

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

N154721476

FACILITY: GRAND TRANSFORMERS INC		SRN / ID: N1547
LOCATION: 1500 MARION AVE, GRAND HAVEN		DISTRICT: Grand Rapids
CITY: GRAND HAVEN		COUNTY: OTTAWA
CONTACT: Edward Smith , COO		ACTIVITY DATE: 06/04/2013
STAFF: April Lazzaro	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Unannounced, unscheduled inspection.		
RESOLVED COMPLAINTS:		

Staff, April Lazzaro arrived at the facility to conduct an unannounced, unscheduled inspection.

Staff met with Edward Smith, COO and Rick Mears, Maintenance who provided facility information. They were presented with the DEQ Environmental Inspections: Rights and Responsibilities brochure.

This facility creates electrical transformers of various sizes. The material used is wire and steel placed on plastic or rhyonite. Some small amount of mold release is used at these stations. The rack that is used for the coating is generally thick with the varnish and the transformer will stick if the mold release is not used. Usage is low and no permit is needed. The raw materials are not manufactured at this facility.

Following the creation of the transformer, some hand brazing with copper is done in the general in-plant environment. No hass or lead solder is used in this process. The transformer goes through the test area where the voltage of the unit is checked for safety and product quality assurance.

Next, the units are placed into one of four varnish dip tanks. Following the dip, the transformers are placed in one of 5 ovens to bake all night at ~ 290F.

The facility is using two different types of varnishes in the tanks. Two are internally vented, and no changes have occurred since the last inspection. The other two tanks are actually externally vented, which is a fact that is different from the last inspection. While AQD staff may have the prior information incorrect, a new review of this portion of the operations is warranted.

The two externally vented tanks apply the Ripley 468-2 at a rate of approximately 110 gallons per week. Staff requested a MSDS on this resin, and one was received dated December 7, 1998. This is an unacceptable date, and staff contacted the supplier/manufacturer to request an updated sheet. A current MSDS was received and a review of the most current MSDS dated November 5, 2013 indicates two components that are emissions, one of which is listed on the Michigan Air Toxics Screening Level List. These are listed on the MSDS as organic anhydride (not on the screening level list), epoxy resin and linseed oil which is a VOC. Based on the CAS # the epoxy resin is categorized as bisphenol A/epichlorohydrin resin.

A discussion with the staff at Elantas indicated that they are planning on trying to demonstrate that there are zero emissions.

The racks are sent out for cleaning when necessary, the facility does not operate a burn-off oven.

The facility utilizes a two component polymeric isocyanate foam pack machine that is internally vented. There is a small welding area that is controlled by an internally vented ESP for smoke and odor control. The brazing area also has an internally vented control device associated.

After months of communication, and the resin manufacturer updating the MSDS several times a determination has been made.

An e-mail was sent to Mr. Smith on November 8, 2013 indicating that air emissions from the use of the material are generated, and the usage and associated emissions of the resin appear to fit within the Rule 290 exemption. AQD expectation is that the company maintain record of the emissions.

The facility was in compliance at the time of the inspection.

(see file for extensive communication and discussion with the company and Elantas PDG)

NAME Paul Rangan

DATE 11-14-13

SUPERVISOR PAB