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

N513426713

FACILITY: AKZO NOBEL COATINGS INC		SRN / ID: N5134
LOCATION: 1696 MAXWELL ST, TROY		DISTRICT: Southeast Michigan
CITY: TROY		COUNTY: OAKLAND
CONTACT: Peter Oleszkowicz , Facilities Engineer		ACTIVITY DATE: 06/30/2014
STAFF: Francis Lim	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Self-initiated inspection		
RESOLVED COMPLAINTS:		

On June 30, 2014, I conducted an inspection at Akzo Nobel Coatings, Inc. R&D facility located at 1845 Maxwell Street, Troy, Michigan. The purpose of the inspection was to determine compliance with the Federal Clean Air Act; Article II, Part 55, Air Pollution Control of Natural Resources and Environmental Protection Act, 1994 Public Act 451, Michigan Department of Environmental Quality, Air Quality Division (MDEQ-AQD) Administrative Rules; and to investigate a solvent odor complaint. There is another Akzo Nobel R&D operations located nearby at another building on 1696 Maxwell Street.

During the inspection, AQD staff was accompanied by Paul Oleszkowicz, facilities manager and Ebone Maxwell, HSE Specialist.

This facility is a research and development lab where paint products are developed for the car refinish and automotive plastic coating markets. Part of the R&D process involves the performance evaluation of the formulation in coating spray application. This is carried out in 15 paint spray booths and batch ovens.

Paint formulations are sprayed on test panels. Amount of test formulation to be sprayed is small, usually about 100 mls. Excess coating is disposed as hazardous waste. Test panels are cured in batch ovens. Dried paint film is evaluated for durability, adhesion, corrosion resistance and evaluated for appearance.

Booth Nos. 1 through 4 are Spraymation automatic paint spray booths that use a regular spray gun. Paint is poured in a paint cup (with disposable liners) and gravity-fed into the paint spray gun. Since there are no paint lines (or tubing), a small amount of purge solvent is used to clean the paint guns. Paint cup is not contaminated with coating since coating is poured into a disposable paint liner. Purge solvent is not collected as hazardous waste but disposed of by spraying directly in the paint spray booths.

The remaining booths are manual paint spray booths. Some booths use an electrostatic paint spray gun. The coating is kept inside a pressure pot. Since there is paint tubing from the pressure pot to the spray gun, more solvent is used to purge the line and spray gun. Typically, purge solvent used is from 500 ml to one liter. Purge solvent is sprayed directly in the paint spray booths.

In Booth No. 10, the facility tried a procedure where purge solvent from the paint line can be collected in 5-gallon waste containers, by spraying the solvent directly into the waste container. They also tried a procedure where they let solvent drip into the waste container. The facility eventually abandoned both procedures and went back to not collecting the purge solvent as hazardous waste and just spraying the solvent directly into the paint spray booths.

Purge solvent used is MEK. A combination of reused and fresh solvent is used for purging. A SATA spray gun washer is used to clean spray guns.

The R&D facility at 1845 Maxwell Street has been the subject of odor complaints coming from the operations of the R&D paint spray booths. Although very little coating is used, when the paint booths are used simultaneously, there could be a potential for solvent odor. Most of the odor will come from the purge solvent operations where the solvent is sprayed directly into the paint spray booths.

A notice of violation was sent to the facility in 2006 for installing the paint spray booths without a permit. The facility submitted a permit but Steve Zervas, permit engineer made a determination that the coating operations were considered research and development and therefore exempt from permits.

I conducted an odor observation in the vicinity of the complainant's apartment after the inspection. I noticed a mild solvent odor coming from the facility.

NAME _____ DATE 10-31-14 SUPERVISOR CJE