



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
Four Penn Center – 1600 John F Kennedy Blvd
Philadelphia, Pennsylvania 19103-2852

Report Title: Clean Air Act Inspection of Huntington Plating
Inspection Date(s): 06/28/2023
Regulatory Program(s): NSPS, NESHAP, MACT
Company Name: Huntington Plating Inc.
Facility Name: Huntington Plating Inc.
Facility Location: 625 Monroe Avenue
Huntington, WV 25704
Latitude: 38.412032 **Longitude:** -82.464257
County/Parish: Huntington
AFS/ICIS-Air Number: WV00001100038
Permit Number: N/A
NAICS Code: 332710, 332813 **SIC:** 3471
Unique Project #: 3E23CA074A

Facility Representatives:	Point of Contact
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EPA Lead Inspector

Signature

Kim Laufenberg
1600 John F Kennedy Blvd
Philadelphia, PA 19103-2852

Date

Supervisor

Signature

Kristen Hall

Date

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I. Introduction

The United States Environmental Protection Agency (EPA) conducted a Clean Air Act (CAA) inspection at Huntington Plating Inc. (Huntington Plating or Facility) to verify compliance with applicable State and Federal regulations. The West Virginia Department of Environmental Protection (WVDEP) was notified of the inspection on May 25, 2023 via email. On June 23, 2023, EPA notified the Facility of the planned inspection via phone and email. EPA emailed a list of records for review to Marc Houvouras, Huntington Plating's Vice President, prior to the inspection (see Attachment A). These records are listed in the Records Review section of the report.

The inspection included an evaluation of the Facility's processes and its compliance with the CAA. All information included in this report is the result of statements by the Facility representatives, materials shown to the inspectors by the Facility representatives, and/or documents provided by the Facility representatives to the inspectors at the time of, or subsequent to, the inspection. In addition, information gathered prior to the inspection from a review of EPA and State records may be included in Section A - Summary of the Facility.

A. Summary of the Facility

The Facility is located at 625 Monroe Ave, Huntington, WV 25704. Huntington Plating, according to its website (<http://www.huntingtonplating.com/>), is a full service machine and plating shop, providing manufacturing, repair, and plating services. The Facility is located in a mixed industrial and residential area of Huntington, WV. The services that were listed on the website on July 17, 2023 included: electroplating which consists of chrome, nickel, and silverplating; machine and hydraulics which consists of rebuilding hydraulic and pneumatic cylinders, heavy equipment components, and industrial machinery parts; and manufacturing which consists of machining and fabrication for single parts and production runs. The NAICS codes for Huntington Plating are 332710 for Machine Shops and 332813 for Chrome Plating and Metal Products.

The Facility does not have any Clean Air Act (CAA) Federal or State permits. The Facility is subject to, or potentially subject to the following federal regulations:

- 40 CFR Part 60, Subpart Dc – Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units,
- 40 CFR Part 63, Subpart N – National Emissions Standards for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks,
- 40 CFR Part 63, Subpart WWWW – National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Plating and Polishing Operations.

B. Inspection Opening Conference

At 07:54 AM on June 28, 2023 EPA inspectors arrived at the Facility for a CAA Inspection and conducted a brief opening conference. Huntington Plating was represented by Marc Houvouras, Vice President of Huntington Plating, Tom Houvouras, President of Huntington Plating and Phillip Stanley, QA/QC Manager of Huntington Plating. Also, Joshua Woody, WVDEP Compliance and Enforcement Officer, was present. EPA inspectors, Kim Laufenberg and Scott Yanos, presented their credentials and explained the purpose of the visit was to conduct a CAA inspection to determine compliance with their permit and any applicable regulations. Additionally, EPA informed the Facility representatives of their right to claim any confidential business information (CBI). At that time, Marc Houvouras claimed that their military contracts which includes the processes and parts contained in those contracts as well as the exact cycle the parts go through the electroplating process as CBI.

II. Site Activity/Process Description

Huntington Plating Inc. was founded in the late 1940s as a combined machine shop and electroplating business. The present location (625 Monroe Avenue, Huntington, WV 25704) is Huntington Plating's only location. Huntington Plating's business mostly consists of industrial, commercial, and government contracts. The Facility does not keep any inventory of parts or materials as orders vary considerably by customer and contracts, and typically the customer provides the part(s). Most of the work that comes to Huntington Plating is reconstruction of machine parts for customers, where the Facility breaks down and re-salvages the parts before repairing and reconstructing them. Huntington Plating also has manufacturing capabilities using its machine shop to fabricate machine parts according to customer specifications.

Huntington Plating is open from 7:30 AM to 3:30 PM, Monday through Friday employing 15 to 20 staff. The Facility occupies a space of roughly 20,000 to 30,000 square feet which consists of:

- One silver plating line, two nickel plating lines, and three chrome plating lines;
- Hazardous waste and chemical storage;
- Machine shop which is separated into three rooms:
 1. Lathes and mills,
 2. Welding and boring, and
 3. Parts preparation and cleaning;
- A small outdoor space used for staging machine parts and a large plating line.

Marc Houvouras provided an overview about how the process of reconstruction is performed, but often each contract is handled differently depending on the needs of the customer. Mr. Houvouras explained that, first, generally, a part is received and then inspected by Huntington Plating. After assessing the work that needs to be completed, each part is cleaned and prepped for plating by using tape to mask the areas that will not be plated. Depending on the metal and

condition of the part, some machine parts need to go through an additional caustic bath of either electro-cleaner or hydrochloric acid to remove current plating, possible oxides, and any other substances that can interfere with the plating process. Once the part is prepped and before the part is dipped, the part is attached to a rack through which the electric current will be applied during the electroplating process. The part is then dipped into a series of baths that will apply the desired plating specifications. Over plates are occasionally used to ensure the proper thickness by going over the area to be plated and only allowing for a certain thickness of metal to develop on the part between the part's surface and the over plate. With the exception of silver plating, parts that have been plated are sent to the machine shop to be machined down to the thickness ordered by the customer. Due to the expense of the silver, Huntington Plating tries to ensure the correct thickness of silver is applied during the electroplating process.

Each of the metals have their own plating line. The chrome plating line has a slightly different process which just polishes the parts versus machining. In addition, the chrome plating line is equipped with a scrubber to control emissions from the plating tanks. Emissions from the tanks are drawn into vents and routed to the scrubber. Huntington Plating is planning on implementing a zinc plating line for commercial availability; however, it was stated that the line is not ready for operation nor are its services currently offered to customers. Huntington Plating has a daily inspection walkthrough of the Facility by the maintenance staff which includes daily pressure drop readings and visual inspection of active process tanks.

Huntington Plating has chemical storage on-site both for use in the plating process and machine shop. The chemicals used in the processes are managed through a Hazardous Waste Program. Huntington Plating only has small scale storage of chemicals which is mostly kept near the metal plating lines themselves. Both the silver and nickel plating lines have their chemicals stored in a small room near the lines, while the chemicals used for the chrome plating line are stored in the same room as the chrome plating tanks across from the dip tanks. Marc Houvouras stated that Huntington Plating ships hazardous waste off-site via 55-gallon drums that is mostly made up of solid waste in small quantities. Huntington Plating does not generate large volumes of wastewater from the plating process because they rarely drain their tanks. Instead, additional chemicals are added to the tanks when the levels of the plating baths get low.

One natural gas-fired boiler is located on-site for space and process heating. Huntington Plating requested and received a determination for the CAA by WVDEP in 1973 that a Rule 13 Permit is not required for their Facility. No re-evaluation has been performed since this initial designation. Marc Houvouras did note that Huntington Plating has had discussions with an environmental consultant who said that they may be subject to 40 C.F.R. Part 63 Subpart WWWW – National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Plating and Polishing Operations.

Once Huntington Plating finishes an order or contract, products are shipped to the customer. Logistics are usually left up to the customer with Huntington Plating having the capability of

delivering product to the customer at their request or allow for third-party to take care of the shipping.

The opening conference concluded at 08:43 AM.

III. Observations

EPA inspectors were led on a walkthrough of the Facility at 08:47 AM by Marc Houvouras and Phillip Stanley of Huntington Plating. Joshua Woody, WVDEP, was also present for the walkthrough. EPA inspectors noted photos would be taken during the Facility walkthrough (Attachment B).

The first area Marc Houvouras showed EPA Inspectors was the silver and nickel plating area, as well as the area where Huntington Plating was working on developing the process for zinc plating. Each line had five tanks involved in the plating process for a total of 15 tanks in this area. Stepping through the tanks:

1. A part was dipped in a 10% by volume sulfuric acid to clean the part,
2. The part continued to an electro-clean bath of sodium hydroxide,
3. This was followed by a rinse tank to remove substances that can interfere with the plating,
4. Then a sulfuric etch tank was used to activate the parts surface for plating (the part may go back to the rinse tank to repeat step #3),
5. And last, the plating tank where the part was dipped in either silver or nickel.

There was also a wastewater recovery tank that was said to recover the water that is used to rinse the machine parts after the plating process is complete. Mr. Houvouras indicated that this is the biggest generator of wastewater at the Facility.

After the silver and nickel plating area, the EPA inspection team proceeded to the chrome plating area, which shared the space with the hazardous waste storage. There was an odor noticed by EPA inspectors upon entering the room. The chrome plating line had three (3) active tanks and Marc Houvouras noted the possibility of adding a fourth if the Facility should need it. Each tank was observed to be attached to an exhaust which connected to a scrubber with a pressure gauge for each unit. The pressures on each gauge were noted, in order, to be 2.7, 3.0, and 2.7 inches of water. A hazardous waste clean-up satellite station was observed near the chrome plating line, next to the chrome preparation stations which had two (2) tanks used for cleaning and stripping chrome parts before they were sent through the plating process. On the opposite side from the chrome plating line, the hazardous and non-hazardous waste storage was observed with solid non-hazardous waste barrels (50-gallon) taking up the majority of the space. The space was observed to be clean with no visible leaks or spills. Next to the waste storage were multiple 155-gallon tanks full of chrome solution. Marc Houvouras explained that they sometimes pull out the chrome solution from the plating tanks depending on the operation and specifications required.

In those circumstances, Huntington Plating was said to store the solution in these tanks for eventual reuse in the chrome plating process.

From the chrome plating line, the walkthrough continued to the small area Huntington Plating utilizes for storing hazardous chemicals, which are created during their plating processes. Sulfuric acid (H_2SO_4), hydrochloric acid (HCl), and zinc solution (Zn) were all observed to be stored in drums, which had containment sumps underneath the 55-gallon drums where the chemicals were stored. The area was observed to be clean, with no leaks or spills but an odor was noted. Along the wall, a water treatment system was noticed, which consisted of a reverse osmosis system and water softener. Marc Houvouras explained that the water from the municipality was too hard, and they have to treat the water to reduce the hardness, so it doesn't interfere with the plating process.

The walkthrough then proceeded to the machine shop portion of the Facility. The machine shop was divided into three rooms, each with a different process for machining the parts after the plating was complete or in the fabrication of new parts. Each of the rooms was observed to have open vents with a fan able to direct air to the outside. The first room had lathes, grinders, and polishers said to mainly be used to finish the chrome plated products and occasionally the nickel plated products. The lathes and grinders are also used in the process of fabricating new parts. After this, the walkthrough proceeded into the area where the mills and welding area was observed. The final room in the machine shop was a prepping and staging area where the parts were said (by Marc Houvouras) to be cleaned and disassembled before further work was completed. A 1,200-gallon degreaser tank was observed in this room which Huntington Plating stated was full of sodium hydroxide to degrease parts before plating. The sodium hydroxide overflow was said to be stored behind the tank along with a few oil storage tanks, which were noted to be empty at the time of the inspection.

An outside area was located directly adjacent to the machine shop where Huntington Plating stages finished parts to be sent back to the customer and where they receive parts for new orders before they are sent to the prepping area. The walkthrough continued through this space to a separate building that contained the large nickel plating line.

The large nickel plating line had space for six (6)-9,000 gallon tanks, only four (4) tanks were noted to be currently in use, and they contained Watts nickel solution, 10% sulfuric acid etch, a rinse, and sodium hydroxide electro-cleaner. Located in the back of the building were two (2) natural gas-fired, low-pressure boilers that were said to be used to heat the nickel plating line and the cleaning tank. Both boilers were observed to be 150 PSI and 2343 MBH via their labels. Huntington Plating was only using the original boiler that was installed with the large nickel plating line. The newer boiler was purchased as a back-up when the original no longer functions. It was during the discussions about the boilers that EPA inspectors were informed that the smaller plating lines (silver and nickel) in the main building used individual electric space heaters as their heating elements. Marc Houvouras noted a 2005 Stack Test was performed for

the scrubber controlling emissions from the chrome plating line which designated the monitored pressure ranges.

The walkthrough concluded at 09:57 AM.

IV. Records Review

The records review commenced immediately after the plant walkthrough at 09:59 AM. EPA inspectors reviewed documents requested in the June 27, 2023 email to Marc Houvouras (see Attachment A). Records were provided at the time of the inspection by Marc Houvouras. Below are the records that were provided during the inspection:

1. Hardcopies of Chrome Pressure Log for January 1, 2020 – June 26, 2023,
2. Hardcopies of Quarterly Chrome Maintenance for January 2020 – June 2023, and
3. Hardcopies of Boiler Service for 6/24/2020, 8/14/2020, 7/25/2021, 1/18/2022, 9/14/2022.

During the inspection, EPA requested the following electronic records from Huntington Plating. Marc Houvouras agreed to provide the records and requested to be sent the secure (GoAnywhere portal) link to upload the files. These documents were provided on 7/10/2023 and 7/17/2023. The general request for the files can be seen in Attachment C.

V. Closing Conference

After the records review, EPA inspectors, Marc Houvouras, Tom Houvouras, and Phillip Stanley from Huntington Plating and Joshua Woody of WVDEP had a brief closing conference to ask additional questions and discuss observations. The EPA inspectors noted that the investigation is on-going, and any areas of concern identified in the final report do not necessarily reflect a violation or deviation, rather, they are areas that will require further investigation. EPA also noted that they would issue an inspection report within in 60 days, with a copy to the State. Simultaneously, EPA will perform a detailed review of records and may have additional questions. The inspection concluded at 10:28 AM.

The Facility is potentially subject to 40 CFR Part 63, Subpart WWWW – National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Plating and Polishing Operations. This regulation applies to area sources of hazardous air pollutants that, among other things, are engaged in the process of non-chromium electroplating and dry mechanical polishing of finished metals and formed products after plating (40 C.F.R. § 63.11504). This regulation includes standards and management practices to control metal HAP emissions from non-chromium plating tanks. EPA is evaluating Huntington Plating's applicability and compliance with this regulation.

VI. List of Attachments

- Attachment A: Email Correspondence – to Marc Houvouras, notification of inspection and records requested for review
- Attachment B: Photo Log for Huntington Plating's On-site Inspection
- Attachment C: Huntington Plating Inspection Records Requested

Laufenberg, Kim

From: Laufenberg, Kim
Sent: Friday, June 23, 2023 2:56 PM
To: marc@huntingtonplating.com
Cc: Yanos, Scott (he/they)
Subject: Upcoming EPA CAA Inspection - Huntington Plating, June 27, 2023
Attachments: Huntington Plating_CAA Inspection_Document Request.docx

Dear Marc Houvouras,

As discussed over our phone call today, EPA Region 3 will be conducting a Clean Air Act (CAA) inspection of Huntington Plating on Wednesday, June 28, 2023. My colleague, Scott Yanos, and I anticipate arriving at 625 Monroe Avenue, Huntington, WV 25704 around 8:00 AM. We would like to begin with an opening meeting that will provide EPA with the current and historical operations at the facility and a brief overview of its process(es). EPA inspectors will have steel toed boots, safety glasses, and ear protection as you noted on our call which is required at the facility.

The scope of the inspection will include, but may not be limited to, a review of all air pollution sources, a facility walk-through (during which photographs will be taken), and a review of records requested (see attached). West Virginia Department of Environmental Protection (WVDEP) has been notified of the inspection and plan to attend.

To help facilitate the inspection, it would be appreciated if the records in the attached document were made available for review.

Please confirm receipt of this message and don't hesitate to contact me with any questions.

Sincerely,

Kim Laufenberg

Air Section – Enforcement & Compliance Assurance Division

U.S. Environmental Protection Agency – Region III

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ATTACHMENT B: PHOTO LOG

Facility: Huntington Plating Inc.

Location: 625 Monroe Avenue, Huntington, WV 25704

Inspection Date: 6/28/2023

EPA Inspector(s): Kim Laufenberg

Photographer: Scott Yanos



Photo Number: DSC00486

Photo Description: Nickel- and Silver-Plating Lines

Time: 08:49 AM



Photo Number: DSC00487

Photo Description: Zinc-Plating Line

Time: 08:54 AM



Photo Number: DSC00488

Photo Description: Wastewater Recovery

Time: 08:55 AM



Photo Number: DSC00489

Photo Description: Chrome-Plating Line

Time: 09:04 AM



Photo Number: DSC00490

Photo Description: Chrome Tank #1 Pressure Gauge

Time: 09:05 AM



Photo Number: DSC00491

Photo Description: Chrome Tank #2 Pressure Gauge

Time: 09:06 AM



Photo Number: DSC00492

Photo Description: Chrome Tank #3 Pressure Gauge

Time: 09:08 AM



Photo Number: DSC00493

Photo Description: Hazardous Waste Satellite Station

Time: 09:10 AM

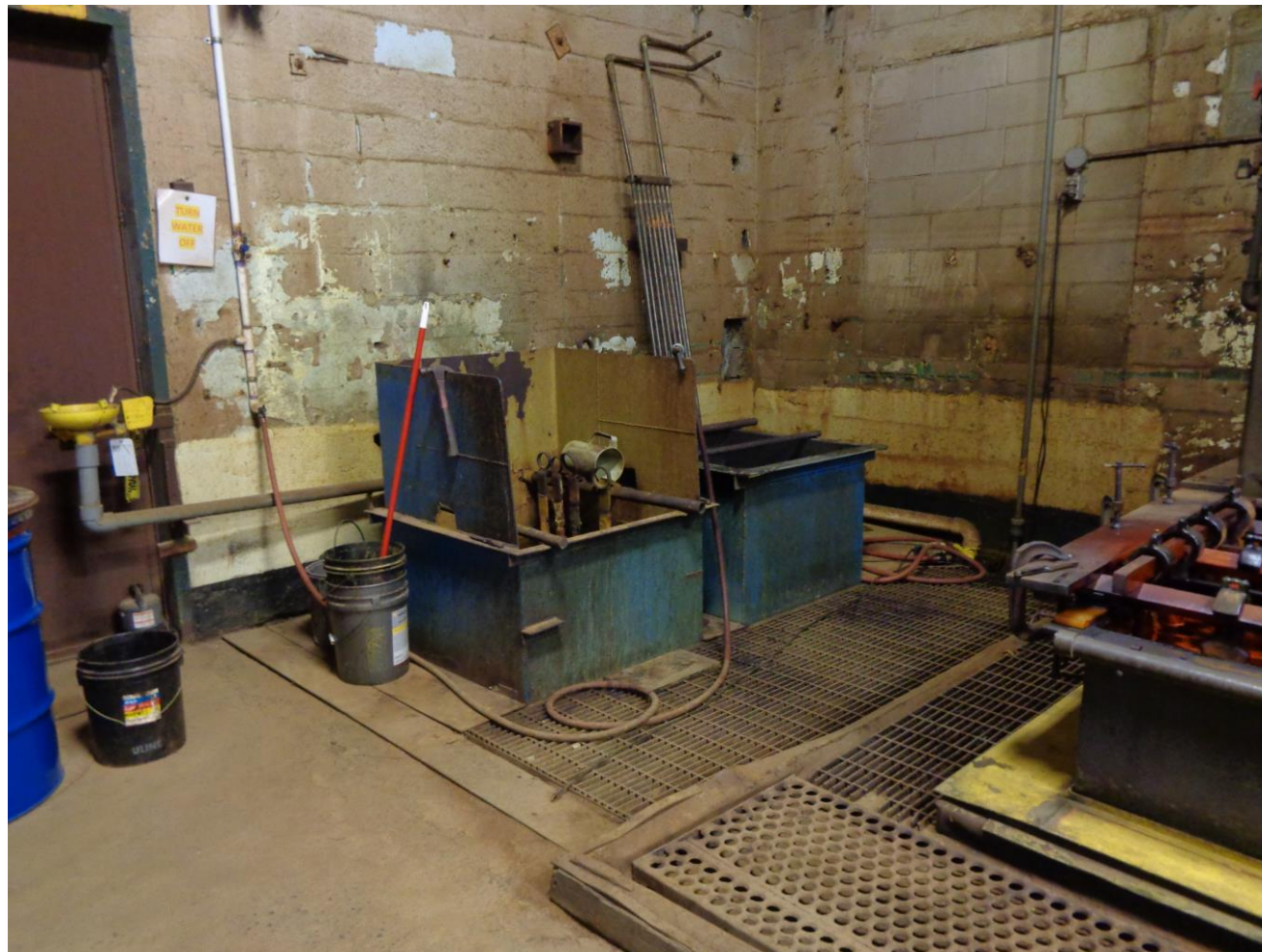


Photo Number: DSC00494

Photo Description: Chrome Stripping Tanks

Time: 09:11 AM



Photo Number: DSC00495

Photo Description: Non-Hazardous Waste Storage

Time: 09:13 AM



Photo Number: DSC00496

Photo Description: Chrome Solution Reuse Totes

Time: 09:15 AM



Photo Number: DSC00497

Photo Description: Chemical Storage Room

Time: 09:19 AM



Photo Number: DSC00498

Photo Description: Chrome Finishing Machine Shop

Time: 09:24 AM



Photo Number: DSC00499

Photo Description: Mill Machine Shop

Time: 09:28 AM



Photo Number: DSC00500

Photo Description: Degreaser

Time: 09:33 AM



Photo Number: DSC00501

Photo Description: Chemical Storage and Overflow

Time: 09:35 AM



Photo Number: DSC00502

Photo Description: Natural Gas-Fired Boilers (2)

Time: 09:44 AM



Photo Number: DSC00503

Photo Description: Primary Natural Gas-Fired Boiler Label

Time: 09:46 AM



Photo Number: DSC00504

Photo Description: Back-up Natural Gas-Fired Boiler Label

Time: 09:47 AM



Photo Number: DSC00505

Photo Description: Large Nickel-Plating Line in Adjacent Shop

Time: 09:51 AM

HUNTINGTON PLATING (FACILITY)

EPA CAA Inspection Records Request

June 27, 2023

Please provide electronic copies of the following records, unless otherwise specified:

1. Provide a plot plan of the Facility. Also, provide a paper copy during the opening conference.
2. Provide a detailed description of the Huntington Plating's process(es).
3. A list of all combustion sources at the Facility such as furnaces, boilers, and/or engines.
 - a. For each boiler or engine identified, provide:
 - i. Date of installation;
 - ii. Type of fuel(s) combusted;
 - iii. Maximum heat input rating (MMbtu or kW/hr);
 - iv. Hours of operation monthly from January 2020 to the present.
 - b. Fuel usage on a monthly basis for any combustion equipment at the Facility (boilers, emergency generators, fire pumps, etc.) since January 2020.
 - c. Records of each tune-up conducted at each unit since January 2020.
4. For each of Huntington Plating's tanks, provide:
 - a. Whether the tank is existing or new (include date of installation);
 - b. The rectifier capacity (volume – gallons);
 - c. Material stored (content held within the tank);
 - d. Annual tank turnover since January 2020;
 - e. The control device(s) used;
 - f. Copies of monitoring records since January 2020;
 - g. A copy of the operation and maintenance plan required by 40 C.F.R. § 63.342(f)(3).
5. Provide copies of the emission statements submitted to WVDEP for the years 2020-2022. These emission statements shall include the emission factors used to determine emissions and the derivation of each factor (stack test, CEMS, AP-42, etc.).
6. Annual production and emissions calculations (preferably emailed in an unlocked Microsoft Excel format) since 2020, including but not limited to:
 - a. Records on the amount of any electroplating, machining, welding, plating, boring, grinding, honing, milling, polishing, and turning on an annual basis;
 - b. Monthly emissions of VOCs, HAPs and NOx for each process unit and facility wide along with supporting calculations for 2020-2022 (lbs/hr).
7. Provide a list of each control device currently in use at the Huntington Plating used to control or reduce emissions from any emission point at the site. The list should include:
 - a. The make/model of the control;
 - b. Date of installation at the Facility;
 - c. Which pollutant(s) are being controlled;
 - d. Each source or emission point being controlled;
 - e. The reduction efficiency (%) for each control;
 - f. Copies of any stack tests conducted to determine emissions, control efficiency, for compliance demonstrations, etc. conducted at the Facility since 2000.
8. Provide a list of each request for permit determination or permit application submitted to the WVDEP since January 2020. Also, provide a list of each permit or permitting determination issued to Huntington Plating. This should include the date of the request/permit and the permit number, if applicable.
9. Provide copies of any initial notifications, compliance reports, and/or periodic reports submitted to either EPA or WVDEP for 40 C.F.R. Parts 60 and 63.