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AQUA-KALAMAZOO

August 27, 2021
Project No. 200397

Amanda Chapel
Senior Environmental Quality Analyst
Kalamazoo District Office
Air Quality Division
Michigan Department of the Environment, Great Lakes and Energy
7953 Adobe Road
Kalamazoo, MI 49009-5025

**Response to Violation Notice dated August 9, 2021
Stelmi America, Inc. (N7166)**

Dear Ms. Chapel:

This letter is in response to the EGLE-AQD Violation Notice dated August 9, 2021 (VN). The VN notes that stack testing results from May 11-12, 2021, on Flexible Group FGCHROME1 exceeded the total chromium emission limit of 0.006 milligrams per dry standard cubic meter (mg/dscm). The alleged violation is cited in the VN is as follows:

Process Description	Rule/Permit Condition Violated	Comments
FGCHROME1	PTI No. 67-15A Special Condition (SC) I.1, 40 CFR 63.341(c)(2)(vi), and 40 CFR 63.344(e)(2).	The facility completed testing on May 11-12 2021 on FGCHROME1 to show compliance with the total chromium emission limit of 0.006 mg/dscm. This emission limit was established under NESHAP 40 CFR Part 63, Subparts A and N for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks. Test results show the facility emitted 0.008 mg/dscm of total chromium during testing.

As requested, this letter provides information regarding the above citation, including: the date the alleged violations occurred; an explanation of the causes and duration of the alleged violations; whether the violations are ongoing; a summary of the actions that have been taken and are proposed to be taken to correct the violations; the dates by which these actions will take place; and what steps are being taken to prevent a reoccurrence.

As described in the July 1, 2021, stack test report as well as in email communications with EGLE from June 9 through June 14, 2021, the original stack testing on FGCHROME1 Scrubber as well as other emission units located at the site was completed on May 12, 2021. During the stack test on FGCHROME1 Scrubber exhaust, metal shavings were observed in the sampling ports and subsequently in the recovered sample bottles after rinsing the probe. Just after the first test run, the stack testing company noted the presence of metal shavings in the alkaline solution used to collect emissions from the stack and into which material collected in the probe was

rinsed. This is unusual – as chromium emissions from chrome plating are in the form of chromic acid generated from plating activity, not metal shavings. The stack testing company and Stelmi, believe that that corrosion on the sampling ports and the metal shavings in the sample contributed to sample contamination which caused an exceedance of the emission limits. As indicated in the stack test report, the concentration of Run 1 on May 12 was 0.016 mg/dscm; while the concentration of the two subsequent runs were 0.004 mg/dscm, (four times less than Run 1). We believe the high result on the first run may be attributable to the shavings being caught in the probe when it was inserted in the stack. Note, it is our understanding that the testing company had some difficulty inserting the probe due to the orientation and length of the port. Because the shavings were only present during the first run we believe the excess emissions to be an outlier, rather than ongoing. Excess emissions only occurred during the first test run (two hours); the remaining test runs (as well as the subsequent retest) demonstrate compliance. Because EGLE representatives present during testing required that Stelmi clean the stack and ports prior to a retest (see the email dated June 9, 2021) it would appear that EGLE believes that the stack itself likely contributed to the excess emissions during the initial testing.

Immediate Corrective and Preventative Actions: As soon as Stelmi was informed of the May 12, 2021, test results, the plant shut down the EHCHROME6, EUCHROME7, and the MAPCO Scrubber system (FGCHROME1); the system was shut down from May 27 until June 9. The system was cleaned and the Stage 1 and Stage 2 mesh pads were replaced. In addition, the blower fan housing was cleaned and painted after signs of corrosion were observed.

A 60-inch section of polyvinyl chloride (PVC) exhaust duct (downstream of the scrubber and blower fan) where sampling is performed was replaced in order to enable removal of observed metal shavings; to accommodate re-orientation of the testing port, and to facilitate reducing the port lengths from 6 inches to 3 inches. This will enable future stack testers to insert and remove the probe without scraping the stack.

A follow-up stack test was performed on June 11, 2021. Following the stack test, Stelmi again shut down EHCHROME6, EUCHROME7, and the MAPCO Scrubber system pending updated stack testing results.

As provided in the subsequent stack testing report, the June 11, 2021, stack test demonstrated compliance with the 0.006 mg/dscm emission limit.

Stelmi takes our environmental compliance very seriously. As soon as we were informed that the May 12 tests did not appear to pass, we shut the lines down and began investigating and performing corrective actions. To prevent a reoccurrence of a similar issue, Stelmi will continue to perform preventive measures on the scrubber and exhaust system and will look for visible signs of corrosion and metal shavings in the stack and correct potential issues in a timely manner.

If you have any questions or require additional information, please contact me at 269-781-6222 or mhall@stelmiamerica.com.

Sincerely,



Michael Hall
Plant Manager

Attachments

By email

Copy: Janine Camilleri – EGLE-AQD (Lansing)
Rex Lane – EGLE-AQD (Kalamazoo)
Stephanie Jarrett – Fishbeck