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

N111943855

FACILITY: ALPHA METAL FINISHING		**SRN / ID:** N1119
LOCATION: 8155 HURON ST, DEXTER		**DISTRICT:** Jackson
CITY: DEXTER		**COUNTY:** WASHTENAW
CONTACT:		**ACTIVITY DATE:** 03/22/2018
STAFF: Zachary Durham	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** MINOR
SUBJECT: Scheduled, unannounced inspection of PTI 21-11 for aluminum anodizing. Targeted inspection as a result of increased activity to identify PFAS sources in the metal finishing industry. NOTE: this is not a PFAS source.		
RESOLVED COMPLAINTS:		

Contact

Brian Muscat
734-426-2855
brian@alphametal.com

Purpose

This was a scheduled, unannounced inspection of Alpha Metal Finishing (AMF) located in Dexter, MI on 3/22/18. AMF has active Permit to Install (PTI) 21-11 for an aluminum anodizing process. This facility was added to the targeted inspection list as a result of increased efforts of the Air Quality Division (AQD) to identify potential current and historic sources of Perfluorinated alkylated substances (PFAS).

Background

This facility was last inspected in 2016 for PTI 21-11 and 409-85. The result of the inspection found PTI 409-85 to be obsolete and has since been voided. The facility was found to be in compliance at the time.

The aluminum anodizing process includes passing electric currents through an immersion bath where aluminum substrates are oxidized, yielding a decorative, durable, corrosion-resistant finish. This process does not constitute a plating operation, but rather enhances the naturally occurring process of metal oxidation.

Compliance Evaluation

The facility has not changed operation since the last inspection and was operating today. While walking in and around the plant no offensive odors were observed that would indicate any process malfunctions. I walked near the anodizing tanks where mesh filter screens are installed to vent process emissions from workers breathing area, which seemed to be in good working order. Attached is the filter cleaning log.

PTI 21-11 identifies material limits on sulfuric acid (100,000 lbs), sodium hydroxide (25,000 lbs), and nitric acid (130,000 lbs) on a 12-month rolling time period. Attached is 2017 usage, which is as follows: sulfuric acid = 15,174 lbs, sodium hydroxide = 2,100 lbs, and nitric acid = 19,985lbs.

I also discussed the PFAS worksheet that has been developed by AQD that discusses regulatory requirements of 40 CFR Part 63, Subpart N for chrome plating operations, and includes PFAS-related regulations on metal finishing operations. Brian indicated that the processes operated at Alpha Metal Finishing do not employ the use of any fume suppressants or surfactants on their anodizing tanks and that no PFAS chemicals are used on site currently or historically. The facility discharges waste water to their local POTW, to whom they supply monthly outfall samples.

Since the inspection, Brian provided me with a summary of chemical use for nitric acid, sulfuric acid, and hydrochloric acid. Hydrochloric acid (HCl) is not included in issued PTI and did not meet the exemption in Rule 284(2)(h)(iv) for HCl that is not more than 11% by weight. A violation was issued dated 4/11/18 in this case. However, a response to the violation has demonstrated that Rule 290 is being met.

Compliance Determination

Following the resolution of the issued violation, it has been determined that this facility is in compliance with state and federal air quality rules and regulations and PTI 21-11.

Recommendations

It is recommended that appropriate record keeping be maintained on site for continuing compliance with Rule 290 subject emission units.

NAME Zach Durham DATE 6/25/18 SUPERVISOR