

# Merillat.

## Certified Mail

Department of Environmental Protection  
Central District  
3319 Maguire Boulevard, Suite 232  
Orlando, Florida 32803-3767

February 27, 2001

Attention: L.T. Kozlov, P.E.  
Program Administrator

Re: Permit Number 0830137-001-AC

Dear Mr. Kozlov:

Enclosed, please find four (4) copies of the Title V Operating Permit Application for Merillat-Ocala.

Please feel free to contact me with any questions. My number is 352-291-4622.

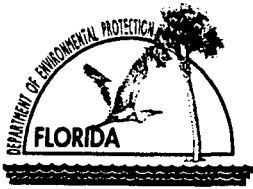
Sincerely,

*Donna R Tackett*

Donna R. Tackett  
Environmental, Health & Safety Coordinator



0830137-002-AV



# Department of Environmental Protection

## Division of Air Resources Management

### APPLICATION FOR AIR PERMIT - TITLE V SOURCE

See Instructions for Form No. 62-210.900(1)

#### I. APPLICATION INFORMATION

AV/00

NO FEE

ZAHM

#### Identification of Facility

1. Facility Owner/Company Name: Merillat Corporation	
2. Site Name: Merillat-Ocala	
3. Facility Identification Number: 0830137 [ ] Unknown	
4. Facility Location: Ocala, Florida Street Address or Other Locator: 1300 S.W. 38 <sup>th</sup> Avenue City: Ocala County: Marion Zip Code: 34474	
5. Relocatable Facility? [ ] Yes [✓] No	6. Existing Permitted Facility? [✓] Yes [ ] No

#### Application Contact

1. Name and Title of Application Contact: Donna Tackett, Environmental, Health, and Safety Coordinator	
2. Application Contact Mailing Address: Organization/Firm: Merillat Corporation Street Address: 1300 S.W. 38 <sup>th</sup> Avenue City: Ocala State: FL Zip Code: 34474	
3. Application Contact Telephone Numbers: Telephone: (352) 291-4622 Fax: (352) 291-4603	

#### Application Processing Information (DEP Use)

1. Date of Receipt of Application:	2/28/01
2. Permit Number:	0830137-002-AV
3. PSD Number (if applicable):	
4. Siting Number (if applicable):	

**Purpose of Application**

**Air Operation Permit Application**

This Application for Air Permit is submitted to obtain: (Check one)

Initial Title V air operation permit for an existing facility which is classified as a Title V source.

Initial Title V air operation permit for a facility which, upon start up of one or more newly constructed or modified emissions units addressed in this application, would become classified as a Title V source.

Current construction permit number: \_\_\_\_\_

Title V air operation permit revision to address one or more newly constructed or modified emissions units addressed in this application.

Current construction permit number: \_\_\_\_\_

Operation permit number to be revised: \_\_\_\_\_

Title V air operation permit revision or administrative correction to address one or more proposed new or modified emissions units and to be processed concurrently with the air construction permit application. (Also check Air Construction Permit Application below.)

Operation permit number to be revised/corrected: \_\_\_\_\_

Title V air operation permit revision for reasons other than construction or modification of an emissions unit. Give reason for the revision; e.g., to comply with a new applicable requirement or to request approval of an "Early Reductions" proposal.

Operation permit number to be revised: \_\_\_\_\_

Reason for revision: \_\_\_\_\_

**Air Construction Permit Application**

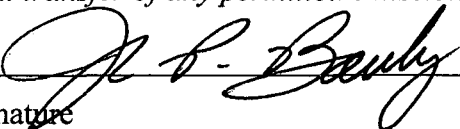
This Application for Air Permit is submitted to obtain: (Check one)

Air construction permit to construct or modify one or more emissions units.

Air construction permit to make federally enforceable an assumed restriction on the potential emissions of one or more existing, permitted emissions units.

Air construction permit for one or more existing, but unpermitted, emissions units.

**Owner/Authorized Representative or Responsible Official**

1. Name and Title of Owner/Authorized Representative or Responsible Official: John Bankey, Director of Operations
2. Owner/Authorized Representative or Responsible Official Mailing Address: Organization/Firm: Street Address: 1300 S.W. 38 <sup>th</sup> Avenue City: Ocala State: FL Zip Code: 34474
3. Owner/Authorized Representative or Responsible Official Telephone Numbers: Telephone: (352) 291-4610 Fax: (352) 291-4601
4. Owner/Authorized Representative or Responsible Official Statement: <i>I, the undersigned, am the owner or authorized representative*(check here [ ], if so) or the responsible official (check here [✓], if so) of the Title V source addressed in this application, whichever is applicable. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof. I understand that a permit, if granted by the Department, cannot be transferred without authorization from the Department, and I will promptly notify the Department upon sale or legal transfer of any permitted emissions unit.</i>  Signature  Date 2/26/01

\* Attach letter of authorization if not currently on file.

**Professional Engineer Certification**

1. Professional Engineer Name: Victor A. Hurlburt Registration Number: No. 33836
2. Professional Engineer Mailing Address: Organization/Firm: Malcolm Pirnie, Inc. Street Address: 2301 Maitland Center Parkway, Suite 140 City: Maitland State: FL Zip Code: 32751-7414
3. Professional Engineer Telephone Numbers: Telephone: (407) 660-1133 Fax: (407) 660-9550

4. Professional Engineer Statement:

*I, the undersigned, hereby certify, except as particularly noted herein\*, that:*

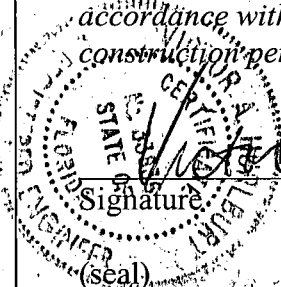
*(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this Application for Air Permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and*

*(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.*

*If the purpose of this application is to obtain a Title V source air operation permit (check here [✓], if so), I further certify that each emissions unit described in this Application for Air Permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance schedule is submitted with this application.*

*If the purpose of this application is to obtain an air construction permit for one or more proposed new or modified emissions units (check here [ ], if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.*

*If the purpose of this application is to obtain an initial air operation permit or operation permit revision for one or more newly constructed or modified emissions units (check here [ ], if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.*



*Robert A. Hurlbut*  
Signature

*2/22/01*  
Date

\* Attach any exception to certification statement.

**Scope of Application**

<b>Emissions Unit ID</b>	<b>Description of Emissions Unit</b>	<b>Permit Type</b>	<b>Processing Fee</b>
1	Woodworking equipment including saws, borers, routers, shaping/carving, sanding and brushing machines.	NA	NA
2	Finishing material application spray booths, curing ovens, storage area, and glue/adhesive applicators.	NA	NA

**Application Processing Fee**

Check one: [ ] Attached - Amount:      [  ] Not Applicable

**Construction/Modification Information**

1. Description of Proposed Project or Alterations:

Not Applicable (NA)

2. Projected or Actual Date of Commencement of Construction:

3. Projected Date of Completion of Construction:

**Application Comment**

None

## II. FACILITY INFORMATION

### A. GENERAL FACILITY INFORMATION

#### Facility Location and Type

1. Facility UTM Coordinates: Zone: 17                                  East (km):                                  North (km):			
2. Facility Latitude/Longitude: Latitude (DD/MM/SS): 29° 10' 30"                                  Longitude (DD/MM/SS): 82° 11' 15"			
3. Governmental Facility Code:  0	4. Facility Status Code:  A	5. Facility Major Group SIC Code:  24	6. Facility SIC(s):  2434
7. Facility Comment (limit to 500 characters):  For additional information regarding the facility, see Attachment A.			

#### Facility Contact

1. Name and Title of Facility Contact: Donna Tackett, Environmental, Health, and Safety Coordinator		
2. Facility Contact Mailing Address: Organization/Firm: Merillat Corporation. Street Address: 1300 S.W. 38 <sup>th</sup> Avenue City: Ocala                                  State: FL                                  Zip Code: 34474		
3. Facility Contact Telephone Numbers: Telephone: (352) 291-4622                                  Fax: (352) 291-4603		



**Facility Regulatory Classifications**

Check all that apply:

1. <input type="checkbox"/> Small Business Stationary Source?	<input type="checkbox"/> Unknown
2. <input checked="" type="checkbox"/> Major Source of Pollutants Other than Hazardous Air Pollutants (HAPs)?	
3. <input type="checkbox"/> Synthetic Minor Source of Pollutants Other than HAPs?	
4. <input checked="" type="checkbox"/> Major Source of Hazardous Air Pollutants (HAPs)?	
5. <input type="checkbox"/> Synthetic Minor Source of HAPs?	
6. <input type="checkbox"/> One or More Emissions Units Subject to NSPS?	
7. <input checked="" type="checkbox"/> One or More Emission Units Subject to NESHAP?	
8. <input type="checkbox"/> Title V Source by EPA Designation?	
9. Facility Regulatory Classifications Comment (limit to 200 characters):	
The facility is a major source of VOC emissions based on potential VOC emissions greater than 100 tons per year, and a major source of HAP emissions based on potential HAP emissions above the 10/25 tons per year thresholds.	

**List of Applicable Regulations**

40 CFR 63, Subpart JJ - National Emission Standards for Wood Furniture Manufacturing Operations
62-210.300 (1) Air Construction Permits
62-210.300 (2) Air Operation Permits
62-212 Preconstruction Review (General Requirements only)
62-213 Operation Permits for Major Sources of Air Pollution
62-296.712 Miscellaneous Manufacturing Process Operations
62-297.620 Exceptions and Approval of Alternate Procedures and Requirements (alternative standard of 5 % opacity for units equipped with a baghouse. Proposed in lieu of 62-296.712)

## B. FACILITY POLLUTANTS

### List of Pollutants Emitted

1. Pollutant Emitted	2. Pollutant Classif.	3. Requested Emissions Cap		4. Basis for Emissions Cap	5. Pollutant Comment
		lb/hour	tons/year		
VOC	A		249	ESCPSD	Proposed facility-wide VOC emission limit
HAPS	A				
PM	B				
PM10	B				

### C. FACILITY SUPPLEMENTAL INFORMATION

#### Supplemental Requirements

1. Area Map Showing Facility Location: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/> Waiver Requested
2. Facility Plot Plan: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/> Waiver Requested
3. Process Flow Diagram(s): <input checked="" type="checkbox"/> Attached, Document ID: Attachment A <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
4. Precautions to Prevent Emissions of Unconfined Particulate Matter: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
5. Fugitive Emissions Identification: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
6. Supplemental Information for Construction Permit Application: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
7. Supplemental Requirements Comment:

**Additional Supplemental Requirements for Title V Air Operation Permit Applications**

8. List of Proposed Insignificant Activities: <input type="checkbox"/> Attached, Document ID: <input checked="" type="checkbox"/> Not Applicable
9. List of Equipment/Activities Regulated under Title VI: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Equipment/Activities On site but Not Required to be Individually Listed <input checked="" type="checkbox"/> Not Applicable
10. Alternative Methods of Operation: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
11. Alternative Modes of Operation (Emissions Trading): <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
12. Identification of Additional Applicable Requirements: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
13. Risk Management Plan Verification: <input type="checkbox"/> Plan previously submitted to Chemical Emergency Preparedness and Prevention Office (CEPPO). Verification of submittal attached (Document ID: _____) or previously submitted to DEP (Date and DEP Office: _____) <input type="checkbox"/> Plan to be submitted to CEPPO (Date required: _____) <input checked="" type="checkbox"/> Not Applicable
14. Compliance Report and Plan: <input checked="" type="checkbox"/> Attached, Document ID: Attachment C <input type="checkbox"/> Not Applicable
15. Compliance Certification (Hard-copy Required): <input checked="" type="checkbox"/> Attached, Document ID: Attachment C <input type="checkbox"/> Not Applicable

### III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through J as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

#### A. GENERAL EMISSIONS UNIT INFORMATION (All Emissions Units)

##### Emissions Unit Description and Status

<p>1. Type of Emissions Unit Addressed in This Section: (Check one)</p> <p><input type="checkbox"/> This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).</p> <p><input checked="" type="checkbox"/> This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.</p> <p><input type="checkbox"/> This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.</p>			
<p>2. Regulated or Unregulated Emissions Unit? (Check one)</p> <p><input checked="" type="checkbox"/> The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.</p> <p><input type="checkbox"/> The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.</p>			
<p>3. Description of Emissions Unit Addressed in This Section (limit to 60 characters):</p> <p>Miscellaneous woodworking equipment including saws, borers, routers, shaping/carving, sanding and brushing machines.</p>			
<p>4. Emissions Unit Identification Number: <span style="float: right;"><input type="checkbox"/> No ID</span></p> <p>ID: 1 <span style="float: right;"><input type="checkbox"/> ID Unknown</span></p>			
<p>5. Emissions Unit Status Code:</p> <p style="text-align: center;">A</p>	<p>6. Initial Startup Date:</p> <p style="text-align: center;">11/2000</p>	<p>7. Emissions Unit Major Group SIC Code:</p> <p style="text-align: center;">24</p>	<p>8. Acid Rain Unit?</p> <p style="text-align: center;"><input type="checkbox"/></p>
<p>9. Emissions Unit Comment: (Limit to 500 Characters)</p>			

**Emissions Unit Control Equipment**

1. Control Equipment/Method Description (Limit to 200 characters per device or method):  Baghouse (fabric filter) dust collection systems.
2. Control Device or Method Code(s): 018

**Emissions Unit Details**

1. Package Unit: N/A Manufacturer:	Model Number:
2. Generator Nameplate Rating:	MW
3. Incinerator Information: Dwell Temperature:	°F
Dwell Time:	seconds
Incinerator Afterburner Temperature:	°F

**B. EMISSIONS UNIT CAPACITY INFORMATION  
(Regulated Emissions Units Only)**

**Emissions Unit Operating Capacity and Schedule**

1. Maximum Heat Input Rate:		mmBtu/hr
2. Maximum Incineration Rate:	lb/hr	tons/day
3. Maximum Process or Throughput Rate:		
4. Maximum Production Rate:	193 cabinets/hour ; 910,000 cabinets/yr	
5. Requested Maximum Operating Schedule:		
	24 hours/day	7 days/week
	52 weeks/year	8,760 hours/year
6. Operating Capacity/Schedule Comment (limit to 200 characters):		

**C. EMISSIONS UNIT REGULATIONS  
(Regulated Emissions Units Only)**

**List of Applicable Regulations**

62-297.620(4) [in lieu of 62-296.712(2)]	



**D. EMISSION POINT (STACK/VENT) INFORMATION  
(Regulated Emissions Units Only)**

**Emission Point Description and Type**

1. Identification of Point on Plot Plan or Flow Diagram? see flow diagram in Attachment A		2. Emission Point Type Code: 3	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point):  Emissions from the woodworking operations are vented to common baghouse dust collection systems. There are three baghouse systems with a single exhaust stack for each baghouse.			
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: N/A			
5. Discharge Type Code: V	6. Stack Height: 50 feet	7. Exit Diameter: 5 feet	
8. Exit Temperature: ambient	9. Actual Volumetric Flow Rate: approx. 80,000 cfm	10. Water Vapor: %	
11. Maximum Dry Standard Flow Rate: dscfm		12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates: Zone: East (km): North (km):			
14. Emission Point Comment (limit to 200 characters):			

**E. SEGMENT (PROCESS/FUEL) INFORMATION**  
**(All Emissions Units)**

**Segment Description and Rate:** Segment 1 of 1

1. Segment Description (Process/Fuel Type) (limit to 500 characters):  Miscellaneous woodworking operations - sanding/planing operations		
2. Source Classification Code (SCC): 3-07-030-98		3. SCC Units: 1,000 Board Feet
4. Maximum Hourly Rate: see below	5. Maximum Annual Rate: see below	6. Estimated Annual Activity Factor: N/A
7. Maximum % Sulfur: N/A	8. Maximum % Ash: N/A	9. Million Btu per SCC Unit: N/A
10. Segment Comment (limit to 200 characters):  For above items 4. and 5., maximum hourly and annual rates will correspond to the number of cabinets produced (not board feet processed). 193 cabinets/hr and 910,000 cabinets/yr represent the maximum hourly and annual rates, respectively.		

**Segment Description and Rate:** Segment \_\_\_\_ of \_\_\_\_

1. Segment Description (Process/Fuel Type) (limit to 500 characters):		
2. Source Classification Code (SCC):		3. SCC Units:
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters):		

F. EMISSIONS UNIT POLLUTANTS  
(All Emissions Units)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM, PM <sub>10</sub>	018	N/A	EL (VE limit)

**G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION  
(Regulated Emissions Units -  
Emissions-Limited and Preconstruction Review Pollutants Only)**

**Potential/Fugitive Emissions**

1. Pollutant Emitted: PM, PM <sub>10</sub>		2. Total Percent Efficiency of Control: 99 - 99.9 % (estimated)	
3. Potential Emissions: 1.04 lb/hour                      1.2 tons/year		4. Synthetically Limited? <input checked="" type="checkbox"/>	
5. Range of Estimated Fugitive Emissions: [ ] 1            [ ] 2            [ ] 3            _____ to _____ tons/year			
6. Emission Factor: N/A Reference: N/A (process knowledge/material balance basis)		7. Emissions Method Code: 2	
8. Calculation of Emissions (limit to 600 characters):  See Attachment B for detailed emission calculations			
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):  PM, PM <sub>10</sub> emissions limited based on maximum cabinet production rates of 193 cabinets/hr and 910,000 cabinets/yr and for "top-shop" operations 300 lineal ft/hr and 260,000 lineal ft/yr.			

**Allowable Emissions** Allowable Emissions:

1. Basis for Allowable Emissions Code: RULE		2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units:		4. Equivalent Allowable Emissions: 1.04 lb/hour            1.2 tons/year	
5. Method of Compliance (limit to 60 characters): See H.4. on the following page.			
6. Allowable Emissions Comment (Desc. Of Operating Method) (limit to 200 characters):			

**H. VISIBLE EMISSIONS INFORMATION**  
**(Only Regulated Emissions Units Subject to a VE Limitation)**

**Visible Emissions Limitation:** Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: VE05	2. Basis for Allowable Opacity: [ <input checked="" type="checkbox"/> ] Rule [ <input type="checkbox"/> ] Other
3. Requested Allowable Opacity: Normal Conditions: 5 % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: Initial visible emissions evaluation (VEE) conducted after start-up in accordance with EPA Method 9. Subsequent compliance demonstrations based on Method 22 periodic visible emissions observations.	
5. Visible Emissions Comment (limit to 200 characters):	

**I. CONTINUOUS MONITOR INFORMATION**  
**(Only Regulated Emissions Units Subject to Continuous Monitoring)**

**Continuous Monitoring System:** Continuous Monitor: N/A

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	[ <input type="checkbox"/> ] Rule [ <input type="checkbox"/> ] Other
4. Monitor Information: Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters):	

**J. EMISSIONS UNIT SUPPLEMENTAL INFORMATION  
(Regulated Emissions Units Only)**

**Supplemental Requirements**

1. Process Flow Diagram <input checked="" type="checkbox"/> Attached, Document ID: See Attach. A <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
2. Fuel Analysis or Specification <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
3. Detailed Description of Control Equipment <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/> Waiver Requested <b>Baghouse Manufacturer: Industrial Air Products, Inc.</b> <b>Model Number: 660 B95 CL3 ARR 1W</b>
4. Description of Stack Sampling Facilities <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
5. Compliance Test Report <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously submitted, Date: 11/29/2000 (Method 9 Test Report) <input type="checkbox"/> Not Applicable
6. Procedures for Startup and Shutdown <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
7. Operation and Maintenance Plan <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
8. Supplemental Information for Construction Permit Application <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
9. Other Information Required by Rule or Statute <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
10. Supplemental Requirements Comment:

**Additional Supplemental Requirements for Title V Air Operation Permit Applications**

11. Alternative Methods of Operation <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
12. Alternative Modes of Operation (Emissions Trading) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
13. Identification of Additional Applicable Requirements <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
14. Compliance Assurance Monitoring Plan <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable * Baghouse/dust collection systems will be operated in accordance with manufacturers' recommendations and compliance will be demonstrated by Method 22 periodic visual emission observations.
15. Acid Rain Part Application (Hard-copy Required) <input type="checkbox"/> Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID: _____ <input type="checkbox"/> Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID: _____ <input type="checkbox"/> New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID: _____ <input type="checkbox"/> Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID: _____ <input type="checkbox"/> Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.) Attached, Document ID: _____ <input type="checkbox"/> Phase NOx Averaging Plan (Form No. 62-210.900(1)(a)5.) Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable

**III. EMISSIONS UNIT INFORMATION**

A separate Emissions Unit Information Section (including subsections A through J as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

**A. GENERAL EMISSIONS UNIT INFORMATION  
(All Emissions Units)**

**Emissions Unit Description and Status**

<p>1. Type of Emissions Unit Addressed in This Section: (Check one)</p> <p><input type="checkbox"/> This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).</p> <p><input checked="" type="checkbox"/> This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.</p> <p><input type="checkbox"/> This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.</p>			
<p>2. Regulated or Unregulated Emissions Unit? (Check one)</p> <p><input checked="" type="checkbox"/> The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.</p> <p><input type="checkbox"/> The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.</p>			
<p>2. Description of Emissions Unit Addressed in This Section (limit to 60 characters):</p> <p>Application of various toners, stains, sealers, and top-coatings to wood components in several finishing booths. Curing ovens will also be included as part of the finishing operations. Also, glue/adhesives will be applied to the wood components during the manufacturing process.</p>			
<p>4. Emissions Unit Identification Number: <span style="float: right;"><input type="checkbox"/> No ID</span></p> <p>ID: 2 <span style="float: right;"><input type="checkbox"/> ID Unknown</span></p>			
<p>5. Emissions Unit Status Code: A</p>	<p>6. Initial Startup Date: 11/2000</p>	<p>7. Emissions Unit Major Group SIC Code: 24</p>	<p>8. Acid Rain Unit? <input type="checkbox"/></p>
<p>9. Emissions Unit Comment: (Limit to 500 Characters)</p>			



**Emissions Unit Control Equipment**

1. Control Equipment/Method Description (Limit to 200 characters per device or method):

N/A

2. Control Device or Method Code(s):

**Emissions Unit Details**

1. Package Unit: N/A

Manufacturer:

Model Number:

2. Generator Nameplate Rating:

MW

3. Incinerator Information:

Dwell Temperature:

°F

Dwell Time:

seconds

Incinerator Afterburner Temperature:

°F

**B. EMISSIONS UNIT CAPACITY INFORMATION  
(Regulated Emissions Units Only)**

**Emissions Unit Operating Capacity and Schedule**

1. Maximum Heat Input Rate:		mmBtu/hr
2. Maximum Incineration Rate:	lb/hr	tons/day
3. Maximum Process or Throughput Rate:	301 lb VOC/hr; 247 tons VOC/yr	
4. Maximum Production Rate:	193 cabinets/hour ; 910,000 cabinets/yr	
5. Requested Maximum Operating Schedule:		
	24 hours/day	7 days/week
	52 weeks/year	8,760 hours/year
6. Operating Capacity/Schedule Comment (limit to 200 characters):		

**C. EMISSIONS UNIT REGULATIONS  
(Regulated Emissions Units Only)**

**List of Applicable Regulations**

40 CFR 63, Subpart JJ (Wood Furniture NESHAP)	

**D. EMISSION POINT (STACK/VENT) INFORMATION  
(Regulated Emissions Units Only)**

**Emission Point Description and Type**

1. Identification of Point on Plot Plan or Flow Diagram? See flow diagram in Attachment A		2. Emission Point Type Code: 3	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point):  The application of finishing materials will be conducted in several spray booths. Fumes from the spray booths will be vented to the atmosphere by a series of exhaust fans through a series of exhaust stacks. Fumes from the application of glues/adhesives will be vented through building vents.  Stack parameter information for the spray booths is provided below.			
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:  N/A			
5. Discharge Type Code: V	6. Stack Height: 35 feet	7. Exit Diameter: 1.75 feet	
8. Exit Temperature: ambient	9. Actual Volumetric Flow Rate: approx. 6,000-8,000 cfm per booth	10. Water Vapor: %	
11. Maximum Dry Standard Flow Rate: dscfm		12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates: Zone: East (km): North (km):			
14. Emission Point Comment (limit to 200 characters):			

**E. SEGMENT (PROCESS/FUEL) INFORMATION  
(All Emissions Units)**

**Segment Description and Rate:** Segment 1 of 1

1. Segment Description (Process/Fuel Type) (limit to 500 characters):  Application of various finishing materials and glue/adhesives to wood components.		
2. Source Classification Code (SCC): 4-02-021-01,05,06,08		3. SCC Units: Tons solvent in coatings
4. Maximum Hourly Rate: 0.15 tons/hr (see below)	5. Maximum Annual Rate: 247 tons/yr (see below)	6. Estimated Annual Activity Factor: N/A
7. Maximum % Sulfur: N/A	8. Maximum % Ash: N/A	9. Million Btu per SCC Unit: N/A
10. Segment Comment (limit to 200 characters):  For above items 4. and 5., maximum hourly and annual rates will correspond to the amount of VOC (solvent) in the coatings/finishing materials and glue adhesives. 301 lbs (0.15 tons) of VOC/hr and 247 tons of VOC/yr represent the maximum hourly and annual rates, respectively.		

**Segment Description and Rate:** Segment \_\_\_\_ of \_\_\_\_

1. Segment Description (Process/Fuel Type) (limit to 500 characters):		
2. Source Classification Code (SCC):		3. SCC Units:
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters):		

**F. EMISSIONS UNIT POLLUTANTS  
(All Emissions Units)**

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
VOC, HAPS	N/A	N/A	EL

**G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION  
(Regulated Emissions Units -  
Emissions-Limited and Preconstruction Review Pollutants Only)**

**Potential/Fugitive Emissions**

1. Pollutant Emitted: VOC, HAPS		2. Total Percent Efficiency of Control: 0 %	
3. Potential Emissions: 301 lb/hr    247 tons/yr		4. Synthetically Limited? [ <input checked="" type="checkbox"/> ]	
5. Range of Estimated Fugitive Emissions: [ ] 1    [ ] 2    [ ] 3    _____ to _____ tons/year			
6. Emission Factor: N/A Reference:		7. Emissions Method Code: 2	
8. Calculation of Emissions (limit to 600 characters):  See Attachment B for detailed emission calculations			
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):  Emissions limited based on maximum expected material usage rates of 301 lb VOC/hr and 247 tons VOC/yr.			

**Allowable Emissions** Allowable Emissions:

1. Basis for Allowable Emissions Code: RULE, ESCPSD		2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: 0.8 lb VHAP/lb solids average across all coatings and 0.2 lb VHAP/lb solids for contact adhesives (40 CFR 63, Subpart JJ)		4. Equivalent Allowable Emissions: 301 lb/hr    247 tons/yr	
5. Method of Compliance (limit to 60 characters):  Maintain records of material usage information.			
6. Allowable Emissions Comment (Desc. Of Operating Method) (limit to 200 characters):			

**H. VISIBLE EMISSIONS INFORMATION  
(Only Regulated Emissions Units Subject to a VE Limitation)**

**Visible Emissions Limitation:** N/A

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: [ ] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions:           %       Exceptional Conditions:       % Maximum Period of Excess Opacity Allowed:                        min/hour	
3. Method of Compliance:	
5. Visible Emissions Comment (limit to 200 characters):	

**I. CONTINUOUS MONITOR INFORMATION  
(Only Regulated Emissions Units Subject to Continuous Monitoring)**

**Continuous Monitoring System:** Continuous Monitor: N/A

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	[ ] Rule [ ] Other
4. Monitor Information: Manufacturer: Model Number:                                       Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters):	



**J. EMISSIONS UNIT SUPPLEMENTAL INFORMATION  
(Regulated Emissions Units Only)**

**Supplemental Requirements**

<p>1. Process Flow Diagram  <input checked="" type="checkbox"/> Attached, Document ID: see Attachment A   <input type="checkbox"/> Not Applicable   <input type="checkbox"/> Waiver Requested</p>
<p>2. Fuel Analysis or Specification  <input type="checkbox"/> Attached, Document ID: _____   <input checked="" type="checkbox"/> Not Applicable   <input type="checkbox"/> Waiver Requested</p>
<p>3. Detailed Description of Control Equipment  <input type="checkbox"/> Attached, Document ID: _____   <input checked="" type="checkbox"/> Not Applicable   <input type="checkbox"/> Waiver Requested</p>
<p>4. Description of Stack Sampling Facilities  <input type="checkbox"/> Attached, Document ID: _____   <input checked="" type="checkbox"/> Not Applicable   <input type="checkbox"/> Waiver Requested</p>
<p>5. Compliance Test Report  <input type="checkbox"/> Attached, Document ID: _____  <input type="checkbox"/> Previously submitted, Date: _____  <input checked="" type="checkbox"/> Not Applicable</p>
<p>6. Procedures for Startup and Shutdown  <input type="checkbox"/> Attached, Document ID: _____   <input checked="" type="checkbox"/> Not Applicable   <input type="checkbox"/> Waiver Requested</p>
<p>7. Operation and Maintenance Plan  <input type="checkbox"/> Attached, Document ID: _____   <input type="checkbox"/> Not Applicable   <input checked="" type="checkbox"/> Waiver Requested                      The facility has prepared and maintains a work practice implementation plan as required by 40 CFR 63, Subpart JJ.</p>
<p>8. Supplemental Information for Construction Permit Application  <input type="checkbox"/> Attached, Document ID: _____   <input checked="" type="checkbox"/> Not Applicable</p>
<p>9. Other Information Required by Rule or Statute  <input type="checkbox"/> Attached, Document ID: _____   <input checked="" type="checkbox"/> Not Applicable</p>
<p>10. Supplemental Requirements Comment:</p>          

Emissions Unit Information Section 2 of 2

**Additional Supplemental Requirements for Title V Air Operation Permit Applications**

11. Alternative Methods of Operation <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
12. Alternative Modes of Operation (Emissions Trading) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
13. Identification of Additional Applicable Requirements <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
14. Compliance Assurance Monitoring Plan <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable * Compliance with HAP emission limits will be based on material usage tracking software. See Attachment C for example report.
15. Acid Rain Part Application (Hard-copy Required) <input type="checkbox"/> Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID: _____ <input type="checkbox"/> Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID: _____ <input type="checkbox"/> New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID: _____ <input type="checkbox"/> Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID: _____ <input type="checkbox"/> Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.) Attached, Document ID: _____ <input type="checkbox"/> Phase NOx Averaging Plan (Form No. 62-210.900(1)(a)5.) Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable

**ATTACHMENT A**

**Process Description**

## PROCESS DESCRIPTION

The proposed wood cabinet manufacturing facility includes two primary processing areas: woodworking and finishing. A process flow diagram for the facility operations is shown in Figure 1.

The woodworking operations consist of machinery used to form wood cabinet and frame components from previously milled wood. The woodworking machinery includes equipment such as saws, borers, routers, and shaping and carving machines. After the machining operations, the wood parts are glued to form panels, frames, and doors in a component assembly process. Then the wood parts are exposed to a variety of sanding operations prior to the application of finishing materials. A wood dust collection system is employed for removing dust and chips from the processing operations described above. The dust collection system configuration consists of rigid ductwork from each dust generating equipment unit connected to common fabric filter baghouses. Exhaust from the baghouses is normally returned to the manufacturing building but can also be vented to the atmosphere via exhaust stacks.

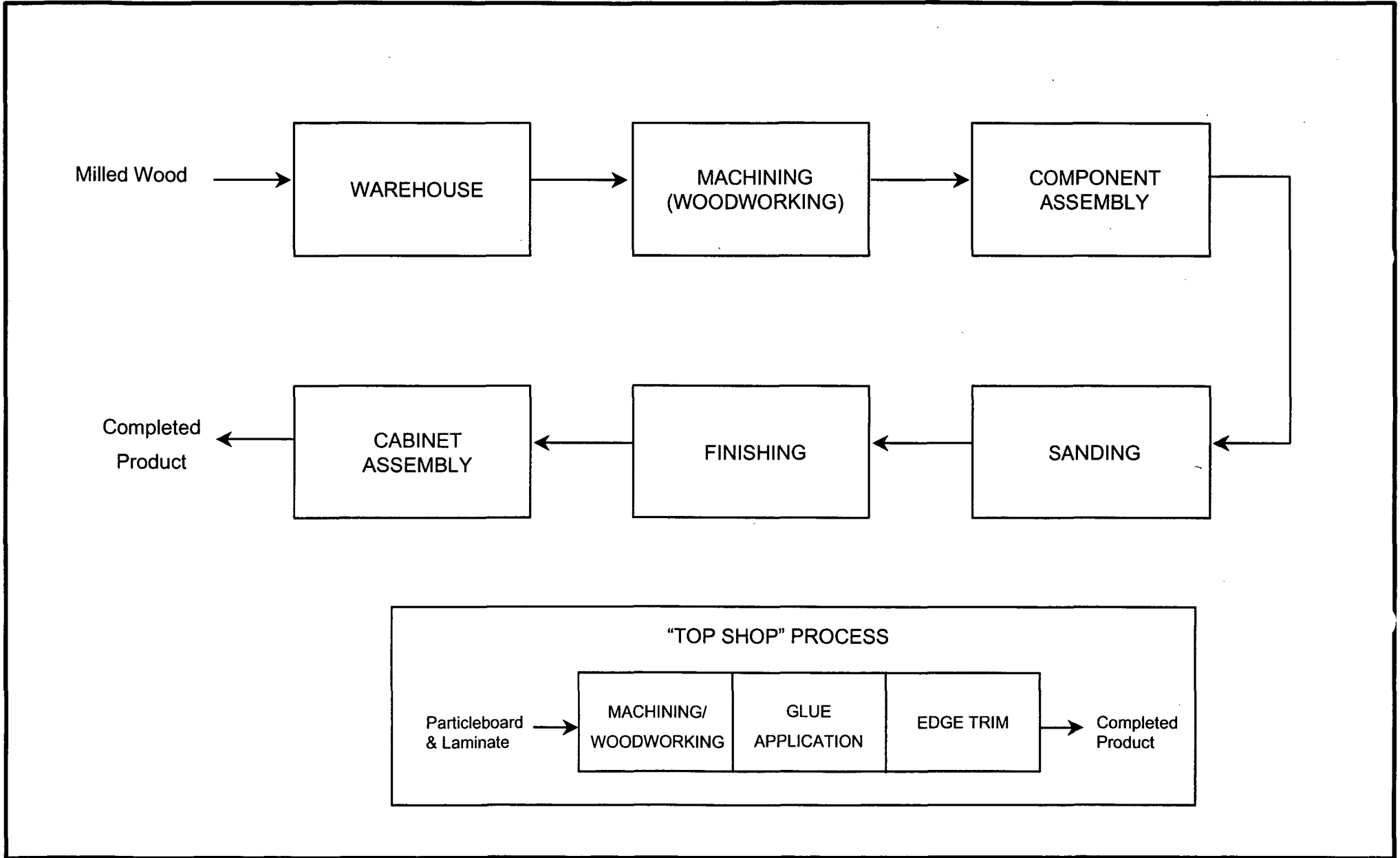
The wood cabinet parts finishing system consists of a series of application spray booths, flash areas, brush and wipe sanding stations, and curing ovens. These processes are connected by an overhead conveyor system that continually moves the parts through the application and process steps. The process begins with the cabinet parts, such as doors, drawer fronts, and frames, being hung on an overhead conveyor with the use of specially designed hooks. The first on-line operation is a wiping or brushing process to clean the product prior to the first coating step. This operation, depending on line speed, is either manual or automated with the use of a light brush and vacuum system. A small dust collection device is used for dust collection with air returned to the manufacturing building. Next, toner is applied manually by operators using hand held high volume low-pressure (HVLV) spray guns. Toner is applied only to a small percentage of products to achieve certain colors or to harmonize the color of the wood. Also, stain is applied manually by operators again using HVLV spray guns in back-to-back spray booths. Stain is applied to approximately two-thirds of the product finished as required to change the

color of the wood. The stained product proceeds to a wiping area where the parts are hand wiped to achieve the desired consistent color. After wiping, the stained parts enter a low temperature oven operated in the range of 150 degrees Fahrenheit to thoroughly dry the stain.

A clear coat sealer is then applied manually by operators using HVLP or air assisted airless (or equivalent) spray guns in back-to-back spray booths. The clear coat sealer is applied to all products to seal the porosity of the wood. The clear coat sealed parts are allowed to flash in a ventilated flash area and then enter an oven where the clear coat is cured. After a short cool down period, the parts are sent to a sealer sand area for light sanding to remove any raised grain. Here the parts are inspected and readied for the application of the final clear topcoat. The dust generated by the sanding operation is collected by a small dust collection system with the air returned to the finishing room.

The parts then enter the last finishing process: the application of the clear topcoat. The topcoat is applied manually by operators using HVLP or air assisted airless (or equivalent) spray guns in back-to-back spray booths. The top-coated parts are allowed to flash in a ventilated flash area and then enter an oven where the topcoat is cured. The parts are allowed to cool on-line for a short time prior to being moved to the cabinet assembly area where final products are assembled.

Additional off-line spray booths are also be required for touch-up and repair, special parts or products, or special colors. Generally, these systems are not conveyORIZED and parts are moved manually to the off-line ovens, sanding, or wiping areas. Also, a separate "top-shop" side operation is used to produce laminated cabinet tops. This operation includes machining operations, glue application, and a final edge trim step. Particulate matter emissions generated from the machining operations are controlled by a small dust collection system with air returned to the manufacturing building.



**ATTACHMENT B**  
**Emission Calculations**

**Emission Summary**  
**Merillat Corporation - Ocala Facility**

Emission Unit ID Number	Process/Emission Activity	Maximum Expected Emissions, tons/year		
		VOC	HAP*	TSP/PM <sub>10</sub>
1	Woodworking/Machining			0.65
	Brushing			0.077
	Light Sanding			0.15
	Top-Shop Woodworking/Machining			0.28
2	Finishing Material Application	236	236	
	Hard Glue Application	0.051	0.003	
	Label Glue Application	0.028	0.028	
	Top-Shop Glue Application	11	11	
<b>Facility Totals</b>		<b>247.1</b>	<b>247.0</b>	<b>1.2</b>

\* Facility will comply with VHAP emission standards & work practice standards prescribed by the Wood Furniture NESHAP.



**MERILLAT CORPORATION  
CALCULATION SHEET**

PROCESS: Machining  
(Woodworking Operations)

POLLUTANT: Particulate  
Matter (TSP/PM<sub>10</sub>)

EQUIPMENT: Miscellaneous  
woodworking equipment

Woodworking equipment and machinery including various wood sawing, sanding, and fabrication equipment will be used to form the wood cabinet components. Emissions of particulate matter from the woodworking operations will be controlled by a baghouse system operating at an estimated control efficiency of 99.9 percent.

Proposed Operating Data

Maximum annual production	= 910,000 cabinets/yr
Maximum hourly production	= 193 cabinets/hr
Estimated amount of material wasted	= 4.8 board ft/cabinet (includes chop waste, molding & sanding waste)
Material weight per board foot	= 3.7 lb/board ft
Estimated particulate portion of wasted material	= 8 % (percentage to dust collector)
Dust collector design control efficiency	= 99.9 %

Maximum Expected TSP/PM<sub>10</sub> Emissions

*Hourly Emissions:*

Waste material generated	= 193 cabinets/hr x 4.8 board ft/cabinet x 3.7 lb/board ft = 3,428 lb/hr
Hourly particulate emissions	= 3,428 lb/hr x 0.08 x (1 - 0.999) = 0.27 lb/hr

*Annual Emissions:*

Waste material generated	= 910,000 cabinets/yr x 4.8 board ft/cabinet x 3.7 lb/board ft = 16,161,600 lb/yr
Annual particulate emissions	= 16,161,600 lb/yr x 0.08 x (1 - 0.999) x ton/2,000 lb = 0.65 tons/yr

**MERILLAT CORPORATION  
CALCULATION SHEET**

PROCESS: Brushing	POLLUTANT: Particulate Matter (TSP/PM <sub>10</sub> )	EQUIPMENT: Manual or automated brushing system																				
<p>During the finishing operation, the wood cabinet components will be lightly brushed prior to the application of the first coating. Emissions of particulate matter from this operation will be controlled by a baghouse dust collection system operating at an estimated control efficiency of 99 percent. The baghouse system will vent inside the manufacturing building.</p> <p><u>Proposed Operating Data</u></p> <table style="width: 100%; border: none;"> <tr> <td style="width: 40%;">Maximum annual cabinet production</td> <td style="width: 60%;">= 910,000 cabinets/yr</td> </tr> <tr> <td>Maximum hourly cabinet production</td> <td>= 193 cabinets/hr</td> </tr> <tr> <td>Cabinet size (wood surface area)</td> <td>= 16.25 ft<sup>2</sup> per cabinet</td> </tr> <tr> <td>Wood removed from surface</td> <td>= 0.00025 inch</td> </tr> <tr> <td>Density of wood</td> <td>= 50 lb/ft<sup>3</sup></td> </tr> <tr> <td>Control efficiency</td> <td>= 99 %</td> </tr> </table> <p><u>Maximum Expected TSP/PM<sub>10</sub> Emissions</u></p> <p><i>Hourly emissions:</i></p> <table style="width: 100%; border: none;"> <tr> <td style="width: 40%;">Wood volume removed</td> <td style="width: 60%;">= 193 cabinets/hr × 16.25 ft<sup>2</sup> × 0.00025 inch × ft/12 inches = 0.07 ft<sup>3</sup>/hr</td> </tr> <tr> <td>Hourly particulate emissions</td> <td>= 0.07 ft<sup>3</sup>/hr × 50 lb/ft<sup>3</sup> × (1 - 0.99) = 0.04 lb/hr</td> </tr> </table> <p><i>Annual emissions:</i></p> <table style="width: 100%; border: none;"> <tr> <td style="width: 40%;">Wood volume removed</td> <td style="width: 60%;">= 910,000 cabinets/yr × 16.25 ft<sup>2</sup>/cabinet × 0.00025 inch × ft/12 inches = 308 ft<sup>3</sup>/yr</td> </tr> <tr> <td>Annual particulate emissions</td> <td>= 308 ft<sup>3</sup>/yr × 50 lb/ft<sup>3</sup> × (1 - 0.99) × ton/2,000 lb = 0.077 ton/yr</td> </tr> </table>			Maximum annual cabinet production	= 910,000 cabinets/yr	Maximum hourly cabinet production	= 193 cabinets/hr	Cabinet size (wood surface area)	= 16.25 ft <sup>2</sup> per cabinet	Wood removed from surface	= 0.00025 inch	Density of wood	= 50 lb/ft <sup>3</sup>	Control efficiency	= 99 %	Wood volume removed	= 193 cabinets/hr × 16.25 ft <sup>2</sup> × 0.00025 inch × ft/12 inches = 0.07 ft <sup>3</sup> /hr	Hourly particulate emissions	= 0.07 ft <sup>3</sup> /hr × 50 lb/ft <sup>3</sup> × (1 - 0.99) = 0.04 lb/hr	Wood volume removed	= 910,000 cabinets/yr × 16.25 ft <sup>2</sup> /cabinet × 0.00025 inch × ft/12 inches = 308 ft <sup>3</sup> /yr	Annual particulate emissions	= 308 ft <sup>3</sup> /yr × 50 lb/ft <sup>3</sup> × (1 - 0.99) × ton/2,000 lb = 0.077 ton/yr
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**MERILLAT CORPORATION  
CALCULATION SHEET**

PROCESS: Sanding	POLLUTANT: Particulate Matter (TSP/PM <sub>10</sub> )	EQUIPMENT: Manual or automated sanding system																				
<p>During the finishing operation, the wood cabinet components will be sanded prior to the application of the final topcoat. Emissions of particulate matter from this operation will be controlled by a baghouse dust collection system operating at an estimated control efficiency of 99 percent. The baghouse system will vent inside the manufacturing building.</p> <p><u>Proposed Operating Data</u></p> <table style="width: 100%; border: none;"> <tr> <td style="width: 40%;">Maximum annual cabinet production</td> <td style="width: 60%;">= 910,000 cabinets/yr</td> </tr> <tr> <td>Maximum hourly cabinet production</td> <td>= 193 cabinets/hr</td> </tr> <tr> <td>Cabinet size (wood surface area)</td> <td>= 16.25 ft<sup>2</sup> per cabinet</td> </tr> <tr> <td>Wood removed from surface</td> <td>= 0.0005 inch</td> </tr> <tr> <td>Density of wood</td> <td>= 50 lb/ft<sup>3</sup></td> </tr> <tr> <td>Control efficiency</td> <td>= 99 %</td> </tr> </table> <p><u>Maximum Expected TSP/PM<sub>10</sub> Emissions</u></p> <p><i>Hourly emissions:</i></p> <table style="width: 100%; border: none;"> <tr> <td style="width: 40%;">Wood volume removed</td> <td style="width: 60%;">= 193 cabinets/hr × 16.25 ft<sup>2</sup> × 0.0005 inch × ft/12 inches = 0.13 ft<sup>3</sup>/hr</td> </tr> <tr> <td>Hourly particulate emissions</td> <td>= 0.13 ft<sup>3</sup>/hr × 50 lb/ft<sup>3</sup> × (1 - 0.99) = 0.065 lb/hr</td> </tr> </table> <p><i>Annual emissions:</i></p> <table style="width: 100%; border: none;"> <tr> <td style="width: 40%;">Wood volume removed</td> <td style="width: 60%;">= 910,000 cabinets/yr × 16.25 ft<sup>2</sup>/cabinet × 0.0005 inch × ft/12 inches = 616 ft<sup>3</sup>/yr</td> </tr> <tr> <td>Annual particulate emissions</td> <td>= 616 ft<sup>3</sup>/yr × 50 lb/ft<sup>3</sup> × (1 - 0.99) × ton/2,000 lb = 0.15 ton/yr</td> </tr> </table>			Maximum annual cabinet production	= 910,000 cabinets/yr	Maximum hourly cabinet production	= 193 cabinets/hr	Cabinet size (wood surface area)	= 16.25 ft <sup>2</sup> per cabinet	Wood removed from surface	= 0.0005 inch	Density of wood	= 50 lb/ft <sup>3</sup>	Control efficiency	= 99 %	Wood volume removed	= 193 cabinets/hr × 16.25 ft <sup>2</sup> × 0.0005 inch × ft/12 inches = 0.13 ft <sup>3</sup> /hr	Hourly particulate emissions	= 0.13 ft <sup>3</sup> /hr × 50 lb/ft <sup>3</sup> × (1 - 0.99) = 0.065 lb/hr	Wood volume removed	= 910,000 cabinets/yr × 16.25 ft <sup>2</sup> /cabinet × 0.0005 inch × ft/12 inches = 616 ft <sup>3</sup> /yr	Annual particulate emissions	= 616 ft <sup>3</sup> /yr × 50 lb/ft <sup>3</sup> × (1 - 0.99) × ton/2,000 lb = 0.15 ton/yr
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**MERILLAT CORPORATION  
CALCULATION SHEET**

PROCESS: "Top Shop" Machining	POLLUTANT: TSP/PM <sub>10</sub>	EQUIPMENT: Miscellaneous woodworking equipment																				
<p>As part of the "top shop" operations, machining or woodworking equipment will be used to form the cabinet tops. Emissions of particulate matter from this processing will be controlled by a baghouse dust collector.</p> <p><u>Proposed Operating Data</u></p> <table style="width: 100%; border: none;"> <tr> <td style="padding-left: 20px;">Maximum annual throughput</td> <td style="padding-left: 20px;">= 260,000 lineal ft/yr</td> </tr> <tr> <td style="padding-left: 20px;">Maximum hourly throughput</td> <td style="padding-left: 20px;">= 300 lineal ft/hr</td> </tr> <tr> <td style="padding-left: 20px;">Material density</td> <td style="padding-left: 20px;">= 42 lb/ft<sup>3</sup></td> </tr> <tr> <td style="padding-left: 20px;">Material removed (dimensions of cut)</td> <td style="padding-left: 20px;">= 8 ft of 1/8 inch x 3/4 inch per lineal ft</td> </tr> <tr> <td style="padding-left: 20px;">Dust collector design control efficiency</td> <td style="padding-left: 20px;">= 99 %</td> </tr> </table> <p><u>Maximum Expected TSP/PM<sub>10</sub> Emissions</u></p> <table style="width: 100%; border: none;"> <tr> <td style="padding-left: 20px;">Estimated hourly emissions</td> <td style="padding-left: 20px;">= 300 lin ft/hr x 8 ft/ft x (1/8 in x 3/4 in)x ft<sup>2</sup>/144 in<sup>2</sup> x 42 lb/ft<sup>3</sup> x (1 - 0.99)</td> </tr> <tr> <td></td> <td style="padding-left: 20px;">= 0.66 lb/hr</td> </tr> <tr> <td style="padding-left: 20px;">Estimated annual emissions</td> <td style="padding-left: 20px;">= 260,000 lin ft/yr x 8 ft/ft x (1/8 in x 3/4 in)x ft<sup>2</sup>/144 in<sup>2</sup> x 42 lb/ft<sup>3</sup> x (1 - 0.99)</td> </tr> <tr> <td></td> <td style="padding-left: 20px;">= 569 lb/yr x ton/2,000 lb</td> </tr> <tr> <td></td> <td style="padding-left: 20px;">= 0.28 ton/yr</td> </tr> </table>			Maximum annual throughput	= 260,000 lineal ft/yr	Maximum hourly throughput	= 300 lineal ft/hr	Material density	= 42 lb/ft <sup>3</sup>	Material removed (dimensions of cut)	= 8 ft of 1/8 inch x 3/4 inch per lineal ft	Dust collector design control efficiency	= 99 %	Estimated hourly emissions	= 300 lin ft/hr x 8 ft/ft x (1/8 in x 3/4 in)x ft <sup>2</sup> /144 in <sup>2</sup> x 42 lb/ft <sup>3</sup> x (1 - 0.99)		= 0.66 lb/hr	Estimated annual emissions	= 260,000 lin ft/yr x 8 ft/ft x (1/8 in x 3/4 in)x ft <sup>2</sup> /144 in <sup>2</sup> x 42 lb/ft <sup>3</sup> x (1 - 0.99)		= 569 lb/yr x ton/2,000 lb		= 0.28 ton/yr
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	= 0.28 ton/yr																					

**MERILLAT CORPORATION  
CALCULATION SHEET**

PROCESS: Application of toners, stains, sealers, and topcoats

POLLUTANT: VOCs, HAPs

EQUIPMENT: Finishing booths, spray guns, storage area, and curing ovens

Various toners, stains, sealers, and topcoats will be applied to the wood cabinet parts in several finishing booths. The application will be done manually by operators using hand held HVLP or air assisted airless (or equivalent) spray guns. The finishing operations will generate emissions of VOCs and HAPs.

Proposed Operating Data

Maximum hourly production rate	= 193 cabinets per hour
Hourly usage of finishing materials	= 47 gallons/hr (maximum)
VOC content in finishing materials	= 6 lb/gallon (average)
Annual VOC throughput in finishing materials	= 472,000 lbs/yr (maximum)

Maximum Expected VOC Emissions

Hourly emissions	= 47 gallons/hr × 6 lb VOC/gal	= 282 lb/hr
Annual emissions	= 472,000 lb VOC/yr × ton/2,000 lb	= 236 tons/yr

**MERILLAT CORPORATION  
CALCULATION SHEET**

PROCESS: Component/Cabinet Assembly	POLLUTANT: VOC, HAP	EQUIPMENT: Hard glue applicator																		
<p>In the component and cabinet assembly process, a hard-type glue will be applied to certain wood components.</p> <p><u>Proposed Operating Data</u></p> <table style="width: 100%; border: none;"> <tr> <td style="padding-left: 20px;">Maximum annual material throughput</td> <td style="padding-left: 20px;">= 24 drums per year (1,320 gallons/yr)</td> </tr> <tr> <td style="padding-left: 20px;">Maximum hourly material throughput</td> <td style="padding-left: 20px;">= 2 gallons/hr</td> </tr> <tr> <td style="padding-left: 20px;">Material density</td> <td style="padding-left: 20px;">= 9.26 lb/gallon</td> </tr> <tr> <td style="padding-left: 20px;">VOC content</td> <td style="padding-left: 20px;">= 0.077 lb VOC/gallon</td> </tr> <tr> <td style="padding-left: 20px;">HAP (vinyl acetate) content</td> <td style="padding-left: 20px;">= 0.005 lb HAP/gallon (vinyl acetate)</td> </tr> </table> <p><u>Maximum Expected VOC Emissions</u></p> <table style="width: 100%; border: none;"> <tr> <td style="padding-left: 20px;">Estimated hourly VOC emissions</td> <td style="padding-left: 20px;">= 2 gallons/hr x 0.077 lb VOC/gallon = 0.15 lb/hr</td> </tr> <tr> <td style="padding-left: 20px;">Estimated annual VOC emissions</td> <td style="padding-left: 20px;">= 1,320 gallons/yr x 0.077 lb/gallon x ton/2,000 lb = 0.051 tons/yr</td> </tr> </table> <p><u>Maximum Expected HAP Emissions</u></p> <table style="width: 100%; border: none;"> <tr> <td style="padding-left: 20px;">Estimated hourly HAP emissions</td> <td style="padding-left: 20px;">= 2 gallons/hr x 0.005 lb VOC/gallon = 0.01 lb/hr of vinyl acetate</td> </tr> <tr> <td style="padding-left: 20px;">Estimated annual HAP emissions</td> <td style="padding-left: 20px;">= 1,320 gallons/yr x 0.005 lb/gallon x ton/2,000 lb = 0.003 tons/yr of vinyl acetate</td> </tr> </table>			Maximum annual material throughput	= 24 drums per year (1,320 gallons/yr)	Maximum hourly material throughput	= 2 gallons/hr	Material density	= 9.26 lb/gallon	VOC content	= 0.077 lb VOC/gallon	HAP (vinyl acetate) content	= 0.005 lb HAP/gallon (vinyl acetate)	Estimated hourly VOC emissions	= 2 gallons/hr x 0.077 lb VOC/gallon = 0.15 lb/hr	Estimated annual VOC emissions	= 1,320 gallons/yr x 0.077 lb/gallon x ton/2,000 lb = 0.051 tons/yr	Estimated hourly HAP emissions	= 2 gallons/hr x 0.005 lb VOC/gallon = 0.01 lb/hr of vinyl acetate	Estimated annual HAP emissions	= 1,320 gallons/yr x 0.005 lb/gallon x ton/2,000 lb = 0.003 tons/yr of vinyl acetate
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**MERILLAT CORPORATION  
CALCULATION SHEET**

PROCESS: Component/Cabinet  
Assembly

POLLUTANT: VOC

EQUIPMENT: Label glue  
applicator

In the component and cabinet assembly process, a glue material will be used to attach a product label to the products.

Proposed Operating Data

Maximum annual material throughput	= 25 drums per year (1,375 gallons/yr)
Maximum hourly material throughput	= 2 gallons/hr
Material density	= 9.5 lb/gallon
VOC content	= 0.041 lb VOC/gallon

Maximum Expected VOC Emissions

Estimated hourly VOC emissions	= 2 gallons/hr x 0.041 lb VOC/gallon = 0.082 lb/hr
Estimated annual VOC emissions	= 1,375 gallons/yr x 0.041 lb/gallon x ton/2,000 lb = 0.028 tons/yr

**MERILLAT CORPORATION  
CALCULATION SHEET**

PROCESS: "Top Shop" Glue Application	POLLUTANT: VOC	EQUIPMENT: Glue application station												
<p>As part of the "top shop" operations, a glue or adhesive material will be used to attach laminate to the particleboard.</p> <p><u>Proposed Operating Data</u></p> <table style="width: 100%;"><tr><td style="width: 40%;">Maximum annual material throughput</td><td>= 3,454 gallons/yr</td></tr><tr><td>Maximum hourly material throughput</td><td>= 3 gallons/hr</td></tr><tr><td>VOC content of material</td><td>= 90 % by weight</td></tr><tr><td>Material density</td><td>= 7 lb/gallon</td></tr></table> <p><u>Maximum Expected VOC Emissions</u></p> <table style="width: 100%;"><tr><td style="width: 40%;">Estimated hourly VOC emissions</td><td>= 3 gal/hr x 0.9 x 7lb/gal = 19 lb/hr</td></tr><tr><td>Estimated annual VOC emissions</td><td>= 3,454 gal/yr x 0.9 x 7 lb/gal x ton/2,000 lb = 11 tons/yr</td></tr></table>			Maximum annual material throughput	= 3,454 gallons/yr	Maximum hourly material throughput	= 3 gallons/hr	VOC content of material	= 90 % by weight	Material density	= 7 lb/gallon	Estimated hourly VOC emissions	= 3 gal/hr x 0.9 x 7lb/gal = 19 lb/hr	Estimated annual VOC emissions	= 3,454 gal/yr x 0.9 x 7 lb/gal x ton/2,000 lb = 11 tons/yr
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**ATTACHMENT C**

**Compliance Report & Certification**

## COMPLIANCE REPORT AND CERTIFICATION

### Compliance Report

The Merillat-Ocala facility is operating in compliance with all applicable air quality requirements. For Emissions Unit 1 (woodworking operations), a Method 9 compliance test report dated November 29, 2000 has been submitted to the Florida Department of Environmental Protection. For Emissions Unit 2 (finishing operations), Merillat has developed and maintains a work practice implementation plan in accordance with 40 CFR Subpart 63, Subpart JJ. Also for Emissions Unit 2, a material tracking system (REGMET) has been implemented to quantify and record HAP usage from the application of finishing materials for demonstrating compliance with applicable emission limitations prescribed by 40 CFR 63, Subpart JJ. An example REGMET report is included on the following page.

### Compliance Certification

Merillat Corporation proposes to submit periodic compliance certification statements annually to the Florida Department of Environmental Protection (DEP) throughout the Title V permit term for the Merillat-Ocala facility.

I, the undersigned, am the responsible official as defined in Chapter 62-210.200, F.A.C., of the Title V source for which this report is being submitted. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made and data contained in this report are true, accurate, and complete.

  
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Signature

2/26/01  
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Date

TOTAL FOR YEAR  
2000

# Finishing Emissions AND Product Usage Summary

Product Usage Summary followed by the Chemical Usage and Emission Summary.

Sections Shown: Source; Emissions HAVE NOT been adjusted for Hazardous Waste entries;

Printed 12/29/2000

From 11/1/2000 to 12/31/2000

Data File :C:\REGMET\DATA\ICCALA.MDB

Permit ID: 0830137-001-AC Merital-Ocala

Emission Sources queried in this report's data:

Facility ID	Equipment ID	Description	Transfer Efficiency*	PM Control Efficiency*	VOC Control Efficiency*	Control Efficiency*	Hours Of Operation*
Ocala	app1	70,000 CFM air make-up system	65.000%	NA	NA	NA	NA

\* Transfer, PM, and VOC Efficiencies apply only to Finishing Sources

\* Total Control Efficiency for Boilers and Wood Dust

\* NA Indicates no schedule set up

ApplicationSystemID app1 70,000 CFM air make-up system

ApplicationMethod hvlp

Product Summary:

Product ID:	Amount (gal)	Solids(Lbs) Used	Solids(Lbs) Emitted	VOC(Lbs) Used	VOC(Lbs) Emitted	#VOC/ #Solid	VHAP(Lbs) Used	VHAPS(Lbs) Emitted	#VHAP /# Solid	HAP(lbs) Used	HAPS(lbs) Emitted	#HAP/ # Solid
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Regular Product Usage

371-W6V-734	1.00	0.35	0.12	5.09	5.09	14.45	2.7E-2	2.7E-2	0.08	2.7E-2	2.7E-2	0.08
371-W6W-762	46.5	91.9	32.2	55.3	55.3	0.60	0.13	0.13	0.00	0.13	0.13	0.00
480-X6V-1768	81.0	0	0	559.7	559.7	NA	0	0	NA	0	0	NA
542-D6V-4385	1.00	0.31	0.11	6.21	6.21	19.73	4.4E-3	4.4E-3	0.01	4.4E-3	4.4E-3	0.01
542-D6V-4386	98.5	60.1	21.0	598.9	598.9	9.97	12.4	12.4	0.21	12.5	12.4	0.21
542-W6V-4387	1.00	1.07	0.37	5.99	5.99	5.62	0	0	0.00	0	0	0.00
630-50L6V-1824	185.5	536.9	187.9	903.4	903.4	1.68	199.5	199.5	0.37	199.5	199.5	0.37
630-PJ3V-1820	6.98	32.7	11.4	29.3	29.6	0.90	13.1	13.1	0.40	13.1	13.1	0.40

Total Regular Usage

Total Amount (gal)	Total Solids (Lbs) Used	Total Solids (Lbs) Emitted	Total VOC (Lbs) Used	Total VOC (Lbs) Emitted	#VOC/ #Solid	Total VHAP (lbs) Used	Total VHAPS (lbs) Emitted	#VHAP /# Solid	Total HAP (lbs) Used	Total HAPS (lbs) Emitted	#HAP/ # Solid
425.4	723.4	253.2	2,164.1	2,164.1	2.99	225.2	225.2	0.31	225.2	225.2	0.31

Application System:

Total Gallons Used	Total Solids (Lbs) Used	Total Solids (Lbs) Emitted	Total VOC (Lbs) Used	Total VOC (Lbs) Emitted	#VOC/ #Solid	Total VHAP (lbs) Used	Total VHAPS (lbs) Emitted	#VHAP /# Solid	Total HAP (lbs) Used	Total HAPS (lbs) Emitted	#HAP/ # Solid
425.4	723.4	253.2	2,164.1	2,164.1	2.99	225.2	225.2	0.31	225.2	225.2	0.31

Grand Totals:

If you have VOC Control devices, you can use this ratio:  
Lbs VHAPS Emitted/ Lbs Solids Used: 0.31

Application System Component Summary

CAS #	Chemical Name	Used (lbs)	Emissions Stack (Lbs)	Emissions Fugitive (Lbs)	Emissions Total (Lbs)	HAPS	VHAPS	SARA313
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Summary Chemicals and Criteria Chemicals

Finishing Emissions AND Product Usage Summary

REGMET 6.25, ERA Environmental Consulting, Inc. ©2000

NO. 692 P. 2

FEB. 19. 2001 1:35PM

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