

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

N638852359

<b>FACILITY:</b> PIONEER METAL FINISHING - STEPHENS ROAD		<b>SRN / ID:</b> N6388
<b>LOCATION:</b> 13251 STEPHENS ROAD, WARREN		<b>DISTRICT:</b> Southeast Michigan
<b>CITY:</b> WARREN		<b>COUNTY:</b> MACOMB
<b>CONTACT:</b> Justin Engel , EHS Coordinator		<b>ACTIVITY DATE:</b> 01/31/2020
<b>STAFF:</b> Kaitlyn Leffert	<b>COMPLIANCE STATUS:</b> Compliance	<b>SOURCE CLASS:</b> SM OPT OUT
<b>SUBJECT:</b> FY2020 Scheduled Inspection		
<b>RESOLVED COMPLAINTS:</b>		

On January 31, 2020, I, Kaitlyn Leffert, Department of Environment, Great Lakes, and Energy (EGLE) Air Quality Division (AQD) staff, conducted a scheduled inspection of Pioneer Metal Industries, located at 13251 Stephens Road, Warren, Michigan. The facility is identified by the Source Registration Number (SRN) of N6388. The purpose of this inspection was to determine compliance with the Federal Clean Air Act; Article II, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451); AQD administrative rules; and Permit to Install (PTI) Numbers 169-07 and 151-05.

Pioneer Metal Finishing coats a variety of small metal parts, primarily for use in the automotive industry. The facility has an opt-out permit for HAPs (No. 151-05) and a general permit to operate eight coating lines (169-07).

I arrived in the vicinity of the facility at approximately 10:00 am on January 31<sup>st</sup>. I met with Justin Engel, Environmental Health, and Safety Coordinator, Pioneer Metal. Justin assisted in my inspection of both this facility and the neighboring Pioneer Metal facility (N5747), located on Industrial Highway. We first went over the records for both facilities, then we did a walk-through of the Industrial Highway facility, followed by a walk-through of this facility. Determination of compliance for the Industrial Highway facility is documented in a separate activity report.

### **Emissions Records**

The facility is required to maintain records of VOC emissions per the general coating permit and records of HAP emissions per PTI No. 151-05. All records were made available through December 2019.

#### *General Coating Permit (PTI No. 169-07)*

The permit requires the facility to maintain monthly records of purchase orders and invoices for all coatings, VOC contents of each coating used, gallons of each coating used, monthly VOC emission calculations, and 12-month rolling VOC emissions calculations. Attached to the report is a copy of facility-wide monthly and 12-month rolling VOC emissions and a copy of monthly and 12-month rolling VOC emissions calculations per coating line.

The permit sets emission limits of 2,000 lbs/month and 10 tons per year (tpy) for each coating line. The provided records indicate that all of the coating lines are below the monthly and the annual emissions limits. The single coating line with the highest monthly VOC emissions in December 2019 was the small spray booth (EU-06), with monthly emissions of 0.55 tons, or 1,100 pounds. The coating line with the highest 12-month rolling VOC emissions was also the small spray paint booth (EU-06), with 5.63 tons. Therefore, records indicate that the VOC emissions from each coating line are well below the permitted limits.

In addition to the VOC emission limits for each coating line, there is also a facility-wide VOC emission limit of 30 tpy, as determined on a 12-month rolling time period. The provided records indicate that the rolling 12-month VOC emissions at the end of December 2019 were 11.25 tpy. This was the highest annual total over the previous few years. Based on the provided records, the facility is in compliance with the facility-wide annual VOC limit.

#### *HAP Opt-out Permit (PTI No. 151-05)*

The facility is required to maintain facility-wide records of the quantity of HAP containing materials used, HAP content of each HAP containing material used, monthly emissions calculations of individual and aggregate HAP emissions, as well as 12-monthly rolling emissions calculations of individual and aggregate HAPs. The facility provided all required records and calculations. HAP emissions calculations are shown in the attached facility-wide monthly and 12-monthly rolling emission summary.

The provided records indicate that the 12-monthly rolling HAP emissions are well below the permitted limits. Per the provided records, the three HAPs that consistently had the highest HAP emissions were xylene, ethyl benzene, and MIBK. In December 2019, the 12-month rolling emissions of xylene were 4.46 tons, emissions of ethyl benzene were 1.13 tons, and emissions of MIBK were 1.29 tons. The provided records indicate that the facility is in compliance with the annual individual HAP emission limit of 9.0 tpy.

As of December 2019, the 12-month rolling aggregate HAP emissions were 6.98 tons, which is below the permitted limits of 22.5 tpy. Based on a review of the previous five years of 12-month rolling emissions records, the rate of HAP emissions is trending upward. The 12-month rolling average HAP emissions as of December 2018 was 3.89, which was nearly 3 tons lower than the emissions this year. Despite the upward trend, the facility remains well within the permitted limits and continues to demonstrate compliance.

**Facility Inspection**

Since the previous inspection, there have been some changes to the coating equipment on site. Permit files indicate that the facility has provided the AQD permit section with adequate notification of the installation of additional coating equipment at the site. The general coating permit covers three chain on edge coating lines (EU-01, EU-07, and EU-08), a large dip drain coating line (EU-02), a small drip drain coating line (EU-03), a large spray booth (EU-04), a small spray booth (EU-06), and a batch oven (EU-05).

My inspection of the facility confirmed that all coating equipment listed above remains on site and that no additional equipment has been installed. In addition to the permitted equipment on site, I also observed the following additional equipment on site:

- Wastewater treatment (used for pH adjustment)
- Parts washers (3)
- Tumblers (2)
- Vibratory dip tumblers (7)
- Tumble blasters (4) – controlled by a dust collector

The wastewater treatment equipment appears to be exempt per R 336.1285(2)(m). The parts washer is exempt under R 336.1281(2)(k). The tumblers, vibratory dip tumblers, and tumble blasters all appear to be exempt per R 336.1285(2)(vi).

Emissions from the coating lines and the batch oven are controlled by a regenerative thermal oxidizer (RTO). During my inspection, the chamber temperature on the thermal oxidizer was observed to be 1573°F. RTO temperature records provided by the facility indicate that the RTO temperature is typically around 1550 to 1570°F. Both the RTO temperature records and my observations of the RTO temperature during my inspection indicate compliance with the minimum chamber temperature of 1400°F.

The permit requires that all solvents and waste coating be properly captured, stored, and disposed of. During my walk-through of the facility, I observed that all solvents and coatings were being properly stored in closed containers. I asked Mr. Engel how the waste solvents and coatings are disposed of. He informed me that all materials used at the facility are considered non-hazardous and are picked up by a waste hauler for disposal.

**Conclusion**

Based on my on-site inspection and review of the required records, Pioneer Metal Finishing (SRN: N6388) appears to be in compliance with all conditions of PTI Nos. 169-07 and 151-05, as well as all applicable air quality rules and regulations.

NAME Kathryn Loggert

DATE 3/24/2020

SUPERVISOR Subantonykalkmal