

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

N784064698

| | | |
|--|-------------------------------|---------------------------|
| FACILITY: NORTH AMERICAN MOULDING | | SRN / ID: N7840 |
| LOCATION: 27263 MAY ST, EDWARDSBURG | | DISTRICT: Kalamazoo |
| CITY: EDWARDSBURG | | COUNTY: CASS |
| CONTACT: Mike Chaffee, Safety and Engineering Coordinator | | ACTIVITY DATE: 08/25/2022 |
| STAFF: Rachel Benaway | COMPLIANCE STATUS: Compliance | SOURCE CLASS: MINOR |
| SUBJECT: On-site inspection to verify compliance with all state and federal air use regulations. | | |
| RESOLVED COMPLAINTS: | | |

AQD staff (Rachel Benaway) conducted an unannounced air quality inspection of North American Moulding (N7840) on 8/25/2022. The purpose of the inspection was to verify North American Moulding (NAM) is in compliance with their Permit to Install (PTI) #250-07 and all state and federal air use regulations. NAM, a laminate panel and architectural millwork manufacturer, is a minor source of volatile organic compounds (VOCs). Mike Chaffee (Safety and Engineering Coordinator) is responsible for the submission of requested records and was present for the on-site inspection. Personal protection equipment required for plant entry includes safety shoes and safety glasses.

There were no visible emissions observed outside of the facility. The facility employs approximately 250 employees operating 4 days a week. The facility was last inspected on 12/14/2017 and reported that a new panel laminator has been installed since that date. Since the new unit uses hot melt adhesive exclusively, it appears to be eligible for a Rule 287(2) (i) exemption. There has been no change to the adhesives used since the last inspection.

| # | Equipment at Facility |
|----|---|
| 5 | Panel laminators (3 single-sided, 1 double-sided) |
| 13 | Profile laminators (glue liners) (10 use hot melt glue, 2 use cold melt glue) |
| 1 | Small parts washer (Exempt Rule 281(2)(h)) |
| 2 | Indoor dust collectors (not vented externally) (Exempt Rule) |
| 4 | Moulders used to mold wood to required shapes (Exempt Rule 285(2)(l)(vi)(c)) |
| 4 | Multi scourers that saw wood into long strips (Exempt Rule 285(2)(l)(vi)(c)) |
| 2 | CNC machines (Exempt Rule 285(2)(l)(vi)(c)) |
| 4 | Panel saws (Exempt Rule 285(2)(l)(vi)(c)) |
| 1 | Table saw (Exempt Rule 285(2)(l)(vi)(c)) |
| 1 | Outdoor Torit baghouse with cyclone |

There are no boilers or emergency generators at the facility. The following is a list of special conditions listed in the PTI for each flexible group of which staff was able to make a compliance determination.

FG-COATING

Description: One or more coating lines and all associated purge and clean-up operations, where each coating line is a single series in a coating process and is comprised of one or more coating applicators, any associated flash-off areas, drying areas, and ovens where one or more surface coatings are applied and subsequently dried or cured.

Eight (8) of the profile laminators use H.B. Fuller HL-6752 pelletized glue hot melt glue exclusively (exempt Rule 287(2) (l)).

PTI #127-06

| SC | Condition | COMPLIANT? |
|-------|--|------------|
| I.1 | VOC 2,000lb/month | Yes |
| I.2 | VOC 10 tpy- 12MRT | Yes |
| III.1 | Capture all purge/cleanup solvents and waste coatings | Yes |
| | Store materials in closed containers and dispose of materials in acceptable manner | Yes |
| IV.1 | Equip and maintain w/ high volume-low pressure spray applicators | Yes |
| IV.2 | Shall not operate unless particulate control is installed, maintained, operated | Yes |
| V.1 | Method 24 testing may be required upon request | N/A |

Monitoring/Recordkeeping:

| SC | Condition | COMPLIANT? |
|------|-----------------------|------------|
| VI.3 | Keep monthly records: | |

- a. Purchase orders and invoices for coatings, reducers, purge/clean-up solvents Yes
- b. VOC content (lb/gallon) of each coating, reducer, purge/clean-up solvents
- c. Gallons of each coating, reducer, purge/clean-up used and reclaimed Yes
- d. VOC mass emission calculations determining monthly emission rate for each coating line, in tons per calendar month, using method in Appendix B Yes *
- e. VOC mass emission calculations determining annual emission rate for each coating line in tons per 12-month rolling time using method in Appendix B *
- VI.4 Maintain current listing of manufacturer of the chemical composition of each coating, including the weight percent of each component. The data may consist of Material Safety Data Sheets. Yes

*While there is no breakdown of what each line is emitting, the submitted records clearly demonstrate that the entire facility is able to comply with the 2,000 lb/month and the 10 tpy VOC emission limits that actually pertain to just one coating line.

The facility submitted a year of purchase orders for the adhesives used at the facility (SC VI.3(a)). Material safety data sheets were submitted for each adhesive used (SC VI.4). Reports were submitted detailing the VOC content (SC VI.3(b)), amount used (SC VI.3(c)), and VOC emissions of each coating per month from January 2020 to June 2022. The facility is not tracking the VOC emissions per coating line as specified in SC VI.3(d) and (e) but is instead totaling all VOCs emitted together per month. The facility has been advised that in the future, records should be kept according to the requirements of the permit to show compliance with the per coating line limits.

In May of 2021, the facility emitted the most VOCs within the period of reviewed records at 1,578.92 lbs of VOCs. The lowest VOC emission occurred in April of 2020 at 277.28 lbs. Over the 30 months reviewed, the facility emitted an average of approximately 1,143 lbs of VOC per month.

FG-COATING appears to be in compliance at this time.

FG-SOURCE

Description: All coating lines and all associated purge and clean-up operations at the stationary source. This includes any coating line covered by this or any other general permit or any permit to install issued pursuant to Rule 201, and any coating line exempt from the requirement to obtain a permit to install pursuant to Rule 287 and/or Rule 290.

PTI #127-06

| SC | Condition | COMPLIANT? |
|-----|-------------------|------------|
| I.1 | VOC 30 tpy- 12MRT | Yes |

Monitoring/Recordkeeping:

| SC | Condition | COMPLIANT? |
|------|--|------------|
| VI.1 | VOC mass emission calculations on a monthly basis for FG-SOURCE determining annual emission rate in tons per 12-month rolling time, for all coating lines and associated purge and clean-up operations at the source | Yes |

The facility submitted records demonstrating the 12-month rolling time emissions of VOCs source-wide. Between July 2021 and June 2022, the highest 12-month rolling time VOC emission occurred in both October and November of 2021 at 7.77 tons of VOC. This is well below the FG-SOURCE permit limit of 30 tpy of VOC.

FG-SOURCE appears to be in compliance at this time.

The facility submitted sawdust sales data that demonstrates how many tons of sawdust are removed from NAM per month and annually. The facility removed an average of 127 tons of sawdust per month from the facility in 2021. Annually, the facility removed 1,523 tons of sawdust.

The facility appears to be in compliance with all state and federal air use regulations at this time.

NAME Rochel Benaway DATE 9/21/22 SUPERVISOR RIL 9/21/22