

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

P079057346

<b>FACILITY:</b> Fletcher Precision Machine Painting, Inc.		<b>SRN / ID:</b> P0790
<b>LOCATION:</b> 6795 E. 9 Mile Road, WARREN		<b>DISTRICT:</b> Warren
<b>CITY:</b> WARREN		<b>COUNTY:</b> MACOMB
<b>CONTACT:</b> Terry Fletcher , Owner		<b>ACTIVITY DATE:</b> 03/18/2021
<b>STAFF:</b> Kaitlyn Leffert	<b>COMPLIANCE STATUS:</b> Non Compliance	<b>SOURCE CLASS:</b> Minor
<b>SUBJECT:</b> FY2021 Scheduled Inspection. Fletcher Precision Painting was found to be in violation of the acetone emission limit (PTI 161-17, EUSOLVENT, S.C. I.1) and for changing their solvent to xylene without first obtaining a permit modification.		
<b>RESOLVED COMPLAINTS:</b>		

On March 18, 2021, Michigan Department of Environment, Great Lakes, and Energy (EGLE) Air Quality Division (AQD) staff, Kaitlyn Leffert, conducted an inspection of Fletcher Precision Painting (SRN: P0790) located at 6795 E. 9 Mile Road, Warren, MI. The purpose of the purpose of the 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); the administrative rules; and Permit to Install (PTI) Number 161-17.

Fletcher Precision Painting is a metal coating facility that is permitted to operate two coating booths and solvent cleaning operations for preparation of materials for coating. The permit limits emissions of acetone from the solvent cleaning process and volatile organic compounds (VOCs) from the two coating booths.

Prior to my inspection, I contacted Terry Fletcher, Owner, Fletcher Precision Paint, to schedule the inspection and request the required records. While inspections are typically unannounced, the inspection was scheduled ahead of time due to ongoing concerns related to COVID-19.

I arrived on-site around 12:00 pm on March 18<sup>th</sup> and was greeted by Mr. Fletcher and Jan Larsen, Engineer, Fletcher Precision Paint. We first went to their office area to go over the requested records. The permit requires that records be maintained of acetone usage, acetone mass emissions calculations, VOC mass emission calculations, as well as a current listing of the chemical composition of each material used. Ms. Larsen provided an overview of their recordkeeping system, which included emission calculations for acetone and VOCs. I requested that a copy of this spreadsheet be sent to me for a closer review.

Fletcher Precision Painting operates Monday through Friday, from 7:00 am to 3:00 pm. The facility closed for June last year and has been operating with a reduced staff due to the ongoing pandemic. One of Fletcher's primary clients is now a company called Paslin, which develops and manufactures automated assembly and welding systems.

The facility is permitted to operate two coating booths. The facility primarily uses just one of the coating booths and the other is used rarely, on an as needed basis. Coating used in the coating booth was stored in closed containers, as required by PTI No. 161-17, FGRule621, S.C. III.1. The facility also has a curing oven which can be used after coating in either paint booth. However, the curing oven is not currently used and the controls for the oven were secured shut with a lock to prevent it's use. The parts are air dried instead. There is also one small batch curing oven on-site, which is currently not in use. Mr. Fletcher informed me that this oven may be connected in the future for use in curing waterborne parts, since those take longer to air dry.

Prior to coating, the metal parts are prepared by cleaning with acetone. The parts are manually wiped own with acetone in order to clean and prep them for the coating booths. I noted that the solvents were stored in closed containers, as required by PTI No. 161-17, EUSOLVENT, S.C. III.1. I also noted that the used rags, which were soaked in acetone were stored in a closed container and it appeared that efforts were being made to minimize fugitive emissions, as required by EUSOLVENT, S.C. III.2.

While I was on-site, Mr. Fletcher informed me that the facility was phasing out the use of acetone as their cleaning solvent. On April 30, I received an email confirming that the facility was now using xylene instead of acetone in the cleaning prep. PTI No. 161-17, EUSOLVENT S.C. II.1 prohibits the use of any VOC or HAP containing solvents in the solvent cleaning process. Xylene is both a HAP and a VOC. This therefore constitutes a violation of the permit and a violation notice will be issued to the facility.

Following the on-site portion of my inspection, I reviewed the emission calculations spreadsheet that was provided during the inspection. Fletcher Precision Painting is required to maintain records of acetone usage, monthly and 12-month rolling acetone emissions calculations, as well as monthly and 12-month rolling VOC emissions calculations. These records are required to demonstrate compliance with the acetone and VOC emission limits in the permit. The records provided by the facility included solvent and coating usage broken out by month, as well as sheets for calculating VOC and acetone emissions. However, upon closer review, it was identified that there were errors in the calculations and that the 12-month rolling data was not being calculated. On April 12, I contacted the facility to request that their records be updated to match the permit requirements.

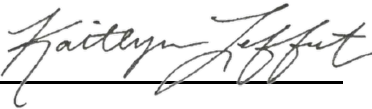
On May 6, 2021, I received an updated copy of the emission records, with updated 12-month rolling emissions calculations. Fletcher Precision Painting is permitted to emit up to 150.3 lb/year of acetone, as determined on a 12-month rolling time period. While the facility has stopped using acetone for metal preparation, acetone was still used throughout 2020. In the records, acetone usage is attributed to when it is purchased. The provided records indicate that acetone usage has exceeded the permitted limit. In particular, the records indicate that 655 pounds of acetone emissions occurred in June 2020 alone. A total of 983 pounds of acetone were reported to have been emitted in calendar year 2020. Based on the provided records, the facility exceeded the annual acetone emissions limit and a violation notice will be issued to the facility.

The facility's permit limits emissions of volatile organic compounds (VOCs) to 9.8 tpy and to 2,000 lbs/month (or 1 ton/month) for each coating booth. The provided records indicate that 12-month rolling emissions at the end of April 2021 were 0.28 tpy. The highest 12-month rolling emissions over the previous two years of rolling emissions data was 0.49, recorded at the end of January 2020. Monthly emission records from January 2019 to present indicate that monthly facility-wide VOC emissions have ranged from 0.02 to 0.09 tons. The reported annual emissions are consistently below both the annual limit and the monthly limit set out in the permit.

#### Conclusion

Fletcher Precision Painting exceeded the acetone emissions limit in their permit and made a change to the solvent used in their process without first obtaining a permit modification. A violation notice will be issued to Fletcher Precision Painting for violation of PTI No. 161-17, EUSOLVENT, S.C. I.1, S.C. II.1 and Rule 201.

NAME

DATE 05/19/2021

SUPERVISOR

