



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, ILLINOIS 60604

SUBJECT: CLEAN AIR ACT INSPECTION REPORT
Plasman Cleveland Manufacturing, Cleveland, Ohio

FROM: Charles Hall, Environmental Engineer
AECAB (MN-OH)

THRU: Brian Dickens, Section Chief
AECAB (MN-OH)

TO: File, Plasman Cleveland Manufacturing, Cleveland, Ohio

BASIC INFORMATION

Facility Name: Plasman Cleveland Manufacturing (PCM)

Facility Location: 3000 West 121st Street, Cleveland, Ohio

Date of Inspection: 24 April 2024

EPA Inspectors:

1. Charles Hall
2. Matthew Walters

Other Attendees:

1. Tim Atkas, General Manager
2. Vickie Chapman, Environmental, Health, & Safety Manager

Contact Email Address: Vickie.Chapman@plasman.com

Purpose of Inspection: To determine PCM's compliance with its Permit-To-Install and Operate (PTIO) and the National Emission Standards for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks (Chromium Electroplating MACT).

Facility Type: chromium electroplater

Regulations Central to Inspection: PCM's PTIO and the Chromium Electroplating MACT.

Arrival Time: 10:00 hrs EDT

Departure Time: 12:00 hrs EDT

Inspection Type:

- ☒ Unannounced Inspection
- ☐ Announced Inspection

OPENING CONFERENCE

- ☒ Presented Credentials
- ☒ Stated authority and purpose of inspection
- ☒ Provided Small Business Resource Information Sheet
- ☐ Small Business Resource Information Sheet not provided.
- ☒ Provided CBI warning to facility

The following information was obtained verbally from Atkas and Chapman unless otherwise noted.

Company Ownership: The ownership of the facility has not changed since 2014. However, the name changed to Plasman Cleveland Manufacturing in 2020.

Process Description:

The PTIO identifies three emission units at PCM: B-LINE Hexavalent (P009), B-LINE Trivalent (P011), and Decorative Trivalent and Hexavalent (P012). PCM has dismantled all electroplating equipment for B-LINE Hexavalent and B-LINE Trivalent. See photograph 1 in Appendix A.

PCM installed the Decorative Trivalent and Hexavalent plating line, which the PCM representatives call the Hoist Line, in 2015 and has not made any physical changes to the Hoist Line since then. The Hoist Line is a decorative trivalent and hexavalent chrome plating line with three trivalent chrome tanks and one hexavalent chrome tank. The trivalent chrome tanks employ an integrated wetting agent and foam blanket. The hexavalent chrome tank uses a foam blanket and chemical fume suppressant with a wetting agent. Each tank is controlled by a composite mesh pad scrubber. In simplified description of the Hoist Line, parts are loaded onto a plating rack, cleaned in a nitric acid bath, electroplated with copper, nickel, and trivalent or hexavalent chromium in succession. After a quality assurance inspection, the parts are loaded into boxes for shipment. PCM operates 20 hours per day on 4 days per week and conducts maintenance work on Fridays. PCM currently has 93 employees.

TOUR INFORMATION

EPA Tour of the Facility: Yes

Data Collected and Observations:

After the initial 40 hours of operation with no surface tension measurements greater than 33 dynes per centimeter, the PTIO requires PCM to measure the surface tension at least once every 8 hours of tank operation. The PCM representatives stated that a PCM employee measures the surface tension up to four times per day. After the inspection, PCM provided and Hall reviewed PCM's surface tension data from January 1 to April 30, 2024. None of the 215 surface tension measurements were greater than 33 dynes per centimeter. However, there was no day with four surface tension measurements, and 39 second or third measurements on a particular day were more than 8 hours apart.

The PTIO prohibits PCM from using a perfluorooctane sulfonic acid (PFOS)-based fume suppressants (containing 1% or greater PFOS by weight) in decorative chromium electroplating tanks. After the inspection, PCM provided an electronic copy of the Safety Data Sheet (SDA) of its fume suppressant. The SDS's ingredients list does not include PFOS.

The PTIO requires PCM to prepare an operation and maintenance plan for the composite mesh pad scrubber which must specify criteria for the add-on air pollution control device. PCM monitors several criteria for the Hoist Line including the differential pressure across the composite mesh pad scrubber and the observation of scrubber liquor flow from a pipe outlet. After the inspection, PCM provided and Hall reviewed the daily checklists for January through April 2024. The checklists did not report any out-of-range pressure drops or the absence of scrubber liquor flow.

Photos and/or Videos were taken during the inspection.

Field Measurements were not taken during the inspection.

RECORDS REVIEW

After the inspection, Hall requested records to review.

CLOSING CONFERENCE

☒ Provided U.S. EPA point of contact to the facility

Requested documents:

After the inspection, Hall sent an e-mail to request the following documents:

- A process flow diagram;
- A copy of the MSDS for the chemical fume suppressant;
- A copy of the operation and maintenance plan;
- The Hoist Line surface tension measurements from January 1 to April 30, 2024;
- The Hoist Line pressure drop monitoring data from January 1 to April 30, 2024;

- The initial notification for the Hoist Line for the National Emission Standards for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks (Chromium Electroplating MACT);
- The 2023 Notification of Compliance Status for the Chromium Electroplating MACT;
- Initial Notification and Notification of Compliance Status for the National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Plating and Polishing Operations, 40 C.F.R. Part 63, Subpart WWWWWW,
- The records specified in § 63.10(b)(2)(i) through (iii) and (xiv) of the MACT General Provisions; and
- The records required to show continuous compliance with each management practice and equipment standard that applies to you, as specified in § 63.11508(d), "What are my compliance requirements?"

DIGITAL SIGNATURES

Report Author: **CHARLES HALL** Digitally signed by CHARLES HALL
Date: 2024.05.30 10:40:50 -05'00'

Section Chief: **BRIAN DICKENS** Digitally signed by BRIAN DICKENS
Date: 2024.05.30 15:46:17 -05'00'

Facility Name: Plasman Cleveland Manufacturing

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APPENDICES AND ATTACHMENTS

1. Appendix A: Digital Image Log

Facility Name: Plasman Cleveland Manufacturing
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APPENDIX A: DIGITAL IMAGE LOG

Photographer: Matt Walters Camera: Olympus Tough TG-6 EPA Bar Code: SZ4061

Image Number	File Name	Date	Description of Image
1	P4240005	04/24/2024	Factory Area which B-Line Previously Occupied
			
2	P4240006	04/24/2024	Control Panel for Copper and Nickel Scrubber
			

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Image Number	File Name	Date	Description of Image
3	P4240007	04/24/2024	Control Cabinet for Copper and Nickel Scrubber
			
4	P4240008	04/24/2024	Plating Bath and Pickup Slots for Scrubber
			

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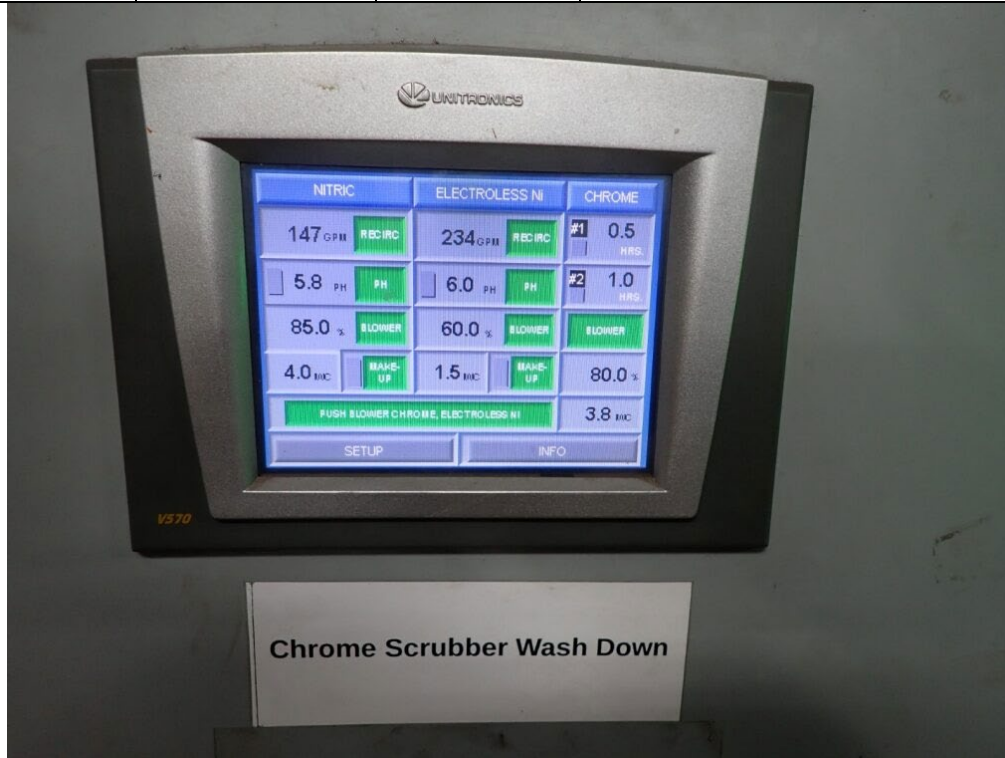
Image Number	File Name	Date	Description of Image
5	P4240009	04/24/2024	Plating Baths with Racks filled with Parts
 A photograph of an industrial plating bath. In the foreground, there are several racks holding metal parts, some of which are submerged in a blue liquid. A yellow crane arm is visible in the background. A label on the equipment reads "BRIGHT ACID COPPER 1".			
6	P4240010	04/24/2024	Plating Baths with Racks filled with Parts
 A photograph of an industrial plating bath. The racks are filled with metal parts, and the liquid in the bath is a greenish color. A yellow crane arm is visible in the background. A control panel with a green light is in the foreground.			

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Image Number	File Name	Date	Description of Image
7	P4240011	04/24/2024	Scrubber Header
			
8	P4240012	04/24/2024	Control Cabinet for Chrome Scrubber Wash Down
			

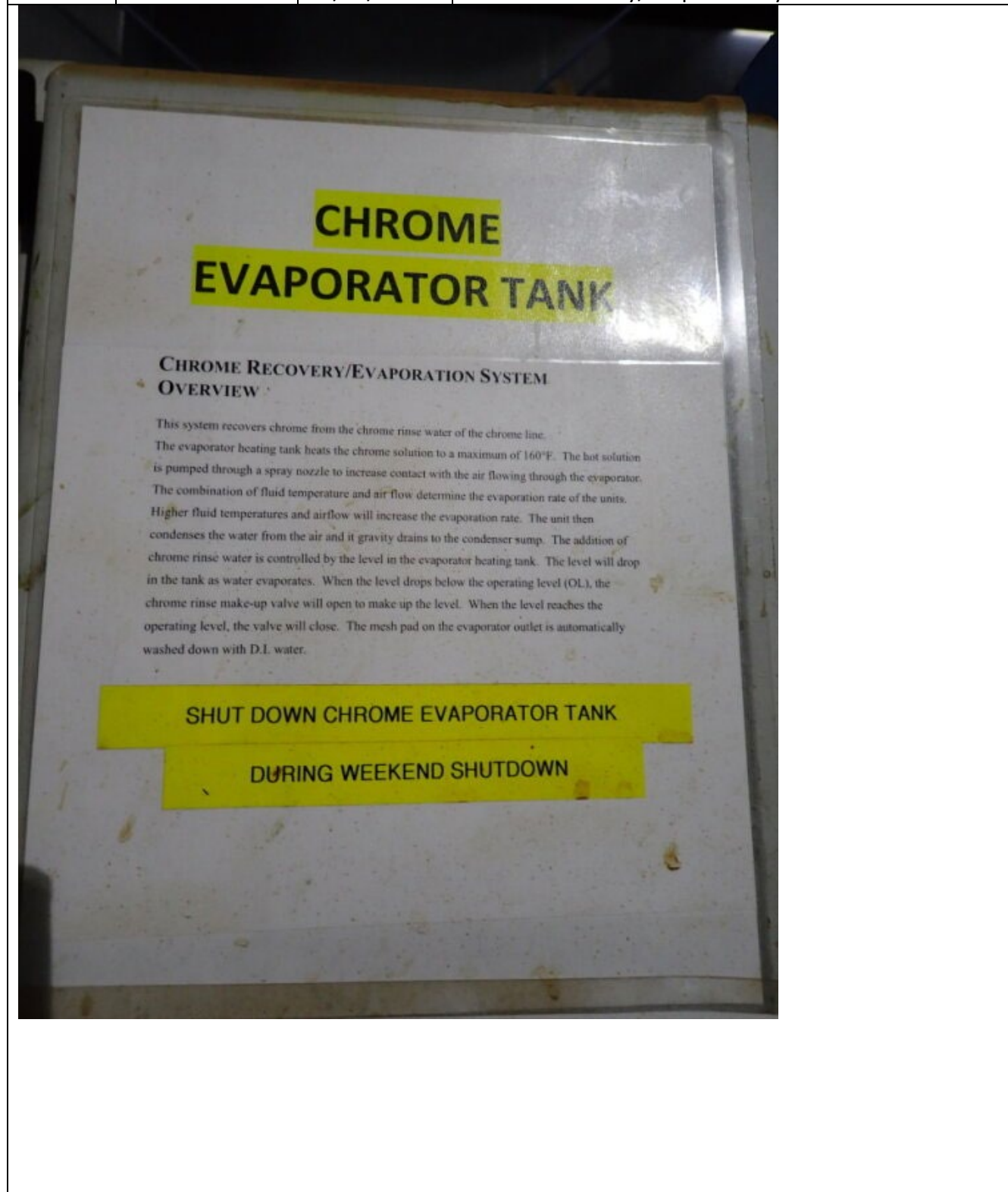
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Image Number	File Name	Date	Description of Image
9	P4240013	04/24/2024	Control Panel for Chrome Scrubber Wash Down

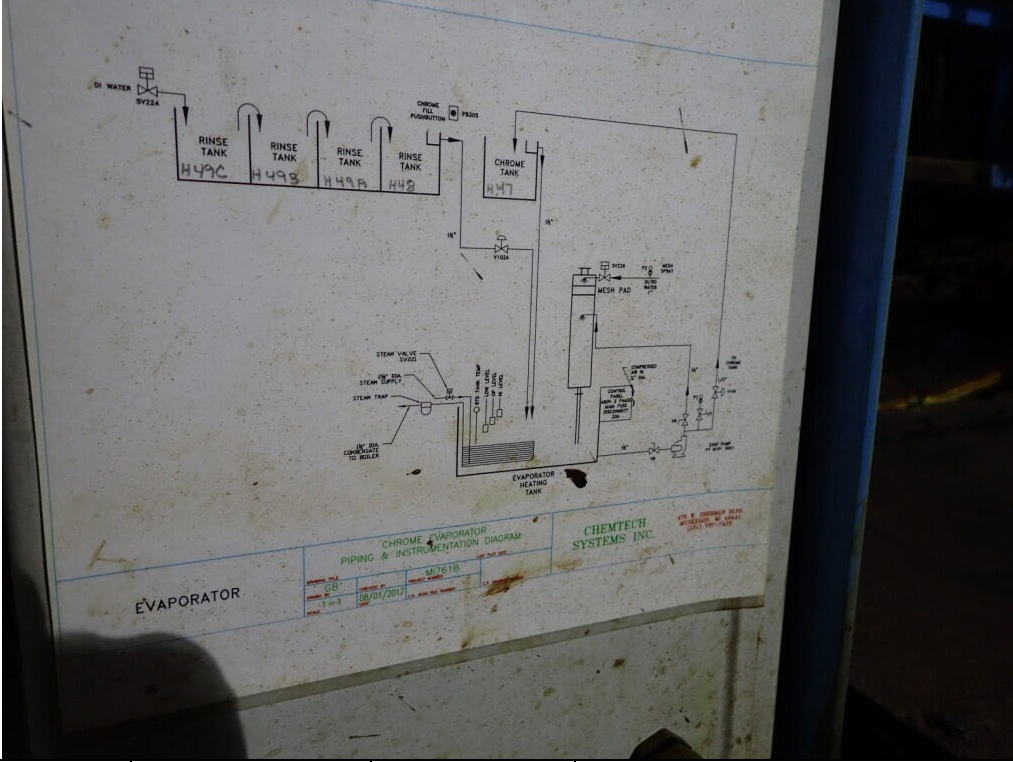


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Image Number	File Name	Date	Description of Image
10	P4240014	04/24/2024	Chrome Recovery/Evaporator System Overview



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Image Number	File Name	Date	Description of Image
11	P4240015	04/24/2024	Diagram of Chrome Recovery/Evaporator System
			
12	P4240016	04/24/2024	Back Side of Hoods for Plating Baths
			

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Image Number	File Name	Date	Description of Image
13	P4240017	04/24/2024	PCM's Tensiometer
			
14	P4240018	04/24/2024	Calibration Marker on the Tensiometer.
			