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

N186329313

FACILITY: Lapeer Plating & Plastics, Inc.		SRN / ID: N1863			
LOCATION: 395 DEMILLE RD., LAPEER		DISTRICT: Lansing			
CITY: LAPEER		COUNTY: LAPEER			
CONTACT: Kenneth Smith, Environmental Coordinator		ACTIVITY DATE: 04/29/2015			
STAFF: Nathaniel Hude	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: SM OPT OUT			
SUBJECT: Inspection of permitted equipment. EU-CHROMEPLATE32: scrubber in-op, dynes/cm measurements out of compliance 7					
days during March and April; EU-CHROMEETCH: 3 magnehelic gauges out of compliance ranges, leak at entry of scrubber; FG-					
COATING: no pressure test caps for HPLV.					
RESOLVED COMPLAINTS:					

Inspection Report

N1863- Lapeer Plating and Plastics

395 Demille Road, Lapeer, Michigan

Inspection Date:

4/29/15

Facility Contacts:

Larry Gatt, CEO – <u>gattl@lpp-inc.com</u> Kenneth Smith, Environmental Coordinator - <u>smithk@lpp-inc.com</u> Sam Daniel, Mfg. Engineer Environmental – <u>daniels@lpp-inc.com</u> Mike Schumacher, Manufacturing Engineer

MDEQ AQD Personnel:

Nathan Hude – <u>huden@michigan.gov</u>, 517-284-6779 Brian Culham (retired as of 5/8/15) – culhamb@michigan.gov, 517-284-6633

Facility Description:

Formerly Deco'Plate Manufacturing, Lapeer Plating and Plastics, Inc. (LPP) is a decorative chrome and paint shop. They produce products for the automotive industry such as hood ornaments and trim. LPP has approx. 400 employees and work 3 shifts per day, 6 days a week on the paint and chrome lines and 3 shifts per day 7 days per week for the mold line.

The facility once held a ROP, but has since reduced its VOC emissions and is now an Opt-Out. Because Lapeer Plating and Plastics has taken facility wide restrictions to opt-out of the Renewable Permit Program they are still required to report emissions to MAERs. Because the plating line is subject to MACT Subpart N, LPP will be required to pay a Category III fee.

Applicable Regulations:

- 1. MI-PTI-25-13
- 2. General PTI 11-13
- 3. 40CFR63 Subpart N

An ROP is not required for a source subject to this MACT unless the source is otherwise obligated to obtain a permit under 40 CFR part 70 or 71.

Key Concerns:

EU-CHROMEPLATE32

- 1. Composite Mesh Pad (CMP) Scrubber inoperative
- 2. CMP Scrubber Maintenance records unavailable for inspection
- 3. Surface tension measurements above 33 dynes/cm

EU-CHROMEETCH

- 1. System 1 Chrome Mist Eliminator "Stage #1 D.P." Magnehelic gauge reading of 0.0 out of compliance range
- 2. System #5 Etch Dual Stage, Stage 1 Magnehelic gauge reading of 0.0 out of compliance range

- 3. System #5 Etch Dual Stage, Total DP Combined Magnehelic gauge reading of 0.15
- 4. Packed Bed / CMP scrubber Maintenance records unavailable for inspection
- 5. Evidence of leak in duct at entry point of Packed Bed / CMP scrubber

FG-COATING

1. HPLV test caps not used in past or available on site.

Emission Unit Summary Table

Emission Unit ID	Emission Unit Description	Flexible Group ID		
EU-CHROMEPLATE32	Decorative chromium electroplating tank #32	NA		
EU-CHROMEETCH	One pre-etch tank (#1) and one etch tank (#2)	NA		
EU-COPPERTANKS	One copper strike tank (#14) and five bright acid copper tanks (#15 through #19)	FG-NONCHROMEPROCESS		
EU-ACTIVATORTANKS	One activator tank (#7), one accelerator tank (#9) and one electroless copper tank (#11)	FG-NONCHROMEPROCES		
EU-NEUTRALIZERTANKS	One neutralizer tank (#5) and one copper - nickel strip tank (#39)	FG-NONCHROMEPROCESS		

Inspection Summary

Brian Culham and I arrived at Lapeer Plating and Plastics, Inc. at 11:00. Our original meeting time was 1:00, but we finished our previous inspection early and stopped to see if we could perform our inspection early. The receptionist contacted Ken Smith and he accepted our early arrival.

Ken met us in the lobby and took us back to a meeting room where the three of us sat down. After introductions, Brian informed Ken on what we would be inspecting throughout our visit.

Brian discussed the NESHAP 40CFR63 Subpart N reporting and stated that we had not received their latest copy of the report 2nd semi-annual 2014. Ken retrieved a copy and thought he had submitted it. Upon return to the office, we found that we did not receive the report. I sent a email to Ken on 5/4/15 requesting a copy of the report. This report later found at the office in the file, yet was not logged in MACES.

The 40CFR63 Subpart N requires an "Ongoing Compliance Status Report" to be submitted every 6 months for the chrome plating tank (EU-CHROMEPLATING32). The report was last received March 3, 2015. All reports identified compliance. Below is a summary of the reports received 2010 to the present:

Period/Year	1Acceptable Emission Limit	1Monitored Value	2Acceptable Emission Limit	2Monitored Value	Total Operating Time	EE Hours
2014 / 2nd	< 35 dynes/cm	< 35 dynes/cm			3232 Hours	0
2014 / 1 st	< 35 dynes/cm	< 35 dynes/cm			3379 Hours	0
2013 / 2nd	0.01 mg/dscm	Foam Blnkt ≥ 2.54cm	0.01 mg/dscm	1.2-2.8" WC ±1"	3413 Hours	0
2013 / 1 st	< 35 dynes/cm	< 35 dynes/cm			3248 Hours	0
2012 / 2nd	0.01 mg/dscm	Foam Blnkt ≥ 2.54cm	0.01 mg/dscm	1.2-2.8" WC ±1"	2991 Hours	0
2012 / 1 st	0.01 mg/dscm	Foam Blnkt ≥ 2.54cm	0.01 mg/dscm	1.2-2.8" WC ±1"	2359 Hours	0
2011 / 2nd	< 45 dynes/cm	< 45 dynes/cm			2295 Hours	0
2011 / 1 st	< 45 dynes/cm	< 45 dynes/cm			2387 Hours	0
2010 / 2nd	< 45 dynes/cm	< 45 dynes/cm			2310 Hours	0
2010 / 1 st	< 45 dynes/cm	< 45 dynes/cm			2180 Hours	0

Brian also discussed the latest MAERS entry performed by Ken. The EU-CHROMEPLATE32 submittal did not have attachments for emission calculations. The calculations were not using the MAERS emission factor or the

emission factor from their 2009 stack test data. Without the supplemental data or use of emission factors, the MAERS report will be returned as incomplete. On 5/4/15, I failed the MAERS submittal and notified Ken via email asking him to look at EU-CHROMEPLATE32 chrome emissions and informed him that if not using stack test data or MAERS emission factors please upload attachment for calculations, and to add the control equipment.

We started our tour in the chrome area. After receiving a description of the tank area we went up to the control platform via stairway. The first was the EU-CHROMEETCH scrubber. The interior to the scrubber was not visible due to dirty windows. We then approached the magnehelic panels. There was confusion as to the naming and labeling of the gauges. I took pictures of the panels (2 panels) in the platform area with my phone. There was also a sheet attached to the panel stating compliance ranges for each gauge. It was evident that the area had been neglected.

We found that the staff was unclear as to which gauge belonged to which device. Based on the labels and discussing with the staff, Brian and I found that three of the gauges for the EU-CHROMEETCH scrubber were out of compliance.

- 1. System 1 Chrome Mist Eliminator "Stage #1 D.P." Magnehelic gauge reading of 0.0, compliance range 1.0-3.0
- 2. System #5 Etch Dual Stage, Stage 1 Magnehelic gauge reading of 0.0, compliance range 1.0-3.0
- 3. System #5 Etch Dual Stage, Total DP Combined Magnehelic gauge reading of 0.15, compliance range 1.5-3.5

MACT Subpart N allows smaller facilities a compliance option of either surface tension management, or installation of a control device such as Composite Mesh Pads (CMP). Permit 25-13 requires both. LPP utilizes both options simultaneously. The 40CFR63 Subpart N and PTI 25-13 limits are the same, 0.007 mg/dscm.

We went into the lab area and reviewed the EU-CHROMEPLATE32 tensiometer readings log. They were in the process of transferring an electronic copy to handwritten forms. (We later received a copy of the forms from Ken before departing). The individual transcribing had written data down for March and April of 2015. As per permit and Subpart N, their limit is < 33 dynes/cm. On the dates of March 8, 9, 15, 16 and April 10, 14, 27 they recorded 34 dynes/cm. The individual stated that he was told 35 dynes/cm was their limit. The sheet he was transcribing the data onto had a statement on the bottom listing \leq 45 dynes/cm but did not list the measurement device. The permit also lists procedures for exceedance occurrences under permit paragraph VI.1. the procedures were not followed due to confusion on their limit.

We requested to see the maintenance records for the scrubbers. Ken did not know where they were located but stated maintenance personnel did. Maintenance staff was unavailable due to a meeting, yet would arrive as soon as possible. At this time, Mike Schumacher joined us for the inspection. Mike was once the Environmental coordinator and is now the Paint Line Supervisor.

While waiting, we toured the paint line covered under the General Permit. There were approx. 8 individual paint booths using LPHV guns for fine color details such as the Cadillac hood ornament and Nissan hub caps. We found that the booths were enclosed on 4 of the 5 sides and the painters would spray towards the ventilation wall. The ventilation wall was covered in filters (of furnace filter consistency). Once of the booths had 6 of the filters moved and allowing unfiltered air to enter the ventilation system. The deficiency was corrected by Mike. Brian asked if the paint line checks their HPLV guns with a pressure cap as per General Permit IV.1. Mike answered no and that they did not have the test caps. We then toured the paint mixing area without issue.

Once complete with the paint line, we went back to the chrome area to the EU-CHROMEPLATE32 scrubber area. While looking at the magnehelic gauges, we found both to be reading 0.0. I climbed onto the roof of the lab to check the ductwork and confirm the gauges were properly hooked up, Ken went up with me. We found that they were connected; I could not feel any vibration in the ductwork to confirm the fan was operational. We climbed back down and tried to approach the fan (post scrubber). We found that the exhaust fan was not operational. At this time Tim Colters (maintenance) arrived. When asked, he informed us that the fan had been down for about two weeks. We requested again to see the maintenance records, but Tim stated he had just left an important meeting and had to get back to the meeting. We requested copies to be sent to us asap. Tim stated he had the replacement fan on-hand, yet was busy and the earliest he could install it would be about 2 weeks. We walked over to where the fan was located and confirmed it was on hand. Sam Daniel joined us at this point. Brian and I were asked how long they had to repair it and I replied as soon as possible.

Following this short discussion, Ken, Sam, Mike, Brian, and I went to a conference room to discuss our

findings. Shortly thereafter Larry Gatt arrived and joined us. We informed them all of what we found;

- 1. System 1 Chrome Mist Eliminator "Stage #1 D.P." Magnehelic gauge reading of 0.0, compliance range 1.0-3.0
- 2. System #5 Etch Dual Stage, Stage 1 Magnehelic gauge reading of 0.0, compliance range 1.0-3.0
- 3. System #5 Etch Dual Stage, Total DP Combined Magnehelic gauge reading of 0.15, compliance range 1.5-3.5
- 4. EU-CHROMEPLATE32 scrubber in-operative
- 5. Evidence of leak on EU-CHROMEETCH scrubber ductwork
- 6. EU-CHROMEPLATE32 dynes/cm out of compliance with 40CFR63 N and permit limit of 33 dynes/cm on 7 occasions since March 2015
- 7. Lack of test caps for FG-COATING Line.

Brian informed them that the compliance issues would more than likely result in a Consent Order and fines between \$5000-100,000. We informed them that corrections to the deficiencies needed to be made asap. Larry requested his staff to create a report on the inspection with a request to be complete by the opening of business the next day.

We departed the site at approx. 1330.

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Image 1(Multi Mag. Panel) : System#1 Chrome Mist Eliminator, System#3 Pre-plate Wet Scrubber, System#4 Nitric Wet Scrubber, and System#5 Etch Dual Stage- Total DP Combined



Image 2(Etch Panel) : System#5 Etch Dual Stage Stage 1 (left) and Stage 2 (right).



Image 3(Etch panel2) : labels visible



Image 4(Etch Scrubber leak) : Etch Scrubber leak at ductwork entrance



Image 5(EU-CHROMEPLATE32 Mag) : No indication of DP, scrubber and exhaust fan in-op

MACES- Activity Report

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NAME_

DATE 5/6/15

SUPERVISOR R. M.