DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: Self Initiated Inspection

A257538884

FACILITY: Advance Plating & Finishing, Inc.		**SRN / ID:** A2575
LOCATION: 840 Cottage Grove, GRAND RAPIDS		**DISTRICT:** Grand Rapids
CITY: GRAND RAPIDS		**COUNTY:** KENT
CONTACT: Don Campbell , Quality Manager		**ACTIVITY DATE:** 03/02/2017
STAFF: April Lazzaro	**COMPLIANCE STATUS:** Non Compliance	**SOURCE CLASS:** MINOR
SUBJECT: Unannounced, self-initiated inspection.		
RESOLVED COMPLAINTS:		

Staff, April Lazzaro arrived at the facility to conduct an unannounced, self-initiated inspection and met with Don Campbell, Quality Manager. Advance Plating & Finishing Inc. (APF), operates a zinc and zinc nickel metal parts electroplating line providing finishing to metal automotive and furniture products. Mr. Campbell stated that APF has not conducted any chromium electroplating since 2015.

AQD staff had not conducted an inspection at this facility since May 2007. At the time of the inspection, the facility was conducting zinc and trivalent chromium electroplating that was internally vented.

AQD file review indicates that from 2007-2015 the site was subject to the National Emissions Standard for Hazardous Air Pollutants (NESHAP) for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing. According to the NESHAP, decorative trivalent chromium plating bath that incorporates a wetting agent as a bath ingredient does not have to submit annual reports as stated in 63.347(i). The facility has been marked as a Category III fee subject facility, and as such has been paying fees to the AQD. According to Mr. Campbell, APF no longer conducts trivalent chromium electroplating or any other subject activity. As such, AQD has formulated a letter to the company representative and owner Orlando Stephenson stating that they will be refunded the 2016 fees.

After a first walk through, that was very quick, a discussion in the office took place between me and Mr. Campbell. Due to a discrepancy in observations of a drum containing plating sludge that was not covered or labeled, we were joined by Allen Wegley, Senior Maintenance Director and we proceeded to do a second walk through. Mr. Campbell clarified that even though their website states they do chromium and nickel plating they have not done either in over two years. I expressed confusion over that statement, because presumably, nickel is contained in the zinc nickel electroplating tank. I asked for clarification in an e-mail and was informed that zinc nickel plating does contain nickel but at a lower concentration than zinc overall. During the walk around, we did confirm that an uncovered, unlabeled drum of plating sludge was observed. This had been an issue during a prior inspection with Office of Waste management and Radiological Protection staff Reed Sneller. Mr. Wegley indicated they would address that immediately.

The line consists of the preparation solutions, rinses, acid, zinc electroplating and zinc nickel electroplating followed by rinses and sealing and a final drying stage. The tanks exhaust to the general in-plant environment, except for the zinc and zinc nickel electroplating tanks, where there is a fan assist exhaust directly over them. It is approximately 13.5' above the electroplating tanks, and the exhaust unit extends approximately 5-7' above the roof and vents horizontally. A discussion of the exhaust and whether or not it was installed and intended to vent emissions from the tanks was conducted. Based on that discussion, it became clear that the unit is exhausting emissions from the zinc and zinc nickel electroplating tanks to the ambient air.

Mr. Campbell was able to provide a process diagram and SDS information for the entire line, which he identified as confidential. At this time, it will be treated as such. For clarification, I contacted Robert Sills, head of the AQD Air Toxics Unit for information on the nickel sulfate used in the zinc nickel electroplating tank. Nickel is considered an air toxic and a carcinogen and I wanted to check on the specific type of nickel used at APF. Mr. Sills informed me that this nickel should be regulated as a nickel compound under CAS # 7440-02-0. Mr. Sills indicated that due to the IRSL for nickel of 0.0042 ug/m2, the Rule 290 Permit to Install exemption is not an option. Rule 291 is a possible option; however the combined potential emissions cannot exceed 0.006 tons per year. Emissions of air contaminants from this line are currently unknown.

Advance Plating & Finishing Inc. is in violation of Rule 201 for failure to obtain a Permit to Install for the zinc nickel electroplating process. A Violation Notice will be issued.

NAME _____ DATE 3-15-17 SUPERVISOR _____