

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: Other

N574758989

FACILITY: PIONEER METAL FINISHING INDUSTRIAL HWY		SRN / ID: N5747
LOCATION: 24600 INDUSTRIAL HWY, WARREN		DISTRICT: Warren
CITY: WARREN		COUNTY: MACOMB
CONTACT: Justin Engel , EHS Coordinator		ACTIVITY DATE: 06/10/2021
STAFF: Kaitlyn Leffert	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Observation of smoke tube test, as is required by PTI No. 2-03M, SC V.2		
RESOLVED COMPLAINTS:		

On June 10, 2021, I attended the smoke tube test at Pioneer Metal Industries, located at 24600 Industrial Highway, Warren, Michigan. The purpose of the smoke tube test is to determine direction of air flow at all of the natural draft openings in order to verify the volatile organic compound (VOC) capture efficiency. The test is to be done on a semi-annual basis, as required by PTI No. 2-03M, S.C. V.2.

I arrived at the facility at 9:15 am and was greeted by Justin Engle, Pioneer Metal. Mr. Engle led me back to the plant floor, where the smoke tube test was underway. I met Tyler Wilson, Senior Project Manager, Impact Compliance and Testing, who informed me that they were currently wrapping up the smoke tube tests and were moving on the pressure differential tests. He walked me through what had been done for the smoke tube tests and showed me the notes they had recorded during the test. All units had passed the smoke tube test. I specifically asked about the Model 24 line, since that line did not initially pass in the smoke tube test in June 2020. He informed me that the unit passed with no problems.

It was noted that all ductwork in the building had recently been updated. I observed that the ductwork in the building did appear to be newly installed.

All of the units were operating at the time of the test, except for the Model 24 dip spin line, Model 10 dip spin booth, and the batch oven. The Model 10 dip spin booth and batch oven rarely operate and the facility is considering removing them entirely. Mr. Wilson informed me that they did turn on the batch oven temporarily in order for them to conduct the smoke test.

Prior to beginning the pressure differential measurements, an RTO temperature reading was made. The RTO temperature was 1,492°F, which is above the minimum allowed RTO temperature observed during the most recent stack test of 1,462°F.

Differential pressure readings were then taken at the chain on edge Line 3 and the topcoat and basecoat booths for COE Line 2. PTI No. 2-03M requires that the pressure differential be at least 0.007 inches of water. The readings at all three spots were negative (indicating air was flowing into the booth) at values less than -0.007 inches of water. For the topcoat booth on COE2, initial readings indicated that the values were out of range. After adjusting and taking readings through a different opening on the booth, the pressure differential read around -0.040 to -0.049 inches of water. It appears the initial readings were out of range due to being below -0.050 inches of water. The large pressure differential was attributed to the new ductwork and ventilation system.

Conclusion

The observed testing indicates that Pioneer Metal is operating in compliance. Full compliance with the testing requirements will be determined upon review of the final test report.

NAME Kaitlyn Jeffert

DATE 8/10/2021

SUPERVISOR K. Kelly