

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

B860351198

FACILITY: JELD-WEN Interior Door - Grand Rapids		SRN / ID: B8603
LOCATION: 4200 ROGER B CHAFFEE MEMORIAL BLVD., GRAND RAPIDS		DISTRICT: Grand Rapids
CITY: GRAND RAPIDS		COUNTY: KENT
CONTACT: Allen Atkins , Environmental, Safety and Sustainability Manager		ACTIVITY DATE: 10/29/2019
STAFF: April Lazzaro	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Unannounced, scheduled inspection.		
RESOLVED COMPLAINTS:		

Staff, April Lazzaro arrived at the facility to conduct an unannounced, scheduled inspection and met with Max Jones, Facility Manager and Allen Atkins, Environmental, Safety and Sustainability Manager.

#### FACILITY DESCRIPTION

JELD-WEN Interior Door- Grand Rapids is an interior door manufacturer for the residential housing market. A substrate like medium density fiberboard (MDF) or other engineered door core material is covered with an outer skin and finished edges. This facility is permitted by General Permit to Install (PTI) No. 117-11 for Coating Lines Emitting up to Ten Tons per Year (10 TPY) of Volatile Organic Compounds (VOCs). This permit limits VOC's from the coating lines at the facility and is therefore considered a synthetic minor for those lines.

The sawdust generated by multiple and various pieces of wood working equipment are controlled by one of three baghouses at the facility which are permitted by PTI No. 322-89. These baghouses were installed in the mid-1970's.

#### COMPLIANCE EVALUATION

Mr. Jones and I talked as we waited from Mr. Atkins to arrive about the activities that the facility had taken since I had last been here and had issued a Violation Notice for the fact that the baghouses had not been properly maintained. I mentioned that the Air Quality Division (AQD) had not received the Malfunction Abatement Plan (MAP) that was required to have been submitted several months ago. Mr. Jones indicated that quite a bit of work had been done and they continued to pay close attention to the area.

Mr. Atkins and I began our facility walk-through and inspection, which started with a discussion of what AQD had listed as existing equipment based on previous inspections.

Currently the facility operates two spray booths, referred to Trim Saw 1 and 2. We observed booth #2 first, and it appeared in good shape with the filters in proper placement. The Graco airless spray guns are still in use, and it had been previously determined that they are considered comparable technology to HVLP guns. Booth #1 was observed, and the filters were not in proper placement to limit particulate passing around them. Mr. Atkins stated that they should've used 4 widths across, but only 3 had been used. This will be addressed and corrected immediately. I suggested additional training may be necessary. Booth #3 (Pre-finish) has not been in use this calendar year.

As we walked through the facility there are various woodworking equipment that is sawing, planing, sanding etc. All of the woodworking equipment is ducted to one of the three baghouses on the north end of the building.

Six adhesive roll coaters are present which utilize a water based adhesive similar in nature to Elmer's glue. These roll coaters are cleaned with water which is collected in a basin below and then transferred to a tote for separation of liquids and solids for proper disposal.

The General PTI has limits on a per line basis of 2,000 lb/month and 10 tons per year for Volatile Organic Compounds (VOC). The emissions from all coating operations at the facility is limited to 30 tons per year of VOC.

Booth #1 (Trim Saw 1) reported 90 lbs VOC emissions for the month of September 2019. The average monthly VOC emissions for 2019 is 73 lbs VOC.

Booth #2 (Trim Saw 2) reported 41.52 lbs VOC emissions for the month of September 2019. The average monthly VOC emissions for 2019 is 44 lbs VOC.

Booth #3 (Pre-Finish) has not been in use in 2019.

The reported 12-month rolling average VOC emissions for the facility through the month of September 2019 was 1.35 tons VOC. All emissions data is attached to this report.

Emissions recordkeeping was observed while at the facility, and it was clear that Mr. Atkins had the emissions spreadsheet up to date through September 2019.

I requested the spreadsheets in Excel format so that the data could be reviewed. This request was clarified with Jason Jones, corporate environmental staff for JELD-WEN. A current Environmental Data Sheet was requested for the most frequently used product and I found that it matched the VOC values on the spreadsheet.

While on-site I explained to Mr. Atkins that during the next years Michigan Air Emissions Reporting System (MAERS) reporting cycle, the company needs to attach the emissions spreadsheet so that the AQD can review the calculations since they have not been submitting supporting data as required. He indicated that he wasn't sure if it would be him or Mr. Jones, but that the information would be shared.

We proceeded out to the external fenced in area where the baghouses are located, and the area was cleaner than observed on previous occasions. I learned that each baghouse had complete bag replacements. These baghouses typically vent externally in the summer to exhaust plant heat and internally in the winter to conserve plant heat. The units are currently exhausting internally as there has been a drop in temperature. Each baghouse has a magnehelic gauge that is monitored for proper operation. The pressure drop for baghouse #1 was 1.1", baghouse #2 was 0.5" and baghouse #3 was 1.3". These values are low, but consistent with all new bags. I observed that there are structural issues with these baghouses, that causes sawdust to accumulate. To combat this, the company has installed hoses attached to a baghouse fan that can be used to clean up any sawdust that is accumulating. Mr. Jones indicated that they inspect the area several times a day and anyone can use the hoses to clean up any material. This is a good way to clean up, however the fix would be to replace or fully repair these aged units. In one area a sheet metal sleeve was in place over the ductwork and some sawdust was blowing out the gap in the sleeve overlap. I suggested that they put something on the sleeve to seal it.

On March 29, 2019 a Violation Notice (VN) was issued that included three citations resulting from the facility's failure to maintain the baghouses properly. The response to the VN also required the submittal of a Malfunction Abatement Plan (MAP) to ensure the facility would correct the problem and continue to maintain the units going forward. Due to temporary AQD staffing changes, the MAP was submitted to a discontinued email address and was never received. Mr. Jones was able to provide the original email and MAP to demonstrate that they believed that it had been properly submitted. Additionally, the attached records indicate that facility staff have implemented the activities required by the MAP since it was implemented in June 2019. See attached for documented MAP records.

The room that houses the shell for the old wood waste burner was observed and found to be decommissioned and the space is being used for storage. There are no plans to recommission this unit.

## CONCLUSION

JELD-WEN Interior Door- Grand Rapids was in compliance at the time of the inspection.

NAME 

DATE 11-4-19

SUPERVISOR 