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

N278751155

FACILITY: ELECTRO CHEMICAL FINISHING		**SRN / ID:** N2787
LOCATION: 2610 REMICO S W, WYOMING		**DISTRICT:** Grand Rapids
CITY: WYOMING		**COUNTY:** KENT
CONTACT: Kyle Thaxton , EHS Specialist		**ACTIVITY DATE:** 10/29/2019
STAFF: April Lazzaro	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** MINOR
SUBJECT: Unannounced, scheduled inspection.		
RESOLVED COMPLAINTS:		

Staff, April Lazzaro arrived at the facility to conduct an unannounced inspection and met with Eric Vaughn and Kyle Thaxton. I learned that Mr. Thaxton has continued in his role as the environmental contact for each facility. Both accompanied me on the inspection of the facility.

FACILITY DESCRIPTION

Electro Chemical Finishing (ECF) is a Decorative Chromium electroplating facility that provides plating services to the automotive, housewares and plumbing industries. The facility has replaced three large scrubbers and one small scrubber with brand new units. The facility is subject to PTI 584-91D, 40 CFR Part 63 Subpart N- National Emission Standards for Chromium Emissions From Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks (NESHAP), Consent Order No. 4-2016 and permit exemptions.

It was determined that no changes to the fume suppressant have been made and they are still using the Macuplex STR NPFX made by MacDermid. This has been confirmed to be free of perfluorooctane sulfonic acid (PFOS) and is NESHAP compliant.

FACILITY OBSERVATIONS

EUALINE

The EUALINE is a decorative chrome electroplating line containing one hexavalent chrome and two trivalent chrome electroplating tanks. It has its own dedicated scrubber which is a composite mesh pad (CMP) system. Scrubber pressure drop readings recorded during the inspection were as follows: Stage 1- 0.4" H_2O, Stage 2- 0.9" H_2O, Stage 3- 1.3" H_2O and overall pressure drop was 2.3" H_2O. Pressure drop readings are comparable to last year's readings, and within the ranges established in the O&M Plan. The decorative chrome plating that occurs on EUALINE is limited to 4,000 hours of operation per year based upon a 12-month rolling time period as determined at the end of each calendar month. The current 12-month rolling hours of operation through September 2019 are 5 hours.

EUBLINE

The EUBLINE is an electroless nickel preplating process. The two chromic acid etch tanks are connected to the EUCLINE packed bed scrubber. The remaining tanks of EUBLINE for the electroless nickel process are vented to the EUBLINE CMP scrubber. Scrubber pressure drop readings recorded during the inspection were as follows: Stage 1- 0.5" H_2O, Stage 2- 0.15" H_2O, Stage 3- 1.0" H_2O, Hepa Filter- 0.8" H_2O and overall pressure drop was 2.6" H_2O. Pressure drop readings are comparable to last year's readings, and within the ranges established in the O&M Plan. The EUBLINE operations are limited to 4,000 hours of operation per year based upon a 12-month

rolling time period as determined at the end of each calendar month. The current 12-month rolling hours of operation through September 2019 are 1,615 hours.

EUCLINE

The EUCLINE is a decorative hexavalent chrome electroplating line containing one decorative chrome plating tank that is ducted to the EUCLINE packed bed scrubber. The remaining tanks of EUCLINE are ducted to the EUBLINE CMP scrubber. The EUCLINE scrubber pressure drop reading recorded during the inspection was 0.7" H_2O. The magnehelic gauge has been replaced since the last time and was operational at the time of the inspection. Water flow was recorded at 70 gallons per minute. These readings are within the ranges established in the O&M Plan. This is the only large scrubber that has yet to be replaced. There are areas where maintenance has been conducted to weld failing seams. The company is considering replacement of this unit as well.

EUSLDGDRYER

The EUSLDGDRYER is a packed column scrubber to control emissions from the electric sludge dryer. The pressure drop was 0.4" and the water flow is non-variable at 9 gpm. The dryer was not in operation at the time of the inspection and ECF was in the process of cleaning up a blueish colored liquid off the floor in that area.

The EUNITRIC line is not in the permit, but the scrubber has been replaced. During the previous inspection I noted that the fan was vibrating and unbalanced. This was not the case during this inspection, and the fan sounded in good shape. This unit operates pursuant to a Rule 290 one-time demonstration. (see file) The maximum uncontrolled emissions calculated based on capacity as provided by the consultant is 909.1 lbs of nitric acid and 18.2 lbs of sulfamic acid per month. The reported maximum controlled emissions calculated based on capacity as provided by the consultant is 46.4 lbs of nitric acid and 0.9 lbs sulfamic acid per month. These demonstrate compliance with Rule 290.

The Waste Treatment Scrubber is not part of the permit as the waste-water treatment equipment is exempt from permitting via Rule 285(2)(m) with minimal emissions. A packed bed scrubber to control emissions and odors from the waste treatment tanks. The media in the scrubber was discolored and showing growth of an unknown origin, which is apparently typical for this unit. Mr. Vaughn had previously checked with the manufacturer who said that the growth wasn't bad enough to affect the particulate control and they monitor the pressure drop closely. Instead of cleaning and putting the media back in, they just replace it. The pressure drop was 1.0". This reading was within the ranges established in the O&M Plan.

A visual inspection of each scrubber was conducted, and there were no apparent visual signs of structural issues or leaks.

Surface tension records were obtained and there were no reported exceedances for the time period evaluated.

The halogenated solvent degreaser was empty, and the company has rendered it inoperable so that they can discontinue reporting for the Halogenated Solvent Degreaser NESHAP found in 40 CFR Part 63 Subpart T. The wiring has been physically removed from the 480 volt power supply on the wall and would require an electrician

and additional work to reconnect. Additionally, it was verified that the tank is empty as evidenced by the attached picture. Electro Chemical Finishing will be removed from the list of facilities subject to 40 CFR Part 63 Subpart T.

I requested all maintenance records that the O&M Plan requires for the quarterly scrubber inspections. These were signed off by a current long-time employee that had misrepresented records in the past. I noted that these inspection logs were not signed off by a supervisor in the space allowed. I emailed Mr. Thaxton to state that the logs need to be signed by a supervisor, but more importantly the activities and maintenance on the scrubbers must be overseen to ensure it is completed properly.

Eric, Kyle and I discussed the possibility of voiding the Administrative Consent Order (ACO). AQD Order no. 4-2016 is a multi-media ACO that includes requirements for the AQD, the Water Resources Division and the Office of Waste Management and Radiological Protection, (now the Materials Management Division). The language of the ACO states that the order will remain in effect until all the requirements have been met and the company requests that the AQO be terminated. I provided Mr. Vaughn and Mr. Thaxton with a copy of the order and the language for termination was identified. They would like to submit a letter to terminate the AQD soon. Based on this inspection, the AQD would support termination of the ACO.

Electro Chemical Finishing currently has a permit in house to remove the hexavalent chromium tank from EUALINE and replace it with a new tank and use trivalent chromium instead. This is an emissions reduction activity. In the permit application, the company submitted an initial notification of construction form signed by the owner. This form did not include estimated dates for tank installation, so the form will need to be resubmitted. The tank replacement is planned for the Thanksgiving holiday shutdown.

The Ongoing Compliance Status Report was requested and received. I requested that Mr. Thaxton review page 2, Box 6 and circle the appropriate selection. This was received and Electro Chemical Finishing has stated that there have been zero excess emissions and that they followed all work practices required by the NESHAP.

See attached for referenced recordkeeping required by the permit and O&M Plan.

CONCLUSION

Electro Chemical Finishing was in compliance at the time of the inspection.

NAME [signature] DATE 10-30-19 SUPERVISOR [signature]