



## **TECHNICAL EVALUATION**

### **APPLICANT**

Busby Cabinets  
13313 Southern Precast Drive  
Alachua, Florida 32615

Facility ID No. 0010120

### **PROJECT**

Project No. 0010120-005-AF  
Application for Minor Source Air Federally Enforceable State Operating Permit  
Renewal FESOP

### **COUNTY**

Alachua, Florida

### **PERMITTING AUTHORITY**

Florida Department of Environmental Protection  
Northeast District Office  
Waste and Air Resource Management  
8800 Baymeadows Way West, Suite 100  
Jacksonville, Florida 32256

### **COMPLIANCE AUTHORITY**

Florida Department of Environmental Protection  
Northeast District Office  
Compliance Assurance  
8800 Baymeadows Way West, Suite 100  
Jacksonville, Florida 32256

February 09, 2015

## **1. GENERAL PROJECT INFORMATION**

### **Air Pollution Regulations**

Projects at stationary sources with the potential to emit air pollution are subject to the applicable environmental laws specified in Section 403 of the Florida Statutes (F.S.). The statutes authorize the Department of Environmental Protection (Department) to establish regulations regarding air quality as part of the Florida Administrative Code (F.A.C.), which includes the following chapters:

**Table 1 - Applicable Rules from the F.A.C.**

<b>Chapter</b>	<b>Description</b>
62-4	Permits
62-204	Air Pollution Control – General Provisions
62-210	Stationary Sources of Air Pollution – General Requirements
62-212	Stationary Sources – Preconstruction Review
62-296	Stationary Sources – Emission Standards
62-297	Stationary Sources – Emissions Monitoring

In addition, the U. S. Environmental Protection Agency (EPA) establishes air quality regulations in Title 40 of the Code of Federal Regulations (CFR). Part 60 specifies New Source Performance Standards (NSPS) for numerous industrial activities. Part 61 specifies National Emission Standards for Hazardous Air Pollutants (NESHAP) based on specific pollutants. Part 63 specifies NESHAP based on the Maximum Achievable Control Technology (MACT) for numerous industrial categories.

Federal regulations adopted by reference are given in Rule 62-204.800, F.A.C. State regulations approved by EPA are given in 40 CFR 52, Subpart K – Florida, also known as the State Implementation Plan (SIP) for Florida.

### **Glossary of Common Terms**

Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of this permit.

### **Facility Process Description and Location**

This is the federally enforceable state operation permit renewal authorizing the operation of a cabinet manufacturing facility. Busby Cabinets is an existing Wood Kitchen Cabinet facility, which is categorized under Standard Industrial Classification Code No. 2434. The facility is located in Alachua County at 13313 Southern Precast Drive, in Alachua, Florida 32615. The UTM coordinates of the existing facility are Zone 17, 360.5 km East, and 3294.8 km North. This site is in an area that is in attainment (or designated as unclassifiable) for all air pollutants subject to state and federal Ambient Air Quality Standards (AAQS).

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The existing facility consists of the following emission units and emission points:

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EU ID No.	Emission Unit Description
001	Wood Working and Moulding Operation (Wood Working Baghouse Emissions Point 01 (Nordfab Systems NFK-2000 HJLR)) Moulder Machine Baghouse Emissions Point 02 (NBM Dust Collector)
002	Surface Coating Operation

The facility is a cabinet manufacturing plant which makes cabinetry for residential use. The facility consists of woodworking and surface coating operation.

### **Wood Working Operation.**

**Main Building.** Various wood pieces are cut, sanded, routed, and shaped as needed per order. The parts are then put together into cabinets with glues, nails, staples or screws. At each machine that generates sawdust, there are pickup hoods to vent the dust to the baghouse #1.

The baghouse is a Nordfab Systems unit model No. NFK-2000 HJLR. It has an exhaust flow rated at approximately 18,000 actual cubic feet per minute and a grain loading assumed to be 0.5 grains per dry standard cubic feet or better. There are four modules with 50 bag filters/module and one downward exhaust duct per module.

**Moulder Building.** Various wood pieces are moulded as needed per order in this building. The moulder is a Weinig America Powermat 400 system. The parts are then used on-site or for off-site orders. There are several smaller pieces of equipment vented to the same baghouse (table saw, radial arm saw, radius moulder). The machines generate sawdust, which is controlled by use of baghouse #2, a Belfab Model NBM baghouse, which is located outside of the building.

### **Surface Coating Operation.**

The facility consists of three spray booths in addition to various tables for painting and staining. The spray guns used are typically airless, however on occasion air spray guns are used. The numbers and types of spray guns are described as below.

<u>Equipment</u>	<u>Quantity</u>
Kremlin MVX 60 Airmix	4
Kremlin M21 VLP	2
Astro Star Siphon Feed Cup Gun	10

The information for the paint booths is as below.

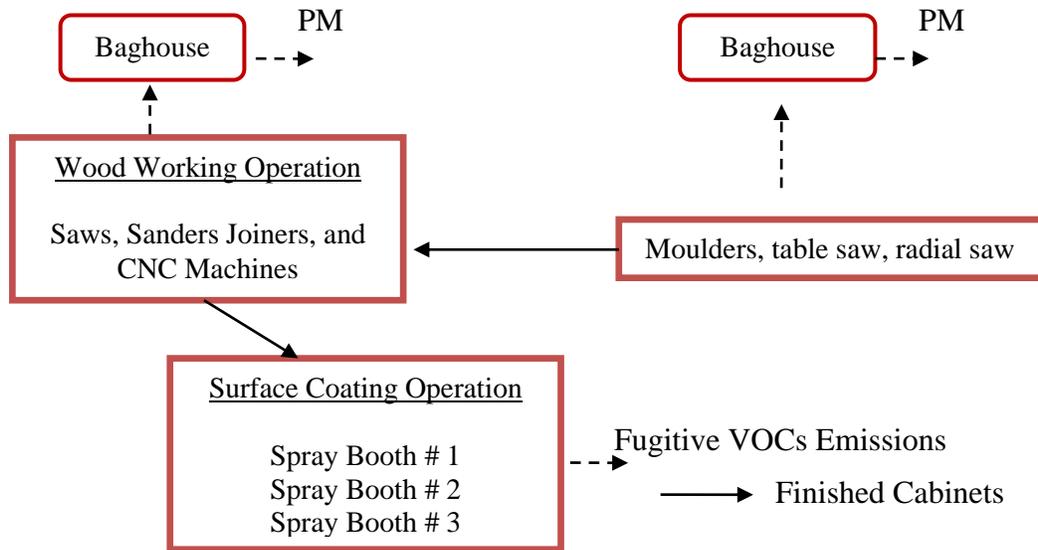
Booth # 1 is a Brink booth with no inlet air heater. It is typically used for top coating the pieces.

Booth # 2 is a Black Crowe booth with 800,000 BTU/hour liquefied propane (LP) gas inlet air heater. It is typically used for sealer coating (strains).

Booth # 3 is a Black Crowe booth with 800,000 BTU/hour LP gas air heater. It is typically used for painting.

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### Process Flow Diagram



### **Facility Regulatory Categories.**

- The facility **is not** a major source of hazardous air pollutants (HAP).
- The facility **does not** operate units subject to the acid rain provisions of the Clean Air Act.
- The facility **is not** a Title V major source of air pollution in accordance with Chapter 213, F.A.C.
- The facility **is not** a major stationary source in accordance with Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

### **Processing Schedule.**

- 2/5/15 Department received the Application for a minor source air pollution operating permit.
- 2/6/15 Department received the supplemented information related to the Application for a minor source air pollution operating permit.

### **Glossary of Common Terms.**

Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of the draft permit distributed with this evaluation.

## **2. APPLICATION REVIEW**

The air pollutant emissions from the facility are: Particulate Matter (PM), VOC, and HAPs. The facility is a synthetic minor source of VOCs and HAP emissions, therefore is not subject to 40 CFR 63 Subpart JJ - National Emission Standards for Wood Furniture Manufacturing Operations. The cap for VOC is to lower the application fee, and the cap for single HAP/Total HAPs is to be classified as the minor source of HAP.

This facility is considered a natural minor facility based on the information provided in the application.

### **Project Description.**

Air Operation Permit Renewal for the existing Busby Cabinets.