

DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION  
ACTIVITY REPORT: Scheduled Inspection

N564532513

FACILITY: FIVE LAKES MANUFACTURING INC		SRN / ID: N5645
LOCATION: 50560 PATRICIA AVE, CHESTERFIELD <i>Now: 24400 Capital Blvd</i>		DISTRICT: Southeast Michigan
CITY: CHESTERFIELD <i>Clinton Twp, MI 48036</i>		COUNTY: MACOMB
CONTACT: Roger Eger, Vice President		ACTIVITY DATE: 11/18/2015
STAFF: Rebecca Loftus	COMPLIANCE STATUS: Compliance	SOURCE CLASS: Minor
SUBJECT:		
RESOLVED COMPLAINTS:		

On November 18, 2015, I, Rebecca Loftus, from the Department of Environmental Quality's (DEQ), Air Quality Division (AQD), conducted an inspection of Five Lakes Manufacturing (FLM), State Registration Number (SRN): N5645, located at 24400 Capital Boulevard, in Clinton Township Michigan. The purpose of this inspection was to determine the facility's compliance with the Federal Clean Air Act Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act of 1994, PA 451, as amended, and Michigan's Air Pollution Control Rules.

**Contact Information**

Roger Eger, 586-463-4123, roger@fivelakesmfg.com  
Irene Wallace, for records, irene@fivelakesmfg.com

**Inspection**

I arrived on-site at 8:55am and met with Mr. Roger Eger, Jr., Vice President. Mr. Eger escorted me through the facility and explained the following:

FLM manufactures interior wooden doors and moved to this location in 1995. Previously, FLM was located at 50560 Patrice Avenue (now the Chesterfield Library).

At this location FLM has materials/equipment located in three consecutive buildings:

- 24200 Capital Boulevard, a.k.a. Building 200
- 24300 Capital Boulevard, rent storage space only
- 24400 Capital Boulevard, a.k.a. Building 400

In Building 400, FLM has equipment used for wood door cutting/machining. All wood work equipment exhausts through a ventilation system which takes the particulates to a dust collector (Torit) located at the back of the building; these process appear to be exempt from obtaining a Permit to Install (PTI) pursuant to 285(v)(vi)(C). During my inspection, most areas appeared to be well maintained and I did not see any particulate emissions or fallout near the dust collector. Mr. Eger explained the containers from the dust collector are changed out every four days and the material is sent to local farms for further use.

Building 400 also has one paint booth. Mr. Eger said most doors are not finished by FLM, but some are finished with water based paints, stains, lacquer, or varnish. Mr. Eger also explained painting can occur Monday through Friday and paint filers are changed out quarterly as needed. Ms. Wallace provided the coating records for the paint booth on 12/14/15 and 2/3/16 (see attached). Although, monthly records are not currently maintained, the yearly gallons

applied, indicate that FLM uses less than 200 gallons of coatings per month; therefore, the paint booth appears to be exempt from obtaining a PTI pursuant to Rule 287(c).

Summary of the provided coating data:

Year	Gallons used	Calculated VOC emissions (Tons)
2008	1229	3.24
2009	800	2.12
2010	825	2.20
2011	775	2.06
2012	905	2.39
2013	600	1.60
2014	830	2.19
2015	745	1.96

In Building 200, FLM has additional wood working equipment, however, this equipment is sent to an in-plant dust collector. This equipment appears to be exempt from obtaining a PTI pursuant to Rules 285(l)(vi)(B) and (C).

Building 200 also has a gluing station. Mr. Eger explained that workers coat pieces of wood/veneer with a polyvinyl acetate (PVA) glue; these pieces are sent to a cold press clamping station to cure; after drying the doors are sent off for additional wood working. According to the Safety Data Sheet (see attached), the PVA has a Volatile Organic Compound (VOC) content of 2.63 grams/liter (approximately 0.02 lbs/gallon). According to the records provided, FLM used 112 containers (270 gallons each) of PVA in 2015.

Based on the usage the following VOC emissions were emitted to the in-plant environment in 2015:

$$112 \text{ containers} \times 270 \text{ gallons/container} \times 0.02 \text{ lbs VOC/gallon} = 604.8 \text{ lbs VOC}$$

Because of the low VOC content, the calculated emissions are anticipated to be low for this process. Based on current usage, the PVA gluing station appears to be exempt from obtaining a PTI pursuant to Rule 290(a)(i).

#### **Previous Air Permit**

Previously, FLM had an air permit, PTI No. 111-96, for assorted woodworking equipment. The last inspection report notes that FLM was no longer in business at 50560 Patricia Avenue and the permit was voided on 2/9/2010. Based on my review of the file, the permit was issued to FML at the new location (24400 Capital Boulevard) and was mistakenly voided.

Although the permit was voided, at this time, the equipment that was previously permitted appears to now be exempt from obtaining a permit, as noted in my report above.

The address in the AQD database (MACES) needs to be updated to reflect the current location of FLM.

**Additional Information**

During my inspection, Mr. Eger noted that the majority of the doors manufactured by FLM go to other companies for further finishing (i.e. coating). One of the companies is a neighboring business, Rosati Specialty Finishes.

Upon returning to the office, I searched the AQD databases and could not find a file for a Rosati Specialty Finishes located on Capital Boulevard. Based on an internet search, it appears that Rosati has a UV process line, roll coat lines, and spray coating lines.

**Conclusions**

Based on the information gathered, FLM appears to be in compliance with the Federal Clean Air Act and Michigan's Air Pollution Control Rules.

For the neighboring company, Rosati Specialty Finishes, I recommend that AQD staff follow-up with a self-initiated inspection to determine their compliance with the Federal Clean Air Act and Michigan's Air Pollution Control Rules.

NAME

Rebecca J. Hitt

DATE

12/14/15  
updated 2/8/16

SUPERVISOR

CJE