

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

P060552668

FACILITY: Premier Finishing, Inc.		SRN / ID: P0605
LOCATION: 3682 Northridge Avenue NW, Suite 10, WALKER		DISTRICT: Grand Rapids
CITY: WALKER		COUNTY: KENT
CONTACT: Andy Ribbens , President		ACTIVITY DATE: 03/04/2020
STAFF: Adam Shaffer	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Scheduled unannounced inspection.		
RESOLVED COMPLAINTS:		

Air Quality Division (AQD) staff Adam Shaffer (AS) arrived at the Premier Finishing, Inc. (PF) facility located in Walker, MI at 9:50 am on March 4, 2020 to complete a scheduled unannounced inspection.

### **Facility Description**

PF is a metal parts cleaning and finishing facility. The facility consists of two separate locations (3180 Fruit Ridge Avenue and 3682 Northridge Drive). In the previous inspection on July 7, 2016, it was determined by utilizing the AQD Policy and Procedure on Stationary Source Determinations (AQD-011) that the two buildings are one stationary source and will be evaluated together. PF is a true minor source of criteria pollutants and is in operation with Permit to Install (PTI) No. 77-15 for an aluminum anodizing line that is located at the Northridge Drive building location.

### **Compliance Evaluation**

Prior to entering the facility, offsite odor and/or visible emission observations were conducted for both locations. The weather conditions at the time of the inspection were mostly sunny skies, temperatures in the high 30's°F, and winds from the west/northwest at 10-15 mph. While observing the Fruit Ridge Avenue location no opacity or odors were observed / noted. While observing the Northridge Drive location, no opacity was observed. Due to the location of the site and direction of the winds, areas directly downwind could not be evaluated for odors.

Upon entering the Fruit Ridge Avenue location, AQD staff AS met with Mr. Andy Ribbens, President. Mr. Ribbens accompanied AQD staff AS on the inspection of both facility locations, answered site specific questions and provided requested records. Also, during the site inspection, AQD staff AS spoke with other PF staff on process specific operations. Following the inspection, AQD staff AS also spoke with PF's consultant on site specific items.

### **PTI No. 77-15**

#### **FGFUMESCRUBBER**

This flexible group is for the aluminum anodizing line consisting of 21 process tanks. Three tanks (EUCAUSTICETCH, EUANODIZE1, and EUANODIZE2) are vented to the ambient air via a fume scrubber system. All other process tanks and rinse tanks are vented to the in-plant environment.

Per Special Condition (SC) III.1, PF shall not operate any of the three tanks (EUCAUSTICETCH, EUANODIZE1, and EUANODIZE2) unless a malfunction abatement plan (MAP) has been submitted. The most recent MAP submitted was received by the AQD on July 9, 2015. The MAP was reviewed with PF staff during the site inspection. Per the MAP,

monthly monitoring and recording of the pressure drop across the scrubber system is required. The MAP also states to follow the applicable cleaning procedure if the pressure drop exceeds 2.5"-3.5". Pressure drop recordings were requested and provided back to January 2019. Though PF is not keeping track of maintenance records as stated in the MAP of the scrubber system, no major replacements have occurred in 2019. On a weekly basis PF staff spray water to rinse off the scrubber system balls (packing media) and on a quarterly basis the packing media is inspected, and an acid wash is used as necessary to further clean the media. Moving forward, this was implemented into the recordkeeping format for PF and an updated MAP was submitted. Spare parts were also observed for the scrubber system onsite.

The aluminum anodizing line and scrubber system was observed during the inspection. At the time of the inspection, a magnehelic gauge was located on the scrubber system and the pressure drop reading for the scrubber was 0.7"-0.8" of water column. As stated earlier, records were provided during the inspection back to January 2019. Pressure drop was being recorded once a month but switched over to being recorded weekly about halfway through 2019. Records reviewed show a pressure drop reading ranging from 0.8"-0.9" of water column. Based on the observations made during the inspection and the records reviewed, the scrubber system appears to be operating in a satisfactory manner and PF appears to be adequately keeping records of pressure drop readings.

At the end of the anodizing line is a dip tank containing a diluted concentration (4-6% by volume of water concentration) of polytetrafluoroethylene (PTFE). The dip tank was determined to have not been included in PTI No. 77-15. The tank is used for coating parts from the anodizing line, however, the company stated only 0.7 % of all parts processed in the anodizing line go through the dip tank. The parts, prior to entering the dip tank, are first dried off and are at about ambient temperature before being coated. Once coated the parts are then placed in a drying oven with the burner running at 220°F - 250°F and the oven drying chamber at about 120°F. PF purchased 20 gallons of PTFE material in December 2016 and have not purchased any additional PTFE material since then. It was later determined that 1.92 gallons of PTFE containing material have been used since the installation of the tank. After further review it was concluded that the PTFE dip tank is not a separate emission unit but appears to be an addition to the permitted anodizing line. A demonstration was provided by PF showing the installation of the PTFE tank is not a meaningful change. Upon initial review, errors were noted and an addendum to the demonstration was requested and provided with additional errors noted. Using the correct values identified in the addendum and comparing them to controlled potential to emit value calculations identified in the permitting process of PTI No. 77-15, it was determined that the addition of the PTFE tank doesn't appear to be a meaningful change and is potentially exempt per Rule 285(2)(b). Moving forward, it was discussed with PF staff on keeping track of usage rates of the PTFE material to determine if the potential to emit and associated meaningful change demonstration may need to be updated with more accurate values.

One stack is listed in association with FGFUMESCRUBBER and was observed during the site inspection. The stack was observed venting unobstructed vertically. Though the dimensions were not measured they appeared to be what is consistent in PTI No. 77-15.

### **Additional Observations**

- The black oxide line was observed in the Fruit Ridge Avenue location. Since the previous inspection, the line has been reconstructed and expanded in a location adjacent to the previous location. Additionally, a scrubber system has been installed and is controlling emissions from select tanks for this line. The black oxide line consisted of a

rinse tank, citric acid tank, phosphoric acid tank, hydrochloric acid tank, rinse tank, black oxide tank, and an emulsified oil tank (rust protectant). The scrubber system was observed in operation and controls the cleaner, acid, oil, and black oxide tank emissions before being vented outside. The remaining tanks are vented internally. Additionally, the magnehelic gauge for the scrubber system had a pressure drop reading of 0.1-0.3" of water column at the time of the inspection. Though the scrubber is controlling emissions, PF does not utilize the control when calculating monthly emission records. As previously identified, PF believes the black oxide line is exempt per Rule 290. Monthly emission records were requested and provided during the inspection. Based on the records provided, for the month of January 2020, 98.12 lbs of total toxic air contaminant (TAC) emissions were emitted for the black oxide line. Minor errors were identified when reviewing the safety data sheets (SDS) of materials used and comparing them to reported emissions. However, based on how low the monthly emissions are, the black oxide line still appears to be in compliance with Rule 290(2)(a)(ii). The errors identified were discussed with PF staff and moving forward will be addressed appropriately.

- Various metal cleaning/surface treatment operations were observed in both building locations including a smaller metal cleaning line observed in the Northridge Drive location. Any emissions from the operations observed are vented internally and appear to be exempt per Rule 285(2)(r)(i) or 285(2)(r)(iv).

### Conclusion

Based on the review of the records provided and observations made at the time of the inspection, PF is in compliance with PTI No. 77-15 and applicable air pollution control rules.

NAME Adam Shaffer

DATE 5-21-20

SUPERVISOR 

