

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

N575451070

FACILITY: KARONA INC		SRN / ID: N5754
LOCATION: 4100 KARONA COURT, CALEDONIA		DISTRICT: Grand Rapids
CITY: CALEDONIA		COUNTY: KENT
CONTACT: Bob Grandmason , Plant Manager		ACTIVITY DATE: 10/10/2019
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 Robert Grandmason, Maintenance Lead. No odors or visible emissions were noted from the outside of the facility.

#### FACILITY DESCRIPTION

Karona, Inc. built this wood door manufacturing facility in 1995, and operations began in 1996. Originally, this was a permitted operation that applied stains and coatings through the use of manual spray application techniques. In 2004, the original permit was voided because the spray application equipment was replaced with the current system. The current system consists of a water-based stain line and a water-based topcoat line that is called the lacquer line. The lines are steam heated via a 4.2 mmBtu/hr boiler. The coating lines are currently utilizing the Rule 290 permit exemption to track emissions. Currently all stains are color matched and formulated on-site, and there is some minimal solvent use in the lab. The base woods of either medium-density fiberboard (MDF) or particle board are cut to size, wrapped in a real wood veneer then stained and finished.

To size the wood before finishing, there are various woodworking equipment including mills, CNC machines, cutting machines, sanders and edgers. The panel lines cut a profile add a veneer then hot press or wrap veneer over the wood profile. Along with the wood processing equipment comes 4 large baghouses. The three that are grouped together were originally installed at the facility and determined to be exempt from permitting pursuant to Rule 285(2)(I)(vi). The fourth baghouse was installed about 20 years ago and is also exempt from permitting pursuant to Rule 285(2)(I)(vi).

This facility is owned by Jeld-Wen

#### COMPLIANCE EVALUATION

A facility tour included observations of all the wood working equipment, the stain and lacquer lines as well as each baghouse.

The stain and lacquer lines are flat panel style lines that are contained in a separated clean room environment. Here stains, ultraviolet cured topcoats or prime finishes are applied. As previously stated, these are water based lines, that utilize water for cleaning. Emissions recordkeeping was received, and it was determined that the highest monthly emissions for 2018 and 2019 was 341 pounds, which is below the 1,000 lbs allowed by the Rule 290 exemption. The recordkeeping also identifies by CAS number the materials that are contained in each product used, however those are not broken down individually into the pounds that each contributes to the total emissions as required by Rule 290. Karona, Inc. must start recording the amount of emissions for each air toxic contaminant as required by the Rule 290 exemption. A review of the Safety Data Sheets, and Environmental Data Sheets indicate that none of the materials that can become an air contaminant (excluding talc as it is a solid and is not a regulated air contaminant in the applications at Karona Inc.) have a toxics screening level that is low enough to limit emissions. Therefore, with some minor corrections the recordkeeping will meet the specific intent of Rule 290.

All woodworking equipment and the baghouses that collect the saw dust were in good condition during the inspection. No evidence of poor collection was observed outside.

#### CONCLUSION

Karona Inc. was in compliance at the time of the inspection.

NAME Paul Logan

DATE 10-22-19 SUPERVISOR [Signature]