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

FACILITY: Valspar Automotive	SRN / ID: N5655	
LOCATION: 4205 Martin Road,	DISTRICT: Southeast Michigan	
CITY: WALLED LAKE	COUNTY: OAKLAND	
CONTACT: Jerry Hall, Safety S	ACTIVITY DATE: 07/22/2016	
STAFF: Samuel Liveson	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Scheduled inspectio	n of an opt-out facility.	
RESOLVED COMPLAINTS:		

On July 22, 2016, I conducted an unannounced, scheduled, level 2 inspection of Valspar Automotive (Valspar), previously known as Quest Specialty Coatings LLC, located at 4205 Martin Road in Walled Lake, 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 (NREPA), 1994 PA 451, as amended, and the conditions of Permit to Install (PTI) No. 316-07A.

I arrived on site around 9:20 AM. I met with Mr. Jerry Hall, Safety Specialist. Mr. Hall provided facility records and a walkthrough of the facility. I provided Mr. Hall with my contact information and a copy of the pamphlet "DEQ Environmental Inspections: Rights and Responsibilities." Mr. Tom Schroeter, Health, Safety, and Environmental Manager, provided additional records and information via email.

Opening Meeting

Valspar manufactures after-market paint for the automotive industry. PTI No. 316-07A is for the manufacturing of topcoat, clearcoat, isocyanate, reducer, and primer products at the facility. Valspar bought Quest Specialty Coatings LLC. The facility operates from 6:00 AM until 2:30 AM Monday through Friday, and Saturday or Sunday if needed.

Valspar doesn't manufacture water-based coatings or powder products. However, products contain some powders, and are sometimes low-VOC (volatile organic compound).

This plant plans to permanently shut down on December 31st of this year.

Facility Walk-Through

Mixing Room

The facility receives raw materials such as solvents and resins for mixing. We observed the mixing room during production. The mixing room contains dispersers, mixers, and mills. Mills grind the paint with small beads as it passes. Mixers have a 580 gallon capacity. Four dispersers appear to be present in the mixing room.

Lids appear to be present on all facility dispersers, mixers, and mills at the facility per FGTOPCOAT Special Condition (S.C.) IV.1, FGIR S.C. IV.1, and FGPRIMER S.C. IV.1. Lids are "pull apart lids", meaning they are made up of two half-circles that can be pulled apart to allow a mixing rod through the lid and the lid can be reclosed.

The facility does not produce powder coatings, but does add powder components to liquid coatings during mixing. The facility has a Ventilation and Dust Filtration System Operation plan per FGTOPCOAT S.C. III.2 and FGCIR S.C. III.3. The plan is provided in the facility manila file. The facility appears to follow proper loading procedures to minimize emissions of particulate matter; dust collectors at mixing containers vent to a Torit dust collector where emissions travel through cartridge dust collectors before emitting to ambient air. The dust

collector automatically pulses to knock powder down into a sealed collection bin. A pressure gauge helps the operator know the dust collector is operating properly.

All provisions of R 630 must be met per FGTOPCOAT S.C. III.1, FGCIR S.C. III.2, and FGPRIMER S.C. III.1. As noted above, mills and mixing tanks appear to be equipped with covers per R 630(2), and organic solvent is used for cleaning and stored in closed containers per R 630(4). I did not observe tank cleaning per R 630(3). According to Mr. Tom Schroeter, acetone is the main solvent used for cleaning.

Above-Ground Storage Tanks

The facility has seven above-ground storage tanks with capacities of 5600 gallons each; two isocyanate storage tanks, two clear resin storage tanks, and three solvent storage tanks. These tanks appear to have a vapor balance system installed per FGPRIMER S.C. III.2 and FGCIR S.C. III.1. Mr. Hall showed me piping that allows vapors to flow between tanks. I did not observe tank filling while on site. A pressure/vacuum relief valve also appears to be installed on the storage tanks.

Rule 287(c) Paint Booths

Four paint booths are on site; a quality control spray booth, a research & development spray booth, a waterborne spray booth, and a pearl spray booth. These booths appear to be exempt from obtaining a permit to install per R 287(c). Per FG-FACILITY S.C. I.1 and I.2, the facility opted-out of Title V requirements by accepting hazardous air pollutant (HAP) limits below major source threshold. The waterborne and pearl spray booths were not operated in 2016 according to facility records.

I visited the quality control spray booth on site. Primers and hardeners are sprayed via an automatic HVLP applicator for greater accuracy. An updraft draws overspray into filters on site. A pressure differential gauge showed 0.08 inches of water when the paint operator turned on the paint booth to demonstrate its operation.

Waste Storage

Signs point to seven waste storage areas on site where waste materials are labeled as hazardous waste. Containers are dated so that storage does not exceed 90 days, and waste containers are closed and grounded. According to Mr. Hall, Valspar hires Stericycle to dispose of hazardous waste materials.

Recordkeeping

To track material usage on site for air quality records, the facility uses the information provided on a batch ticket for coating production. Mr. Hall showed me a batch ticket for a current order. A batch ticket is essentially a recipe for manufacturing a particular coating, showing quantities of raw materials added. If a change is made to a batch ticket, a "hit ticket" is attached to the batch ticket documenting the quantity of addition or subtraction from the original batch ticket.

Volatile Organic Compounds (VOCs)

Mr. Schroeter provided VOC emission calculationsfrom January of 2015 through June of 2016 based on batches produced. These VOC emissions are provided for FGTOPCOAT per S.C. VI.6, for FGCIR per S.C. VI.5, and per FGPRIMER per S.C. VI.4. Summary monthly VOC emissions are provided from January of 2015 through June of 2016. Per Mr. Schroeter and verified by records, Valspar uses a VOC emission factor of 2% for topcoat and primer production. For CIR (clearcoat, isocyanate, and reducer) production, the facility uses an emission factor of 0.15%. According to Mr. Schroeter, this is because those items are made in

and packaged out of closed sealed mixing tanks/pots and there are fewer emissions. To validate the 0.15% emission factor, Mr. Schroeter referenced emission calculations from the facility PTI application that appear to show emissions of 0.11% based on equations from EPA AP-42 Methods for Estimating Air Emissions from Paint, Ink and Other Coating Manufacturing Facilities (February, 2005).

The table below shows the maximum VOC emissions for FGCIR, FGPRIMER, and FGTOPCOAT compared to the VOC emission limits for those flexible groups in PTI No. 316-07A.

Flexible Group	Maximum VOC	Month & Year	PTI VOC Emission	Emission Limit
	Emissions (tpy)	of Maximum	Limit (tpy)	Exceeded?
FGTOPCOAT	11.2	January 2015	27.5	No
FGCIR	4.3	January 2015	6.4	No
FGPRIMER	3.8	January 2015	27.7	No

Material Limits

Valspar provided records of solvents used each dayfrom January through June of 2016 per FGTOPCOAT S.C. VI.1 & VI.2, and FGCIR S.C. VI.1.

The highest amount of daily acetone used in FGCIR was 24,331 pounds on June 27, 2016, below the permit limit of 92,260 pounds per day per FGCIR S.C. II.9. The highest amount of daily acetone used in FGTOPCOAT was 2,379 pounds on April 23, 2016, below the permit limit of 1,080,060 pounds per day per FGTOPCOAT S.C. II.9.

The highest amount of daily isopropyl alcohol usage in FGCIR was 468 pounds on March 2, 2016, below the permit limit of 94,910 pounds per FGCIR S.C. II.8.

The highest amount of daily xylene usage in FGCIR was 6,489 pounds on April 16, 2016, below the permit limit of 309,720 pounds per day per FGCIR S.C. II.7. The highest amount of daily xylene usage in FGTOPCOAT was 2,074 pounds on January 13, below the permit limit of 123,888 pounds per day per FGTOPCOAT S.C. II.7.

According to Mr. Schroeter, naphthalene is not used at the facility per FGTOPCOAT S.C. II.10. Ethyl toluene is not tracked individually; however FGTOPCOAT S.C. VI.2 requires monthly records of ethyl toluene used at the facility. Looking at the monthly totals of topcoat produced for 2015 and 2016, the amount of topcoat produced as a whole monthly is less than the monthly material limit for ethyl toluene. AQD used discretion to avoid issuing a violation notice for not tracking ethyl toluene monthly usage because topcoat production records indicate compliance with the ethyl toluene material limit per FGTOPCOAT S.C. II.11. The highest amount of topcoat produced at the facility as a whole); this is below the ethyl toluene material limit of 955,059 pounds per month. Because the facility is closing, I did not request starting separate records of ethyl toluene. If the facility continues operation into 2017, I will request it keep separate records of ethyl toluene.

To comply with material percent limits by weight in coating products, Mr. Schroeter explained that he signs off on each new formula change or issuance and makes sure material limits are not exceeded per FGTOPCOAT S.C. VI.3 and FGCIR S.C. VI.2.

Hazardous Air Pollutants

Valspar opted-out of Title V regulations for hazardous air pollutants (HAPs) by limiting individual and aggregate HAP emissions facility-wide. HAP emissions are tracked similarly to VOC emissions, estimating an emission factor of 2% from FGTOPCOAT and 0.15% from FGCIR. Monthly HAP emissions were provided per FGFACILITY S.C. VI.1. The maximum HAP emissions per 12-month rolling time period were 6,995 pounds, or 3.5 tons, in April of 2015. This is below individual and aggregate HAP emission limits per FGFACILITY S.C. I.1 & 1.2.

Conclusion

The facility appears to be in compliance. The facility plans to close on December 31, 2016.

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