

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

N692961992

FACILITY: Central Michigan Hardwoods		SRN / ID: N6929
LOCATION: 110 S 64th Ave, COOPERSVILLE		DISTRICT: Grand Rapids
CITY: COOPERSVILLE		COUNTY: OTTAWA
CONTACT: Wade Van Keulen , Owner		ACTIVITY DATE: 02/23/2022
STAFF: Chris Robinson	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: FY'22 on-site inspection to determine the facility's compliance status with PTI no. 382-00B and any other applicable air quality rules and regulations.		
RESOLVED COMPLAINTS:		

On February 23, 2022, AQD staff Chris Robinson (CR) conducted an unannounced inspection of Central Michigan Hardwoods located at 110 South 64th Street in Coopersville, Michigan. The purpose of the inspection was to determine the facility's compliance status with Permit to Install no. 382-00B and any other applicable air quality rules and regulations and to follow-up on an anonymous citizen's question regarding a brief period in which black smoke was observed exiting the facility's stack. CR met with Mr. Wade Van Keulen, owner of the facility. Identification was provided and Mr. Van Keulen was informed of AQD's purpose for the visit. Mr. Van Keulen provided a walk-through of the facility and pertinent information regarding their PTI. Records were provided as requested.

The Weather conditions on February 23, 2022, were approximately 11°F with light snow and northerly winds at approximately 12 mph (www.weatherunderground.com). No odors or visible emissions were observed.

Central Michigan Hardwoods is a hardwood lumber yard that dries lumber in one of 8 kilns. The facility brings in green lumber sorts it, dries it, cuts/planes it to final dimensions/thickness, and then restacks it for shipment. Two additional kilns have been converted for covered air drying. Neither of these two kilns retain any fuel combustion components nor are they connected to the facility's steam system for drying wood. Fans have been installed to cycle ambient air over the lumber being dried.

The eight kilns that are used for drying, which are covered in the PTI under FGKILNS, are connected to the wood-waste boiler which produces steam that heat each of the kilns. Fuel for the boiler is generated from cutting/planning the dried lumber that is being prepared for shipment. Per Mr. Van Keulen this boiler operates 24-hours 7 days per week and supplies heat to the other buildings onsite. The Wood waste boiler is covered in the PTI under EUBOILER. The recovered sawdust/scrap is used for fuel. The sawdust is stored in one of two silos which are covered in the PTI under EUSILO. The facility also has one natural gas-fired emergency boiler on site. It is a Cleaver Brooks boiler with a max heat rating of approximately 4,184,000 BTU/hour. This emission unit is not covered in the PTI. However, since the max heat rating appears to be less than 50 MMBTU, is for

indirect heating, and is natural gas fired, it appears to be exempt from Rule 201 permitting requirements per Rule 282(2)(b)(i). Also, since the heat rating is below 10 MMBtu it is also not subject to the Standards of Performance for small industrial-commercial-institutional steam generating units (40 CFR Part 60, Subpart Dc).

EUBOILER is subject to a PM emission limit of 0.50 lbs./1,000 lbs. of exhaust gas and a PM-10 emission limit of 4.18 pph. Both limits are based on "Test Protocol" which assumes that the limits are met if the PTI conditions are met, and the boiler is properly maintained and operated. Also, the only fuel allowed to be used in EUBOILER virgin waste wood, and it cannot be operated unless the multi-clone is installed, maintained, and operated in a satisfactory manner, and to comply with the reporting and recordkeeping requirements of 40 CFR, Subpart DC (60.48c). This facility only dries hardwood and only those scraps/sawdust are used for fuel. Although maintenance logs are not required by this PTI visually and per discussions with Mr. Van Keulen the equipment appears to be maintained and operated in a satisfactory manner. CR observed the multi-clone installed and operating. Special Condition (SC) VI.1 of EUBOILER requires the facility to comply with the reporting requirements of 40 CFR Part 60 Subpart Dc (60.48c). This New Source Performance Standard requires a notification (60.48c) along with establishing SO₂ and PM emission limits (60.42c & 60.43c), monitoring requirements (60.47c), and testing requirements (60.45c & 60.44c). Based on the size of the boiler (16.72 MMBtu/hr.) and the fuel use of only being wood, EUBOILER is not subject to the SO₂ and PM limits and is only required to submit the initial notification and monitor fuel use. Fuel usage is being monitored and records were provided. However, the initial notification has not been submitted. CR will work with the facility to have one prepared and submitted.

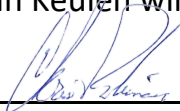
Since EUBOILER has a heat rating of greater than 10 MMBtus/hr and is fueled by biomass (wood) this boiler appears to be subject to the Nation Emision Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources promulgated in 40 CFR Part 63, Subpart JJJJJ. However, EPA oversees compliance with this regulation since EGLE does not have delegation to implement or enforce it.

The only PTI requirement for EUSILO is to not transfer wood waste into the silo unless the cyclone is installed, maintained, and operated in a satisfactory manner. CR observed the cyclone installed and operating and per Mr. Van Keulen waste is not transferred unless the cyclone is operating. Again, no maintenance logs are required by this PTI so based on observations and discussions the cyclone appears to have been installed, operated, and is being maintained in a satisfactory manner.

FGKILNS is subject to a VOC emission limit of 14.1 tons per year based on a 12-month rolling time-period. The worse -case emissions factor of 4.3 lbs. C/MBF (Hard Maple) is being used to calculate monthly emissions. Emission calculations are also based on the max kiln capacities and average drying time per load (16 – 17 days). Based on the records, total kiln capacity is 324 MBF and drying time is approximately 16 – 17 days which yields 22 loads and a total max board feet of wood dried of 7,128 MBF ($324 * 22 = 7,128$ MBF). The calculations provided by the company show total VOCs for January 2021 through January 2022 to be 14.71 tons, which is over the permit limit of 14.1 tons per year. However, the incorrect board feet were used in the calculation (6,843 MBF), with the correct board feet of 7,128 MBF, VOC emissions were 15.33 tons ($(7,128 \text{ MBF} * 4.3 \text{ lbs VOC / MBF}) / 2,000 \text{ lbs.}$). This is still over the permitted limit; however, this is based on max kiln capacity and a 13-month time-period. The limit is based on a 12-month rolling time period and actual amount of lumber dried. CR requested monthly MBF of dried lumber which demonstrated that only 5,378 MBF had been dried during a 12-month period (February 2021 through January 2022). This equates to VOC emissions of 11.56 tons ($(5,378 \text{ MBF} * 4.3 \text{ lbs./MBF}) = 23,125.4 \text{ lbs.} / 2000 = 11.56 \text{ tons}$) which is less than the permitted limit of 14.1 tons. CR informed Mr. VanKeulen that they need to pay close attention to their monthly usage and emissions since the facility can generate more emissions and dry more lumber than what is allowed in their PTI and especially since they are operating close to their limit. Monthly records of the type of species and board feet are being tracked as required by the PTI. Per records the facility processed 5,378 MBF from February 2021 through January 2022 which is less than the PTI limit of 6,556 MBF.

No smoke was observed during the inspection. However, the citizen's concern was discussed with Mr. VanKeulen and the facility was unaware of any issues or downtime that may have led to opacity. Based on conversations with the citizen this appeared to be a very brief issue. Based on the observations and discussions made during the inspection and subsequent records review Central Michigan Hardwoods appears to be in compliance with PTI no. 382-00B and other applicable air quality rules and regulations. Mr. Van Keulen will discuss the opacity issue with staff.

NAME



DATE

3/28/2022

SUPERVISOR

