

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

B165237699

FACILITY: Robroy Stahlin		SRN / ID: B1652
LOCATION: 500 Maple St, BELDING		DISTRICT: Grand Rapids
CITY: BELDING		COUNTY: IONIA
CONTACT: Eric Faasen , Operations Supervisor		ACTIVITY DATE: 11/09/2016
STAFF: Kaitlyn DeVries	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: The purpose of this inspection was to determine compliance with PTI No. 183-05E and all other applicable air quality rules and regulations.		
RESOLVED COMPLAINTS:		

On Wednesday November 9, 2016 AQD Staff Kaitlyn DeVries (KD) conducted an unannounced, scheduled inspection of Robroy Enclosures located at 500 Maple St., Belding Michigan. The purpose of this inspection was to determine compliance with PTI No. 183-05E and all other applicable air quality rules and regulations.

Prior to entering the facility, KD surveyed the perimeter for any excess opacity and odors; none were noted. KD met with Mr. Dean Childs, Plant Engineer, and later with Mr. Erik Faasen, Plant Manager.

Facility Description

Robroy Enclosures (Robroy) is a manufacturer of non-metallic electrical enclosures. The enclosures are made from fiberglass using a sheet molding compound (SMC) that is closed or molded into various size boxes. The facility used to do some hand lay-up to make the boxes, but is no longer doing that on site. Further information on this, and other processes, will be discussed in the compliance evaluation section below. The SMC line is run for one (1) shift, approximately three (3) times per week. The facility as a whole operates 2-3 shifts five (5) days per week.

Regulatory Analysis

Robroy was previously subject to the Title V program and had a Renewable Operating Permit (ROP), but after an enforcement action and subsequent consent order, Robroy chose to void the ROP and take Opt-Out Limits. Thus, Robroy is a synthetic minor source for Hazardous Air Pollutants (HAP's) and currently holds one (1) permit, PTI No. 183-05E. Additionally, by taking these opt-out limits, Robroy is not subject to the National Emissions Standards for Hazardous Air Pollutants 40 CFR Part 63 Subpart WWWW for reinforced plastic composites production at this time. The Consent Order has also been terminated.

Compliance Evaluation

EUTABLESAWDRILL

This emission unit consists of a table saw and drill press controlled by a fabric filter unit. Per Mr. Childs, this emission unit was fully housed in a separate building located to the northwest of the main building. The equipment in this building has subsequently been decommissioned and removed from the site; this includes the baghouse that was associated with this emission unit. Since the equipment was removed, PTI Condition EUTABLESAWDRILL 2.4 referencing visible emission observations of the outlet collector couldn't be evaluated on site.

EUCLEANSOLV

This emission unit consists of all cleaning solvents used for cleaning various process equipment located throughout the facility. The facility uses a naptha based cleaning solvent, and per Mr. Childs, the facility recycles and re-claims as much of the solvent as possible before it is discarded. Volatile Organic Compounds (VOC's) are limited to 15.0 tons per year (tpy) on a 12-month rolling basis. As of October 2016, the 12-month rolling VOC emissions were 1.46 tpy (see attached records).

FGSMCPROCESSES

This flexible group consists of both the old and the new SMC processes. The old process (EUOLDSMCPROC) has almost been completely removed from the site. KD was able to visually observe that the process equipment

was removed. Most of the area where the equipment was previously housed is now used for storage. Further discussion of this will follow below.

EUNEWSMCPROC

The new SMC room is contained in a separate area from the rest of the production operations, thus all emissions are contained here and exhausted out through a common stack. This line was not in use at the time of the inspection. The stack dimensions, while not explicitly measured, appeared to be of correct dimension.

The line consists of a mixing and a holding tank for the SMC past, with chemical delivery points being enclosed. Robroy appeared to be using a nylon containing film to enclose the SMC. The doctor box used for the resin delivery system appeared to be properly installed and operated. Robroy uses an automated system to weigh and add all of the ingredients to the mixing tank. The raw material is piped in from a storage tank located outside of the facility. After the blocks are made, they are held for approximately 24 hours before they are pressed in the mold. The compression molding equipment is exempt from permitting under Rule 286(b).

Robroy is properly tracking the materials used and the HAP and styrene content of the raw materials. Styrene emissions from this process are limited to 5.7 pounds per hour (pph), and 0.009 lb. of styrene per pound of styrene available, both based on test protocol. FGSMC PROCESSES special condition 4.1b allows for the use of a 0.9% emission factor for calculating the styrene emitted per pound of styrene available. Robroy is utilizing this emission factor as no new stack test results indicated a higher emission rate. February 12, 2016 was the day that had the highest pph at 4.000 pph. All records appear to be properly kept. All records can be found attached to this report.

EUOLDSCMPROC

As mentioned above, the process and control equipment associated with this emission unit has been completely removed. Particulate matter (PM) from this emission unit was limited to 0.05 lbs per 1,000 lbs of exhaust gas and 0.7 pph, both based on test method. Since the in series baghouses have been removed, KD could not verify the requirements of the pressure drop device and other requirements such as the preventative maintenance plan.

KD spoke to Mr. Faasen about ~~the~~ modifying his permit to remove this equipment since it is no longer at the facility. KD also mentioned that since it is still in the permit, Robroy is still required to keep pertinent records. Records indicated zero (0) emissions and that there has been no activity associated with this emission unit in such records.

FGFACILITY

This flexible group covers all process equipment source-wide including equipment covered by other permits, grand-fathered equipment and exempt equipment. HAP's are individually limited to 9 tons per year (tpy) and aggregately limited to 22.5 tpy, both 12-month rolling. Styrene is the largest individual HAP emitted by the facility, and as of October 2016, had a 12-month rolling emission of 1.60 tpy. Aggregately, the 12-month rolling HAP emissions were 1.63 tpy as of October 2016. Robroy is also adequately tracking the monthly emissions, as required. Over the past 12 months, June 2016 was the month with the highest emissions at 0.26 tons that month.

All records appear to be properly kept; emissions data appears consistent with what was reported under the 2015 MAERS report.

EXEMPT EQUIPMENT AND MISCELLANEOUS OPERATIONS

Historically, Robroy did some hand lay-up operations in the same building where EUTABLESAWDRILL was housed, but they no longer use this process. Per Mr. Childs, they contract this work out and do not do it on site. The facility has some sanding stations for the units, which are exhausted to a common baghouse. The sanding stations are exempt from Rule 201 permitting under Rule 285(l)(vi)(c). Additionally, there are three (3) CNC machines exhausting to a different common baghouse, which are exempt from Rule 201 permitting under Rule 285(l)(vi)(b), as the baghouse is exhausted internally. Per Mr. Childs, the bags are replaced approximately every 3 months, or as needed.

Lastly, there is a foam in place gasket operation. The foam in place acts as an adhesive coating, and is

exhausted internally. This process is exempt from Rule 201 permitting under Rule 287(a).

Compliance Determination

Based on the observations made during the inspection, and a subsequent review of the records, ~~it appears as if~~ Robroy Enclosures appears to be in compliance with PTI No. 183-05E and all applicable air quality rules and regulations.

NAME Kaitlyn Haskin

DATE 11/22/2016

SUPERVISOR [Signature]