

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

A644424771

FACILITY: Midwest Rubber Company		SRN / ID: A6444
LOCATION: 3525 RANGELINE RD, DECKERVILLE		DISTRICT: Saginaw Bay
CITY: DECKERVILLE		COUNTY: SANILAC
CONTACT: Rick Bezemek , Environmental Management Rep		ACTIVITY DATE: 03/31/2014
STAFF: Gina McCann	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Scheduled inspection to determine compliance with opt-out permit and 9 other PTIs. glm		
RESOLVED COMPLAINTS:		

I (glm) conducted a scheduled inspection at the Midwest Rubber Company (facility) in Deckerville on March 31, 2014. Midwest Rubber has 10 active permits one of which is a title V opt-out permit (PTI 276-06). I met with Rick Bezemek, plant environmental manager, and Janet Brown. Ms. Brown is learning the environmental manager role as the company anticipates her to ease into this role in the future. Mr. Bezemek and Ms. Brown were very knowledgeable about their processes and were very detailed in their recordkeeping and had all records required by AQD.

Facility Description

Midwest Rubber Company primarily operates neoprene dip coating, plastisol dip coating, and slush coating operations. Designers fabricate aluminum mandrels that are essentially a mold used to form rubber.

During the neoprene dip coating, the mandrels are dipped into a room temperature vat of coagulant/lubricant, then dip coated in neoprene for a desired amount of time which corresponds to the thickness desired. Water is sometimes added to these vats to replace water lost due to evaporation. The facility has several manual dip coating cells, as well as one automated cell. One example of a dip coated part is windshield wiper blade covers.

Plastisol dips heat the mandrels before coating between approximately 375 °F to as high as 600 °F. Dipped parts are then placed in the higher temperature oven to cure, ranging in temperature from approximately 375 °F to 600 °F.

Slush molding is a manually operated curing operation using a hot salt solution for the curing of plastisol. The mandrels are filled with room temperature plastisol and then dipped into the heat treated salt (approximately 425 °F) for a desired length of time corresponding to the thickness required. The excess plastisol is poured off and then the mandrel is dipped back in to the salt bath to cure the product. The parts are then taken off of the mandrels and placed on a vertical conveyor system that allows ambient air to pass over them until cool.

Compliance Evaluation

The attached Table 1 compares permit limits for VOC emissions with VOC actual emissions and permit limits for material usage with actual material usage. The data is taken from spreadsheets provided by the facility and supplemented with 2012 MAERS report, all of which is attached to this report. In addition to the permits listed within Table 1, Midwest Rubber also holds active permits 383-86 and 388-86 for dryers and truck part ovens respectively.

As shown in Table 1 actual material usage limits are below the permit threshold values and actual VOC emissions are below the permitted limit for all permits.

Midwest Rubber uses VM&P Naphtha Rule 66, a product similar to a mineral spirit, as a reducer in one of their processes. This material contains Toluene, which is a known HAP (Hazardous Air Pollutant). Toluene is the only HAP at the facility; therefore the individual HAP emissions are the same as the aggregate HAP emissions. According to the MSDS Midwest Rubber provided, the HAPS content is 0.094 lbs./gal, which calculates their HAPs emissions at 0.03 TPY for 2013. This value is well under the 9.0 TPY for an individual HAP or 22.5 TPY for an aggregate HAP. It should be noted that in MAERS, under RGMiscellaneous, xylene is a solvent listed. The facility has since stopped using xylene in their process, they report a zero usage, but choose to list it so that it is not accidentally forgotten in the event they do use the material again. At the time of my inspection, all conditions of PTI 276-06 were met; therefore the facility is in compliance with their opt-out permit.

PTI 383-86 and 388-86

These permits are for dryers and a truck parts oven, respectively. After the rubber parts are molded and cured the parts may sit for a period of time before they are packaged. The parts are then run through a water rinse, to rinse off any dust they may have collected, and then tumble in a dryer until the water mist is evaporated. This step is for aesthetics and not part of the manufacturing process. The dryers look much like an industrial dryer at a Laundromat. At the time of the inspection, I did not notice any visible emissions. Additionally, PTI 388-86 is for the truck part ovens and no visible emissions were observed during the time of inspection.

At the time of my inspection Midwest Rubber was found to be in compliance with their active permits and the air quality rules.

NAME Glenn R. McCann

DATE 4/18/2014

SUPERVISOR C. Hare