

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

P047729665

FACILITY: G-M WOOD PRODUCTS		SRN / ID: P0477
LOCATION: 531 CLAY STREET, NEWAYGO		DISTRICT: Grand Rapids
CITY: NEWAYGO		COUNTY: NEWAYGO
CONTACT: Jerry Wright, Plant Manager		ACTIVITY DATE: 06/03/2015
STAFF: Denise Plafcan	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Inspection to confirm that the facility is maintaining required records.		
RESOLVED COMPLAINTS:		

Denise Plafcan (DP) and Kaitlyn DeVries (KD) conducted an unannounced scheduled inspection to determine compliance with state and federal Air Quality rules and regulations. The facility was last inspected in July 2013 and this inspection was to confirm that proper records were being maintained since the past inspections resulted in record keeping violations. Prior to the inspection, staff drove by the area. There weren't any obvious issues of concern with odors, malfunctions or fugitive emissions. DP and KD met with, Jerry Wright, Plant Manager, and Matt Postema, in the conference room. After a brief introduction and discussion, DP explained the purpose of the inspection and reviewed the Environmental Inspection brochure. Matt had electronic records readily available and submitted the attached electronic copies by the end of the day. There was some discussion of which exemptions are being used and what are the defined emission units that are utilizing which exemptions. The facility currently operates all processes under exemptions from Rule 201 Permit to Install requirements.

G-M Wood Products (G-M) primarily manufactures silk screened frames and pre-assembled door and window trim and frames. They have ~100 employees working 1-2 shifts (currently 2 shifts) five days a week. The manufacturing operation is divided into three plants – Plant 1, Plant 2, and Plant 3 as well as five warehouses. Plant 1 contains the Graphics Department, which does not do any ACTUAL graphic work but assembles silk screen frames used by silk screen companies. Plant 2 does portions of the wood trim assembly. Plant 3 contains the Millwork Department, which makes wood trim as well as the two vacuum coating lines.

#### PLANT 1

Plant 1 or the Graphics Department (G-M Graphic), has several operations that are regulated by the AQD, wood-working equipment, coating, and assembly with adhesives.

The woodworking machines are all connected to an internal baghouse system. Jerry said that they are looking at installing a new external baghouse and DP explained that anything less than 60,000 cfm should not require a Permit to Install. Based on the size of the system inside the building, the baghouse would most likely be less than 15,000 cfm and therefore well below the Part 3 limits and could be installed under Rule 285(d). The existing woodworking operations are exempt from Rule 201 permitting requirements under Rule 285 (l)(vi)(B).

The wood frames are either manufactured and assembled on site or purchased pre-made, then finished in Plant 1. The assembly process includes the use of an adhesive (see attached MSDS). This process is not exhausted via a ventilation system but released to the in-plant environment. Material usage records are being kept for this process (see attached). Based on the usage, the company is using a Rule 287(c) exemption from the permitting requirements of Rule 201. The adhesive usage is below 100 gallons and does not subtract out any water. DP explained that this is fine but once numbers start approaching the 200 gallons per month limit then they should start to subtract out the water. Some usage numbers are based on when a drum is considered "used" so some months may have 110 gallons (two 55 gallon drums) with no usage for the previous or consecutive month.

The finishing process for the wood frames uses a dip coating process which applies a lacquer to the frames. The dip process has a large tank in which the parts are hand dipped then hung to dry in the ambient air. The room has a wall fan / vent, but the room is also opened to the rest of the facility as well. The exhaust vent exits directly out the side of the

building. There wasn't any filter on the fan but there were some Styrofoam panels that were used to block the cold air from coming into the room. Material usage records are being kept for this dip coat process (see attached). Based on the usage, the company is using a Rule 287(c) exemption from the permitting requirements of Rule 201. The adhesive usage is below 100 gallons and at this time does not subtract out any water.

After the frames are dip coated, the silk screen is attached to it. The facility adheres silk screen to either wood or aluminum frames. The screen attachment process uses a two-step adhesive process. First the silk screen is stretched to a precise tension across the frame. A quick-dry adhesive rolled on the frame. Then industrial strength super glue is sprayed on. The process takes precisely one minute from the time the first adhesive is applied. After the adhesive dries, the excess silk screen is cut off. Material usage records are being kept for this dip coat process (see attached). Based on the usage, the company is using a Rule 287(c) exemption from the permitting requirements of Rule 201. The adhesive usage is below 100 gallons and does not subtract out any water.

## PLANT 2

The primary operations in Plant 2 are wood-working and coating. The facility has a large baghouse (~45,000 cfm dust collection system) that is collected into two roll-off containers.

The dust collection system controls miscellaneous wood working saws, sanding and grinding equipment. The collection system appeared to be operating properly, however, like the cyclone in Plant 3 there was a pile of sawdust. Again a little duct tape could prevent the leak of fugitive sawdust. DP emphasized the importance of minimizing fugitive emissions and requested an e-mail notification when the repairs had been made. The wood-working operations are exempt from Rule 201 permitting under Rule 285(l)(vi)(C).

The Millwork Department also has two vacuum coating lines and one free standing paint booth. The lines are Primer 1 and Primer 2. Both of the Primer lines were in operation at the time of the inspection. The lines are used to prime the wood trim and frame pieces.

The vacuum process minimizes or virtually eliminates over-spray and greatly improves transfer efficiency. They use a water based primer that allows them to use water for the clean-up. There was an open drum containing equipment parts soaking in a liquid that Jerry stated was only water, it did not have any odors. They do not use any other solvents for the clean-up.

The free standing paint booth was not operational and is rarely used for very small jobs. The company claims the use of a Rule 290 exemption from Rule 201 permitting requirements for all coating operations in Plant 2. Records are combined with the coating records for the vacuum lines. Some months are higher depending on the when a drum is opened. However, the usage is below the 1000 lbs per month for uncontrolled equipment.

There is also a 2' by 3' (6 square feet) Safety Kleen parts washer that contains Immersion Cleaner and Cold Parts Cleaner to clean miscellaneous metal parts. This unit is exempt from Rule 201 PTI requirements under a Rule 281(h) exemption. Based on the size of the unit and the attached MSDS, the unit is also in compliance with Part 6 requirements.

## PLANT 3

Plant 3 contains door frame assembly lines. The plant has a variety of wood working equipment. The company claims the use of a Rule 285(l)(vi)(C) exemption from Rule 201 permitting requirements. The woodworking equipment is vented to an external cyclone, which, vents back into the plant attached to one roll-off container. There was a hole ~0.5" in the duct that runs just above ground level. It appeared that the hole was once covered (perhaps with duct tape); the pile below the hole peaked at ~2' and was ~ 3' in diameter. DP requested that the material be cleaned up and the hole plugged or covered with duct tape as soon as possible. DP also requested an e-mail confirming the repairs had been made.

In the closing meeting, DP said overall everything looked fine except for the sawdust issue. Jerry asked since it is a natural material and used for animal bedding why it would

matter if it is piled up. DP explained that in residential areas it can be considered a nuisance and impact the local residents.

Based on the physical inspection and the records provided, this facility appears to be in compliance with state and federal Air Quality rules and regulations. This report will be updated once the e-mail, verifying the necessary repairs had been made to the duct work, has been received.

NAME *Demise Pifer*

DATE 6.15.15

SUPERVISOR *PAB*