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

N652041770

FACILITY: ELECTRO CHEMICAL FINISHING		SRN / ID: N6520
LOCATION: 379 44TH ST SW, WYOMING		DISTRICT: Grand Rapids
CITY: WYOMING		COUNTY: KENT
CONTACT: Jonathan Vruggink , Environmental Specialist		ACTIVITY DATE: 08/31/2017
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, scheduled inspection. I had called Steve Hulst who works out of the Remico Street location however I could not get through to him. I also called John Vruggink but got his voice mail. In the meantime, I met with Eric at the facility who I told I was there for an inspection, so he started to show me around the facility.

FACILITY DESCRIPTION

This facility is a miscellaneous parts plating facility that operates under Permit to Install 288-98. The equipment described in the application that are permitted are as follows: nine plating lines which include, one decorative hexavalent chrome plating tank subject to the Chrome Plating NESHAP, 40 CFR 63, Subpart N, nitric acid stripping tanks and other metals plating, a sludge dryer and a buffing operation. The permit covers emissions from three large wet scrubbers that are externally located that are referred to as the north, middle and south scrubber as well as the small venturi scrubber on the sludge dryer. The facility has discontinue using the trichloroethylene vapor degreaser that is subject to the Halogenated Solvent Degreaser NESHAP, 40 CFR 63 Subpart T. The unit is still located on-site, but Mr. Vruggink stated that it is empty. The facility submitted the annual certification in January 2017, and even though it is out of service, they should continue to submit until the unit is removed from the facility.

COMPLIANCE EVALUATION

As Eric and I walked around, it was determined that the middle scrubber had been removed. The plating tanks are no longer vented externally for that process, and the ductwork is not connected to a fan.

The Operations and Maintenance (O&M) Plan details the variables to be monitored and the acceptable parameters. We looked at the south scrubber monitoring system and recorded the data observed. The minimum acceptable water flow is 50 gallons per minute (gpm). The water flow at the time of the inspection was 55.3 gpm. Additionally, the low liquid level alarm was evaluated. They have replaced the probe style with a float style monitor because the probe would get covered with scale. The acceptable range for pressure drop of the scrubber is 0.5-4.5" water. The pressure drop at the time of the inspection was 0.6" water. This is within the acceptable range, but close to being too low. A review of the daily scrubber inspection form requested showed that daily records are being adequately maintained. The data collected was within the parameters identified in the O&M Plan.

The north scrubber monitoring system acceptable water flow is a minimum 30 gpm. The water flow at the time of the inspection was 36-39 gpm. This unit has also been retrofit with a float style low liquid level alarm. The acceptable range for pressure drop of the scrubber is 0.25-4.25" water. The pressure drop at the time of the inspection was 3.8" water.

We went outside to conduct a visual inspection of the control devices. Visually, I did not detect any leaks of liquid or hear air flow leaks during the observations.

We continued past the sludge dryer. It is a cake press with venturi control. I noticed an area of corrosion at the venturi inlet nozzle and pointed it out. The exhaust portion of the venturi looked acceptable. It was not in operation at the time of the inspection. This was about how it looked during the last inspection, and structurally appeared ok. I told Mr. Vruggink that I noted the corrosion during the last inspection, and warned of a seal failure.

Records requested from Mr. Vruggink included the most recent Notification of Compliance Status (NOCS) which only has to be kept on site and provided upon request. He stated it was at 44th street and he would e-mail it. I also asked for copies of the daily O&M Plan sheets for the month of February 2017 and from the last 2 quarterly inspections.

These were provided and it was determined that the O&M Plan was appropriately followed, the NOCS reports compliance and there were no surface tension limit exceedances during the time period reviewed. Records are attached.

The SDS for the chrome plating tank fume suppressant was requested. The SDS identified a proprietary ingredient in the hazard section. In the most recent NESHAP revision, the use of perfluorooctane sulfonic acid (PFOS) is specifically excluded. The AQD has been specifically verifying compliance with this provision to ensure PFOS is not going to the municipal waste water treatment plants. The product used at Electro Chemical Finishing is called Macuplex STR NPFX made by MacDermid. In the hazardous ingredients section of the safety data sheet it lists "surfactant 5-15% as proprietary". MacDermid would not tell Electro Chemical Finishing staff what the proprietary ingredient is. AQD does not allow for the claim of proprietary when the chemical in question needs to be identified to determine compliance with the Clean Air Act and the Michigan Air Pollution Control Rules, however it can be kept confidential. After numerous email and telephone refusals by staff at MacDermid, they finally provided the name of the surfactant. It was determined to not be the specific CAS # for PFOS, and therefore a slightly different chemical. The identification of this chemical is in the confidential file.

CONCLUSION

The Electro Chemical Finishing 44th Street facility was in compliance at the time of the inspection.

NAME [signature] DATE 9-29-17 SUPERVISOR [signature]