

**DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: On-site Inspection**

P033461991

FACILITY: VERSATILE WOOD SOLUTIONS		SRN / ID: P0334
LOCATION: 11335 APPLE DRIVE, NUNICA		DISTRICT: Grand Rapids
CITY: NUNICA		COUNTY: OTTAWA
CONTACT: Mark Schroeder , President		ACTIVITY DATE: 02/23/2022
STAFF: Chris Robinson	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: FY'22 on-site inspection to determine the facility's compliance status with applicable air quality rules and regulations.		
RESOLVED COMPLAINTS:		

On February 23, 2022, AQD staff Chris Robinson (CR) conducted an unannounced inspection of Versatile Wood Solutions (P0334) located at 11335 Apple Drive in Nunica, Michigan. The purpose of the inspection was to determine the facility's compliance status with applicable air quality rules and regulations. CR met with Mr. John Riggs, Production Manager, and Mr. Ron Roop Maintenance Manager. Identification was provided and both Mr. Riggs and Mr. Roop were informed of AQD's purpose for the visit. Mr. Riggs and Mr. Roop provided a walk-through of the facility and pertinent information. Records were provided by Mr. Mark Schroeder, President.

The Weather conditions on February 23, 2022, were approximately 11°F with light snow and northerly winds at approximately 12 mph (www.weatherunderground.com). No odors or visible emissions were observed.

Versatile Wood Solutions is a woodworking facility that uses both hardwood and composite wood. They manufacture store fixtures, furniture, and other miscellaneous wood products.

The two manual spray booths noted in the previous AQD inspection report were observed. Per booth operator and Mr. Riggs, filters are changed as needed. However, the filters on the larger of the two booths (Eastern one) were plugged and in need of replacement. This was discussed with Mr. Riggs and the operator which noted they were scheduled to be changed.

Since the previous inspection conducted on March 29, 2012, the facility has added an enclosed manual spray booth (Col-met brand), installed approximately two years ago and an automated Ultra-Violet (UV) spray line which was installed approximately 4 years ago. The UV spray line consists of coaters, a flash off oven, a curing oven heated by hot water, a UV curing unit, and a sanding unit used in case items need to be re-sanded and sent back through the coating line. Dry filters were in place and appeared to be in good shape. All spray booths vent externally.

The facility is claiming that all four booths are exempt from Rule 201 permitting requirements per Rule 287(2)(c) for having an individual coating usage of no more than 200 gallons per month. Usage records for each of the four (4) booths were provided and the booth with the highest usage was the Auto Spray line at 120 gallons in July of 2021, which is less than the 200 gallon limit.

The facility has three areas that utilize a white/yellow wood glue. One area is in assembly which is used to attached primarily solid wood face frames. The second area is for gluing strips of solid wood into panels, and the third area is what the facility calls layup. This is where laminate is adhered to 4x8 sheets of MDF board and pressed together either by using the hot press or the cold press. Based on the records for 1/1/2021 through 12/31/2022 the assembly area uses approximately 8

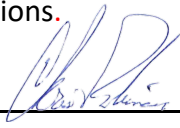
gallons of adhesive per month. Adhesive use is based on Purchase orders and is purchased for inventory not on an as needed basis. Based on the records provided there are several months in a row that exceed 200 gallons purchased making it impossible to determine how much was used. However, the records provided include water. Per Rule 287(2)(c), the 200-gallon monthly limit is based on "minus water". Safety Data sheets provided by the company show that water accounts for approximately 50% of the adhesive, therefore removal of the water reduces usage to below 200 gallons each month. Since the facility does not purchase adhesive on an as needed basis this approach is not recommended, however, it is being accepted for now but Versatile should develop a new way of tracking usage if they wish to continue to use Rule 287(2)(c).

The facility operates two banders for applying edge banding to MDF board. The adhesive for both is hot melt adhesive, one in pellet form and the other in block form. These banders appear to be exempt from Rule 201 permitting requirements per Rule 287(2)(i).

Various equipment exist that are used for cutting and sanding wood, this includes five (5) CNC machines. All sawdust is directed to the baghouse which can be either vented internally for HVAC assistance or externally. When vented internally this equipment appears to be exempt from Rule 201 permitting per Rule 285(2)(l)(vi)(B). When vented externally this equipment appears to be exempt per Rule 285(2)(l)(vi)(C). The area outside near the baghouse and the sawdust storage/augering system for the wood fired furnace did need attention. According to Mr. Roop the auger that feeds sawdust to the wood waste furnace froze and required material to be removed to thaw also noting that the company responsible for removing the baghouse dumpsters tends to forget to unlatch the ducting prior to removal, which causes spillage. CR informed Mr. Riggs and Mr. Roop during the inspection and later with Mr. Schroeder by phone that regardless of the transporter's actions Versatile is responsible and that Rule 370 requires collection and disposal of air contaminants to be performed in a manner to minimize the introduction of contaminants to the outer air". A return inspection of this area may be warranted. CR could not find a CFM rating on the baghouse, but the previous inspection report noted that it was most likely rated at between 30,000 – 40,000 CFM. Mr. Schroeder had also assured the inspector that it was not more than 40,000 CFM which he did so again for this inspection. Using Rule 331 emission rate of 0.10 lbs. of Particulate Matter (PM) per 1,000 lbs. of exhaust gas, potential annual PM emissions would be approximately 85 tons per year, which is less than the Title V threshold of 100 tpy. A second baghouse could trip the 100 tpy limit requiring the facility to either operate as a major source for PM or apply for a Title V opt-out permit to restrict PM potential to below the Title V threshold.

Versatile has three (3) wood waste boilers and one (1) wood waste furnace (forced air). Only two (2) of the three (3) boilers are currently being operated. Based on conversations with Mr. Roop approximately 20% manufactured board is used as fuel. However, CR expressed concerns with that estimate since the solid wood bin was almost completely empty and a large pile of MDF scrap was stacked directly in front of the boilers. In addition, CR mostly observed manufactured board in the facility's grinder which is being used for fuel. CR discussed this with Mr. Riggs onsite and with Mr. Schroeder after the inspection informing them that at any given time the material being combusted cannot be more than 20% manufactured board.

Based on the observations and discussions made during the inspection and subsequent records review Versatile Wood Solutions appears to be in compliance with applicable air quality rules and regulations.

NAME 

DATE 3/15/2022

SUPERVISOR 