

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: Self Initiated Inspection

N700525673

FACILITY: Monarch Millwork		SRN / ID: N7005
LOCATION: 2211 Industrial Drive, GRAYLING		DISTRICT: Gaylord
CITY: GRAYLING		COUNTY: CRAWFORD
CONTACT: Mike Hees , Owner		ACTIVITY DATE: 06/12/2014
STAFF: Caryn Owens	COMPLIANCE STATUS: Compliance	SOURCE CLASS:
SUBJECT: Field Inspection to determine whether a PTI is necessary, as of right now, no PTI is necessary for the facility..		
RESOLVED COMPLAINTS:		

On June 12, 2014 Caryn Owens and Rob Dickman of the DEQ- AQD conducted a field inspection at Monarch Millwork (MMI) located at 2211 Industrial Drive, Grayling, Crawford County, Michigan. The purpose of the field inspection was to determine whether a permit to install was necessary for the processes at the facility.

DEQ was escorted through the facility by Mr. Mike Hees, the General Manager of MMI. The facility generally produces building square and rectangle components and frames, and pellets using the saw dust waste from the processes. The facility consists of a lumber storage yard, a stacker building, a pre-dryer, two steam kilns, wood-fired boiler, and the production facility. The facility uses aspen lumber for its component processes.

As the lumber comes in, it is stored in the yard until it can be sorted and counted in the stacker building, after the wood is stacked, it is brought into the pre-dryer that typically stays 82°F and which is controlled by a computer system to keep a regulated temperature. From the pre-dryer, the wood is placed into the kilns which are regulated at an average temperature of 120°F. The wood needs to have a moisture content of 6.8 percent prior to the milling process. The pre-dryer and kilns were steam heated by a wood fired boiler. The boiler was rated at 5.7 MMBTU and 125 hp. This is below the 6.0 MMBTU permitting threshold described in Rule 282(b)(iii). The milling process consists of planers, various sawing, sanding and joiner equipment. The millwork equipment was connected to a Carter-Day baghouse system. According to Mr. Hees, the baghouse does not have a magnehelic pressure gauge installed to monitor the pressure in the baghouse. The bags are changed annually, to ensure proper operation. In the case of the a malfunction of the baghouse, the emissions release in plant, and the malfunction is quickly taken care of.

During the inspection, the boiler was operating at 1225°F, and had a differential pressure of -1.25 inches water column. According to Mr. Hess, the boiler shuts down if the differential pressure goes above -0.5 inches wc. The last inspection of the boiler system was in August 2013, and inspected on an annual basis.

All the saw dust waste generated at the facility is used to fuel the boiler system, and for the pellet press to make pellets for pellet stoves and grills. The saw dust collected in the baghouse is stored in a storage silo that uses a dual auger to feed the boiler 24 hours/day all week, and the electric pellet press that is operated during the night when the main processes of the facility are not operating. The pellets are made using an electric press that pressurizes the wood and extrudes then from the machine. The pellets are then bagged and loaded for sales.

DEQ observed two rotary dryers that were at the facility, but not installed or used at the facility. Mr. Hess plans to increase his pellet business in the future by drying green saw dust using the exhaust gas of the boiler system using a closed loop system. Mr. Hess indicated he will be contacting the DEQ if he decides to pursue this in the future. At this time, MMI does not need to obtain a PTI for the current facility processes.

Below are Mr. Dickman's observations during the field inspection.

Following are observations made as part of an inspection conducted by Caryn Owens at Monarch Wood Products in Grayling, Michigan on June 12, 2014. The intent of this inspection was to determine the facility's compliance with Michigan Air Pollution Control Rules and more specifically to determine if any of the equipment at the facility is subject to air permitting pursuant to Rule 201.

Prior to entering the facility, no visible emissions or odors were noted from it. Housekeeping around the facility was adequate.

This facility brings in wet, rough cut, hardwood planking from lumber mills. These planks are partially air dried in a large, climate controlled building on site and then finished in kilns to a final moisture content of 7%. The planks then are made in to saleable products through various operations (cutting, planing, sanding, etc.) These various processes are controlled by a baghouse and the collected material is stored in a silo on site.

This baghouse is made by Carter Day. No visible emissions were noted from it. The owner of the facility said that the baghouse was serviced annually. Emissions from the baghouse release back in to the facility so any issues or malfunctions are immediately noted by plant personnel.

This collected wood waste is used for fuel and to make wood pellets to sell. As a fuel, it is used to power a boiler used to heat the facility. The maximum heat input to this boiler is 5.7 MMBTU per hour, below the 6.0 MMBTU permitting threshold described in Rule 282(b)(iii).

The pellet machine was not in operation at the time of the inspection.

Two rotary dryers were noted on site but neither appeared to be able to operate. The owner explained that he has plans for the kilns involving the drying of green sawdust. He indicated he would contact Ms. Owens regarding any air permitting concerns associated with the dryers.

NAME Camp Owens

DATE 6/24/14

SUPERVISOR 