

DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION  
**ACTIVITY REPORT: On-site Inspection**

P073956826

<b>FACILITY:</b> Paslin Company	<b>SRN / ID:</b> P0739	
<b>LOCATION:</b> 25411 Ryan Road, WARREN	<b>DISTRICT:</b> Warren	
<b>CITY:</b> WARREN	<b>COUNTY:</b> MACOMB	
<b>CONTACT:</b> Leon Kresek , Facilities Manager	<b>ACTIVITY DATE:</b> 01/27/2021	
<b>STAFF:</b> Robert Joseph	<b>COMPLIANCE STATUS:</b> Non Compliance	<b>SOURCE CLASS:</b> SM OPT OUT
<b>SUBJECT:</b> Scheduled on-site inspection of opt-out coating facility.		
<b>RESOLVED COMPLAINTS:</b>		

On January 27, 2021, I, Michigan Department Environment, Great Lakes, and Energy-Air Quality Division staff Robert Joseph, conducted a 2020-2021 on-site scheduled inspection of The Paslin Company (SRN: P0739) located at 25411 Ryan Road, Macomb, Michigan. The purpose of the inspection was to determine the facility's compliance with the requirements of the Federal Clean Air Act; Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451; the Michigan Department Environment, Great Lakes, and Energy-Air Quality Division (EGLE-AQD) Administrative Rules, conditions of the facility's Permit to Install (#153-16), and General Coating Lines permit (#201-16).

### **Opening Introduction**

I arrived at the facility shortly after 1 p.m. and met with Leon Kresek, Facilities Manager, of The Paslin Company. I introduced myself and presented my identification and credentials and stated the purpose of my visit. I asked Leon to provide me some general information regarding the facility. He indicated the facility employs approximately 200 employees and operates roughly 8 a.m to 4 p.m. daily and some weekends 6 a.m to 12 p.m. He said work hours vary based on customer demands and project scheduling. The facility produces and coats assembly-line parts that are used at automotive plants. The facility's Opt-Out permit (#153-16) references the facility's flexible group conditions for facility-wide emissions, and the General Coating Lines permit references the facility's flexible group coating and source conditions.

### **Facility Tour**

The Paslin Company conducts their operations out of two buildings. Building #2 (25303 Ryan Road) is the assembly room where robotics work occurs on the simulation of the metal assembly-line parts, and the labor building #1 (25411 Ryan Road) is where the machining and coating of the assembly-line parts occur. The facility has several lathe machines where mechanical cutting of the parts occurs, and if necessary, the parts can also be welded. Both processes are exempt per R 336.1285 permit to install exemptions; miscellaneous, R 336.1285, 2(l)(vi) and 2(i), respectively. The facility obtained both the Opt-Out permit to install (153-16) and the General Coating Lines permit by agreeing to accept emission limits to remain under the major source thresholds for hazardous air pollutants (HAPs). Assembly-line parts require surface coatings before being shipped to the facility's customers.

The facility previously had one open-face coating booth (EU1) upon issuance of both permits when they were originally permitted using oil-based paints, however, a second open-face coating booth (EU2) was also on-site which the facility indicates it uses as their primary coating booth for water-based paints. EU2 is much larger than EU1. It is described

as a G-90 Booth/G-90 Mechanical Model and constructed of 18-gauge galvanized steel. The paint booth is equipped with a heating component with temperature and pressures gauges to aid in the drying of the coatings once applied to the parts. Leon indicated that a new PTI was obtained through the AQD Permits Division. I indicated to him that I was unaware of any new PTI's issued to the facility and that I would investigate it further upon completion of the inspection.

Leon indicated the facility seldomly uses EU1 and that it is only used for large-scale projects with demanding schedule completion dates, otherwise, nearly all coating applications are performed using EU2 with water-based coatings. The facility used oil-based coatings exclusively through 2019 and has been using water-based coatings almost exclusively since September 2020. He indicated there are a limited number of customers that still request oil-based coatings. The facility applies the coatings using high volume low pressure (HVLP) spray guns that have a one-gallon pressure pot for delivery of the water-based coatings. The facility indicates water-based coatings must be applied very slowly. Oil-based paints are also applied using a HVLP spray gun which contains a 20-ounce cup for the paint. HAPs in these coatings include Xylene, Toluene, Ethylbenzene, and Methanol.

Materials requiring cleaning after the use of water-based paints are cleaned primarily without the use of solvents and those materials in which oil-based paints are used are cleaned with paint thinner and mineral spirit. The facility used to also use Xylene as a solvent cleaner, but according to facility records, stopped this process in late 2019 as invoices provided by the facility indicate purchases occurred in July 2019 (399 lbs) and April 2019 (799 lbs). The facility claims to soak the application guns in 6.5-gallon containers filled with lacquer thinner and/or mineral spirit which is then disposed into a 55-gallon drum when needed for disposal. The facility contracts Service Environmental Engineering, Inc. to manifest the drums out to a licensed facility.

Both spray booths are fitted with dry filters and changed at minimum on a weekly basis for EU2 and depending on usage at least monthly for EU1. The filters are also properly containerized and disposed of by Service Environmental Engineering, Inc.

The coating process is typically performed by one employee clothed in personal protection equipment. Exhaust gases from the coating operations discharge unobstructed vertically upwards to a single stack opening for EU1 and two stack openings for EU2. There did not appear to be any obstructions with any of the stacks or any visible emissions.

**General Permit for Coating Line(s) emitting up to 10 tons/yr of VOCs:** Based on records review since the AQD's last inspection in January 2019.

## **FG-COATING**

### **I. EMISSION LIMITS**

The emission limit table states the facility is not to exceed a VOC emission limit of 2,000 lbs/month for all coating lines plus all associated purge and clean-up solvent materials. The facility provided usage records of the monthly and 12-month rolling VOC emissions for coatings, however, these records and calculations do not include monthly usage of all purge and clean-up solvent materials. The facility is required per special condition VI.3.c to keep records of the monthly gallons of each coating and purge and clean-up solvent materials used.

The facility provided waste manifests, however, an analysis of the waste was not provided nor do these documents provide a daily or monthly usage breakdown. The waste manifests' show a combined total over a period of several months at a time detailing each purge or clean-up solvent material used (mineral spirit, lacquer thinner, and other waste materials). This constitutes a violation of special condition VI.3.c, d, and e of the facility's General Coating Lines permit.

Based on the records provided, it cannot be determined if the facility was compliant with the emission limit. The highest one month VOC usage total for oil-based coatings occurred in January 2019 with 961 lbs emitted, and in February 2020 for water-based coatings with 3.84 lbs emitted. These totals do not include any purge and clean-up solvent materials used. There were no purchase invoices during these two months. VOC (xylene, lacquer thinner, mineral spirit) purchase totals exceeded 6,000 lbs in 2019 and were nearly 5,000 lbs in 2020.

Due to lack of monthly purge and clean-up solvent usage records, the worst-case monthly VOC emissions were estimated as an indicator of whether the facility was in compliance with the 2,000 lb/month VOC limit. The worst-case VOC emissions were estimated assuming all purge and clean-up solvent materials purchased in a year were emitted in one month at the facility. The worst-case monthly VOC emissions exceed the limit in special condition I.1.

The emission limit table states the facility is not to exceed a VOC emission limit of 10 ton/yr for all coating lines plus all associated purge and clean-up solvent materials during a 12-month rolling time period as determined at the end of each calendar month. The highest 12-month rolling usage total for oil-based coatings occurred in January 2019 with 6.8 tons emitted, and in December 2020 for water-based coatings with 0.007 tons emitted. The facility purchased 688 lbs (0.4 tons) of lacquer thinner in December 2020. These totals do not properly reflect the actual purge and clean-up solvent materials usage.

Due to lack of monthly purge and clean-up solvent material usage records, the worst-case annual VOC emissions were estimated as an indicator of whether the facility was in compliance with the 10 ton/year per booth VOC limit. The worst-case annual VOC emissions were estimated assuming all purge and clean-up solvent materials purchased in a year were emitted at the same time. The worst-case annual VOC emissions do not appear to exceed the limit in special condition I.2.

### **III. PROCESS/OPERATIONAL RESTRICTIONS**

The facility captures all purge/clean-up solvent materials and waste coatings in 55-gallon drums. During the inspection it was observed the materials were in closed containers and they are disposed of by an outside vendor, Service Environmental Engineering, Inc.

### **IV. DESIGN/EQUIPMENT PARAMETERS**

The facility utilizes high volume-low pressure (HVLP) spray applicators on its products. The applicators produce approximately 35 lb/in<sup>2</sup> for oil-based applications. I did not perform a pressure test on any of the applicators. The facility uses dry filters in both coating booths, EU1 and EU2, and they are replaced on a monthly and weekly basis at minimum,

respectively. The facility does not utilize a thermal or catalytic oxidizer in its coating operation.

## **V. TESTING**

The AQD has not requested the facility to verify VOC emissions or the VOC content of any coatings, purge, or clean-up solvent materials.

## **VI. MONITORING/RECORDKEEPING**

The facility maintains purchase orders for all coatings, purge, and clean-up solvent materials per special condition VI.3. According to purchase invoices, the facility purchased over 2,000 lbs (2,104 lbs) combined of lacquer thinner (VOC content 6.25 lb/gal) and mineral spirit (VOC content 6.50 lb/gal) in September 2019.

Also, the facility maintains the VOC content (lb/gal) of each coating and the gallons used of each coating on a monthly basis as required. The facility also maintains the VOC content (lb/gal) of each purge and clean-up solvent material.

The facility is not properly maintaining monthly purge and clean-up materials usage records, therefore, the monthly VOC emissions nor the 12-month rolling VOC emission calculations can be accurately determined since the calculations do not include the emissions from the purge and clean-up materials.

The facility maintains a current listing of the chemical composition of each coating and its weight formula on file per special condition VI.4. This was provided via Safety Data Sheets. Oil-based coatings include Fast Dry Gloss White Base, Fast Dry White Primer, and Fast Dry Gloss Neutral Base. Water-based coatings include Acrylic Waterborne DTM Gloss White Base, Neutral Base, and Bonding Primer.

## **VIII. STACK/VENT RESTRICTIONS**

There did not appear to any obstructions within the facility's exhaust stacks.

## **IX. OTHER REQUIREMENTS**

The facility installed a new coating booth, EU2, in 2020. The facility contacted the AQD Permits Division prior to installing the coating booth, however, the Permits Division failed to verify that the facility correctly referenced the General Coating Lines permit number (#201-16) on the submittal. The facility instead mistakenly indicated the Opt-Out permit number (#153-16) on the form when requesting to modify the General Coating Lines permit. The facility has been in contact with the Permits Division and is in the process of modifying the General Coating Lines Permit, however, due to the violation of special condition I.1 the facility will be advised to obtain a site specific permit (the facility improperly maintained monthly records of the purge and clean-up solvent materials).

## **FG-SOURCE**

### **I. EMISSION LIMITS**

The facility is permitted a VOC limit of 30 tons/year on a 12-month rolling time period as determined at the end of each calendar month. The facility has not exceeded 11 tons in any 12-month time period (emissions and purchases combined), however, a total cannot be accurately determined since purge and clean-up solvent materials records were not properly maintained on a monthly basis by the facility.

Coating usage records indicate that monthly emissions have not exceeded 0.5 tons and 12-month rolling totals have not exceeded 7 tons. Due to lack of purge and clean-up solvent materials usage records, the worst-case annual VOC emissions were estimated as an indicator of whether the facility was in compliance with the 30 ton/year VOC limit for the source. The worst-case annual VOC emissions were estimated assuming all purge and clean-up solvents materials purchased in a year were emitted at the same time. The worst-case annual VOC emissions do not appear to exceed the limit in special condition I.1.

## **VI. MONITORING/RECORDKEEPING**

The facility is not maintaining accurate VOC mass emission calculations on a monthly basis for FG-SOURCE determining the annual emission rate for each coating line, in tons per 12-month rolling time period as determined at the end of each calendar month. The calculations do not include emissions from purge and clean-up solvent materials because records were not properly maintained on a monthly basis by the facility.

### **Environmental Compliance per PTI #153-16**

#### **FG-FACILITY**

##### **I. EMISSION LIMITS**

The emission limits of the permit indicate individual HAPS are not to exceed 9 tons/yr on a 12-month rolling time period as determined at the end of each calendar month. The highest 12-month rolling time period individual HAP usage total occurred in January 2019 with Xylene at 2.3 tons, however, that does not include purge or clean-up solvent materials usage.

The emission limits of the permit indicate an aggregate HAP total is not to exceed 22.5 tons/yr on a 12-month rolling time period as determined at the end of each calendar month. The highest 12-month rolling time period aggregate HAP usage total occurred in January 2019 with with 4.0 tons, however, that does not include purge or clean-up solvent materials usage.

Based on the combined facility purchase invoice and usage totals, the facility is compliant with the emission limit given that the highest individual HAP total is 4.4 tons, and highest aggregate HAP total is 6.1 tons. This is determined on the worst-case scenario of combining the highest individual HAP monthly total with the entire year's purchases, and the highest 12-month rolling HAP total with the entire year's purchases.

##### **V. TESTING**

The AQD has not requested the facility to verify HAP content of any material.

## **VI. MONITORING/RECORDKEEPING**

As described under the facility's General Permit, the facility maintains a current listing of the chemical composition of each coating and its weight formula on file. This was provided via Safety Data Sheets.

The facility did not accurately maintain the monthly usage in pounds of each HAP containing material used since purge and clean-up solvent materials were not properly accounted for. The facility does not reclaim any HAP containing material. The facility maintains the pounds per gallon of each containing material used via the Safety Data Sheets for all coatings.

The individual HAP and aggregate HAP emission calculations determining the monthly emission rate in tons per calendar month was maintained for all coatings but not for the purge and clean-up solvent materials used. The highest individual monthly HAP usage emission rate occurred in January 2019 with Xylene at 0.165 tons. The highest aggregate monthly HAP usage emission rate occurred in January 2019 at 0.28 tons.

The individual HAP and aggregate HAP emission calculations determining the annual emission rate of each in tons per 12-month rolling time period as determined at the end of each calendar month was maintained for all coatings but not properly recorded for the purge and clean-up solvent materials used. The highest 12-month rolling time period individual HAP usage total occurred in January 2019 with Xylene at 2.3 tons. The highest 12-month rolling time period aggregate HAP usage total occurred in January 2019 with 4.0 tons.

## **CONCLUSION**

The facility only maintained monthly records for coating usage. The facility failed to properly maintain monthly records for the usage of purge and clean-up solvent materials, but rather instead maintained records for the amount of waste material that was shipped via manifests throughout the year. Therefore, it cannot be accurately determined if the facility is compliant with the 2,000 lb/month VOC emission limit, however, based on the worst-case one month scenario given the usage and purchase records provided, it is determined that non-compliance has occurred since over 6,000 lbs were purchased in 2019 and nearly 5,000 lbs purchased in 2020.

This constitutes a violation of the facility's General Coating Lines Permit special condition FG-COATING I.1 and therefore a violation notice will be issued. The facility also failed to properly maintain these records during the AQD's last visit to the facility in January 2019. The facility was informed at that time that failure to do so would require a site-specific permit in-lieu of a General Coating Lines permit.

Based on the EGLE-AQD's inspection, The Paslin Company is currently not in-compliance with the aforementioned conditions of the facility's Permit to Install (#153-16) and General Coating Lines permit (#201-16).

NAME Robert Joseph

DATE 03/31/21

SUPERVISOR K. Kelly