

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

N767930565

FACILITY: RACK PROCESSING MICHIGAN LCC		SRN / ID: N7679
LOCATION: 3513 LOUSMA DR SE, WYOMING		DISTRICT: Grand Rapids
CITY: WYOMING		COUNTY: KENT
CONTACT: Megan Jozwiak , Office Administrator		ACTIVITY DATE: 08/11/2015
STAFF: David Morgan	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT:		
RESOLVED COMPLAINTS:		

At 3:00 P.M. on August 11, 2015, Air Quality Division staff Dave Morgan conducted an unannounced scheduled inspection of Rack Processing Michigan LLC located at 3513 Lousma Drive SE in Wyoming. The purpose of the inspection was to verify the company's compliance with state and federal air pollution regulations as well as Permit to Install Nos. 300-06 and 3-11B. Accompanying AQD staff on the inspection was Megan Jozwiak, Office Administrator.

FACILITY DESCRIPTION

Rack Processing refurbishes part racks used in the electroplating process. The part racks are dipped in plastisol to protect the metal racks. The company strips off the old plastisol coating on the racks, conducts maintenance and then recoats the racks with plastisol. The coating line is covered under General Permit to Install No. 300-06 and there is a burn-off oven covered under PTI No. 3-11B. The facility is a synthetic minor source for hazardous air pollutants.

COMPLIANCE EVALUATION

Rack Burn-Off Oven:

Under PTI-3-11B the company operates a Steelman rack burn-off oven to remove the existing plastisol coating from racks that they refurbish. At the time of the inspection the equipment was not operating, however, the unit operates about once, sometimes twice per week. The primary chamber is operated around 430 °F and the cycle time on a batch of racks can last many hours.

There is a secondary afterburner installed on the unit and a circular chart to record the temperature. The company had temperature records on site which AQD staff reviewed. Temperature records show that the afterburner is operated at or above 1,600 °F which is above the minimum temperature limit of 1,560 °F in the permit.

Records required by PTI No. 3-11B were being maintained in accordance with the permit. From August 2014 through July 2015 43,011 pounds of plastisol was burned which is below the 51,100 pound permit limit.

It is noted that the company is using the same Chemionics plastisol (and PVC content) since development of the permit in early 2011. Attached are Safety Data Sheets.

It is noted that the stack on the oven was replaced in 2014 due to wind damage. The replacement stack was installed to meet the 45 foot stack requirement in the permit.

Sandblasting:

After the parts come out of the oven the racks are sandblasted. The sandblasting booth is fully contained except for plastic curtains at the entrance. There is an internal baghouse used to collect particulate. There is no exhaust out of the building. This equipment is exempt under Rule 285(l)(vi)(B).

Primer Dip Coating:

After the parts are sandblasted, a soap solution is pasted on the part clips and is readied for priming. The rack is dipped into a 2,000 gallon rectangular tank containing a primer and MEK mixture. The tank is not in an enclosed booth, however, there is an air handling system to allow solvent fumes to be vented to the ambient air. There are no exhaust filters, however, no coating atomization is occurring. After the racks are dipped in primer, air is used to blow off excess primer. At the time of the inspection, the primer tank was not operating and the lid was closed on the dip tank.

According to company records from August 2014 through July 2015, total VOC emissions were 6.81 tons which is below the 10 ton per line and 30 ton per facility limits contained in PTI No. 300-06. The company had adequate records to determine compliance with emission limits.

Preheat Oven:

After the racks are primed, they go into a 0.6 Million Btu/hr natural gas-fired pre-heat oven for 25 minutes. The racks are

heated to a temperature of 450 °F. This oven is covered under PTI No. 300-06.

Plastisol Coating:

The heated racks are dipped into a 2,000 gallon rectangular tank containing black plastisol and reducer. Two coats of plastisol are applied in order to insure complete coverage of the metal rack. Plastisol from 275 gallon bulk containers and a small amount of reducer is added to the tanks on a monthly basis. The company did have the MSDS for the plastisol and reducer coatings manufactured by Chemionics Corporation. According to the MSDS, the plastisol and reducer have no VOC.

Curing Oven:

After the racks have been coated with plastisol, the racks are cured in a natural gas-fired oven around 350 °F for about 35 minutes. This oven is covered under PTI No. 300-06.

Soldering:

The company has started installation of a liquid soldering station but installation is not complete. Although this unit exhausts out of the building, it is exempt under Rule 285(i).

Micellaneous:

No odor or visible emissions issues were noted at that time of the inspection.

SUMMARY

Rack Processing appears to be in compliance with applicable requirements evaluated above. Attached are company records.

NAME  DATE 8/19/15 SUPERVISOR PAB