum rating of 30 units per hour, with fugitive emissions from each dip tank venting internally.

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

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

### D.2.1 Particulate Matter (PM) [326 IAC 6-3-2(c)]

Pursuant to 326 IAC 6-3-2(c) (Process Operations), the PM from each of the four (4) surface coating booths (EU-3 through EU-6) shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation and extrapolation 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:

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

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

### D.2.2 Volatile Organic Compounds (VOC) [326 IAC 8-2-12]

Pursuant to 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating), with the exception of no more than ten (10) gallons of coating per day used for touch-up and repair operations, the surface coating applied to wood furniture 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.2.3 Wood Furniture NESHAP [40 CFR 63, Subpart JJ]

(a) The wood furniture coating operation is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP), 326 IAC 20-14, (40 CFR 63, Subpart JJ), with a compliance date of December 7, 1998.

(b) Pursuant to 40 CFR 63, Subpart JJ, the wood furniture coating operations shall comply with the following conditions:

(1) Limit the Volatile Hazardous Air Pollutant (VHAP) emissions from finishing operations as follows:

(A) Achieve a weighted average VHAP content across all coatings of 1.0 pound VHAP per pound solids; or

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

**PART 70 PERMIT CERTIFICATION FORM**

Source Name: Heritage Furniture, a Division of Middlebury Hardwood Products, Inc.  
Source Address: 19881 C.R. 146, New Paris, IN 46553  
Mailing Address: 19881 C.R. 146, New Paris, IN 46553  
Part 70 Permit No.: T039-7682-00437

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

Please check what document is being certified:

- 9 Annual Compliance Certification Letter
- 9 Test Result (specify) \_\_\_\_\_
- 9 Report (specify) \_\_\_\_\_
- 9 Notification (specify) \_\_\_\_\_
- 9 Other (specify) \_\_\_\_\_

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

Signature:

Printed Name:

Title/Position:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT**  
**OFFICE OF AIR MANAGEMENT**  
**COMPLIANCE DATA SECTION**  
**P.O. Box 6015**  
**100 North Senate Avenue**  
**Indianapolis, Indiana 46206-6015**  
**Phone: 317-233-5674**  
**Fax: 317-233-5967**

**PART 70 OPERATING PERMIT**  
**EMERGENCY/DEVIATION OCCURRENCE REPORT**

Source Name: Heritage Furniture, a Division of Middlebury Hardwood Products, Inc.

Source Address: 19881 C.R. 146, New Paris, IN 46553

Mailing Address: 19881 C.R. 146, New Paris, IN 46553

Part 70 Permit No.: T039-7682-00437

**This form consists of 2 pages**

**Page 1 of 2**

Check either No. 1 or No.2

- 9 1. This is an emergency as defined in 326 IAC 2-7-1(12)
  - The Permittee must notify the Office of Air Management (OAM), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
  - The Permittee must submit notice in writing or by facsimile within two (2) days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16
- 9 2. This is a deviation, reportable per 326 IAC 2-7-5(3)(C)
  - The Permittee must submit notice in writing within ten (10) calendar days

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

Facility/Equipment/Operation:

Control Equipment:

Permit Condition or Operation Limitation in Permit:

Description of the Emergency/Deviation:

Describe the cause of the Emergency/Deviation:

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

**PART 70 OPERATING PERMIT  
SEMI-ANNUAL REPORT**

For HAPs usage - Wood Furniture NESHAP

Source Name: Heritage Furniture, a Division of Middlebury Hardwood Products, Inc.  
 Source Address: 19881 C.R. 146, New Paris, IN 46553  
 Mailing Address: 19881 C.R. 146, New Paris, IN 46553  
 Part 70 Permit No.: T039-7682-00437  
 Facility: Surface Coating  
 Parameter: VOC and VHAPs - NESHAP  
 Limit: (1) Finishing operations - 1.0 lb VHAP/lb Solids  
 (2) Thinners used for on-site formulation of washcoats, basecoats and enamels - 3% VHAP content by weight  
 (3) All other thinners - 10% VHAP content by weight  
 (4) Foam adhesives (meeting upholstered flammability requirements) -1.8 lb VHAP/lb Solids  
 (5) All other contact adhesives - 1.0 lb VHAP/lb Solids  
 (6) Strippable spray booth material - 0.8 lb VOC/lb solids

YEAR: \_\_\_\_\_

Month	Finishing Operations (lb VHAP/lb Solid)	Thinners used for on site formulation (3% by weight )	All Other Thinners (% by weight)	Foam adhesives (upholstered) (lb VHAP/lb solid)	Contact Adhesives (lb VHAP/lb solid)	Spray Booth coating (lb VOC/lb Solid)
1						
2						
3						
4						
5						
6						

- 9 No deviation occurred in this six month period.
- 9 Deviation/s occurred in this six month period.  
 Deviation has been reported on: \_\_\_\_\_

Submitted by: \_\_\_\_\_  
 Title / Position: \_\_\_\_\_  
 Signature: \_\_\_\_\_  
 Date: \_\_\_\_\_  
 Phone: \_\_\_\_\_



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

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

Source Name: Heritage Furniture, a Division of Middlebury Hardwood Products, Inc.  
Source Address: 19881 C.R. 146, New Paris, IN 46553  
Mailing Address: 19881 C.R. 146, New Paris, IN 46553  
Part 70 Permit No.: T039-7682-00437

Months: \_\_\_\_\_ to \_\_\_\_\_ Year: \_\_\_\_\_

This report is an affirmation that the source has met all the compliance monitoring requirements stated in this permit. This report shall be submitted quarterly. Any deviation from the compliance monitoring requirements and the date(s) of each deviation must be reported. Additional pages may be attached if necessary. This form can be supplemented by attaching the Emergency/Deviation Occurrence Report. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD.

Compliance Monitoring Requirement (e.g. Permit Condition D.1.3)	Number of Deviations	Date of each Deviation

Form Completed By: \_\_\_\_\_  
Title/Position: \_\_\_\_\_  
Date: \_\_\_\_\_  
Phone: \_\_\_\_\_

Attach a signed certification to complete this report.

# Indiana Department of Environmental Management Office of Air Management

## Technical Support Document (TSD) for a Part 70 Significant Permit Modification

### Source Background and Description

**Source Name:** Heritage Furniture, a Division of Middlebury Hardwood Products, Inc.  
**Source Location:** 19881 County Road 146, New Paris, Indiana 46553  
**County:** Elkhart  
**SIC Code:** 2511, 2521  
**Operation Permit No.:** T039-7682-00437  
**Operation Issuance Date:** December 21, 1998  
**Significant Permit Modification No.:** 039-11562-00437  
**Permit Reviewer:** Melissa Groch

The Office of Air Management (OAM) has reviewed a significant permit modification application from Heritage Furniture relating to the construction of the following emission units:

- (a) Five (5) closed top wood coating dip tanks, identified as EU-7 through EU-11, each with a maximum rating of 30 units per hour, with fugitive emissions from each dip tank venting internally.
- (b) One (1) natural gas fired air make-up unit, with a maximum capacity rated at 3.6 MMBtu per hour, identified as EU-12, exhausting internally.

Item (b), above, falls under the category of natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour, and therefore is considered an insignificant activity.

### History

On November 1, 1999, Heritage Furniture submitted an application to the OAM requesting to install five (5) new dip tanks to their existing surface coating operation, and one (1) air make-up unit. The source modification has been reviewed as a minor source modification under document 039-11516-00437.

### Enforcement Issue

There are no enforcement actions pending.

### Stack Summary

There are no stacks associated with the five new dip tanks, or the air make-up unit.

### Recommendation

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

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

An administratively complete Part 70 permit modification application for the purposes of this review was received on November 1, 1999.

### Justification for Modification

The Part 70 Operating permit is being modified through a Part 70 Significant Permit Modification. This permit modification is being performed pursuant to 326 IAC 2-7-12(d), which states that Significant modification procedures shall be used for applications requesting Part 70 permit modifications that do not qualify as minor permit modifications or as administrative amendments.

Pursuant to 326 IAC 2-7-12(b)(1)(E), Minor permit modification procedures shall be used only for those permit modifications that are not modifications under any provision of Title I of the CAA. Since the five (5) wood coating dip tanks are subject to the Wood Furniture Coating NESHAP (40 CFR 63, Subpart JJ), this permit modification is considered a Title I modification.

The approval to construct was performed under Minor Source Modification document 039-11516.

### Emission Calculations

See Appendix A of this document for detailed emissions calculations, pages 1 of 1.

### Modifications

The following changes have been incorporated into the Part 70 operating permit. The additions of the new equipment were reviewed as a Part 70 minor source modification under document 039-11516.

- (1) The title page of the Part 70 permit has a second box added to identify this permit modification. It appears as follows:

<b>First Significant Permit Modification: 039-11562</b>	<b>Pages Affected: 5, 30, 34, 35, 37, and 38</b>
<b>Issued by: Paul Dubenetzky, Branch Chief Office of Air Management</b>	<b>Issuance Date:</b>

Also on this page, the IDEM has deleted a rule cite that is no longer necessary in the second paragraph. This paragraph now reads as follows:

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 and ~~326 IAC 2-4-3.2~~ as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

- (2) Because of the ownership change for this source under A039-9667-00437, issued June 18, 1998, and a recent address change, two lines in Condition A.1, General Information, have been changed to read as follows:

Responsible Official: ~~Gordon Miller~~ **Chuck Lamb**

Mailing Address: ~~P.O. Box 874, Goshen, IN 46527-0874~~ **19881 County Road 146, New Paris, Indiana 46553**

- (3) In Section A.2, Emission Units and Pollution Control Equipment Summary, part (g) has been added as follows:

(g) **Five (5) closed wood coating dip tanks, identified as EU-7 through EU-11, each with a maximum rating of 30 units per hour, with fugitive emissions from each dip tank**

**venting internally.**

- (4) Also, this equipment has been added to the facility description box for Section D.2, and the title line for this section has been rewritten, as follows:

**D.2 FACILITY OPERATION CONDITIONS - 4 spray booths EU-3 thru EU-6 and dip tanks**

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

Four (4) surface coating booths, identified as EU-3, EU-4, EU-5 and EU-6, with a maximum rating of 4.11 units per hour each. Particulate matter emissions shall be controlled by dry filters and then exhausted at Stack/Vent ID #S-3, S-4, S-5 and S-6, respectively.

**Five (5) closed top wood coating dip tanks, identified as EU-7 through EU-11, each with a maximum rating of 30 units per hour, with fugitive emissions from each dip tank venting internally.**

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

And upon further review, the IDEM has also added a statement in parentheses regarding the information contained in the description box.

5. Because of the mailing address change for this source, the Mailing Address line on each reporting form have been revised as follows:

Mailing Address: ~~P.O. Box 874, Coshen, IN 46527-0874~~ **19881 County Road 146, New Paris, Indiana 46553**

**Appendix A: Emissions Calculations**

**Company Name:** Heritage Furniture, a Division of Middlebury Hardwood Products, Inc.  
**Address City IN Zip:** 19881 County Road 146, New Paris, Indiana 46553  
**Minor Source Modification:** 039-11562  
**Pit ID:** 00437  
**Reviewer:** Melissa Groch

**VOC from Closed Top Dip Tanks**

Dip Tank Material	Density (Lb/Gal)	Weight % Volatile (H2O & 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
<b>EU-7 and EU-8</b>																
Stain 1803 for 2 tanks	7.01	95.74%	0.0%	95.7%	0.0%	4.26%	0.003	60	6.71	6.71	1.21	28.99	5.29	0.00	157.51	100%
<b>EU-9 and EU-10</b>																
Stain 3828 for 2 tanks	7.76	90.15%	0.0%	90.1%	0.0%	9.85%	0.003	60	7.00	7.00	1.26	30.22	5.52	0.00	70.99	100%
<b>EU-11</b>																
Stain 4082	6.97	93.93%	0.0%	93.9%	0.0%	3.91%	0.003	30	6.55	6.55	0.59	14.14	2.58	0.00	167.52	100%

**State Potential Emissions**

**Add worst case coating to all solvents**

**3.06      73.35      13.39      0.00**

**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

**Air Make-up Unit, EU-12**

**Heat Input Capacity**      **Potential Throughput**  
 MMBtu/hr      MCMF/yr

3.6      31.5

Emission Factor in lb/MMCF	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	1.9	7.6	0.6	100.0	5.5	84.0
				**see below		
Potential Emission in tons/yr	0.0	0.1	0.0	1.6	0.1	1.3

\*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  
 MCMF = 1,000,000 Cubic Feet of Gas  
 Potential Throughput (MCMF) = Heat Input Capacity (MMBTu/hr) x 8,760 hrs/yr x 1 MCMF/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 (MCMF/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).