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

J2914515325569	····	
FACILITY: Ithaca Coatings		SRN / ID: U29145153
LOCATION: 301 Avenue B - Industrial Parkway, Ithaca		DISTRICT: Lansing
CITY: Ithaca		COUNTY: GRATIOT
CONTACT: Scott Chick, Quality Manager		ACTIVITY DATE: 06/19/2014
STAFF: Michelle Luplow	COMPLIANCE STATUS: Compliance	SOURCE CLASS:
SUBJECT: Self-initiated inspection	on	
RESOLVED COMPLAINTS:		

Inspected by: Michelle Luplow

Other AQD Staff Present: Doreen Lehner, Toxics Unit

Personnel Present: Scott Chick, Quality Manager (schick@ithacacoatings.com)

## Purpose:

Conduct an unannounced self-initiated compliance inspection of Ithaca Coatings, which does not have an air use permit. The last inspection here was conducted in 2006.

## **Facility Background:**

Scott Chick, Quality Manager for Ithaca Coatings, said that 80-95% of the time they coat metal parts for the automotive industry, but also for agriculture and office furniture. Johnson Controls is Ithaca Coatings' biggest customer and typically automotive seat frames, brackets, etc. are coated at the facility. Ithaca Coatings used to run 3 shifts approximately 10 years ago, but now only runs 1 shift with 20 people, largely a result of the downturn in economy.

## Inspection:

Doreen and I arrived at Ithaca Coatings at approximately 11:00 a.m. June 19, 2014 and met with Scott Chick. I provided S. Chick with an Environmental Inspections: Rights and Responsibilities brochure as well as a May 2012 Permit to Install Exemptions handbook.

There is one coating line present onsite for the pre-cleaning, etching, coating, and drying of metal parts. The metal parts initially go through a spray cleaner stage and then an immersion cleaner stage, where the cleaners in both stages are composed of 94% water, 6% KOH and run at 170°F. These are vented to the outside air via stacks. This part of the process is exempt per Rule 285 (I)(iii) for surface preparation of metals by use of aqueous solutions (excluding acids).

The parts are then sent through a city water immersion rinse followed by a deionized water spray rinse before entering the coating bath. S. Chick said that the coating bath (~10,000 gallon dip tank) contains 94% water and 6% of a propriety formula containing pigment and PVC resin (a vinylidene chloride co-polymer and carbon black – see attached SDS). HF is maintained at 0.2% in the tank. At this stage, S. Chick said that the metal is simultaneously being etched (with HF) and coated. The coating process is exempt from a permit to install (PTI) per Rule 284(a), which includes the 55 gallon HF drum, for dipping operations that coat objects with synthetic resins containing no organic solvents. The HF is stored at 4.8-5.2 wt% in water and diluted down to 1% for addition to the bath. Ithaca Coatings receives HF in 55 gallon drums from HF manufacturer, Henkel Technologies.

Once the parts are coated, they are rinsed with city water (which rinses off any residual coating), followed by a deionized water rinse (~8,800 gallons) containing a 1% ammonium bicarbonate solution (see attached SDS for Bonderite M-PT 2150 Reaction Rinse). From here the parts go into a 230°F oven outside of the main facility building which dewaters the parts. S. Chick said that the oven is natural gas-fired and rated at 2.5 MMBTU/hr. The oven is exempt per rule 281(e) for equipment used to dry materials if the material itself cannot become an air contaminant.

S. Chick said HCI is stored onsite in a 5000 gallon container at 10 wt% in water and is used in an ion exchange process. During the etching/coating process the HF etches off iron shavings from the metal, which collects in the coating tank. Ithaca Coatings has an ion exchange process that S.Chick said efficiently removes the iron and other contaminants from the coating bath runs, on average, 1-3 cycles per day. The HCI storage tank is exempt from a PTI per rule 284(h)(iv) as the HCI in the solution is no more than 11 wt%.

S. Chick explained that the coating bath is cleaned and inspected for damage to the liner once per year on average. The coating is removed from the tank, transferred to a holding tank during the inspection process, before being transferred back to the dip tank.

Ithaca Coatings is in compliance with all state and federal regulations at this time.

NAME Midley M. Lyphus

DATE 7-1-14

SUPERVISOR MANAGAN

http://intranet.deq.state.mi.us/maces/webpages/ViewActivityReport.aspx?ActivityID=24505761

7/1/2014