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

B279343883		
FACILITY: VALLEY CITY PLATING		SRN / ID: B2793
LOCATION: 3353 EASTERN SE, GRAND RAPIDS		DISTRICT: Grand Rapids
CITY: GRAND RAPIDS		COUNTY: KENT
CONTACT: Dave Pelletier, Engineering Manager		ACTIVITY DATE: 03/28/2018
STAFF: April Lazzaro	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Unannounced, scho	eduled inspection.	· · · · · · · · · ·
RESOLVED COMPLAINTS:	· · · ·	

Staff, April Lazzaro arrived at the facility to conduct an unannounced, scheduled inspection and met with Dave Pelletier, Engineering Manager/Environmental Compliance Officer.

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.

I informed Mr. Pelletier that part of the inspection was to gain information on the facilities historic use of mist suppressant that contains perfluorooctane sulfonic acid (PFOS) CAS # 1763-23-1 as part of the AQD PFOS inspection initiative. The facility has not used a PFOS based mist suppressant since 2015.

Valley City Plating Company operates a 12-hour shift and employs approximately 50 people.

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. An evaluation of the surface tension records were requested and reviewed for the past two years and they were found to demonstrate compliance. (see attached) According to Mr. Pelletier, tank replacement is conducted every 8-10 years. I informed him that per the Subpart N, this is 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. A roof top inspection was also conducted to observe the condition of the stacks. The chrome tank stack was clean, with no evidence of chromium upset on the stack or on the roof. (see attached photos)

FGFACILITY

The entire facility is limited to less than 9.0 tons of individual Hazardous Air Pollutant (HAP) per 12month 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 March 2017-February 2018 is 2.65 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 March 2017-February 2018 is 3.06 tons. Total chromium emissions for the same timeframe are reported at 0.6 pounds or 0.0003 tons.

Records were requested and provided timely. I discussed with Mr. Pelletier the difference between a Safety Data Sheet and formulation data, which is required for compliance. Mr. Pelletier was able to provide AQD with information sheets that showed the actual percent of each chemical contained in the coatings, and as such was determined compliant. Valley City Plating should add an annual review of the coating VOC content to ensure information is accurate.

Valley City Plating is only keeping track of "stain" use, with one HAP content. The highest month of usage of total stain in 2017 was 5.75 gallons, however Valley City Plating should keep track of each separately.

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). 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 information was destroyed.

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). Photos taken on the roof which include the specialty line stacks are attached.

I requested tank replacement information to ensure that there have been no recent replacements, and Mr. Pelletier provided that in an e-mail. (attached) It would appear that there have been no recent changes to either line and the tanks. Mr. Pelletier also confirmed that there have been no tank ventilation changes since the 2005 exemption demonstration submittal.

PTI No. 683-80

The pneumafil baghouse was observed from the outside on the ground level as well as the ductwork on the roof. The facility is still using the old cyclone as an air pre-cleaner of the polishing particulate before the baghouse. The unit looked in good condition, and Mr. Pelletier stated they would like to maintain the permit, which limits opacity to 20% and emission to 0.10 pounds per 1,000 pounds exhaust gases. No testing will be required at this time.

CONSENT ORDER No. 32-2000

This consent order was issued on December 14, 2000 and includes all equipment at the facility. Mr. Pelletier has requested via e-mail that the consent order be terminated. Since Valley City is in compliance following this inspection the request will be sent to Lansing for completion.

ADDITIONAL REVIEW

There is a second small internally vented baghouse used for control on some of the polishing equipment. This is exempt per Rule 285(2)(I)(vi) as identified in the 2005 submittal.

Two spray booths are currently in use and are commonly referred to as the Grille 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. Additional information was collected and will be attached on various plating line installation and replacement information and is attached. Valley City Plating should continue to be aware of the possible replacement and need for re-permitting of the line should changes occur.

The strip tank that is located in the spray booth area was being maintained with the lid closed. This is exempt per Rule 290 as identified in the 2005 submittal.

CONCLUSION

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

DATE 4-710-18

SUPERVISOR