

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

INFORMATION COLLECTION REQUEST FOR THE METAL FINISHING AND ELECTROPLATING INDUSTRY DRAFT



Form Approved
OMB Control No. 2040-NEW
Approval Expires [Date]

This collection of information is approved by OMB under the Paperwork Reduction Act, 44 U.S.C. 3501 et seq. (OMB Control No. 2040-NEW). Responses to this collection of information are mandatory (Section 308 of the Clean Water Act (Federal Water Pollution Control Act, 33 U.S.C. Section 1318)). An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

To comment on EPA's need for this collection, the accuracy of the provided burden estimate, and any suggested methods for minimizing respondent burden EPA has established a public docket for this ICR under Docket ID No. EPA-HQ-OW-2022-0869, which is available for public viewing at the Water Docket in the EPA Docket Center (EPA/DC), EPA West, Room 3334, 1301 Constitution Ave., NW, Washington, DC 20004. The EPA Docket Center Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Reading Room is (202) 566-1744, and the telephone number for the Water Docket is (202) 566-2426. An electronic version of the public docket is available through the Federal Docket Management System (FDMS) at <http://www.regulations.gov>. Use FDMS to submit or view public comments, access the index listing of the contents of the public docket, and access those documents in the public docket that are available electronically. Once in the system, select "search", then key in the docket ID number identified above. Please include the EPA Docket ID No. (EPA-HQ-OW-2022-0869) and OMB control number (2040-NEW) in any correspondence.

NOTE 1: *This questionnaire will be primarily administered as an online questionnaire using Qualtrics Survey Software (Qualtrics). However, EPA will offer a fillable form PDF or hardcopy version to respondents that do not have internet connection or cannot otherwise complete the Qualtrics version. The PDF and hardcopy versions may also be used by respondents as a working file to help them compile all information needed to respond prior to completing the Qualtrics version. The content of the PDF, hardcopy, and Qualtrics versions will match, but the exact order of question and/or the presentation, format, and spacing of the questions may differ.*

NOTE 2: *For the purposes of this draft, all tables include minimal rows for data entry; these tables are intended simply to show the types of data EPA is requesting. In the final versions (PDF, hardcopy, and Qualtrics format), all tables will include enough additional empty rows appropriate for most respondents.*

NOTE 3: *The final questionnaire will include confidential business information (CBI) designation checkboxes or dropdowns for each question, allowing the respondent to indicate if a response contains CBI. This draft questionnaire does not include these CBI checkboxes.*

NOTE 4: *Skipped questions and sections will be programmed in Qualtrics and written instructions omitted. As such, respondents will not see the questions or sections that are skipped based on their responses. Instructions on identifying applicable questions are included in this draft to show what will be included in the PDF and hardcopy versions and demonstrate the intended questionnaire flow.*

NOTE 5: *As currently designed, the questionnaire will be administered as a census to all facilities in the chromium finishing industry profile (approx. 1,815 facilities). All facilities that have conducted one or more of the chromium operations of interest at any time since they began operation and were still operating as of January 1, 2023 will be required to complete the questionnaire. Most facilities will not need to complete every question in the questionnaire and the survey instrument includes instructions about skipping questions that do not apply. Facilities that do not perform these chromium finishing operations or closed by January 1, 2023 will complete a handful of basic facility identification and industrial classification questions and then be done.*

NOTE 6: *Blue highlights indicate fields that would be formatted as a dropdown menu or other standardized field in the final Qualtrics version of the questionnaire.*

INTRODUCTION AND PURPOSE

The United States Environmental Protection Agency (EPA) is conducting a survey of the metal finishing and electroplating industry as part of its effort to review and revise, as appropriate, effluent limitations guidelines and standards (ELGs) for these point source categories. The existing ELGs are codified in 40 Code of Federal Regulations (CFR) Part 433 and 40 CFR Part 413, respectively. This questionnaire is being conducted under the authority of Section 308 of the Clean Water Act (Federal Water Pollution Control Act, 33 U.S.C. Section 1318). Failure to respond, late filing, or failure to comply with the instructions may result in fines, civil penalties, and other sanctions, as provided by law.

This questionnaire requests data from sites engaged in specific chromium operations within the metal finishing and electroplating industry. For detailed information on how EPA plans to use data obtained from each question, see the document titled “Information Collection Request Supporting Statement – United States Environmental Protection Agency Metal Finishing and Electroplating Industry Data Collection” at EPA Docket ID No. (EPA-HQ-OW-2022-0869).

EPA’s Office of Water administered the questionnaire as a census to the subset of metal finishing and electroplating facilities engaged in specific chromium operations. The questionnaire consists of multiple sections, and they all must be completed as directed before submittal. The questionnaire is divided into the following sections:

- Section 1: General Facility Information
- Section 2: Facility Operations and Per- and Polyfluoroalkyl Substances (PFAS) Use
- Section 3: Wastewater Generation
- Section 4: Wastewater Flow Diagram
- Section 5: Wastewater Management and Treatment
- Section 6: Permit Requirements and Monitoring Data
- Section 7: Environmental and Other Information
- Section 8: Financial Information
- Section 9: Comments

EPA prepared the questionnaire to be applicable to a variety of facilities; therefore, not all questions will apply to every company or facility. Complete all questions for all parts of the questionnaire unless otherwise specified. The questionnaire includes instruction to note when you do not need to complete a part or question.

WHEN TO SUBMIT THE QUESTIONNAIRE

The response to this questionnaire is due **60 days after receiving the notification letter** from EPA with instructions for accessing the questionnaire. If you wish to request an extension, you must do so **in writing** within 14 days of receipt of the notification letter. Written requests may be emailed (preferred) or mailed to:

PFAS308help@erq.com

OR

United States Environmental Protection Agency
c/o Eastern Research Group, Inc.
Metal Finishing and Electroplating Industry Questionnaire
14555 Avion Pkwy, Suite 200
Chantilly, VA 20151-1102

Extension requests will be evaluated on a case-by-case basis. Submittal of an extension request to EPA does **not** alter the due date of your questionnaire unless and until EPA agrees to the extension and establishes a new date.

QUESTIONNAIRE INSTRUCTIONS

Complete and submit the questionnaire in Qualtrics Survey Software (Qualtrics). EPA created the questionnaire in Qualtrics to minimize burden, and it has been developed to meet the 1998 Government Paperwork Elimination Act (GPEA). If your facility lacks internet access or cannot complete the Qualtrics questionnaire, contact the Helpline; refer to QUESTIONNAIRE ASSISTANCE for contact information for the Helpline. EPA will allow facilities that cannot complete the Qualtrics questionnaire to complete a fillable form PDF or hardcopy version of the questionnaire.

Review the **General Instructions** before beginning your questionnaire response. The **General Instructions** are available for download on the EPA Metal Finishing and Electroplating Industry Data Collection webpage (<https://www.epa.gov/eg/metal-finishing-questionnaire>) and pertain to all questionnaire responses, regardless of the format (Qualtrics, PDF, or hardcopy). The instructions provided herein are specific to completing and submitting a PDF or hardcopy questionnaire.

Facilities are encouraged to use this PDF/hardcopy questionnaire to prepare for completing the questionnaire in Qualtrics.

FILES SUBMITTED WITH THE QUESTIONNAIRE

For certain questions, you will be asked to provide copies of documents, figures, and diagrams. Additional questions provide template Excel workbooks and ask you to download, complete, and then submit the workbooks as responses. These template files are available for download in Qualtrics from the corresponding questions or can be downloaded from the EPA Metal Finishing and Electroplating Industry Data Collection webpage. When questionnaire respondents request a fillable form PDF or hardcopy questionnaire, these files are included in the materials on removable media (e.g., flash drive, CD) mailed by the Helpline.

Respondents submitting PDF or hardcopy questionnaires should make copies of all files (submitting one copy to EPA and keeping one copy for their records), save any electronic files onto removable media (preferably a USB drive), and mail all materials to the Helpline along with their questionnaire submission. PDF and hardcopy questionnaire respondents should indicate within these files which files are claimed as CBI and include the Facility ID, which was assigned to your facility in the notification letter mailed by EPA, in the file names of any electronic files and on any hardcopy materials.

DATA CONFIDENTIALITY

If no business confidentiality claim accompanies the information when it is received by EPA, EPA may make the information available to the public without further notice.

You may assert claims of business confidentiality for any information you submit to EPA. Information claimed as confidential will be treated in accordance with the procedures for handling information claimed as confidential under 40 CFR Part 2, Subpart B, and will be disclosed to the extent, and by means of procedures, set forth in Subpart B. If no claim of confidentiality is asserted when the information is received by EPA, it may be made available to the public without further notice to you. See 40 CFR 2.203(a), 41 Fed. Reg. 36,907. Furthermore, generally, effluent data and information already available to the public is not entitled to confidential treatment and will be made available to the public without further notice to you. See 40 CFR §§ 2.201(g), 2.302(e) & (f); 40 CFR § 403.14. Any knowing and

willful misrepresentation is subject to criminal penalty pursuant to 18 U.S.C. § 1001.

In this questionnaire, designate responses as confidential business information (CBI) using the CBI checkboxes next to each question.

QUESTIONNAIRE ASSISTANCE

If you have any questions about your facility's questionnaire, consult the *List of Frequently Asked Questions (FAQs)* on the EPA Metal Finishing and Electroplating Questionnaire webpage ([https://www.epa.gov/eg/metal finishing questionnaire](https://www.epa.gov/eg/metal-finishing-questionnaire)). You may also request assistance from the Helpline using the email and telephone lines provided below. Include the Facility ID, assigned to your facility in the notification letter from EPA, in any inquires to the Helpline.

If your facility lacks internet access or you are unable to submit the questionnaire in Qualtrics, contact the Helpline to request a fillable form PDF or hardcopy questionnaire be mailed to you.

If your company operates one or more facilities in the United States that currently or previously conducted chromium finishing operations and these facilities did not receive a questionnaire, contact the Helpline to request a copy of the questionnaire for these facilities.

EPA Metal Finishing and Electroplating Questionnaire Helpline

Eastern Research Group, Inc.

Telephone Number: Local: 703-633-####
Toll-free: 1-877-353-####

Email: PFAS308help@erg.com

Questions regarding EPA's associated rulemaking for the Metal Finishing and Electroplating Questionnaire should be directed to EPA at Flanders.Phillip@epa.gov.

WHERE TO SUBMIT THE QUESTIONNAIRE

Complete the entire questionnaire, enter your Facility ID in the header of each page, and certify your responses by completing the Certification Statement at the end of this document (see page 57). Mail the completed questionnaire, including requested attachments, template files on removable media (preferably USB drive), and the signed Certification Statement, to:

United States Environmental Protection Agency
c/o Eastern Research Group, Inc.
Metal Finishing and Electroplating Industry Questionnaire
14555 Avion Parkway, Suite 200
Chantilly, VA 20151-1102

ABBREVIATIONS

Ag	silver
Al	aluminum
Au	gold
CAS	Chemical Abstracts Service
CBI	Confidential Business Information
Cd	cadmium
CFR	Code of Federal Regulations
Cr III	trivalent chromium
Cr VI	hexavalent chromium
Cu	copper
dpw	days per week
dpy	days per year
ELGs	effluent limitations guidelines and standards
EPA	United States Environmental Protection Agency
Fe	iron
FRS	Facility Registry Service
FTE	full-time equivalent
gpd	gallons per day
gpy	gallons per year
GPEA	1998 Government Paperwork Elimination Act
hpd	hours per day
Mg	magnesium
mg/l	milligram per liter
mm/dd/yyyy	month/day/year
MWh	megawatt-hours
NA	not applicable
NAICS	North American Industry Classification System
Ni	nickel
ng/l	nanogram per liter (equivalent to part-per-trillion)
NPDES	National Pollutant Discharge Elimination System
Pb	lead
Pd	palladium
PFAS	per- and polyfluoroalkyl substances
POTW	publicly owned treatment works
Pt	platinum
RCRA	Resource Conservation and Recovery Act
Rh	rhodium
RL	reporting limit
SBA	Small Business Administration
SIC	Standard Industrial Classification
Sn	tin
tpy	tons per year
USD	United States Dollars
WFD	wastewater flow diagram
Zn	zinc

GLOSSARY

Adsorption/Adsorptive Media: Removal of a pollutant from air or water by collecting the pollutant on the surface of a solid material (e.g., method of treating waste in which activated carbon removes pollutants from vented gases or wastewater).

Affiliated Company: A company that is a minority shareholder of another company/facility.

Air Emission Control: Any technology or practice intended to capture, reduce, or eliminate one or more contaminants in a gaseous stream. Includes chemical fume suppressants and air pollution control equipment that is used to reduce chromium emissions from chromium electroplating and chromium anodizing tanks.

Air Emission Control Wastewater: Any wastewater generated from an air emission control.

Analytical Method: Laboratory analytical methods (test procedures) that are used by industries and municipalities to analyze the chemical, physical, and biological components of wastewater and other environmental samples.

Anodizing: A process which produces a protective oxide film on aluminum, magnesium, or other light metal, usually by passing an electric current through an electrolyte bath in which the metal is immersed. Phosphoric acid, sulfuric acid, and boric acid may be used in anodizing. Anodizing may be followed by a sealant operation. These oxide coatings provide corrosion protection, decorative surfaces, a base for painting and other coating processes, and special electrical and mechanical properties. Wastewaters generated during anodizing include spent anodizing solutions, sealants, and rinse waters.

Biological Treatment: Wastewater treatment intended to degrade and reduce organic matter in wastewater, primarily in the form of soluble organic compounds.

Capital Improvements: Any addition or alteration to a facility that substantially adds to its value or appreciably prolongs its use.

Centralized Waste Treatment Facility: Any facility that treats (for disposal, recycling or recovery of material) any hazardous or nonhazardous industrial wastes, hazardous or nonhazardous industrial wastewater, and/or used material received from off site. Centralized waste treatment facility includes both a facility that treats waste received exclusively from off site and a facility that treats wastes generated on site as well as waste received from off site. For example, an organic chemical manufacturing plant may, in certain circumstances, be a centralized waste treatment facility if it treats industrial wastes received from off site as well as industrial waste generated at the organic chemical manufacturing plant.

Chemical Abstracts Service (CAS) Registry Number: A unique numeric identifier that provides an unambiguous means to distinguish chemical substances. Each CAS registry number designates only one substance, has no chemical significance, and can be used to search for information about a specific chemical substance.

Chemical Etching and Milling: These processes are used to produce specific design configurations and tolerances or surface appearances on parts (or metal-clad plastic in the case of printed circuit boards) by controlled dissolution with chemical reagents or etchants. Included in this classification are the processes of chemical milling, chemical etching and bright dipping. Chemical etching is the same process as chemical milling except the rates and depths of metal removal are usually much greater in chemical milling. Bright dipping is a specialized form of etching and is used to remove oxide and tarnish from

ferrous and nonferrous materials and is frequently performed just prior to anodizing. Bright dipping can produce a range of surface appearances from bright clean to brilliant depending on the surface smoothness desired for the finished part. Bright dipping solutions usually involve mixtures of two or more of sulfuric, chromic, phosphoric, nitric and hydrochloric acids. Also included in this unit operation is the stripping of metallic coatings.

Chemical Fume Suppressant: Any chemical that reduces surface tension or suppresses fumes or mists at the surface of an electroplating, anodizing, or other process bath. Another term for chemical fume suppressant is chemical mist suppressant.

Chemical Precipitation/Flocculation: Wastewater treatment unit that uses the addition of chemicals to alter the physical state of dissolved and suspended solids and facilitate their removal by sedimentation or filtration.

Chromic Acid: The common name for chromium anhydride (CrO_3).

Chromium Finishing Operations: Any metal finishing or electroplating process that deposits a layer of chromium on any base material or uses chromium materials in the fabrication of a metal product. Applicable processes include, but are not limited to, the activities listed and defined below. Another term for chromium finishing operations is chrome finishing operations.

Decorative Chromium Plating: Process by which a thin layer of chromium (typically 0.003 to 2.5 microns) is electrodeposited on a base metal, plastic, or undercoating to provide a bright surface with wear and tarnish resistance. In this process, the part(s) serves as the cathode in the electrolytic cell and the solution serves as the electrolyte. Typical current density applied during this process ranges from 540 to 2,400 Amperes per square meter (A/m^2) for total plating times ranging between 0.5 to 5 minutes. Decorative chromium plating is used for items such as automotive trim, metal furniture, bicycles, hand tools, and plumbing fixtures.

Functional/Hard Chromium Plating: Process by which a thick layer of chromium (typically 1.3 to 760 microns) is electrodeposited on a base material to provide a surface with functional properties such as wear resistance, a low coefficient of friction, hardness, and corrosion resistance. In this process, the part serves as the cathode in the electrolytic cell and the solution serves as the electrolyte. Hard chromium electroplating process is performed at current densities typically ranging from 1,600 to 6,500 A/m^2 for total plating times ranging from 20 minutes to 36 hours depending upon the desired plate thickness. Hard chromium plating is used for items such as hydraulic cylinders and rods, industrial rolls, zinc die castings, plastic molds, engine components, and marine hardware.

Chromium Anodizing: Electrolytic process by which an oxide layer is produced on the surface of a base metal for functional purposes (e.g., corrosion resistance or electrical insulation) using a chromic acid solution. In chromium anodizing, the part to be anodized acts as the anode in the electrical circuit, and the chromic acid solution, with a concentration typically ranging from 50 to 100 grams per liter (g/L), serves as the electrolyte.

Chromic Acid Etching: Process using a chromic acid solution in the removal of specific unwanted areas of silicon substrate or deposited film so that an underlying material may be exposed, or another material may be deposited, in the etched materials place.

Chromate Conversion Coating: Process involving formation of a conversion coating (protective coating) on a metal by immersing or spraying the metal with a hexavalent chromium compound solution to produce a hexavalent or trivalent chromium compound coating. This also is known as chromate treatment, and is most often applied to aluminum, zinc, cadmium or magnesium surfaces. Sealant operations using chromium also are included in this unit operation.

Clean Water Act: Federal legislation enacted by Congress to “restore and maintain the chemical, physical, and biological integrity of the Nation’s waters” (Federal Water Pollution Control Act of 1972, as amended, 33 USC 1251 et seq.).

Clarification: A sedimentation process to remove solid particles from a liquid stream by gravitational force.

Coating: Metal finishing operations which include chromating, phosphating, and metal coloring. These coatings are applied to previously deposited metal or basis material for increased corrosion protection, lubricity, preparation of the surface for additional coatings or formulation of a special surface appearance. In chromating, a portion of the base metal is converted to one of the components of the protective film formed by the coating solution. This occurs by reaction with aqueous solutions containing hexavalent chromium and active organic or inorganic compounds. Chromate coatings are most frequently applied to zinc, cadmium, aluminum, magnesium, copper, brass, bronze and silver. In phosphating, phosphate coatings are used to provide a good base for paints and other organic coatings, to condition the surfaces for cold forming operations by providing a base for drawing compounds and lubricants, and to impart corrosion resistance to the metal surface by the coating itself or by providing a suitable base for rust-preventative oils or waxes. Phosphate conversion coatings are formed by the immersion of iron, steel, or zinc plated steel in a dilute solution of phosphoric acid plus other reagents. Metal coloring covers only chemical methods of coloring in which the metal surface is converted into an oxide or similar metallic compound. The most common colored finishes are used on copper, steel, zinc, and cadmium.

Code of Federal Regulations (CFR): A codification of the final rules published daily in the Federal Register. Title 40 of the CFR contains the environmental regulations.

Confidential business information (CBI): In accordance with 40 CFR §2, any information submitted to EPA pursuant to these regulations may be claimed as confidential by the submitter. Any such claim must be asserted at the time of submission in the manner prescribed on the application form or instructions or, in the case of other submissions, by stamping the words “confidential business information” on each page containing such information. If no claim is made at the time of submission, EPA may make the information available to the public without further notice. If a claim is asserted, the information will be treated in accordance with the procedures in 40 CFR §2 (Public Information). See 40 CFR §122.7.

Destination: The place to which a wastewater stream is sent. Immediate destinations refer to the first place a wastewater stream is sent to while final destinations refer to the ultimate place a wastewater stream is sent.

Discharge: The conveyance of wastewater or any pollutant via an outfall to: (1) surface waters; or (2) a publicly owned, privately owned, federally owned, combined, or other treatment works.

Effluent Limitation: Any restriction imposed on quantities, discharge rates, and concentrations of pollutants which are discharged from point sources into waters of the United States, the waters of the contiguous zone, or the ocean.

Effluent Limitations Guidelines and Standards: Regulations promulgated by EPA under authority of Sections 301, 304, 306, and 307 of the Clean Water Act that set out minimum, national technology-based standards of performance for point source wastewater discharges from specific industrial categories (e.g., iron and steel manufacturing plants). Effluent limitations guidelines and standards regulations are implemented through the NPDES permit and national pretreatment programs and include the following:

- Best Practicable Control Technology Currently Available (BPT)
- Best Available Technology Economically Achievable (BAT)
- Best Conventional Pollutant Control Technology (BCT)
- New Source Performance Standards (NSPS)
- Pretreatment Standards for Existing Sources (PSES)
- Pretreatment Standards for New Sources (PSNS)

The pretreatment standards (PSES, PSNS) are applicable to industrial facilities with process wastewater discharges to publicly owned treatment works (POTWs). The effluent limitations guidelines and new source performance standards (BPT, BAT, BCT, and NSPS) are applicable to industrial facilities with direct discharges of process wastewaters to waters of the United States.

Effluent: Wastewater flowing out of a process, unit, or system.

Electroplating: The production of a thin surface coating of one metal upon another by electrodeposition. This surface coating is applied to provide corrosion protection, wear or erosion resistance, anti-frictional characteristics, enhanced aesthetics, or to obtain a surface with properties or dimensions different from those of the base material.

Electroless Plating: A process which involves applying a metallic coating to a part using a chemical reduction process in the presence of a catalysis. An electric current is not used in these operations.

Equalization: Wastewater treatment unit used to dampen variations in flow rate and composition through the treatment system.

Equity Investment: Money that is invested in a company by purchasing shares of that company in the stock market.

Facility: A facility is generally one contiguous physical location at which manufacturing operations, such as to metal finishing or electroplating, are conducted. In some instances, a facility may include properties located within separate fence lines but located close to each other.

Facility Registry Services (FRS): A centrally managed database that identifies facilities, sites, or places subject to environmental regulations or of environmental interest using a unique identifier.

Factoring: A financial arrangement under which accounts receivable, such as invoices, are exchanged with another company for advanced cash that collects payment directly from customers.

Full-Time Equivalent (FTE) Employees: An employee who works 40 hours per week is a full-time equivalent of 1.0. An employee who works less than 40 hours is converted into a full-time equivalent by dividing part-time working hours by 40. Since a company usually has full-time and part-time employees, their working hours can be converted into full-time equivalent to determine the level of employment.

General Partnership: A business partnership structure made up of two or more owners, each sharing the business's debts, liabilities, and assets.

Granular Activated Carbon: Wastewater treatment unit that uses highly porous carbon material made from organic materials with high carbon contents (such as wood, lignite, and coal) to remove pollutants from water by adsorption.

Groundwater: Underground water that resides within the cracks, crevices, and spaces in soil, sand, and rock. Groundwater may be resurfaced when it is withdrawn from the ground by way of a well.

Hexavalent Chromium (Cr VI): The form of chromium in a valence state of +6. Substances that consist of or contain 0.1 percent or greater by weight of chromium trioxide, hexavalent VI oxide, chromic acid, or chromic anhydride are considered to contain hexavalent chromium.

Home Equity Line of Credit: A flexible financial arrangement under which access to a fixed amount of loan is granted against home equity for short-term needs. The money is used as the need arises. It is like a perpetual credit and interest is paid only on the amount used, not the entire loan amount.

Influent: Wastewater flowing into a process, unit, or system.

Ion Exchange: Wastewater treatment unit based on the reversible exchange of ions adsorbed on a mineral or synthetic polymer surface with ions in solution in contact with the surface.

Leasing: Acquiring equipment, capital goods, or buildings with periodic payments, instead of paying cash up-front.

Limited Partnership: A business partnership structure where at least one owner bears full responsibility for the debts, liabilities, and assets as a general partner while another one or more owners only participate as a limited partner.

Local Ordinance: A law or requirement established by a municipality, city, or other local government.

Media Filtration: Wastewater treatment unit that uses that uses sand, coal, garnet, and/or other media to remove suspended or dissolved pollutants by straining.

Merchant Cash Advance: A sales agreement where the merchant (the “seller”) is selling their future revenue at a discount to the merchant cash advance company (the “buyer”).

Metal Finishing: The process of changing the surface of an object, for the purpose of improving its appearance and/or durability.

Microfiltration: A membrane filtration treatment process designed to separate particulate matter and bacteria from a liquid using a semi-permeable membrane, where transmembrane pressure is applied to the concentrated side of the membrane.

Monitoring Requirement: Any requirement to collect wastewater monitoring/sampling data.

Nanofiltration: A membrane filtration treatment process designed to separate particulate, colloidal, and dissolved matter from a liquid using a semi-permeable membrane, where transmembrane pressure is applied to the concentrated side of the membrane.

National Pollutant Discharge Elimination System (NPDES): The national program authorized by Sections 307, 318, 402, and 405 of the Clean Water Act for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements under the Clean Water Act. The NPDES permit number is assigned by the respective state or EPA Region and generally includes the state abbreviation in the number.

National Pollutant Discharge Elimination System (NPDES) Permit: NPDES permits regulate discharges of pollutants from point sources to waters of the United States. Such discharges are illegal unless authorized by a NPDES permit.

General NPDES or Stormwater Permit: A general permit covers a group of dischargers with similar qualities within a given geographical location.

Individual NPDES Permit: A permit specifically tailored to an individual facility.

Neutralization/pH Adjustment: Changing the acidity or alkalinity of a substance by adding alkaline or acidic materials, respectively.

Nonprocess Area Stormwater: Water flow as a result of precipitation (rain, snow melt, etc.) over land or impervious surfaces in areas that do not process raw materials, intermediate products, finished products, byproducts, or waste products.

Nonprocess Wastewater: Any wastewater that does not come into direct contact with or result from production or use of any raw material, intermediate product, finished product, byproduct, or waste product (e.g., cooling water).

North American Industry Classification System (NAICS): The standard used by Federal statistical agencies in classifying business establishments for the purpose of collecting, analyzing, and publishing statistical data related to the United States business economy. Each facility is categorized within a NAICS code based on the type of operations conducted at the facility (e.g., NAICS code 332813 is for (Electroplating, Plating, Polishing, Anodizing, and Coloring)).

Off Site/Offsite: Locations not on contiguous facility property.

Oil/Water Separation: Treatment unit that uses differences in specific gravity to separate water, oil, and sludge. In an oil/water separation unit, free oil rises to the surface and floats on water, the denser of the two liquids. The free oil that floats on the surface is skimmed off, while the sludge that settles to the bottom of the separation unit is removed periodically.

On Site/Onsite: Property and equipment under the operational control of the plant, including landfills, ponds/impoundments, and outfall structures located on noncontiguous property.

Outfall: A discharge point of a wastestream into a surface water, POTW, municipal sewer system, or to a commercial waste treatment facility.

Per- and Polyfluoroalkyl Substances (PFAS): Per- and polyfluorinated substances that structurally contain the unit $R-(CF_2)_n-C(F)(R')R''$ where both the CF_2 and CF moieties are saturated carbons and none of the R groups (R, R', or R'') can be hydrogen.

Permit Monitoring Location: A location in the facility from which wastewater samples are taken for the purpose of monitoring for permit compliance.

Permit: An authorization, license, or equivalent control document issued by EPA or delegated authority to implement the requirements of 40 CFR §122, §123, and §124. See 40 CFR §122.2.

Point Source: Any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged.

Pollutant: Dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials (except those regulated under the Atomic Energy Act of 1954, as amended (42 USC 2011 et seq.)), heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water. See 40 CFR §122.2. For the purposes of this data request, temperature and heat are not considered pollutants.

Pretreatment Agreement/Permit: Permit for discharge from facility to a POTW or municipal sewer system.

Pretreatment Standard: Any restriction imposed on quantities, discharge rates, and concentrations of pollutants which are discharged from point sources into a municipal sewer system or transferred to a POTW or commercial treatment facility.

Printed Circuit Board Manufacture: The formation of a circuit pattern of conductive metal (e.g., copper) on nonconductive board materials such as plastic or glass. There are five basic steps involved in the manufacture of printed circuit boards: cleaning and surface preparation, catalyst and electroless plating, pattern printing and masking, electroplating, and etching.

Process Area Stormwater: Water flow as a result of precipitation (rain, snow melt, etc.) over land or impervious surfaces in areas that process raw materials, intermediate products, finished products, byproducts, or waste products.

Process Wastewater: Any water which, during metal finishing or electroplating operations, comes into direct contact with or results from the storage, production, or use of any raw material, intermediate product, finished product, by-product, or waste product. Wastewater from equipment cleaning, direct-contact air emission control, rinse water, storm water associated with industrial activity, surface impoundment leachate, landfill leachate, and contaminated cooling water are considered process wastewater. Process wastewater may also include wastewater that is contract hauled for offsite disposal. Sanitary wastewater, uncontaminated noncontact cooling water, and storm water not associated with industrial activity are not considered process wastewater.

Publicly Owned Treatment Works (POTW): Any device or system owned and operated by a public entity and used in the storage, treatment, recycling, or reclamation of liquid municipal sewage and/or liquid industrial wastes. The sewerage system that conveys wastewaters to treatment works is considered part of the POTW.

Regulatory Authority: An entity, usually branches of state or federal government, that enforces environmental, health, or safety related requirements set by set by law or permits.

Reporting Limit: The laboratory reporting limit in the matrix analyzed. Usually this is a multiple of the method detection limit. Also known by terms such as minimum level of quantification or quantification limit.

Reverse Osmosis: A membrane filtration treatment process designed to separate particulate, colloidal, and dissolved matter from a liquid using a semi-permeable membrane, where pressure in excess of the osmotic pressure is applied to the concentrated side of the membrane.

Sanitary Wastewater: Wastewater that is generated from restrooms, cafeterias, showers, and domestic (versus industrial) activities.

Sole Proprietor: Someone who owns an unincorporated business by himself or herself. The owner pays taxes on the income he or she generates. A self-employed individual is an example of a sole proprietor.

Standard Industrial Classification (SIC): SIC codes are numerical codes assigned by the United States government to business establishments to identify the primary business of the establishment. A code number system used to identify various types of industries. The code numbers are published by the Superintendent of Documents, United States Government Printing Office, Washington, DC 20402. A particular industry may have more than one SIC code if it conducts several types of commercial or manufacturing activities on site.

Solid Waste/Sludge/Concentrated Wastestream: Any solid, semi-solid, or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plant, unit operation or process, water supply plant, or air emission control exclusive of the treated water effluent from a wastewater treatment system. For the purpose of this data request, includes byproducts, off-spec materials, spent materials, and solid wastes generated by unit operations, product recovery units, or wastewater treatment units.

Stormwater: Water flow as a result of precipitation (rain, snowmelt, etc.) over land or impervious surfaces.

Subchapter C Corporation/Limited Liability Corporation: Limited liability corporation that is subject to Chapter C of the Internal Revenue Code. It is a legal business organization under which owner or shareholder liability is limited to the company itself.

Surface Water: Waters of the United States as is consistent with the pre-2015 regulatory regime. Refer to the Current Implementation of Waters of the United States for further detail and definition of terms (<https://www.epa.gov/wotus/current-implementation-waters-united-states#Pre-2015>).

Technology vendor: The company that manufactured or provided a wastewater treatment unit.

Third-Party Wastewater: Wastewater that is not generated at the given facility and is transferred to the facility from another source.

Trade Credit: A business arrangement under which a buyer can purchase goods without paying cash at the time of transaction, with a promise to pay on a certain later date. In essence, it is a short-term interest-free loan advanced by the seller.

Trivalent Chromium (Cr III): Form of chromium in a valence state of +3.

Ultrafiltration: A membrane filtration treatment process designed to separate particulate and colloidal matter from a liquid using a semi-permeable membrane, where low transmembrane pressure is applied to the concentrated side of the membrane.

Ultimate Parent Company: The business organization at the highest position in the facility's ownership structure that is organized domestically (e.g., the highest-level United States incorporated company). An ultimate parent company owns more than 50 percent of one or more other domestic businesses. A business organization that is owned by another United States business is not an ultimate parent company but a subsidiary or branch. Subsidiary business organizations to the ultimate parent can include "headquarters" business organizations. A "headquarters" is a business that has branches or divisions reporting to it. Branches or divisions can also report directly to the Ultimate Parent Company. In this case, the ultimate parent company is also a headquarters organization. The ultimate parent company typically resides in a different physical location than its subsidiary headquarters or division/branch locations.

Underground Injection: Long-term or permanent disposal of untreated, partially treated, or treated wastewaters by pumping the wastewater into underground formations of suitable character through a bored, drilled, or driven well. Sometimes referred to as "subsurface injection" or "deep-well injection."

Underground Injection Control (UIC) Permit: Underground injection control permits regulate discharges of waste streams into underground formations of suitable character. Such discharges are illegal unless authorized by a permit.

Wastewater: Includes process wastewater, nonprocess wastewater, process area stormwater, nonprocess area stormwater, air emission control wastewater, third-party wastewater, sanitary wastewater, and groundwater.

Wastewater Discharge Permit: Documentation of authorization to discharge wastewater to a surface water or POTW. See definitions for NPDES permit and pretreatment agreement/permit.

Wastewater Flow Diagram: A simplified schematic outlining the flows and process units in a system.

Wastewater Treatment: The processing of wastewater by physical, chemical, biological, or other means to remove specific pollutants from the wastewater stream or to alter the physical or chemical state of specific pollutants in the wastewater stream. Treatment is performed for discharge of treated wastewater, recycle of treated wastewater to the same process which generated the wastewater, or for reuse of the treated wastewater in another process.

Wastewater Treatment System: A combination of one or more wastewater treatment units designed to achieve wastewater treatment.

Wastewater Treatment Unit: A unit operation used to remove pollutants from process wastewater. Wastewater treatment units include, but are not limited to: pond/impoundments, chemical precipitation, pH adjustment, clarification, biological reactor, thickeners, filters, constructed wetlands, activated carbon adsorption, ion exchange, and membrane filtration.

Facility ID: _____

Facility Name: _____

SECTION 1. GENERAL FACILITY INFORMATION

1. Provide the facility name and physical address.

Facility Name

Facility Street Address Line 1

Facility Street Address Line 2 (Optional)

City

State

ZIP Code

2. Provide the name, title, telephone number, email, and mailing address for a primary and secondary contact for technical information reported in this questionnaire response.

Primary Technical Contact Name

Primary Technical Contact Title

Telephone Number

Email

Mailing Address Line 1

Mailing Address Line 2 (Optional)

City

State

ZIP Code

Secondary Technical Contact Name

Secondary Technical Contact Title

Telephone Number

Email

Mailing Address Line 1

Mailing Address Line 2 (Optional)

City

State

ZIP Code

Facility ID: _____

Facility Name: _____

3. Provide the name, title, telephone number, email, and mailing address for a primary and secondary contact for financial information reported in this questionnaire response.

Primary Financial Contact Name

Primary Financial Contact Title

Telephone Number

Email

Mailing Address Line 1

Mailing Address Line 2 (Optional)

City

State

ZIP Code

Secondary Financial Contact Name

Secondary Financial Contact Title

Telephone Number

Email

Mailing Address Line 1

Mailing Address Line 2 (Optional)

City

State

ZIP Code

Facility ID: _____

Facility Name: _____

4. Is the facility owned, controlled, or managed by an ultimate parent company? Identify the ultimate parent company and provide the name, title, telephone number, email, and mailing address for a primary point of contact for the ultimate parent company. If the facility does not have an ultimate parent company, select “No ultimate parent company.”

No ultimate parent company.

OR

Ultimate Parent Company Name

Primary Contact Name

Primary Contact Title

Telephone Number

Email

Mailing Address Line 1

Mailing Address Line 2 (Optional)

City

State

ZIP Code

Country

5. Provide all six-digit North American Industry Classification System (NAICS) code(s) applicable to the facility. If you do not know which NAICS code(s) the facility falls under, please visit the United States Census Bureau website (<https://www.census.gov/naics/>) and search for the operation(s) that most accurately describes the facility’s operation (NAICS codes starting with 31 through 33 are for manufacturing facilities). If the facility is associated with more than three NAICS codes, list additional codes in Section 9 (Comments).

Facility NAICS Code(s)

Primary NAICS code

Primary NAICS code: _____

Secondary NAICS code

Secondary NAICS code: _____

Tertiary NAICS code

Tertiary NAICS code: _____

Facility ID: _____

Facility Name: _____

6. Provide all four-digit Standard Industrial Classification (SIC) code(s) applicable to the facility. If you do not know which SIC code(s) the facility falls under, please visit the United States Department of Labor website (<https://www.osha.gov/data/sic-manual>) and search for the operation(s) that most accurately describes the facility's operation. If the facility is associated with more than three SIC codes, list additional codes in Section 9 (Comments).

Facility SIC Code(s)

Primary SIC code

Primary SIC code: _____

Secondary SIC code

Secondary SIC code: _____

Tertiary SIC code

Tertiary SIC code: _____

7. Provide the applicable 12-digit Facility Registry Service (FRS) identification number associated with the facility (also known as EPA Registry ID). If you do not know the facility's FRS identification number, please visit EPA's FRS Search website (<https://www.epa.gov/frs/frs-query#facility>) and search for the facility using the facility's address and/or name. If the facility does not have an associated FRS identification number, select "Facility does not have an FRS identification number."

Facility does not have an FRS identification number

OR

FRS Identification Number: _____

8. Did the facility engage in metal finishing or electroplating operations, as defined in the GLOSSARY, at any time since the facility began operation? Include operations that previously occurred even if they do not reflect current operations. Include operations that occurred under other ownership, if applicable. If unknown, provide the best estimate.

Yes

No

If yes, provide an overview of the types of metal products finished or electroplated at the facility.



**If you answered "No" to this question, proceed to Section 9 (Comments).
DO NOT COMPLETE THE REMAINDER OF THIS QUESTIONNAIRE.**

Facility ID: _____

Facility Name: _____

9. What year did metal finishing or electroplating operations begin at the facility? Metal finishing and electroplating operations at the facility may have begun under other ownership and may not reflect current operations. If unknown, provide the best estimate.

Year Operations Began: _____

10. What industry (or industries) are the primary customers or ultimate users of metal products finished or electroplated at the facility? Select all that apply.

- Aerospace
 - Aviation (e.g., aircraft, helicopters)
 - Automotive (e.g., cars, buses, trucks, motor vehicles)
 - Electronic equipment
 - Hardware
 - Household equipment
 - Instruments
 - Marine (e.g., ships, boats)
 - Mobile industrial equipment
 - Office machine
 - Ordnance (e.g., weapons, ammunition)
 - Precious metals and jewelry
 - Railroad
 - Stationary industrial equipment
 - Miscellaneous metal products
 - Other, specify: _____
 - Other, specify: _____
 - Other, specify: _____
-

Facility ID: _____

Facility Name: _____

11. Did the facility engage in chromium finishing operations, as defined in the GLOSSARY, at any time since the facility began operation? Chromium finishing operations include any metal finishing or electroplating process that deposits a layer of chromium on any base material or uses chromium materials in the fabrication of a metal product. Applicable processes include, but are not limited to, decorative chromium plating, functional/hard chromium plating, chromium anodizing, chromic acid etching, and chromate conversion coating. Include operations that previously occurred even if they do not reflect current operations. Include operations that occurred under other ownership, if applicable. If unknown, provide the best estimate.

Yes

No



**If you answered "No" to this question, proceed to Section 9 (Comments).
DO NOT COMPLETE THE REMAINDER OF THIS QUESTIONNAIRE.**

12. Did the facility permanently close or permanently discontinue all metal finishing and electroplating operations as of January 1, 2023?

Yes. Facility has permanently closed as of January 1, 2023.

Yes. Facility is not permanently closed but has permanently discontinued all metal finishing and electroplating operations as of January 1, 2023.

No. Facility will perform one or more metal finishing or electroplating operations after January 1, 2023.



**If you answered "Yes" to this question, proceed to Section 9 (Comments).
DO NOT COMPLETE THE REMAINDER OF THIS QUESTIONNAIRE.**

13. Will the facility permanently close or permanently discontinue all metal finishing and electroplating operations by December 31, 2028? If unknown, provide the best estimate.

Yes. Provide the planned date of permanent closure or cessation of all metal finishing and electroplating operations:

No. Facility will perform one or more metal finishing or electroplating operations after December 31, 2028.

Facility ID: _____

Facility Name: _____

14. Information and data submitted in response to this questionnaire should reflect calendar year 2022, unless otherwise specified. Is information and data provided for calendar year 2022 representative of typical production, wastewater generation, or wastewater management operations at the facility?

Yes

No

If no, provide an overview of why the information and data reported for calendar year 2022 is not representative of typical production, wastewater generation, or wastewater management operations.

Facility ID: _____

Facility Name: _____

15. If the facility is regulated by any water discharge requirement(s) (e.g., general National Pollutant Discharge Elimination System (NPDES) permit, individual NPDES permit, stormwater permit, pretreatment agreement/permit, underground injection control permit) or local ordinance, complete the table below and provide copies of relevant documents. Complete a row for each applicable water discharge permit and requirement. For each applicable water discharge permit or requirement, identify the type of requirement and provide the identification or permit number(s), the regulatory authority, the expiration date(s), and specify the types of wastewaters covered. Include administratively continued permits if they are the basis for the facility's current water discharge requirements.

Do not include the following types of permits: construction permits, erosion and sediment control permits associated with construction activities, temporary or general permits for hydrostatic testing water, water obstruction and encroachment permits, and/or water allocation permits.

Attach copies of all applicable discharge requirement documents to your questionnaire response. Examples of such documents include permits, factsheets, permit applications, Form 2C data, and statements of basis. See the FILES SUBMITTED WITH THE QUESTIONNAIRE section for guidance on submitting electronic copies of discharge requirement documents and other attachments with the completed questionnaire.

Facility does not hold any water discharge permit(s), requirements, or local ordinance(s).

OR

Water Discharge Requirements and Permits

Identification or Permit Number (enter "NA" if no number)	Type of Requirement (select only one)	Regulatory Authority	Expiration Date (mm/dd/yyyy)	Type of Wastewater Covered by Requirement (select all that apply)
	<input type="checkbox"/> General NPDES or stormwater permit <input type="checkbox"/> Individual NPDES permit <input type="checkbox"/> Pretreatment agreement/permit <input type="checkbox"/> Underground injection control permit <input type="checkbox"/> Local ordinance <input type="checkbox"/> Other, specify: _____		__/__/____	<input type="checkbox"/> Process wastewater <input type="checkbox"/> Nonprocess wastewater <input type="checkbox"/> Process area stormwater <input type="checkbox"/> Nonprocess area stormwater <input type="checkbox"/> Air emission control wastewater <input type="checkbox"/> Third-party wastewater <input type="checkbox"/> Sanitary wastewater <input type="checkbox"/> Groundwater <input type="checkbox"/> Other, specify: _____

Facility ID: _____

Facility Name: _____

Water Discharge Requirements and Permits

Identification or Permit Number (enter "NA" if no number)	Type of Requirement (select only one)	Regulatory Authority	Expiration Date (mm/dd/yyyy)	Type of Wastewater Covered by Requirement (select all that apply)
	<input type="checkbox"/> General NPDES or stormwater permit <input type="checkbox"/> Individual NPDES permit <input type="checkbox"/> Pretreatment agreement/permit <input type="checkbox"/> Underground injection control permit <input type="checkbox"/> Local ordinance <input type="checkbox"/> Other, specify: _____		__/__/____	<input type="checkbox"/> Process wastewater <input type="checkbox"/> Nonprocess wastewater <input type="checkbox"/> Process area stormwater <input type="checkbox"/> Nonprocess area stormwater <input type="checkbox"/> Air emission control wastewater <input type="checkbox"/> Third-party wastewater <input type="checkbox"/> Sanitary wastewater <input type="checkbox"/> Groundwater <input type="checkbox"/> Other, specify: _____

Facility ID: _____

Facility Name: _____

16. Facilities that engage in the manufacturing, forming, milling, processing, or finishing of metals and may be subject to one or more effluent limitations guidelines and standards (ELGs). Identify the ELG or ELGs that apply to the operations conducted at the facility. If you do not know which ELGs are applicable to the facility, please visit the EPA weblink provided and review the applicability information. Select all that apply.

Metal Equipment Manufacturing, Assembly, Rebuilding, Maintenance, and Surface Finishing

- [Metal Finishing \(40 CFR Part 433\)](#)
- [Electroplating \(40 CFR Part 413\)](#)
- [Metal Products and Machinery \(40 CFR Part 438\)](#)

Metal Manufacturing

- [Iron and Steel Manufacturing \(40 CFR Part 420\)](#)
- [Nonferrous Metals Manufacturing \(40 CFR Part 421\)](#)
- [Ferroalloy Manufacturing \(40 CFR Part 424\)](#)

Metal Forming

- [Metal Molding and Casting \(Foundries\) \(40 CFR Part 464\)](#)
- [Aluminum Forming \(40 CFR Part 467\)](#)
- [Copper Forming \(40 CFR Part 468\)](#)
- [Nonferrous Metals Forming and Metal Powders \(40 CFR Part 471\)](#)

Metal Mill Products

- [Battery Manufacturing \(40 CFR Part 461\)](#)
- [Coil Coating \(40 CFR Part 465\)](#)
- [Porcelain Enameling \(40 CFR Part 466\)](#)
- [Electrical and Electronic Components \(40 CFR Part 469\)](#)

Other Metal Related Effluent Limitations Guidelines and Standards

- [Plastics Molding and Forming \(40 CFR Part 463\)](#)
 - Other ELG not listed above, specify: _____
 - Other ELG not listed above, specify: _____
 - Other ELG not listed above, specify: _____
-

Facility ID: _____

Facility Name: _____

SECTION 2. FACILITY OPERATIONS AND PFAS USE

17. Identify the chromium finishing operation(s) performed at the facility at any time since the facility began operation and the form of chromium used in such operation. Complete a row in the table below for each type of chromium finishing operation performed and report the form(s) of chromium used as well as the most recent year that hexavalent chromium (Cr VI) and trivalent chromium (Cr III) were used in the operation. Include operations that previously occurred even if they do not reflect current operations. Include operations that occurred under other ownership, if applicable. If unknown, provide the best estimate.

Chromium Finishing Operations Performed Since Facility Began Operation

Chromium Finishing Operation (select only one)	Form of Chromium Used in Operation (select all that apply)	Year Operation Was Most Recently Performed	
		With Cr VI	With Cr III
<input type="checkbox"/> Decorative chromium plating <input type="checkbox"/> Functional/hard chromium plating <input type="checkbox"/> Chromium anodizing <input type="checkbox"/> Chromic acid etching <input type="checkbox"/> Chromate conversion coating <input type="checkbox"/> Other, specify: _____	<input type="checkbox"/> Cr VI <input type="checkbox"/> Cr III		
<input type="checkbox"/> Decorative chromium plating <input type="checkbox"/> Functional/hard chromium plating <input type="checkbox"/> Chromium anodizing <input type="checkbox"/> Chromic acid etching <input type="checkbox"/> Chromate conversion coating <input type="checkbox"/> Other, specify: _____	<input type="checkbox"/> Cr VI <input type="checkbox"/> Cr III		

18. Identify the chromium finishing operation(s) performed at the facility at any time during calendar year 2022 and the form of chromium used in such operation. Complete a row in the table below for each type of chromium finishing operation performed and report the form(s) of chromium used, number of days the operation was performed during calendar year 2022, and whether any wastewater was generated from the operation.

Facility did not perform any chromium finishing operations at any time during calendar year 2022.

OR

Chromium Finishing Operations Performed During 2022

Chromium Finishing Operation (select only one)	Form of Chromium Used in Operation (select all that apply)	Number of Days Performed (dpy)	Was Wastewater Generated From Operation (yes/no)
<input type="checkbox"/> Decorative chromium plating <input type="checkbox"/> Functional/hard chromium plating <input type="checkbox"/> Chromium anodizing <input type="checkbox"/> Chromic acid etching <input type="checkbox"/> Chromate conversion coating <input type="checkbox"/> Other, specify: _____	<input type="checkbox"/> Cr VI <input type="checkbox"/> Cr III		<input type="checkbox"/> Yes <input type="checkbox"/> No

Facility ID: _____

Facility Name: _____

Chromium Finishing Operations Performed During 2022

Chromium Finishing Operation (select only one)	Form of Chromium Used in Operation (select all that apply)	Number of Days Performed (dpy)	Was Wastewater Generated From Operation (yes/no)
<input type="checkbox"/> Decorative chromium plating <input type="checkbox"/> Functional/hard chromium plating <input type="checkbox"/> Chromium anodizing <input type="checkbox"/> Chromic acid etching <input type="checkbox"/> Chromate conversion coating <input type="checkbox"/> Other, specify: _____	<input type="checkbox"/> Cr VI <input type="checkbox"/> Cr III		<input type="checkbox"/> Yes <input type="checkbox"/> No

19. In addition to chromium finishing operations reported in response to Questions 17 and 18, identify any nonchromium metal finishing or electroplating operations performed at the facility at any time during calendar year 2022 and type of material(s) used (either as a base material or applied/deposited onto a base material) in such operation. Complete a row in the table below for each nonchromium metal finishing and electroplating operation performed and report the material(s) used, number of days the operation was performed during calendar year 2022, and whether any wastewater was generated from the operation. If the facility performed the same type of metal finishing or electroplating operation using different materials (e.g., two process lines processing different materials, transition in material being electroplated over course of year) report all applicable materials on a single row of the table.

Facility did not perform any nonchromium metal finishing or electroplating operations at any time during calendar year 2022.

OR

Facility ID: _____

Facility Name: _____

Nonchromium Metal Finishing and Electroplating Operations Performed During 2022

Metal Finishing or Electroplating Operation (select only one)	Material(s) Used in Operation (select all that apply)	Number of Days Performed (dpy)	Was Wastewater Generated From Operation (yes/no)
<input type="checkbox"/> Electroplating <input type="checkbox"/> Electroless plating <input type="checkbox"/> Anodizing <input type="checkbox"/> Coating (chromating, phosphating, and coloring) <input type="checkbox"/> Chemical etching and milling <input type="checkbox"/> Printed circuit board manufacture <input type="checkbox"/> Other, specify: _____	<input type="checkbox"/> Aluminum (Al) <input type="checkbox"/> Brass <input type="checkbox"/> Cadmium (Cd) <input type="checkbox"/> Copper (Cu) <input type="checkbox"/> Gold (Au) <input type="checkbox"/> Iron (Fe) <input type="checkbox"/> Lead (Pb) <input type="checkbox"/> Magnesium (Mg) <input type="checkbox"/> Nickel (Ni) <input type="checkbox"/> Palladium (Pd) <input type="checkbox"/> Plastic <input type="checkbox"/> Platinum (Pt) <input type="checkbox"/> Rhodium (Rh) <input type="checkbox"/> Silver (Ag) <input type="checkbox"/> Steel <input type="checkbox"/> Tin (Sn) <input type="checkbox"/> Zinc (Zn) <input type="checkbox"/> Other, specify: _____		<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Electroplating <input type="checkbox"/> Electroless plating <input type="checkbox"/> Anodizing <input type="checkbox"/> Coating (chromating, phosphating, and coloring) <input type="checkbox"/> Chemical etching and milling <input type="checkbox"/> Printed circuit board manufacture <input type="checkbox"/> Other, specify: _____	<input type="checkbox"/> Aluminum (Al) <input type="checkbox"/> Brass <input type="checkbox"/> Cadmium (Cd) <input type="checkbox"/> Copper (Cu) <input type="checkbox"/> Gold (Au) <input type="checkbox"/> Iron (Fe) <input type="checkbox"/> Lead (Pb) <input type="checkbox"/> Magnesium (Mg) <input type="checkbox"/> Nickel (Ni) <input type="checkbox"/> Palladium (Pd) <input type="checkbox"/> Plastic <input type="checkbox"/> Platinum (Pt) <input type="checkbox"/> Rhodium (Rh) <input type="checkbox"/> Silver (Ag) <input type="checkbox"/> Steel <input type="checkbox"/> Tin (Sn) <input type="checkbox"/> Zinc (Zn) <input type="checkbox"/> Other, specify: _____		<input type="checkbox"/> Yes <input type="checkbox"/> No

Facility ID: _____

Facility Name: _____

20. Did the facility use one or more chemical fume suppressants (including as an air emission control for Cr VI emissions) at any time since the facility began operation? Include operations that occurred under other ownership, if applicable. If yes, complete a row in the table for each chemical fume suppressant product used and provide the information requested. Include operations that previously occurred even if they do not reflect current operations. Include operations that occurred under other ownership, if applicable. If unknown, provide the best estimate.

Facility did not use one or more chemical fume suppressants at any time since the facility began operation.

OR

Chemical Fume Suppressant Use Since Facility Began Operation

Chemical Fume Suppressant Product Name (select only one)	Manufacturer Name (select only one)	Target Pollutant(s) and Control Level (select all that apply)	Contains PFAS?	Year(s) Product Was Used (select all that apply)	Total Annual Volume Used in 2022 (gallons)	Number of Days Used in 2022 (dpy)
<input type="checkbox"/> Product A <input type="checkbox"/> Product B <input type="checkbox"/> Product C <input type="checkbox"/> Other, specify: _____	<input type="checkbox"/> Manufacturer A <input type="checkbox"/> Manufacturer B <input type="checkbox"/> Manufacturer C <input type="checkbox"/> Other, specify: _____	<input type="checkbox"/> Cr VI Target level: _____ <input type="checkbox"/> Other, specify Pollutant: _____ Target level: _____	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	<input type="checkbox"/> 2022 <input type="checkbox"/> 2021 <input type="checkbox"/> 2020 <input type="checkbox"/> 2019 <input type="checkbox"/> 2018 <input type="checkbox"/> 2017 <input type="checkbox"/> 2016 <input type="checkbox"/> 2010 – 2015 <input type="checkbox"/> 2000 – 2014 <input type="checkbox"/> Prior to 2000		
<input type="checkbox"/> Product A <input type="checkbox"/> Product B <input type="checkbox"/> Product C <input type="checkbox"/> Other, specify: _____	<input type="checkbox"/> Manufacturer A <input type="checkbox"/> Manufacturer B <input type="checkbox"/> Manufacturer C <input type="checkbox"/> Other, specify: _____	<input type="checkbox"/> Cr VI Target level: _____ <input type="checkbox"/> Other, specify Pollutant: _____ Target level: _____	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	<input type="checkbox"/> 2022 <input type="checkbox"/> 2021 <input type="checkbox"/> 2020 <input type="checkbox"/> 2019 <input type="checkbox"/> 2018 <input type="checkbox"/> 2017 <input type="checkbox"/> 2016 <input type="checkbox"/> 2010 – 2015 <input type="checkbox"/> 2000 – 2014 <input type="checkbox"/> Prior to 2000		

Facility ID: _____

Facility Name: _____

21. Did the facility operate one or more air emission controls (excluding chemical fume suppressants reported in Question 20) at any time in calendar year 2022? If yes, complete a row in the table for each air emissions control type and describe the air emission control, target pollutants and control level(s), number of days performed in calendar year 2022, and whether wastewater was generated.

Facility did not operate one or more air emission controls (excluding use of chemical fume suppressants reported in Question 20) at any time in calendar year 2022.

OR

Air Emission Controls Operated During 2022 (excluding chemical fume suppressants)

Air Emission Control Type (select only one)	Description of Air Emission Control	Receives Emissions from Chromium Finishing Operations (yes/no)	Target Pollutant(s) and Control Level (select all that apply)	Number of Days Used in 2022 (dpy)	Was Wastewater Generated From Operation (yes/no)
<input type="checkbox"/> Wet scrubber <input type="checkbox"/> Dry scrubber <input type="checkbox"/> Composite mesh pad scrubber <input type="checkbox"/> Physical/mechanical fume suppression <input type="checkbox"/> Enclosed lines <input type="checkbox"/> Air jet systems <input type="checkbox"/> Other, specify: _____		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Cr VI Target level: _____ <input type="checkbox"/> Other, specify Pollutant: _____ Target level: _____		<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Wet scrubber <input type="checkbox"/> Dry scrubber <input type="checkbox"/> Composite mesh pad scrubber <input type="checkbox"/> Physical/mechanical fume suppression <input type="checkbox"/> Enclosed lines <input type="checkbox"/> Air jet systems <input type="checkbox"/> Other, specify: _____		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Cr VI Target level: _____ <input type="checkbox"/> Other, specify Pollutant: _____ Target level: _____		<input type="checkbox"/> Yes <input type="checkbox"/> No

Facility ID: _____

Facility Name: _____

22. Did the facility intentionally use, blend, integrate, or apply one or more PFAS (including a mixture or product containing PFAS) **for any other purpose** in metal finishing operations, electroplating operations, or air emission controls (excluding chemical fume suppressants reported in Question 20) at any time since the facility began operation? Include operations that previously occurred even if they do not reflect current operations. Include operations that occurred under other ownership, if applicable. If yes, complete a row in the table for each metal finishing operation, electroplating operation, and air emission control using PFAS and provide the information requested. Include operations that occurred under other ownership, if applicable. If unknown, provide the best estimate.

Facility did not use, blend, integrate, or apply one or more PFAS (including a mixture or product containing PFAS) for any other purpose in metal finishing operations, electroplating operations, or air emission controls (excluding chemical fume suppressants reported in Question 20) at any time since the facility began operation.

OR

PFAS Use in Metal Finishing and Electroplating Processes and Air Emission Controls (excluding chemical fume suppressants)

Process Name	Process Category (select only one)	Description of Process and Purpose for Use of PFAS or PFAS-Containing Product	Manufacturer(s) and Name(s) of PFAS or PFAS-Containing Product	Year(s) PFAS or PFAS-Containing Product Was Used (select all that apply)	Was Wastewater Generated From Operation (yes/no)	Total Annual Volume Used in 2022	Number of Days Used in 2022 (dpy)
	<input type="checkbox"/> Chromium metal finishing or electroplating operation <input type="checkbox"/> Nonchromium metal finishing or electroplating operation <input type="checkbox"/> Air emission control			<input type="checkbox"/> 2022 <input type="checkbox"/> 2021 <input type="checkbox"/> 2020 <input type="checkbox"/> 2019 <input type="checkbox"/> 2018 <input type="checkbox"/> 2017 <input type="checkbox"/> 2016 <input type="checkbox"/> 2010 – 2015 <input type="checkbox"/> 2000 – 2014 <input type="checkbox"/> Prior to 2000	<input type="checkbox"/> Yes <input type="checkbox"/> No		

Facility ID: _____

Facility Name: _____

PFAS Use in Metal Finishing and Electroplating Processes and Air Emission Controls (excluding chemical fume suppressants)

Process Name	Process Category (select only one)	Description of Process and Purpose for Use of PFAS or PFAS-Containing Product	Manufacturer(s) and Name(s) of PFAS or PFAS-Containing Product	Year(s) PFAS or PFAS-Containing Product Was Used (select all that apply)	Was Wastewater Generated From Operation (yes/no)	Total Annual Volume Used in 2022	Number of Days Used in 2022 (dpy)
	<input type="checkbox"/> Chromium metal finishing or electroplating operation <input type="checkbox"/> Nonchromium metal finishing or electroplating operation <input type="checkbox"/> Air emission control			<input type="checkbox"/> 2022 <input type="checkbox"/> 2021 <input type="checkbox"/> 2020 <input type="checkbox"/> 2019 <input type="checkbox"/> 2018 <input type="checkbox"/> 2017 <input type="checkbox"/> 2016 <input type="checkbox"/> 2010 – 2015 <input type="checkbox"/> 2000 – 2014 <input type="checkbox"/> Prior to 2000	<input type="checkbox"/> Yes <input type="checkbox"/> No		

Facility ID: _____

Facility Name: _____

23. Provide the facility's total annual production volume of **metal products** (i.e., all saleable materials produced by result of chromium and nonchromium metal finishing and electroplating operations) during calendar year 2022. Also provide the facility's total annual production volume of **metal products** associated with intentional use, blending, integrating, or application of one or more PFAS (including a mixture or product containing PFAS) during calendar year 2022.

Total annual volume of metal products produced: _____ **Units of Measure**

Total annual volume of metal products produced using PFAS or PFAS-based fume suppressant: _____ **Units of Measure**

24. Provide the facility's total annual production volume of **chromium products** (i.e., all saleable materials produced by result of chromium finishing operations) during calendar year 2022. Also provide the facility's total annual production volume of **chromium products** associated with intentional use, blending, integrating, or application of one or more PFAS (including a mixture or product containing PFAS) during calendar year 2022.

Total annual volume of chromium products produced: _____ **Units of Measure**

Total annual volume of chromium products produced using PFAS or PFAS-based fume suppressant: _____ **Units of Measure**

25. Is the facility planning to modify operations in a manner which will change or eliminate the use of hexavalent chromium at the facility by December 31, 2028? If yes, complete a row in the table below for each applicable planned modification and report the estimated change in hexavalent chromium use and planned completion date.

Facility does not plan to modify operations in a manner which will change or eliminate the use of hexavalent chromium at the facility by December 31, 2028.

OR

Planned Modifications Reducing or Eliminating Hexavalent Chromium

Modification ID	Description of Planned Modification	Estimated Change in Cr VI Use (reported as percent reduction relative to 2022)	Planned Completion Month	Planned Completion Year
1				
2				

Facility ID: _____

Facility Name: _____

26. Is the facility planning to add, remove, or modify operations in a manner which will change the quantity or type of PFAS intentionally used, blended, integrated, or applied in metal finishing operations, electroplating operations, or air emission controls (including chemical fume suppressants) at the facility by December 31, 2028? If yes, complete a row in the table below for each applicable planned modification and report the estimated change in PFAS and planned completion date.

Facility does not plan to modify operations in a manner which will change the quantity or type of PFAS intentionally used, blended, integrated, or applied in metal finishing operations, electroplating operations, or air emission controls (including chemical fume suppressants) at the facility by December 31, 2028.

OR

Planned Modifications Changing PFAS Intentionally Used, Blended, Integrated, or Applied

Modification ID	Description of Planned Modification	Estimated Change in PFAS (reported as percent change relative to 2022)	Planned Completion Month	Planned Completion Year
1				
2				

Facility ID: _____

Facility Name: _____

SECTION 3. WASTEWATER GENERATION

27. Did the facility generate wastewater (such as process wastewater, nonprocess wastewater, process area stormwater, nonprocess area stormwater, air emission control wastewater, third-party wastewater, sanitary wastewater, groundwater) from any metal finishing operations, electroplating operations, or air emission controls at any point during calendar year 2022?

Yes

No



If you answered "No" to this question, proceed to Section 7 (Environmental and Other Information).

DO NOT COMPLETE SECTIONS 3, 4, 5, OR 6.

Facility ID: _____

Facility Name: _____

28. Complete a row in the table below for each wastewater generated on site or transferred to the facility during calendar year 2022. Include rows for each process wastewater, nonprocess wastewater, process area stormwater, nonprocess area stormwater, air emission control wastewater, third-party wastewater, sanitary wastewater, and groundwater. See the GLOSSARY for a definition of each wastewater type. If the wastewater does not fit within any of these classifications, select "other" and specify the wastewater type in the space provided. Multiple rows per wastewater type may be reported (e.g., if the facility generates three types of process wastewater, you should complete three rows in the table to report each of these three process wastewater streams).

Include all wastewaters generated from the metal finishing operations, electroplating operations, and air emission controls reported in response to Section 2. Include wastewaters that are generated on site and wastewaters transferred to the facility regardless of final destination or if they are reused/recycled within the facility. Include both wastewaters that were continuously generated or transferred to the facility as well as those that were only generated or transferred for a portion of calendar year 2022 (e.g., wastewaters only generated during a specific manufacturing campaign should be reported).

Wastewater Streams Generated On Site or Transferred to the Facility During 2022

Wastewater Stream Name	Wastewater Type (select only one)	Wastewater Source (as reported in Section 2 or location wastewater originates)	Annual Average Flow Rate (gpy)	Number of Days Generated or Transferred (dpy)	Onsite Wastewater Treatment (yes/no)	Final Destination (select all that apply)
	<input type="checkbox"/> Process wastewater <input type="checkbox"/> Nonprocess wastewater <input type="checkbox"/> Process area stormwater <input type="checkbox"/> Nonprocess area stormwater <input type="checkbox"/> Air emission control wastewater <input type="checkbox"/> Third-party wastewater <input type="checkbox"/> Sanitary wastewater <input type="checkbox"/> Groundwater <input type="checkbox"/> Other, specify: _____				<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Discharged to surface water <input type="checkbox"/> Discharged to POTW <input type="checkbox"/> Transferred to centralized waste treatment facility <input type="checkbox"/> Land applied (onsite or offsite) <input type="checkbox"/> Reused or recycled within the facility <input type="checkbox"/> Underground injection <input type="checkbox"/> Septic tank <input type="checkbox"/> Other, specify: _____

Facility ID: _____

Facility Name: _____

Wastewater Streams Generated On Site or Transferred to the Facility During 2022

Wastewater Stream Name	Wastewater Type (select only one)	Wastewater Source (as reported in Section 2 or location wastewater originates)	Annual Average Flow Rate (gpy)	Number of Days Generated or Transferred (dpy)	Onsite Wastewater Treatment (yes/no)	Final Destination (select all that apply)
	<input type="checkbox"/> Process wastewater <input type="checkbox"/> Nonprocess wastewater <input type="checkbox"/> Process area stormwater <input type="checkbox"/> Nonprocess area stormwater <input type="checkbox"/> Air emission control wastewater <input type="checkbox"/> Third-party wastewater <input type="checkbox"/> Sanitary wastewater <input type="checkbox"/> Groundwater <input type="checkbox"/> Other, specify: _____				<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Discharged to surface water <input type="checkbox"/> Discharged to POTW <input type="checkbox"/> Transferred to centralized waste treatment facility <input type="checkbox"/> Land applied (onsite or offsite) <input type="checkbox"/> Reused or recycled within the facility <input type="checkbox"/> Underground injection <input type="checkbox"/> Septic tank <input type="checkbox"/> Other, specify: _____

29. Is the facility planning to add, remove, or modify operations in a manner which will change the quantity, type, or characterization of wastewater (including process wastewater, nonprocess wastewater, process area stormwater, nonprocess area stormwater, air emission control wastewater, third-party wastewater, sanitary wastewater, and groundwater) generated on site or transferred to the facility by December 31, 2028? If yes, complete a row in the table below for each applicable planned modification and report the wastewater streams impacted and planned completion date.

Facility does not plan to modify operations in a manner which will change the quantity, type, or characterization of wastewater generated on site or transferred to the facility by December 31, 2028.

OR

Facility ID: _____

Facility Name: _____

Planned Modifications Changing Wastewater Generated On Site or Transferred to the Facility

Modification ID	Description of Planned Modification	Impacted Wastewater Stream Name	Wastewater Type (select only one)	Estimated Change in Process Wastewater Quantity or Characterization	Planned Completion Month	Planned Completion Year
1			<input type="checkbox"/> Process wastewater <input type="checkbox"/> Nonprocess wastewater <input type="checkbox"/> Process area stormwater <input type="checkbox"/> Nonprocess area stormwater <input type="checkbox"/> Air emission control wastewater <input type="checkbox"/> Third-party wastewater <input type="checkbox"/> Sanitary wastewater <input type="checkbox"/> Groundwater <input type="checkbox"/> Other, specify: _____			
2			<input type="checkbox"/> Process wastewater <input type="checkbox"/> Nonprocess wastewater <input type="checkbox"/> Process area stormwater <input type="checkbox"/> Nonprocess area stormwater <input type="checkbox"/> Air emission control wastewater <input type="checkbox"/> Third-party wastewater <input type="checkbox"/> Sanitary wastewater <input type="checkbox"/> Groundwater <input type="checkbox"/> Other, specify: _____			

Facility ID: _____

Facility Name: _____

SECTION 4. WASTEWATER FLOW DIAGRAM

30. To understand the facility's wastewater generation and management practices, EPA is requiring the facility to provide one or more wastewater flow diagrams depicting the current treatment and management practices of each wastewater generated on site or transferred to the facility. The diagram should illustrate the source of each wastewater generated on site or transferred to the facility, each wastewater treatment unit operated on site, the wastewaters that enter and exit each wastewater treatment unit, and the ultimate destinations of the wastewaters. The diagram should also identify any solid waste residuals generated on site or transferred to the facility, including process waste, wastewater treatment sludge, and spent water treatment residuals (e.g., spent activated carbon or resin), and identify the ultimate designation of the solid waste (e.g., centralized waste treatment facility, landfill). The diagram should also identify all air emission control equipment operated on site (do not include chemical fume suppressants) and air emissions released from the facility. Include all items listed in the checklist below on your diagram. Any wastewaters that are reused or recycled within the facility should also be included on the diagram and the destination noted.

Provide as many wastewater flow diagrams as necessary to convey the information requested in the checklist below. See the example figure below for the level of detail requested. Include the facility name and number each diagram; the first diagram should be numbered WFD-1, the second numbered WFD-2, etc. You may use an existing diagram, such as a water balance diagram included in a permit application and mark the additional required information on the diagram manually. You may use a diagram from previous years, as long as the diagram is still representative of current operations. See the FILES SUBMITTED WITH THE QUESTIONNAIRE section for guidance on submitting electronic copies of wastewater flow diagrams and other attachments with the completed questionnaire.

List all applicable attachments (include file format extension; e.g., "example.pdf"):

Wastewater Flow Diagram #1 File Name (WFD-1): _____

Wastewater Flow Diagram #2 File Name (WFD-2): _____

Wastewater Flow Diagram #3 File Name (WFD-3): _____

Wastewater Flow Diagram #4 File Name (WFD-4): _____

Wastewater Flow Diagram #5 File Name (WFD-5): _____

Wastewater Flow Diagram Checklist

- 1) Include the wastewater treatment diagram number, facility ID, and facility name on each diagram submitted.
- 2) Include and label all wastewater treatment units (including in-process treatment units, product recovery units, and treatment units in the end-of-pipe wastewater treatment system) operated at the facility during calendar year 2022. Where multiple units of the same type are present at the facility (e.g., the facility operates two clarifiers), each should be depicted separately on the diagram and identified. If applicable, use the same process names reported in Section 2 and

Facility ID: _____

Facility Name: _____

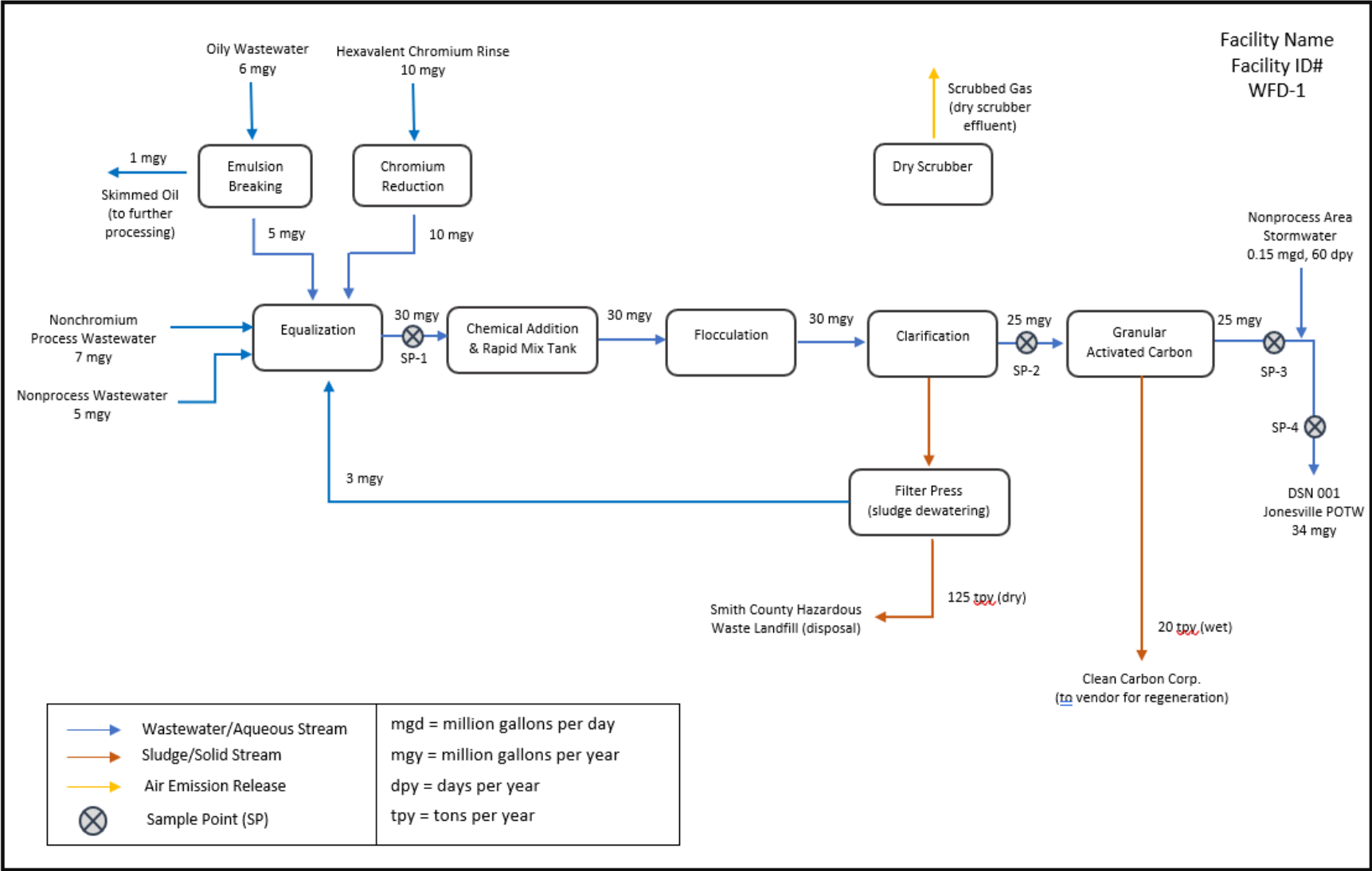
wastewater treatment units reported in Section 5 (Question 37) when labeling the diagram.

- 3) Include and label all wastewater and solid/sludge streams including but not limited to all wastewaters generated on site or transferred to the facility during calendar year 2022, influent(s) and effluent(s) for each treatment unit, and intermittent streams. Effluent streams may include wastewater as well as solid waste, sludges, or concentrated wastestreams. If applicable, use the same wastewater stream names reported in Section 3 (Question 28), treatment unit names reported in Section 5 (Question 37), and solids/sludge stream names reported in Section 7 (Question 51) when labeling the diagram.
- 4) Identify the destination of all wastewater and solid/sludge streams depicted on the diagram. All streams should either be entering another unit shown on the diagram or the next destination should be noted (e.g., Outfall 001, offsite disposal at Company X).
- 5) Specify the name and source of all wastewater and solid/sludge streams entering or transferred to the facility in calendar year 2022 (e.g., third-party wastewater entering the facility's wastewater treatment system). Also specify the name and destination of all wastewater and solid/sludge streams exiting or transferred from the facility in calendar year 2022 (e.g., hazardous waste materials transferred to a centralized waste treatment facility).
- 6) Provide the 2022 annual average flow in gallons per year (gpy) or gallons per day (gpd) and days per year (dpy) for all influent and effluent wastewater streams on the diagram. Frequency does not have to be provided for continuous streams (i.e., those generated 365 dpy).
- 7) Indicate, as appropriate, where any wastestreams are reused or recycled within the facility.
- 8) Include and label all air emission control equipment reported in Section 2 (Question 21) and air emission streams released at the facility. Flow data is not required for air emission streams.
- 9) Include NPDES permit or pretreatment permit/agreement outfall numbers, if applicable. Label all PFAS sample collection locations reported in Section 6, if applicable.
- 10) If you believe that a diagram should be treated as confidential, stamp it "Confidential" or write "Confidential" or "CBI" across the top. If any diagram is not marked "Confidential," it will be considered nonconfidential under 40 CFR Part 2, Subpart B.

Facility ID: _____

Facility Name: _____

Example Wastewater Flow Diagram



Facility ID: _____

Facility Name: _____

SECTION 5. WASTEWATER MANAGEMENT AND TREATMENT

31. Did the facility discharge or transfer off site any wastewater generated from metal finishing operations, electroplating operations, or air emission controls at any point during calendar year 2022? Include all wastewater discharges and transfers to a surface water, POTW, or centralized waste treatment facility.

Yes

No. **Skip to Question 36.**

32. Complete a row in the table below for each applicable final destination of wastewaters generated on site or transferred to the facility during calendar year 2022. The rows completed should match the final destinations reported in Section 3 (Question 28) and the wastewater flow diagram (Question 30). The annual flow rate should reflect the total flow to the destination (i.e., sum of flow rates for all wastewaters that are transferred to the destination).

2022 Final Wastewater Destinations

Wastewater Destination	Does Facility Send Wastewater to This Destination	Annual Average Flow Rate (gpy)	Number of Days (dpy)
Discharged to surface water	<input type="checkbox"/> Yes <input type="checkbox"/> No		
Discharged to POTW	<input type="checkbox"/> Yes <input type="checkbox"/> No		
Transferred to centralized waste treatment facility	<input type="checkbox"/> Yes <input type="checkbox"/> No		
Land applied (onsite or offsite)	<input type="checkbox"/> Yes <input type="checkbox"/> No		
Reused or recycled within the facility	<input type="checkbox"/> Yes <input type="checkbox"/> No		
Underground injection	<input type="checkbox"/> Yes <input type="checkbox"/> No		
Septic tank	<input type="checkbox"/> Yes <input type="checkbox"/> No		
Other, specify: _____	<input type="checkbox"/> Yes <input type="checkbox"/> No		
Other, specify: _____	<input type="checkbox"/> Yes <input type="checkbox"/> No		
Other, specify: _____	<input type="checkbox"/> Yes <input type="checkbox"/> No		

Facility ID: _____

Facility Name: _____

33. How many wastewater discharge locations (final outfalls) are present at this facility? Include discharge locations conveying wastewater to surface waters, POTWs, and centralized waste treatment facilities.

Total Number of Discharge Locations and Permit Monitoring Locations: [REDACTED]

34. Complete a row in the table below for each discharge location (final outfall) that discharges wastewater to a surface water, POTW, or centralized waste treatment facility. All final outfalls identified in the NPDES permits, pretreatment agreements, general stormwater permits, and underground injection control permits listed in response to Question 15 should be included.

2022 Wastewater Discharge and Final Outfall Information

Outfall Name/ Number	Outfall Coordinates (decimal degrees)	Annual Average Flow Rate (gpy)	Number of Days Generated or Transferred (dpy)	Type(s) of Wastewater & Relative Contributions to the 2022 Outfall Flow (select all that apply)	Applicable Discharge Destination (select only one)	Mixing Zone Been Applied at the Outfall (yes/no)
	Latitude: _____ Longitude: _____			<input type="checkbox"/> Process wastewater % of total outfall flow: _____ <input type="checkbox"/> Nonprocess wastewater % of total outfall flow: _____ <input type="checkbox"/> Process area stormwater % of total outfall flow: _____ <input type="checkbox"/> Nonprocess area stormwater % of total outfall flow: _____ <input type="checkbox"/> Air emission control wastewater % of total outfall flow: _____ <input type="checkbox"/> Sanitary wastewater % of total outfall flow: _____ <input type="checkbox"/> Groundwater % of total outfall flow: _____ <input type="checkbox"/> Other, specify: _____ % of total outfall flow: _____	<input type="checkbox"/> Surface water Name: _____ Type: <input type="checkbox"/> River/stream <input type="checkbox"/> Lake/pond <input type="checkbox"/> Estuary <input type="checkbox"/> Marine <input type="checkbox"/> POTW <input type="checkbox"/> Centralized waste treatment facility <input type="checkbox"/> Land application (onsite or offsite) <input type="checkbox"/> Underground injection (onsite or offsite) <input type="checkbox"/> Septic tank <input type="checkbox"/> Other, specify: _____	<input type="checkbox"/> Yes <input type="checkbox"/> No

Facility ID: _____

Facility Name: _____

2022 Wastewater Discharge and Final Outfall Information

Outfall Name/ Number	Outfall Coordinates (decimal degrees)	Annual Average Flow Rate (gpy)	Number of Days Generated or Transferred (dpy)	Type(s) of Wastewater & Relative Contributions to the 2022 Outfall Flow (select all that apply)	Applicable Discharge Destination (select only one)	Mixing Zone Been Applied at the Outfall (yes/no)
	Latitude: _____ Longitude: _____			<input type="checkbox"/> Process wastewater % of total outfall flow: _____ <input type="checkbox"/> Nonprocess wastewater % of total outfall flow: _____ <input type="checkbox"/> Process area stormwater % of total outfall flow: _____ <input type="checkbox"/> Nonprocess area stormwater % of total outfall flow: _____ <input type="checkbox"/> Air emission control wastewater % of total outfall flow: _____ <input type="checkbox"/> Sanitary wastewater % of total outfall flow: _____ <input type="checkbox"/> Groundwater % of total outfall flow: _____ <input type="checkbox"/> Other, specify: _____ % of total outfall flow: _____	<input type="checkbox"/> Surface water Name: _____ Type: <input type="checkbox"/> River/stream <input type="checkbox"/> Lake/pond <input type="checkbox"/> Estuary <input type="checkbox"/> Marine <input type="checkbox"/> POTW <input type="checkbox"/> Centralized waste treatment facility <input type="checkbox"/> Land application (onsite or offsite) <input type="checkbox"/> Underground injection (onsite or offsite) <input type="checkbox"/> Septic tank <input type="checkbox"/> Other, specify: _____	<input type="checkbox"/> Yes <input type="checkbox"/> No

Facility ID: _____

Facility Name: _____

35. Did the facility discharge wastewater to a POTW or centralized waste treatment facility at any time in calendar year 2022? Select all that apply.

Facility did not discharge wastewater to a POTW or centralized waste treatment facility in calendar year 2022.

OR

Facility discharged wastewater to a POTW in calendar year 2022. If there is more than one applicable POTW, list additional facility information in Section 9 (Comments).

POTW Name

POTW Street Address Line 1

POTW Street Address Line 2 (Optional)

City

State

ZIP Code

OR

Facility discharged wastewater to a centralized waste treatment facility in calendar year 2022. If there is more than one applicable centralized waste treatment facility, list additional facility information in Section 9 (Comments).

Centralized Waste Treatment Facility Name

Centralized Waste Treatment Facility Street Address Line 1

Centralized Waste Treatment Facility Street Address Line 2 (Optional)

City

State

ZIP Code

36. Did the facility operate one or more wastewater treatment units on site to treat any of the wastewater streams prior to its final destination during calendar year 2022?

Yes

No. **Skip to Question 40.**

Facility ID: _____

Facility Name: _____

37. Complete a row in the table below for each onsite wastewater treatment unit used to treat any wastewater generated on site or transferred to the facility during calendar year 2022. A list of common wastewater treatment units is provided in the table and these terms are defined in the GLOSSARY. If a wastewater treatment unit is used that is not included in the list, or if a unique variation of a listed wastewater treatment process is used, please include this information in the space provided. If the facility operates more than one treatment unit of a specific type (e.g., two clarifiers operated in series or in parallel), report each individual unit in a separate row of the table. The treatment units documented in the table below should match the wastewater flow diagram(s) provided in response to Section 4. This system and unit descriptions (flow rates, chemical addition) should reflect the treatment system used in calendar year 2022.

If the treatment unit was installed since January 1, 2018, attach any available costing information. Indicate by selecting “Yes” in the “Cost Information Provided?” field for which units this information is provided; for all other units, select “No.” See the FILES SUBMITTED WITH THE QUESTIONNAIRE section for guidance on submitting electronic copies of cost estimates and other attachments with the completed questionnaire.

Onsite Wastewater Treatment Units Operated During 2022

Treatment Unit Name	Treatment Unit Type (select only one)	Annual Average Influent Flow Rate (gpy)	Number of Days Operated (dpy)	Average Residence Time (hpd)	Technology Vendor Name	Treatment Media Replacement Frequency (if applicable)	Installed Since January 1, 2018	Cost Information Provided (yes/no)
	<input type="checkbox"/> Equalization <input type="checkbox"/> Neutralization/pH adjustment <input type="checkbox"/> Oil/water separation <input type="checkbox"/> Primary grit removal/screen <input type="checkbox"/> Biological treatment <input type="checkbox"/> Clarification <input type="checkbox"/> Chemical precipitation/ flocculation <input type="checkbox"/> Granular activated carbon <input type="checkbox"/> Ion exchange <input type="checkbox"/> Other adsorptive media <input type="checkbox"/> Media filtration <input type="checkbox"/> Microfiltration or ultrafiltration <input type="checkbox"/> Nanofiltration <input type="checkbox"/> Reverse osmosis <input type="checkbox"/> Other, specify: _____					<input type="checkbox"/> Once per day <input type="checkbox"/> Once per week <input type="checkbox"/> Once per month <input type="checkbox"/> Other, Describe: _____	<input type="checkbox"/> Installed prior to 2018 <input type="checkbox"/> Installed since 2018	<input type="checkbox"/> Yes <input type="checkbox"/> No

Facility ID: _____

Facility Name: _____

Onsite Wastewater Treatment Units Operated During 2022

Treatment Unit Name	Treatment Unit Type (select only one)	Annual Average Influent Flow Rate (gpy)	Number of Days Operated (dpy)	Average Residence Time (hpd)	Technology Vendor Name	Treatment Media Replacement Frequency (if applicable)	Installed Since January 1, 2018	Cost Information Provided (yes/no)
	<input type="checkbox"/> Equalization <input type="checkbox"/> Neutralization/pH adjustment <input type="checkbox"/> Oil/water separation <input type="checkbox"/> Primary grit removal/screen <input type="checkbox"/> Biological treatment <input type="checkbox"/> Clarification <input type="checkbox"/> Chemical precipitation/ flocculation <input type="checkbox"/> Granular activated carbon <input type="checkbox"/> Ion exchange <input type="checkbox"/> Other adsorptive media <input type="checkbox"/> Media filtration <input type="checkbox"/> Microfiltration or ultrafiltration <input type="checkbox"/> Nanofiltration <input type="checkbox"/> Reverse osmosis <input type="checkbox"/> Other, specify: _____						<input type="checkbox"/> Installed prior to 2018 <input type="checkbox"/> Installed since 2018	<input type="checkbox"/> Yes <input type="checkbox"/> No

38. Were chemicals added to one or more wastewater treatment units in calendar year 2022? If yes, complete a row in the table for each treatment unit where chemical was added in 2022. If the same chemical is added to multiple units or used for multiple purposes, include each unit and purpose as a separate row in the table.

No chemicals were added to wastewater treatment units in calendar 2022.

OR

Facility ID: _____

Facility Name: _____

Chemical Addition to Wastewater Treatment Units During 2022

Treatment Unit Name (as reported in Question 37)	Chemical Trade Name	Purpose of Chemical Addition	Average Concentration of Addition (mg/L)	Annual Average Rate of Addition (gpy)	Addition Frequency
		<input type="checkbox"/> Metals removal <input type="checkbox"/> Nitrogen removal <input type="checkbox"/> Phosphorus removal <input type="checkbox"/> Settling/thickening <input type="checkbox"/> pH adjustment <input type="checkbox"/> Other, specify: _____			<input type="checkbox"/> Continuous (24 hpd, 7 dpw) <input type="checkbox"/> Once per shift <input type="checkbox"/> Once per day <input type="checkbox"/> Once per week <input type="checkbox"/> Other, specify: _____
		<input type="checkbox"/> Metals removal <input type="checkbox"/> Nitrogen removal <input type="checkbox"/> Phosphorus removal <input type="checkbox"/> Settling/thickening <input type="checkbox"/> pH adjustment <input type="checkbox"/> Other, specify: _____			<input type="checkbox"/> Continuous (24 hpd, 7 dpw) <input type="checkbox"/> Once per shift <input type="checkbox"/> Once per day <input type="checkbox"/> Once per week <input type="checkbox"/> Other, specify: _____

Facility ID: _____

Facility Name: _____

39. Provide the total annual average flow rate, in gpy, for influent to the wastewater treatment system and effluent from the wastewater treatment system during calendar year 2022. The response should reflect the sum of all wastewaters entering or exiting the wastewater treatment system regardless of the type of wastewater and location that each wastewater enters or exits the system. Do not include wastewaters recycled within the wastewater treatment system in the reported value.

Total annual influent to the wastewater treatment system: _____ gpy

Total annual effluent to the wastewater treatment system: _____ gpy

40. Does the facility recycle or reuse any process wastewater?

Yes

No. **Skip to Question 42.**

41. For any process wastewater recycled or reused on site, provide the amount reused/recycled and describe the use. If the process wastewater is ultimately discharged, include a brief description of the discharge location (e.g., receiving water, POTW, centralized waste treatment facility, or other destination) and of any treatment that occurs prior to discharge. Populate one row of the table for each use or reuse case. Example responses for the “Description of Discharge Destination and Treatment” field:

- Discharged to a POTW without treatment.
- Discharged to surface water with treatment.
- Discharged to a centralized waste treatment facility without treatment.

Wastewater Recycling or Reuse in 2022

Recycle/Reuse ID	Description of Wastewater Recycle or Reuse	Annual Average Flow Rate (gpy)	Number of Days (dpy)	Is the Stream Ultimately Discharged (yes/no)	Description of Discharge Destination and Treatment
1				<input type="checkbox"/> Yes <input type="checkbox"/> No	
2				<input type="checkbox"/> Yes <input type="checkbox"/> No	

42. Since January 1, 2018, did the facility conduct any cleaning or replacement of major equipment to mitigate presence of PFAS in wastewater discharges? Check all that apply.

Yes, cleaned equipment (no water use)

Yes, cleaned equipment (using water)

Yes, replaced or modified equipment

Yes, other action specified below

Facility ID: _____

Facility Name: _____

No

If yes, describe the actions taken and whether they impacted wastewater characterization.

43. Is the facility planning to add, remove, or modify operations in a manner which will change the management or treatment of wastewaters generated on site or transferred to the facility by December 31, 2028? If yes, complete a row in the table below for each applicable planned modification and report the treatment units or processes impacted and planned completion date.

Facility does not plan to modify operations in a manner which will change the management or treatment of wastewater generated on site or transferred to the facility by December 31, 2028.

OR

Planned Modifications Changing Wastewater Management or Treatment

Modification ID	Description of Planned Modification	Treatment Unit or Practice Impacted	Planned Completion Month	Planned Completion Year
1				
2				

Facility ID: _____

Facility Name: _____

SECTION 6. PERMIT REQUIREMENTS AND MONITORING DATA

44. Complete a row in the table below for each PFAS monitoring requirement, PFAS effluent limitation, and PFAS pretreatment standard for the facility, including those in current wastewater discharge permits, consent decrees, set by regulatory authorities, required for process control, or other monitoring required to be conducted by the facility. Include requirements that apply at any location at the facility, including in-plant sampling points and facility outfall/final effluent related to requirements reported in Question 15.

No applicable PFAS requirements.

OR

PFAS Permit and Monitoring Requirements

Parameter Name	CAS Registry Number	Requirement Type	Monitoring Frequency (e.g., monthly, quarterly, annually)	Effluent Limitation or Pretreatment Standard Value (if applicable, reported in ng/l)	Applicable Outfall(s) or Sample Collection Location(s) (list all that apply as identified in the wastewater flow diagram)

45. Complete a row in the table below for each individual wastewater sampling result for PFAS that was collected at any location within the facility prior to discharge (including untreated wastewater; in-plant sampling points; wastewater treatment influent, intermediate points, or effluent) since January 1, 2018. Wastewater sampling results collected at locations reflecting final effluent or discharge should be reported in response to Question 46. Groundwater sampling results collected should be reported in response to Question 58. Include all individual wastewater sampling results analyzed for PFAS using any analytical method (the analytical method need not be an EPA approved method). Include required monitoring and voluntary monitoring sampling results. Include wastewater sampling results for aggregated fluorine parameters, such as adsorbable organic fluorine and total fluorine. List each individual sampling result in a separate row of the table. Specify all concentrations in nanograms per liter (ng/l).

No PFAS monitoring data available for wastewater samples collected prior to discharge.

OR

Facility ID: _____

Facility Name: _____

PFAS Monitoring Data for Wastewater Samples Collected Prior to Discharge

Parameter Name	CAS Registry Number	Date Sample Collected (mm/dd/yyyy)	Detection Indicator (select only one)	Measured Value (if applicable, reported in ng/l)	Reporting Limit (RL) Value (if applicable, reported in ng/l)	Analytical Method Name	Sample Collection Location (as identified in the wastewater flow diagram)	Sampling or Analysis Notes
			<input type="checkbox"/> Detection above RL <input type="checkbox"/> Detection below RL <input type="checkbox"/> Nondetection					
			<input type="checkbox"/> Detection above RL <input type="checkbox"/> Detection below RL <input type="checkbox"/> Nondetection					

46. Complete a row in the table below for each individual wastewater sampling result for PFAS that was collected for final effluent or facility discharge since January 1, 2018. Wastewater sampling results collected at any other location within the facility prior to discharge (including untreated wastewater; in-plant sampling points; wastewater treatment influent, intermediate points, or effluent prior to discharge) should be reported in response to Question 45. Groundwater sampling results collected should be reported in response to Question 58. Include all individual wastewater sampling results analyzed for PFAS using any analytical method (the analytical method need not be an EPA approved method). Include required monitoring and voluntary monitoring sampling results. Include wastewater sampling results for aggregated fluorine parameters, such as adsorbable organic fluorine and total fluorine. List each individual sampling result in a separate row of the table. Specify all concentrations in nanograms per liter (ng/l).

No PFAS monitoring data available for wastewater samples collected for point of discharge.

OR

Facility ID: _____

Facility Name: _____

PFAS Monitoring Data for Wastewater Samples Collected at Point of Discharge

Parameter Name	CAS Registry Number	Date Sample Collected (mm/dd/yyyy)	Detection Indicator	Measured Value (if applicable, reported in ng/l)	Reporting Limit (RL) Value (if applicable, reported in ng/l)	Analytical Method Name	Sample Collection Location (as identified in the wastewater flow diagram)	Sampling or Analysis Notes
			<input type="checkbox"/> Detection above RL <input type="checkbox"/> Detection below RL <input type="checkbox"/> Nondetection					
			<input type="checkbox"/> Detection above RL <input type="checkbox"/> Detection below RL <input type="checkbox"/> Nondetection					

47. Complete a row in the table below for each individual wastewater sampling result for any pollutants excluding PFAS that was collected at any location within the facility prior to discharge (including untreated wastewater; in-plant sampling points; wastewater treatment influent, intermediate points, or effluent) since January 1, 2018. Wastewater sampling results collected at locations reflecting final effluent or discharge should be reported in response to Question 48. Include all individual wastewater sampling results analyzed for pollutants (excluding PFAS) using any analytical method (the analytical method need not be an EPA approved method). Include required monitoring and voluntary monitoring sampling results. List each individual sampling result in a separate row of the table. Specify all concentrations in milligrams per liter (mg/l).

No non-PFAS pollutant monitoring data available for wastewater samples collected prior to discharge.

OR

Facility ID: _____

Facility Name: _____

Non-PFAS Pollutant Monitoring Data for Wastewater Samples Collected Prior to Discharge

Parameter Name	CAS Registry Number	Date Sample Collected (mm/dd/yyyy)	Detection Indicator (select only one)	Measured Value (if applicable, reported in mg/l)	Reporting Limit (RL) Value (if applicable, reported in mg/l)	Analytical Method Name	Sample Collection Location (as identified in the wastewater flow diagram)	Sampling or Analysis Notes
			<input type="checkbox"/> Detection above RL <input type="checkbox"/> Detection below RL <input type="checkbox"/> Nondetection					
			<input type="checkbox"/> Detection above RL <input type="checkbox"/> Detection below RL <input type="checkbox"/> Nondetection					

48. Complete a row in the table below for each individual wastewater sampling result for pollutants excluding PFAS that was collected for final effluent or facility discharge since January 1, 2018. Wastewater sampling results collected at any other location within the facility prior to discharge (including untreated wastewater; in-plant sampling points; wastewater treatment influent, intermediate points, or effluent prior to discharge) should be reported in response to Question 47. Include all individual wastewater sampling results analyzed for pollutants (excluding PFAS) using any analytical method (the analytical method need not be an EPA approved method). Include required monitoring and voluntary monitoring sampling results. List each individual sampling result in a separate row of the table. Specify all concentrations in milligrams per liter (mg/l).

No non-PFAS pollutant monitoring data available for wastewater samples collected for point of discharge.

OR

Facility ID: _____

Facility Name: _____

Non-PFAS Pollutant Monitoring Data for Wastewater Samples Collected at Point of Discharge

Parameter Name	CAS Registry Number	Date Sample Collected (mm/dd/yyyy)	Detection Indicator	Measured Value (if applicable, reported in mg/l)	Reporting Limit (RL) Value (if applicable, reported in mg/l)	Analytical Method Name	Sample Collection Location (as identified in the wastewater flow diagram)	Sampling or Analysis Notes
			<input type="checkbox"/> Detection above RL <input type="checkbox"/> Detection below RL <input type="checkbox"/> Nondetection					
			<input type="checkbox"/> Detection above RL <input type="checkbox"/> Detection below RL <input type="checkbox"/> Nondetection					

Facility ID: _____

Facility Name: _____

SECTION 7. ENVIRONMENTAL AND OTHER INFORMATION

49. Provide the facility’s latitude and longitude coordinates, in decimal degrees, for the facility’s geographic location. If you do not know the coordinates for the facility, please visit an online service (e.g., <https://www.latlong.net/>) and search the facility’s physical address.

Latitude	Longitude
----------	-----------

50. Is a solid waste, sludge, or concentrated waste stream generated by metal finishing operations, electroplating operations, air emission controls, or wastewater treatment? Include any process waste, wastewater treatment sludge, spent water treatment residuals (e.g., spent carbon or resin), membrane concentrate, and solids removed from the treatment system.

Yes

No. **Skip to Question 52.**

51. Complete a row in the table below for each solid waste, sludge, or concentrated waste stream generated by metal finishing operations, electroplating operations, air emission controls, or wastewater treatment during calendar year 2022. Include any process waste, wastewater treatment sludge, spent water treatment residuals (e.g., spent carbon or resin), membrane concentrate, and solids removed from the treatment system. Include all solid waste streams reported in the wastewater flow diagram(s) provided in Section 4.

Solid Waste, Sludge, and Concentrated Waste Stream Generation and Management During 2022

Waste Stream Name	Waste Source (process name from Section 2 or wastewater treatment unit name from Question 37)	Annual Average Generation Rate	Units of Measure for Generation	Weight Basis	Final Destination of Waste Sludge
			<input type="checkbox"/> Kilograms <input type="checkbox"/> Pounds <input type="checkbox"/> Tons <input type="checkbox"/> Gallons <input type="checkbox"/> Other, specify: _____	<input type="checkbox"/> Dry weight basis <input type="checkbox"/> Wet weight basis <input type="checkbox"/> % solids: _____	<input type="checkbox"/> Onsite landfill <input type="checkbox"/> Offsite landfill <input type="checkbox"/> Onsite surface impoundment <input type="checkbox"/> Land applied <input type="checkbox"/> Onsite composting <input type="checkbox"/> Offsite composting <input type="checkbox"/> Other, specify: _____

Facility ID: _____

Facility Name: _____

Solid Waste, Sludge, and Concentrated Waste Stream Generation and Management During 2022

Waste Stream Name	Waste Source (process name from Section 2 or wastewater treatment unit name from Question 37)	Annual Average Generation Rate	Units of Measure for Generation	Weight Basis	Final Destination of Waste Sludge
			<input type="checkbox"/> Kilograms <input type="checkbox"/> Pounds <input type="checkbox"/> Tons <input type="checkbox"/> Gallons <input type="checkbox"/> Other, specify: _____	<input type="checkbox"/> Dry weight basis <input type="checkbox"/> Wet weight basis % solids: _____	<input type="checkbox"/> Onsite landfill <input type="checkbox"/> Offsite landfill <input type="checkbox"/> Onsite surface impoundment <input type="checkbox"/> Land applied <input type="checkbox"/> Onsite composting <input type="checkbox"/> Offsite composting <input type="checkbox"/> Other, specify: _____

52. Wastewater treatment sludge from electroplating processes (with exemptions) is considered hazardous waste under the Resource Conservation and Recovery Act (RCRA) waste code F006. Provide the applicable RCRA site identification number associated with the facility. If the facility does not have an associated RCRA site identification number (e.g., small quantity generators, facilities qualifying for exemptions), select "Do not have an RCRA site identification number."

Facility does not have an RCRA site identification number.

OR

RCRA Site Identification Number: _____

53. Provide the facility's total estimated energy consumption, in megawatt-hours (MWh), for calendar year 2022.

2022 Energy Consumption: _____ MWh

54. Since January 1, 2015, did the facility or ultimate parent company conduct, fund, or sponsor any studies assessing the human health or environmental effects of wastewater or stormwater discharges such as, but not necessarily limited to, toxicity; fate and transport; effects on the physical, chemical, or biological condition of receiving waters; effects on surface water use, such as for drinking water, agriculture, fishing, ecosystem support or recreation; or groundwater effects?

No

OR

Yes. Complete a row in the table for each applicable study and provide an electronic version as an attachment to the completed questionnaire. See the FILES SUBMITTED WITH THE QUESTIONNAIRE section for guidance on submitting electronic copies of human health and environmental impact studies and other attachments with the completed questionnaire.

Facility ID: _____

Facility Name: _____

Studies of Metal Finishing and Electroplating Wastewater Discharge Environmental Impacts

Study Title	Author Date (mm/dd/yyyy)	Description of Study	Provided as Attachment	Attachment File Name
			<input type="checkbox"/> Yes <input type="checkbox"/> No	
			<input type="checkbox"/> Yes <input type="checkbox"/> No	

55. Since January 1, 2015, did the facility or ultimate parent company conduct, fund, or sponsor any studies assessing the feasibility, cost, or performance of any technologies or methods for disposal, treatment, or destruction of PFAS, PFAS-containing wastewater, or PFAS-containing waste?

No

OR

Yes. Complete a row in the table for each applicable study and provide an electronic version as an attachment to the completed questionnaire. See the FILES SUBMITTED WITH THE QUESTIONNAIRE section for guidance on submitting electronic copies of PFAS control technology studies and other attachments with the completed questionnaire.

Studies of PFAS Control Technologies

Study Title	Author Date (mm/dd/yyyy)	Description of Study	Provided as Attachment	Attachment File Name
			<input type="checkbox"/> Yes <input type="checkbox"/> No	
			<input type="checkbox"/> Yes <input type="checkbox"/> No	

56. Does the facility monitor groundwater quality?

Yes

No. **Skip to Question 59.**

Facility ID: _____

Facility Name: _____

57. Describe the groundwater monitoring schedule the facility follows.

Groundwater Monitoring Schedule

Number of Groundwater Monitoring Wells	Frequency of Monitoring (select only one)	Reason for Monitoring	Beginning Year of Monitoring	Date of Last Monitoring Event (mm/dd/yyyy)
	<input type="checkbox"/> Once per month <input type="checkbox"/> Once per quarter <input type="checkbox"/> Once per year <input type="checkbox"/> Twice per year <input type="checkbox"/> Once every other year <input type="checkbox"/> Other, specify:			

58. Does the facility collect individual groundwater monitoring data (not averaged or aggregated) for any PFAS parameters?

No

Yes. Provide 2022 annual average concentration data available for PFAS as an attachment. See the FILES SUBMITTED WITH THE QUESTIONNAIRE section for guidance on submitting electronic copies of groundwater monitoring data and other attachments with the completed questionnaire.

59. Did the facility conduct any onsite groundwater collection or remediation in calendar year 2022?

Yes

No

If yes, describe the groundwater collection or remediation actions taken.

60. Has the facility or ultimate parent company engaged in public, community, or other outreach activities to discuss facility activities and potential associated environmental effects associated with use of PFAS or wastewater discharges from the facility?

No

OR

Yes. Complete a row in the table for each applicable outreach activity.

Facility ID: _____

Facility Name: _____

Public, Community, and Other Outreach Activities Associated with PFAS Use and Wastewater Discharges from the Facility

Name of Group or Audience	Outreach Date (mm/dd/yyyy)	Description of Topics Discussed and Purpose for Outreach



Facility ID: _____

Facility Name: _____

SECTION 8. FINANCIAL INFORMATION

61. Select the corporation type that best described the facility in calendar year 2022.

Subchapter C Corporation/Limited Liability Corporation

Limited Partnership

General Partnership

Sole Proprietor

Other, specify: _____

62. Was the facility publicly or privately held in calendar year 2022?

Privately Held

Publicly Held

63. Select the classification(s) that best described the business ownership for the facility in calendar year 2022? Select all that apply.

Woman owned business

African American owned business

American Indian or Alaskan Native owned business

Asian owned business

Non-Hispanic, White American owned business

Hispanic or Latino owned business

Middle Eastern or North African owned business

Mixed group owned business

Other

64. Select the category that best reflects the number of full-time equivalent (FTE) employees at the facility for calendar year 2022. For example, four half-time employees would be listed as two full-time equivalent employees. Only directly employed personnel should be counted; contracted workers should not be included.

1 – 4 FTE employees

5 – 9 FTE employees

10 – 19 FTE employees

20 – 49 FTE employees

Facility ID: _____

Facility Name: _____

50 – 99 FTE employees

100 – 249 FTE employees

250 – 499 FTE employees

500 or more FTE employees

65. Complete the table below with estimated number of full-time equivalent (FTE) employees working at the facility for calendar years 2018 to 2022. Only directly employed personnel should be counted; contracted workers should not be included. If the facility was not in business for one or more of the calendar years, enter "N/A" for those years.

Facility Total Employment 2018 – 2022

Calendar Year	2018	2019	2020	2021	2022
Facility Total FTE Employees					

66. How did the facility primarily fund its operations in calendar year 2022?

Retained business earnings

Personal funds of owner(s)

External financing

67. Which of the following forms of financing, if any, did the facility regularly use or carry an outstanding balance on in calendar year 2022? Select all that apply.

Loan or line of credit (short term)

Merchant cash advance (short term)

Credit card (short term)

Trade credit (short term)

Equity investment (long term)

Factoring (sale of accounts receivable) (short term)

Home equity line of credit (short term)

Leasing (medium term)

Other, specify: _____

Business does not use external financing

Facility ID: _____

Facility Name: _____

68. If the facility borrows money to finance capital improvements, such as wastewater treatment equipment, what interest rate would it pay on such loans? If unknown, what is the most recent interest rate the company paid to finance capital improvements?

Interest Rate (%): _____

69. When the facility finances capital improvements, what is the approximate mix of debt and equity?

Debt (%): _____

Equity (%): _____

70. If the facility borrows money to finance capital improvements, what type of repayment term do you typically choose?

Up to 2 years

More than 2 but less than 5 years

5 or more, but less than 10 years

10 or more years

71. Provide the annual capital improvement expenditure incurred for the chromium finishing operations for calendar years 2018 to 2022.

Annual Capital Improvement Expenditure for Chromium Finishing Operations 2018 – 2022

Year	Capital Improvement Expenditure (USD)
2018	
2019	
2020	
2021	
2022	

72. Provide the total value for loans received for the chromium finishing operations for calendar years 2018 to 2022.

Annual Loan Value for Chromium Finishing Operations 2018 – 2022

Year	Total Loan Value (USD)
2018	
2019	
2020	
2021	
2022	

Facility ID: _____

Facility Name: _____

73. What is the minimum rate of return on capital (i.e., the discount rate) required to compensate equity owners for bearing risk? Identify whether the rate is pre-tax or post-tax and whether the rate is real or nominal.

Discount Rate (%): _____

Pre-Tax Real Rate Post-Tax Nominal Rate

74. Report the requested annual income statement information in the tables below for calendar years 2018 to 2022 for the facility and the ultimate parent company. If the facility does not have an ultimate parent company, select "No ultimate parent company" and do not populate the Ultimate Parent Company column. If certain items are not held on the facility's books, enter zero for the item under the Facility column. Report amounts in United States dollars (USD); round to the nearest thousand. Complete the table for each calendar year requested (i.e., 2018, 2019, 2020, 2021, and 2022). Respondents should complete one table for each year, a facility operating for the entire period will submit a total of five completed tables. If the ultimate parent company is a multinational firm, limit the financial information provided to United States sources only. Income statement information may also be provided as a separate file attachment as long as they include all requested information. See the FILES SUBMITTED WITH THE QUESTIONNAIRE section for guidance on submitting electronic copies of income statements and other attachments with the completed questionnaire.

No ultimate parent company (keep the ultimate parent company column blank)

2018 Income Statement Information

	Facility	Ultimate Parent Company
Revenues		
a. Net sales from metal finishing and electroplating products	\$	\$
b. Other income (such as equity earnings and interest)	\$	\$
c. Total revenues (sum of a and b)	\$	\$
Costs and Expenses		
d. Cost of goods sold (purchases and operating expenses)	\$	\$
e. Selling, general, administrative, depreciation and amortization expenses	\$	\$
f. Total costs and expenses (sum of d and e)	\$	\$
g. Earnings before interest and taxes (EBIT) (subtract f from c)	\$	\$
h. Interest Expense	\$	\$
i. Taxes	\$	\$
j. Net Income	\$	\$

Facility ID: _____

Facility Name: _____

2019 Income Statement Information

	Facility	Ultimate Parent Company
Revenues		
a. Net sales from metal finishing and electroplating products	\$	\$
b. Other income (such as equity earnings and interest)	\$	\$
c. Total revenues (sum of a and b)	\$	\$
Costs and Expenses		
d. Cost of goods sold (purchases and operating expenses)	\$	\$
e. Selling, general, administrative, depreciation and amortization expenses	\$	\$
f. Total costs and expenses (sum of d and e)	\$	\$
g. Earnings before interest and taxes (EBIT) (subtract f from c)	\$	\$
h. Interest Expense	\$	\$
i. Taxes	\$	\$
j. Net Income	\$	\$

2020 Income Statement Information

	Facility	Ultimate Parent Company
Revenues		
a. Net sales from metal finishing and electroplating products	\$	\$
b. Other income (such as equity earnings and interest)	\$	\$
c. Total revenues (sum of a and b)	\$	\$
Costs and Expenses		
d. Cost of goods sold (purchases and operating expenses)	\$	\$
e. Selling, general, administrative, depreciation and amortization expenses	\$	\$
f. Total costs and expenses (sum of d and e)	\$	\$
g. Earnings before interest and taxes (EBIT) (subtract f from c)	\$	\$
h. Interest Expense	\$	\$
i. Taxes	\$	\$
j. Net Income	\$	\$

Facility ID: _____

Facility Name: _____

2021 Income Statement Information

	Facility	Ultimate Parent Company
Revenues		
a. Net sales from metal finishing and electroplating products	\$	\$
b. Other income (such as equity earnings and interest)	\$	\$
c. Total revenues (sum of a and b)	\$	\$
Costs and Expenses		
d. Cost of goods sold (purchases and operating expenses)	\$	\$
e. Selling, general, administrative, depreciation and amortization expenses	\$	\$
f. Total costs and expenses (sum of d and e)	\$	\$
g. Earnings before interest and taxes (EBIT) (subtract f from c)	\$	\$
h. Interest Expense	\$	\$
i. Taxes	\$	\$
j. Net Income	\$	\$

2022 Income Statement Information

	Facility	Ultimate Parent Company
Revenues		
a. Net sales from metal finishing and electroplating products	\$	\$
b. Other income (such as equity earnings and interest)	\$	\$
c. Total revenues (sum of a and b)	\$	\$
Costs and Expenses		
d. Cost of goods sold (purchases and operating expenses)	\$	\$
e. Selling, general, administrative, depreciation and amortization expenses	\$	\$
f. Total costs and expenses (sum of d and e)	\$	\$
g. Earnings before interest and taxes (EBIT) (subtract f from c)	\$	\$
h. Interest Expense	\$	\$
i. Taxes	\$	\$
j. Net Income	\$	\$

75. For calendar years 2018 to 2022, what percentage of the total revenue of the facility was from the sale of metal finishing and electroplating products that were manufactured on its behalf in a different location?

- | | | | | | | |
|------|-----------------------------|--------------------------------|---------------------------------|---------------------------------|---------------------------------|-------------------------------|
| 2018 | <input type="checkbox"/> 0% | <input type="checkbox"/> 1-25% | <input type="checkbox"/> 26-50% | <input type="checkbox"/> 51-75% | <input type="checkbox"/> 76-99% | <input type="checkbox"/> 100% |
| 2019 | <input type="checkbox"/> 0% | <input type="checkbox"/> 1-25% | <input type="checkbox"/> 26-50% | <input type="checkbox"/> 51-75% | <input type="checkbox"/> 76-99% | <input type="checkbox"/> 100% |
| 2020 | <input type="checkbox"/> 0% | <input type="checkbox"/> 1-25% | <input type="checkbox"/> 26-50% | <input type="checkbox"/> 51-75% | <input type="checkbox"/> 76-99% | <input type="checkbox"/> 100% |
| 2021 | <input type="checkbox"/> 0% | <input type="checkbox"/> 1-25% | <input type="checkbox"/> 26-50% | <input type="checkbox"/> 51-75% | <input type="checkbox"/> 76-99% | <input type="checkbox"/> 100% |

Facility ID: _____

Facility Name: _____

2022

0%

1-25%

26-50%

51-75%

76-99%

100%



If the facility does not have an ultimate parent company, proceed to Section 9 (Comments).

DO NOT COMPLETE THE REMAINDER OF THIS QUESTIONNAIRE.

76. What is the facility's relationship to the ultimate parent company?

Branch Subsidiary

77. In what state is the ultimate parent company organized as a legal entity?

State: _____

78. Is the facility's ultimate parent company a small business? The Small Business Administration (SBA) defines businesses as "small" based on either a revenue or an employment level threshold that is specific to each NAICS code. Visit the Small Business Administration website (<https://www.sba.gov/federal-contracting/contracting-guide/size-standards>). In determining whether the facility's ultimate parent is a small business, consider only revenue from domestic sources. Base your determination on calendar year 2022 revenue and employment data.

Yes

No

79. Select the classification(s) that best described the business ownership for the ultimate parent company in calendar year 2022? Select all that apply.

Woman owned business

African American owned business

American Indian or Alaskan Native owned business

Asian owned business

Non-Hispanic, White American owned business

Hispanic or Latino owned business

Middle Eastern or North African owned business

Mixed group owned business

Other

Facility ID: _____

Facility Name: _____

80. Select the category that best reflects the number of full-time equivalent (FTE) employees at the ultimate parent company for calendar year 2022. For example, four half-time employees would be listed as two full-time equivalent employees. Only directly employed personnel should be counted; contracted workers should not be included.

1 – 4 FTE employees

5 – 9 FTE employees

10 – 19 FTE employees

20 – 49 FTE employees

50 – 99 FTE employees

100 – 249 FTE employees

250 – 499 FTE employees

500 or more FTE employees

81. Complete the table below with estimated number of FTE employees working at the ultimate parent company for calendar years 2018 to 2022. Only directly employed personnel should be counted; contracted workers should not be included. If the ultimate parent company was not in business for one or more of the calendar years, enter "N/A" for those years.

Ultimate Parent Company Total Employment 2018 – 2022

Calendar Year	2018	2019	2020	2021	2022
Ultimate Parent Company Total FTE Employees					

Facility ID: _____

Facility Name: _____

82. List any facilities in the United States that are operated by the ultimate parent company. Provide the name, description, and address of the facility, indicate whether the facility was constructed or acquired by the ultimate parent company, and indicate whether the facility is a metal finishing or electroplating facility. Populate the first row of the table with the facility reported in Question 1. For all facilities that received the questionnaire, please identify the facility ID for their questionnaire.

Facilities Operated by the Ultimate Parent Company

Facility Name	Facility Description	NAICS	City	State	ZIP	Constructed or Acquired?	Metal Finishing or Electroplating Facility?	Percent Employment in Metal Finishing or Electroplating Activities
						<input type="checkbox"/> Constructed <input type="checkbox"/> Acquired	<input type="checkbox"/> Yes <input type="checkbox"/> No Facility ID _____	
						<input type="checkbox"/> Constructed <input type="checkbox"/> Acquired	<input type="checkbox"/> Yes <input type="checkbox"/> No Facility ID _____	

83. For calendar years 2018 to 2022, did any facilities have any manufacturing of metal finishing and electroplating products done on behalf of the facility in Question 1 in a different location (include manufacturing by both affiliated and unaffiliated companies)?

No

OR

Yes. List all facilities that apply.

Facility Name: _____

Applicable Years: 2018 2019 2020 2021 2022

Facility Name: _____

Applicable Years: 2018 2019 2020 2021 2022

Facility Name: _____

Applicable Years: 2018 2019 2020 2021 2022

Facility ID: _____

Facility Name: _____

84. Does the facility's ultimate parent company have operations in one or more foreign countries that are a source of international revenue? If yes, complete the table below with the ultimate parent company's total revenue from all domestic and foreign sources together for calendar years 2018 to 2022. The reported values should reflect the sum of all revenue from the United States and international countries. Report amounts in United States dollars (USD); round to the nearest thousand. If the facility's ultimate parent company does not have international operations that are a source of revenue, select "Facility's ultimate parent company does not have operations outside of the United States that are a source of revenue."

Facility's ultimate parent company does not have operations outside of the United States that are a source of revenue.

OR

Ultimate Multinational Parent Company Total Annual Revenue 2018 – 2022

Calendar Year	2018	2019	2020	2021	2022
Multinational Ultimate Parent Company Total Revenue (USD)					

Facility ID: _____

Facility Name: _____

SECTION 9. COMMENTS

In this section, provide any comments, additional information/detail, or clarifications on your responses.

You may also provide the basis for any estimations or explain why you may have provided atypical data. Year-to-year operations are expected to fluctuate. For example, you may indicate if information provided for calendar year 2022 is not representative of normal operations. You may also note where alternate units were used in your answers. If a question did not provide sufficient space for your response, you may continue it here. Include in the table the section and question numbers to which your comment pertains.

Comments

Section Number	Question Number	Comment Claimed as CBI	Comment
		<input type="checkbox"/> Yes <input type="checkbox"/> No	
		<input type="checkbox"/> Yes <input type="checkbox"/> No	



**THE QUESTIONNAIRE IS NOW COMPLETE.
REVIEW YOUR RESPONSES, COMPLETE THE CERTIFICATION STATEMENT, AND
PROCEED TO SUBMIT RESPONSES AS INDICATED IN THE INSTRUCTIONS.**

Facility ID: _____

Facility Name: _____

CERTIFICATION STATEMENT

The individual responsible for directing or supervising the preparation of the questionnaire must read and sign this Certification Statement. The certifying official must be a responsible corporate official or his/her authorized representative.

Certification Statement

I certify under penalty of law that the submitted questionnaire was prepared under my direction or supervision and that qualified personnel properly gathered and evaluated the information submitted. The information submitted is, to the best of my knowledge and belief, accurate and complete. In those cases, where we did not possess the requested information for questions applicable to our company, we provided best estimates. We have to the best of our ability indicated what we believe to be company confidential business information (CBI) as defined under 40 CFR Part 2, Subpart B. We understand that we may be required at a later time to justify our claim in detail with respect to each item claimed confidential. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment as explained in Section 308 of the Clean Water Act.

Signature of Certifying Official

Date

Printed Name of Certifying Official

Telephone Number

Title of Certifying Official

Company Name

**THE METAL FINISHING AND ELECTROPLATING INDUSTRY QUESTIONNAIRE IS NOW COMPLETE.
SAVE A COPY OF YOUR COMPLETED RESPONSE FOR YOUR RECORDS AND SUBMIT THE COMPLETED
QUESTIONNAIRE AND ALL SUPPLEMENTAL FILES TO EPA AS NOTED IN THE INSTRUCTIONS**