DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

ACTIVITY REPORT: Scheduled Inspection

FACILITY: UNITED PAINT & CHEMICAL CORP		SRN / ID: B5779
LOCATION: 24671 TELEGRAPH RD, SOUTHFIELD		DISTRICT: Southeast Michigan
CITY: SOUTHFIELD		COUNTY: OAKLAND
CONTACT: Mike Zapalski , Production Manager		ACTIVITY DATE: 12/09/2015
STAFF: Samuel Liveson	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Scheduled inspectio	n of opt-out facility.	
RESOLVED COMPLAINTS:		

On Wednesday, December 9 and Thursday, December 10, 2015, I conducted an unannounced, scheduled, level 2 inspection of United Paint & Chemical Corporation (United Paint), located at 24671 Telegraph Road in Southfield, Michigan. The purpose of this inspection was to determine the facility's compliance with the federal Clean Air Act, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, and the conditions of Permits to Install (PTI) No. 273-00 and PTI No. 301-76.

I arrived on site Wednesday around 9:00 AM. I met with Mr. Mike Zapalksi, Production Manager, and with Ms. Carol Shensky, Operations Director. Mr. Zapalski provided records and a walkthrough of the production facility and shipping area. On Thursday, Ms. Shensky provided a walkthrough of the laboratory building and accompanied me to facility boilers. I provided Mr. Zapalski and Ms. Shensky with my contact information and a copy of the pamphlet "DEQ Environmental Inspections: Rights and Responsibilities."

Opening Meeting

United Paint is a Tier II manufacturer of liquid coatings for automobile interiors. The company typically operates two 8 hour shifts from 6 AM to 11 PM; however, recent demand has led to two 10-hour shifts from 6 AM to 2 AM. Both solvent and water based coatings are produced at the facility. According to Mr. Zapalski, recent client demand has been for solvent-based coatings. The facility is an opt-out source for hazardous air pollutants (HAPs).

Facility Walk-Through

The facility has three buildings on site: the production facility, a shipping area, and a research and development laboratory.

Production Building

EUPAINTPROD - PTI No. 273-00

The production building consists of portable and fixed tanks, mixers, and a small laboratory for quality control. Mixers were not operating during the inspection.

Raw material from above ground storage tanks is mixed on site. The final mix is stored in tanks ranging from 5 to 600 gallons in size. These tanks all appear to be closed, as required by Rule 630(2); each tank has a polyurethane cover attached by a large band. The facility is required to comply with Rule 630 per PTI No. 273-00 Special Condition (S.C.) 8. From these tanks, the product is transferred to smaller shipping containers and moved into the warehouse area for transportation.

A dispensing room has an electronic dispenser used with water-based coatings. Several tanks of water-based raw material have tubing that leads to the electronic dispenser. A tank is placed below this dispenser. Another room has several mixers and larger resin storage tanks. According to Mr. Zapalski, no containers are larger than 19,800 gallons, so that the facility does not appear to be subject to 40 CFR Part 60 Subpart Kb: Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984.

According to Mr. Zapalski, there are no underground storage tanks on site.

EUCLEANING - PTI No. 273-00

Tanks are cleaned with cleaning solvent per R 630(3)(c). I did not observe cleaning operations. Wash solvent appears to be kept in closed containers per R 630(4). Mr. Zapalski provided the MSDS for the cleaning solvent used, named AMLAC 312. It appears to contain less than 7% methanol, a HAP. No other HAPs appear to be present in the cleaning solvent. According to Tracking Spreadsheet Instructions provided by United Paint consultant Ms. Nikki McKenna from Integrated Environmental, Inc., emissions of AMLAC 312 are estimated as 20% of monthly solvent purchased. This 20% emission rate is based on operational observations.

Waste Coating Area

Liquid waste coating is stored outside in a covered area with a raised curb around containers. Liquid waste from the facility is generally considered hazardous, and is disposed as hazardous waste according to Mr. Zapalski. All containers appeared to be closed.

Dust Control System - PTI No. 301-76 and PTI No. 273-00

PTI No. 301-76 permits one Dustkop Model 30E51 blower and Dustkop Model FT40D1 fabric filter. The permit was issued in April of 1977. There are three similar dust collectors on site. According to the application for PTI No. 273-00, this permit is for three dust collectors of model 30E51.

I will recommend to Mr. Zapalski that the facility request to void PTI No. 301-76 because PTI No. 301-76 appears to be obsolete. All three dust collectors are accounted for in PTI No. 273-00, and conditions in PTI No. 301-76 appear to be redundant and less stringent than those in PTI No. 273-00.

Particulate is controlled by bags inside the dust collector before being vented to ambient air. According to Mr. Zapalski, dust collectors are manually agitated once a day so that excess dust falls off the bags into the drums below. Drums are changed on a weekly basis. Particulate waste is put into a regular dumpster because the particulate is considered inert (non-hazardous). All dust collectors appeared to operate properly; no opacity was observed at the site per S.C. 9 & 10 of PTI No. 301-76 and S.C. 6 & 7 of PTI No. 273-00.

Research and Laboratory Building

On Thursday December 10, Ms. Shensky showed me the laboratory building and explained that researchers perform tests such as thermoshock tests and sun & bug (how sun screen and bug spray affects paint). The research and development area appears to be exempt from obtaining a Permit to Install per R 283(1)(a).

Boilers and Miscellaneous Equipment

The production building has two small natural-gas boilers used for space heating installed in 2009 and 2010. The boilers appear to be exempt from obtaining a Permit to Install per R 282

(b)(i). The boilers also appear to be exempt from 40 CFR Part 63 Subpart JJJJJJ – National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources per §63.11195(e) because they appear to meet the definition of gasfired boilers.

According to Mr. Zapalski, there are no cold cleaners or emergency generators on site.

Stacks

I was unable to verify stack dimensions during the site visit. Of two stacks visible from the ground level, one has a rain cap. Although this is not a violation of PTI No. 273-00 S.C. 13 because the permit does not require exhaust gases discharge unobstructed, I suggested to Mr. Zapalski that United Paint install no-loss rain guards next time they are considering stack upgrades.

Recordkeeping

Mr. Zapalski provided detailed facility records from January of 2014 through October of 2015 per S.C. 11.

Volatile Organic Compound Records

VOC emissions are based on an emission factor of 0.034 pound (lb) VOC per lb of solvent used each month per S.C. 10. The facility is permitted to emit up to 40 tons per year of VOC emissions on a 12-month rolling time period per PTI No. 273-00 S.C. 1. The highest VOC emissions for United Paint in 2015 were 16.16 tons of VOC emissions in July of 2015 on a 12-month rolling time period.

The facility is permitted to emit up to 15.6 pounds per hour of VOC emissions from EUPAINTPROD and EUCLEANING per S.C. 2. The highest pounds VOCs per hour emitted by the facility in 2015 was 9.39 pounds per hour in October of 2015. The method to determine VOC emissions per hour appears to be to divide the monthly emissions by the monthly hours of operation.

According to records, the highest VOC emissions in 2015 from EUPAINTPROD were 13.06 tons per 12-month rolling time period in October of 2015, below the facility limit of 27 tons per S.C. 3.

According to records, the highest VOC emissions in 2015 from EUCLEANING were 3.52 tons per 12-month rolling time period in April of 2015, below the facility limit of 10.2 tons VOC per S.C. 4. Cleaning solvent usage records are based on solvent purchased each month. Emissions of AMLAC 312 cleaning solvent are estimated as 20% of monthly solvent used based on operational observations.

Hazardous Air Pollutant Records

HAP emissions are based on the representative amount of HAPs emitted from each product category produced (acrylic, alkyd, etc.) based on the representative most-used coatings in each product category at the facility. The representative HAP emission content of these categories is updated about once each year.

I asked for the material datasheets used to determine the representative HAP content of acrylics. Acrylics are the most-produced coating product at the facility. Ms. McKenna provided the material datasheets used to determine the representative HAP content of acrylics. A spot

check of these coating data sheets appears to show that HAP contents accurately determine the HAP percentages in acrylics.

According to records, the highest individual HAP emissions in 2015 were 3.64 tons of methyl isobutyl ketone per 12-month rolling time period in October of 2015, and the highest combined HAP emissions were 8.77 tons in July of 2015. These amounts are below the permit limits of 9 tons of individual HAPs and 22 tons of any combination of HAPs per S.C. 5.

Equipment Installation

According to Ms. McKenna, there have not been any modifications or new equipment installations per S.C. 12.

Compliance

Based on the AQD inspection and records review, it appears that United Paint is in compliance with the federal Clean Air Act, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, the conditions of PTI No. 273-00 and PTI No. 301-76.

DATE 12/23/15

SUPERVISOR