N3209- RVN- 20171122

Elm Plating Company
Quality Metal Finishing
Since 1951

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November 22, 2017

Mr. Mike Kovalchick
Senior Environmental Engineer
Michigan Department of Environmental Quality
Air Quality Division
Jackson District Office
301 East Louis Glick Highway
Jackson, Michigan 49201-1556

Subject: Violation Notice, Elm Plating Co. 1319 South Elm Street, Jackson, MI 49203, SRN: N3209

Dear Mr. Kovalchick,

In response to your Violation Notice resulting from your inspection of October 19, 2017, Elm Plating responds as follows:

1. Violation 1:
   Chrome Conversion Tanks; National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Plating and Polishing Operations – 40 CFR 63 Subpart WWWWWW (6W): On October 20, 2008, the Company submitted an Initial Notification to EPA for compliance with 6W. In this initial notification, the Company indicated that they have 11 chrome conversion tanks that have a control device to control potential chromium air emissions. However, none of these tanks have the required controls verified during the inspection.

   Response:
   Elm Plating Co. submitted the Initial Notification incorrectly identifying "Control Devices", and on some sources, "Tank Covers", as methods used to comply with applicable management practices and equipment standards when this equipment was not applicable to the regulated sources. Elm Plating Co. has complied with the requirements of 40 CFR 63.11507(g) management practices, the only standard determined to be applicable to its regulated sources, at all times since the Initial Notification.

   Dates violation occurred:
   This alleged Violation occurred October 20, 2008, on submittal of the Initial Notification.

Explanation of causes and duration of the violations:
The Environmental Manager at that time misunderstood the requirements of the Subpart and presumed that the term "Control Device" described any piece of equipment or management practice, not restricted to a "piece of equipment that is part of a control system that collects and/or reduces the quantity of a pollutant that is emitted to the air".

Elm Plating Co. has met the applicable compliance requirements for its sources specified in the Subpart, specifically the management practices specified in §63.11507(g) since the effective date of this Subpart.

Whether the violations are ongoing:
The alleged violation has been corrected.

Actions taken and proposed to be taken to correct the violation and dates by which these actions will take place:
Elm Plating resubmitted the Notification of Compliance to EPA and copied the MDEQ-AQD on November 14, 2017 (Attachment A).

Steps being taken to prevent a reoccurrence:
The requirements of Subpart 6W have been added to Elm Plating Co.'s list of "Legal and other requirements" in its Environmental Management System to be audited annually for compliance.

2. Violation 2:
New Zinc Plating line B5 with chrome conversion tanks controlled by a wet scrubber installed in December 2016; 40 CFR 63 Subpart 6W: The Company failed to submit an Initial Notification form to the EPA regarding this new line.

Response:
Notifications were not submitted by start-up of the new regulated sources. The device in question is a composite mesh pad collector and only uses water during the wash down cycle.

Dates violation occurred:
The Plating Line, including the new Chrome Conversion Tanks, began operation on December 27, 2016.

Explanation of causes and duration of the violations:
The Environmental Manager was not aware of the requirements for Notification for the new regulated sources.

Whether the violations are ongoing:
The violation was abated with submission of a Notification 11/14/2017 to EPA and MDEQ-AQD.

Actions taken and proposed to be taken to correct the violation and dates by which these actions will take place:
The Notification was submitted November 14, 2017 (Attachment A).

Steps being taken to prevent a reoccurrence:
The requirements of Subpart 6W have been added to Elm Plating Co.'s list of "Legal and other requirements" in its Environmental Management System to be audited annually for compliance.

3. Violation 3:
Chrome Conversion Tanks; 40 CFR 63 Subpart 6W: No annual compliance reports are being prepared and maintained at the facility nor other 6W required records being kept.

Response:
Compliance reports have not been generated and maintained onsite as required. Deviation Reports are necessary as there were deviations from the Compliance Requirements in 40 CFR 11508(a) to submit Notifications of Compliance Status.

Dates violation occurred:
This violation has occurred since January 31, 2011, when the first annual certification of compliance report was required for sources existing before July 1, 2008.

Explanation of causes and duration of the violations:
The Environmental Manager was not aware of the required report.

Whether the violations are ongoing:
The violations have been abated with the submission of the annual compliance reports and Deviation Reports to EPA.

Actions taken and proposed to be taken to correct the violation and dates by which these actions will take place:
Annual Compliance Reports and Deviation Reports, as applicable, have been submitted to EPA on November 20, 2017 (Attachment B).

Steps being taken to prevent a reoccurrence:
The requirements of Subpart 6W have been added to Elm Plating Co.'s list of "Legal and other requirements" in its Environmental Management System to be audited annually for compliance.

4. Violation 4:
Heat Treat Line #2, Hardening Furnace Stack #7: PTI 238-04, Special Condition 1.2 (10% Opacity limitation): Black smoke with an opacity of 25% was photographed on the roof coming from Stack #7. The opacity noted was continuous over at least a 15-minute interval.

Response:
Black smoke was identified from Stack #7 from the Line #2 Hardening Furnace that had estimated opacity above the limit of Permit PTI-238-04 as the result of a malfunction of two of the burners in the Hardening Furnace.

Explanation of causes and duration of the violations:
Two natural gas fired burners were found to be out of adjustment and operating with too rich an air/fuel mixture. Our daily inspection for the October 18, the day preceding the inspection, indicates no smoke was visible (Attachment C).

Whether the violations are ongoing:
The violation was abated on October 19, 2017.

Actions taken and proposed to be taken to correct the violation and dates by which these actions will take place:
On October 19, the Maintenance Manager adjusted the air fuel mixture for the two burners that were emitting the smoke to Stack #7. Elm Plating Co. has contracted with an outside service to tune and adjust all burners for Line #2 on November 28, 2017.

Steps being taken to prevent a reoccurrence:
Elm Plating Co. has contracted with an outside service to inspect, test, and adjust burners on Lines #1 and #2 on December 4 and 5, 2017, on a quarterly schedule. In addition, the weekly Preventive Maintenance sheet has been revised to identify all individual stacks and time interval to be visually inspected for emissions that may exceed the opacity limits for further investigation and corrective actions.

5. Violation 5:
Heat Treat Line #2 Post Wash Stack #3; PTI 238-04, Special Condition 1.2 (10% Opacity limitation); White smoke with an estimated opacity of 35% was photographed on the roof coming from Stack #3. The opacity noted was continuous over at least a 15-minute interval. The high opacity smoke was observed after the trail off point of a steam plume and appeared to be condensing oil mist.

Response:
The white smoke observed was caused by fouling of two spray nozzles by metal particles in the Post Wash section of the Line. The nozzles are cleaned every day as part of normal Preventive Maintenance. The line was taken out of service on November 7, at which time the brushes for cleaning the tubes and nozzles were inspected and found to be in good condition.

Explanation of causes and duration of the violations:
Two spray nozzles in the Postwash section of Line #2 were found to be plugged, resulting in oil residues on the parts entering the Draw section of the Line. The smoke was caused by the burning of the oil residue. The Inspection Record of October 18, 2017, shows that the smoke was not visible on that date (Attachment C).

Whether the violations are ongoing:
The spray nozzles were cleaned on October 19, 2017, by the Maintenance Manager, and subsequent elevated stack emission opacity have not been observed.

Actions taken and proposed to be taken to correct the violation and dates by which these actions will take place:
The spray patterns of the Postwash section of Line #2 were inspected by the Maintenance Manager on October 19, and nozzles with inadequate spray pattern were cleaned and or/replaced at that time. In addition, the weekly Preventive Maintenance sheet has been revised to identify all individual stacks and time interval to be visually inspected for emissions that may exceed the opacity limits for further investigation and corrective actions.

Steps being taken to prevent a reoccurrence:
Elm Plating Co. has revised its Preventive Maintenance Inspections to include a more detailed observation checklist to detect opacity emissions from the stacks in the Heat Treatment Department.

6. Violation 6:
Three (3) oil quench tanks located underneath 3 hardening furnaces associated with the heat treat lines associated with PTI 238-04; Rule 201-No Permit to Install. Emission Unit not properly described in original permit application: Three (3) oil quenching tanks located underneath 3 separate hardening furnaces are generating particulate e missions that are not being properly captured by a ventilation system associated with either the hardening furnaces or the post wash ventilation systems. Instead, smoke from these oil quench tanks is being emitted from openings in the floor into the in-plant environment and then escaping through the open bay doors located at ground level.

Response:
The Quench Oil Tanks are identified in the Permit Application, however their emissions were not associated with stacks in the Application documents.

Dates violation occurred:
The omission of the description of the exhaust and an associated stack occurred on the date of the Application.

Explanation of causes and duration of the violations:
The Permit Application was prepared by the Production Manager based on observation of the equipment and trial operation of the equipment. The trials were done with lighter loads than were being processed at the time of the inspection and the smoke was not apparent. The ventilation and exhaust systems have not been altered since that date.

Whether the violations are ongoing:
The visible emissions from the Building occur periodically, based on several factors, including the mass of the parts being treated, wind direction, and door opening.

Actions taken and proposed to be taken to correct the violation and dates by which these actions will take place:
Elm Plating Co. is consulting with Ventilation Contractors to design the correction to the exhaust system deficiencies. We will have a final decision on the design and specifications by December 22, 2017. Based on that design, a PTI Application to modify PTI 238-04 will be prepared and submitted as

needed. In the interim, Elm Plating will keep the North side overhead door closed unless needed for deliveries.

Steps being taken to prevent a reoccurrence:
As part of a compliance audit, described below, Elm Plating will identify all sources of emissions in its facilities and verify that any necessary Permits describe the source and discharge.

7. Violation 7:
Viron International Viro-Chrome 9000 chrome 3 stage scrubber controlling emissions from 5 tanks containing Chromium compounds: Rule 910-An air-cleaning device shall be installed, maintained, and operated in a satisfactory manner. Pressure drop readings strongly suggested that Stage II of the scrubber was plugged. Also, the 3 separate flow meters for each Stage of the scrubber indicated no water flow into the scrubber.

Response:
The "scrubber" installed on the exhaust lines from the Chrome Conversion Tanks is not a device required for operation of the Tanks either by Federal Subpart 6W regulations, nor by Michigan Administrative Rules as these sources qualify for exemption under Rule 290.
This device is a composite mesh pad collector with periodic wash down. Water flow for washing the pads using the rotometers is controlled by the Plating Line PLC Controller with the wash cycle shown in the Manufacturer's recommendations in the attached Viro-Chrome 9000 manual, Section C. Washdown Plumbing, item 4 (Attachment D). The PLC Controller is set for the first stage to wash down for one minute every hour, the second stage for one minute every 24 hours. This may be the reason no water flow was detected during the inspection. The washdown cycle was tested and found to be working correctly.

Dates violation occurred:
Elm Plating Co. does not have records of the differential pressure readings to identify the initial date the readings exceeded 4.5" WC, but does believe that it initially occurred shortly before the Inspection date.

Explanation of causes and duration of the violations:
Elm Plating believed tested the wash down system and found that it is operating at the rates recommended by the Manufacturer. It is unclear why the Stage II demister pads were showing high differential pressure.

Whether the violations are ongoing:
The mesh pads were removed and acid cleaned on November 10, 2017.

Actions taken and proposed to be taken to correct the violation and dates by which these actions will take place:
Elm Plating Co. has instituted Preventive Maintenance check lists to inspect the differential pressure gages manually daily against marking on the gage faces indicating correct operating ranges (Attachment E).

Steps being taken to prevent a reoccurrence:
The Elm Plating Co. Plant 1 Zinc Plating Division Preventive Maintenance Program will be amended to add a Monthly Checklist to verify weekly checks and record actual differential pressure readings.

Elm Plating Co. will contract with a qualified Consultant that specializes in air emission regulatory compliance to audit its facilities and operations by January 31, 2018. We will report any issues found and corrective actions taken to bring the facilities into compliance.

Please let me know if you have any questions or comments.

Sincerely,

Allen Kinsler
Environmental Manager

Copies: Mr. Scott Miller, MDEQ
Ms. Lynn Fiedler, MDEQ
Ms. Mary Ann Dolehanty, MDEQ
Mr. Chris Etheridge, MDEQ
Mr. Thomas Hess, MDEQ