

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

U4111058851072

FACILITY: Kamps Hardwoods		SRN / ID: U41110588
LOCATION: 925 Dutton Industrial Park Drive SE, Dutton		DISTRICT: Grand Rapids
CITY: Dutton		COUNTY: KENT
CONTACT: Cory VanOverloop , Production Manager		ACTIVITY DATE: 10/10/2019
STAFF: April Lazzaro	COMPLIANCE STATUS: Compliance	SOURCE CLASS:
SUBJECT: Unannounced, scheduled inspection.		
RESOLVED COMPLAINTS:		

Staff, April Lazzaro arrived at the facility to conduct an unannounced self-initiated inspection and met with Cory VanOverloop, Production Manager. I explained to Mr. VanOverloop the inspection process and that the Air Quality Division had been there previously in 2011 for a compliance inspection.

#### FACILITY DESCRIPTION

Kamps Hardwoods is a hardwood lumber yard that conducts wood working by mechanical cutting and heat treating in a kiln. A small baghouse captures saw dust generated by the wood working, and there are 8 kilns with two boilers that provide steam heat for the wood treatment. There are also two steamers.

#### COMPLIANCE EVALUATION

The woodworking operations and the small baghouse is exempt from permitting pursuant to Rule 285(2) (l)(vi). The hardwood sawdust is collected in roll-off boxes and used by farmers as bedding. The site fills up to 10 roll-off boxes with saw dust per week.

During the last inspection, there was one compartment kiln that housed 4 compartments. Since that time, approximately 5 years ago, an additional compartment kiln housing 4 kilns has been installed. The older compartment kiln is heated by a 4.47 mmBtu/hr boiler and the new compartment kiln is heated by a 4.5 mmBtu/hr boiler. The natural gas fired boilers are small and exempt from state and federal regulations. For ease of recordkeeping, each of the two compartment kilns will be considered emission units at this time. Volatile Organic Compound (VOC) and toxic air contaminant emissions are generated during the wood kiln drying process. Information from US EPA Region 10 was provided to Mr. VanOverloop and he was asked to conduct calculations to demonstrate compliance with Rule 290 as he was unsure if they were currently keeping any records.

Further internal investigation and research found that the US EPA Region 10 document is not the correct approach to determine emissions from a hardwood kiln. Additionally, the US EPA Region 10 document is based on the generally accepted Milota Paper from lumber drying that AQD has historically utilized for emission factors from this type of process. The table in the EPA document is also only for softwoods, and Kamps Hardwoods kiln dries hardwood species. Finally, a recent permit for a much larger hardwood kiln operation in the Grand Rapids district approved the use of an emission factor consisting of 0.358 lbs VOC/mbf. This is the emission factor that will be used for this facility as well.

The two steamers are used to add moisture to black walnut so that it attains the very dark look that is desirable to consumers. Only one of the steamers is currently in use.

On the same day, Mr. VanOverloop emailed me and provided data indicating compliance with Rule 290, which allows for 1,000 pounds of emissions per emission unit per month. Emissions based on the board foot processed for the entire facility are on average a total 326 pounds of VOC per month, and 145 pounds of VOC per emission unit. Additionally, the air toxics associated with hardwood kilns were evaluated. These consist of methanol, formaldehyde, acetaldehyde, propionaldehyde and acrolein. Of these air toxics, formaldehyde and acetaldehyde are carcinogenic and the combined emissions must be 20 pounds or less per emission unit per month pursuant to the Rule 290 exemption. The combined emissions are 13.79 pounds per month per emission unit, and therefore compliant with the Rule 290 exemption. It was advised that the facility maintain the monthly records as required. Rule 290 guidance and an example spreadsheet was provided. The Potential to Emit (PTE) for VOC is below major source thresholds, and the PTE for Hazardous Air Pollutants (HAP) based on maximum kiln throughput (which

is about where they are currently operating) is below the major source thresholds of 10 tons for an individual HAP or 25 tons per aggregate HAP.

**CONCLUSION**

While emissions records were not immediately available, Kamps Hardwoods provided them the same day and was in compliance at the time of the inspection.

NAME



DATE

11-5-19

SUPERVISOR

