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

N638831092

FACILITY: PIONEER METAL FINISHING - STEPHENS ROAD		**SRN / ID:** N6388
LOCATION: 13251 STEPHENS ROAD, WARREN		**DISTRICT:** Southeast Michigan
CITY: WARREN		**COUNTY:** MACOMB
CONTACT: Dave Corey ,		**ACTIVITY DATE:** 09/06/2015
STAFF: Joyce Zhu	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** SM OPT OUT
SUBJECT: Annual Inspection		
RESOLVED COMPLAINTS:		

On Aug. 6, I conducted an annual air quality inspection at Pioneer Metal Finishing, located at 13251 Stephens, Warren. Arriving at the facility around 9:00 AM, I met with Mr. Eric Rosenberg, the operations manager from the facility. I explained the purpose of inspection; afterwards, I conducted the inspection.

Inspection
The majority of the work in the plant is metal coating. There are three Chain on Edge (COE) lines, two dip drain lines, & three spray paint booths with filter controls. The VOC emissions from the COE lines, the large dip spin line & the spray booths are controlled by a thermal oxidizer. Prior to coating, they measure paint viscosity & will add thinner if needed. Also, there are four alkaline wash lines on site. Each wash line consists of a wash tank followed by a rinse tank. Because they will take COE #1 off line, the alkaline wash lines will be taken off as well. During the inspection, all the tanks were emptied. .

Permit # 169-07, Permit # 151-05, & CO #23-2015
The permits & the consent order covers the three Chain on Edge lines, two dip drain lines, & three spray paint booths with filter control, & a batch oven. HVLP applicators are used in the coating booths. They change the filters in the booths every other day. They clean the spray nozzles by purging with solvents. Waste solvents are stored in a drum which will be shipped off-site. During the inspection, I observed some overspray inside the booths. I didn't see any spill in the dip drain lines. The containers were closed. I didn't see any spill in the storage area. The thermal oxidizer was operated with a temperature of 1554 F & VFD of 38.9 Hz. These values were consistent with the corresponding parameters I observed during the stack test of 5/20/2015. Permit #151-05 is an opt-out permit which sets the facility wide enforceable limits for HAP as well as HAPs. The company keeps the following records:

a. Material usage containing HAP(s) in gallons
b. The corresponding HAP contents in the above materials
c. Emission calculation of HAP & aggregate HAPs in tons/month as well as tons/(12-month rolling time period)
d. The thermal oxidizer temperatures
e. VOC contents (lbs/gal) of each material and its usage rate
f. VOC emission (lbs./month & lb./[12-month rolling time period])

According to the company's record, the thermal oxidizer temperature during 7/29 – 8/6 has sometimes fallen below the temperature during the stack test of 5/20/2015. The temperature was above 1400 F. Although Permit # 169-07 allows the company operated the temperature above 1400 F, the company cannot assume tested control efficiency. I

have informed the company about this. Eric said they would raise the thermal oxidizer temperature to the tested temperature right the way. Based on the company's emission calculation, the VOC as well as HAP emissions were well below the corresponding permit limits. Even if we assume the control efficiency is 76% (permit limit) vs. 95.6% tested efficiency in July, the total VOC emitted per line during 12-month rolling time period in July is less than 3 tons (permit limit 10 tons). Let's assume the worst case is 3 tons per line in July base on the 12-month rolling time, the total resulted VOC from all eight lines in the facility was less than 24 tons during the 12-month rolling time period in July (permit limit 30 tons). The total HAPs emissions in July were less than 2 tons (assuming 76% control efficiency); therefore, the total HAPs emissions during 12-month rolling time period in July were less than 8 tons (permit limit 22.5 tons). Since the total HAPs emissions during 12-month time period was less than 10 tons, any single HAP emission during the same period would be less than 10 tons.

In conclusion, the facility appeared to operate in compliance with the permits' requirements, the consent order & Air Quality Rules in July.

NAME Joyce [signature] DATE 9/11 SUPERVISOR CJE