Merillat.

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October 7, 2004

Mr. Al Linero
Division of Air Resource Management
Florida Department of Environmental Protection
2600 Blair Stone Road MS 5500
Tallahassee, FL 32399-2400

Re: Air Permit Application
Merillat Corporation – Ocala Facility (Facility ID No.: 0830137)

Dear Mr. Linero:

Please find enclosed four signed copies of the Air Construction & Revised Title V Permit Application for the Merillat Corporation - Ocala Facility. In response to a recent increase in consumer demand for our products, this application addresses our request for approval to install new manufacturing equipment for the production of additional wood cabinets. The application was prepared on the basis that our proposed modification is subject to Prevention of Significant Deterioration (PSD) review for emissions of volatile organic compounds (VOCs). We have enclosed a check in the amount of $7,750.00 to cover the applicable permit application fees.

Please contact Donna Tackett, our Environmental, Health, and Safety Coordinator, at (352) 291-4622 if you have any questions or require additional information.

Sincerely,

Michael Stickles
Plant Manager

MERILLAT CORPORATION

Enclosures

MALCOLM PIRNIE

RECEIVED
OCT 12 2004
BUREAU OF AIR REGULATION

AIR CONSTRUCTION PERMIT & REVISED TITLE V PERMIT APPLICATION

MERILLAT CORPORATION
OCALA FACILITY

Merillat.

OCTOBER 2004

Prepared by:

MALCOLM PIRNIE, INC.
701 Town Center Drive, Suite 600
Newport News, Virginia 23606

2767-024

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MALCOLM PIRNIE

INTRODUCTION & PSD APPLICABILITY

Merillat Corporation (Merillat), a division of Merillat Industries, LLC and owned by the MASCO Corporation, currently operates a wood furniture manufacturing facility in Ocala, Florida. The operations at the facility include woodworking and finishing operations for the manufacturing of kitchen and bath cabinets. The woodworking operations include machinery for manufacturing wood cabinet frames and doors. Baghouse dust collection systems are operated to minimize emissions of particulate matter from the woodworking operations. The finishing operations involve the application of stains, toners, sealers, top-coatings, glazes and other specialty finishes to the wood cabinet components and generate emissions of volatile organic compounds (VOCs) and hazardous air pollutants (HAPs).

Merillat received authorization to construct and operate the Ocala facility via a construction permit issued by the Florida Department of Environmental Protection (DEP) in 1999. Additionally, the Ocala facility is subject to Title V permitting requirements (as a major source of VOCs and HAPs) and operates under a Title V operating permit issued by DEP in 2001. As a major source of HAPs, the facility is also subject to requirements under 40 CFR Part 63, Subpart JJ – National Emission Standards for Wood Furniture Manufacturing Operations. The facility is currently limited by permit to 249 tons per year of VOC emissions. This emission limit is less than the 250 tons per year major source threshold under the Prevention of Significant Deterioration (PSD) provisions. Therefore, the Ocala facility is presently considered a minor source with respect to PSD permitting requirements.

To address an increase in consumer demand for wood cabinets, Merillat is proposing to modify the Ocala facility by installing additional equipment (new spray booths, curing ovens, and ancillary equipment). Operation of this new equipment will allow for the production of additional wood cabinets at the facility and result in an increase in air pollutant emissions (primarily VOCs and HAPs). Consequently, Merillat is requesting a new VOC emission limit for the facility of 411 tons per year. The installation of the new equipment is planned for the 1st and 2nd quarters of 2005 with start-up of this equipment by mid-2005.

Considering the proposed VOC emissions increase and past actual VOC emissions from the Ocala facility, a review of PSD applicability under §62-212.400 of the Florida Administrative Code was completed. As shown in the table below, an evaluation of past actual VOC emissions and future potential facility emissions shows a net emissions increase less than 250 tons per year.

VOC Emissions	Tons/Yr
Current VOC Emission Limit	249
Proposed VOC Emission Limit (future potential emissions)	411
Past Actual VOC Emissions (2-year average over past 24-months)	166
Net Emissions Increase (future potential – past actual emissions)	245

Since the net emissions increase in VOC emissions is below the 250 tons/year PSD major source threshold, the proposed modification seemingly qualifies as a minor modification and is thereby exempt from PSD review. Notwithstanding the above and in recognition of the types of emissions generating

units that constitute the finishing operations, as well as the lengthy construction period associated with the construction of the current facility, DEP has recommended that the proposed modification be treated as a modification subject to PSD preconstruction review. Therefore, Merillat has prepared this permit application to satisfy preconstruction review requirements in accordance with PSD permitting provisions.

To determine which pollutants are subject to PSD review (under the assumption that the facility is currently considered a PSD major source although the facility is currently limited by permit to 249 tons/year of VOC emissions), future potential emissions estimates were calculated to determine the net emissions increase associated with the proposed modification. For simplicity, past actual emissions for all pollutants except VOC were assumed to be negligible. Below is a summary of net emission increases associated with the proposed modification and corresponding PSD significant emission rate thresholds.

Pollutant	Net Emissions Increase*	PSD Significant Emission Rate Threshold	Subject to PSD Review?
Carbon Monoxide (CO)	7.8	100	No
Nitrogen Oxides (NO_x)	9.3	40	No
Sulfur Dioxide (SO_2)	0.1	40	No
Ozone – VOC	245	40	Yes
Particulate Matter	2.7	25	No
PM10	2.7	15	No

* For simplicity, the net emissions increase shown is equivalent to future potential emissions for the modified facility (ignoring past actual emissions) for all pollutants except VOC.

The above table indicates that the only pollutant subject to PSD review is VOC. As such, this permit application was prepared to satisfy PSD permitting requirements for VOC, as well as preconstruction and Title V permitting requirements in accordance with DEP guidelines. Certain items typically associated with PSD preconstruction review including an ambient impact analysis are not included in this permit application since the only pollutant subject to PSD review is VOC. Additionally, Merillat requests an exemption from preconstruction air quality monitoring on the basis that representative ozone monitoring data is available for the Ocala area. The following items are included in this permit application:

Item	Section
Introduction and PSD Applicability	1
DEP Form No. 62-210.900(1) Application for Air Construction Permit & Title V Permit Revision	2
Process Description and Emission Calculations	Appendix A
BACT Analysis	Appendix B
Compliance Report and Certification	Appendix C

MALCOLM PIRNIE

DEP PERMIT APPLICATION FORM NO. 62-210.900(1)

A completed DEP Form No. 62-210.900(1) is presented in this section for authorization to modify the Merillat-Ocala facility. This application covers Merillat's request for the issuance of an air construction permit and revision to the effective Title V air operation permit for the Ocala facility.

Department of
Environmental Protection

Division of Air Resource Management

APPLICATION FOR AIR PERMIT - LONG FORM

I. APPLICATION INFORMATION

Air Construction Permit – Use this form to apply for an air construction permit for a proposed project:

- subject to prevention of significant deterioration (PSD) review, nonattainment area (NAA) new source review, or maximum achievable control technology (MACT) review; or
- where the applicant proposes to assume a restriction on the potential emissions of one or more pollutants to escape a federal program requirement such as PSD review, NAA new source review, Title V, or MACT; or
- at an existing federally enforceable state air operation permit (FESOP) or Title V permitted facility.

Air Operation Permit – Use this form to apply for:

- an initial federally enforceable state air operation permit (FESOP); or
- an initial/revised/renewal Title V air operation permit.

Air Construction Permit & Revised/Renewal Title V Air Operation Permit (Concurrent Processing Option) – Use this form to apply for both an air construction permit and a revised or renewal Title V air operation permit incorporating the proposed project.

To ensure accuracy, please see form instructions.

Identification of Facility

1. Facility Owner/Company Name: Merillat Corporation	
2. Site Name: Merillat-Ocala	
3. Facility Identification Number: 0830137	
4. Facility Location... Street Address or Other Locator: 1300 S. W. 38th Avenue City: Ocala County: Marion Zip Code: 34474	
5. Relocatable Facility? ☐ Yes ☑ No	6. Existing Title V Permitted Facility? ☑ Yes ☐ No

Application Contact

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

Application Processing Information (DEP Use)

1. Date of Receipt of Application:	10-12-04
2. Project Number(s):	0830137-003-AC 0830137-004-AV
3. PSD Number (if applicable):	PSD-FL-347
4. Siting Number (if applicable):	

APPLICATION INFORMATION

Purpose of Application

This application for air permit is submitted to obtain: (Check one)

Air Construction Permit

☐ Air construction permit.

Air Operation Permit

☐ Initial Title V air operation permit.

☐ Title V air operation permit revision.

☐ Title V air operation permit renewal.

☐ Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is required.

☐ Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is not required.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit (Concurrent Processing)

☑ Air construction permit and Title V permit revision, incorporating the proposed project.

☐ Air construction permit and Title V permit renewal, incorporating the proposed project.

Note: By checking one of the above two boxes, you, the applicant, are requesting concurrent processing pursuant to Rule 62-213.405, F.A.C. In such case, you must also check the following box:

☑ I hereby request that the department waive the processing time requirements of the air construction permit to accommodate the processing time frames of the Title V air operation permit.

Application Comment

APPLICATION INFORMATION

Scope of Application

Emissions Unit ID Number	Description of Emissions Unit	Air Permit Type	Air Permit Proc. Fee
1	Woodworking equipment including saws, borers, routers, and shaping/carving, sanding and brushing machines	AC1F	$250.00
2	Finishing material application spray booths, flash and wipe areas, curing ovens, and glue/adhesive applicators.	AC1A	$7500.00

Application Processing Fee

Check one: ☑ Attached - Amount: $ 7,750.00 ☐ Not Applicable

APPLICATION INFORMATION

Owner/Authorized Representative Statement

Complete if applying for an air construction permit or an initial FESOP.

1. Owner/Authorized Representative Name :

2. Owner/Authorized Representative Mailing Address...
   Organization/Firm:
   Street Address:
   City: State: Zip Code:

3. Owner/Authorized Representative Telephone Numbers...
   Telephone: ( ) - Fax: ( ) -

4. Owner/Authorized Representative Email Address:

5. Owner/Authorized Representative Statement:

   I, the undersigned, am the owner or authorized representative of the facility addressed in this air permit application. 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 and all other requirements identified in this application to which the facility is subject. 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 the facility or any permitted emissions unit.

   Signature Date

APPLICATION INFORMATION

Application Responsible Official Certification

Complete if applying for an initial/revised/renewal Title V permit or concurrent processing of an air construction permit and a revised/renewal Title V permit. If there are multiple responsible officials, the "application responsible official" need not be the "primary responsible official."

1. Application Responsible Official Name: Mike Stickles

2. Application Responsible Official Qualification (Check one or more of the following options, as applicable):

- [✓] For a corporation, the president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit under Chapter 62-213, F.A.C.
- [ ] For a partnership or sole proprietorship, a general partner or the proprietor, respectively.
- [ ] For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official.
- [ ] The designated representative at an Acid Rain source.

3. Application Responsible Official Mailing Address...
Organization/Firm: Merillat Corporation
Street Address: 1300 S. W. 38th Avenue
City: Ocala State: FL Zip Code: 34474

4. Application Responsible Official Telephone Numbers...
Telephone: (352) 291-4610 Fax: (352) 291-4601

5. Application Responsible Official Email Address: MStickles@Merillat.com

6. Application Responsible Official Certification:

I, the undersigned, am a responsible official of the Title V source addressed in this air permit application. 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 and all other applicable requirements identified in this application to which the Title V source is subject. 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 the facility or any permitted emissions unit. Finally, I certify that the facility and each emissions unit are in compliance with all applicable requirements to which they are subject, except as identified in compliance plan(s) submitted with this application.

Signature 10-11-04 Date

APPLICATION INFORMATION

Professional Engineer Certification

1. Professional Engineer Name: David Cibik
   Registration Number: 55467
2. Professional Engineer Mailing Address...
   Organization/Firm: Malcolm Pirnie, Inc.
   Street Address: 1715 East 9th Avenue
   City: Tampa State: Florida Zip Code: 33605
3. Professional Engineer Telephone Numbers...
   Telephone: (813) 248-6900 ext. 166 Fax: (813) 248-8085
4. Professional Engineer Email Address: Dcibik@pirnie.com
5. 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.

(3) If the purpose of this application is to obtain a Title V 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 plan and schedule is submitted with this application.

(4) If the purpose of this application is to obtain an air construction permit (check here ☐, if so) or concurrently process and obtain an air construction permit and a Title V air operation permit revision or renewal 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.

(5) If the purpose of this application is to obtain an initial air operation permit or operation permit revision or renewal 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.

David Cibik
Signature

10/5/04
Date

(seal)

* Attach any exception to certification statement.

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 : For additional information regarding the facility, see process description in Appendix A.			

Facility Contact

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

Facility Primary Responsible Official

Complete if an "application responsible official" is identified in Section I. that is not the facility "primary responsible official."

1. Facility Primary Responsible Official Name:
2. Facility Primary Responsible Official Mailing Address... Organization/Firm: Street Address: City: State: Zip Code:
3. Facility Primary Responsible Official Telephone Numbers... Telephone: ( ) - ext. Fax: ( ) -
4. Facility Primary Responsible Official Email Address:

FACILITY INFORMATION

Facility Regulatory Classifications

Check all that would apply *following* completion of all projects and implementation of all other changes proposed in this application for air permit. Refer to instructions to distinguish between a "major source" and a "synthetic minor source."

1. ☐ Small Business Stationary Source	☐ Unknown
2. ☐ Synthetic Non-Title V Source	
3. ☑ Title V Source	
4. ☑ Major Source of Air Pollutants, Other than Hazardous Air Pollutants (HAPs)	
5. ☐ Synthetic Minor Source of Air Pollutants, Other than HAPs	
6. ☑ Major Source of Hazardous Air Pollutants (HAPs)	
7. ☐ Synthetic Minor Source of HAPs	
8. ☐ One or More Emissions Units Subject to NSPS (40 CFR Part 60)	
9. ☐ One or More Emissions Units Subject to Emission Guidelines (40 CFR Part 60)	
10. ☑ One or More Emissions Units Subject to NESHAP (40 CFR Part 61 or Part 63)	
11. ☐ Title V Source Solely by EPA Designation (40 CFR 70.3(a)(5))	
12. Facility Regulatory Classifications Comment:	
The facility is a major source of VOC emissions based on potential VOC emissions greater than 100 tons/year and a major source of HAP emissions based on potential HAP emissions above the 10/25 tons per year thresholds.	

FACILITY INFORMATION

List of Pollutants Emitted by Facility

1. Pollutant Emitted	2. Pollutant Classification	3. Emissions Cap [Y or N]?
VOC	A	Y
HAPS	A	N
PM	B	N
PM10	B	N

B. EMISSIONS CAPS

Facility-Wide or Multi-Unit Emissions Caps

1. Pollutant Subject to Emissions Cap	2. Facility Wide Cap [Y or N]? (all units)	3. Emissions Unit ID No.s Under Cap (if not all units)	4. Hourly Cap (lb/hr)	5. Annual Cap (ton/yr)	6. Basis for Emissions Cap
VOC	Y			411	OTHER

7. Facility-Wide or Multi-Unit Emissions Cap Comment:

The emissions cap listed above for VOC reflects an increase to the existing facility-wide VOC emissions cap of 249 tons/year. This increase is requested to obtain approval to install new equipment for producing additional wood cabinets.

C. FACILITY ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Facility Plot Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   Note: A waiver is requested on the basis that the proposed modification will not alter the current facility plot plan and an air quality modeling analysis is not required as part of this application.

2. Process Flow Diagram(s): (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☑ Attached, Document ID: Figures 1,2 in Appendix A ☐ Previously Submitted, Date:____

3. Precautions to Prevent Emissions of Unconfined Particulate Matter: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   Note: This is considered not applicable since emissions of unconfined particulate matter are not anticipated from the proposed facility modification and operation. Activities such as land clearing, building demolition, and vehicle traffic on unpaved roads are not expected to occur during the installation of new facility equipment.

Additional Requirements for Air Construction Permit Applications

1. Area Map Showing Facility Location:
   ☐ Attached, Document ID:_____ ☑ Not Applicable (existing permitted facility)

2. Description of Proposed Construction or Modification:
   ☑ Attached, Document ID: see Section 1 of this Permit Application

3. Rule Applicability Analysis:
   ☑ Attached, Document ID: see Section 1 of this Permit Application

4. List of Exempt Emissions Units (Rule 62-210.300(3)(a) or (b)1., F.A.C.):
   ☐ Attached, Document ID:_____ ☑ Not Applicable (no exempt units at facility)
   Note: Multiple natural gas fired-units are operated each with a maximum rated heat input capacity < 5 MMBtu/hr.

5. Fugitive Emissions Identification (Rule 62-212.400(2), F.A.C.):
   ☐ Attached, Document ID:_____ ☑ Not Applicable

6. Preconstruction Air Quality Monitoring and Analysis (Rule 62-212.400(5)(f), F.A.C.):
   ☐ Attached, Document ID:_____ ☑ Not Applicable
   Note: Merillat is requesting an exemption from preconstruction monitoring on the basis that representative ozone monitoring data is available for the Ocala area.

7. Ambient Impact Analysis (Rule 62-212.400(5)(d), F.A.C.):
   ☐ Attached, Document ID:_____ ☑ Not Applicable
   Note: An ambient impact (modeling) analysis is not required since the only pollutant subject to PSD review is VOC.

8. Air Quality Impact since 1977 (Rule 62-212.400(5)(h)5., F.A.C.):
   ☐ Attached, Document ID:_____ ☑ Not Applicable
   Note: A waiver is requested since the only pollutant subject to PSD review is VOC.

FACILITY INFORMATION

9. Additional Impact Analyses (Rules 62-212.400(5)(e)1. and 62-212.500(4)(e), F.A.C.): ☐ Attached, Document ID:_____ ☑ Not Applicable **Note: A waiver is requested since the only pollutant subject to PSD review is VOC.**
10. Alternative Analysis Requirement (Rule 62-212.500(4)(g), F.A.C.): ☐ Attached, Document ID:_____ ☑ Not Applicable

Additional Requirements for FESOP Applications

1. List of Exempt Emissions Units (Rule 62-210.300(3)(a) or (b)1., F.A.C.):
   ☐ Attached, Document ID:_____ ☐ Not Applicable (no exempt units at facility)

Additional Requirements for Title V Air Operation Permit Applications

1. List of Insignificant Activities (Required for initial/renewal applications only):
   ☐ Attached, Document ID:_____ ☑ Not Applicable (revision application)

2. Identification of Applicable Requirements (Required for initial/renewal applications, and for revision applications if this information would be changed as a result of the revision being sought):
   ☐ Attached, Document ID:_____
   ☑ Not Applicable (revision application with no change in applicable requirements)

3. Compliance Report and Plan (Required for all initial/revision/renewal applications):
   ☑ Attached, Document ID: see Appendix C of this Permit Application
   Note: A compliance plan must be submitted for each emissions unit that is not in compliance with all applicable requirements at the time of application and/or at any time during application processing. The department must be notified of any changes in compliance status during application processing.

4. List of Equipment/Activities Regulated under Title VI (If applicable, required for initial/renewal applications only):
   ☐ Attached, Document ID:_____
   ☐ Equipment/Activities On site but Not Required to be Individually Listed
   ☑ Not Applicable

5. Verification of Risk Management Plan Submission to EPA (If applicable, required for initial/renewal applications only) :
   ☐ Attached, Document ID:_____ ☑ Not Applicable

6. Requested Changes to Current Title V Air Operation Permit:
   ☐ Attached, Document ID: See note below: ☐ Not Applicable
   Note: The only requested change to the current Title V permit is an increase to the VOC emission limit from 249 tons/year to 411 tons/year.

Additional Requirements Comment

III. EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Application - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for Title V air operation permit, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each regulated and unregulated emissions unit addressed in this application for air permit. Some of the subsections comprising the Emissions Unit Information Section of the form are optional for unregulated emissions units. Each such subsection is appropriately marked. Insignificant emissions units are required to be listed at Section II, Subsection C.

Air Construction Permit or FESOP Application - For air construction permitting or federally enforceable state air operation permitting, emissions units are classified as either subject to air permitting or exempt from air permitting. The concept of an "unregulated emissions unit" does not apply. If this is an application for air construction permit or FESOP, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air permitting are required to be listed at Section II, Subsection C.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit Application – Where this application is used to apply for both an air construction permit and a revised/renewal Title V air operation permit, each emissions unit is classified as either subject to air permitting or exempt from air permitting for air construction permitting purposes and as regulated, unregulated, or insignificant for Title V air operation permitting purposes. **The air construction permitting classification must be used to complete the Emissions Unit Information Section of this application for air permit.** A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air construction permitting and insignificant emissions units are required to be listed at Section II, Subsection C.

If submitting the application form in hard copy, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application must be indicated in the space provided at the top of each page.

EMISSIONS UNIT INFORMATION
Section [1] of [2]

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

☑ The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

☐ The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)

☐ 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).

☑ 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.

☐ 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.

2. Description of Emissions Unit Addressed in this Section:
Miscellaneous woodworking equipment including saws, borers, routers, and shaping/carving, sanding and brushing machines.

3. Emissions Unit Identification Number: 1

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A	1st Qtr 2005	2nd Qtr 2005	24	☐ Yes ☑ No

9. Package Unit:
Manufacturer: N/A Model Number: N/A

10. Generator Nameplate Rating: MW

11. Emissions Unit Comment:

Emissions Unit Control Equipment

1. Control Equipment/Method(s) Description:

Baghouse (fabric filter) dust collection systems.

2. Control Device or Method Code(s): 018

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate:	
2. Maximum Production Rate: 4000 cabinets/day	
3. Maximum Heat Input Rate: million Btu/hr	
4. Maximum Incineration Rate: pounds/hr tons/day	
5. Requested Maximum Operating Schedule:	
24 hours/day	7 days/week
52 weeks/year	8,760 hours/year

6. Operating Capacity/Schedule Comment:

The facility is expected to operate on a 16 hours/day, 5 days/week, 250 days/year, 4,000 hours/year maximum operating schedule. However, periods of increased consumer demand for products may require extended periods of operation on a temporary basis.

C. EMISSION POINT (STACK/VENT) INFORMATION
(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: See flow diagram (Figure 1) in Appendix A.	2. Emission Point Type Code: 3
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: 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: Not applicable	

5. Discharge Type Code: V	6. Stack Height: 50 feet	7. Exit Diameter: 5 feet
8. Exit Temperature: Ambient	9. Actual Volumetric Flow Rate: ~ 80,000 acfm	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 Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)
15. Emission Point Comment:	

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type): Miscellaneous woodworking operations (wood furniture manufacturing) – machining & sanding/planing operations		
2. Source Classification Code (SCC): 3-07-02-002 & 3-07-02-003	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: For above items 4. and 5., maximum hourly and annual rates correspond to the number of cabinets produced (not board feet processed). The estimated maximum cabinet assembly rate for the woodworking operations is 4000 cabinets/day.		

Segment Description and Rate: Segment __ of __

1. Segment Description (Process/Fuel Type):		
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:		

D. SEGMENT (PROCESS/FUEL) INFORMATION (CONTINUED)

Segment Description and Rate: Segment __ of __

1. Segment Description (Process/Fuel Type):		
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:		

Segment Description and Rate: Segment __ of __

1. Segment Description (Process/Fuel Type):		
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:		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM, PM10	018	N/A	EL (VE limit)

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: PM, PM10	2. Total Percent Efficiency of Control: 99 – 99.9% estimated
3. Potential Emissions: 1.3 lb/hour 2.0 tons/year	4. Synthetically Limited? ☑ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): N/A	
6. Emission Factor: Reference: N/A (process knowledge/material balance basis)	7. Emissions Method Code: 2
8. Calculation of Emissions: See Appendix A for detailed emission calculations.	
9. Pollutant Potential/Estimated Fugitive Emissions Comment:	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **N/A – see visible emissions information below in Section G.**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

G. VISIBLE EMISSIONS INFORMATION

Complete if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: VE05	2. Basis for Allowable Opacity: ☑ Rule ☐ Other
3. 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 periodic visible emissions observations.	
5. Visible Emissions Comment:	

Visible Emissions Limitation: Visible Emissions Limitation ___ of ___

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: ☐ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	

H. CONTINUOUS MONITOR INFORMATION

Complete if this emissions unit is or would be subject to continuous monitoring.

Note: this section is not applicable

Continuous Monitoring System: Continuous Monitor 1 of 1

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:	

Continuous Monitoring System: Continuous Monitor ___ of ___

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:	

H. CONTINUOUS MONITOR INFORMATION (CONTINUED)

Complete if this emissions unit is or would be subject to continuous monitoring.

Note: this section is not applicable

Continuous Monitoring System: Continuous Monitor 1 of 1

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:	

Continuous Monitoring System: Continuous Monitor ___ of ___

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:	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☑ Attached, Document ID: see Figure 1 in Appendix A ☐ Previously Submitted, Date ____

2. Fuel Analysis or Specification (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   Not applicable
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____

3. Detailed Description of Control Equipment (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: See information below: ☐ Previously Submitted, Date

   Control Equipment description: Baghouse (fabric filter) – control device code 018.
   Baghouse manufacturer: Waltz-Holtz
   Model number: DustStar 12-716-11066

4. Procedures for Startup and Shutdown (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____
   ☑ Not Applicable (construction application)

5. Operation and Maintenance Plan (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____
   ☑ Not Applicable

6. Compliance Demonstration Reports/Records

☐ Attached, Document ID: _____

Test Date(s)/Pollutant(s) Tested: _____

_____

☑ Previously Submitted, Date: 11/29/2000

Test Date(s)/Pollutant(s) Tested: Method 9 Test Report (PM/Opacity)

_____

☐ To be Submitted, Date (if known): _____

Test Date(s)/Pollutant(s) Tested: _____

_____

☐ Not Applicable

Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute

☐ Attached, Document ID: _____ ☑ Not Applicable

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(6) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e))
   ☐ Attached, Document ID: _____ ☑ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(5)(h)6., F.A.C., and Rule 62-212.500(4)(f), F.A.C.)
   ☐ Attached, Document ID: _____ ☑ Not Applicable
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only)
   ☐ Attached, Document ID: _____ ☑ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements
   ☐ Attached, Document ID: see information below:

Applicable requirements specific to Unit ID 1:

- 62-296.712(2) – PM emission limitations for Miscellaneous Manufacturing Process Operations. Note that 62-297.620(4) is proposed to satisfy emissions monitoring requirements in lieu of this provision)
- 62-297.620(4) – Exceptions and Approvals of Alternate Procedures and Requirements (applicable to PM emission units with baghouses to waive otherwise applicable PM compliance test requirements by specifying 5% opacity standard).

2. Compliance Assurance Monitoring
   ☐ Attached, Document ID: _____ ☑ Not Applicable

Note: CAM requirements apply and will require a future submittal of a CAM plan at the time of Title V permit renewal.

3. Alternative Methods of Operation
   ☐ Attached, Document ID: _____ ☑ Not Applicable
4. Alternative Modes of Operation (Emissions Trading)
   ☐ Attached, Document ID: _____ ☑ Not Applicable

5. Acid Rain Part Application
   - ☐ Certificate of Representation (EPA Form No. 7610-1)
     - ☐ Copy Attached, Document ID:_
   - ☐ Acid Rain Part (Form No. 62-210.900(1)(a))
     - ☐ Attached, Document ID:_____
     - ☐ Previously Submitted, Date:_____
   - ☐ Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
     - ☐ Attached, Document ID:_____
     - ☐ Previously Submitted, Date:_____
   - ☐ New Unit Exemption (Form No. 62-210.900(1)(a)2.)
     - ☐ Attached, Document ID:_____
     - ☐ Previously Submitted, Date:_____
   - ☐ Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
     - ☐ Attached, Document ID:_____
     - ☐ Previously Submitted, Date:_____
   - ☐ Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
     - ☐ Attached, Document ID:_____
     - ☐ Previously Submitted, Date:_____
   - ☐ Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
     - ☐ Attached, Document ID:_____
     - ☐ Previously Submitted, Date:_____
   - ☑ Not Applicable

Additional Requirements Comment

III. EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Application - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for Title V air operation permit, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each regulated and unregulated emissions unit addressed in this application for air permit. Some of the subsections comprising the Emissions Unit Information Section of the form are optional for unregulated emissions units. Each such subsection is appropriately marked. Insignificant emissions units are required to be listed at Section II, Subsection C.

Air Construction Permit or FESOP Application - For air construction permitting or federally enforceable state air operation permitting, emissions units are classified as either subject to air permitting or exempt from air permitting. The concept of an "unregulated emissions unit" does not apply. If this is an application for air construction permit or FESOP, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air permitting are required to be listed at Section II, Subsection C.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit Application – Where this application is used to apply for both an air construction permit and a revised/renewal Title V air operation permit, each emissions unit is classified as either subject to air permitting or exempt from air permitting for air construction permitting purposes and as regulated, unregulated, or insignificant for Title V air operation permitting purposes. **The air construction permitting classification must be used to complete the Emissions Unit Information Section of this application for air permit.** A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air construction permitting and insignificant emissions units are required to be listed at Section II, Subsection C.

If submitting the application form in hard copy, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application must be indicated in the space provided at the top of each page.

EMISSIONS UNIT INFORMATION
Section [2] of [2]

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

☑ The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

☐ The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)

☐ 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).

☑ 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.

☐ 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.

2. Description of Emissions Unit Addressed in this Section:

Application of various toners, stains, sealers, top-coatings, colors, glazes, and other specialty finishes to wood components in several application booths. Curing ovens and flash and wipe areas are also included as part of the finishing operations. Also, glue/adhesives are applied to the wood components during the manufacturing process. See Appendix A for more detailed information.

3. Emissions Unit Identification Number: 2

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A	1st Qtr 2005	2nd Qtr 2005	24	☐ Yes ☑ No

9. Package Unit:
Manufacturer: N/A Model Number:

10. Generator Nameplate Rating: MW

11. Emissions Unit Comment:

Emissions Unit Control Equipment

1. Control Equipment/Method(s) Description:

N/A

2. Control Device or Method Code(s):

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate:	
2. Maximum Production Rate: 3460 cabinets/day	
3. Maximum Heat Input Rate: million Btu/hr	
4. Maximum Incineration Rate: pounds/hr tons/day	
5. Requested Maximum Operating Schedule:	
24 hours/day	7 days/week
52 weeks/year	8760 hours/year
6. Operating Capacity/Schedule Comment:	

The facility is expected to operate on a maximum operating schedule of 16 hours/day, 5 days/week, 250 days/year, 4,000 hours/year. However, periods of increased consumer demand for products may require extended periods of operation on a temporary basis.

C. EMISSION POINT (STACK/VENT) INFORMATION
(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: See flow diagram (Figures 1,2) in Appendix A	2. Emission Point Type Code: 3
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: Finishing materials are primarily applied in spray booths. Fumes from the spray booths, flash areas, and curing ovens are vented to the atmosphere via a series of exhaust fans and exhaust stacks. Fumes from the application of glues/adhesives are vented through building vents.	
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 for application booths/areas and approximately 150°F for curing ovens.	9. Actual Volumetric Flow Rate: Approximately 6,000 – 8,000 cfm per booth and approximately 1,000 – 3,000 cfm per curing oven.	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 Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)
15. Emission Point Comment:	

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type): Application of various finishing materials and glue/adhesives to wood cabinet components (Wood furniture surface coating operations).		
2. Source Classification Code (SCC): 4-02-01-901	3. SCC Units: Tons solvent in coatings	
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: For above items 4. and 5., maximum hourly and annual rates will correspond to the amount of VOCs applied as contained in the finishing materials and glues/adhesives. The maximum estimated annual VOC usage (emission) rate is 411 tons/yr.		

Segment Description and Rate: Segment __ of __

1. Segment Description (Process/Fuel Type):		
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:		

D. SEGMENT (PROCESS/FUEL) INFORMATION (CONTINUED)

Segment Description and Rate: Segment __ of __

1. Segment Description (Process/Fuel Type):		
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:		

Segment Description and Rate: Segment __ of __

1. Segment Description (Process/Fuel Type):		
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:		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

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

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: VOC, HAPS	2. Total Percent Efficiency of Control: 0.0 %
3. Potential Emissions: VOC: 257 lb/hour* 411 tons/year * This value reflects estimated potential hourly emissions calculated on a monthly average basis. Due to variability in finishing materials applied and VOC content, the hourly emission rate could potentially be higher for an individual hour.	4. Synthetically Limited? ☑ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): N/A	
6. Emission Factor: N/A Reference:	7. Emissions Method Code: 2
8. Calculation of Emissions: See Appendix A for detailed emission calculations.	
9. Pollutant Potential/Estimated Fugitive Emissions Comment:	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: RULE, OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.8 lb VHAP/lb solids average across all coatings and 0.2 lb VHAP/lb solids for contact adhesives to comply with 40 CFR 63, Subpart JJ (NESHAP requirements).	4. Equivalent Allowable Emissions: 411 tons VOC/year
5. Method of Compliance: Maintain records of material usage information and VOC/HAP content. The facility has implemented a material tracking system (REGMET software) for this purpose.	
6. Allowable Emissions Comment (Description of Operating Method): The requested annual emission limit of 411 tons VOC/yr is based on maximum estimated emissions for the facility inclusive of emissions from the proposed equipment. This new limit is requested to replace the current VOC limit of 249 tons/yr.	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

G. VISIBLE EMISSIONS INFORMATION

Complete if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Note: this section is not applicable

Visible Emissions Limitation: Visible Emissions Limitation __ of ____

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: ☐ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	

Visible Emissions Limitation: Visible Emissions Limitation ___ of __

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: ☐ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	

H. CONTINUOUS MONITOR INFORMATION

Complete if this emissions unit is or would be subject to continuous monitoring.

Note: this section is not applicable

Continuous Monitoring System: Continuous Monitor ___ of ___

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:	

Continuous Monitoring System: Continuous Monitor ___ of ___

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:	

H. CONTINUOUS MONITOR INFORMATION (CONTINUED)

Complete if this emissions unit is or would be subject to continuous monitoring.

Note: this section is not applicable

Continuous Monitoring System: Continuous Monitor ___ of ___

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:	

Continuous Monitoring System: Continuous Monitor ___ of ___

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:	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☑ Attached, Document ID: see Figures 1,2 in Appendix A ☐ Previously Submitted, Date __

2. Fuel Analysis or Specification (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   Not applicable
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____

3. Detailed Description of Control Equipment (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   Not applicable
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____

4. Procedures for Startup and Shutdown (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____
   ☑ Not Applicable (construction application)

5. Operation and Maintenance Plan (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____
   ☐ Not Applicable **Note: the facility has prepared and maintains a work practice implementation plan as required by 40 CFR 63, Subpart JJ (NESHAP requirements).**

6. Compliance Demonstration Reports/Records

☐ Attached, Document ID: _____

Test Date(s)/Pollutant(s) Tested: _____

_____

☐ Previously Submitted, Date: _____

Test Date(s)/Pollutant(s) Tested: _____

_____

☐ To be Submitted, Date (if known): _____

Test Date(s)/Pollutant(s) Tested: _____

_____

☑ Not Applicable

Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute

☐ Attached, Document ID: _____ ☑ Not Applicable

EMISSIONS UNIT INFORMATION
Section [2] of [2]

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(6) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e))
   ☑ Attached, Document ID: see BACT Analysis in Appendix B ☐ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(5)(h)6., F.A.C., and Rule 62-212.500(4)(f), F.A.C.)
   ☐ Attached, Document ID: _____ ☑ Not Applicable
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only)
   ☐ Attached, Document ID: _____ ☑ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements
   ☐ Attached, Document ID: see information below:

   Applicable requirements specific to Unit ID 2:
   - 40 CFR 63, Subpart JJ – National Emission Standards for Wood Furniture Manufacturing Operations.

2. Compliance Assurance Monitoring
   ☐ Attached, Document ID: _____ ☑ Not Applicable
3. Alternative Methods of Operation
   ☐ Attached, Document ID: _____ ☑ Not Applicable
4. Alternative Modes of Operation (Emissions Trading)
   ☐ Attached, Document ID: _____ ☑ Not Applicable

5. Acid Rain Part Application
   - ☐ Certificate of Representation (EPA Form No. 7610-1)
     - ☐ Copy Attached, Document ID:_
   - ☐ Acid Rain Part (Form No. 62-210.900(1)(a))
     - ☐ Attached, Document ID:_____
     - ☐ Previously Submitted, Date:_____
   - ☐ Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
     - ☐ Attached, Document ID:_____
     - ☐ Previously Submitted, Date:_____
   - ☐ New Unit Exemption (Form No. 62-210.900(1)(a)2.)
     - ☐ Attached, Document ID:_____
     - ☐ Previously Submitted, Date:_____
   - ☐ Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
     - ☐ Attached, Document ID:_____
     - ☐ Previously Submitted, Date:_____
   - ☐ Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
     - ☐ Attached, Document ID:_____
     - ☐ Previously Submitted, Date:_____
   - ☐ Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
     - ☐ Attached, Document ID:_____
     - ☐ Previously Submitted, Date:_____
   - ☑ Not Applicable

Additional Requirements Comment

APPENDIX A

Process Description & Emission Calculations

MALCOLM PIRNIE

PROCESS DESCRIPTION & EMISSION CALCULATIONS

The wood cabinet manufacturing facility includes two primary processing areas: woodworking and finishing. A process block flow diagram for the facility operations is shown in Figure 1. A more detailed process flow diagram for the manufacturing operations is presented as Figure 2.

PROCESS DESCRIPTION

The woodworking operations consist of machinery used to manufacture 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 (note that a portion of the cabinets assembled are not finished at the Ocala facility). 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 (HVLP) 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 HVLP 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.

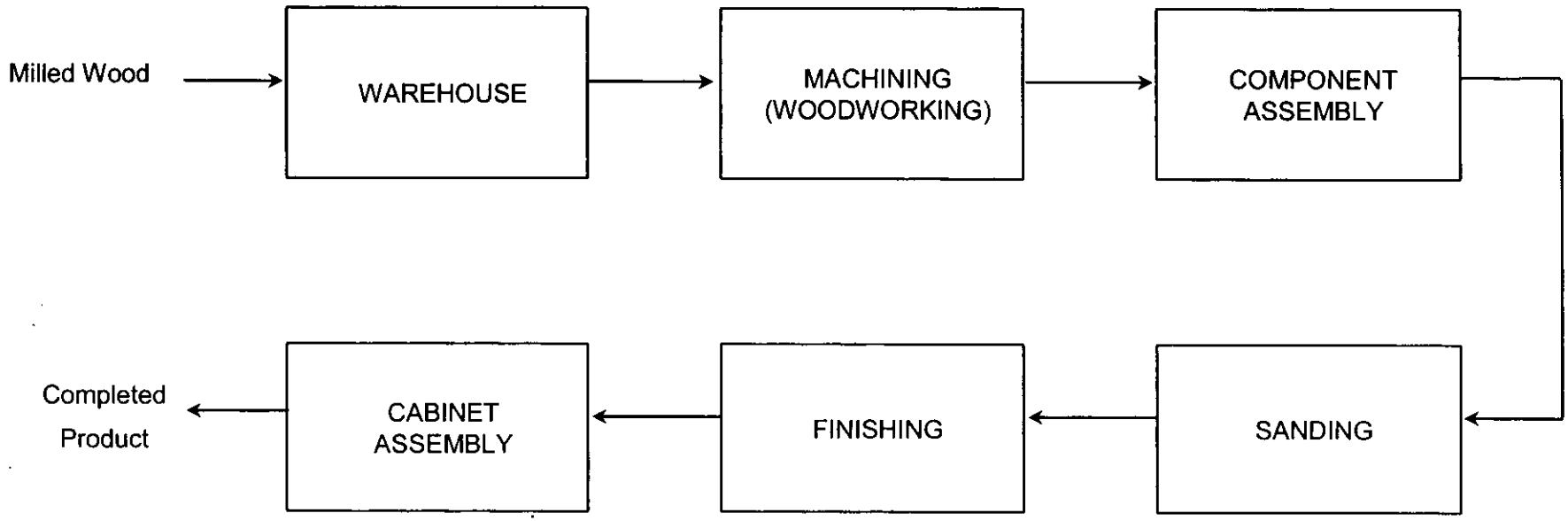
A clear coat sealer is then applied manually by operators using HVLP or air assisted airless (or equivalent) spray guns in back-to-back spray booths. The clear coat sealer is applied to all products to seal the porosity of the wood. The clear coat sealed parts are allowed to flash in a ventilated flash 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/products, or special colors, glazes, and other finishes. Generally, these systems are not conveyorized and parts are moved manually to the off-line ovens, sanding, or wiping areas.

The facility operates numerous natural gas-fired units as part of the manufacturing operations and for ventilation purposes. These units are small sized units (each less than 5 MMBtu/hr) and include curing ovens, make-up air units, and other ventilation related equipment. The combustion of natural gas fuel in these units results in emissions of various fuel burning related pollutants including carbon monoxide and nitrogen oxides.

EMISSION CALCULATIONS

Emission calculations which provide an estimate of maximum expected emissions for the facility including emissions from woodworking operations, finishing operations, and natural gas-fired units are presented on the following pages. Table A-1 presents a facility-wide summary of maximum expected air pollutant emissions and a summary of past actual and future potential VOC emissions. Tables A-2, A-3, and A-4 provide calculations for woodworking, finishing, and natural gas emission units, respectively. These estimates reflect new facility totals inclusive of maximum expected emissions from the additional equipment proposed for installation.



MALCOLM PIRNIE

Merillat-Ocala Wood Cabinet Assembly Plant

SIMPLIFIED PROCESS FLOW DIAGRAM

MALCOLM PIRNIE, INC.

FIGURE 1

FIGURE 2

Wood Cabinet Manufacturing Plant Process Flow Diagram

Merillat.

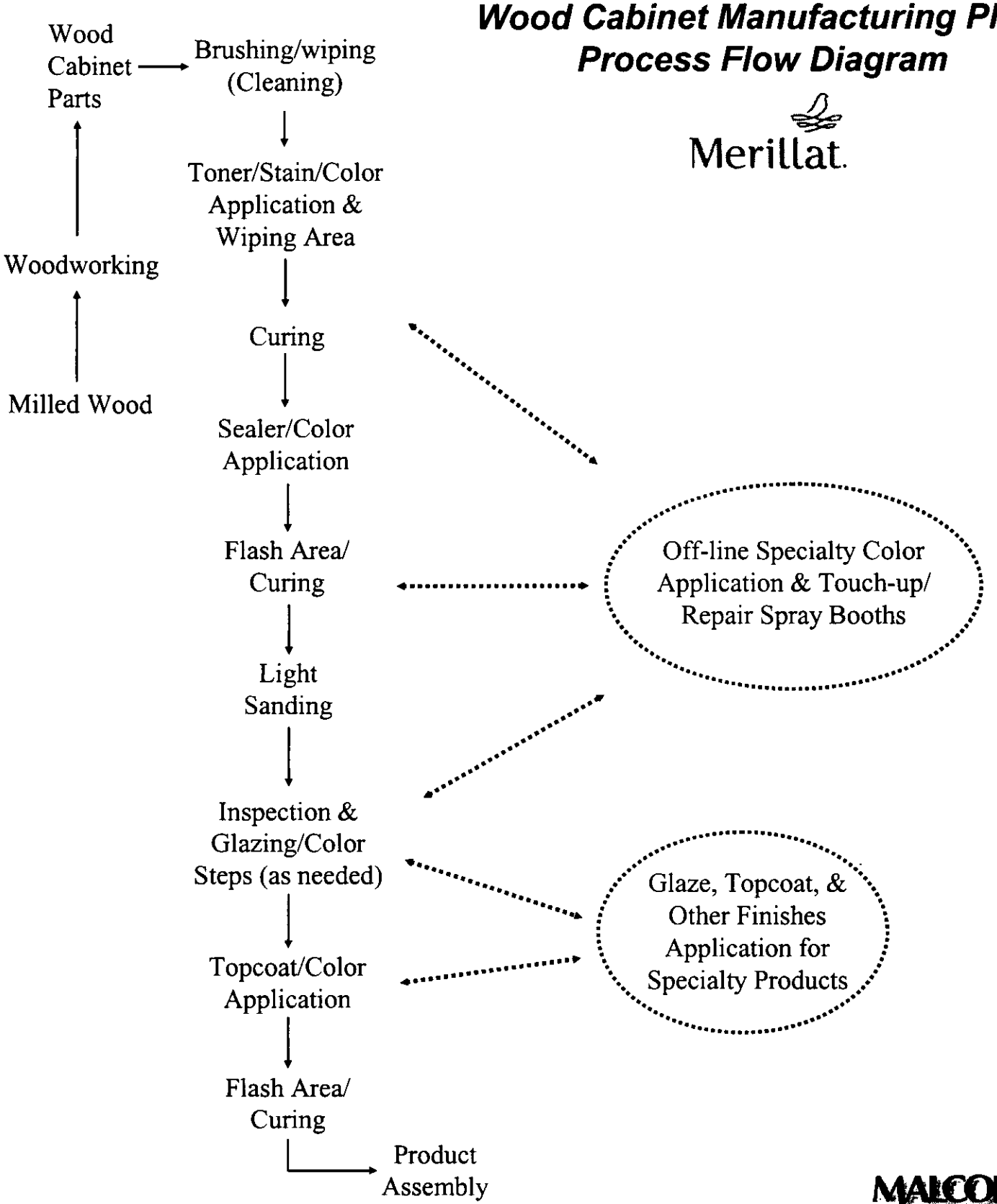


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TABLE A-1
FUTURE POTENTIAL EMISSIONS SUMMARY
Modified Wood Cabinet Manufacturing Facility - Ocala, Florida

Process/Emission Activity	Maximum Expected Emissions, tons/year					
	VOC	HAP	PM	NO_x	CO	SO_2
Woodworking	--	--	2.0	--	--	--
Finishing	410.9	86.5	--	--	--	--
Natural Gas Combustion	0.5	--	0.7	9.3	7.8	0.1
Facility Totals	411.4	86.5	2.7	9.3	7.8	0.1

PRIOR 2-YEAR ACTUAL VOC EMISSIONS SUMMARY FROM FINISHING OPERATIONS

VOC Emissions	Tons/yr
24-Month Total (Sept. 2002 - Aug. 2004)	331.7
Annual Average (past 24-months)	165.9

TABLE A-2
ESTIMATED EMISSIONS FROM WOODWORKING OPERATIONS
Modified Wood Cabinet Manufacturing Facility - Ocala, Florida

Woodworking machinery is operated to manufacture wood cabinet components prior to finishing operations. Note that a portion of the wood cabinets that are assembled are not finished at the Ocala facility. Emissions of particulate matter from the woodworking operations are controlled by dust collector system(s) operating at an estimated control efficiency of 99 - 99.9 percent.

Estimated Operating Data:

Maximum cabinets to be assembled (daily max basis)	4000 cabinets/day
Amount of material wasted (annual average maximum basis)	4.0 lb/cabinet
Estimated particulate/dust portion of material wasted	10 percent
Control efficiency of dust collector system	99 - 99.9 percent

Maximum Expected PM Emissions:

Hourly emissions = 4000 cab./day x 4.0 lb/cab x day/16 hr x 0.10 x (1 - 0.99) x 1.25 (max hourly factor)
= 1.3 lb/hr
(note: this reflects a monthly average maximum hourly emission rate)

Annual emissions = 4000 cab./day x 4.0 lb/cab x 250 day/yr x 0.10 x (1 - 0.99) x ton/2000 lb
= 2.0 ton/yr

TABLE A-3
ESTIMATED EMISSIONS FROM FINISHING OPERATIONS
Modified Wood Cabinet Manufacturing Facility - Ocala, Florida

Various finishing materials (toners, stains, sealers, topcoatings, glazes, etc.) are applied to wood cabinet parts in the finishing system. The application of these materials generates emissions of VOCs (and HAPs) from spray booths, flash & wipe areas, and curing ovens. Note that a portion of the wood cabinets assembled at the Ocala facility are not finished.

Estimated Operating Data:

Maximum cabinets to be finished (daily max basis)	3460 cabinets/day
VOC usage per cabinet (annual average maximum basis)	0.95 lb/cabinet
HAP usage per cabinet (annual average maximum basis)	0.20 lb/cabinet

Maximum Expected VOC Emissions:

Hourly emissions = 3460 cab./day x 0.95 lb/cab x day/16 hr x 1.25 (max hourly factor)
= 256.8 lb/hr
(note: this reflects a monthly average maximum hourly emission rate)

Annual emissions = 3460 cab./day x 0.95 lb/cab x 250 day/yr x ton/2000 lb
= 410.9 ton/yr

Maximum Expected HAP (total) Emissions:

Hourly emissions = 3460 cab./day x 0.20 lb/cab x day/16 hr x 1.25 (max hourly factor)
= 54.1 lb/hr
(note: this reflects a monthly average maximum hourly emission rate)

Annual emissions = 3460 cab./day x 0.20 lb/cab x 250 day/yr x ton/2000 lb
= 86.5 ton/yr

TABLE A-4
ESTIMATED EMISSIONS FROM NATURAL GAS COMBUSTION UNITS
Modified Wood Cabinet Manufacturing Facility - Ocala, Florida

In support of the wood cabinet manufacturing operations, various natural gas combustion units are operated. These emission units include curing ovens, air make-up units, and gas heaters.

Estimated Capacity Requirements of Natural Gas-Fired Units:

Emission Unit	Total Rated Capacity of Units (MMBtu/hr)
Curing Ovens	13.7
Make-Up Air Units	30.6
Ancillary Units	3.3
Note: maximum rated capacity of each individual unit is less than 5 MMBtu/hr.	
Total MMBtu/hr of all natural gas units	**47.6**
Maximum estimated MMBtu demand per year	**190,400**

Maximum Expected Emissions (totals for all units)
(Basis: AP-42, Section 1.4 factors for natural gas combustion)

Pollutant	Emission Factor lb/10^6 scf	Maximum Estimated Emissions		
		lb/hr	lbs/day	tons/yr
NO_x	100	4.67	112.0	9.3
CO	84	3.92	94.1	7.8
SO_2	0.6	0.03	0.7	0.1
VOC	5.5	0.26	6.2	0.5
PM	7.6	0.35	8.5	0.7

Note: emission estimates based on natural gas heating value of 1,020 Btu/scf.

APPENDIX B

BACT Analysis

MALCOLM PIRNIE

BACT ANALYSIS

This section presents the Best Available Control Technology (BACT) analysis for Merillat's proposed modifications to the Ocala wood cabinet manufacturing facility. This analysis was completed to address PSD-BACT requirements relative to the proposed increase in volatile organic compound (VOC) emissions from the finishing operations.

BACKGROUND

Under the PSD program, newly constructed and modified major sources located in areas that are in attainment with NAAQS must implement BACT. The BACT review process is outlined in the EPA draft document "New Source Review Workshop Manual" (USEPA, 1990). The five major steps involved in a BACT analysis are:

- Identification of all available control options and alternative processes with practical potential for application to the specific emission unit for the regulated pollutant under evaluation.
- Elimination of technically infeasible or unavailable control technology options.
- Ranking of remaining control technologies based on control effectiveness.
- Evaluation of most effective control technologies and documentation of results.
- Selection of BACT.

Best Available Control Technology (BACT) is defined in 42 U.S.C. & 7479, provision within the Clean Air Act as follows:

"[BACT] means an emission limitation based on the maximum degree of reduction of each pollutant subject to regulation under this chapter emitted from or which results from any major emitting facility, which the permitting authority, on a case-by-case basis, taking into account energy, environmental, and economic impacts and the other costs, determines is achievable for such facility through application of production processes and available methods, systems and techniques..."

Economic, energy and environmental impacts are considered in a "top-down" BACT analysis. The "top-down" BACT approach must not only look at the most stringent emission limits previously approved, but it also must evaluate all demonstrated and potentially applicable technologies. These technologies and emission limits are identified through a review of EPA's RACT/BACT/LAER Clearinghouse (RBLC). Information from the RBLC for the wood products/furniture surface coating category is provided at the end of this appendix. If the proposed BACT is equivalent to the most stringent emission limit, no further analysis is necessary. However, if the most stringent emission limit is not selected, additional analyses are required.

Once the most stringent emission limit has been identified, its technical feasibility must be determined. A technology that is available and is applicable to the source under review is considered technically feasible. A control technique is considered available if it has reached the licensing and commercial sales stage of

development. If a control technique is not applicable or is technically or economically infeasible for the source in question, the next most stringent technology is evaluated. The process continues until an emission control technology cannot be eliminated. If a control technology is technically and economically feasible and provides the most stringent emission level, that control is considered BACT unless energy or environmental impacts preclude its use.

The determination of what ultimately constitutes BACT is left to the state regulatory agency in which the emissions unit will operate. This allows state regulatory agencies to consider the weight or emphasis to be placed on the energy, environmental and economic impacts of control. The state agency may consider the size of the facility, the increment of air quality that will be absorbed by any particular major emitting facility and such other considerations as anticipated and desired economic growth for the area. For the Merillat-Ocala facility, the Florida Department of Environmental Protection (DEP) will determine BACT for the proposed facility modification.

IMPACT ANALYSIS OF CONTROL ALTERNATIVES

If the most stringent technically feasible emission limitation is not selected as BACT, justification must be provided in terms of adverse environmental, energy, or economic impacts. The net environmental impact is the first analysis performed for each alternative. Both beneficial impacts and adverse impacts should be discussed and qualified/quantified where possible. All air pollutants should be included in the analysis, including air pollutants not currently regulated under the Clean Air Act. The second analysis involves energy impacts. The direct energy impacts of the control alternatives are estimated in terms of energy consumption (Btu, kWh, etc.). In addition, the impacts of relying on scarce fuels must be considered because of the possibility of a change in availability in subsequent years. The third analysis involves evaluating the economic impacts of control alternatives with primary consideration to the cost effectiveness (dollars per ton of pollutant removed) for each option. The analysis generally includes an estimate of the capital and annualized costs for each alternative based on vendor quotes and established USEPA cost-estimating procedures.

ENFORCEABILITY

An emission limit must be proposed for each emission unit subject to BACT and the emission limit must be federally enforceable. The emission limit must be specific such that regulatory agency personnel can ascertain the compliance status of the emission unit.

ANALYSIS OF CANDIDATE AIR POLLUTION CONTROL ALTERNATIVES

Both add-on air pollution control technologies and use of alternative materials and processes were considered in the BACT analysis for reducing VOC emissions from the finishing operations. Technically feasible add-on control technologies for reducing VOC emissions include thermal oxidation, catalytic oxidation, carbon adsorption, absorption/scrubbing, and condensation. The use of alternative materials includes implementing the use of non-photochemically reactive (non-VOC) and low VOC finishing materials. Process and coating application alternatives include the use of high volume, low pressure (HVLP), air assisted or airless spray guns to minimize overspray and the use of ultraviolet (UV) curing technology. These candidate air pollution control alternatives are discussed in the sections below.

ALTERNATIVE MATERIALS AND PROCESSES

VOC emission reduction alternatives include the use of non-VOC and low VOC finishing materials. Merillat continually works with finishing material suppliers to implement low VOC coatings and include non-photochemically reactive solvents into coating formulations. The VOC contents of finishing materials vary significantly based on the type of coating (toners, stains, sealers, topcoats, etc.) being applied and the type of cabinet being produced in response to continually changing consumer demands. In addition, specialty products can require the use of certain specialty formulations with varying VOC contents on a limited-use basis. The establishment of a specific limitation on VOC content would restrict the facility's ability to produce certain products and adjust to changes in consumer demands. This would preclude the facility from effectively operating in the high-quality end of the wood cabinet industry. As such, a VOC content limitation does not constitute BACT for the facility.

The finishing system at the Ocala includes a series of spray booths for the manual application of various finishing materials to wood cabinet components. To minimize the amount of material applied (and VOC emissions) in comparison with conventional spray gun applicators, spray gun application equipment which reduces overspray is available. This equipment includes HVLP, air assisted, and airless spray gun technology. These spray gun alternatives are each approximately equivalent in minimizing overspray. Therefore, the use of HVLP, air assisted, and/or airless spray gun (or equivalent) technology is a candidate to represent BACT.

The implementation of UV curing technology was also considered as an alternative process for the finishing system. UV curing is a photochemical process used to cure coating with UV light as opposed to heat which is used for curing in a conventional finishing process. In the UV process, 100 percent reactive, non-VOC coatings can be applied. Merillat has evaluated the use of UV technology for application to the wood cabinet manufacturing process and has found that the UV spray technology has not been demonstrated to produce a consistent, high-quality finish on wood cabinets. Consequently, UV technology is not considered a technically feasible alternative and does not constitute BACT.

ADD-ON AIR POLLUTION CONTROL TECHNOLOGIES

Application of add-on pollution control technology to the wood cabinet finishing operations will require an extensive VOC collection system to capture ventilation air from the modified finishing process. The sources of VOC emissions from the proposed finishing equipment consist of application spray booths, repair and off-line spray booths, wiping and flash-off areas, and low temperature curing ovens. The application of the finishing materials is conducted in highly ventilated areas as required by worker health and safety standards. To achieve high VOC collection efficiencies (approximately 95 percent with 5 percent uncaptured/fugitive losses), these areas are vented under negative pressure and routed through a rigid ductwork system. The total volume of exhaust air from the finishing system is dependent on the number of spray booths (and associated flash-off areas) and curing ovens. The proposed combination of new spray booths and ovens will generate an estimated total air flow of 120,000 cubic feet per minute (cfm), which will be vented from the application areas. Consequently, the implementation of add-on air pollution control systems, such as thermal oxidizers to reduce emissions of VOCs from these finishing operations would have to be adequately sized to handle high exhaust air flow rates. Because large control systems are required, the costs associated with the implementation of these systems are substantial. To reduce the volume of exhaust air to be treated by an add-on control device, Merillat has evaluated the use

of exhaust air concentrators. However, the implementation of an exhaust concentrator has not been demonstrated in the wood cabinet manufacturing industry and information obtained on this equipment suggests significant downtime may occur (20-30% downtime) thereby requiring that add-on control equipment be sized at the full exhaust air flow from the process. For these reasons, the use of an exhaust concentrator upstream of an add-on control device was not considered as BACT.

Traditional VOC add-on control options include incineration (thermal and catalytic oxidation) and non-destructive control alternatives such as carbon adsorption, absorption/scrubbing, and condensation. Add-on pollution control devices, exclusively incineration systems, have been implemented at a very small percentage of wood cabinet manufacturing facilities to reduce VOC emissions. Incineration technology, based on qualified input loadings in excess of 500 ppm_v can achieve high VOC destruction efficiencies above 95 percent, while non-destructive control technologies can potentially achieve VOC removal efficiencies in the 70 to 90 percent range depending on the types and concentrations of organic pollutants in the gas stream.

Due to the use of the variety of finishing materials required to achieve the colors, textures, and the look and feel of the wood cabinet required by today's consumer, the exhaust gas streams from wood finishing systems include highly variable organic concentrations and numerous and variable organic constituents. Consequently, non-destructive control alternatives have not been implemented on wood finishing systems. In addition, the non-destructive control options are not as effective in consistently reducing VOC emissions from highly variable exhaust streams in comparison with incineration alternatives. Therefore, carbon adsorption, absorption/scrubbing, and condensation, were eliminated from further consideration as BACT for the control of VOC emissions from the finishing operations.

As evident from the RBLC, incineration systems, specifically regenerative thermal oxidizer (RTO) systems, have been implemented to control VOC emissions from a few wood finishing operations. An RTO system is the type of incineration system best suited for application to wood furniture finishing operations based on reduced auxiliary fuel demands, which is a particularly important factor when handling large volumes of exhaust gas with low concentrations of volatile organic constituents. RTO systems are able to substantially lower auxiliary fuel requirements by achieving heat recoveries of approximately 95 percent through the use of specialized heat exchange media. Equipment manufacturers of RTO systems will generally guarantee VOC destruction efficiencies in excess of 95 percent assuming a minimum VOC concentration of 500 ppm_v in the gas stream.

The Merillat finishing system differs from those referenced in the RBLC utilizing incineration in that the use of vertical hand spray booths will be used for the finish application steps. From years of experience finishing components at rates over 18,000 cabinets per day, Merillat has learned that hand applications utilizing trained operators and today's efficient spray technologies, tend to be much more efficient in transferring the material on the part than the highly automated systems. The reason for this overall efficiency difference is that waste material and equipment cleaning solvents are minimized Even though many of the automated systems utilize reclaim, in that they collect a percentage of overspray from the conveyor and collection belt, this is done with the additional use of highly volatile solvents. Also, because kitchen cabinet clear coats are catalyzed, it is difficult to utilize all of the reclaim material generated, thereby increasing waste.

The enhanced transfer efficiency of the hand application system does come at a cost. It is more labor intensive, generally takes more building space, and more importantly, due to health and safety requirements, it requires significantly greater amounts of exhaust air. Because the proposed manual system of spray booths requires a greater amount of air per unit produced, much lower volatile concentrations will result in the exhaust gas air stream. Even by recirculating the exhaust air wherever possible, the potential volatile loading could often be as low as approximately 100 ppm_v. With this low of an inlet concentration, RTO manufacturers are often reluctant to guarantee 95 percent destruction efficiency. Normally, EPA Method 25A is used to verify VOC performance, and due to the expected low VOC inlet concentrations, test error and ambient background measurements, most manufactures limit their guarantee to be no less than 15 to 20 ppm_v measured at the outlet.

Based on the above information, it is not feasible to propose destruction efficiency any greater than 95 percent. The finishing equipment collection system will be designed utilizing the concepts of a total enclosure, however the collection efficiency must account for at least a small amount of uncaptured or fugitive losses. Accounting for an estimated 5 percent allowance for uncaptured or fugitive losses associated with a collection system yields an estimated collection efficiency of 95 percent. Therefore, the use of incineration add-on pollution control technology operating at a measured VOC destruction efficiency of 95 percent in conjunction with a VOC collection system with an estimated collection efficiency of 95 percent results in a control system operating at an overall VOC control efficiency of 90 percent. This control level is believed to represent a top-level of control for the proposed finishing equipment. As discussed above, an RTO is the type of incineration technology best suited for application to a finishing system based on auxiliary fuel cost savings. Nonetheless, a thermal oxidation system with no heat recovery and catalytic oxidation systems with and without heat recovery are also candidate control alternatives. Below is a summary of the candidate incineration alternatives further considered below as BACT in the "top-down" process:

- Regenerative thermal oxidation with 95% heat recovery
- Thermal oxidation (with no heat recovery)
- Catalytic oxidation (with 70% heat recovery)
- Catalytic oxidation (with no heat recovery)

Each of the above alternatives are ranked as equivalent in the "top-down" process since each are assumed to achieve an overall VOC control efficiency of 90% (based on a 95% efficient VOC collection system and a 95% control device destruction efficiency). These incineration alternatives are further evaluated as BACT based on economic, energy, and environmental impacts in the sections below.

IMPACT ANALYSIS FOR ADD-ON AIR POLLUTION CONTROL TECHNOLOGIES

Each of technically feasible add-on air pollution control technologies identified above is further evaluated as BACT based on economic, energy, and environmental impacts. The economic impact analysis performed for each incineration option considers estimated equipment capital costs and annualized operating costs. The economic analyses were completed based on two-60,000 cfm control systems (to treat a total exhaust rate of 120,000 cfm) following an approach consistent with USEPA guidance as

documented in the OAQPS Control Cost Manual (EPA/452/B-02-001 – Section 3, Chapter 2). The purchased equipment cost item was estimated for each control alternative directly from the OAQPS manual and was verified to represent a reasonable cost estimate by Merillat. An estimated ductwork cost was included in the analysis based on Merillat's estimated capital cost to implement a ductwork system for capturing VOC emissions from each proposed spray booth and associated curing ovens and flash areas and routing the VOC exhausts to add-on control systems. In accordance with the OAQPS manual, a 10-year equipment life and 7 year interest rate was used to calculate a capital recovery cost. The final step in the economic impact analysis is to calculate an annualized cost effectiveness value in terms of dollars per ton of pollutant (VOC) reduced. In calculating this value for the proposed finishing equipment to be installed at the Merillat facility, the tons of pollutant reduced was calculated by subtracting the newly proposed potential emissions value (411 tons/year) from the current potential emissions value for the existing equipment of (249 tons/year) and then applying a 90 percent overall control efficiency factor based on the implementation of a VOC collection and control system. Detailed economic impact cost tables are provided for each option as Tables B-1 through B-4 in this appendix.

Energy and environmental impacts are also considered as part of the impact analysis. Each of the incineration options has associated energy impacts attributed to auxiliary fuel demand and pressure loss through the control system. These energy impacts are shown for each control alternative under direct annual costs in Tables B-1 through B-4. Environmental impacts pertain to the generation of combustion related emissions (primarily NO_x and CO) from the operation of an incinerator. The pollutant of primary concern is NO_x since it has the potential to result in ozone formation. NO_x emissions are estimated to be approximately 10 to 20 tons per year from the operation of an add-on incinerator. However, this adverse environmental impact does not preclude eliminating the incineration operations from consideration as BACT since a significantly greater amount of VOC emissions will be reduced.

The impact analyses completed for each control alternative are summarized in the table shown below. Economic impacts for the incineration options range from $8,310/ton to $46,897/ton of VOC reduced. As expected, the options with heat recovery have lower annualized total costs due to substantial savings in auxiliary fuel costs. The costs associated with the application of each incineration technology are considered excessive in that they are greater than those typically associated with acceptable BACT alternatives. Therefore, add-on controls are concluded to be inappropriate as BACT for the proposed finishing equipment on the basis of excessive economic impacts.

Control Alternative	Emissions Reduced (tons VOC/yr)	Total Annualized Cost ($/yr)	Cost Effectiveness ($/ton VOC)	Energy Impact ($/yr)	Environmental Impact (tons NO_x/yr)
Regenerative Thermal Oxidation	145.8	1,211,597	8,310	185,021	21.4
Thermal Oxidation (no heat recovery)	145.8	6,837,558	46,897	3,264,769	21.4
Catalytic Oxidation (w/heat recovery)	145.8	1,660,081	11,386	507,474	10.5
Catalytic Oxidation (no heat recovery)	145.8	3,768,402	25,846	1,602,427	10.5
Note: see Tables B-1 through B-4 for more detailed information on each control alternative.					

BACT ANALYSIS CONCLUSION

The implementation of a VOC collection and add-on air pollution control system is not concluded as BACT for the proposed finishing system modifications on the basis of excessive economic impacts. Therefore, the BACT conclusion based on the above analysis for VOC emissions from the proposed finishing equipment is the use of HVLP, air assisted, or airless spray gun technology (or equivalent).

TABLE B-1
REGENERATIVE THERMAL OXIDATION CAPITAL COST COMPONENTS
MERILLAT CORPORATION - OCALA, FLORIDA

DIRECT COSTS:	FACTOR	(1)	EQUIPMENT COST ($)
(1) Purchased Equipment Costs (for one 60,000 cfm RTO unit)			
a) Basic Equipment			
1) Basic Equipment and Auxiliaries		(2)	914,600
2) Ductwork (estimated)			190,600
Subtotal of Basic Equipment	A		1,105,200
b) Instruments and Controls	0.1 A		110,520
c) Sales Tax	0.03A		33,156
d) Freight	0.05A		55,260
Total Purchased Equipment Cost	B = 1.18 A		1,304,136
(2) Direct Installation Costs			
a) Foundations and Supports	0.08 B		104,331
b) Handling and Erection	0.14 B		182,579
c) Electrical	0.04 B		52,165
d) Piping	0.02 B		26,083
e) Insulation	0.01 B		13,041
f) Painting	0.01 B		13,041
Total Installed Direct Cost	0.30 B		391,241
TOTAL DIRECT COST	**1.30 B**		**1,695,377**
INDIRECT COSTS:			
(3) Engineering	0.10 B		130,414
(4) Construction and Field Expenses	0.05 B		65,207
(5) Contractor Fees	0.10 B		130,414
(6) Start-up	0.02 B		26,083
(7) Performance Test	0.01 B		13,041
(8) Contingency	0.03 B		39,124
TOTAL INDIRECT COST	**0.31 B**		**404,282**
TOTAL CAPITAL COST	1.61 B		2,099,659

TABLE B-1 (Continued)
REGENERATIVE THERMAL OXIDATION OPERATING COST COMPONENTS
MERILLAT CORPORATION - OCALA, FLORIDA

DIRECT OPERATING COSTS:	FACTOR	(1)	COST ($)
Operating Labor (2 shifts/day)	1/2 hour per shift ($30/hr)		7,500
Supervisory Labor	15% of Operating Labor		1,125
Maintenance Labor (2 shifts/day)	1/2 hour per shift ($30/hr)		7,500
Maintenance Materials	100% of Maintenance Labor		7,500
Utilities			
a) Electricity	$0.059/kwhr	(3)	57,985
b) Natural Gas (auxiliary fuel usage)	$7.55/MMBtu	(4)	127,036
Total Direct Operating Cost			**208,646**
INDIRECT OPERATING COSTS:			
Overhead	60% of Labor and Materials		14,175
Administrative charges	2% of Total Capital Cost		41,993
Property Tax	1% of Total Capital Cost		20,997
Insurance	1% of Total Capital Cost		20,997
Capital Recovery	[CRF (5)][Total Capital Cost]		298,991
Total Indirect Operating Cost			**397,153**
TOTAL ANNUALIZED COST (per unit)			**605,799**
Total Estimated Annualized Cost for 2 Units		(6)	1,211,597
Tons Per Year of VOC Removed by Oxidation (90% overall C.E. basis)			145.8
COST EFFECTIVENESS ($/ton VOC Removed)			**8,310**

NOTES:

1. Source: Section 3.2, Chapter 2 of EPA Air Pollution Control Cost Manual (Sixth Edition) EPA/452/B-02-001, January 2002, U.S. EPA Office of Air Quality Planning and Standards (OAQPS).
2. Purchased equipment cost & auxiliaries represents budget estimates from OAQPS Cost Manual.
3. Electricity demand calculated per hour as follows (from OAQPS Cost Manual):
   [(1.17E-4)(acfm)(delta P)/eff] Where acfm = exhaust actual cubic feet per minute
   delta P = pressure drop across system (21 inches of water)
   eff = combined fan and motor efficiency (60%)
4. Estimated fuel use based on attached fuel program. $/MMBtu fuel cost is minimum cost paid over past year.
5. CRF (Capital Recovery Factor) = 0.1424 and is based on 10 year equipment life and 7 percent interest rate.
6. A total of 2 regenerative thermal oxidation systems are required to process approximately 120,000 cfm of exhaust air (60,000 cfm per unit) from the modified wood products finishing system.

TABLE B-1a
FUEL PROGRAM
MERILLAT CORPORATION - OCALA, FLORIDA

	Thermal Oxidation	Catalytic Oxidation w/heat recovery	Catalytic Oxidation	Regenerative Thermal Oxidation
THERMAL ENERGY RECOVERY	0%	70%	0%	95%
VOC REMOVAL EFF. *	90%	90%	90%	90%
FUEL COST, $/kft^3 ($/MMBtu)	7.55	7.55	7.55	7.55
OPERATING HOURS, hr/yr	4000	4000	4000	4000
PROCESS EXHAUST VOLUME, scfm	60000	60000	60000	60000
PROCESS EXHAUST TEMP., Deg.F	120	120	120	120
VOC RATE, lb/hr	81.0	81.0	81.0	81.0
VOC HEAT VALUE, Btu/lb	15,000	15,000	15,000	15,000
INCIN TEMP., Deg.F	1600	850	850	1600
NET ENERGY REQUIRED, MMBtu/hr	95.90	47.30	47.30	95.90
TOTAL ENERGY RECOVERED, %	0%	70%	0%	95%
NET HEAT EXCHANGED, MMBtu/hr	0.00	33.11	0.00	91.11
NET VOC ENERGY CREDIT, MMBtu/hr	1.09	1.09	1.09	1.09
NET FUEL REQUIRED, MMBtu/hr	94.81	13.10	46.21	3.70
AVAILABLE FUEL ENERGY, %	88.00	88.00	88.00	88.00
GROSS FUEL REQUIRED, MMBtu/hr	107.74	14.88	52.51	4.21
FUEL COST, $/year	**3,253,724**	**449,489**	**1,585,860**	**127,036**

* VOC removal efficiency reflects overall efficiency based on 95% capture efficiency and 95% control efficiency.

TABLE B-2
THERMAL OXIDATION CAPITAL COST COMPONENTS
MERILLAT CORPORATION - OCALA, FLORIDA

DIRECT COSTS:	FACTOR	(1)	EQUIPMENT COST ($)
(1) Purchased Equipment Costs (for one 60,000 cfm RTO unit)			
a) Basic Equipment			
1) Basic Equipment and Auxiliaries		(2)	144,760
2) Ductwork (estimated)			190,600
Subtotal of Basic Equipment	A		335,360
b) Instruments and Controls	0.1 A		33,536
c) Sales Tax	0.03A		10,061
d) Freight	0.05A		16,768
Total Purchased Equipment Cost	B = 1.18 A		395,725
(2) Direct Installation Costs			
a) Foundations and Supports	0.08 B		31,658
b) Handling and Erection	0.14 B		55,401
c) Electrical	0.04 B		15,829
d) Piping	0.02 B		7,914
e) Insulation	0.01 B		3,957
f) Painting	0.01 B		3,957
Total Installed Direct Cost	0.30 B		118,717
TOTAL DIRECT COST	**1.30 B**		**514,442**
INDIRECT COSTS:			
(3) Engineering	0.10 B		39,572
(4) Construction and Field Expenses	0.05 B		19,786
(5) Contractor Fees	0.10 B		39,572
(6) Start-up	0.02 B		7,914
(7) Performance Test	0.01 B		3,957
(8) Contingency	0.03 B		11,872
TOTAL INDIRECT COST	**0.31 B**		**122,675**
TOTAL CAPITAL COST	1.61 B		637,117

TABLE B-2 (Continued)
THERMAL OXIDATION OPERATING COST COMPONENTS
MERILLAT CORPORATION - OCALA, FLORIDA

DIRECT OPERATING COSTS:	FACTOR	(1)	COST ($)
Operating Labor (2 shifts/day)	1/2 hour per shift ($30/hr)		7,500
Supervisory Labor	15% of Operating Labor		1,125
Maintenance Labor (2 shifts/day)	1/2 hour per shift ($30/hr)		7,500
Maintenance Materials	100% of Maintenance Labor		7,500
Utilities			
a) Electricity	$0.059/kwhr	(3)	11,045
b) Natural Gas (auxiliary fuel usage)	$7.55/MMBtu	(4)	3,253,724
Total Direct Operating Cost			3,288,394
INDIRECT OPERATING COSTS:			
Overhead	60% of Labor and Materials		14,175
Administrative charges	2% of Total Capital Cost		12,742
Property Tax	1% of Total Capital Cost		6,371
Insurance	1% of Total Capital Cost		6,371
Capital Recovery	[CRF (5)][Total Capital Cost]		90,725
Total Indirect Operating Cost			130,385
TOTAL ANNUALIZED COST (per unit)			**3,418,779**
Total Estimated Annualized Cost for 2 Units		(6)	6,837,558
Tons Per Year of VOC Removed by Oxidation (90% overall C.E. basis)			145.8
COST EFFECTIVENESS ($/ton VOC Removed)			**46,897**

NOTES:

1. Source: Section 3.2, Chapter 2 of EPA Air Pollution Control Cost Manual (Sixth Edition) EPA/452/B-02-001, January 2002, U.S. EPA Office of Air Quality Planning and Standards (OAQPS).
2. Purchased equipment cost & auxiliaries represents budget estimates from OAQPS Cost Manual..
3. Electricity demand calculated per hour as follows (from OAQPS Cost Manual):
   [(1.17E-4)(acfm)(delta P)/eff] Where. acfm = exhaust actual cubic feet per minute
   delta P = pressure drop across system (4 inches of water)
   eff = combined fan and motor efficiency (60%)
4. Estimated fuel use based on attached fuel program. $/MMBtu fuel cost is minimum cost paid over past year.
5. CRF (Capital Recovery Factor) = 0.1424 and is based on 10 year equipment life and 7 percent interest rate.
6. A total of 2 thermal oxidation systems are required to process approximately 120,000 cfm of exhaust air (60,000 cfm per unit) from the modified wood products finishing system.

TABLE B-3
CATALYTIC OXIDATION (w/heat recovery) CAPITAL COST COMPONENTS
MERILLAT CORPORATION - OCALA, FLORIDA

DIRECT COSTS:	FACTOR	(1)	EQUIPMENT COST ($)
(1) Purchased Equipment Costs (for one 60,000 cfm RTO unit)			
a) Basic Equipment			
1) Basic Equipment and Auxiliaries		(2)	631,180
2) Ductwork (estimated)			190,600
Subtotal of Basic Equipment	A		821,780
b) Instruments and Controls	0.1 A		82,178
c) Sales Tax	0.03A		24,653
d) Freight	0.05A		41,089
Total Purchased Equipment Cost	B = 1.18 A		969,700
(2) Direct Installation Costs			
a) Foundations and Supports	0.08 B		77,576
b) Handling and Erection	0.14 B		135,758
c) Electrical	0.04 B		38,788
d) Piping	0.02 B		19,394
e) Insulation	0.01 B		9,697
f) Painting	0.01 B		9,697
Total Installed Direct Cost	0.30 B		290,910
TOTAL DIRECT COST	**1.30 B**		**1,260,611**
INDIRECT COSTS:			
(3) Engineering	0.10 B		96,970
(4) Construction and Field Expenses	0.05 B		48,485
(5) Contractor Fees	0.10 B		96,970
(6) Start-up	0.02 B		19,394
(7) Performance Test	0.01 B		9,697
(8) Contingency	0.03 B		29,091
TOTAL INDIRECT COST	**0.31 B**		**300,607**
TOTAL CAPITAL COST	1.61 B		1,561,218

TABLE B-3 (Continued)
CATALYTIC OXIDATION (w/heat recovery) CAPITAL COST COMPONENTS
MERILLAT CORPORATION - OCALA, FLORIDA

DIRECT OPERATING COSTS:	FACTOR	(1)	COST ($)
Operating Labor (2 shifts/day)	1/2 hour per shift ($30/hr)		7,500
Supervisory Labor	15% of Operating Labor		1,125
Maintenance Labor (2 shifts/day)	1/2 hour per shift ($30/hr)		7,500
Maintenance Materials	100% of Maintenance Labor		7,500
Utilities			
a) Electricity	$0.059/kwhr	(3)	57,985
b) Natural Gas (auxiliary fuel usage)	$7.55/MMBtu	(4)	449,489
Total Direct Operating Cost			531,099
INDIRECT OPERATING COSTS:			
Overhead	60% of Labor and Materials		14,175
Administrative charges	2% of Total Capital Cost		31,224
Property Tax	1% of Total Capital Cost		15,612
Insurance	1% of Total Capital Cost		15,612
Capital Recovery	[CRF **(5)**][Total Capital Cost]		222,317
Total Indirect Operating Cost			298,941
TOTAL ANNUALIZED COST (per unit)			**830,041**
Total Estimated Annualized Cost for 2 Units		(6)	1,660,081
Tons Per Year of VOC Removed by Oxidation (90% overall C.E. basis)			145.8
COST EFFECTIVENESS ($/ton VOC Removed)			**11,386**

NOTES:

1. Source: Section 3.2, Chapter 2 of EPA Air Pollution Control Cost Manual (Sixth Edition) EPA/452/B-02-001, January 2002, U.S. EPA Office of Air Quality Planning and Standards (OAQPS).
2. Purchased equipment cost & auxiliaries represents budget estimates from OAQPS Cost Manual.
3. Electricity demand calculated per hour as follows (from OAQPS Cost Manual):
   [(1.17E-4)(acfm)(delta P)/eff] Where: acfm = exhaust actual cubic feet per minute; delta P = pressure drop across system (21 inches of water); eff = combined fan and motor efficiency (60%)
4. Estimated fuel use based on attached fuel program. $/MMBtu fuel cost is minimum cost paid over past year.
5. CRF (Capital Recovery Factor) = 0.1424 and is based on 10 year equipment life and 7 percent interest rate.
6. A total of 2 catalytic oxidation systems are required to process approximately 120,000 cfm of exhaust air (60,000 cfm per unit) from the modified wood products finishing system.

TABLE B-4
CATALYTIC OXIDATION CAPITAL COST COMPONENTS
MERILLAT CORPORATION - OCALA, FLORIDA

DIRECT COSTS:	FACTOR	(1)	EQUIPMENT COST ($)
(1) Purchased Equipment Costs (for one 60,000 cfm RTO unit)			
a) Basic Equipment			
1) Basic Equipment and Auxiliaries		(2)	513,460
2) Ductwork (estimated)			190,600
Subtotal of Basic Equipment	A		704,060
b) Instruments and Controls	0.1 A		70,406
c) Sales Tax	0.03A		21,122
d) Freight	0.05A		35,203
Total Purchased Equipment Cost	B = 1.18 A		830,791
(2) Direct Installation Costs			
a) Foundations and Supports	0.08 B		66,463
b) Handling and Erection	0.14 B		116,311
c) Electrical	0.04 B		33,232
d) Piping	0.02 B		16,616
e) Insulation	0.01 B		8,308
f) Painting	0.01 B		8,308
Total Installed Direct Cost	0.30 B		249,237
TOTAL DIRECT COST	**1.30 B**		**1,080,028**
INDIRECT COSTS:			
(3) Engineering	0.10 B		83,079
(4) Construction and Field Expenses	0.05 B		41,540
(5) Contractor Fees	0.10 B		83,079
(6) Start-up	0.02 B		16,616
(7) Performance Test	0.01 B		8,308
(8) Contingency	0.03 B		24,924
TOTAL INDIRECT COST	**0.31 B**		**257,545**
TOTAL CAPITAL COST	1.61 B		1,337,573

TABLE B-4 (Continued)
CATALYTIC OXIDATION OPERATING COST COMPONENTS
MERILLAT CORPORATION - OCALA, FLORIDA

DIRECT OPERATING COSTS:	FACTOR	(1)	COST ($)
Operating Labor (2 shifts/day)	1/2 hour per shift ($30/hr)		7,500
Supervisory Labor	15% of Operating Labor		1,125
Maintenance Labor (2 shifts/day)	1/2 hour per shift ($30/hr)		7,500
Maintenance Materials	100% of Maintenance Labor		7,500
Utilities			
a) Electricity	$0.059/kwhr	(3)	16,567
b) Natural Gas (auxiliary fuel usage)	$7.55/MMBtu	(4)	1,585,860
Total Direct Operating Cost			1,626,053
INDIRECT OPERATING COSTS:			
Overhead	60% of Labor and Materials		14,175
Administrative charges	2% of Total Capital Cost		26,751
Property Tax	1% of Total Capital Cost		13,376
Insurance	1% of Total Capital Cost		13,376
Capital Recovery	[CRF (5)][Total Capital Cost]		190,470
Total Indirect Operating Cost			258,148
TOTAL ANNUALIZED COST (per unit)			**1,884,201**
Total Estimated Annualized Cost for 2 Units		(6)	3,768,402
Tons Per Year of VOC Removed by Oxidation (90% overall C.E. basis)			145.8
COST EFFECTIVENESS ($/ton VOC Removed)			**25,846**

NOTES:

1. Source: Section 3.2, Chapter 2 of EPA Air Pollution Control Cost Manual (Sixth Edition) EPA/452/B-02-001, January 2002, U.S. EPA Office of Air Quality Planning and Standards (OAQPS).
2. Purchased equipment cost & auxiliaries represents budget estimates from OAQPS Cost Manual.
3. Electricity demand calculated per hour as follows (from OAQPS Cost Manual):
   [(1.17E-4)(acfm)(delta P)/eff] Where: acfm = exhaust actual cubic feet per minute; delta P = pressure drop across system (6 inches of water); eff = combined fan and motor efficiency (60%)
4. Estimated fuel use based on attached fuel program. $/MMBtu fuel cost is minimum cost paid over past year.
5. CRF (Capital Recovery Factor) = 0.1424 and is based on 10 year equipment life and 7 percent interest rate.
6. A total of 2 catalytic oxidation systems are required to process approximately 120,000 cfm of exhaust air (60,000 cfm per unit) from the modified wood products finishing system.

APPENDIX B

RACT/BACT/LAER Clearinghouse Summary & Detailed Report

TABLE B-5
Summary of RBLC Determinations for VOC Emissions from Wood Products/Furniture Surface Coating (1994 - 2004)

RBLC ID	Facility	Permit Date	Process	Allowable VOC Emission Rate	Determination
AL-0083	Wellborn Cabinet, Inc.	09/08/95	Wood cabinet manufacturing	797.0 TPY	HVLP and air assisted/airless spray guns (BACT)
AZ-0024	Thornwood Furniture Mfg. Inc.	06/13/94	Coating, wood furniture	760.0 lb/day; 99.0 TPY	High transfer efficiency, low VOC coatings (BACT)
CA-0634	Custom Woodcraft	12/13/94	Wood coating operation	No emission limits listed	Low VOC coatings (BACT)
CA-0726	Creations in Wood, Inc.	09/12/96	Coating booth	12.5 lb/day	Low VOC coatings & HVLP spray guns (LAER)
CA-0769	Guy Chaddock & Company	03/07/97	Coating application	250.0 lb/day; 10.0 TPY	HVLP spray guns (LAER)
CA-0772	Enviroplex	12/18/01	Exterior Coating of Panels	18.8 - 25.0 lb/day	HVLP spray guns, low VOC coatings (LAER)
CA-0804	American Door Manufacturing	11/21/96	Wood products coating operation	21.7 lb/day 15.4 lb/day	HVLP spray guns and Low VOC coatings (LAER)
CA-0815	Sandberg Furniture Co., Inc.	12/18/01	Coating wood furniture	0.0164 lb/day	Roller coaters and UV cure section (LAER)
CA-0873	Sandberg Furniture Co., Inc.	02/21/97	Coating and drying system	1689 lb/day	Low VOC coatings (BACT)
CA-0891	Arbek Manufacturing, Inc.	04/26/00	Spray booth	346.0 lb/day	Low VOC coatings (BACT)
CA-0995	Feathers Custom Wood Products	12/01/02	Coating operation	3900.0 lb/quarter	Low VOC coatings and high transfer equipment (LAER)
IA-0042	Omega Cabinets	04/10/98	Spray line	215.0 TPY	High transfer efficiency (BACT)
IN-0113	Masterbrand Cabinets	02/03/03	Spray booths	200 TPY 16.67 tons/month	RTO (BACT)
MI-0286	Steelcase Wood Furniture	01/06/00	Surface coating	See note below (1)	HVLP, automatic electrostatic spray. Capture & control system (RTO) for tiecoats and washcoats (BACT)
MN-0037	Crystal Cabinet Works, Inc.	10/03/01	Surface coating, spray finishing	See note below (1)	High transfer efficiency, reformulated coatings (BACT)
MS-0042	Batesville Casket Company	03/15/99	Wood finishing line	46.15 TPY	Low VOC coatings (BACT)
NC-0079	Masterbrand Cabinets	09/05/01	Spray booths	620.0 TPY	Low VOC coatings (BACT)
NC-0080	Marsh Furniture Company	01/28/02	Surface coating	800.0 TPY	Low VOC coatings (BACT)
NC-0098	Homanit USA, Inc.	03/19/02	Surface coating line	140.0 TPY	Low VOC coatings (BACT)
NC-0100	Steelcase, Inc.	03/03/98	Surface coating, furniture finishing	913.0 TPY	Non-photochemically reactive solvents (BACT)
OH-0249	Sauder Woodworking Company	08/18/99	Stain roller application	6.8 lb/hr	Basis listed as SIP
TN-0084	Bruce Hardwood Flooring	07/10/98	Surface coating	6.53 tons/month; 78.3 TPY	Rollcoat applicators and UV cure sealers/topcoats (BACT)
VA-0217	Dutailier Virginia, Inc.	03/17/94	Coating, production booth	160.9 lb/hr; 153.8 TPY	HVLP spray guns (BACT)
VA-0237	Vaughan Furniture Company	08/28/96	Spray booths	232.0 TPY	Airless spray nozzles (MACT)
VA-0242	Stanley Furniture	05/31/99	Paint spray booths	350.0 TPY	HVLP and air assisted/airless spray guns (BACT)
VA-0243	Stanley Furniture	12/01/02	Surface coating	338.0 TPY	Limit on VOC throughput (BACT)
VA-0286	Merillat Corporation	01/05/04	Wood furniture finishing system	288.0 lb/hr; 240.0 TPY	Good control (operating) practices (MACT)
WI-0110	Bemis Manufacturing Co.	05/13/99	Flow coating line	24.73 lb/hr	Low VOC content (BACT)

(1) Emission limits listed on lb/gallon basis.

DETAILED SOURCE LISTING
Report Date: 09/22/2004

Facility Information

RBLC ID: VA-0286 (final)
Company Name: MERILLAT CORPORATION
Plant Name: MERILLAT CORPORATION PLANT 14
EPA Region: 3
County/State: SMYTH / VA
Permit Issued By: VIRGINIA ENVIRONMENTAL QUALITY AIR DIV. (agency)
CLIFF MUSICK (contact) (540) 676-4833
Plant Description: EQUIPMENT TO BE CONSTRUCTED AT THIS FACILITY CONSISTS OF 1 WOOD SANDING SYSTEM RATED AT 4,000 SQUARE FT/HR; 1 WOOD BRUSHING SYSTEM RATED AT 4,000 SQUARE FT/HR; 3 FIXED ROOF STORAGE TANKS EACH WITH LESS THAN 10,000 GALLONS CAPACITY; AND 1 WOOD FURNITURE FINISHING SYSTEM RATED AT 48 GALLONS/HR INCLUDING 24 PRODUCTION SYSTEMS, OR EQUIVALENT SPRAY BOOTHS; 12 PRODUCTIONS SYSTEMS OR EQUIVALENT NATURAL GAS FIRED CURING OVENS RATED BETWEEN 0.5 AND 4.5 MMBTU/HR EACH.
Notes:

Date Last Updated: 03/19/2004
Permit/File No.: 11075
Permit Date: 01/05/2004 (actual)
SIC Code: 2434
NAICS: 33711

Process/Pollutant Information

PROCESS: WOOD SANDING AND BRUSHING SYSTEMS
Process Type: 30.007 (Woodworking)
Primary Fuel:
Throughput:
Process Notes: WOOD SANDING AND BRUSHING SYSTEMS

SCC Code: 30702003
Compliance Verified: No

POLLUTANT: PM **CAS No.:** PM
Emission Limit 1: 7.7600 LB/H
Emission Limit 2: 0.0100 GR/DSCF
Standard Emission:
Control Method: (P) FABRIC FILTER BAGHOUSES
Pollutant Notes: Additional limit: 34 t/yr. EMISSIONS FROM THE OPERATION OF ALL WOODWORKING MACHINERY AT THE FACILITY SHALL NOT EXCEED THIS LIMIT

Basis: NSPS
% Efficiency:

POLLUTANT: PM10 **CAS No.:** PM

Emission Limit 1: 7.7600 LB/H **Basis:** NSPS

Emission Limit 2: 0.0100 GR/DSCF **% Efficiency:**

Standard Emission:

Control Method: (P) FARBRIC FILTER BAGHOUSES

Pollutant Notes: Additional limit: 34 t/yr. EMISSIONS FROM THE OPERATION OF ALL WOODWORKING MACHINERY AT THE FACILITY SHALL NOT EXCEED THIS LIMIT

Process/Pollutant Information

PROCESS: WOOD FINISHING

Process Type: 41.025 (Wood Products/Furniture Surface Coating (except 41.006))

Primary Fuel: **SCC Code:** 40201901

Throughput: **Compliance Verified:** No

Process Notes: WOOD FURNITURE FINISHING SYSTEM CONSISTS OF SPRAY BOOTHS AND CURING OVENS

POLLUTANT: PM10 **CAS No.:** PM

Emission Limit 1: 4.8000 LB/H **Basis:** MACT

Emission Limit 2: 4.0000 T/YR **% Efficiency:**

Standard Emission:

Control Method: (P) FIBERGLASS FILTERS

Pollutant Notes: TOTAL EMISSIONS FROM THE OPERATION OF THE FINISHING SYSTEMS SHALL NOT EXCEED THESE SPECIFIED LIMITS

POLLUTANT: VOC **CAS No.:** VOC

Emission Limit 1: 288.0000 LB/H **Basis:** MACT

Emission Limit 2: 240.0000 T/YR **% Efficiency:**

Standard Emission:

Control Method: (P) GOOD CONTROL PRACTICES FOR MINIMIZING EMISSIONS

Pollutant Notes: TOTAL EMISSIONS FROM THE OPERATION OF THE FINISHING SYSTEMS SHALL NOT EXCEED THESE SPECIFIED LIMITS

Facility Information

RBLC ID:	IN-0113 (final)	**Date Last Updated:**	05/28/2004
Company Name:	MASTERBRAND CABINETS, INC.	**Permit/File No.:**	037-13893-00051-2434
Plant Name:	MASTERBRAND CABINETS, INC.	**Permit Date:**	02/03/2003 (actual)
EPA Region:	5	**SIC Code:**	2434
County/State:	DUBOIS / IN	**NAICS:**	33711
Permit Issued By:	INDIANA DEPT OF ENV MGMT, OFC OF AIR (agency) GURINDER SAINI (contact) 317-233-0203		
Plant Description:	WOODEN CABINET MANUFACTURING		
Notes:	Modification to construct and operate an electrostatic finishing line consisting of 6 new spray booths: stain, sealer, and topcoat; and existing spray booths for toner, sealer touch-up, and topcoat touch-up booths, and a curing oven.		

Process/Pollutant Information

PROCESS:	SPRAY BOOTHS		
Process Type:	41.025 (Wood Products/Furniture Surface Coating (except 41.006))		
Primary Fuel:	NATURAL GAS	**SCC Code:**	40201901
Throughput:	766.00 UNIT/H	**Compliance Verified:**	No
Process Notes:	6 spray booths: 2 stain spray booths, 2 sealer spray booths, 2 topcoat spray booths, all using electrostatic spray applicators, using dry filters as particulate controls.		

POLLUTANT: VOC **CAS No.:** VOC

Emission Limit 1:	200.0000 T/YR	**Basis:**	BACT-PSD
Emission Limit 2:	16.6700 T/MO	**% Efficiency:**	
Standard Emission:			
Control Method:	(B) NATURAL GAS FIRED RTO, MAXIMUM HEAT INPUT: 7.9 MMBTU/H; USAGE LIMITS		
Pollutant Notes:	Limits above are for the operations 12 months after beginning use of the RTO. Additional limit is 50 t/quarter. From the date of the permit until commencement of the RTO, input of VOC < 381 t/yr; 95.25 t/quarter; or 31.75 t/mo.		

POLLUTANT: HAP **CAS No.:** HAP

Emission Limit 1:	1.0000 LB/LB SOLIDS weighted avg	**Basis:**	NESHAP
Emission Limit 2:	1.0000 LB/LB SOLIDS max for coatings (see note)	**% Efficiency:**	
Standard Emission:			
Control Method:	(B) EITHER COATING VOLATILE HAP (VHAP) CONTENT LIMITS OR CONTROL DEVICE (RTO, IN THIS CASE)		
Pollutant Notes:	1 lb/lb solids max for all stains, washcoats, sealers, topcoats, basecoats, & enamels.		

Facility Information

RBLC ID:	CA-0995 (final)	**Date Last Updated:**	09/03/2003
Company Name:	FEATHERS CUSTOM WOOD PRODUCTS	**Permit/File No.:**	16563
Plant Name:	FEATHERS CUSTOM WOOD PRODUCTS	**Permit Date:**	12/01/2002 (actual)
EPA Region:	9	**SIC Code:**	2511
County/State:	SACRAMENTO COUNTY / CA	**NAICS:**	337122
Permit Issued By:	SACRAMENTO METROPOLITAN AQMD, CA (agency) JORGE DEGUZMAN (contact) (916)874-4860		
Plant Description:	CUSTOM WOODWORKING FACILITY		
Notes:			

Process/Pollutant Information

PROCESS:	COATING OPERATION		
Process Type:	41.025 (Wood Products/Furniture Surface Coating (except 41.006))		
Primary Fuel:		**SCC Code:**	40201901
Throughput:		**Compliance Verified:**	No

Process Notes: PAINT SPRAY BOOTH

POLLUTANT: VOC **CAS No.:** VOC

Emission Limit 1:	3900.0000 LB/QTR QUARTER	**Basis:** LAER
Emission Limit 2:		**% Efficiency:**
Standard Emission:		
Control Method:	(P) LOW VOC COATING AND HIGH TRANSFER EQUIPMENT	
Pollutant Notes:	BACT DETERMINATION: ACHIEVED IN PRACTICE. Limit for each quarter - 3 months.	

Facility Information

RBLC ID:	VA-0243 (final)	**Date Last Updated:**	12/03/2002
Company Name:		**Permit/File No.:**	31027
Plant Name:	STANLEY FURNITURE	**Permit Date:**	12/01/2002 (estimated)
EPA Region:	3	**SIC Code:**	2511
County/State:	HENRY / VA	**NAICS:**	337122
Permit Issued By:	VIRGINIA ENVIRONMENTAL QUALITY AIR DIV. (agency) STEVE DIETRICH (contact) (540) 562-6762		
Plant Description:	WOOD HOUSEHOLD FURNITURE MFG.		
Notes:			

Process/Pollutant Information

PROCESS: BOILER, NAT GAS & OIL

Process Type: 13.310 (Natural Gas (includes propane and liquefied petroleum gas))

Primary Fuel: NATURAL GAS **SCC Code:** 10200602
Throughput: 26.50 MMBTU/H **Compliance Verified:** No
Process Notes: KEWANEE NATURAL GAS/DISTILLATE OIL BOILER. THROUGHPUT 26.5 MMBTU/HR - 450,000 GAL #2 OIL. ADDITIONAL SCC, 10200502. FOR ALL POLLUTANTS, NO CONTROLS, EMISSION LIMITS IN T/YR ONLY

POLLUTANT: NOX **CAS No.:** 10102
Emission Limit 1: 12.8000 T/YR **Basis:** BACT-OTHER
Emission Limit 2: **% Efficiency:**
Standard Emission: NOT AVAILABLE
Control Method: (N) EMISSION LIMITS IN T/YR ONLY
Pollutant Notes:

POLLUTANT: PM10 **CAS No.:** PM
Emission Limit 1: 0.9000 T/YR **Basis:** BACT-OTHER
Emission Limit 2: **% Efficiency:**
Standard Emission: NOT AVAILABLE
Control Method: (N) NO CONTROLS LISTED. EMISSION LIMITS IN T/YR ONLY
Pollutant Notes:

POLLUTANT: SO2 **CAS No.:** 7446-09-5
Emission Limit 1: 16.0000 T/YR **Basis:** BACT-OTHER
Emission Limit 2: **% Efficiency:**
Standard Emission: NOT AVAILABLE
Control Method: (N) EMISSION LIMITS IN T/YR ONLY
Pollutant Notes:

POLLUTANT: CO **CAS No.:** 630-08-0
Emission Limit 1: 9.4000 T/YR **Basis:** BACT-OTHER
Emission Limit 2: **% Efficiency:**
Standard Emission: NOT AVAILABLE
Control Method: (N) EMISSION LIMITS IN T/YR ONLY
Pollutant Notes:

POLLUTANT: PM **CAS No.:** PM
Emission Limit 1: 1.1000 T/YR **Basis:** BACT-OTHER
Emission Limit 2: **% Efficiency:**
Standard Emission: NOT AVAILABLE
Control Method: (N) EMISSION LIMITS IN T/YR ONLY
Pollutant Notes:

Process/Pollutant Information

PROCESS: WOOD FURNITURE MANUFACTURING, WOODWORKING
Process Type: 30.007 (Woodworking)
Primary Fuel: **SCC Code:** 307020
Throughput: **Compliance Verified:** No
Process Notes:

POLLUTANT: PM **CAS No.:** PM
Emission Limit 1: 17.4000 T/YR **Basis:** BACT-OTHER
Emission Limit 2: 0.0040 GR/DSCF **% Efficiency:**
Standard Emission:
Control Method: (A) BAGHOUSE/FABRIC FILTERS.
Pollutant Notes:

POLLUTANT: PM10 **CAS No.:** PM
Emission Limit 1: 8.7000 T/YR **Basis:** BACT-OTHER
Emission Limit 2: 0.0020 GR/DSCF **% Efficiency:**
Standard Emission:
Control Method: (A) BAGHOUSE/FABRIC FILTERS.
Pollutant Notes:

Process/Pollutant Information

PROCESS: WOOD FURNITURE MANUFACTURING, SURFACE COATING
Process Type: 41.025 (Wood Products/Furniture Surface Coating (except 41.006))
Primary Fuel:
Throughput:
Process Notes:
SCC Code: 40201901
Compliance Verified: No

POLLUTANT: VOC **CAS No.:** VOC
Emission Limit 1: 338.0000 T/YR
Emission Limit 2:
Standard Emission:
Control Method: (P) PLANT TOOK A LIMIT ON VOC THROUGHPUT
Pollutant Notes:
Basis: BACT-PSD
% Efficiency:

POLLUTANT: PM10 **CAS No.:** PM
Emission Limit 1: 4.8000 T/YR
Emission Limit 2:
Standard Emission:
Control Method: (B) OVERSPRAY CONTROLS AND WATER CURTAINS
Pollutant Notes:
Basis: BACT-OTHER
% Efficiency:

Facility Information

RBLC ID: NC-0098 (final)
Company Name: HOMANIT USA, INC.
Plant Name: HOMANIT USA, INC. MT. GILEAD
Date Last Updated: 04/02/2004
Permit/File No.: 08803R02
Permit Date: 03/19/2002 (actual)

EPA Region:	4	**SIC Code:**	2493
County/State:	MONTGOMERY / NC	**NAICS:**	321219
Permit Issued By:	NORTH CAROLINA DIV OF ENV MGMT (agency) BRUCE INGLE (contact) (919) 715-6241		
Plant Description:	THIN HIGH DENSITY FIBERBOARD MANUFACTURING		
Notes:	Modification to construct a surface coating line at its thin high-density fiberboard (THDF)manufacturing facility.		

Process/Pollutant Information

PROCESS:	SURFACE COATING LINE		
Process Type:	41.025 (Wood Products/Furniture Surface Coating (except 41.006))		
Primary Fuel:		**SCC Code:**	402021
Throughput:		**Compliance Verified:**	No
Process Notes:	one rotographic surface coating line (ID No. ES-50)		

POLLUTANT: VOC **CAS No.:** VOC

Emission Limit 1:	140.0000 T/YR 12 mo rolling avg	**Basis:**	BACT-PSD
Emission Limit 2:		**% Efficiency:**	
Standard Emission:			
Control Method:	(P) LOW VOC COATINGS		
Pollutant Notes:	MACT limit for VOC is 0.01 HAP/gal solids, supplier certification		

Facility Information

RBLC ID:	NC-0080 (final)	**Date Last Updated:**	03/12/2004
Company Name:	MARSH FURNITURE COMPANY	**Permit/File No.:**	03238R15

Plant Name:	MARSH FURNITURE COMPANY	**Permit Date:**	01/28/2002 (actual)
EPA Region:	4	**SIC Code:**	2511
County/State:	GUILFORD / NC	**NAICS:**	337122
Permit Issued By:	NORTH CAROLINA DIV OF ENV MGMT (agency) BOOKER PULLEN (contact) (919) 715-6248		
Plant Description:	FURNITURE MANUFACTURING		
Notes:	Modification is to install 2 new surface coating lines to eventually replace 3 existing flat lines, and to replace the equipment in the roller room with a new flat-type surface coating line. The PSD review will address BACT for the finishing/coating operations, only VOC emissions are subject to BACT.		

Process/Pollutant Information

PROCESS: SURFACE COATING, HANGING LINE (2)

Process Type: 41.025 (Wood Products/Furniture Surface Coating (except 41.006))

Primary Fuel: **SCC Code:** 40201901

Throughput: **Compliance Verified:** No

Process Notes: Hanging lines 1&2: conveyorized hanging systems with 6 spray booth pairs per line. Lines include sections where each coating stage is cured in natural gas fired ovens. Each booth will be constructed with an over spray paint arrestor pad to capture potential emissions of pm10. Spray booths are: SAP/equalizer, stain, wiping stain, sealer/topcoat, glaze, and topcoats.

POLLUTANT: VOC **CAS No.:** VOC

Emission Limit 1: 800.0000 T/YR facility-wide limit **Basis:** BACT-PSD

Emission Limit 2: **% Efficiency:**

Standard Emission:

Control Method: (P) VOC LIMITS FOR COATINGS

Pollutant Notes: VOC limits (lb VOC/gal, minus H2O & exempt solvents): transparent stains = 7.2; sealers=6.2; topcoats=5.5; basecoats/primers=6.4; enamels=5.6; edge coats=5.0; fillers=5.0; booth coater=4.0; booth prep, stripper=6.8.

Process/Pollutant Information

PROCESS: SURFACE COATING, FLAT LINE

Process Type: 41.025 (Wood Products/Furniture Surface Coating (except 41.006))

Primary Fuel: **SCC Code:** 40201901

Throughput: **Compliance Verified:** No

Process Notes: The flat line will consist of 6 stages and will have small steam-heated cure ovens.

POLLUTANT: VOC **CAS No.:** VOC

Emission Limit 1: 800.0000 T/YR facility wide limit **Basis:** BACT-PSD

Emission Limit 2: **% Efficiency:**

Standard Emission:

Control Method: (P) VOC LIMITS ON SURFACE COATINGS

Pollutant Notes: BACT limits for surface coatings, lb VOC/gal minus H2O and exempt solvents: transparent stains=7.2; sealers=6.2; topcoats= 5.5; basecoats/primers=6.4; enamels=5.6; edge coats=5.0; fillers=5.0; booth coater=4.0; booth prep, stripper=6.8.

Facility Information

RBLC ID: PA-0215 (final) **Date Last Updated:** 09/04/2003

Company Name: PELLA CORPORATION **Permit/File No.:** 01-05032

Plant Name: PELLA CORPORATION **Permit Date:** 01/08/2002 (actual)

EPA Region: 3 **SIC Code:** 2431

County/State: ADAMS / PA **NAICS:** 321911

Permit Issued By: PENNSYLVANIA DEP, BUR OF AIR QUAL CTRL (agency)
RONALD DAVIS (contact) (717) 657-4587

Plant Description: WINDOW MANUFACTURING OPERATION, CONSTRUCTION OF WOOD TREATMENT PLANT

Notes: This facility is a window manufacturing plant, using catalytic oxidizer for emission reduction. The plant only uses natural gas.

Process/Pollutant Information

PROCESS: WINDOW MANUFACTURING

Process Type: 41.025 (Wood Products/Furniture Surface Coating (except 41.006))
Primary Fuel:
Throughput:
Process Notes: VOC capture efficiency 70% with DE efficiency of 95%

SCC Code: 40202101
Compliance Verified: Yes

POLLUTANT: PM10 **CAS No.:** PM
Emission Limit 1: 0.0200 GR/DSCF
Emission Limit 2:
Standard Emission:
Control Method: (N)
Pollutant Notes:

Basis: BACT-OTHER
% Efficiency:

POLLUTANT: SOX **CAS No.:** 7446
Emission Limit 1: 500.0000 PPM
Emission Limit 2:
Standard Emission:
Control Method: (N)
Pollutant Notes:

Basis: BACT-OTHER
% Efficiency:

Facility Information

RBLC ID: NC-0079 (final)
Company Name: MASTERBRAND CABINETS
Plant Name: MASTERBRAND CABINETS
EPA Region: 4

Date Last Updated: 03/12/2004
Permit/File No.: 08804R02
Permit Date: 09/05/2001 (actual)
SIC Code: 2511

County/State: LENOIR / NC
NAICS: 337110
Permit Issued By: NORTH CAROLINA DIV OF ENV MGMT (agency)
JOHN EVANS (contact) (919) 733-3340
Plant Description: CABINET MANUFACTURING PLANT
Notes: MODIFICATION FOR THE ADDITION OF A HIGH VOLUME LINE.

Process/Pollutant Information

PROCESS: TONER SPRAY BOOTHS, (4)
Process Type: 41.025 (Wood Products/Furniture Surface Coating (except 41.006))
Primary Fuel:
SCC Code: 40201901
Throughput:
Compliance Verified: Yes
Process Notes: FACILITY VOC LIMIT: 620 T/YR PER CONSECUTIVE 12 MONTH PERIOD.

POLLUTANT: VOC **CAS No.:** VOC
Emission Limit 1: 7.1700 LB/GAL GALLON COATING APPLIED
Basis: BACT-PSD
Emission Limit 2:
% Efficiency:
Standard Emission:
Control Method: (P) LOW VOC COATINGS
Pollutant Notes:

Process/Pollutant Information

PROCESS: STAIN SPRAY BOOTHS, (4)
Process Type: 41.025 (Wood Products/Furniture Surface Coating (except 41.006))
Primary Fuel:
SCC Code: 40201901
Throughput:
Compliance Verified: Yes
Process Notes: FACILITY VOC LIMIT: 620 T/YR PER CONSECUTIVE 12 MONTH PERIOD.

POLLUTANT: VOC **CAS No.:** VOC
Emission Limit 1: 6.3900 LB/GAL GALLON COATING APPLIED
Basis: BACT-PSD
Emission Limit 2:
% Efficiency:
Standard Emission:

Control Method: (P) LOW VOC COATINGS
Pollutant Notes:

Process/Pollutant Information

PROCESS: PRE-SEAL BOOTHS, (4)
Process Type: 41.025 (Wood Products/Furniture Surface Coating (except 41.006))
Primary Fuel: **SCC Code:** 40201901
Throughput: **Compliance Verified:** Yes
Process Notes: FACILITY VOC LIMIT: 620 T/YR PER CONSECUTIVE 12 MONTH PERIOD.

POLLUTANT: VOC **CAS No.:** VOC
Emission Limit 1: 5.7300 LB/GAL GALLON COATING APPLIED **Basis:** BACT-PSD
Emission Limit 2: **% Efficiency:**
Standard Emission:
Control Method: (P) LOW VOC COATINGS
Pollutant Notes:

Process/Pollutant Information

PROCESS: SEALER BOOTHS, (4)
Process Type: 41.025 (Wood Products/Furniture Surface Coating (except 41.006))
Primary Fuel: **SCC Code:** 40201901
Throughput: **Compliance Verified:** Yes
Process Notes: FACILITY VOC LIMIT: 620 T/YR PER CONSECUTIVE 12 MONTH PERIOD.

POLLUTANT: VOC **CAS No.:** VOC
Emission Limit 1: 5.7300 LB/GAL GALLON COATING APPLIED **Basis:** BACT-PSD
Emission Limit 2: **% Efficiency:**
Standard Emission:
Control Method: (P) LOW VOC COATINGS
Pollutant Notes:

Process/Pollutant Information

PROCESS: TOPCOAT BOOTHS, (4)
Process Type: 41.025 (Wood Products/Furniture Surface Coating (except 41.006))
Primary Fuel: **SCC Code:** 40201901
Throughput: **Compliance Verified:** Yes
Process Notes: FACILITY VOC LIMIT: 620 T/YR PER CONSECUTIVE 12 MONTH PERIOD.

POLLUTANT: VOC **CAS No.:** VOC
Emission Limit 1: 5.7300 LB/GAL GALLON COATING APPLIED **Basis:** BACT-PSD
Emission Limit 2: **% Efficiency:**
Standard Emission:
Control Method: (P) LOW VOC COATINGS
Pollutant Notes:

Facility Information

RBLC ID: CA-0891 (final)
Company Name: ARBEK MANUFACTURING, INC.
Plant Name: ARBEK MANUFACTURING, INC.
EPA Region: 9
County/State: SAN BERNARDINO / CA
Permit Issued By: CALIFORNIA AIR RESOURCES BOARD (agency)
RAVI BHATIA (contact) (909) 396-2571

Date Last Updated: 11/21/2001
Permit/File No.: 347744
Permit Date: 04/26/2000 (actual)
SIC Code: 2599
NAICS:

Plant Description:

Notes: THERE ARE A TOTAL OF NINE SPRAY BOOTHS, EACH WITH A SEPARATE PERMIT TO CONSTRUCT ASSOCIATED WITH THIS PROJECT. AUTHORITY TO CONSTRUCT NUMBERS 347745, 347748, 347749, 347750, 347752, 347753, AND 347754. THE SPRAY BOOTHS ARE NOT ALL IDENTICAL.

Process/Pollutant Information

PROCESS: SPRAY BOOTH, DRY-FILTER CONVEYORIZED

Process Type: 41.025 (Wood Products/Furniture Surface Coating (except 41.006))

Primary Fuel:

SCC Code: 4-02-019-01

Throughput:

Compliance Verified: Yes

Process Notes: ARB RECORD # A340-914-00 DRY-FILTER CONVEYORIZED SPRAY BOOTH USED TO COAT WOOD FURNITURE USING TOPCOAT, SEALER, ACETONE-BASED SEALER, HIGH SOLIDS STAIN AND LOW SOLIDS STAIN

POLLUTANT: VOC **CAS No.:** VOC

Emission Limit 1: 346.0000 LB/D

Basis: BACT-PSD

Emission Limit 2:

% Efficiency: 85.500

Standard Emission:

Control Method: (P) BACT DETERMINATION IS THE USE OF SUPER-LOW VOC COATINGS WITH REDUCTION EQUIVALENT TO AN AIR POLLUTION CONTROL SYSTEM. PERMIT LIMIT IS LB VOC/DAY LIMIT.

Pollutant Notes:

Facility Information

RBLC ID: MI-0286 (final)

Date Last Updated: 11/21/2001

Company Name: STEELCASE WOOD FURNITURE

Permit/File No.: 286-99

Plant Name: STEELCASE WOOD FURNITURE
EPA Region: 5
County/State: KENT / MI
Permit Issued By: MICHIGAN DEPT OF ENVIRONMENTAL QUALITY (agency)
JACK LARSEN (contact) (517) 780-7850
Plant Description: WOOD FURNITURE PLANT
Notes: EPA ID - MID 982074452. THIS ENTRY INCLUDES HANGLINE PROCESS HAPS FROM PERMIT MOD # 286-99A. SRN: N0677, COMPRISING THE STEELCASE INC. - KENTWOOD COMPLEX, IS MAINLY SIC 2522. THIS PERMIT IS FOR A NEW WOOD FURNITURE MFG. FACILITY OF 600,000 SQ.FT., LOCATED AT 4100 68TH ST. CALEDONIA, MI 49316. EMISSIONS DESCRIPTIONS HEREIN PERTAIN ONLY TO THE WOOD FURNITURE OPERATIONS. ALL OF N0677 PERMITS TO INSTALL ARE IN RENEWABLE OPERATING PERMIT #199600211.

Permit Date: 01/06/2000 (actual)
SIC Code: 2521
NAICS:

Process/Pollutant Information

PROCESS: SURFACE COATING, TIECOAT & SEALERS
Process Type: 41.025 (Wood Products/Furniture Surface Coating (except 41.006))
Primary Fuel:
Throughput:
SCC Code: 40201901
Compliance Verified: Yes
Process Notes: ALL TIECOATS AND WASHCOATS VENT TO RTO, INCLUDING BOOTHS, FLASHOFF, AND OVENS. 85% CAPTURE OF BOOTHS ON HIGH-VOLUME AND LOW-VOLUME LINES. OVENS AND HANGLINE BOOTHS CAPTURE = 80%.

POLLUTANT: VOC **CAS No.:** VOC
Emission Limit 1: 5.9000 LB/GAL
Basis: BACT-PSD
Emission Limit 2:
% Efficiency: 76.000
Standard Emission:
Control Method: (B) NO COATING TO EXCEED 5.9 LB/GAL AS APPLIED. HIGH-TRANSFER APPLICATION OF AAA-HVLP ON HIGH-VOLUME AND LOW-VOLUME FLAT LINES. APPLICATION BY AUTOMATIC ELECTROSTATIC AND MANUAL HVLP ON HANGLINE. RTO DESTRUCTION 95+%.
Pollutant Notes:

Process/Pollutant Information

PROCESS: SURFACE COATING, TOPCOATS, WATER-BASED
Process Type: 41.025 (Wood Products/Furniture Surface Coating (except 41.006))

Primary Fuel:
Throughput:
Process Notes:

SCC Code: 40201901
Compliance Verified: Yes

POLLUTANT: VOC **CAS No.:** VOC
Emission Limit 1: 1.3000 LB/GAL
Emission Limit 2:
Standard Emission:
Control Method: (P) WATER-BASED. NO COATING TO EXCEED 1.3 LB/GAL AS APPLIED. HIGH TRANSFER EFFICIENCY BY AAA-HVLP. LIMIT IS LB/GAL AS APPLIED.
Pollutant Notes:

Basis: BACT-PSD
% Efficiency:

Process/Pollutant Information

PROCESS: SURFACE COATING, UV TOPCOATS
Process Type: 41.025 (Wood Products/Furniture Surface Coating (except 41.006))
Primary Fuel:
Throughput:
Process Notes: ROBOTIC SPRAY OF UV-CURABLE TOPCOATS.

SCC Code: 40201901
Compliance Verified: Yes

POLLUTANT: VOC **CAS No.:** VOC
Emission Limit 1: 4.5500 LB/GAL
Emission Limit 2:
Standard Emission:
Control Method: (P) HIGH TRANSFER WITH AAA-HVLP. LIMIT IS LB/GAL AS APPLIED.
Pollutant Notes:

Basis: BACT-PSD
% Efficiency:

Process/Pollutant Information

PROCESS: SURFACE COATING, HANGLINE
Process Type: 41.025 (Wood Products/Furniture Surface Coating (except 41.006))
Primary Fuel:
Throughput:

SCC Code: 40201901
Compliance Verified: Yes

Process Notes: COATING OF FRAMES AND COMPONENTS USES SOMEWHAT DIFFERENT APPLICATORS THAN DO OTHER LINES, BUT SAME LIMITS.

POLLUTANT: VOC **CAS No.:** VOC

Emission Limit 1: 76.0000 % REDUCTION **Basis:** BACT-OTHER

Emission Limit 2: **% Efficiency:** 76.000

Standard Emission:

Control Method: (B) AUTOMATIC ELECTROSTATIC SPRAYS USED FOR THE TIECOAT AND TOPCOAT. BOTH SOLVENT AND WATER-BASED STAINS ARE MANUAL HVLP. WASHCOAT AND TIECOAT VENT TO THE AFTERBURNER.

Pollutant Notes:

Process/Pollutant Information

PROCESS: SURFACE COATING, ROLL COAT LINE

Process Type: 41.025 (Wood Products/Furniture Surface Coating (except 41.006))

Primary Fuel: **SCC Code:** 40201901

Throughput: **Compliance Verified:** Yes

Process Notes: COATING, FOR FLAT PIECES, CURES TO 100% SOLIDS.

POLLUTANT: VOC **CAS No.:** VOC

Emission Limit 1: 100.0000 % REDUCTION **Basis:** BACT-OTHER

Emission Limit 2: **% Efficiency:** 100.000

Standard Emission:

Control Method: (P) COATING, FOR FLAT PIECES, CURES TO 100% SOLIDS - NEAR ZERO VOC.

Pollutant Notes:

Process/Pollutant Information

PROCESS: ADHESIVES, VENEER PRESS

Process Type: 41.025 (Wood Products/Furniture Surface Coating (except 41.006))

Primary Fuel: **SCC Code:** 40200701

Throughput: **Compliance Verified:** Yes

Process Notes: IN ADDITION TO THE PART JJ NESHAP LIMITS ON FACILITY TOTAL V-HAP, FORMALDEHYDE RATE LIMITS EXIST FOR VENEER PRESS, VENEER SPLICE AND WOOD FINISHING.

POLLUTANT: FORMALDEHYDE **CAS No.:** 50-00-0

Emission Limit 1: 0.0500 WT %
Basis: BACT-OTHER

Emission Limit 2: 232.5000 LB/YR
% Efficiency:

Standard Emission:

Control Method: (P) NO ADHESIVES > 0.05% WT FORMALDEHYDE.

Pollutant Notes:

Process/Pollutant Information

PROCESS: COATINGS

Process Type: 41.025 (Wood Products/Furniture Surface Coating (except 41.006))

Primary Fuel:
SCC Code: 40201901

Throughput:
Compliance Verified: Yes

Process Notes: FACILITY LEVEL LIMIT

POLLUTANT: HAP **CAS No.:** HAP

Emission Limit 1: 0.8000 LB/ LB SOLIDS
Basis: NESHAPS

Emission Limit 2:
% Efficiency:

Standard Emission:

Control Method: (P) WEIGHTED AVERAGE OF VOLATILE HAPS IN ALL COATINGS, LIMITED AS FOLLOWS, AS APPLIED.

Pollutant Notes:

Process/Pollutant Information

PROCESS: SURFACE COATING, STAINS, WATER BASED

Process Type: 41.025 (Wood Products/Furniture Surface Coating (except 41.006))

Primary Fuel:
SCC Code: 40201901

Throughput:
Compliance Verified: Yes

Process Notes: ONLY WATER BASED STAINS ARE ALLOWED ON THE "HIGH VOLUME" LINE.

POLLUTANT: VOC **CAS No.:** VOC

Emission Limit 1: 2.8000 LB/GAL **Basis:** BACT-PSD

Emission Limit 2: **% Efficiency:**

Standard Emission:

Control Method: (P) HVLP APPLICATIONS ON "HIGH VOLUME" LINE AND "LOW VOLUME" LINE. LIMIT IS LB/GAL LESS WATER.

Pollutant Notes:

Process/Pollutant Information

PROCESS: SURFACE COATING, STAINS, SOLVENT BASED

Process Type: 41.025 (Wood Products/Furniture Surface Coating (except 41.006))

Primary Fuel: **SCC Code:** 40201901

Throughput: **Compliance Verified:** Yes

Process Notes: SOLVENT-BASED STAIN WILL ONLY BE USED IN THE "LOW VOLUME" LINE.

POLLUTANT: VOC **CAS No.:** VOC

Emission Limit 1: 6.9500 LB/GAL **Basis:** BACT-PSD

Emission Limit 2: **% Efficiency:**

Standard Emission:

Control Method: (P) COMPANY IS COMMITTED TO PHASING OUT SOLVENT BASED STAINS. HIGH TRANSFER EFFICIENCY HVLP APPLICATORS. LIMIT IS LB/GAL LESS WATER.

Pollutant Notes:

Process/Pollutant Information

PROCESS: SURFACE COATING, WASHCOATS

Process Type: 41.025 (Wood Products/Furniture Surface Coating (except 41.006))

Primary Fuel: **SCC Code:** 40201901

Throughput: **Compliance Verified:** No

Process Notes: ALL WASHCOATS AND TIECOATS VENT TO RTO. LOW-SOLIDS SEALCOAT; NOT TO EXCEED 5.9 LB/GAL ANY COATING. BOOTH AND OVEN EMISSIONS REDUCED BY CONTROL DEVICE.

POLLUTANT: VOC **CAS No.:** VOC

Emission Limit 1: 5.9000 LB/GAL LESS H20 **Basis:** BACT-PSD

Emission Limit 2: **% Efficiency:** 76.000

Standard Emission:

Control Method: (B) APPLIED BY HIGH-TRANSFER AAA-HVLP, AIR ASSISTED AIRLESS HVLP. CAPTURE 80-85%. 95% OR GREATER DESTRUCTION IN RTO REGENERATIVE THERMAL OXIDIZER.

Pollutant Notes:

Process/Pollutant Information

PROCESS: SURFACE COATING, WIPE STAIN

Process Type: 41.025 (Wood Products/Furniture Surface Coating (except 41.006))

Primary Fuel: **SCC Code:** 40201901

Throughput: **Compliance Verified:** Yes

Process Notes: A HEAVILY PIGMENTED STAIN.

POLLUTANT: VOC **CAS No.:** VOC

Emission Limit 1: 4.9000 LB/GAL **Basis:** BACT-PSD

Emission Limit 2: **% Efficiency:**

Standard Emission:

Control Method: (P) WATER-BASED AUTOMATIC RECIPROCATOR SPRAY HVLP ON HIGH VOLUME LINE. MANUAL SPRAY OR AUTOMATIC RECIPROCATOR HVLP ON LOW VOLUME LINE.

Pollutant Notes:

Facility Information

RBLC ID:	MN-0037 (final)	**Date Last Updated:**	10/03/2001
Company Name:		**Permit/File No.:**	14100001-001
Plant Name:	CRYSTAL CABINET WORKS, INC.	**Permit Date:**	09/02/1999 (actual)
EPA Region:	5	**SIC Code:**	2434
County/State:	SHERBURNE / MN	**NAICS:**	
Permit Issued By:	MINNESOTA POLL CTRL AGCY, AIR QUAL DIV (agency) ROXANA DORSEY (contact) (651) 296-7554		
Plant Description:			
Notes:	CRYSTAL MANUFACTURES KITCHEN AND BATH CABINETRY AND ARCHITECTURAL WORK. THE MANUFACTURE OF CABINETRY AND CASEWORK INVOLVES WOODWORKING (SAWING, SHAPING, MOLDING, SANDING), SPRAY FINISHING, LAMINATING AND ASSEMBLY. THE BACT LIMITS WERE ESTABLISHED FOR THE FOLLOWING TYPES OF COATING: TONERS, STAIN/GLAZER, SEALER, CLEAR VARNISH, CLEAR VARNISH, CLEAR LAQUER, PRIMERS AND ENAMEL TOPCOATS		

Process/Pollutant Information

PROCESS:	SURFACE COATING, SPRAY FINISHING, SEALER		
Process Type:	41.025 (Wood Products/Furniture Surface Coating (except 41.006))		
Primary Fuel:		**SCC Code:**	40201901
Throughput:		**Compliance Verified:**	Yes
Process Notes:	FLATLINE SPRAY FINISHING OPERATIONS		

POLLUTANT:	VOC	**CAS No.:**	VOC
Emission Limit 1:	4.9100 LB/GAL	**Basis:**	BACT-PSD
Emission Limit 2:		**% Efficiency:**	
Standard Emission:			
Control Method:	(P) 1) HIGH TRANSFER EFF. SPRAY 2) SOLVENT REPLACEMENT/COATINGS REFORMULATION. COSTS FOR #1 ALONE: CAPITAL $50754, ANNUALIZED $9278, COST EFF= $150-175/T. COSTS FOR #2: CAPITAL-$675, ANNUAL-$10947, COST EFF.-$1240/T.		
Pollutant Notes:			

Process/Pollutant Information

PROCESS:	SURFACE COATING, SPRAY FINISHING, CLEAR VARNISH

Process Type: 41.025 (Wood Products/Furniture Surface Coating (except 41.006))
Primary Fuel: **SCC Code:** 40201901
Throughput: **Compliance Verified:** Yes
Process Notes: FLATLINE SPRAY FINISHING OPERATIONS

POLLUTANT: VOC **CAS No.:** VOC
Emission Limit 1: 4.7300 LB/GAL **Basis:** BACT-PSD
Emission Limit 2: **% Efficiency:**
Standard Emission:
Control Method: (P) 1) HIGH TRANSFER EFF. SPRAY 2) SOLVENT REPLACEMENT/COATINGS REFORMULATION. COSTS FOR #1 ALONE: CAPITAL $50754, ANNUALIZED $9278, COST EFF= $150-175/T. COSTS FOR #2: CAPITAL-$675, ANNUAL-$10947, COST EFF.-$1240/T.
Pollutant Notes:

Process/Pollutant Information

PROCESS: SURFACE COATING, SPRAY FINISHING, TONERS
Process Type: 41.025 (Wood Products/Furniture Surface Coating (except 41.006))
Primary Fuel: **SCC Code:** 40201901
Throughput: **Compliance Verified:** Yes
Process Notes: FLATLINE SPRAY FINISHING OPERATIONS

POLLUTANT: VOC **CAS No.:** VOC
Emission Limit 1: 3.8600 LB/GAL **Basis:** BACT-PSD
Emission Limit 2: **% Efficiency:**
Standard Emission:
Control Method: (P) 1) HIGH TRANSFER EFF. SPRAY 2) SOLVENT REPLACEMENT/COATINGS REFORMULATION. COSTS FOR #1 ALONE: CAPITAL $50754, ANNUALIZED $9278, COST EFF= $150-175/T. COSTS FOR #2: CAPITAL-$675, ANNUAL-$10947, COST EFF.-$1240/T.
Pollutant Notes:

Process/Pollutant Information

PROCESS: SURFACE COATING, SPRAY FINISHING, PRIMERS
Process Type: 41.025 (Wood Products/Furniture Surface Coating (except 41.006))
Primary Fuel:
SCC Code: 40201901
Throughput:
Compliance Verified: Yes
Process Notes: FLATLINE SPRAY FINISHING OPERATIONS

POLLUTANT: VOC **CAS No.:** VOC
Emission Limit 1: 4.6900 LB/GAL
Basis: BACT-PSD
Emission Limit 2:
% Efficiency:
Standard Emission:
Control Method: (P) 1) HIGH TRANSFER EFF. SPRAY 2) SOLVENT REPLACEMENT/COATINGS REFORMULATION. COSTS FOR #1 ALONE: CAPITAL $50754, ANNUALIZED $9278, COST EFF= $150-175/T. COSTS FOR #2: CAPITAL-$675, ANNUAL-$10947, COST EFF.-$1240/T.
Pollutant Notes:

Process/Pollutant Information

PROCESS: SURFACE COATING, SPRAY FINISHING, ENAMEL TOPCOAT
Process Type: 41.025 (Wood Products/Furniture Surface Coating (except 41.006))
Primary Fuel:
SCC Code: 40201901
Throughput:
Compliance Verified: Yes
Process Notes: FLATLINE SPRAY FINISHING OPERATIONS

POLLUTANT: VOC **CAS No.:** VOC
Emission Limit 1: 4.8400 LB/GAL
Basis: BACT-PSD
Emission Limit 2:
% Efficiency:
Standard Emission:
Control Method: (P) 1) HIGH SOLIDS CATALYZED COATINGS 2) SOLVENT REPLACEMENT/COATINGS REFORMULATION. COSTS FOR #1 ALONE: CAPITAL $50754, ANNUALIZED $9278, COST EFF= $150-175/T. COSTS FOR #2: CAPITAL-$675, ANNUAL-$10947, COST EFF.-$1240/T.
Pollutant Notes:

Facility Information

RBLC ID:	OH-0249 (final)	**Date Last Updated:**	05/16/2003
Company Name:	SAUDER WOODWORKING COMPANY	**Permit/File No.:**	03-13380
Plant Name:	SAUDER WOODWORKING COMPANY	**Permit Date:**	08/18/1999 (actual)
EPA Region:	5	**SIC Code:**	2511
County/State:	FULTON / OH	**NAICS:**	337122

Permit Issued By: OHIO ENVIRONMENTAL PROTECTION AGENCY (agency)
CHERYL E. SUTTMAN (contact) 614-644-3617

Plant Description: WOOD FURNITURE AND PRODUCTS. FACILITY HAS 23 WOOD WASTE HANDLING SYSTEMS, AND INCLUDES LAMINATION PROCESSES, CUTTING, SANDING, COUNTER BANDING, EDGING, STAINING ETC.

Notes: Compliance date is for modification. Original PSD permit # 03-13201

Process/Pollutant Information

PROCESS: WOOD WASTE HANDLING

Process Type: 30.999 (Other Wood Products Industry Sources)

Primary Fuel:

SCC Code: 30703001

Throughput: 72000.00 ACFM

Compliance Verified: Yes

Process Notes: 23 wood waste handling systems, all baghouse systems with 0.0042 gr PM/dscf and 0.0030 gr PM10/dscf. 20,280 to 72,000 acfm. Monitor pressure drop across the handling system.

POLLUTANT: PM10 **CAS No.:** PM

Emission Limit 1: 0.0030 GR/DSCF

Basis: BACT-PSD

Emission Limit 2:

% Efficiency: 99.000

Standard Emission:

Control Method: (A) BAGHOUSES

Pollutant Notes: Limit is for 14 wood waste handling systems. This permit is a modification to adjust PM10 limits. PM/hr

limits vary depending on size of unit: 20,280 acfm to 72,000 acfm. Worst case emissions from one unit: 1.85 lbs PM10/hr and 2.59 lbs PM/hr

POLLUTANT: PM **CAS No.:** PM

Emission Limit 1: 0.0042 GR/DSCF **Basis:** BACT-PSD

Emission Limit 2: **% Efficiency:** 99.000

Standard Emission:

Control Method: (A) BAGHOUSES

Pollutant Notes: Limit is for 14 wood waste handling systems. This permit is a modification to adjust PM10 limits. PM/hr limits vary depending on size of unit: 20,280 acfm to 72,000 acfm. Worst case emissions from one unit: 1.85 lbs PM10/hr and 2.59 lbs PM/hr

POLLUTANT: OPACITY **CAS No.:** VE

Emission Limit 1: 5.0000 % OPACITY as a 6 minute average **Basis:** BACT-PSD

Emission Limit 2: **% Efficiency:** 99.000

Standard Emission: 5.0000 % OPACITY

Control Method: (A) BAGHOUSES

Pollutant Notes: Limit is for 14 wood waste handling systems. This permit is a modification to adjust PM10 limits. PM/hr limits vary depending on size of unit: 20,280 acfm to 72,000 acfm. Worst case emissions from one unit: 1.85 lbs PM10/hr and 2.59 lbs PM/hr

Process/Pollutant Information

PROCESS: LAMINATION

Process Type: 41.025 (Wood Products/Furniture Surface Coating (except 41.006))

Primary Fuel: **SCC Code:** 40202199

Throughput: **Compliance Verified:** Yes

Process Notes:

POLLUTANT: FORMALDEHYDE **CAS No.:** 50-00-0

Emission Limit 1: 0.0140 LB/H **Basis:** SIP

Emission Limit 2: **% Efficiency:**

Standard Emission:

Control Method: (N)
Pollutant Notes: Lamination of raw fiberboard, limit is for one unit. VOC emissions from formaldehyde-based resins.

Process/Pollutant Information

PROCESS: STAIN ROLLER APPLICATION
Process Type: 41.025 (Wood Products/Furniture Surface Coating (except 41.006))
Primary Fuel: **SCC Code:** 40201901
Throughput: **Compliance Verified:** Yes
Process Notes: Modification to 453 inkers (stain applicators, fugitive to building). 30 tons VOC/yr.

POLLUTANT: VOC **CAS No.:** VOC
Emission Limit 1: 6.8000 LB/H No PRM allowed **Basis:** SIP
Emission Limit 2: **% Efficiency:**
Standard Emission:
Control Method: (N)
Pollutant Notes: 453 inkers (roller type stain applicators), fugitive inside building. PRM - Photo Reactive Material.

Facility Information

RBLC ID: VA-0242 (final) **Date Last Updated:** 11/20/2001
Company Name: **Permit/File No.:** 30320
Plant Name: STANLEY FURNITURE **Permit Date:** 05/31/1999 (actual)
EPA Region: 3 **SIC Code:** 2511
County/State: HENRY / VA **NAICS:**

Permit Issued By: VIRGINIA ENVIRONMENTAL QUALITY AIR DIV. (agency)
RAY GOETZ (contact) (540) 562-6763

Plant Description: WOOD HOUSEHOLD FURNITURE MANUFACTURING

Notes:

Process/Pollutant Information

PROCESS: MANUFACTURING, FURNITURE, PAINT SPRAY BOOTH

Process Type: 41.025 (Wood Products/Furniture Surface Coating (except 41.006))

Primary Fuel: **SCC Code:** 40201901

Throughput: 3.10 MMBF/YR **Compliance Verified:** No

Process Notes: PAINT SPRAY BOOTHS PLANT 2 FINISHING LINE SHALL NOT EXCEED 3.1 MILLION BOARD FEET PER YEAR

POLLUTANT: PM **CAS No.:** PM

Emission Limit 1: 5.0000 T/YR **Basis:** BACT-OTHER

Emission Limit 2: **% Efficiency:**

Standard Emission:

Control Method: (B) HVLP AND AIR ASSISTED AIRLESS SPRAY GUNS, MACT WORK PRACTICES STANDARDS, WATER CURTAINS

Pollutant Notes:

POLLUTANT: VOC **CAS No.:** VOC

Emission Limit 1: 350.0000 T/YR **Basis:** BACT-PSD

Emission Limit 2: **% Efficiency:**

Standard Emission:

Control Method: (B) HVLP AND AIR ASSISTED AIRLESS SPRAY GUNS, MACT WORK PRACTICES STANDARDS, WATER CURTAINS

Pollutant Notes:

Facility Information

RBLC ID:	WI-0110 (final)	**Date Last Updated:**	01/10/2002
Company Name:	BEMIS MANUFACTURING COMPANY	**Permit/File No.:**	99POY013
Plant Name:	BEMIS MANUFACTURING COMPANY	**Permit Date:**	05/13/1999 (actual)
EPA Region:	5	**SIC Code:**	2493
County/State:	SHEBOYGAN / WI	**NAICS:**	
Permit Issued By:	WISCONSIN DEPT OF NATURAL RESOURCES (agency) PAUL O. YEUNG (contact) (608) 266-0672		
Plant Description:	PROCESSES INCLUDE BLENDING WOOD FLOUR WITH RESIN AND MOLDING IT INTO TOILET SEATS AND CROQUET BALLS. MOLDED PRODUCTS ARE SANDED PRIOR TO THE APPLICATION OF SEALERS AND TOP COAT		
Notes:	START UP AND COMPLIANCE DATES ARE NOT AVAILABLE. BEMIS MANUFACTURING COMPANY OPERATES A MOLDED WOOD PRODUCTS FACILITY IN SHEBOYGAN FALLS, WI		

Process/Pollutant Information

PROCESS:	FLOW COATING LINE, PROCESS P90 (STACKS S90 - S96)		
Process Type:	41.025 (Wood Products/Furniture Surface Coating (except 41.006))		
Primary Fuel:	NATURAL GAS	**SCC Code:**	40201901
Throughput:	3.00 MMBTU/H	**Compliance Verified:**	No
Process Notes:	MOLDED AND SANDED TOILET SEATS AND COVERS ARE HUNG ON AN AUTOMATED COATING LINE WHICH FIRST PASSES INTO THE SEALER TUNNEL. A CONTINUOUS FLOW OF SEALER IS PUMPED OVER THE PARTS AND RESIDUAL SEALER DRAINED BACK INTO THE SEALER RESERVOIR. COATED PARTS PASS THROUGH THE DIRECT FIRED GAS SEALER OVEN TO INCREASE CURE RATE AND THEN TO A COOL ROOM WHERE THEY ARE BROUGHT BACK DOWN TO ROOM TEMPERATURE. THE COOLED PARTS ARE THEN CONVEYED TO THE INTERMEDIATE AND TOP COAT LINES.		

POLLUTANT: PM **CAS No.:** PM

Emission Limit 1:	0.0230 LB/H	**Basis:**	OTHER
Emission Limit 2:		**% Efficiency:**	
Standard Emission:			
Control Method:	(N) REGULATORY BASIS IS STATE REGULATION.		

Pollutant Notes:

POLLUTANT: SO2 **CAS No.:** 7446-09-5

Emission Limit 1: 0.0018 LB/H **Basis:** OTHER

Emission Limit 2: **% Efficiency:**

Standard Emission:

Control Method: (N) REGULATORY BASIS IS STATE REGULATION.

Pollutant Notes:

POLLUTANT: NOX **CAS No.:** 10102

Emission Limit 1: 0.6300 LB/H **Basis:** OTHER

Emission Limit 2: **% Efficiency:**

Standard Emission:

Control Method: (N) REGULATORY BASIS IS STATE REGULATION.

Pollutant Notes:

POLLUTANT: CO **CAS No.:** 630-08-0

Emission Limit 1: 0.2500 LB/H **Basis:** OTHER

Emission Limit 2: **% Efficiency:**

Standard Emission:

Control Method: (N) REGULATORY BASIS IS STATE REGULATION.

Pollutant Notes:

POLLUTANT: VOC **CAS No.:** VOC

Emission Limit 1: 24.7300 LB/H **Basis:** BACT-PSD

Emission Limit 2: **% Efficiency:**

Standard Emission:

Control Method: (P) MATERIAL USAGE AND VOC CONTENT. VOC INPUT TO COATING LINE <0.011 LB/PIECE, BASED ON A DAILY AVERAGE.

Pollutant Notes:

Facility Information

RBLC ID:	MS-0042 (final)	**Date Last Updated:**	11/05/2003
Company Name:	BATESVILLE CASKET COMPANY	**Permit/File No.:**	2100-00021
Plant Name:	BATESVILLE CASKET COMPANY	**Permit Date:**	03/15/1999 (actual)
EPA Region:	4	**SIC Code:**	3995
County/State:	PANOLA / MS	**NAICS:**	339995
Permit Issued By:	MISSISSIPPI DEPT OF ENV QUALITY (agency) CELINA M. SUMRALL (contact) (601) 961-5746		
Plant Description:			
Notes:	THIS FACILITY MANUFACTURES WOOD BURIAL CASKETS. PRE- CONSTRUCTION, THE FACILITY HAD 2 WOODWASTE/NATURAL GAS BOILERS, A CASKET ASSEMBLY AND PREFINISH LINE, AND ONE CASKET FINISHING LINE. THEY WILL BE INSTALLING A SECOND FINISHING LINE. THE FACILITY HAS BEEN SUBJECT TO PSD REGULATIONS SINCE 1988. THE NEW (2ND) FINISH LINE WAS SUBJECT TO PSD REVIEW FOR OZONE (AS VOC) EMISSIONS.		

Process/Pollutant Information

PROCESS: WOOD FINISHING, LINE NO. 2

Process Type: 41.025 (Wood Products/Furniture Surface Coating (except 41.006))

Primary Fuel: **SCC Code:** 40200

Throughput: **Compliance Verified:** Yes

Process Notes: THE FACILITY HAS A CAP ON VOC EMISSIONS FROM THE NO.2 LINE, AND A VOC CONTENT LIMIT FOR ANY COATING/SOLVENT/GLUE USED ON THE NEW LINE. THE EXISTING AND NEW LINES OPERATE COMPLETELY INDEPENDENTLY WITH NO INTERCHANGE. COMPLIANCE WILL BE DEMONSTRATED BASED ON MASS BALANCE EQUATIONS AND BY MONITORING PRODUCTION RATES. PRODUCTION RATE WILL VARY BASED ON COATING SCENARIO. THE FACILITY MUST SUBMIT A RECORD OF ALL COATING SCENARIOS AND RELATIVE EMISSIONS RATES.

POLLUTANT: VOC **CAS No.:** VOC

Emission Limit 1:	46.1500 T/YR	**Basis:**	BACT-PSD
Emission Limit 2:	4.1000 LB/GAL	**% Efficiency:**	
Standard Emission:			
Control Method:	(P) THE USE OF LOW VOC/HAP COATINGS, SOLVENTS, AND GLUES. IN ADDITION, NO. 2 LINES' HAPS ARE LIMITED TO 9.9 T/YR (ONE HAP) AND 24.9 T/YR (COMBINED).		
Pollutant Notes:	ALTERNATE EMISSIONS ARE 4.1 LB/GAL VOC BY WT. LESS WATER.		

Facility Information

RBLC ID:	TN-0084 (final)	**Date Last Updated:**	12/16/2002
Company Name:	BRUCE HARDWOOD FLOORING L.P.	**Permit/File No.:**	949834F
Plant Name:	BRUCE HARDWOOD FLOORING L.P.	**Permit Date:**	07/10/1998 (actual)
EPA Region:	4	**SIC Code:**	2426
County/State:	MADISON / TN	**NAICS:**	321918, 337215, 321113, 321912
Permit Issued By:	TENNESSEE DIV OF AIR POLLUTION CONTROL (agency) DAVID G. CARSON (contact) (615) 532-0614		
Plant Description:	WOODWORKING FACILITY		
Notes:			

Process/Pollutant Information

PROCESS:	BOILER, WOOD-FIRED		
Process Type:	13.120 (Biomass (includes wood, wood waste, bagasse, and other biomass))		
Primary Fuel:	WOOD	**SCC Code:**	1-02-009-03
Throughput:	53.50 MMBTU/H	**Compliance Verified:**	No

Process Notes:

POLLUTANT: PM10 **CAS No.:** PM

Emission Limit 1: 0.1000 LB/MMBTU **Basis:** BACT-PSD

Emission Limit 2: **% Efficiency:**

Standard Emission: 0.1000 LB/MMBTU

Control Method: (P) GOOD COMBUSTION PRACTICES

Pollutant Notes:

Process/Pollutant Information

PROCESS: SURFACE COATING, WOOD PRODUCTS

Process Type: 41.025 (Wood Products/Furniture Surface Coating (except 41.006))

Primary Fuel: **SCC Code:** 4-02-021-33

Throughput: 0 **Compliance Verified:** No

Process Notes: * THE TON PER MONTH LIMIT IS FOR THE FIRST TWELVE (12) MONTHS OF OPERATION ONLY.

POLLUTANT: VOC **CAS No.:** VOC

Emission Limit 1: 6.5300 T/MO **Basis:** BACT-PSD

Emission Limit 2: 78.3000 T/YR **% Efficiency:** 74.300

Standard Emission:

Control Method: (P) THE USE OF ROLLCOAT APPLICATORS FOR APPLICATION OF SEALERS AND STAINS, AND THE USE OF UV CURABLE SEALERS AND TOPCOATS.

Pollutant Notes:

Facility Information

RBLC ID:	IA-0042 (final)	**Date Last Updated:**	12/18/2001
Company Name:	OMEGA CABINETS	**Permit/File No.:**	98-A-010 THROUGH 98-A-019
Plant Name:	OMEGA CABINETS	**Permit Date:**	04/10/1998 (actual)
EPA Region:	7	**SIC Code:**	2434
County/State:	BLACK HAWK / IA	**NAICS:**	
Permit Issued By:	IOWA DEPARTMENT OF NATURAL RESOURCES (agency) KAREN KUHN (contact) (515) 281-4306		
Plant Description:			
Notes:	FACILITY IS NOT IN COMPLIANCE FOR OZONE MONITORING.		

Process/Pollutant Information

PROCESS:	SPRAY LINE WOOD FURNITURE		
Process Type:	41.025 (Wood Products/Furniture Surface Coating (except 41.006))		
Primary Fuel:	N/A	**SCC Code:**	2434
Throughput:	0	**Compliance Verified:**	No
Process Notes:	LIMITED TO 215 TPY VOC, ENTIRE LINE		

POLLUTANT: VOC **CAS No.:** VOC

Emission Limit 1:	215.0000 T/Y	**Basis:**	BACT
Emission Limit 2:	0	**% Efficiency:**	0
Standard Emission:	0		
Control Method:	(P) HIGH TRANSFER EFFICIENCY		
Pollutant Notes:			

Facility Information

RBLC ID:	NC-0100 (final)	**Date Last Updated:**	04/02/2004
Company Name:	STEELCASE, INC.	**Permit/File No.:**	1968R20
Plant Name:	STEELCASE, INC.	**Permit Date:**	03/03/1998 (actual)
EPA Region:	4	**SIC Code:**	2521
County/State:	HENDERSON / NC	**NAICS:**	337211
Permit Issued By:	NORTH CAROLINA DIV OF ENV MGMT (agency) BRUCE INGLE (contact) (919) 715-6241		
Plant Description:	WOOD OFFICE FURNITURE MANUFACTURING		
Notes:	Modification to expand the furniture manufacturing facility		

Process/Pollutant Information

PROCESS: SURFACE COATING, FURNITURE FINISHING

Process Type: 41.025 (Wood Products/Furniture Surface Coating (except 41.006))

Primary Fuel: **SCC Code:** 40201901

Throughput: **Compliance Verified:** No

Process Notes: Furniture finishing system utilizing non-photochemically reative or exempt solvents. System includes spraybooths, drying ovens, rollcoaters, electrodeposition painting systems, and finish repair for wood and metal furniture components.

POLLUTANT: VOC **CAS No.:** VOC

Emission Limit 1: 913.0000 T/YR **Basis:** BACT-PSD

Emission Limit 2: **% Efficiency:**

Standard Emission:

Control Method: (B) NON-PHOTOCHEMICALLY REACTIVE OR EXEMPT SOLVENTS, DRY FILTERS

Pollutant Notes:

Facility Information

RBLC ID:	CA-0772 (final)	**Date Last Updated:**	12/18/2001
Company Name:	ENVIROPLEX	**Permit/File No.:**	N-3780-2-0
Plant Name:	ENVIROPLEX	**Permit Date:**	03/20/1997 (actual)
EPA Region:	9	**SIC Code:**	2451
County/State:	SAN JOAQUIN / CA	**NAICS:**	
Permit Issued By:	SJVUAPCD - CENTRAL REGIONAL OFFICE, CA (agency) SEYED SADREDIN (contact) (209) 468-3474		
Plant Description:			
Notes:			

Process/Pollutant Information

PROCESS: EXTERIOR COATING OF WOODEN WALL PANELS
Process Type: 41.006 (Flatwood Paneling Surface Coating)
Primary Fuel: **SCC Code:** 4-02-021-99
Throughput: 0 **Compliance Verified:** No
Process Notes: ARB RECORD # A340-789-97

POLLUTANT: PM10 **CAS No.:** PM
Emission Limit 1: 40.1000 LB/DAY **Basis:** LAER
Emission Limit 2: 0 **% Efficiency:** 0
Standard Emission: 0
Control Method: (P) USE OF AN HVLP OR EQUIVALENT APPLICATION EQUIPMENT
Pollutant Notes:

POLLUTANT: VOC **CAS No.:** VOC
Emission Limit 1: 18.8000 LB/DAY **Basis:** LAER

Emission Limit 2: 0 **% Efficiency:** 0
Standard Emission: 0
Control Method: (P) HVLP APPLICATION EQUIPMENT, WATER BASED PIGMENTED TOPCOATS WITH A VOC CONTENT OF 1.1 LB/GAL (LESS WATER AND EXEMPT COMPOUNDS) OR LESS
Pollutant Notes:

Process/Pollutant Information

PROCESS: METAL FRAMES, EXTERIOR COATING OF WOODEN PANELS
Process Type: 41.025 (Wood Products/Furniture Surface Coating (except 41.006))
Primary Fuel: **SCC Code:** 4-02-021-99
Throughput: 0 **Compliance Verified:** No
Process Notes: ARB RECORD # A340-798 AND A340-812-97 SIC CODE N-3780-1 AND N-3780-2 RESPECTIVELY

POLLUTANT: PM10 **CAS No.:** PM
Emission Limit 1: 29.4000 LB/DAY **Basis:** LAER
Emission Limit 2: 0 **% Efficiency:** 0
Standard Emission: 0
Control Method: (P) USE OF HVLP OR DISTRICT RULE 4603/4606 COMPLIANT COATING APPLICATION METHODS
Pollutant Notes:

POLLUTANT: VOC **CAS No.:** VOC
Emission Limit 1: 25.0000 LB/DAY **Basis:** LAER
Emission Limit 2: 0 **% Efficiency:** 0
Standard Emission: 0
Control Method: (P) PRIMERS, VOC CONTENT 1.8 LB/GAL, METAL FRAMES COATING AND PIGMENTED TOPCOATS, VOC CONTENT 1.1 LB/GAL
Pollutant Notes:

POLLUTANT: PM10 **CAS No.:** PM
Emission Limit 1: 40.1000 LB/DAY **Basis:** LAER
Emission Limit 2: 0

% Efficiency: 0

Standard Emission: 0

Control Method: (P) USE OF HVLP OR DISTRICT RULE 4603/4606 COMPLIANT COATING APPLICATION METHODS

Pollutant Notes:

POLLUTANT: VOC **CAS No.:** VOC

Emission Limit 1: 18.8000 LB/DAY **Basis:** LAER

Emission Limit 2: 0 **% Efficiency:** 0

Standard Emission: 0

Control Method: (P) PRIMERS, VOC CONTENT 1.8 LB/GAL. METAL FRAMES COATING AND PIGMENTED TOPCOATS, VOC CONTENT 1.1 LB/GAL

Pollutant Notes:

Facility Information

RBLC ID:	CA-0769 (final)	**Date Last Updated:**	12/18/2001
Company Name:	GUY CHADDOCK & COMPANY	**Permit/File No.:**	S-3006-1-1, 2-1, 3-1 & 4-1
Plant Name:	GUY CHADDOCK & COMPANY	**Permit Date:**	03/07/1997 (actual)
EPA Region:	9	**SIC Code:**	2511
County/State:	KERN / CA	**NAICS:**	
Permit Issued By:	SJVUAPCD - CENTRAL REGIONAL OFFICE, CA (agency) SEYED SADREDIN (contact) (209) 468-3474		

Plant Description:

Notes:

Process/Pollutant Information

PROCESS: COATING APPLICATION EQUIPMENT
Process Type: 41.025 (Wood Products/Furniture Surface Coating (except 41.006))
Primary Fuel: **SCC Code:** 4-02-019-01
Throughput: 0 **Compliance Verified:** No
Process Notes: ARB RECORD # A340-786-97

POLLUTANT: PM10 **CAS No.:** PM
Emission Limit 1: 26.3000 LB/DAY **Basis:** LAER
Emission Limit 2: 0 **% Efficiency:** 0
Standard Emission: 0
Control Method: (P) HVLP SPRAY GUNS, 2 BINKS AND 2 VIKING FLOOR TYPE, OPEN FACE SPRAY BOOTHS
Pollutant Notes:

POLLUTANT: VOC **CAS No.:** VOC
Emission Limit 1: 250.0000 LB/DAY **Basis:** LAER
Emission Limit 2: 10.0000 TON/YR **% Efficiency:** 0
Standard Emission: 0
Control Method: (P) HVLP SPRAY EQUIPMENT
Pollutant Notes:

Facility Information

RBLC ID:	CA-0873 (final)	**Date Last Updated:**	10/03/2001
Company Name:	SANDBERG FURNITURE MFG. CO. INC.	**Permit/File No.:**	323199
Plant Name:	SANDBERG FURNITURE MFG. CO. INC.	**Permit Date:**	02/21/1997 (actual)
EPA Region:	9	**SIC Code:**	2511
County/State:	LOS ANGELES / CA	**NAICS:**	
Permit Issued By:	CALIFORNIA AIR RESOURCES BOARD (agency) STACEY EBINER (contact) (909)396-2504		

Plant Description:

Notes: WOOD FURNITURE AND PLASTIC FOAM ARE COATED WITH UV SEALERS/TOPCOATS USING ROLLER COATERS AND SPRAY GUNS. SYSTEM ALSO INCLUDES TWO TOUCH-UP SPRAY BOOTHS BUT IS NO LONGER IN USE AS OF 5/7/99. NO AUTHORITY TO CONSTRUCT PERMIT WAS ISSUED. COMPLIANCE: ACCORDING TO OUR COMPUTER SYSTEM, SINCE JUNE 1996, SANBERG FURNITURE RECEIVED A NOTICE OF VIOLATION ON 10/16/97 FOR DISTRICT RULES 1136 AND 203, AND A NOTICE TO COMPLY ON 1/28/98 FOR STATE H & S CODE 42303 AND DISTRICT RULE 203.

Process/Pollutant Information

PROCESS:	COATING AND DRYING SYSTEM		
Process Type:	41.025 (Wood Products/Furniture Surface Coating (except 41.006))		
Primary Fuel:	NATURAL GAS	**SCC Code:**	40201901
Throughput:	5.00 HP BLOWER	**Compliance Verified:**	No

Process Notes: ARB RECORD # A340-889-99 COATING AND DRYING SYSTEM CONSISTING OF A MID STATE INDUSTRIAL, INC., AUTOMATIC SPRAY BOOTH WITH AN ULTRAVIOLET CURE SECTION AND A NATURAL GAS-FIRED OVEN VENTED BY A 5 HP BLOWER

POLLUTANT: VOC **CAS No.:** VOC

Emission Limit 1: 1689.0000 LB/D **Basis:** BACT-PSD

Emission Limit 2: **% Efficiency:**

Standard Emission:

Control Method: (P) A SUPER CLEAN MATERIAL CONTAINING NO MORE THAN 5% BY WEIGHT VOC IS USED AS SEALERS AND TOPCOATS. EMISSION LIMIT IS FACILITY TOTAL.

Pollutant Notes:

Facility Information

RBLC ID:	CA-0815 (final)	**Date Last Updated:**	12/18/2001
Company Name:	SANDBERG FURNITURE CO. INC.	**Permit/File No.:**	F5476 A/N323199
Plant Name:	SANDBERG FURNITURE CO. INC.	**Permit Date:**	02/20/1997 (actual)
EPA Region:	9	**SIC Code:**	2511
County/State:	/ CA	**NAICS:**	
Permit Issued By:	SOUTH COAST AQMD, CA (agency) ROBERT PEASE (contact) (818) 572-6174		
Plant Description:			
Notes:	ROLLERCOATER, HYMMEN COMBICOATER UV CURE SECTION ROLLERCOATER, HYMMEN DIRECT COATER AUTOMATIC SPRAY BOOTH, MID-STATE INDUSTRIAL TOUCH-UP SPRAY BOOTHS, 2, MID-STATE INDSTRIAL OVEN, MID-STATE INDUSTRIAL UV CURE SECTION, MID-STATE INDUSTRIAL WOOD FURNITURE, ROLL COATED WITH UV SEALERS, ROLL COATED WITH TOPCOATS OR S PRAYED WITH TOPCOATS TO CONTROL THICKNESS.		

Process/Pollutant Information

PROCESS:	COATING WOOD FURNITURE		
Process Type:	41.025 (Wood Products/Furniture Surface Coating (except 41.006))		
Primary Fuel:		**SCC Code:**	40201901
Throughput:	0	**Compliance Verified:**	No
Process Notes:			

POLLUTANT: VOC	**CAS No.:** VOC		
Emission Limit 1:	0.0164 LB/D	**Basis:** LAER	
Emission Limit 2:	0	**% Efficiency:** 0	
Standard Emission:	0		
Control Method:	(A) ROLLERCOATERS AND UV CURE SECTION INSTALLED AHEAD OF SPRAY BOOTH		
Pollutant Notes:			

Facility Information

RBLC ID:	CA-0804 (final)	**Date Last Updated:**	12/18/2001
Company Name:	AMERICAN DOOR MANUFACTURING	**Permit/File No.:**	N-1084-2-1
Plant Name:	AMERICAN DOOR MANUFACTURING	**Permit Date:**	11/21/1996 (actual)
EPA Region:	9	**SIC Code:**	249
County/State:	SAN JOAQUIN / CA	**NAICS:**	
Permit Issued By:	SJVUAPCD - CENTRAL REGIONAL OFFICE, CA (agency) SEYED SADREDIN (contact) (209) 468-3474		
Plant Description:			
Notes:			

Process/Pollutant Information

PROCESS:	WOOD PRODUCTS COATING OPERATION		
Process Type:	41.025 (Wood Products/Furniture Surface Coating (except 41.006))		
Primary Fuel:		**SCC Code:**	4-02-019-01
Throughput:	0	**Compliance Verified:**	No
Process Notes:	ARB RECORD # A340-777-97		

POLLUTANT: VOC **CAS No.:** VOC

Emission Limit 1:	21.7000 LB/DAY	**Basis:**	LAER
Emission Limit 2:	15.4000 LB/DAY	**% Efficiency:**	0
Standard Emission:	0		
Control Method:	(P) HVLP OR EQUIVALENT APPLICATION EQUIPMENT AND COATINGS WITH A VOC CONTENT 0.68 LB/GAL FOR WATER BASED PIGMENTED PRIMERS & 1.62 LB/GAL FOR		

TOPCOATS

Pollutant Notes:

POLLUTANT: PM10 **CAS No.:** PM

Emission Limit 1: 5.9000 LB/DAY **Basis:** LAER

Emission Limit 2: 0 **% Efficiency:** 0

Standard Emission: 0

Control Method: (P) ENCLOSED SPRAY BOOTH WITH EXHAUST FILTERS AND HVLPOR EQUIVALENT APPLICATION EQUIPMENT

Pollutant Notes:

Process/Pollutant Information

PROCESS: WOOD PRODUCTS COATING OPERATION

Process Type: 41.025 (Wood Products/Furniture Surface Coating (except 41.006))

Primary Fuel: **SCC Code:** 4-02-019-01

Throughput: 0 **Compliance Verified:** No

Process Notes: ARB RECORD # A340-811-97 SIC CODE: N-1084-3-1

POLLUTANT: VOC **CAS No.:** VOC

Emission Limit 1: 15.4000 LB/DAY **Basis:** LAER

Emission Limit 2: 0 **% Efficiency:** 0

Standard Emission: 0

Control Method: (P) HVLP OR EQUIVALENT APPLICATION AND COATING WITH A VOC CONTENT 0.68 LB/GAL-WATER BASED PRIMERS AND 1.62 LB.GAL-WATER BASED TOPCOATS

Pollutant Notes:

Facility Information

RBLC ID:	CA-0726 (final)	**Date Last Updated:**	12/18/2001
Company Name:	CREATIONS IN WOOD, INC.	**Permit/File No.:**	C-1686-6-0
Plant Name:	CREATIONS IN WOOD, INC.	**Permit Date:**	09/12/1996 (actual)
EPA Region:	9	**SIC Code:**	2511
County/State:	FRESNO / CA	**NAICS:**	
Permit Issued By:	SJVUAPCD - CENTRAL REGIONAL OFFICE, CA (agency) SEYED SADREDIN (contact) (209) 468-3474		
Plant Description:			
Notes:	CAPCOA BACT CLEARINGHOUSE NO. A340-734-97		

Process/Pollutant Information

PROCESS:	WOODEN CABINET AND FURNITURE COATING BOOTH		
Process Type:	41.025 (Wood Products/Furniture Surface Coating (except 41.006))		
Primary Fuel:		**SCC Code:**	4-02-019-01
Throughput:	3.00 HP	**Compliance Verified:**	No
Process Notes:			

POLLUTANT: VOC **CAS No.:** VOC

Emission Limit 1:	12.5000 LB/DAY	**Basis:**	LAER
Emission Limit 2:	0	**% Efficiency:**	0
Standard Emission:	0		
Control Method:	(B) COATINGS WITH VOC CONTENT OF 4.6 LB/GAL FOR CLEAR TOPCOATS, 3.2 LB/GAL FOR HIGH-SOLID COATINGS, 4.6 LB/GAL FOR SANDING SEALERS. HVLP SPRAY EQUIPMENT.		
Pollutant Notes:			

Facility Information

RBLC ID:	VA-0237 (final)	**Date Last Updated:**	12/18/2001
Company Name:	VAUGHAN FURNITURE COMPANY	**Permit/File No.:**	30973
Plant Name:	VAUGHAN FURNITURE COMPANY	**Permit Date:**	08/28/1996 (actual)
EPA Region:	3	**SIC Code:**	2511
County/State:	PATRICK / VA	**NAICS:**	337215, 337122
Permit Issued By:	VIRGINIA ENVIRONMENTAL QUALITY AIR DIV. (agency) ALLEN ARMISTEAD (contact) (804) 582-5120		
Plant Description:			
Notes:	PERMIT TO CONSTRUCT AND OPERATE A FURNITURE MANUFACTURING FACILITY TO INCLUDE A WOOD/COAL-FIRED BOILER, ASSORTED WOODWORKING EQUIPMENT, WOOD DRYING, WOOD GLUING, WOOD FINISHING OPERATION AND AN EMERGENCY FIRE PUMP (INTERNAL COMBUSTION ENGINE).		

Process/Pollutant Information

PROCESS:	WOOD/COAL-FIRED BOILER		
Process Type:	13.190 (Other Solid Fuel & Solid Fuel Mixtures)		
Primary Fuel:	WOOD AND COAL	**SCC Code:**	1-02-009-03
Throughput:	28000000.00 BTU/HR	***Compliance Verified:***	No
Process Notes:	*THROUGHPUT INFO: 3504 TPY FOR COAL, 15,330 TPY FOR WOOD & 28000000 BTUS/HR EXCLUDES ANY WOOD WHICH CONTAINS CHEMICAL TREATMENTS OR HAS AFFIXED PAINT AND/OR FINISHING MATERIALS OR PAPER OR PLASTIC LAMINATES.		

POLLUTANT: AS **CAS No.:** 7440-38-2

Emission Limit 1:	0.0500 TPY	**Basis:**	BACT
Emission Limit 2:	0	**% Efficiency:**	0
Standard Emission:	0		
Control Method:	(N)		
Pollutant Notes:			

POLLUTANT: SO2 **CAS No.:** 7446-09-5

Emission Limit 1: 66.5999 TPY **Basis:** BACT

Emission Limit 2: 0 **% Efficiency:** 0

Standard Emission: 0

Control Method: (P) FUEL SPEC: 0.75% SULFUR COAL AND THROUGHTPUT LIMIT

Pollutant Notes:

POLLUTANT: NO2 **CAS No.:** 10102-44-0

Emission Limit 1: 24.0000 TPY **Basis:** BACT

Emission Limit 2: 0 **% Efficiency:** 0

Standard Emission: 0

Control Method: (N)

Pollutant Notes:

POLLUTANT: CO **CAS No.:** 630-08-0

Emission Limit 1: 104.2000 TPY **Basis:** BACT

Emission Limit 2: 0 **% Efficiency:** 0

Standard Emission: 0

Control Method: (N)

Pollutant Notes:

POLLUTANT: VOC **CAS No.:** VOC

Emission Limit 1: 1.7000 TPY **Basis:** BACT

Emission Limit 2: 0 **% Efficiency:** 0

Standard Emission: 0

Control Method: (N)

Pollutant Notes:

POLLUTANT: FORMALDEHYDE **CAS No.:** 50-00-0

Emission Limit 1: 0.0900 TPY **Basis:** BACT

Emission Limit 2: 0

% Efficiency: 0

Standard Emission: 0
Control Method: (N)
Pollutant Notes:

POLLUTANT: BE **CAS No.:** 7440-41-7
Emission Limit 1: 0.0040 TPY **Basis:** BACT
Emission Limit 2: 0 **% Efficiency:** 0
Standard Emission: 0
Control Method: (N)
Pollutant Notes:

POLLUTANT: CR **CAS No.:** 7440-47-3
Emission Limit 1: 0.0800 TPY **Basis:** BACT
Emission Limit 2: 0 **% Efficiency:** 0
Standard Emission: 0
Control Method: (N)
Pollutant Notes:

POLLUTANT: TSP **CAS No.:** PM
Emission Limit 1: 36.8000 TPY **Basis:** BACT
Emission Limit 2: 0 **% Efficiency:** 90.000
Standard Emission: 0
Control Method: (A) MULTICYLCONES, EQUIPPED WITH A DEVICE TO CONTINUOUSLY MEASURE DIFFERENTIAL PRESSURE DROP
Pollutant Notes:

POLLUTANT: PM10 **CAS No.:** PM
Emission Limit 1: 36.8000 TPY **Basis:** BACT
Emission Limit 2: 0 **% Efficiency:** 90.000
Standard Emission: 0

Control Method: (A) MULTICYLCONES, EQUIPPED WITH A DEVICE TO CONTINUOUSLY MEASURE DIFFERENTIAL PRESSURE DROP

Pollutant Notes:

Process/Pollutant Information

PROCESS: MISCELLANEOUS WOODWORKING EQUIPMENT

Process Type: 30.007 (Woodworking)

Primary Fuel:

SCC Code: 3-07-020-99

Throughput: 7000000.00 BOARD FT/YEAR

Compliance Verified: No

Process Notes:

POLLUTANT: PM10 **CAS No.:** PM

Emission Limit 1: 23.3000 TPY

Basis: BACT

Emission Limit 2: 0

% Efficiency: 99.900

Standard Emission: 0

Control Method: (A) FABRIC FILTER

Pollutant Notes:

POLLUTANT: TSP **CAS No.:** PM

Emission Limit 1: 23.3000 TPY

Basis: BACT

Emission Limit 2: 0

% Efficiency: 99.900

Standard Emission: 0

Control Method: (A) FABRIC FILTER

Pollutant Notes:

Process/Pollutant Information

PROCESS: 15 SPRAY BOOTHS

Process Type: 41.025 (Wood Products/Furniture Surface Coating (except 41.006))

Primary Fuel:

SCC Code: 4-02-019-01

Throughput: 86.00 GAL/HR

Compliance Verified: No

Process Notes:

POLLUTANT: TSP **CAS No.:** PM

Emission Limit 1: 55.6000 TPY **Basis:** BACT

Emission Limit 2: 0 **% Efficiency:** 85.000

Standard Emission: 0

Control Method: (A) FIBERGLASS FILTERS OR EQUIVALENT

Pollutant Notes:

POLLUTANT: PM10 **CAS No.:** PM

Emission Limit 1: 55.6000 TPY **Basis:** BACT

Emission Limit 2: 0 **% Efficiency:** 85.000

Standard Emission: 0

Control Method: (A) FIBERGLASS FILTERS OR EQUIVALENT

Pollutant Notes:

POLLUTANT: VOC **CAS No.:** VOC

Emission Limit 1: 232.0000 TPY **Basis:** MACT

Emission Limit 2: 0 **% Efficiency:** 0

Standard Emission: 0

Control Method: (P) MINIMIZED BY AIRLESS SPRAY NOZZLES

Pollutant Notes:

Process/Pollutant Information

PROCESS: GLUING EQUIPMENT

Process Type: 41.025 (Wood Products/Furniture Surface Coating (except 41.006))

Primary Fuel: **SCC Code:** 4-02-019-99

Throughput: 13.00 GAL/HR **Compliance Verified:** No

Process Notes:

POLLUTANT: VOC **CAS No.:** VOC

Emission Limit 1: 3.3000 TPY **Basis:** BACT
Emission Limit 2: 0 **% Efficiency:** 0
Standard Emission: 0
Control Method: (P) USE OF LOW VOC OR WATER BASE ADHESIVES
Pollutant Notes:

POLLUTANT: FORMALDEHYDE **CAS No.:** 50-00-0
Emission Limit 1: 0.2400 TPY **Basis:** BACT
Emission Limit 2: 0 **% Efficiency:** 0
Standard Emission: 0
Control Method: (P) LOW FORMALDEHYDE ADHESIVE
Pollutant Notes:

Process/Pollutant Information

PROCESS: KILN EQUIPMENT (WOOD DRYING KILNS)
Process Type: 30.999 (Other Wood Products Industry Sources)
Primary Fuel: **SCC Code:** 3-07-020-99
Throughput: 11440000.00 BOARD FT/YEAR **Compliance Verified:** No
Process Notes: 11440000 BOARD FT/YEAR OF HARDWOOD

POLLUTANT: VOC **CAS No.:** VOC
Emission Limit 1: 1.2000 TPY **Basis:** BACT
Emission Limit 2: 0 **% Efficiency:** 0
Standard Emission: 0
Control Method: (N) NONE
Pollutant Notes:

Process/Pollutant Information

PROCESS: DIESEL FIRE PUMP (INTERNAL COMBUSTION ENGINE)
Process Type: 17.210 (Fuel Oil)

Primary Fuel:
SCC Code: 2-02-001-02
Throughput: 231.00 HP
Compliance Verified: No
Process Notes: USED ONLY FOR EMERGENCY FIRE SUPPRESSION AT THE FACILITY.

POLLUTANT: NOX **CAS No.:** 10102
Emission Limit 1: 1.1000 TPY
Basis: BACT
Emission Limit 2: 0
% Efficiency: 0
Standard Emission: 0
Control Method: (P) 300 HOURS/YEAR LIMIT
Pollutant Notes:

Facility Information

RBLC ID: AL-0083 (final)
Date Last Updated: 09/10/2002
Company Name: WELLBORN CABINET, INC.
Permit/File No.: 304-5008-X002, 0004, 0006-0015
Plant Name: WELLBORN CABINET, INC.
Permit Date: 09/08/1995 (actual)
EPA Region: 4
SIC Code:
County/State: CLAY / AL
NAICS:
Permit Issued By: ALABAMA DEPT OF ENVIRONMENTAL MGMT (agency)
KEVIN FULMER (contact) (334) 271-7861
Plant Description:
Notes:
797 TPY BUBBLE FOR VOC FOR ENTIRE FACILITY, ROLLING 12 MONTH TOTAL. STAINS APPLIED HVLP OR EQUIVALENT 65% TRANSFER EFFICIENCY (TE). AIR PRESSURE SHALL NOT EXCEED 10 PSIG AT APPLICATION. SEALERS AND TOPCOATS APPLIED WITH AIR ASSISTED AIRLESS OR EQUIVALENT 65% TE UNIT SUBJECT TO NESHAP, WELLBORN WILL COMPLY WITH "NEW SOURCE" REQUIREMTS UPON PERMIT ISSUANCE. MUST PRACTICE GOOD HOUSEKEEPING PRACTICES. WELLBORN TO UTILIZE NEW COATING TECHNOLOGY WHEN IT BECOMES ECONOMICALLY &

TECHNICALLY FEASIBLE. ALL FLAT SHEET STOCK TO USE UV COATING PROCESS.

Process/Pollutant Information

PROCESS: WOOD CABINET MANUFACTURING

Process Type: 41.025 (Wood Products/Furniture Surface Coating (except 41.006))

Primary Fuel: **SCC Code:** 4-02-019-01

Throughput: 0 **Compliance Verified:** No

Process Notes: VOC COATING LIMITS (1 MO AVG) IN LB VOC/GAL COATING: STAINS & TONERS: 7.2 MAX, 6.8 AVG; SEALERS 7.2 MAX, 5.7 AVG.; TOPCOATS 7.2 MAX, 5.0 AVG.

POLLUTANT: VOC **CAS No.:** VOC

Emission Limit 1: 797.0000 T/YR BUBBLE FAC-WIDE **Basis:** BACT-PSD

Emission Limit 2: 0 **% Efficiency:** 0

Standard Emission: 0

Control Method: (P) HVLP AND AIR ASSISTED AIRLESS APPLICATION (SEE NOTES)

Pollutant Notes:

POLLUTANT: PM **CAS No.:** PM

Emission Limit 1: 25.0000 T/YR **Basis:** BACT-PSD

Emission Limit 2: **% Efficiency:**

Standard Emission:

Control Method: (A) ESP OR BAGHOUSE TO BECOME SYNTHETIC MINOR. ESP AND/OR BAGHOUSE ON WOOD WASTE BOILERS AND WOOD HANDLING SYSTEM

Pollutant Notes:

POLLUTANT: PM10 **CAS No.:** PM

Emission Limit 1: 15.0000 T/YR **Basis:** BACT-PSD

Emission Limit 2: **% Efficiency:**

Standard Emission:

Control Method: (A) ESP OR BAGHOUSE TO BECOME SYNTHETIC MINOR. ESP AND/OR BAGHOUSE ON WOOD WASTE BOILERS AND WOOD HANDLING SYSTEM

Pollutant Notes:

Facility Information

RBLC ID:	CA-0634 (final)	**Date Last Updated:**	12/18/2001
Company Name:	CUSTOM WOODCRAFT	**Permit/File No.:**	P/O NO. C-1283-A-1
Plant Name:	CUSTOM WOODCRAFT	**Permit Date:**	12/13/1994 (actual)
EPA Region:	9	**SIC Code:**	2499
County/State:	/ CA	**NAICS:**	
Permit Issued By:	SAN LUIS OBISPO COUNTY APCD, CA (agency) DEAN CARLSON (contact) (805) 781-5912		
Plant Description:			
Notes:	DISCOVERED SOURCE. NO AUTHORITY TO CONSTRUCT WAS ISSUED. PERMIT TO OPERATE WAS ISSUED ON 12-13-94. BUSINESS VOLUME FLUCTUATES SO EMISSIONS VARY. BUT THIS CHANGE HAS REDUCED EMISSIONS AT LEAST 90%. PERMITTEE USES COATINGS THAT HAVE VOC CONTENT LOWER THAN LIMITS LISTED ABOVE. BOOTH HEATERS ARE RARELY USED.		

Process/Pollutant Information

PROCESS:	WOOD COATING OPERATION IN TWO DOWNDRAFT BOOTHS		
Process Type:	41.025 (Wood Products/Furniture Surface Coating (except 41.006))		
Primary Fuel:	NATURAL GAS	**SCC Code:**	4-02-019-01
Throughput:	1.20 BTU/HR FOR HEATER	**Compliance Verified:**	No
Process Notes:	COMPLIANCE TO BE VERIFIED WITH INSPECTION		

POLLUTANT: VOC **CAS No.:** VOC

Emission Limit 1: 0 SEE CNTRL DESC **Basis:** BACT-OTHER

Emission Limit 2: 0 **% Efficiency:** 0

Standard Emission: 0

Control Method: (P) LOW VOC WATERBORNE WOOD COATINGS, CLEAR TOPCOATS LIMITED TO 275 G/L LESS WATER AND EXEMPT CPDS. STAINS,SEALERS, PIGMTED COATINGS LIMITED TO 240G/L

Pollutant Notes:

Facility Information

RBLC ID: AZ-0024 (final)
Company Name: THORNWOOD FURNITURE MFG. INC.
Plant Name: THORNWOOD FURNITURE MFG. INC.
EPA Region: 9
County/State: / AZ
Permit Issued By: MARICOPA CO AIR POLLUTION CONTROL, AZ (agency)
DALE A. LIEB (contact) (602) 506-6738
Plant Description:
Notes: EMISSION LIMITS WITH RECORDKEEPING AND REPORTING.

Date Last Updated: 12/18/2001
Permit/File No.: 93-0054
Permit Date: 06/13/1994 (actual)
SIC Code: 2500
NAICS:

Process/Pollutant Information

PROCESS: WOODWORKING
Process Type: 30.007 (Woodworking)
Primary Fuel:
Throughput: 0
Process Notes:

SCC Code: 30702099
Compliance Verified: No

POLLUTANT: PM10 **CAS No.:** PM

Emission Limit 1: 85.0000 LB/D **Basis:** BACT-PSD

Emission Limit 2: 15.0000 TPY **% Efficiency:** 99.000

Standard Emission: 0

Control Method: (A) BAGHOUSES, HIGH EFFICIENCY CYCLONES

Pollutant Notes:

Process/Pollutant Information

PROCESS: COATING, WOOD FURNITURE

Process Type: 41.025 (Wood Products/Furniture Surface Coating (except 41.006))

Primary Fuel: **SCC Code:** 40201901

Throughput: 0 **Compliance Verified:** No

Process Notes:

POLLUTANT: PM10 **CAS No.:** PM

Emission Limit 1: 0 **Basis:** BACT-PSD

Emission Limit 2: 0 **% Efficiency:** 96.000

Standard Emission: 0

Control Method: (B) PAINT BOOTHS, HIGH EFFICIENCY GUNS

Pollutant Notes:

POLLUTANT: VOC **CAS No.:** VOC

Emission Limit 1: 760.0000 LB/D **Basis:** BACT-PSD

Emission Limit 2: 99.0000 TPY **% Efficiency:** 65.000

Standard Emission: 0

Control Method: (P) HIGH TRANSFER EFFICIENCY, LOW VOC COATINGS

Pollutant Notes:

Facility Information

RBLC ID: VA-0217 (final)
Company Name: DUTAILIER VIRGINIA, INC.
Plant Name: DUTAILIER VIRGINIA, INC.
EPA Region: 3
County/State: HENRY / VA
Permit Issued By: VIRGINIA ENVIRONMENTAL QUALITY AIR DIV. (agency)
LARRY S. LEONARD (contact) (804) 582-5120
Plant Description:
Notes: VE'S NOT TO EXCEED 5% OPACITY.

Date Last Updated: 12/18/2001
Permit/File No.: 30876
Permit Date: 03/17/1994 (actual)
SIC Code: 2512
NAICS:

Process/Pollutant Information

PROCESS: COATING, PRODUCTION BOOTH
Process Type: 41.025 (Wood Products/Furniture Surface Coating (except 41.006))
Primary Fuel:
Throughput: 63.00 UNITS/HR
Process Notes:

SCC Code: 40201901
Compliance Verified: No

POLLUTANT: VOC **CAS No.:** VOC
Emission Limit 1: 160.9000 LB/HR
Emission Limit 2: 153.8000 TPY
Standard Emission: 0
Control Method: (P) HVLP SPRAY GUNS
Pollutant Notes:

Basis: BACT
% Efficiency: 97.800

POLLUTANT: PM10 **CAS No.:** PM

Emission Limit 1: 0.9000 LB/HR
Emission Limit 2: 0.8000 TPY
Standard Emission: 0
Control Method: (A) FABRIC FILTER & BAFF. +BOOTH FILTER
Pollutant Notes:

Basis: BACT
% Efficiency: 99.900

Process/Pollutant Information

PROCESS: COATING, TOUCH-UP BOOTH
Process Type: 41.025 (Wood Products/Furniture Surface Coating (except 41.006))
Primary Fuel:
Throughput: 0
Process Notes:

SCC Code: 40201901
Compliance Verified: No

POLLUTANT: VOC **CAS No.:** VOC
Emission Limit 1: 1.6000 LB/HR
Emission Limit 2: 1.6000 TPY
Standard Emission: 0
Control Method: (A) BAFF. +BOOTH FIL
Pollutant Notes:

Basis: BACT
% Efficiency: 97.800

APPENDIX C

Compliance Report & Certification

MALCOLM PIRNIE

COMPLIANCE REPORT & 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.

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.

_____ 10-11-04

Signature Date