



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 1

5 POST OFFICE SQUARE, SUITE 100
BOSTON, MA 02109-3912

Drafted Date: March 24, 2022

Finalized Date: May 4, 2022

Subj: Inspection Report
Clean Water Act - National Pollutant Discharge Elimination
System ("NPDES")
Photofabrication Engineering, Inc.

From: John (Jack) Melcher
Michelle Coombs

Appendices:

- Appendix A - Process Flow Diagram
- Appendix B - Photographs
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- Appendix D - Wastewater Operator Logbook Pages
- Appendix E - Email Correspondence re April 2021 Nickle
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I. Facility Information

- A. *Facility Name:* Photofabrication Engineering, Inc.
- B. *Facility Location:* 500 Fortune Blvd
Milford, MA 01757
- C. *Facility Contacts:* Phillip Galeucia, Director of Operations
(603) 438-8604, pgaleucia@photofabrication.com

David Williams, Engineering Manager
508-478-2025, DWilliams@photofabrication.com
- D. *NPDES ID No(s):* MAPIU0008 (wastewater, pretreatment)
MAR053076 (stormwater)

II. Background Information

- A. *Date(s) of inspection:* March 22 and 23, 2022
- B. *Weather Conditions:* March 22: Clear.
Weather Underground reports the previous precipitation in Milford, Massachusetts was 0.46 inches on March 20.
- C. *US EPA Representative(s):*
John (Jack) Melcher, Enforcement Officer
Michelle Coombs, Inspector
Shannon Brunelle, Inspector-in-Training
- D. *State/Local Representative(s):*
None
- E. *Federally Enforceable Requirements Covered During the Inspection:*
40 C.F.R. Part 403 – General Pretreatment Regulations for Existing and New Sources of Pollution
40 C.F.R. § 433.15 – Metal Finishing Point Source Category, Pretreatment Standards for Existing Sources
NPDES Multi-Sector General Permit for Stormwater Activities Associated with Industrial Activity (“MSGP”)
- F. *Previous Enforcement Actions:*
No EPA Clean Water Act enforcement actions are on record since at least January 1, 2010

III. Type and Purpose of Inspection

EPA conducted an Industrial User (“IU”) Evaluation Inspection and an IU Sampling Inspection to evaluate compliance with the General Pretreatment Regulations at 40 C.F.R. Part 403 and the Metal Finishing Point Source Category, Pretreatment Standards for Existing Sources at 40 C.F.R. § 433.15.

EPA conducted a Compliance Evaluation Inspection to evaluate compliance with the MSGP issued by EPA on January 15, 2021 (“2021 MSGP”)

IV. Facility Description

EPA’s Enforcement Compliance History Online (“ECHO”) website provides general environmental compliance data for Photofabrication Engineering, Inc. (“PEI” or “the Facility”).¹

¹ Available at: <https://echo.epa.gov/detailed-facility-report?fid=110000309577>. Accessed on March 23, 2022.

A. Wastewater

EPA's previous on-site inspection to evaluate the facility's compliance with the Pretreatment Standards was on September 21, 2017.

The Facility submitted a Baseline Monitoring Report on February 13, 1985. This information was updated in response to an EPA Information Request in August 2017. The following is a summary:

- PEI performs chemical machining (etching) of copper, brass, stainless steel, titanium, and various other alloys of metals.
- The average daily flow is approximately 4,800 gallons per day (gpd).
- Daily maximum flows are approximately 12,000 gpd.

Following the September 21, 2017 inspection, the Facility provided EPA with an updated Industrial Wastewater Pretreatment System Process Flow Diagram, provided in Appendix A of this report.

B. Stormwater

EPA's previous on-site inspection to evaluate the facility's compliance with the MSGP was on September 23, 2009.

The Facility submitted a Notice of Intent for coverage under the 2021 MSGP on March 11, 2021. The Notice of Intent states that the Facility's primary Standard Industrial Classification code is 3479 (Coating, Engraving, and Allied Services, Not Elsewhere Classified). Section AA (Fabricated Metal Products) and Subsector AA2 (Fabricated Metal Coating and Engraving) of the 2021 MSGP are applicable to the Facility.

V. Inspection

Unless otherwise noted, this report describes conditions at the facility/property as observed by EPA inspector(s), and/or through records provided to and/or information reported to EPA inspector(s) by facility representatives and as understood by the inspector(s). This report may not capture all operations or activities ongoing at the time of the inspection. This report does not make final determinations on potential areas of concern. Nothing in this report affects EPA's authorities under federal statutes and regulations to pursue further investigation or action.

The inspection was not announced in advance.

Mr. Melcher, Ms. Coombs, and Ms. Brunelle ("the inspectors" or "EPA representatives") arrived on March 22, 2022, at approximately 09:00.

Select photographs taken during the inspection are provided in Appendix B of this report. The photographs have an incorrect time stamp that is approximately one hour earlier than the correct time and display an incorrect date. All photographs were taken on March 22, 2022.

A. Opening Conference

The inspectors were received by Mr. Galeucia. Mr. Galeucia said that Michael Martell, the previous Manager of Environmental Health and Safety and Waste Treatment had recently left PEI. Mr. Galeucia was taking over many duties from Mr. Martell, but Mr. Galeucia had only started work at PEI on the previous Friday.

Mr. Melcher showed Mr. Galeucia his credentials and explained the purpose of the inspection.

B. Wastewater Sampling

The inspectors, Mr. Galeucia, and Mr. Williams went to the wastewater treatment room so that Ms. Coombs and Ms. Brunelle could collect wastewater samples.

Inside the wastewater treatment room, facility representatives directed Ms. Coombs and Ms. Brunelle to the location where compliance monitoring samples are collected. The compliance monitoring point is a sampling valve located after the last of three Final Filter tanks (“FF-3,” according to the Industrial Wastewater Pretreatment System Process Flow Diagram) and just prior to discharge. At 09:40 on March 22, EPA representatives collected grab samples for analysis of volatile organic compounds (“VOCs”), base/neutral and acid extractables (“BNAs”), pesticides, polychlorinated biphenyls (“PCBs”), and total cyanide from the sampling valve. A sample (“PEI”) and a duplicate (“PEI-D”) were collected for each parameter. An instantaneous grab sample was collected for pH and total residual chlorine (“TRC”) for in-situ screening. The sample was field tested for pH using an Oakton “pHtestr” pH meter and TRC using a HACH “DR300” colorimeter. The pH was 6.59 Standard Units (S.U.) and the TRC was 0.13 mg/L.

At 10:15 on March 22, EPA representatives deployed an ISCO model 6712 automatic sampling device with twenty-four (24) aliquot containers inside. The purpose of the automatic sampler deployment was to collect a time composited sample of the facility’s discharge for the analysis of metals from the compliance monitoring point (sampling valve). EPA programmed the ISCO to pump 120 milliliters (“mL”) of sample every 15 minutes for 24 hours into each of the 24 aliquot bottles, so that each bottle would represent one hour of wastewater discharge activity during a 24-hour period.

On March 23, at approximately 10:00 HRS, EPA representatives returned to collect the automatic sampler. Mr. Williams stated that the facility’s discharge began on March 22, at 11:00 and ended at 14:15 and occurred again from 18:30-21:15. On March 23, Mr. Williams stated that the facility’s discharge occurred from 05:00-05:45, 07:30-08:30, and was currently running since 09:30. The following bottles were to be composited.

Table 1: Summary of Times During Which Facility Discharges Occurred

Date of Facility Discharge	Aliquot Bottle #	Facility Discharge Period
3/22/22	2-5	11:00-14:15

3/22/22	9-12	18:30-21:15
3/23/22	20	05:00-05:45
3/23/22	23	7:30-08:30
3/23/22	24	09:30

Upon retrieving the ISCO, a blockage was detected that prevented the aliquot bottles from being filled properly. The ISCO continued to pull samples as programmed (120mL every 15 minutes for 24 hours), but it filled the basin of the ISCO with sample instead of the aliquot bottles. The sample was transferred into a 5 gallon “cube-pack” container and homogenized. The sample and a duplicate were transferred from the homogenized “cube-pack” container into sample bottles.

The total metals samples were collected in 250-mL HDPE containers and preserved with nitric acid to attain a pH of less than 2 S.U. The total cyanide samples were collected in 250-mL HDPE containers and preserved with sodium hydroxide to attain a pH of above 12 S.U. The BNA samples were collected in 1-liter amber jars with no preservative added. The pesticides/PCBs samples were collected in 1-liter amber jars with no preservative added. The VOC samples were collected in 40-mL amber vials and preserved with hydrochloric acid to attain a pH of less than 2 S.U. All samples were then placed in coolers with ice to maintain an internal temperature of less than 4 degrees Celsius and delivered to the to the EPA New England Regional Laboratory in North Chelmsford, MA to be analyzed.

Sampling and analytical results are displayed in Section VI, below.

C. Wastewater Evaluation

1. Wastewater Treatment Room

On March 22, at approximately 9:15, Mr. Melcher, Mr. Galeucia, and Mr. Williams discussed wastewater issues while Ms. Coombs and Ms. Brunelle were performing wastewater sampling.

Mr. Galeucia said that, in April 2021, the Facility was purchased by The Partner Companies (“TPC”), which owns several other industrial facilities located in the United States.

Mr. Melcher said that, since at least January 2018, most of the Facility’s reports had not included monitoring results for silver, a pollutant regulated by the Pretreatment Standards for Existing Sources for the Metal Finishing Point Source Category. Mr. Williams said that the Facility did not work on silver parts. Mr. Melcher said that the regulations allow for Industrial Users to forego sampling of a pollutant regulated by a categorical Pretreatment Standard if the facility has demonstrated through sampling and other technical factors that the pollutant is neither present nor expected to be present in the discharge.

Mr. Melcher said that, since approximately 2019, the Facility had not been providing a certification in its wastewater Periodic Reports on Continued Compliance that no dumping of concentrated toxic organics into the wastewaters had occurred. Mr. Williams said that the Facility discontinued use of trichloroethylene (“TCE”) in 1989. The solvent had been used for parts washing, but the Facility switched to an aqueous solution of soap and water. Switching to soap and water necessitated the addition of a process to dry parts before additional processing.

Mr. Melcher asked to view the plumbing of water purification reject water from the Facility’s reverse osmosis system. Dennis Sweeney, Facility Manager, pointed out a white pipe of approximately 1-1/2 inches in diameter conveying water purification reject waters to vault in the floor (Appendix B, Photograph 3). The water purification reject waters did not dilute the metal finishing wastewaters prior to the sampling location.

Mr. Melcher viewed the location where the metal finishing wastewaters flow through the floor (Photo 4). Mr. Melcher viewed the location where final hydrogen ion concentration (“pH”) is measured for metal finishing wastewaters, located approximately five feet from the location where the metal finishing wastewaters flow through the floor (Photo 5).

Mr. Melcher asked how frequently the pH probe was calibrated. Mr. Williams stated that the probe was calibrated at least weekly. Mr. Williams stated that the wastewater treatment system is configured to only start if the probe has been calibrated within one week.

2. Wastewater Records Review

On March 22, at approximately 11:00, the inspectors, Mr. Galeucia, Mr. Williams, and Bill Johnson, Chief Wastewater Operator, went to a conference room to discuss wastewater records.

Mr. Melcher asked the Facility representatives about eight instances of non-compliance with the Pretreatment Standards for Existing Sources for the Metal Finishing Point Source Category reported by the Facility, as summarized in Appendix C of this report.² For each instance, Mr. Johnson looked up the date in the operators’ log books, photographs of which are provided in Appendix D of this report.

The Facility’s quarterly Periodic Reports on Continued Compliance typically include one composite sample per month for metals. Therefore, the appropriate Pretreatment Standard for Existing Sources is the average monthly standard.

² Since the date of the inspection, the Facility submitted its Periodic Report on Continued Compliance for the fourth quarter of calendar year 2019, on which the total nickel observed during December 2019 (5.41 milligrams per liter) exceeded the Average Monthly Standard of 2.38 milligrams per liter.

a. Total Nickel

The average monthly Pretreatment Standard for Existing Sources for total nickel for the Metal Finishing Point Source Category is 2.38 milligrams per liter (“mg/l”).

The Facility’s Periodic Report on Continued Compliance dated June 30, 2021, states that a total nickel concentration of 16.5 mg/l was observed in a composite sample collected on April 14, 2021. Mr. Melcher read aloud an email exchange included in the June 2021 Report between the Mr. Martell, the previous Manager of Environmental Health and Safety and Waste Treatment, and Joseph Canzano of EPA (provided in Appendix E of this report). In the email, Mr. Martell explained that the result received from the laboratory was higher than any observed nickel concentration obtained from internal process monitoring. In the email, Mr. Martell said that “the only thing I can think of is the sample jar or sample itself somehow got exposed to contaminants. All testing prior to and after have been perfectly fine.”

Mr. Williams said that he did not think that it was likely that the sample bottles had been contaminated, as the Facility receives sealed sample bottles with preservatives included from their laboratory. Ms. Brunelle said that the laboratory could check the lot number of the bottles for information regarding contamination.

Mr. Johnson said that when he performs metals analysis for process control, he takes samples either from the clarifier or from Tank 6A, located immediately downstream of the clarifier, rather than the sampling port used for the composite sampler. Mr. Melcher asked if there is a potential for addition nickel to be introduced between the process control sampling location and the compliance sampling location, such as from the final filters. Mr. Williams said that he did not think that there was a potential for contamination; the final filters are not intended to remove metals and are unlikely to be a source of metals.

Mr. Johnson said that he uses Hach brand test kits to perform process control sampling for copper and nickel. Ms. Coombs asked if there is a potential that an expired kit was provided erroneous results. Mr. Williams stated that kits are ordered four or five times a year directly from Hach and that it is unlikely that an expired kit was used.

Mr. Johnson described the Facility’s procedure for performing composite sampling. Typically, the wastewater operators turn on the power to the wastewater treatment room in the morning and, immediately afterwards, activate the ISCO automated sampling machine. The ISCO is programmed to collect a composite from wastewater treatment system discharges throughout the day. The electricity to the wastewater treatment system, including the ISCO, is typically turned off during the afternoon and no further wastewater treatment system discharges are made, nor samples collected.

The logbook from April 14, 2021, states that the highest nickel concentration observed from the process control tests was 0.834 mg/l. Mr. Johnson said that he could tell by the handwriting that another operator, George, was on duty.

Table 2 provides a summary of the results reported to EPA from laboratory analysis of composite samples that exceeded the average monthly Pretreatment Standard for Existing

Sources for total nickel for the Metal Finishing Point Source Category, as well as the highest nickel concentration recorded for the sampling date in the logbooks from the Hach process control test kits.

Table 2 – Comparison of Nickel Laboratory Results and Process Control Test Results

Periodic Report on Continued Compliance Date	Sample Date	Lab Result (mg/l)	Highest Hach Kit Result (mg/l)
11/6/2019	7/24/2019	3.00	1.08
11/6/2019	9/26/2019	2.71	0.623
5/18/2020	1/29/2020	8.73	0.875
3/30/2021	2/8/2021	3.42	0.851
6/30/2021	4/14/2021	16.50	0.834

In each case, the laboratory analysis of composite samples is significantly higher than the highest nickel concentration recorded in the logbooks from the Hach process control test kits.

b. Total Copper

The average monthly Pretreatment Standard for Existing Sources for total copper for the Metal Finishing Point Source Category is 2.07 mg/l.

The Facility’s Periodic Report on Continued Compliance, dated March 30, 2021, stated that a laboratory analysis of a composite sample collected on January 20, 2021, had a concentration of 2.48 mg/l.

The logbook for January 20, 2021, states that a “cupric spill” occurred on that date. Mr. Johnson said that the handwriting on the logbook for that day was of another wastewater operator, George. Process control test kit results for copper shown in the logbook are as high as 3.38 mg/l.

Mr. Williams said that “cupric” is an industry term for copper chloride, and that cupric is an acid used by the Facility to etch brass. Mr. Johnson said that if copper chloride enters the wastewater treatment system, it causes “upsets.” Mr. Johnson said that if the wastewater treatment operators are notified immediately, they can divert spilled materials into a wastewater storage tank (“Big Blue”), where they can be metered out slowly and not result in inadequate treatment.

The Facility’s Periodic Report on Continued Compliance, dated April 9, 2018, states that a laboratory analysis of a composite sample collected on February 15, 2018, had a concentration of 2.72 mg/l.

The logbook for April 9, 2018, states that, following a process control test kits result for copper of 2.86 mg/l, the clarifier was pumped down. Mr. Johnson said that the handwriting in the logbook was his own. Once he was aware of the high copper

concentrations, he directed wastewater from the clarifier to the sludge thickening tank rather than discharging it.

c. Total Zinc

The average monthly Pretreatment Standard for Existing Sources for total zinc for the Metal Finishing Point Source Category is 1.48 mg/l.

The Facility's Periodic Report on Continued Compliance, dated April 9, 2018, states that a laboratory analysis of a composite sample collected on March 15, 2018, had a concentration of 1.66 mg/l.

Mr. Williams stated that the Facility does not routinely test zinc for process control, but asked Mr. Johnson to look at the process control test kit result for copper. The logbook for March 15, 2018, states that the highest copper result recorded was 0.21 mg/l.

d. Wastewater Reporting

Mr. Melcher said that other than the observation of 16.5 mg/l of nickel in a composite sample collected on April 14, 2021, the Facility had not identified non-compliance in the cover letters of its reports for the events described above. Mr. Williams said that the Facility's policy was to review laboratory results when they are received and notify the Town of Milford and EPA as appropriate. Mr. Melcher provided the Facility with a document "Monitoring and Report Procedures" prepared by EPA Region 1 with guidance for IUs for which EPA is the Control Authority. The document provides an email address set up by EPA to receive notifications (R1.ECAD.pretreatment@epa.gov), including non-compliance notifications within 24 hours of becoming aware of a violation. A copy of the Monitoring and Report Procedures document is included as Appendix F of this report.

Mr. Melcher requested that, going forward, the Facility provide its quarterly wastewater Periodic Reports on Continued Compliance in hard copy sent his attention at the address provided in the Monitoring and Report Procedures document. Mr. Melcher requested that, in addition, an electronic copy of submittal be provided to the notification email address provided in the Monitoring and Report Procedures document.

Mr. Williams clarified that the "Min/Max Recorded pH" on the Analytic Results and Summary Table in their Periodic Reports on Continued Compliance reflected the minimum and maximum pH recorded for each month, not just the sampling day.

Mr. Williams clarified that the "Total Daily Discharge" on the Analytic Results and Summary Table in their Periodic Reports on Continued Compliance reflected the average daily flow for each month, not just the sampling day. Mr. Melcher said that, in addition, the regulations require a statement of daily maximum flow during the reporting period, which the Facility does not currently provide in its Periodic Reports on Continued Compliance.

D. Stormwater Evaluation

On March 22, Mr. Melcher, Mr. Galeucia, and Mr. Williams discussed stormwater issues while Ms. Coombs and Ms. Brunelle were performing wastewater sampling.

Mr. Galeucia asked Mr. Melcher if stormwater sampling results should be included in quarterly wastewater Periodic Reports on Continued Compliance. Mr. Melcher said that the stormwater sampling information only needs to be reported using EPA's "NetDMR" electronic Discharge Monitoring Report system.

Mr. Melcher said that it appeared that the Facility had incorrectly entered its stormwater monitoring results for zinc in NetDMR. The form in NetDMR prompts the Facility to enter a zinc concentration in units of microgram per liter ("µg/l"). For the monitoring period ending on September 30, 2021, the Facility reported a zinc concentration of 0.332 µg/l. For the monitoring period ending on December 31, 2021, the Facility reported a zinc concentration of 0.247 µg/l. Typical zinc analyses will yield results in milligrams per liter. A specialized analysis would be necessary to report a zinc concentration to thousandths of a microgram per liter.

Mr. Melcher said that, presuming the zinc concentrations observed by the Facility were, in fact, 332 µg/l and 247 µg/l, these observations would guarantee a four-sample average of greater than the hardness-dependent benchmark of 132 µg/l provided in the 2021 MSGP. Mr. Melcher said that, while an exceedance of a benchmark does not constitute non-compliance, the 2021 MSGP requires that Additional Implementation Measures be considered when benchmark exceedances are observed. Mr. Williams said that he could not think of any additional measures that could be implemented, since the Facility does not perform any operations or store any materials outside.

Mr. Williams said that Milford is known as the "Granite City" and zinc may be prevalent in the environment. Mr. Melcher stated that the 2021 MSGP provides exceptions to performing Additional Implementation Measures when benchmark exceedances are due to natural background sources of pollutants or due to run-on of pollutants from a neighboring source.

Mr. Melcher asked if, perhaps, roof vents could be a pathway for zinc to travel from indoor industrial processes to areas exposed to stormwater. The Facility included a photograph of a roof vent as an attachment to its MSGP Annual Report dated February 3, 2022. The Annual Report stated that there were no spills or staining in evidence around the roof vent. Mr. Galeucia said that he had viewed the roof vent on March 18 and no materials had been observed. Mr. Williams stated that the roof vented steam from warm etching machines. Mr. Williams pointed out condensers in the etching room (Appendix B, Photos 1 and 2). One condenser was present immediately above each of two etching machines indicated by Mr. Williams. Another condenser, in series with the condensers immediately above the machines, was present on the ceiling. Mr. Williams said that the etching machines used copper chloride ("cupric") to etch brass, which contains zinc, but that if materials were being released onto the roof, they would be green in color and would be very obvious.

1. Stormwater Records Review

On March 22, at approximately 13:15, the inspectors, Mr. Galeucia, and Mr. Williams, met in a conference room to discuss stormwater records.

Mr. Melcher said that the 2021 MSGP requires the Facility, on its Notice of Intent, to either provide excerpts from its Stormwater Pollution Prevention Plan (“SWPPP”) or to provide a link to a website where the full plan could be accessed. The Facility provided a Universal Resource Locator (“URL”) in its Notice of Intent, but the URL resulted in an error when EPA attempted to access the document prior to the inspection. Mr. Melcher requested a copy of the SWPPP. Mr. Galeucia provided a copy of a SWPPP dated from the year 2016.

Two site plans were included in the SWPPP. The first, apparently more-detailed plan, was completely illegible. The second, which depicted the location of storm drains, did not have legible text, but storm drains were shown conveying stormwater from the parking lot on the north side of the building to a connection with a Town of Milford storm drain on the southwestern side of the building.

The Facility’s April 2021 Notice of Intent stated that the Facility did not discharge to a Municipal Separate Storm Sewer System. Mr. Melcher asked for any other record drawings of drainage plans for the Facility. Mr. Sweeny brought a large-format print dated from 1985 that showed the drains for the north side of the building connected to the Town storm drains on the western side of the building, in a different location than the site plan included in the 2016 SWPPP. Mr. Sweeny said that recently the drain was “cross-connected.”

Mr. Galeucia said that he spoke with a colleague who manages the Facility’s website and was told that the former Manager of Environmental Health and Safety and Waste Treatment had never been provided to the website manager to post.

The page for the 2016 SWPPP to be signed and dated by an authorized facility representative was not completed.

2. Stormwater Site Tour

On March 22, at approximately 14:00, the inspectors, Mr. Galeucia, and Mr. Williams, began a tour around the site to view stormwater infrastructure and industrial activities exposed to stormwater. Following the inspection, Mr. Melcher used his observations to mark up an aerial photograph with estimated locations of stormwater infrastructure (see Appendix G).

Mr. Williams said that a manhole on the north side of the building is the stormwater sampling location. Mr. Williams said that a container is attached to a pole to grab samples from the manhole.

Mr. Melcher observed that, in general, the paved areas were free of excessive debris and solids. Three drainage inlets were observed – trench drains in front of two loading docks

and a catch basin in the middle of the driveway. No roof downspouts were observed; Mr. Williams stated roof drains flow inside the building and into the storm drainage system.

Mr. Melcher observed a dumpster was observed next to a loading dock. The dumpster appeared to load from the side, not the top. Mr. Williams said the top was solid.

Mr. Melcher observed a pile of old light fixtures was observed at the northern corner of the parking lot. All fluorescent bulbs from the fixtures appeared to have been removed. Mr. Williams stated that the fixtures were only a few years old, and no hazardous materials were expected to be present in the ballasts.

Mr. Melcher observed that there was no curb along the northwest edge of the parking lot. Mr. Melcher said that it appeared as though some areas of the parking lot, particularly the northern corner, may flow into the swale running parallel to the edge of the parking lot. Mr. Melcher recommended that the Facility evaluate drainage patterns and, if necessary, designate the swale running parallel to the parking lot as an additional outfall.

Ms. Coombs and Ms. Brunelle departed at approximately 14:30 on March 22.

E. Closing Conference

Mr. Melcher held a closing conference with Mr. Galeucia and Mr. Williams at approximately 14:30 on March 22.

Mr. Melcher provided Mr. Galeucia with a copy of the EPA Small Business Resources Information Sheet.³

Mr. Melcher described the following areas of concern:

- The Facility's email correspondence from May 10, 2021, indicates that the Facility had a low confidence that its compliance samples taken during April 2021 were representative of the Facility's discharges.
- The Facility reported non-compliance with the Metal Finishing Point Source Category, Pretreatment Standards for Existing Sources at 40 C.F.R. § 433.15 during eight months since January 1, 2018.
- The Facility did not notify EPA of most exceedances of Pretreatment Standards.
- The Facility's wastewater Periodic Reports on Continued Compliance did not include a description of the maximum daily flow for the reporting period.
- The Facility's SWPPP had not been updated for the 2021 MSGP.

³ Available at: <https://www.epa.gov/sites/production/files/2017-06/documents/smallbusinessinfo.pdf>. Accessed on March 23, 2022.

- The Facility appears to have incorrectly entered its benchmark monitoring data for zinc in its stormwater DMRs.
- The Facility has not reviewed its SWPPP to identify Additional Implementation Measures to address zinc discharges in stormwater.

Mr. Melcher departed at approximately 14:45 on March 22.

VI. Sampling and Analytical Results Summary

The table below provides a summary of the laboratory analytical results and field parameters collected during the inspection. For a full list of compounds analyzed for each parameter and their results, refer to the laboratory reports that are attached to this inspection report in Appendices H through L.

Table 2: Summary of Photofabrication Engineering Inc. 3/22/22 Inspection

Sample #	Sample Date and Time	Sample Type	pH (S.U.)	TRC (mg/L)	Analytical Results (mg/L unless otherwise noted)		Pretreatment Standards for 40 CFR 433.15	
							Daily Maximum (mg/L)	Monthly Average (mg/L)
PEI	3/22/22 09:40 HRS	Grab	6.59	0.13	VOAs ^{1,2}		2.13	N/A
					Chloroform	0.0024		
					BNAs ¹	ND		
	3/23/22 10:30 HRS	Composite			Total Cyanide	ND	1.20	0.65
					Total Metals ³			
					Cadmium	ND	0.69	0.26
					Chromium	ND	2.77	1.71
					Copper	0.25	3.38	2.07
					Lead	ND	0.69	0.43
					Nickel	0.63	3.98	2.38
					Silver	ND	0.43	0.24
					Zinc	0.37	2.61	1.48
PEI-D	3/22/22 09:40 HRS	Grab	N/A	N/A	VOAs ^{1,2}		2.13	N/A
					Chloroform	0.0023		
					BNAs ¹	ND		
	3/23/22 10:30 HRS	Composite			Total Cyanide	ND	1.20	0.65
					Total Metals ³			
					Cadmium	ND	0.69	0.26
					Chromium	ND	2.77	1.71
					Copper	0.27	3.38	2.07
					Lead	ND	0.69	0.43
					Nickel	0.65	3.98	2.38
					Silver	ND	0.43	0.24
					Zinc	0.42	2.61	1.48

Notes:

1: Compounds that were analyzed but not listed in this table are Not Detected above Reporting Limit (ND).

2. Compounds listed are Total Toxic Organics (TTO) subject to the Metal Finishing Point Source standards under 433.15. Additional compounds not subject to the TTO standard were detected but are not listed in this table.

3: Metals within the pollutants of concern under the Metal Finishing Point Source Category under 40 CFR 433.15.