

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

P047768605

FACILITY: G-M WOOD PRODUCTS		SRN / ID: P0477
LOCATION: 531 CLAY STREET, NEWAYGO		DISTRICT: Grand Rapids
CITY: NEWAYGO		COUNTY: NEWAYGO
CONTACT: Hannah Drouin , Safety/Quality Coordinator		ACTIVITY DATE: 06/01/2023
STAFF: Scott Evans	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: On site inspection to assess compliance with air quality rules and regulations.		
RESOLVED COMPLAINTS:		

Introduction

On June 1, 2023, State of Michigan Department of Environment, Great Lakes, and Energy Air Quality Division staff member Scott Evans (SE) conducted an on-site inspection of the G-M Wood Products facility located at 531 Clay St. in Newaygo, Michigan, to assess compliance with the requirements of Permit to Install (PTI) No. 87-22 and all other air quality rules and regulations. G-M Wood Products is a manufacturing facility that produces door jams and trim. It has four woodworking plants and five warehouses. Two of the plants are used for manufacture and assembly of the wood products, one is used for specialty parts manufacturing, and one is used for vinyl wrapping to the manufactured pieces. There is one additional plant that is a separate entity from the woodworking operations.

Upon arrival at the facility, a perimeter observation was conducted to assess any odors or visible emissions (VEs) beyond the property line. No VEs or odors were observed. SE then entered the facility and was greeted by Tyler Huntley and Hannah Drouin. The purpose of the visit was discussed, and an inspection of the facility was conducted.

PTI No. 87-22

This PTI has multiple Emissions Units (EUs) including three baghouse dust collectors to control woodworking particulate matter, adhesive application equipment, two surface coating lines with natural gas dryers, two spray booths, a UV sealer, two vinyl-wrap application operations, two sealer application lines, label printing, four glue application setups, a wood filler application line, and a vacuum coater application setup. These emissions units are organized into three Flexible Groups (FGs). FGWOODWORKING is comprised of the various woodworking operations including molding, sawing, routing, and sanding as well as all associated dust control baghouses. FGCOATING is comprised of the various coating operations at the facility. FGFACILITY has requirements that cover all operations at the facility.

FGWOODWORKING

This flexible group consists of the various woodworking equipment within the facility plants as well as three associated baghouses for controlling dust. Woodworking operations are organized into three emission units: EUWOODWORKINGP2, EUWOODWORKINGP3, and EUWOODWORKINGP5.

This FG has ten emissions limits:

Pollutant	Limit	Time Period / Operating Scenario
1. PM for EUWOODWORKINGP2	0.96 pph	Hourly

Pollutant	Limit	Time Period / Operating Scenario
2. PM10 for EUWOODWORKINGP2	0.96 pph	Hourly
3. PM2.5 for EUWOODWORKINGP2	0.96 pph	Hourly
4. PM for EUWOODWORKINGP3	0.39 pph	Hourly
5. PM10 for EUWOODWORKINGP3	0.39 pph	Hourly
6. PM2.5 for EUWOODWORKINGP3	0.39 pph	Hourly
7. PM for EUWOODWORKINGP5	0.9 pph	Hourly
8. PM10 for EUWOODWORKINGP5	0.9 pph	Hourly
9. PM2.5 for EUWOODWORKINGP5	0.9 pph	Hourly
10. Opacity	5%	6-minute average when discharging to outside atmosphere

PM emissions have not been tested however all baghouses appeared to be installed, maintained, and working properly and so no further verification is being required at this time.

The above compliance determinations are based on various other restrictions and parameters described further below as well as the observation that no visible emissions were observed during the visit.

This FG has two operational restrictions. One states that the equipment within the FG may only operate if an approved Malfunction Abatement Plan (MAP) has been submitted to the AQD, is being followed, and contains the following:

- A preventative maintenance program that specifies who is responsible for oversight of the plan.
- Identification of operating variables used to identify proper or improper function of control equipment.
- A description of corrective procedures to be taken in the event of a malfunction.

At the time of the inspection a copy of the facility MAP was not in the facility file with the AQD. This was discussed and the facility was able to demonstrate that a malfunction abatement plan was housed on site and being adhered to within the facility. The facility was instructed to provide a copy of this MAP to the AQD. As the plan was established and in use at the time of the inspection and a copy provided to the AQD, a violation will not be issued.

The facility is also not permitted to vent emissions from the baghouses externally from the facility for more than 6570 hours per baghouse over any 12-month rolling period. It was discussed that the facility operates each plant for one or two shifts, five days per week. Assuming sixteen hours of sustained operation over the course of five-days per week, the facility only operates the baghouses for roughly 4,200 hours per year. This demonstrates compliance with this requirement.

This facility has one equipment parameter, which states that the woodworking operations may only commence if the associated baghouses are installed, maintained, and operated appropriately. During the inspection the equipment was observed to be installed and operating appropriately, demonstrating compliance with the requirement.

There are two testing requirements for this FG. One states that the facility may be required to verify emission rates from the associated baghouses if requested to do so by the AQD. During the inspection the baghouses were observed and appeared to be properly functioning. At this time it is not felt that testing is required. The facility may also be required to assess VEs from the baghouses if requested by the AQD. As observations during the inspection found no VEs from any baghouse and there was no evidence of excessive particulate matter around the facility baghouses, testing is not necessary at this time.

This FG has the following monitoring and recordkeeping requirements:

- All maintenance logs of the emission control equipment shall be maintained appropriately.
- Any VE evaluations shall be recorded.
- All operational hours of externally venting baghouses shall be recorded.

The facility was able to provide maintenance logs of the facility as required. Review of these records was used to help verify that proper baghouse functionality is maintained to verify adherence to the above emissions limits. Upon discussion with the facility, it was explained that external ventilation of the baghouses is an infrequent occurrence through cold months as internal ventilation is used as a temperature management method based on temperatures inside of the warehouse. Logs were reviewed and a copy of the log for May of 2023 was provided to accompany this report. Only one building's baghouse vented externally at all through the month. This log shows the incidents of when baghouse ventilation was switched to external ventilation. Each incident lasted the duration of the day's operations for the single shift work day. At each of these times, an assessment of visible emissions was made and there were no observations of visible emissions. The facility maintains these records for all operational months and this was reviewed and discussed during the inspection.

There are three stacks associated with this FG. All three stacks were observed and appeared to be compliant with permitted height and diameter requirements. These were not measured directly for safety reasons.

FGCOATING

This FG consists of the various coating processes conducted at the facility. It has one emission limit, which limits VOC emissions to 16.0 tpy, evaluated on a 12-month rolling period. A review of records

provided for May 2022 through April 2023 determined that the highest emission rate from the facility was 5.3 tpy as of June, 2023.

This FG has four material limits:

Compliance with these limits was determined through a review of the chemical composition records of all listed materials. This is discussed in more detail below.

The facility is not permitted to use VOC containing adhesives in edge gluing emission units. This was discussed and the facility appears to be in compliance based on the results of observations during the inspection.

This FG has the following operational restrictions:

- All waste materials shall be captured and stored in closed containers prior to proper disposal.
- Spent filters shall be disposed of so as to minimize release of air contaminants.
- All VOC containing material shall be handled so as to minimize release of air contaminants.

During the inspection all materials and waste materials appeared to be handled appropriately. Materials and waste products were all stored in lidded or otherwise enclosed containers when not in use. Spent filters were seen appropriately covered and awaiting proper disposal.

The FG has the following equipment parameters:

- All associated exhaust filters must be installed, maintained, and operated appropriately.
- Primer application must be done with airless application or comparable equipment.
- The manual spray booth must use HVLP or comparable technology.
- Vacuum primer applications must use a vacuum coater or comparable technology.
- All other applicator systems must use direct application or comparable technology.

During the inspection, all equipment was observed and appeared to be using the required technologies as listed above. The facility was advised that any changes to equipment or processes should be reviewed with the permit to ensure continued adherence to these permitted requirements.

This FG has one testing requirement that states the facility shall either use Federal Reference Test Method 24 to determine VOC content of use materials or else submit a written request to the AQD for approval to use manufacturer formulation data. At the time of the inspection no testing had been conducted and a request to use manufacturer data was not on file with the AQD. This was discussed with the facility staff who submitted a request to the AQD for approval on August 9, 2023.

This FG has the following recordkeeping requirements:

- The facility shall maintain a current listing from the manufacturer of the chemical composition of each material, including the weight percent of each component.
- The following emissions data must be recorded:
 - Gallons of each material used.

- VOC content of each material as applied.
- Monthly VOC emissions.
- 12-month rolling annual VOC emissions.

These records were requested and provided to the AQD remotely for more detailed review. The records discussing VOC content of each material were used to assess compliance with material limits as shown in the table above. There were no instances of materials with VOC content levels in exceedance of the permitted requirements. VOC emissions data was reviewed and used to assess compliance with the 12-month rolling period emissions limit as discussed above. The facility records demonstrated compliance with the limit.

FGFACILITY

This FG has conditions that apply source-wide to all process equipment including equipment covered by other permits, grand-fathered equipment and exempt equipment.

There are two emissions limits:

Pollutant	Limit	Time Period / Operating Scenario	Recorded Maximum	In Compliance? (Y/N)
1. Each Individual HAP	Less than 8.9 tpy	12-month rolling time period as determined at the end of each calendar month	43.58 lbs	Yes
2. Aggregate HAPs	Less than 22.4 tpy	12-month rolling time period as determined at the end of each calendar month	51.56 lbs	Yes

The above compliance determinations were made after review of records provided as described below.

This FG has one testing requirement which states that the facility must use manufacturer data to determine Hazardous Air Pollutant (HAP) content of materials used unless testing is requested by the AQD. At this time it appears to be sufficient for the facility to continue to use manufacturer data and no testing is required.

This FG has the following recordkeeping requirements regarding HAP emissions:

- Gallons or pounds of each HAP containing material used.
- Gallons or pounds of each HAP containing material reclaimed.
- HAP content of each material used.
- Monthly HAP emissions for each individual and aggregate HAP.
- 12-month rolling annual HAP emissions for each individual and aggregate HAP.

Records were requested and provided remotely to the AQD in the form of manufacturer formulation data of all used chemicals for further review of emissions data.

Conclusion

At the conclusion of the inspection, the facility appeared to be in compliance with permitted requirements as well as all other applicable air quality rules and regulations.

NAME Scott Evans

DATE 8/16/2023

SUPERVISOR 