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

N218262923

FACILITY: The Stow Company		**SRN / ID:** N2182
LOCATION: 3311 WINDQUEST DR, HOLLAND		**DISTRICT:** Grand Rapids
CITY: HOLLAND		**COUNTY:** OTTAWA
CONTACT: Barry Walburg , Vice President Training & EHS		**ACTIVITY DATE:** 05/19/2022
STAFF: Chris Robinson	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** MINOR
SUBJECT: FY' 22 onsite inspection to determine compliance with applicable air quality rules and regulations.		
RESOLVED COMPLAINTS:		

Chris Robinson (CR) from the Department of Environment, Great Lakes, and Energy's (EGLE) Air Quality Division (AQD) was on site to conduct an inspection of The Stow Company (SRN N2182) on May 19, 2022. The facility is located at 3311 Windquest Drive in Holland, Michigan. Prior to entry CR surveyed the perimeter of the facility along Windquest Drive for odors and visible emissions. Weather conditions were hazy with a temperature of approximately 56^{o}F and southerly winds at 13 mph. No visible emissions or odors were observed.

CR met with MR. Bob Gardner, Maintenance Manager. Identification was provided and CR informed Mr. Gardner that he was onsite to conduct a routine inspection. Mr. Gardner provided a walkthrough of the facility and pertinent information.

The Stow Company manufactures home organization systems consisting of either a paper laminate, applied elsewhere and purchased by Stow or a vinyl wrap applied by Stow at this location. The pre-purchased board comes in large sheets which is cut and routered to shape then edge banded using hot melt adhesive. Use of the hot melt adhesive appears exempt from Michigan's Rule 201 permitting requirements per exemption Rule 287(2)(i). Particulate emissions from the wood working equipment are collected using one of two baghouses (Towers A1 and A2) that can be vented internally or externally as needed to assist with building HVAC needs. The woodworking operations appear to be exempt from Rule 201 permitting requirements per exemption Rule 285(2)(l)(vi)(B) for when the baghouses are vented to the in-plant environment and 285(2)(l)(vi)(C) for when they are vented externally. The baghouses are monitored electronically and are equipped with differential pressure (DP) gauges. Both baghouses were in operation during the inspection. The system is designed to alarm when either baghouse operates outside of the manufacturers specifications. The specifications were unknown but programed into the system. Differential pressure is not displayed, instead the system shows up as either green for okay or red for an issue. Both baghouses were operating in the green. Physically the baghouses appeared to be well maintained and operating properly.

To evaluate for applicability of the Federal Title V program (40 CFR Part 70) CR requested max exhaust flow (CFM) for both baghouses. Based on the information provided by the facility, Tower A1 is rated at 103,576 CFM and Tower A2 is rated at 77,682 CFM for a combined flow of 181,258 CFM. Title V applicability is determined based on criteria pollutant thresholds and a facility's Potential to Emit (PTE) for applicable criteria pollutants. The Title V threshold for PM-10 or Particulate Matter of 10 micrometers or less is 100 tons per year. Assuming all PM is PM-10 and using Michigan's Rule 331 PM Emission rate of 0.1 lbs. of PM per 1,000 lbs. of exhaust gas the PTE for Towers 1 and 2 combined is approximately 380.57 tons, which far exceeds Title V threshold. Therefore, the facility needs to either operate as a Major source and obtain a Title V permit or take federally enforceable restrictions in a Permit to Install to allow them to Opt-out of the program.

The following baghouse information was provided to the facility by the baghouse manufacture with a note indicating that the facility uses 16" ducting:

Filter 1 (8 fans)	**CFM - 14"**	**CFM - 16"**
M3/h/fan	25,000	22,000
CFM/fan	14,713	12,947
Total CFM	117,700	103,576
Filter 2 (6 fans)	**CFM - 14"**	**CFM - 16"**
M3/h/fan	25,000	22,000
CFM/fan	14,713	12,947
Total CFM	88,275	77,682

The vinyl wrap process consists of first applying an adhesive to pre-finished wooden components, then overlaying vinyl, which is then vacuum sealed to the components. The adhesive is typically applied by use of a robotic sprayer inside an enclosed area equipped with dry filters. The enclosure and filters appeared to be in good condition. Two manual spray booths are used if the robotic arm is malfunctioning or if a repair is needed for a component. In the past, the permit exemption Rule 287(2)(c) was claimed for the manual spray booths. However, since the previous inspection, the facility installed the robotic sprayer and increased production. Usage records were requested and provided. Based on these, from June 2021 through May 2022 usage for both spray booths combined was 130 gallons (minus water). The maximum monthly usage for this time period for the robotic sprayer was 131 gallons, minus water (September 2021 & March 2022). Based on the records provided, all three booths are operating under 200 gallon/month (minus water and as applied). Therefore, they appear to still be exempt from Rule 201 permitting requirements per Rule 287(2)(c).

Based on the observations and discussions made during the inspection and subsequent records review and discussions the Stow Company is operating in compliance with air quality rules and regulations with the exception of Title V. The company can choose to apply for an opt-out permit with a federally enforceable restriction on the PTE of PM-10 or apply for a Title V permit. CR has discussed this with the facility and they will be applying for an opt-out permit soon.

NAME _____ DATE 6/23/2022 SUPERVISOR _____