

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

B279361657

<b>FACILITY:</b> VALLEY CITY PLATING	<b>SRN / ID:</b> B2793
<b>LOCATION:</b> 3353 EASTERN SE, GRAND RAPIDS	<b>DISTRICT:</b> Grand Rapids
<b>CITY:</b> GRAND RAPIDS	<b>COUNTY:</b> KENT
<b>CONTACT:</b> Dave Pelletier , Engineering Manager	<b>ACTIVITY DATE:</b> 01/12/2022
<b>STAFF:</b> April Lazzaro	<b>COMPLIANCE STATUS:</b> Compliance
<b>SUBJECT:</b> Unannounced, scheduled inspection.	<b>SOURCE CLASS:</b> SM OPT OUT
<b>RESOLVED COMPLAINTS:</b>	

Staff, April Lazzaro arrived at the facility to conduct an unannounced, scheduled inspection and met with Dave Pelletier, Engineering Manager/Environmental Compliance Officer. No odors or visible emissions were noted upon arrival. This facility is located in an Environmental Justice (EJ) area as identified using the Environmental Protection Agencies EJSCREEN which is an Environmental Justice Screening and Mapping Tool.

#### FACILITY DESCRIPTION

Valley City Plating is a metal furniture, motorcycle and gaming parts finishing operation that conducts chrome, brass and antique finishing. Metal parts coating operations are also conducted as needed. Equipment on site consists of two plating lines, four lacquer spray booths (only two in use) and buffing and polishing operations. The chrome plating tank is permitted pursuant to Opt-out Permit to Install No. 256-05A, which also limits Hazardous Air Pollutants facility-wide. The chrome plating tank is also subject to 40 CFR Part 60 Subpart N, National Emission Standards for Chromium Emissions From Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks. The pneumafil model 8.85-156-8 bag filter collector on the polishing equipment is permitted pursuant to PTI No. 683-80.

The Valley City Plating facility has not used a PFOS based mist suppressant since 2015.

Valley City Plating Company operates a 12-hour shift and employs approximately 40 people. Over the next couple years, Nathan Provo, a chemist who runs the lab will be taking over the environmental reporting and recordkeeping responsibilities for Mr. Pelletier who will be reducing his hours.

#### COMPLIANCE EVALUATION

PTI No. 256-05A

#### EUCHROME1

This is a manual hoist style decorative chrome electroplating line utilizing mist suppressant to control chrome emissions. The permit only covers the chrome electroplating tank and none of the ancillary plating line tanks. There is no scrubber controls at this facility for any of the plating tanks. The chrome plating tank is limited to an emission limit of 0.007 mg/dscm total chromium, and testing is not being required at this time. A mist suppressant is used to keep the surface tension below the limit of 40 dynes/cm by stalagmometer as required by 40 CFR Part 60 Subpart N. Surface tension records were requested and reviewed for 2021 and they

were found to demonstrate compliance with both the 40 dyne/cm limit and the sampling frequency requirement of once every 40 hours of tank operation. (see attached) Previously, Mr. Pelletier has indicated that tank replacement is conducted every 8-10 years. I have informed him that per the Subpart N, this may be considered a new emission unit and tank replacement requires new notifications etc. The chrome tank rectifier has not been replaced and is still rated at 10,000 amps. There is a backup, but it is smaller and cannot operate at the same time the larger one can and is used only in emergencies. The current mist suppressant used at the facility is a PFOS free product named Benchbrite CR-1800 and is on the “approved” for use list established by the California Air Resources Board in 2016.

The chromium tank was visually observed, including the two adjacent chrome reclaim tanks that are internally vented.

#### **FGFACILITY**

The entire facility is limited to less than 9.0 tons of individual Hazardous Air Pollutant (HAP) per 12-month rolling time period as determined at the end of each calendar month. The highest HAP emitted is toluene with reported emissions for the timeframe of January – December 2021 is 1.75 tons. The facility is limited to less than 22.5 tons of aggregate HAPs per 12-month rolling time period as determined at the end of each calendar month. The total reported HAP emissions for the timeframe of January – December 2021 is 1.97 tons. Total chromium emissions for the same timeframe are reported at 0.85 pounds or 0.0004 tons.

Valley City Plating is appropriately maintaining records of all coatings and materials used monthly on a spreadsheet. Requested records were provided timely and are attached.

#### **PLATING LINE REVIEW**

The remainder of the tanks in the chrome electroplating line were identified as exempt in a 2005 report that Valley City Plating submitted to the AQD. The externally vented tanks operate per Rule 290 and the internally vented tanks (including all nickel tanks) per Rule 285(2)(r). During the last compliance inspection, AQD staff requested information on the proprietary ingredients being used in the nickel plating tank mist suppressant. This information was received from the manufacturer and did not appear to need additional review. The proprietary information was destroyed at the request of the company rather than be returned.

There is also a specialty plating line that was identified as exempt in the 2005 report. The externally vented tanks operate per Rule 290 and the internally vented tanks (including all nickel tanks) per Rule 285(2)(r).

Mr. Pelletier stated that no changes have been made to the tanks or ventilation equipment.

#### **PTI No. 683-80**

The pneumafil baghouse was observed from the outside on the ground. The facility is using the cyclone as an air pre-cleaner of the polishing particulate before the baghouse. The unit looked in good condition. The permit limits opacity to 20% and

emission to 0.10 pounds per 1,000 pounds exhaust gases. No visible emissions were observed and testing will not be required at this time.

#### ADDITIONAL REVIEW

There are three small internally vented baghouse used for control on the hand buffing and polishing equipment. This equipment is exempt per Rule 285(2)(l)(vi).

Two externally vented spray booths are currently in use and are commonly referred to as the Grill and Furniture booths. Each booth operates per the Rule 287(2)(c) exemption as identified in the 2005 submittal. Overall, the usage of paint is less than 200 gallons per month, and Valley City Plating is maintaining usage on a per booth basis. The booths are also subject to the limitations contained in Rule 621 wherein the emission rate of VOC must be below 2,000 pounds per month and 10.0 tons per year. The combined VOC emission rate from all metallic surface coating lines shall not exceed 30.0 tons per year. These values are being met, and compliance demonstrated through the attached recordkeeping. The highest month of usage was September 2021 with 87 gallons and 77 gallons of paint used in the Grill and Furniture booths respectively.

During a visual inspection of the booths, I commented that filter placement could be improved upon. Mr. Pelletier immediately addressed my concerns.

The facility has begun to utilize an old paint booth for painting of automotive bumpers. This booth is filtered for particulate before being vented internally to the in-plant environment. Records of coating usage is being maintained and the booth is exempt per Rule 287(2)(c). The highest month of usage was July 2021 with 16 gallons of coating used.

The strip tank that is located in the main spray booth area was being maintained with the lid closed. This tank is exempt per Rule 290 and monthly emissions are calculated as required. The highest monthly emission rate was 262.60 pounds in September 2021.

#### CONCLUSION

Valley City Plating was in compliance at the time of the inspection.

NAME April Lazzaro

DATE 01/31/2022

SUPERVISOR HH