

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

N186333881

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: 03/22/2016
STAFF: Nathaniel Hude	COMPLIANCE STATUS: Non Compliance
SOURCE CLASS: SM OPT OUT	
SUBJECT: Scheduled, unannounced inspection as follow-up to previous violations and MI AQD Consent Order 27-2015.	
RESOLVED COMPLAINTS:	

Inspection Report

N1863- Lapeer Plating and Plastics (LPP)
395 Demille Road, Lapeer, Michigan

Inspection Date:

3/22/16

Facility Contacts:

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

MDEQ AQD Personnel:

Nathan Hude – huden@michigan.gov, 517-284-6779

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. 450 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 LPP 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

Previous Inspections:

4/29/15, Nathan Hude and Brian Culham (retired), see detailed violations below
12/18/13, Brian Culham, no concerns noted
11/13/12, Brian Culham, no concerns noted
4/17/12, Brian Culham, violation for EU-CHROMEPLATE32

Previous Violations:

1. 4/29/15, EU-CHROMEPLATE32; Special Condition IV.1. of Permit 25-13, Composite Mesh Pad (CMP) scrubber inoperative since March 26, 2015
2. 4/29/15, EU-CHROMEPLATE32; Special Condition VI.1. of Permit 25-13, Surface Tension dynes/cm exceedances of 7 days from March 1, 2015 – April 29, 2015
3. 4/29/15, EU-CHROMEPLATE32; 40CFR63 paragraph 63.342 (d), Lack of proper control via CMP or surface tension for 3 days March 1, 2015 – April 29, 2015
4. 4/29/15, EU-CHROMEPLATE32; Special Condition VI.3. of Permit 25-13 and 40CFR63 paragraph 63.342 (f) (F)(v), CMP scrubber maintenance records unavailable for inspection
5. 4/29/15, EU-CHROMEPLATE32; 40CFR63 paragraph 63.342 (f)(3), Failure to comply with Malfunction Abatement Plan (MAP) for inoperative CMP

6. 4/29/15, EU-CHROMEPLATE32; Special Condition VI.1. of Permit 25-13, Surface tension exceedance practices not performed
7. 4/29/15, EU-CHROMEETCH; Special Condition III.2. of Permit 25-13 and 40CFR63 paragraph 63.343 (c) (1), Minimum pressure drop across scrubber not being met, System 1 Chrome Mist Eliminator
8. 4/29/15, EU-CHROMEETCH; Special Condition III.2. of Permit 25-13 and 40CFR63 paragraph 63.343 (c) (1), Minimum pressure drop across scrubber not being met, System 5 Stage 1
9. 4/29/15, EU-CHROMEETCH; Special Condition III.2. of permit 25-13 and 40CFR63 paragraph 63.343 (c) (1), Minimum pressure drop across scrubber not being met, System 5 Total DP Combined
10. 4/29/15, EU-CHROMEETCH; Special Condition VI.3. of permit 25-13 and 40CFR63 paragraph 63.342 (f)(F) (v), CMP scrubber maintenance records unavailable for inspection
11. 4/29/15, FG-COATING; Special Condition IV.1. of General Permit 11-13, Filters removed by staff while operating HPLV booths
12. 4/29/15, FG-COATING; Special Condition IV.1. of General Permit 11-13, HPLV spray applicator pressure check caps unavailable

Violations Found During this Inspection including reoccurring:

1. FG-COATING; Consent Order 27-2015 paragraph 9.D. and Special Condition IV.1. of General Permit 11-13, Filter removed by staff while operating HPLV booths. *Reoccurring as documented as number 11 above.*
2. The EU-CHROMEPLATE32 Operations, Maintenance, and Malfunction Abatement Plan was to be updated in accordance with paragraph 9.A. of Consent Order 27-2015, as of this inspection and updated plan has not been created or provided by LPP for approval.
3. The EU-CHROMEETCH Operations, Maintenance, and Malfunction Abatement Plan was to be updated in accordance with paragraph 9.A. of Consent Order 27-2015, as of this inspection and updated plan has not been created or provided by LPP for approval.
4. The composite mesh pad wash downs not being recorded properly per paragraph VI. 2.e), VI.3. and 40CFR63 Subpart N Table 1 for EU-CHROMEPLATE32.
5. The composite mesh pad wash downs not being recorded properly per paragraph and 40CFR63 Subpart N Table 1 for EU-CHROMEETCH VI.4.e).
6. PTI 25-13 FG-FACILITY Individual and Aggregate HAP emissions are not being tracked or recorded per paragraphs VI.1. and VI.2.a) through e).

Recent Complaints (within 2 years):

none

MAERS Reporting

2015 MAERS was submitted on time and is awaiting review.

MAERS Emission Unit List

EU-BOILER	Process heat boiler for the plating line.	02/01/1988
EU-BOWTIELINE	Bowtie mold and paint line. Bowties are molded vacuum metalized and backup painted.	01/01/2008
EU-CHROMEETCH	Chrome etch process for the plating line, non-electrolytic process exempt from MACT standards.	03/01/1988
EU-CHROMEPLATE32	Decorative chromium electroplating tank #32.	03/01/1988
EU-COPPERTANKS	One copper strike tank (#14), five bright acid copper tanks (#15 through #19)	03/01/1998
EU-MASKWASH	Maskwash coldcleaners, includes 5 operating cleaners that use acetone and reclaim from the solvent reclaim unit. Unit emits negligible VOCs.	01/01/2004
EU-NEUTRALIZERTA	One neutralizer tank (#5) and one copper-nickel strip tank (#39).	03/01/1988
EU-PAINTLINE#2	Automotive Paint Process, 6 dry filter booths, natural gas shared bake oven, and application equipment. Includes HVPL robot spray machines, solvent-less maskwashers, and electrostatic technology.	01/03/1993
EU-VCRESTLINE	V-Crest Paint Line mold and paint line. V-Crests are molded vacuum metalized and backup painted.	01/01/2004
EUACTIVATORTANKS	One activator tank (#17), one accelerator tank (#9), and one electroless copper tank (#11)	03/01/1988
EUSOLVENTRECLIAM		01/01/2004

Solvent Distillation Unit, 110-gallon capacity. Unit reclaims acetone and non-quantifiable amounts of MEK and IPA from Maskwash cleaners. Negligible amounts of VOCs are emitted from this unit.
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Inspection Summary

I arrived at LPP, Inc. on 3/22/16 at approx. 9:20am. This was a scheduled yet unannounced inspection as part of a follow-up of the 4/29/15 inspection.

Ken met me in the lobby area and we went back to his office. I informed him of the reason for my visit and provided him with the inspections brochure, the boiler card, and my business card. We reviewed all of the documents and discussed the boiler regulations. Due to the fact that the boiler is fired via natural gas and they are an area source (synthetic minor) of HAPS, the boiler is exempt from 40CFR63 JJJJJJ via paragraph 63.11195 (e).

PTI 11-13

This permit identifies the emission units via functional groups and are identified as:
FG-COATING and FG-SOURCE.

We performed the inspection by permit stating with General Permit 11-13 for the Coating Line Emitting up to 10 Tons Per Year VOC. The permit states a thermal oxidizer is optional, at this point one is not installed but should emission increase it would be a viable option to maintain VOCs below 10 tpy. We walked the paint line and I found that one employee had removed a filter from one of the booths while using red paint for Cadillac emblems. It was evident that the worker removed the filter in the direction of the spray as the other surrounding filters appeared to have overspray. This was a repeat violation of the previous inspection, though last time had 6 filters removed in one booth allowing for minimal particulate control. The filter was corrected on the spot by the employee once pointed out to Ken. This is in violation of paragraph IV.2 and Consent Order paragraph 9.D.

I confirmed that the HVLP pressure caps were on hand in accordance with IV.1, the paint mixer stated that the last tests were around 8psi for all the guns. The Monitoring/Recordkeeping has requirements that we reviewed. Paragraph VI 1 and 2 are associated with thermal oxidizer information and do not apply. Paragraph VI3 is a combination of retaining solvent and paint purchase orders which is completed by an individual named Mary in the front office and documentation of VOC content and paint usage which is conducted by Ken via database. Ken also has launched a new MSDS database for all chemicals onsite thus satisfying VI.4. I confirmed emission limits via records check:

FG-COATING: VOC limited to 2000lb/month with a result of a maximum of 0.298 in October 2015

FG-COATING: VOC limited to 10tpy with a result of 2.526 tons March 2015 to February 2016

*FG-SOURCE: VOC limit of 30tpy with a result of 4.32tpy ending in December 2015

*This limit is tracked via appendix B of the permit and submitted quarterly satisfying VI.1. of FG-SOURCE. This calculation also includes the Bowtie Line and V-Crest Line which are identified as 287(c) exempt with documentation of gallons per month.

Ken informed me that he had also added the bake-off oven to MAERS for this reporting season. He believes that the emissions were combined with the boiler in past years. This bake off oven has been installed for some time.

PTI 25-13

This permit identifies the following emission units for the chrome plating process: EU-CHROMEPLATE32, EU-CHROMEETCH, FGNONCHROMEPROCESS (EU-COPPERTANKS, EU-ACTIVATORTANKS, EU-NEUTRALIZERTANKS) and FG-FACILITY.

Ken and I reviewed the Operations and Maintenance Plan required by PTI 25-13 paragraph III 1. and 40CFR63.342(f)(3) for EU-CHROMEPLATE32, EU-CHROMEETCH, and FG-NONCHROMEPROCESS. The plan in use is dated January 5, 2008 and is outdated with current practices, personnel, and current MSDS information. In accordance with AQD Consent Order 27-2015 paragraph 9.A., this plan was to be updated no later than August 1, 2015. Although the order was not signed by LPP until September 16, 2015, this updated plan should have been completed prior to this inspection and is thus a violation of AQD Consent Order 27-2015 paragraph 9.A. Update needs are required in all sections of the plan. This plan is referenced in paragraph III.1. for EU-CHROMEPLATE32 and III.1. for EU-CHROMEETCH.

We reviewed records and determined that the surface tension requirements of PTI 25-13 paragraph III 2. for EU-CHROMEPLATE32 and paragraph III 3. For EU-CHROMEETCH are being met accordingly and the surface tension for both units are being checked up to three times a day thus exceeding the requirements of paragraph VI.1. for EU-CHROMEPLATE32 and VI.3 for EU-CHROMEETCH. The highest dynes/cm for EU-CHROMEPLATE32 since January 4, 2016 was 32 with a limit of not to exceed 33 by permit paragraph III.2. and 40CFR63 Subpart N and the highest dynes/cm for EU-CHROMEETCH since December 23, 2015 as 32 with a limit of not to exceed 32 per permit paragraph III.3. This document also indicates the amount of fume suppressant being added to the tanks thus satisfying the requirement of paragraph VI.4. for EU-CHROMEPLATE32 and paragraph VI. 5. for EU-CHROMEETCH. LPP is using a tensiometer to measure surface tension in dynes/cm as in the previous inspection; this device was last calibrated on 12/17/15 and is next due on 5/28/16 as identified by a calibration sticker on the device.

Under permit paragraph IV.1. and 2. for EU-CHROMEPLATE32 and paragraphs III.2. and IV.1. for EU-CHROMEETCH, LPP is required to operate and maintain scrubbers for the plating process. I confirmed this by observing the magnehelic gauges and found that all were compliant with the following readings:

1. System 1 Chrome Mist Eliminator "Stage #1 D.P." Magnehelic gauge reading of 2.4, 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. System #5 Etch Dual Stage, Stage 1 Magnehelic gauge reading of 2.5, compliance range 1.5-3.5
5. System #5 Etch Dual Stage, Stage 2 Magnehelic gauge reading of 0.45, compliance range 0.3-1.5

LPP has been documenting pressure drop daily drop in accordance with permit paragraphs VI.2.a) for EU-CHROMEPLATE32 and VI.4.a) for EU-CHROMEETCH.

LPP uses a checklist for the quarterly checks required of EU-CHROMEPLATE32 paragraphs VI.2.b) – d) and EU-CHROMEETCH VI.4.b) – d). This also satisfies the requirements of Table 1 of Subpart N, 63.342. Paragraph VI.4.e) requires that a wash down of the mesh pads are completed in accordance with the manufacturers recommendations. LPP stated that they have been completing this on a weekly basis. While reviewing documentation of the washdowns, I found that documentation for EU-CHROMEPLATE32 was missing between the dates of 11/10 and 12/20 and the only entry made on the documents provided for EU-CHROMEETCH was 1/24/16. I discussed the importance of good documentation with Ken and one of the maintenance individuals with key points of including a year, if it's not written down it didn't happen, and consolidating the reports for review and inspection purposes. Due to previous maintenance practice documentation deficiencies, this will be written as a violation of paragraph VI.2.e) and VI.3. for EU-CHROMEPLATE32 and EU-CHROMEETCH VI.4.e) and 40CFR63 Subpart N Table 1.

The 40CFR63 Subpart N and permit paragraph VII.1. requires an "Ongoing Compliance Status Report" to be submitted every 6 months for the chrome plating tank (EU-CHROMEPLATING32). The report was last received January 29, 2016. The 2015 1st semiannual report identifies the deviations expressed in the 4/29/15 inspection report. Below is a summary of the reports received 2010 to the present:

Year / Period	1Acceptable Emission Limit	1Monitored Value	2Acceptable Emission Limit	2Monitored Value	Total Operating Time	EE Hours
2015 / 2 nd	33 dynes/cm	≤33 dynes/cm	1.2-2.8" w.c.±1"	1.2-2.8" w.c.±1"	3230 Hours	0
2015 / 1 st	33 dynes/cm	≤33 dynes/cm	1.2-2.8" w.c.±1"	1.2-2.8" w.c.±1"	3361 Hours	57
2014 / 2 nd	< 35 dynes/cm	< 35 dynes/cm			3232 Hours	0
2014 / 1 st	< 35 dynes/cm	< 35 dynes/cm			3379 Hours	0
2013 / 2 nd	0.01 mg/dscm	Foam Blnt ≥ 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 / 2 nd	0.01 mg/dscm	Foam Blnt ≥ 2.54cm	0.01 mg/dscm	1.2-2.8" WC ±1"	2991 Hours	0
2012 / 1 st	0.01 mg/dscm	Foam Blnt ≥ 2.54cm	0.01 mg/dscm	1.2-2.8" WC ±1"	2359 Hours	0
2011 / 2 nd	< 45 dynes/cm	< 45 dynes/cm			2295 Hours	0
2011 / 1 st	< 45 dynes/cm	< 45 dynes/cm			2387 Hours	0
2010 / 2 nd	< 45 dynes/cm	< 45 dynes/cm			2310 Hours	0
2010 / 1 st	< 45 dynes/cm	< 45 dynes/cm			2180 Hours	0

We reviewed the record keeping requirements for EU-CHROMEETCH paragraph VI.1. and 2. Ken printed a copy of the report that is generated from data input by him. This report meets the intent of the requirement.

Under permit paragraph III.1. for FG-NONCHROMEPROCESS, LPP is required to operate and maintain a scrubber and electric cyclone for the process. I confirmed this by observing the magnehelic and amp gauges and found that all were compliant with the following readings:

1. EU-COPPERTANKS; System 2 Acid Copper Cyclone 6 Separator amp reading of 19, compliance range 17-20 amps
2. EU-ACTIVATORTANKS; System 3 Pre-plate wet scrubber "Stage #2 D.P." Magnehelic gauge reading of 1.8, compliance range 1.0-3.0
3. EU-NEUTRALIZERTANKS; System 4 Nitric wet Scrubber Magnehelic gauge reading of 2.0, compliance range 1.0-3.

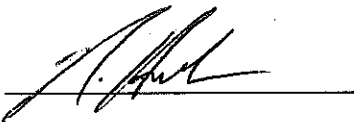
These readings are used to determine compliance with emission limits listed for sulfuric acid, hydrochloric acid, and formaldehyde under paragraph I. LPP has been documenting pressure drop and amperage daily to comply with paragraph VI.1. a) and b). for FG-NONCHROMEPROCESS.

Paragraph III.2.a) through c) discusses the MAP for FG-NONCHROMEPROCESS. This MAP is combined with the other emission units and again is somewhat outdated. Updating the MAP for this device was not a requirement of the AQD Consent Order but I encouraged Ken to make it part of the update.

A review of the FG-FACILITY requirements for PTI 25-13 was conducted via records review in Kens office. Ken was unable to provide documentation for the monitoring and recordkeeping requirements of VI.1. and VI.2.a) through e). This documentation is used to confirm compliance with the emission units listed for individual and aggregate HAPS as listed in table I under FG-FACILITY. This is a violation of the permit conditions VI.1. and VI.2.a) through e).

At this point, Ken and I completed a closing meeting to which I informed him on which violations were to be cited.

NAME



DATE

6/23/16

SUPERVISOR



Original print copy could not be found, so report was re-printed

