## DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

**ACTIVITY REPORT: Scheduled Inspection** 

B613848336

FACILITY: PLASTIC PLATE INC		SRN / ID: B6138
LOCATION: 1648 MONROE AVENUE NW, GRAND RAPIDS		DISTRICT: Grand Rapids
CITY: GRAND RAPIDS		COUNTY: KENT
CONTACT: Karen Baweja , Supervisor of Air Quality		ACTIVITY DATE: 02/14/2019
STAFF: April Lazzaro	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Unannounced, sc	heduled inspection.	
RESOLVED COMPLAINTS:		

Staff, April Lazzaro invited the Department of Environmental Quality Pollution Emergency Alert System Administrator and the Assistant Health and Safety Coordinator, Dana Bradt, to join me on a scheduled inspection at the facility. I called the company contact, Karen Baweja at 3:05 PM the day prior to let her know we were going to be there at 9:00 AM the next morning. Ms. Baweja's office is not at this location and I wanted to ensure she was there when we got there. This is still considered an unannounced inspection.

There were several additional Lacks staff that joined us for the inspection, including: Jim Morrisey, Forou Zandeh, Jeff Merryman, Mike and Mark.

## **FACILITY DESCRIPTION**

The Lacks Plastic-Plate, Inc. Monroe Facility conducts chromium electroplating onto plastic automotive parts. This facility had closed but recently was revamped and reopened. As part of the inspection, I requested a cost determination of repairs and replacements to aid in determining whether or not reconstruction has occurred. This plant is currently operating one shift four days a week.

The plating line consists of the equipment as described in the Emission Unit Summary Table. EU-CHROME: one chrome etch tank (3 bays), two decorative chrome plating tanks, one purification tank and one evaporator /reclaim unit. This EU is controlled by a composite mesh pad scrubber.

EU-CATALYST: one catalyst tank (2 bays) and one accelerator tank (1 bay)

EU-ELECTROLESS: Electroless copper or electroless nickel process consisting of one tank (up to 4 bays) There have been zero hours of electroless copper operation at the facility. This EU is controlled by a packed bed scrubber with a mist eliminator.

EU-NITRICSTRIP: one nitric acid strip tank (2 bays). This EU is controlled by a packed bed scrubber with a mist eliminator.

EU-NICKELPLATE: exempt nickel plating tanks including two satin nickel tanks, three semi-bright nickel tanks (6 bays), two bright nickel tanks (2 bays each) and one particle nickel tank.

EU-CONDITIONER: one tank used to condition the plastic parts prior to plating.

## **COMPLIANCE EVALUATION**

The compliance evaluation began on the roof of the facility, where we learned that the stairs and railing had not been installed on the control device platform, so Mr. Morrissey and I used a regular ladder to access the platform. A visual inspection of each control device and ductwork was conducted. A small spot of staining was visible in the snow below the inlet to the chrome scrubber. Upon closer visual inspection, the origin of the small brown spot could not be identified as the area above it was dry and clean and there were no visible cracks. Ms. Baweja indicated that they believe the staining occurred when the pads were pulled for routine cleaning which had been done very recently prior to the inspection. (see attached email)

Inside the facility we observed the plating line from behind a drip shield, and no specific ventilation or operational issues were noted.

We went to the lab to get the most recent surface tension data for the chrome tanks. These tanks demonstrate compliance with the Chrome NESHAP through the pressure drop of the control device.

Chrome 1: 37.8, 38.4, 36.6, 38.1 dynes (target 37) Chrome 2: 38.5, 38.4, 38.1, 39 dynes (target 37)

Chrome etch: 37, 40, 49 (target 47)

The pressure drop and flow data for each control device was observed, and compared with the values as presented in the Malfunction Abatement Plan (MAP) as revised on October 1, 2018.

The chrome scrubber overall pressure drop was 3.86"  $H_2O$  and within the appropriate range as identified in the MAP. Stage 1 has an hourly washdown, Stage 2 has a washdown daily at 8:30 AM and Stage 3 has a manual washdown weekly after product is done being run through the line. Each wash down is between 51-54 gpm which is within the appropriate range as identified in the MAP. This unit is identified in the Lacks system as MP1.

The nickel scrubber is identified as MP3, and the current bleed off was 6.7 gpm, flow was 111 gpm and the pressure drop was 1.14"  $H_2O$ . These are within the appropriate range as identified in the MAP.

The nitric scrubber is identified as MP4, and the current bleed off was 4.59 gpm, flow was 102 gpm and the pressure drop was 1.007"  $H_2O$ . These are within the appropriate range as identified in the MAP. I asked about any recent "red" alarm status points for the chrome scrubber in the past month, and one was identified. This was because as part the monthly PM to ensure the alarms were working properly. This is documented in the system, and at no time was a scrubber down.

Lacks plans to stack test each scrubber once all replacements have been conducted and the testing can be done all at once. It is suggested that Lacks submit a test plan for AQD approval so the results are accepted.

At the time of report completion, Ms. Baweja was still working on the reconstruction demonstration, so that was not a part of the inspection compliance determination and will be evaluated upon receipt.

## CONCLUSION

Lacks Plastic-Plate, Inc. Monroe Facility was in compliance at the time of the inspection. See attached for documentation to support the compliance determination.