



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

### INFORMATION COLLECTION REQUEST

# **DRAFT** CHROMIUM FINISHING QUESTIONNAIRE

**Questionnaire ID:** \_\_\_\_\_

OMB Control No. 2040-NEW  
OMB Approval Date: [Date]  
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This collection of information is approved by the United States Office of Management and Budget (OMB) under the Paperwork Reduction Act, 44 USC § 3501 et seq. (OMB Control No. 2040-NEW). Responses to this collection of information are mandatory under Section 308 of the Clean Water Act (Federal Water Pollution Control Act, 33 USC § 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.

The public reporting and recordkeeping burden for this collection of information is estimated to be up to 30 hours per questionnaire response for facilities completing all sections. EPA estimates the total burden to the industry for responding to the questionnaire to be 44,039 hours and \$3,242,480. Send comments on the EPA's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden to the Regulatory Support Division Director, United States Environmental Protection Agency (2821T), 1200 Pennsylvania Ave., NW, Washington, DC 20460. Include the OMB control number in any correspondence. Do not send the completed questionnaire to this address.

September 2023

## **QUESTIONNAIRE INSTRUCTIONS**

*Read the General Instructions, available for download from the [EPA Chromium Finishing Questionnaire webpage](#), before beginning your questionnaire.*

**Unless otherwise noted, EPA requests information for calendar year 2022.**

**This questionnaire should be completed by personnel most knowledgeable about the metal finishing, electroplating, and wastewater management operations of the facility.** Section 8. (Financial Information) of the questionnaire should be completed by personnel most knowledgeable about the facility's and ultimate parent company's finances.

**Carefully read all instructions throughout the questionnaire.** Contact the EPA Chromium Finishing Questionnaire Helpline (Helpline) if you do not understand a question or how to respond.

**Review the resources provided to help you respond to the questionnaire.** The General Instructions, Frequently Asked Questions (FAQs), and Abbreviations and Glossary files are provided to assist you in understanding and completing the questionnaire. These resources are available for download from the [EPA Chromium Finishing Questionnaire webpage](#). If you are unable to resolve your questions using these resources, contact the Helpline.

**Complete this questionnaire for your entire facility.** A facility is one contiguous physical location at which manufacturing operations, such as metal finishing or electroplating, are conducted.

**Enter a response for each question to which you are directed.** You should complete the questions in sequence (that is, questions should not be skipped or completed out of order). EPA prepared the questionnaire to be applicable to a variety of facilities; therefore, not all questions will apply to every facility. Enter a response to all questions for all sections of the questionnaire as instructed. The questionnaire includes instructions to note when you do not need to complete a section or question based on your responses to previous questions. If the space allowed for the answer is inadequate for your complete response, continue the response in Section 9. (Comments).

**Enter "0" (zero) where appropriate; do not leave an entry blank if the answer is zero.**

**Provide data in the requested units of measure.** If you are unable to provide the response in the units specified, enter a comment in Section 9. (Comments) explaining the alternate units used.

**Enter numerical values without commas.** Some questions require you to report a number value (e.g., flow rate, dollars) which may be in the thousands or millions. In these situations, you should enter only the number as your response - exclude comma separators (e.g., enter "1000" rather than "1,000").

**EPA is not requesting you perform non-routine tests or measurements solely for the purpose of responding to this questionnaire.** If exact data or information are not available, **provide an estimate using best professional judgement.** Note the basis for any estimates in Section 9. (Comments).

**Retain a copy of your completed questionnaire, along with submitted files and data sources used to complete your response, for two years.** You will not be able to access the questionnaire after it has been certified and submitted to EPA. The online questionnaire will instruct you to save an electronic version following completion of all applicable questions and certification. Facilities completing a hardcopy questionnaire should create and retain a second copy. EPA may request your cooperation in clarifying responses if necessary.

**Use Section 9. (Comments) to clarify a response or provide additional detail.** You may elect to provide any comments, additional information/detail, or clarifications on your response to each question in Section 9. (Comments). You may also provide the basis for any estimations, note where alternate units were used in your response, or indicate if information provided for calendar year 2022 is not representative of normal operations. Year-to-year operations are expected to fluctuate; however, you may indicate if information provided for calendar year 2022 is not representative of typical production, wastewater generation, or wastewater management at the facility and explain why (e.g., COVID-19, supply chain disruptions, economic conditions, workforce shortages, government assistance programs such as the Paycheck Protection Program).

**Identify responses and comments which contain confidential business information (CBI) by checking the corresponding CBI checkboxes.** The hardcopy version of the questionnaire includes a CBI checkbox for each question and each comment row in Section 9. (Comments). You may claim a response or comment, including any submitted files, as CBI by checking the corresponding checkbox next to the question or comment.<sup>1</sup> Any response or comment where “Claim Question # response as CBI” is not individually checked will not be considered confidential and EPA may make the information available to the public without further notice to you. Refer to the Confidential Business Information section in the General Instructions and Enclosure #1 in the notification letter mailed to you by EPA for additional information regarding EPA's procedures for CBI.

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<sup>1</sup> For the electronic questionnaire (i.e., the Qualtrics version), at the end of each questionnaire section you will see a summary of your response to each question in the previous section and be instructed to assert whether each response contains CBI. You may claim a response as CBI by selecting “Yes” in the dropdown menu that appears after each question response and comment field.



## **ABBREVIATIONS**

Ah	ampere-hour or amp-hour
A/m <sup>2</sup>	amperes per square meter
CAS	Chemical Abstracts Service
CBI	confidential business information
CFR	Code of Federal Regulations
Cr(III)	trivalent chromium
Cr(VI)	hexavalent chromium
ELGs	effluent limitations guidelines and standards
EPA	United States Environmental Protection Agency
FRS	Facility Registry Service
FTE	full-time equivalent
g/l	grams per liter
gal	gallons
GPEA	1998 Government Paperwork Elimination Act
mg/l	milligram per liter
mm/dd/yyyy	month/day/year
N/A	not applicable
NAICS	North American Industry Classification System
ng/l	nanogram per liter (equivalent to part-per-trillion)
NPDES	National Pollutant Discharge Elimination System
PFAS	per- and polyfluoroalkyl substances
POTW	publicly owned treatment works
RCRA	Resource Conservation and Recovery Act
RL	reporting limit
SBA	Small Business Administration
USD	United States dollars
WFD	wastewater flow diagram
µg/l	microgram per liter

## **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).

**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 plating and chromium anodizing tanks.

**Air Emission Control Wastewater:** Any wastewater generated from an air emission control system (i.e., wasters generated from technologies or practices intended to capture, reduce, or eliminate one or more contaminants in a gaseous stream).

**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 suspended. 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.

**Base Metal or Material:** That substance of which the workpieces are made and that receives the finish, plate, and/or treatment.

**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.

**Captive Facility:** A facility which owns more than 50 percent (annual area basis) of the materials undergoing metal finishing and electroplating.

**Centralized Waste Treatment Agreement:** Contract or other agreement associated with wastewater discharge from the industrial facility to a centralized waste treatment facility.

**Centralized Waste Treatment Facility:** Any commercial 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.

**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 the following acids: sulfuric, chromic, phosphoric, nitric and hydrochloric. 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 a plating, 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 (typically forming a substance which is partially or mainly insoluble and, therefore, appears as a solid) and facilitate their removal by sedimentation or filtration.

**Chromic Acid:** The common name for chromium anhydride ( $\text{CrO}_3$ ).

**Chromium Finishing Operations:** Any metal finishing or electroplating process that deposits a layer of chromium on any base metal or 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 deposited on a base metal or material to provide a bright surface with wear and tarnish resistance. In the decorative electroplating 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 ( $\text{A/m}^2$ ) for total plating times ranging between 0.5 to 5 minutes. Decorative chromium plating includes electroless chromium plating processes. 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 deposited on a base metal or material to provide a surface with functional properties such as wear resistance, a low coefficient of friction, hardness, or corrosion resistance. In the functional/hard electroplating process, the part serves as the cathode in the electrolytic cell and the solution serves as the electrolyte. Functional/hard chromium electroplating processes are performed at current densities typically ranging from 1,600 to 6,500  $\text{A/m}^2$  for total plating times ranging from 20 minutes to 36 hours depending upon the desired plate thickness. Functional/hard chromium plating includes electroless chromium plating processes. Functional/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 or material 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, deposited film, or other material 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 surface by immersing or spraying the base metal or material with a hexavalent chromium compound solution (consisting substantially of chromic acid or water-soluble salts of chromic acid) to produce a hexavalent or trivalent chromium compound coating. This also is known as chromate treatment, and is often applied to aluminum, zinc, cadmium or magnesium surfaces. Sealant operations using chromium are also 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 base 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 or material 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” or “CBI” 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 is sent. Immediate destinations refer to the first place a wastewater is sent to while final destinations refer to the ultimate place a wastewater is sent (after any on site wastewater treatment). For

many facilities, the final destination refers to where wastewater is sent after it leaves the facility.

**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 (e.g., municipal wastewater treatment plant).

**Effluent Limitation:** Any restriction imposed on quantities, discharge rates, or concentrations of pollutants which are discharged from point sources into surface waters, 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 municipal wastewater treatment plants. 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 surface waters.

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

**Electroplating:** The production of a thin surface coating of one metal upon a base metal or material by electrodeposition. This surface coating may be 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 metal or material.

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

**End-of-Pipe Wastewater Treatment:** The reduction and/or removal of pollutants by wastewater treatment processes just prior to actual discharge.

**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 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 is generated at a facility when it is resurfaced or 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.

**Job Shop:** A facility which owns not more than 50 percent (annual area basis) of the materials undergoing metal finishing and electroplating.

**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:** A wastewater treatment unit 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 to improve 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:** The measurement, sometimes continuous, of water quality.

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

**Municipal Wastewater Treatment Plant:** 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 municipal wastewater treatment plant. Another term for municipal wastewater treatment plant is publicly owned treatment works (POTW).

**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 surface waters. 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 (i.e., precipitation not associated with industrial activity).

**Nonprocess Wastewater:** Any wastewater that does not come into direct contact with or result from storage, 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:** A 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 wastewater into a surface water or municipal wastewater treatment plant.

**Parameter:** A characteristic element of constant factor.

**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, or 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:** Treatment of wastewaters from sources before discharge or transfer to a municipal wastewater treatment plant.

**Pretreatment Agreement/Permit:** A permit for discharge from facility to a municipal wastewater treatment plant.

**Pretreatment Standard:** Any restriction imposed on quantities, discharge rates, and concentrations of pollutants which are discharged from point sources to a municipal wastewater treatment plant.

**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 (i.e., precipitation associated with industrial activity).

**Process Wastewater:** Any water which, during manufacturing or processing, comes into direct contact with or results from the storage, production, or use of any raw material, intermediate product, finished product, byproduct, or waste product. Includes waters resulting from metal finishing and electroplating operations (e.g., chromium plating/anodizing bath water), equipment cleaning wastewater, rinse water, and leachate captured from surface impoundments and landfills. Process wastewater may also include wastewater that is contract hauled for offsite disposal. Sanitary wastewater, cooling water, stormwater, and groundwater that is not used in manufacturing or process operations is not considered process wastewater.

**Product Recovery:** Physical or chemical treatment to remove metal or other materials from wastewater for later reuse.

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

**Rinse Water:** Water for removal of dragout by dipping, spraying, fogging, etc.

**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.



**Solid Waste/Sludge/Concentrated Waste Stream:** 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 September 8, 2023, rulemaking as specified in 40 CFR 120 (<https://www.ecfr.gov/current/title-40/chapter-I/subchapter-D/part-120>).

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

**Third-Party Wastewater:** Wastewater that is not generated at the facility but 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 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 or to alter the physical or chemical state of specific pollutants in the wastewater. 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.

**Water Discharge Permit:** Documentation of authorization to discharge wastewater to a surface water or municipal wastewater treatment plant. Another term for water discharge permit is wastewater discharge permit. Also see definitions for NPDES permit and pretreatment agreement/permit.

**Wetting Agent:** Any chemical that reduces surface tension in the liquid of an electroplating, anodizing, or other process bath and/or increases the spreading and penetrating properties of a liquid over a surface.

### **SECTION 1. GENERAL FACILITY INFORMATION**

Claim Question 1. response as CBI.

1. Provide the facility's name and physical address.

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Facility Name

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Facility Street Address Line 1

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Facility Street Address Line 2 (if applicable)

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City Code	State/Territory	ZIP
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Claim Question 2. response as CBI.

- 2. Did the facility engage in metal finishing or electroplating, as defined in the GLOSSARY, at any time since the facility began operating? Include metal finishing and electroplating operations that are no longer occurring or the facility no longer performed in 2022. Include operations that occurred under other ownership, if known. If unknown, provide an estimate using best professional judgement.

**Metal Finishing:** The process of changing the surface of an object to improve its appearance and/or durability.

**Electroplating:** The production of a thin surface coating of one metal upon a base metal or material by electrodeposition. This surface coating may be 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 metal or material.

No

Yes. Describe the metal finishing and/or electroplating services conducted or products manufactured by the facility. For example, "Since 1990, the facility has offered copper, nickel, and chromium electroplating services for metal parts used by the automotive industry."

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





Claim Question 3. response as CBI.

3. Did the facility engage in chromium finishing operations, as defined in the GLOSSARY, at any time since calendar year 1995?<sup>2</sup> Include chromium finishing operations that are no longer occurring or the facility no longer performed in 2022. Include operations that occurred under other ownership, if known. If unknown, provide an estimate using best professional judgement.

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

- Decorative chromium plating.
- Functional/hard chromium plating.
- Chromium anodizing.
- Chromic acid etching.
- Chromate conversion coating.

No

Yes



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

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<sup>2</sup> In 1995, EPA promulgated the National Emission Standards for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks. The final rule, codified at 40 CFR Part 63 Subpart N, established emission limitations for new and existing chromium electroplating and chromium anodizing operations based on the use of chemical fume suppressants and wetting agents. Certain chemical fume suppressants and wetting agents contain PFAS. Additional information on the 1995 final rule and amendments to the rule is available on EPA’s website at <https://www.epa.gov/stationary-sources-air-pollution/chromium-electroplating-national-emission-standards-hazardous-air>.



Claim Question 4. response as CBI.

4. Has the facility permanently closed or permanently discontinued all metal finishing and electroplating as of January 1, 2023? Select only one.

No. The facility will perform metal finishing or electroplating after January 1, 2023.

Yes. The facility has permanently closed as of January 1, 2023.

Yes. The facility has not permanently closed but has permanently discontinued all metal finishing and electroplating as of January 1, 2023.



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

Claim Question 5. response as CBI.

5. Provide the name, title, phone 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

\_\_\_\_\_

Phone Number

Phone Extension (if applicable)

Email

\_\_\_\_\_

Mailing Address Line 1

\_\_\_\_\_

Mailing Address Line 2 (if applicable)

\_\_\_\_\_

City Code

State/Territory

ZIP

\_\_\_\_\_

Secondary Technical Contact Name

Secondary Technical Contact Title



\_\_\_\_ Phone Number                      Phone Extension (if applicable)                      Email

\_\_\_\_ Mailing Address Line 1

\_\_\_\_ Mailing Address Line 2 (if applicable)

\_\_\_\_ City Code                                      State/Territory                                      ZIP

Claim Question 6. response as CBI.

- 6. Provide the name, title, phone 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

\_\_\_\_ Phone Number                      Phone Extension (if applicable)                      Email

\_\_\_\_ Mailing Address Line 1

\_\_\_\_ Mailing Address Line 2 (if applicable)

\_\_\_\_ City Code                                      State/Territory                                      ZIP

\_\_\_\_ Secondary Financial Contact Name                      Secondary Financial Contact Title

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\_\_\_\_ Phone Number                      Phone Extension (if applicable)                      Email

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\_\_\_\_ Mailing Address Line 1

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\_\_\_\_ Mailing Address Line 2 (if applicable)

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\_\_\_\_ City    State/Territory    ZIP  
Code

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Claim Question 7. response as CBI.

7. If the facility is owned, controlled, or managed by an ultimate parent company, as defined in the GLOSSARY, identify the ultimate parent company and provide the name, title, phone 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.” If the facility is owned, controlled, or managed by the United States federal government (e.g., the United States Department of Defense), select “Facility is owned, controlled, or managed by the United States federal government.”

**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.

No ultimate parent company. **Skip Questions 64. - 71..**

OR

Facility is owned, controlled, or managed by the United States federal government. **Skip Questions 43. - 71..**

OR

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\_\_\_\_\_  
Ultimate Parent Company Name

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_____ Primary Contact Name	_____ Primary Contact Title
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_____ Phone Number	_____ Phone Extension (if applicable)	_____ Email
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\_\_\_\_\_  
Mailing Address Line 1

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\_\_\_\_\_  
Mailing Address Line 2 (if applicable)



City

State/Territory

ZIP Code

Claim Question 8. response as CBI.

8. Provide the six-digit North American Industry Classification System (NAICS) code(s) most applicable to the facility. If you do not know under which NAICS code(s) the facility falls, 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. Facilities responding to this questionnaire may fall under NAICS codes:

- 332813 (Electroplating, Plating, Polishing, Anodizing, and Coloring)
- 332812 (Metal Coating, Engraving (except Jewelry and Silverware), and Allied Services to Manufacturers)

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: \_\_\_\_\_

Secondary NAICS code: \_\_\_\_\_

Tertiary NAICS code: \_\_\_\_\_

Claim Question 9. response as CBI.

9. 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, 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 FRS identification number, select “Facility does not have an FRS identification number.”

Facility does not have an FRS identification number.

OR

FRS Identification Number: \_\_\_\_\_

Claim Question 10. response as CBI.

10. What year did chromium finishing operations begin at the facility? Chromium finishing operations at the facility may have begun under other ownership and may not reflect current operations. If unknown, provide an estimate using best professional judgement.

Year Operations Began: \_\_\_\_\_



Claim Question 11. response as CBI.

11. What industry (or industries) are the customers or ultimate users of chromium finishing services and related products produced by the facility? Select all that apply. If there are more than three industries that fall into the 'other' category, list the additional industries in Section 9. (Comments).

- Aerospace
- Aviation (e.g., aircraft, helicopters)
- Automotive (e.g., cars, buses, trucks, motor vehicles)
- Electronic equipment
- Hardware
- Household appliances and 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: \_\_\_\_\_

Claim Question 12. response as CBI.

12. Will the facility permanently close or permanently discontinue all metal finishing and electroplating by December 31, 2028? Select only one. If unknown, provide an estimate using best professional judgement.

- No.
- Yes. The facility will permanently close or permanently discontinue all metal finishing and electroplating by December 31, 2028.

Provide the planned year of permanent closure or cessation of all metal finishing and electroplating: \_\_\_\_\_

Claim Question 13. response as CBI.

13. If the facility was regulated by any water discharge permits or requirements (e.g., general National Pollutant Discharge Elimination System (NPDES) permit, individual NPDES permit, stormwater permit, pretreatment agreement/permit, centralized waste treatment agreement, underground injection control permit, local ordinance) in calendar year 2022, complete Table 13. and attach copies of all water discharge permit/requirement documents to your questionnaire response. Complete a row in Table 13. for each applicable water discharge permit and requirement. For each applicable permit and requirement, report the identification or permit number, the type of requirement, the regulatory authority, the expiration date, and specify the types of wastewaters covered. See the GLOSSARY for a definition of “water discharge permit” and descriptions of each type of wastewater.

- Do not include permits or requirements that only apply to solid waste or air emissions (only water discharge permits and requirements should be reported).
- 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 water allocation permits.
- Do not include any water discharge permits and requirements that no longer apply to the facility (e.g., permits that have expired or been superseded). Include administratively continued permits if they are the basis for the facility's current water discharge requirements.

Attach copies of all applicable discharge permit/requirement documents to your questionnaire response. Examples of such documents include permits, factsheets, permit applications, Form 2C data, and statements of basis. See the General Instructions for guidance on submitting hardcopy or electronic copies of water discharge permit/requirement documents and other attachments with the completed questionnaire.

Facility does not have any water discharge permits or requirements.

OR



**Table 13.. Water Discharge Permits and Requirements for 2022**

<b>Identification or Permit Number</b> (enter "None" if not applicable)	<b>Type of Requirement</b> (select only one)	<b>Regulatory Authority</b> (enter "None" if not applicable)	<b>Expiration Date</b> (mm/dd/yyyy)	<b>Type of Wastewater Covered by Requirement</b> (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"/> Centralized waste treatment agreement <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: _____
	<input type="checkbox"/> General NPDES or stormwater permit <input type="checkbox"/> Individual NPDES permit <input type="checkbox"/> Pretreatment agreement/permit <input type="checkbox"/> Centralized waste treatment agreement <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: _____



Claim Question 14. response as CBI.

14. Facilities that engage in the manufacturing, forming, milling, processing, or finishing of metals may be subject to one or more effluent limitations guidelines and standards (ELGs). Identify the ELGs that apply to the operations conducted at the facility in calendar year 2022. If you do not know which ELGs are applicable to the facility, visit the EPA weblink provided and review the applicability information or visit [www.epa.gov/eg/industrial-effluent-guidelines](http://www.epa.gov/eg/industrial-effluent-guidelines). Select all that apply.

Most job shops (i.e., facilities which own not more than 50 percent (annual area basis) of the materials undergoing metal finishing and electroplating) only conduct operations covered by the ELGs for the Metal Finishing Point Source Category (40 CFR Part 433) or Electroplating Point Source Category (40 CFR Part 413).

**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 \(40 CFR Part 421\)](#)
- [Ferrous Alloy 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: \_\_\_\_\_
- None of the above (i.e., no ELGs apply to this facility).



## SECTION 2. FACILITY OPERATIONS AND PFAS USE

Claim Question 15. response as CBI.

15. Complete a row in Table 15. for each type of chromium finishing operation performed at the facility at any time since calendar year 1995.<sup>3</sup> For each type of chromium finishing operation performed, report whether hexavalent chromium (Cr(VI)) and trivalent chromium (Cr(III)) have been used and, the most recent year Cr(VI) and Cr(III) were used in the operation. If the facility did not use Cr(VI) or Cr(III) in the operation since 1995, enter “0” (zero) in the Year Operation Was Most Recently Performed column. Include chromium finishing operations that are no longer occurring or the facility no longer performed in 2022. Include operations that occurred under other ownership, if known. If unknown, provide an estimate using best professional judgement.

**Table 15.. Chromium Finishing Operations Performed Since 1995**

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)		

<sup>3</sup> In 1995, EPA promulgated the National Emission Standards for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks. The final rule, codified at 40 CFR Part 63 Subpart N, established emission limitations for new and existing chromium electroplating and chromium anodizing operations based on the use of chemical fume suppressants and wetting agents. Certain chemical fume suppressants and wetting agents contain PFAS. Additional information on the 1995 final rule and amendments to the rule is available on EPA’s website at <https://www.epa.gov/stationary-sources-air-pollution/chromium-electroplating-national-emission-standards-hazardous-air>.

Claim Question 16. response as CBI.

16. Complete a row in Table 16. for each process line at the facility where any chromium finishing operation was performed at any time during calendar year 2022. Process lines that do not include chromium finishing operations do not need to be reported. For each applicable process line, report the chromium finishing operation(s) performed, the form(s) of chromium used, the number of days chromium finishing was performed, how much power was applied for the purpose of chromium finishing to the process line in amp-hours (Ah), and whether any wastewater was generated from the chromium finishing operation(s) and subsequent rinse tanks.

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

OR

**Table 16.. Process Lines Performing Chromium Finishing Operations in 2022**

<b>Process Line Name</b> (how your facility refers to the process line)	<b>Chromium Finishing Operation(s)</b> (select all that apply)	<b>Form of Chromium Used in Operation</b> (select all that apply)	<b>Number of Days Chromium Finishing was Performed in 2022</b>	<b>Power Applied During Chromium Finishing in 2022</b> (Ah) (enter 0 if unknown or not applicable)	<b>Wastewater Generated From Chromium Finishing Operation(s) or Subsequent Rinse Tanks?</b>
	<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
	<input type="checkbox"/> Decorative chromium plating <input type="checkbox"/> Functional/hard chromium plating <input type="checkbox"/> Chromium anodizing	<input type="checkbox"/> Cr(VI) <input type="checkbox"/> Cr(III)			<input type="checkbox"/> Yes <input type="checkbox"/> No

**Table 16.. Process Lines Performing Chromium Finishing Operations in 2022**

Process Line Name (how your facility refers to the process line)	Chromium Finishing Operation(s) (select all that apply)	Form of Chromium Used in Operation (select all that apply)	Number of Days Chromium Finishing was Performed in 2022	Power Applied During Chromium Finishing in 2022 (Ah) (enter 0 if unknown or not applicable)	Wastewater Generated From Chromium Finishing Operation(s) or Subsequent Rinse Tanks?
	<input type="checkbox"/> Chromic acid etching <input type="checkbox"/> Chromate conversion coating <input type="checkbox"/> Other, specify: _____				

Claim Question 17. response as CBI.

17. Complete a row in Table 17. for each chemical fume suppressant and wetting agent used at any time since calendar year 1995.<sup>4</sup> Include chemical fume suppressants used as an air emission control for Cr(VI) emissions and wetting agents used in any process lines reported in Question 16.. Include chemical fume suppressant and wetting agents that are no longer used or the facility no longer used in 2022. Include operations that occurred under other ownership, if known. If unknown, provide an estimate using best professional judgement.

Facility did not use any chemical fume suppressants or wetting agents at any time since calendar year 1995.

OR

<sup>4</sup> In 1995, EPA promulgated the National Emission Standards for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks. The final rule, codified at 40 CFR Part 63 Subpart N, established emission limitations for new and existing chromium electroplating and chromium anodizing operations based on the use of chemical fume suppressants and wetting agents. Certain chemical fume suppressants and wetting agents contain PFAS. Additional information on the 1995 final rule and amendments to the rule is available on EPA's website at <https://www.epa.gov/stationary-sources-air-pollution/chromium-electroplating-national-emission-standards-hazardous-air>.



**Table 17.. Chemical Fume Suppressant and Wetting Agent Use Since 1995**

<b>Chemical Fume Suppressant or Wetting Agent Product Name</b> (enter "Unknown" if unknown)	<b>Manufacturer Name</b> (enter "Unknown" if unknown)	<b>Used to Control Cr(VI) Emissions?</b> (select only one)	<b>Contains PFAS?</b> (select only one)	<b>Year(s) Product Was Used</b> (select all that apply)	<b>Total Volume Used in 2022</b> (gal) (enter 0 if not applicable)	<b>Number of Days Used in 2022</b> (enter 0 if not applicable)
		<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not applicable	<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 - 2009 <input type="checkbox"/> Prior to 2000		
		<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not applicable	<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 - 2009 <input type="checkbox"/> Prior to 2000		



Claim Question 18. response as CBI.

18. Complete a row in Table 18. for each air emission control (excluding chemical fume suppressants and wetting agents reported in Question 17.) operated at any time in calendar year 2022. If applicable, select the type of air emission control, describe the air emission control and target pollutant(s), indicate whether the air pollution control receives emissions from chromium finishing operations, and indicate whether wastewater was generated from the air emission control.

Facility did not operate any air emission controls (excluding use of chemical fume suppressants and wetting agents reported in Question 17.) at any time in calendar year 2022.

OR

**Table 18.. Air Emission Controls Operated During 2022 (excluding chemical fume suppressants and wetting agents)**

Air Emission Control Type (select only one)	Description of Air Emission Control and Target Pollutant(s)	Receives Emissions from Chromium Finishing Operations?	Wastewater Generated From Air Emission Control?
<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"/> 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"/> Yes <input type="checkbox"/> No



Claim Question 19. response as CBI.

19. Complete a row in Table 19. for each metal finishing operation, electroplating operation, and air emission control into which the facility intentionally used, blended, integrated, or applied any PFAS (including a mixture or product containing PFAS) **for any purpose other than chemical fume suppressants and wetting agents** at any time since calendar year 1995? Use of chemical fume suppressants and wetting agents containing PFAS should be reported in Question 17. and do not need to be reported in this question. Include operations that are no longer occurring or the facility no longer performed in 2022. Include operations that occurred under other ownership, if known. If unknown, provide an estimate using best professional judgement.

Facility did not intentionally use, blend, integrate, or apply any PFAS (including a mixture or product containing PFAS) for any purpose other than chemical fume suppressants and wetting agents reported in Question 17. at any time since calendar year 1995.

OR

**Table 19.. Intentional PFAS Use in Metal Finishing and Electroplating Processes and Air Emission Controls Since 1995 (excluding chemical fume suppressants and wetting agents)**

Process Name (how your facility refers to the process in which PFAS were used)	Process Category (select only one)	Description of Process and Purpose for Intentional PFAS Use	Manufacturer(s) and Name(s) of PFAS or PFAS-Containing Product (enter "Unknown" if unknown"	Year(s) PFAS or PFAS-Containing Product Was Used (select all that apply)	Wastewater Generated From Process?	Total PFAS-Containing Product Volume Used in 2022 (gal) (enter 0 if not applicable)
	<input type="checkbox"/> Chromium finishing <input type="checkbox"/> Nonchromium metal finishing or electroplating <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 - 2009 <input type="checkbox"/> Prior to 2000	<input type="checkbox"/> Yes <input type="checkbox"/> No	

**Table 19.. Intentional PFAS Use in Metal Finishing and Electroplating Processes and Air Emission Controls Since 1995 (excluding chemical fume suppressants and wetting agents)**

<b>Process Name</b> (how your facility refers to the process in which PFAS were used)	<b>Process Category</b> (select only one)	<b>Description of Process and Purpose for Intentional PFAS Use</b>	<b>Manufacturer(s) and Name(s) of PFAS or PFAS-Containing Product</b> (enter "Unknown" if unknown)	<b>Year(s) PFAS or PFAS-Containing Product Was Used</b> (select all that apply)	<b>Wastewater Generated From Process?</b>	<b>Total PFAS-Containing Product Volume Used in 2022</b> (gal) (enter 0 if not applicable)
	<input type="checkbox"/> Chromium finishing <input type="checkbox"/> Nonchromium metal finishing or electroplating <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 - 2009 <input type="checkbox"/> Prior to 2000	<input type="checkbox"/> Yes <input type="checkbox"/> No	



Claim Question 20. response as CBI.

20. Provide the facility's total annual production of **metal finishing and electroplating services or products** (i.e., all chromium and nonchromium metal finishing and electroplating services and saleable materials produced by result) during calendar year 2022 in Table 20.. Also provide the facility's total annual production volume of **metal finishing and electroplating services or products** associated with intentional use, blending, integrating, or application of any PFAS (including a mixture or product containing PFAS) during calendar year 2022 in Table 20.. If unknown, provide an estimate using best professional judgement.

**Table 20.. Total Annual Production of Metal Finishing and Electroplating Services or Products in 2022**

Basis of Estimate (select only one)	Total Metal Finishing and Electroplating Production in 2022		Total Metal Finishing and Electroplating Production Using PFAS or PFAS-Based Chemical Fume Suppressants or Wetting Agents in 2022 (enter 0 if not applicable)	
	Quantity	Unit of Measure	Quantity	Unit of Measure
<input type="checkbox"/> Number of units finished <input type="checkbox"/> Surface area finished <input type="checkbox"/> Power applied <input type="checkbox"/> Mass of materials finished <input type="checkbox"/> Sales volume <input type="checkbox"/> Other, specify: _____				



Claim Question 21. response as CBI.

21. Provide the facility's total annual production of **chromium finishing services or products** (i.e., all chromium finishing services and saleable materials produced by result) during calendar year 2022 in Table 21.. Also provide the facility's total annual production volume of **chromium finishing services or products** associated with intentional use, blending, integrating, or application of any PFAS (including a mixture or product containing PFAS) during calendar year 2022 in Table 21.. If unknown, provide an estimate using best professional judgement.

**Table 21.. Total Annual Production of Chromium Finishing Services or Products in 2022**

Basis of Estimate (select only one)	Total Chromium Finishing Production in 2022		Total Chromium Finishing Production Using PFAS or PFAS-Based Chemical Fume Suppressants or Wetting Agents in 2022 (enter 0 if not applicable)	
	Quantity	Unit of Measure	Quantity	Unit of Measure
<input type="checkbox"/> Number of units finished <input type="checkbox"/> Surface area finished <input type="checkbox"/> Power applied <input type="checkbox"/> Mass of materials finished <input type="checkbox"/> Sales volume <input type="checkbox"/> Other, specify: _____				

Claim Question 22. response as CBI.

22. If the facility used Cr(VI) during calendar years 2018 to 2022, complete Table 22. with the total annual consumption of Cr(VI) (as chromic acid or other Cr(VI) source) by the facility's chromium finishing operations. Do not include any chromic acid or other Cr(VI) source used for new bath makeups. If unknown, provide an estimate using best professional judgement. If the facility did not use Cr(VI) for one or more of the calendar years, enter "0" (zero) for those years.

Facility did not use Cr(VI) in chromium finishing during calendar years 2018 to 2022.

OR



**Table 22.. Total Annual Consumption of Cr(VI) (as chromic acid or other Cr(VI) source) for 2018 - 2022**

Calendar Year	Units of Measure (select only one)	2018	2019	2020	2021	2022
Total Cr(VI) consumption	<input type="checkbox"/> Pounds (dry weight) <input type="checkbox"/> Pounds (wet weight) <input type="checkbox"/> Kilograms (dry weight) <input type="checkbox"/> Kilograms (wet weight) <input type="checkbox"/> Tons (dry weight) <input type="checkbox"/> Tons (wet weight) <input type="checkbox"/> Gallons					

Claim Question 23. response as CBI.

23. Is the facility planning to modify operations in a manner which will change or eliminate the use of Cr(VI) at the facility by December 31, 2028? Complete a row in Table 23. for each applicable planned modification and report the estimated change in Cr(VI) use and planned completion month and year. Examples of what should be reported include, but are not limited to, specific plans to reduce the annual consumption of Cr(VI) used, convert existing Cr(VI) processes to Cr(III) processes, or discontinue use of Cr(VI) before December 31, 2028.

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

OR

**Table 23.. Planned Modifications Reducing or Eliminating Cr(VI) Use for 2023 - 2028**

Description of Planned Modification	Estimated Change in Cr(VI) Use Relative to 2022 (select only one)	Planned Completion Month	Planned Completion Year
	<input type="checkbox"/> Increase in Cr(VI) use relative to 2022 <input type="checkbox"/> Decrease in Cr(VI) use relative to 2022 <input type="checkbox"/> Eliminate use of Cr(VI)		
	<input type="checkbox"/> Increase in Cr(VI) use relative to 2022 <input type="checkbox"/> Decrease in Cr(VI) use relative to 2022 <input type="checkbox"/> Eliminate use of Cr(VI)		



Claim Question 24. response as CBI.

24. 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 and wetting agents) at the facility by December 31, 2028? Complete a row in Table 24. for each applicable planned modification and report the estimated change in PFAS and planned completion month and year. Examples of what should be reported include, but are not limited to, specific plans to reduce or eliminate use of all PFAS-containing chemical fume suppressants, PFAS-containing wetting agents, or other PFAS-containing products before December 31, 2028.

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 and wetting agents) at the facility by December 31, 2028.

OR

**Table 24.. Planned Modifications Changing PFAS Intentionally Used, Blended, Integrated, or Applied for 2023 - 2028**

Description of Planned Modification	Estimated Change in PFAS Use Relative to 2022 (select only one)	Planned Completion Month	Planned Completion Year
	<input type="checkbox"/> Increase in PFAS use relative to 2022 <input type="checkbox"/> Decrease in PFAS use relative to 2022 <input type="checkbox"/> Eliminate use of PFAS		
	<input type="checkbox"/> Increase in PFAS use relative to 2022 <input type="checkbox"/> Decrease in PFAS use relative to 2022 <input type="checkbox"/> Eliminate use of PFAS		





### SECTION 3. WASTEWATER GENERATION

Claim Question 25. response as CBI.

25. Did the facility generate on site or receive from off site any of the following types of wastewaters at any time during calendar year 2022?

**Process Wastewater:** Any water which, during manufacturing or processing, comes into direct contact with or results from the storage, production, or use of any raw material, intermediate product, finished product, byproduct, or waste product. Includes waters resulting from metal finishing and electroplating (e.g., chromium plating/anodizing bath water), equipment cleaning wastewater, rinse water, and leachate captured from surface impoundments and landfills. Process wastewater may also include wastewater that is contract hauled for offsite disposal. Sanitary wastewater, cooling water, stormwater, and groundwater that is not used in manufacturing or process operations is not considered process wastewater.

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

**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 (i.e., precipitation associated with industrial activity).

**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 (i.e., precipitation not associated with industrial activity).

**Air Emission Control Wastewater:** Any wastewater generated from an air emission control system (i.e., wasters generated from technologies or practices intended to capture, reduce, or eliminate one or more contaminants in a gaseous stream).

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

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

No

Yes



**If you answered “No” to this question, proceed to Section 7. Question 40. (Environmental and Other Information).**

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



**EPA**



Claim Question 26. response as CBI.

26. Complete a row in Table 26. for each wastewater generated on site or transferred to the facility during calendar year 2022. Include a row 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, specify:" and specify the wastewater type. Multiple rows per wastewater type may be reported; for example, if the facility generates three types of process wastewater (e.g., copper rinse water, nickel rinse water, and Cr(VI) rinse water), each of the three process wastewaters should be entered in a separate row of Table 26..

Include all wastewaters generated from the metal finishing operations, electroplating operations, and air emission controls reported in Section 2. (i.e., operations reported in response to Questions 16., 18., and 19. which generate wastewater). The Wastewater Source reported should be consistent with process and process line names reported in these earlier questions. 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 wastewaters that were both continuously generated or transferred to the facility as well as those that were only generated or transferred for a portion of calendar year 2022 (i.e., wastewaters only generated during a specific manufacturing campaign should be reported). All flows should be reported in gallons (gal) per year for calendar year 2022.

**Table 26.. Wastewaters Generated On Site or Transferred to the Facility During 2022**

<b>Wastewater Name</b> (how your facility refers to the wastewater)	<b>Wastewater Type</b> (select only one)	<b>Wastewater Source</b> (specify where wastewater was generated or transferred from)	<b>Total Flow in 2022</b> (gal)	<b>Onsite Wastewater Treatment?</b>	<b>Percent of 2022 Total Flow Sent to Final Destinations</b> (select all that apply)
	<input type="checkbox"/> Cr(VI) process wastewater <input type="checkbox"/> Cr(III) process wastewater <input type="checkbox"/> Other 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 % of total outfall flow: ____ <input type="checkbox"/> Discharged to municipal wastewater treatment plant % of total outfall flow: ____ <input type="checkbox"/> Transferred to centralized waste treatment facility % of total outfall flow: ____ <input type="checkbox"/> Land applied (onsite or offsite) % of total outfall flow: ____ <input type="checkbox"/> Reused or recycled within the facility % of total outfall flow: ____ <input type="checkbox"/> Underground injection % of total outfall flow: ____ <input type="checkbox"/> Septic tank % of total outfall flow: ____ <input type="checkbox"/> Other, specify: _____ % of total outfall flow: ____

**Table 26.. Wastewaters Generated On Site or Transferred to the Facility During 2022**

Wastewater Name (how your facility refers to the wastewater)	Wastewater Type (select only one)	Wastewater Source (specify where wastewater was generated or transferred from)	Total Flow in 2022 (gal)	Onsite Wastewater Treatment?	Percent of 2022 Total Flow Sent to Final Destinations (select all that apply)
	<input type="checkbox"/> Cr(VI) process wastewater <input type="checkbox"/> Cr(III) process wastewater <input type="checkbox"/> Other 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 % of total outfall flow: ____ <input type="checkbox"/> Discharged to municipal wastewater treatment plant % of total outfall flow: ____ <input type="checkbox"/> Transferred to centralized waste treatment facility % of total outfall flow: ____ <input type="checkbox"/> Land applied (onsite or offsite) % of total outfall flow: ____ <input type="checkbox"/> Reused or recycled within the facility % of total outfall flow: ____ <input type="checkbox"/> Underground injection % of total outfall flow: ____ <input type="checkbox"/> Septic tank % of total outfall flow: ____ <input type="checkbox"/> Other, specify: _____ % of total outfall flow: ____

Claim Question 27. response as CBI.

27. 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? Complete a row in Table 27. for each applicable planned modification and report the wastewaters impacted and planned completion month and year.

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

**Table 27.. Planned Modifications Changing Wastewater Generated On Site or Transferred to the Facility for 2023 - 2028**

Description of Planned Modification	Impacted Wastewater(s) Name (as reported in Question 26.)	Description of Estimated Change in Process Wastewater Quantity or Characterization (enter 0 if modification will not impact process wastewater)	Planned Completion Month	Planned Completion Year



## SECTION 4. WASTEWATER FLOW DIAGRAM

Claim Question 28. response as CBI.

28. 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 sources and treatment/management practices of each wastewater generated on site or transferred to the facility in calendar year 2022. The Wastewater Flow Diagram Checklist below provides details on what is required in the diagram(s). The diagram(s) should include all of the following information and data:

- the source of each wastewater generated on site or transferred to the facility (e.g., the process line name);
- each wastewater treatment unit operated on site, including the wastewaters that enter and exit each wastewater treatment unit; and
- all interim and final destinations of these wastewaters.

You are **NOT** required to create a new wastewater flow diagram if an existing diagram will suffice. You may submit an existing diagram, such as one included in a permit application, and mark the additional required information on the diagram. You may use a diagram from previous years, as long as the diagram is still representative of current operations.

If you create a new wastewater flow diagram, include all items listed in the Wastewater Flow Diagram Checklist on the diagram(s). Provide as many pages of diagrams as necessary to convey the information requested in the checklist. See the example diagram in Figure 28. for the level of detail requested.

See the General Instructions for guidance on submitting hardcopy or electronic copies of wastewater flow diagrams and other attachments with the completed questionnaire.

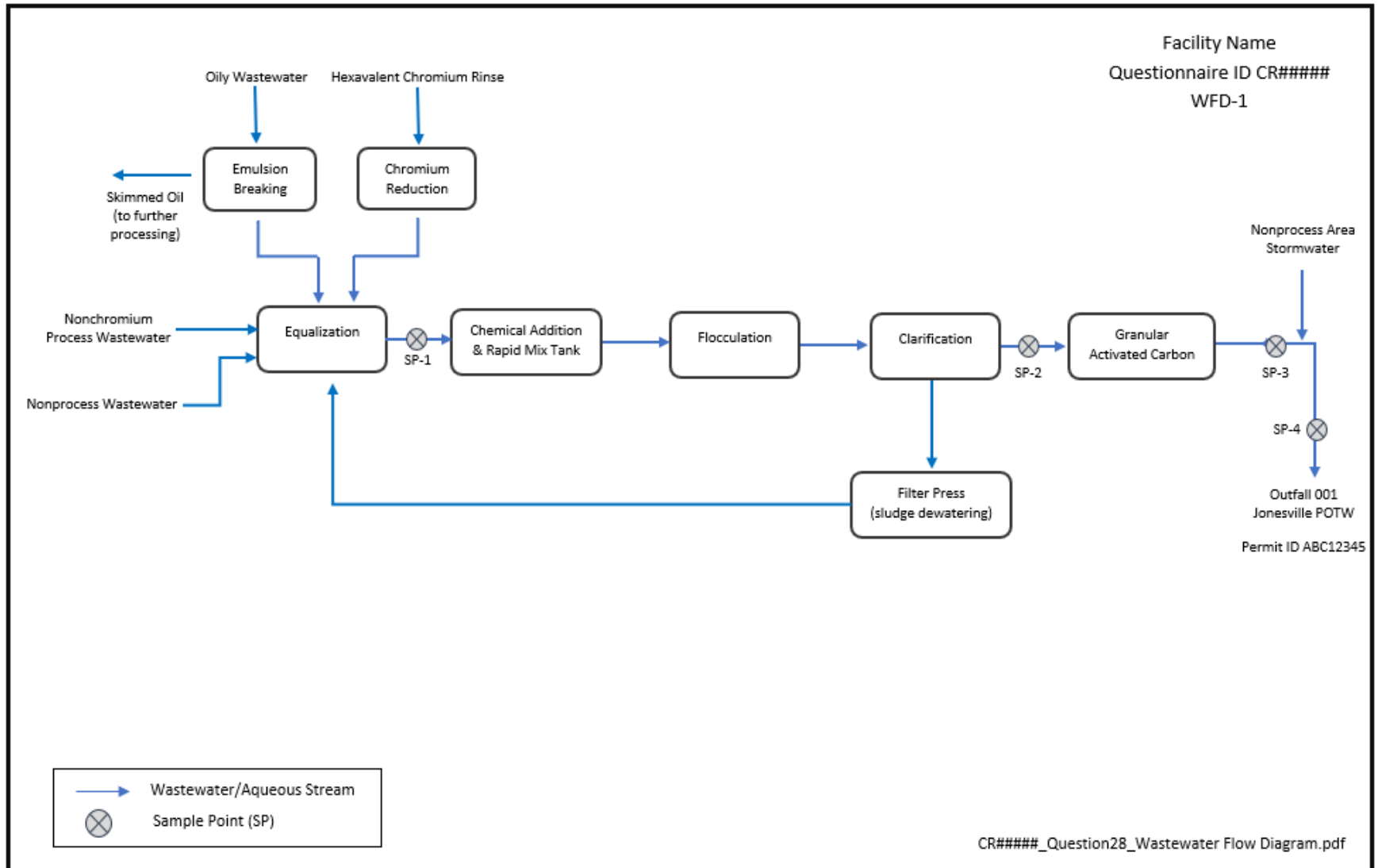
### **Wastewater Flow Diagram Checklist**

- Include your Questionnaire ID (i.e., the unique identification number assigned to your facility in the notification letter mailed by EPA) and facility name on each diagram submitted. Number each wastewater flow diagram, starting with "WFD-1" and numbering each additional diagram sequentially.
- Include and label all wastewaters generated on site or transferred to the facility during calendar year 2022. This should include all wastewaters reported in Question 26., influent(s) to each wastewater treatment unit, effluent(s) from each wastewater treatment unit, and the final destination for each wastewater. Use the same wastewater names and wastewater source descriptions reported in Question 26. when labeling the diagram. The diagram should illustrate the flow of wastewater through the facility; all wastewaters should either be entering another operation or wastewater treatment unit shown on the diagram or the next destination should be noted (e.g., Outfall 001). If applicable, indicate where any

wastewaters are reused or recycled within the facility. Wastewater flow rate data may be included on the diagram but are not required.

- 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.
- Include NPDES permit, pretreatment permit/agreement, or centralized waste treatment agreement outfall numbers, if applicable.
- Label all wastewater pollutant monitoring and sample collection locations at the facility (e.g., sample collection locations for discharge monitoring or compliance). You will be asked to provide more details on these monitoring locations and sample results in Section 6..

**Figure 28.. Example Wastewater Flow Diagram**





### SECTION 5. WASTEWATER MANAGEMENT AND TREATMENT

Claim Question 29. response as CBI.

29. Did the facility discharge or transfer off site any process wastewater, nonprocess wastewater, process area stormwater, air emission control wastewater, or third-party wastewater at any time during calendar year 2022? Include all wastewater discharges and transfers to a surface water, municipal wastewater treatment plant, or centralized waste treatment facility.

No. **Skip to Question 34..**

Yes

Claim Question 30. response as CBI.

30. In Table 30., provide the total flow for each final destination of wastewater generated on site or transferred to the facility during calendar year 2022. The final destinations receiving measurable flow should match the destinations reported in Question 26. and the wastewater flow diagram in Question 28.. The total flow should reflect the total flow to the destination (i.e., sum of flows for all wastewaters that are transferred to the destination) during calendar year 2022. All flows should be reported in gallons (gal) per year for calendar year 2022. If your facility did not send any wastewater to the destination during calendar year 2022, enter "0" (zero) into the Total Flow for 2022 column.

**Table 30.. Final Wastewater Destinations in 2022**

<b>Wastewater Destination</b>	<b>Total Flow for 2022 (gal) (enter 0 if not applicable)</b>
Discharged to surface water	
Discharged to municipal wastewater treatment plant	
Transferred to centralized waste treatment facility	
Land applied (onsite or offsite)	
Reused or recycled within the facility	
Underground injection	
Septic tank	
Other, specify: _____	
Other, specify: _____	
Other, specify: _____	





Claim Question 31. response as CBI.

31. How many permitted wastewater outfalls (i.e., discharge point of a wastewater into a surface water, municipal wastewater treatment plant, or municipal sewer system) were present at this facility in calendar year 2022? All wastewater outfalls identified in NPDES permits and pretreatment agreements/permits listed in response to Question 13. should be included.

Number of permitted wastewater outfalls in 2022: \_\_\_\_\_ **If "0" (zero), skip to Question 33..**

---



Claim Question 32. response as CBI.

32. For each permitted wastewater outfall identified in Question 31., complete a copy of this page by responding to questions 32.a through 32.d. Report outfall latitude and longitude coordinates in decimal degrees to the third decimal point. If you do not know the coordinates for an outfall, consult the facility's permit or use an online service (e.g., <https://www.google.com/maps>) and search the outfall's physical address or location (Google Maps presents latitude and longitude coordinates of an address or dropped pin).

32.a Outfall Name/Number: \_\_\_\_\_

Outfall Latitude: \_\_\_\_\_ Outfall Longitude: \_\_\_\_\_

32.b What is the discharge destination of the outfall? Select only one.

Surface water (Complete Questions 32.b.i and 32.b.ii)

Municipal wastewater treatment plant

Other, specify: \_\_\_\_\_

32.b.i. Type of Receiving Water (select only one)

River/stream

Lake/pond

Estuary

Marine

32.b.ii. Name of Surface Water

\_\_\_\_\_

\_\_\_\_\_

32.c What is the total flow of wastewater discharged from the outfall to this destination in calendar year 2022?

\_\_\_\_\_ gal per year

32.d Identify the type(s) of wastewater transferred to the outfall and the percent of each contribution relative to the total 2022 outfall flow reported in Question 32..c. Responses should sum to 100%.

**Table 32..d. Wastewater Contributions to Outfall in 2022**

Types of Wastewater	Percent Contributions Relative to the Total 2022 Outfall Flow (enter 0 if not applicable; total should sum to 100%)
Process wastewater	%
Nonprocess wastewater	%
Process area stormwater	%
Nonprocess area stormwater	%
Air emission control wastewater	%
Third-party wastewater	%
Sanitary wastewater	%
Groundwater	%
Other, specify:	%





Claim Question 33. response as CBI.

33. Complete a row in Table 33. for each municipal wastewater treatment plant and centralized waste treatment facility that the facility discharged or transferred wastewater to at any time in calendar year 2022?

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

OR

**Table 33.. Municipal Wastewater Treatment Plants and Centralized Waste Treatment Facilities that Received Facility Wastewater in 2022**

Receiving Facility Type (select only one)	Receiving Facility Name	Receiving Facility Address				Receiving Facility NPDES Permit Number (enter 0 if unknown or not applicable)
		Street Address	City	State/Territory (two letter abbreviation)	ZIP Code (5 digits only)	
<input type="checkbox"/> Municipal wastewater treatment plant <input type="checkbox"/> Centralized waste treatment facility						
<input type="checkbox"/> Municipal wastewater treatment plant <input type="checkbox"/> Centralized waste treatment facility						

Claim Question 34. response as CBI.

34. Did the facility operate any wastewater treatment units on site to treat any wastewater prior to its final destination during calendar year 2022?

No. **Skip to Question 37..**

Yes

Claim Question 35. response as CBI.

35. Complete a row in Table 35. 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 Table 35. 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, include this information in the space provided after "Other, specify:". 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 Table 35.. The treatment units documented in Table 35. should match the wastewater flow diagram(s) in Question 28.. All flows should be reported in gallons (gal) per year for calendar year 2022.

If the treatment unit was installed after January 1, 2018, attach any available costing information. See the General Instructions for guidance on submitting hardcopy or electronic copies of cost estimates and other attachments with the completed questionnaire.

**Table 35.. Onsite Wastewater Treatment Units Operated During 2022**

Treatment Unit Name (how your facility refers to the treatment unit)	Treatment Unit Type (select only one)	Total Influent Flow in 2022 (gal)	Technology Vendor Name (enter 0 if unknown)	Typical Treatment Media Replacement Frequency		Installed After January 1, 2018? (attach available costing information)
				Frequency Value (enter 0 if not applicable)	Frequency Unit (select only one)	
	<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"/> Not applicable <input type="checkbox"/> Hours <input type="checkbox"/> Days <input type="checkbox"/> Weeks <input type="checkbox"/> Months	<input type="checkbox"/> Yes <input type="checkbox"/> No

**Table 35.. Onsite Wastewater Treatment Units Operated During 2022**

Treatment Unit Name (how your facility refers to the treatment)	Treatment Unit Type (select only one)	Total Influent Flow in 2022 (gal)	Technology Vendor Name (enter 0 if unknown)	Typical Treatment Media Replacement Frequency		Installed After January 1, 2018? (attach available costing)
				Frequency Value (enter 0 if not applicable)	Frequency Unit (select only one)	
	<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"/> Not applicable <input type="checkbox"/> Hours <input type="checkbox"/> Days <input type="checkbox"/> Weeks <input type="checkbox"/> Months	<input type="checkbox"/> Yes <input type="checkbox"/> No



Claim Question 36. response as CBI.

36. Complete Table 36. with the estimated total annual flow, in gallons (gal) per year, for influent to the wastewater treatment system and effluent from the wastewater treatment system for calendar years 2018 to 2022. The response should reflect the sum of all wastewaters entering or exiting the wastewater treatment system during the year 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. If the wastewater treatment system did not exist or receive wastewater during a calendar year, enter "0" (zero) for that year.

**Table 36.. Total Annual Wastewater Treatment System Flow for 2018 - 2022**

Calendar Year	2018	2019	2020	2021	2022
Total annual influent flow to the wastewater treatment system (gal)					
Total annual effluent flow from the wastewater treatment system (gal)					

Claim Question 37. response as CBI.

37. 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? This could include operational changes made to optimize the wastewater treatment system or decommissioning of units. Complete a row in Table 37. for each applicable planned modification and report the treatment units or processes impacted and planned completion month and year. Examples of what should be reported include, but are not limited to, specific plans to increase volume of wastewater reused/recycled on site, install additional wastewater treatment units, or change the wastewater discharge destination before December 31, 2028.

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

**Table 37.. Planned Modifications Changing Wastewater Management or Treatment for 2023 - 2028**

Description of Planned Modification	Wastewater Treatment Unit(s) or Management Practice(s) Impacted	Planned Completion Month	Planned Completion Year





## SECTION 6. PERMIT REQUIREMENTS AND MONITORING DATA

Claim Question response as CBI.

38. Complete a row in Table for each PFAS and non-PFAS pollutant monitoring requirement, effluent limitation, pretreatment standard, and local limitation that applied to the facility in calendar year 2022. Include monitoring requirements, effluent limitations, pretreatment standards, and local limitations for all PFAS and non-PFAS parameters. Include mandatory monitoring requirements, effluent limitations, pretreatment standards, and local limitations that are established by water discharge permits/requirements reported in Question 13, consent decrees, or regulatory authorities. Include requirements that apply at any location at the facility, including in-plant sampling points and permitted wastewater outfalls. Specify all concentrations in milligram per liter (mg/l), microgram per liter (µg/l), or nanograms per liter (ng/l).

The facility did not have any PFAS or non-PFAS pollutant monitoring requirements, effluent limitations, or pretreatment standards in 2022.

OR

**Table . 2022 Pollutant Monitoring Requirements, Effluent Limitations, and Pretreatment Standards**

Parameter Name	Parameter Type (select only one)	CAS Registry Number (enter 0 if unknown)	Requirement Type (select only one)	Monitoring Frequency (select only one)	Effluent Limitation or Pretreatment Standard (if applicable)		Applicable Outfall(s) or Sample Collection Location(s) (list all that apply and as identified in the wastewater flow diagram)
					Value	Units of Measure (select only one)	
	<input type="checkbox"/> PFAS <input type="checkbox"/> Non-PFAS		<input type="checkbox"/> Monitoring only <input type="checkbox"/> Effluent limitation, pretreatment standard, or local limitation <input type="checkbox"/> Other, specify: _____	<input type="checkbox"/> Daily <input type="checkbox"/> Weekly <input type="checkbox"/> Monthly <input type="checkbox"/> Quarterly <input type="checkbox"/> Annually <input type="checkbox"/> Other, specify: _____		<input type="checkbox"/> mg/l <input type="checkbox"/> µg/l <input type="checkbox"/> ng/l	
	<input type="checkbox"/> PFAS		<input type="checkbox"/> Monitoring	<input type="checkbox"/> Daily		<input type="checkbox"/> mg/l	

**Table . 2022 Pollutant Monitoring Requirements, Effluent Limitations, and Pretreatment Standards**

Parameter Name	Parameter Type (select only one)	CAS Registry Number (enter 0 if	Requirement Type (select only one)	Monitoring Frequency (select only one)	Effluent Limitation or Pretreatment Standard (if applicable)		Applicable Outfall(s) or Sample Collection Location(s) (list all that apply and as identified in the wastewater flow diagram)
					Value	Units of Measure (select only one)	
	<input type="checkbox"/> Non-PFAS		only <input type="checkbox"/> Effluent limitation, pretreatment standard, or local limitation <input type="checkbox"/> Other, specify: _____	<input type="checkbox"/> Weekly <input type="checkbox"/> Monthly <input type="checkbox"/> Quarterly <input type="checkbox"/> Annually <input type="checkbox"/> Other, specify: _____		<input type="checkbox"/> µg/l <input type="checkbox"/> ng/l	

Claim Question 39. response as CBI.

39.To understand the facility's wastewater characteristics, EPA is requiring the facility to submit all pollutant monitoring data for PFAS and non-PFAS parameters for samples collected at the facility in calendar year 2022. Download the template file titled "Questionnaire ID\_Question 39\_2022 Monitoring Data.xlsx", read the instructions on the Instruction worksheet, enter all applicable 2022 pollutant monitoring data into the Data Table worksheet, and submit a copy of the completed workbook with your completed questionnaire. Include all individual sampling results (not averaged or aggregated results) collected at any location within the facility prior to discharge (including untreated wastewater; in-plant sampling points; wastewater treatment influent, intermediate points, or effluent) and at permitted wastewater outfalls during 2022. Include required monitoring and voluntary monitoring sampling results. See the template file for additional information on what should be included in your response.

See the General Instructions for guidance on submitting hardcopy or electronic copies of workbooks and other attachments with the completed questionnaire.



**SECTION 7. ENVIRONMENTAL AND OTHER INFORMATION**

Claim Question 40. response as CBI.

40. Provide the facility's latitude and longitude coordinates, in decimal degrees to the third decimal place, for the facility's geographic location. If you do not know the coordinates for the facility, use an online service ((e.g., <https://www.google.com/maps>) and search the facility's physical address or location (Google Maps presents latitude and longitude coordinates of an address or dropped pin).

---

Latitude

Longitude

---

Claim Question 41. response as CBI.

41. Complete a row in Table 41. for each solid waste, sludge, and 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. Where applicable, populate the Waste Source column with the same operation names reported in Section 2. (Questions 16., 18., and 19.) and wastewater treatment unit names reported in Question 35.. Report the total cost to manage or dispose of the solid waste, sludge, or concentrated waste stream in United States dollars (USD) and round to the nearest whole dollar; do not include decimal points or commas in your response.

No solid waste, sludge, or concentrated waste streams were generated by metal finishing operations, electroplating operations, air emissions controls, or wastewater treatment in 2022.

OR

**Table 41.. Solid Waste, Sludge, and Concentrated Waste Stream Generation and Management in 2022**

Waste Stream Name (how your facility refers to the waste stream)	Waste Source (specify where waste is generated from)	Total Generation for 2022	Units of Measure for Generation (select only one)	Final Destination(s) of Waste Sludge (select all that apply)	Total Cost to Manage/ Dispose Waste Stream in 2022 (USD)
			<input type="checkbox"/> Pounds (dry weight) <input type="checkbox"/> Pounds (wet weight) <input type="checkbox"/> Kilograms (dry weight) <input type="checkbox"/> Kilograms (wet weight) <input type="checkbox"/> Tons (dry weight) <input type="checkbox"/> Tons (wet weight) <input type="checkbox"/> Gallons	<input type="checkbox"/> Onsite landfill <input type="checkbox"/> Offsite nonhazardous waste landfill <input type="checkbox"/> Offsite hazardous waste 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: _____	

**Table 41.. Solid Waste, Sludge, and Concentrated Waste Stream Generation and Management in 2022**

Waste Stream Name (how your facility refers to the waste stream)	Waste Source (specify where waste is generated from)	Total Generation for 2022	Units of Measure for Generation (select only one)	Final Destination(s) of Waste Sludge (select all that apply)	Total Cost to Manage/ Dispose Waste Stream in 2022 (USD)
			<input type="checkbox"/> Pounds (dry weight) <input type="checkbox"/> Pounds (wet weight) <input type="checkbox"/> Kilograms (dry weight) <input type="checkbox"/> Kilograms (wet weight) <input type="checkbox"/> Tons (dry weight) <input type="checkbox"/> Tons (wet weight) <input type="checkbox"/> Gallons	<input type="checkbox"/> Onsite landfill <input type="checkbox"/> Offsite nonhazardous waste landfill <input type="checkbox"/> Offsite hazardous waste 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: _____	



Claim Question 42. response as CBI.

42. 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 "Facility does not have an RCRA site identification number."

Facility does not have an RCRA site identification number.

OR

RCRA Site Identification Number: \_\_\_\_\_



**If the facility is owned, controlled, or managed by the United States federal government, proceed to Section 9. (Comments).**

**DO NOT COMPLETE THE REMAINDER OF THIS QUESTIONNAIRE.**

Claim Question 43. response as CBI.

43. Since January 1, 2018, has the facility or ultimate parent company conducted, funded, or sponsored 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

Yes. Complete a row in Table 43. for each applicable study and provide a hardcopy or electronic version as an attachment to the completed questionnaire. See the General Instructions for guidance on submitting hardcopy or electronic copies of human health and environmental impact studies and other attachments with the completed questionnaire.

**Table 43.. Studies of Metal Finishing and Electroplating Wastewater Discharge Environmental Impacts During 2018 - 2022**

Study Title	Year Completed or Published	Description of Study



Claim Question 44. response as CBI.

44. Since January 1, 2018, has the facility or ultimate parent company conducted, funded, or sponsored 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
- Yes. Complete a row in Table 44. for each applicable study and provide a hardcopy or electronic version as an attachment to the completed questionnaire. See the General Instructions for guidance on submitting hardcopy or electronic copies of PFAS control technology studies and other attachments with the completed questionnaire.

**Table 44.. Studies of PFAS Control Technologies During 2018 - 2022**

Study Title	Year Completed or Published	Description of Study

Claim Question 45. response as CBI.

45. Did the facility monitor groundwater quality for any PFAS during calendar year 2022?

- No. **Skip to Question 47..**
- Yes. Provide hardcopy or electronic copies of all documents with 2022 groundwater monitoring results for PFAS to your questionnaire response and complete a row in Table 45. for each applicable document. Examples of such documents include laboratory analytical reports and reports summarizing 2022 PFAS groundwater monitoring activities/results. See the General Instructions for guidance on submitting hardcopy or electronic copies of groundwater monitoring reports and other attachments with the completed questionnaire.

**Table 45.. Documents Containing 2022 Groundwater Monitoring Results for PFAS**

Document Title	Year Completed or Published	Description of PFAS Groundwater Monitoring Effort





Claim Question 46. response as CBI.

46. Describe the PFAS groundwater monitoring schedule the facility follows in Table 46..

**Table 46.. 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:			

Claim Question 47. response as CBI.

47. Since January 1, 2018, 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

Yes. Complete a row in Table 47. for each applicable outreach activity. If available, provide hardcopy or electronic copies of relevant documentation for each applicable outreach activity to your questionnaire response. Examples of such documents include agendas, minutes, and recordings from applicable outreach meetings or reports prepared to document the facility's or ultimate parent company's public, community, or other outreach activities. See the General Instructions for guidance on submitting hardcopy or electronic copies of outreach documentation and other attachments with the completed questionnaire.

**Table 47.. 2018 - 2022 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



Claim Question 48. response as CBI.

48. Identify the source(s) of incoming water to the facility's chromium finishing operations in calendar year 2022. Select all that apply. If unknown, provide an estimate using best professional judgement.

Purchased water from city/municipality

Purchased water from private entity

Purchased steam

Groundwater

Surface water

Other, specify: \_\_\_\_\_



## SECTION 8. FINANCIAL INFORMATION

**In order to assess economic achievability of potential technology-based regulatory options (i.e., determine whether pollution control technologies are affordable by the industry), EPA requires information on financial, ownership, and employment data for individual facilities and their ultimate parent companies.**

Claim Question 49. response as CBI.

49. Select the corporation type that best describes the facility in calendar year 2022. Select only one.

- Subchapter C Corporation/Limited Liability Corporation
  - Limited Partnership
  - General Partnership
  - Sole Proprietor
  - Other, specify: \_\_\_\_\_
- 

Claim Question 50. response as CBI.

50. Was the facility publicly or privately held in calendar year 2022? Select only one.

- Privately Held
  - Publicly Held
- 

Claim Question 51. response as CBI.

51. Select the classification(s) that best describes the business ownership of 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
-



Claim Question 52. response as CBI.

52. 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 FTE employees. Only directly employed personnel should be counted; contracted workers should not be included. Round up to the nearest whole number. Select only one.

- 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

Claim Question 53. response as CBI.

53. Complete Table 53. with the estimated numbers of 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. Round up to the nearest whole number; do not include decimal points or commas in your response. If the facility was not in business for one or more of the calendar years, enter "0" (zero) for those years. If you enter "0" (zero) as any part of your response, provide an explanation for each in Section 9 (Comments).

**Table 53.. Facility Total Employment for 2018 - 2022**

Calendar Year	2018	2019	2020	2021	2022
Facility Total FTE Employees					

Claim Question 54. response as CBI.

54. How did the facility primarily fund its operations in calendar year 2022? Select all that apply.

- Retained business earnings
- Personal funds of owner(s)
- External financing



Claim Question 55. response as CBI.

55. Which of the following forms of financing, if any, did the facility regularly use or carry an outstanding balance 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 did not use external financing

Claim Question 56. response as CBI.

56. Complete Table 56. with the estimated annual percentages of expenditure for each item listed for calendar years 2018 to 2022. If the facility was not in business or did not finance expenditures for one or more of the calendar years, enter "0" (zero) for those years. If you enter "0" (zero) as any part of your response, provide an explanation for each in Section 9 (Comments).

**Table 56.. Annual Percentage of Expenditures for 2018 - 2022**

Calendar Year	2018	2019	2020	2021	2022
Annual expenditure financed using line of credit, credit card, trade credit, and home equity (%)	%	%	%	%	%
Annual expenditure financed using sale of account receivable and merchant cash advances (%)	%	%	%	%	%
Annual expenditure for new investment financed using personal savings (%)	%	%	%	%	%
Annual expenditure on leasing financed by using personal savings (%)	%	%	%	%	%



Claim Question 57. response as CBI.

57.If the facility borrows money to finance capital improvements, such as wastewater treatment equipment, what nominal interest rate would it pay on such loans? If unknown, report the most recent nominal interest rate the company paid to finance capital improvements or provide an estimate using best professional judgement.

Nominal Interest Rate (%): \_\_\_\_\_

Claim Question 58. response as CBI.

58.When the facility finances capital improvements, what is the approximate mix of debt and equity? If unknown, provide an estimate using best professional judgement.

Debt (%): \_\_\_\_\_

Equity (%): \_\_\_\_\_

Claim Question 59. response as CBI.

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

- Not applicable. The facility does not borrow money to finance capital improvements.
- Up to 2 years
- More than 2 but less than 5 years
- 5 or more, but less than 10 years
- 10 or more years

Claim Question 60. response as CBI.

60.Provide the annual capital improvement expenditure incurred for the chromium finishing operations for calendar years 2018 to 2022 in Table 60.. If the facility was not in business or did not have any applicable capital improvement expenditures for one or more of the calendar years, enter "0" (zero) for those years. If you enter "0" (zero) as any part of your response, provide an explanation for each in Section 9 (Comments). Report your response in United States dollars (USD) and round to the nearest whole dollar; do not include decimal points or commas in your response.

**Table 60.. Annual Capital Improvement Expenditure for Chromium Finishing Operations for 2018 - 2022**

Year	Capital Improvement Expenditure (USD)
2018	
2019	
2020	



**Table 60.. Annual Capital Improvement Expenditure for Chromium Finishing Operations for 2018 - 2022**

Year	Capital Improvement Expenditure (USD)
2021	
2022	

Claim Question 61. response as CBI.

61. Provide the total value for loans received for the chromium finishing operations for calendar years 2018 to 2022 in Table 61.. If the facility was not in business or did not have any applicable loans for one or more of the calendar years, enter "0" (zero) for those years. If you enter "0" (zero) as any part of your response, provide an explanation for each in Section 9 (Comments). Report your response in United States dollars (USD) and round to the nearest whole dollar; do not include decimal points or commas in your response.

**Table 61.. Annual Loan Value for Chromium Finishing Operations for 2018 - 2022**

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

Claim Question 62. response as CBI.

62. 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. If unknown, provide an estimate using best professional judgement.

Discount Rate (%): \_\_\_\_\_

Select one:  Pre-Tax  Post-Tax

Select one:  Real Rate  Nominal Rate



Claim Question 63. response as CBI.

63. Report the requested annual income statement information in Tables 63.-1 to 63.-5 for calendar years 2018 to 2022 for the facility and the ultimate parent company. If the facility does not have an ultimate parent company, enter "0" (zero) for each row in the Ultimate Parent Company column. If the facility was not in business or certain items are not held on the facility's books for one or more of the calendar years, enter "0" (zero) for the item. If you enter "0" (zero) as any part of your response, provide an explanation for each in Section 9 (Comments). Report your response in United States dollars (USD) and round to the nearest whole dollar; do not include decimal points or commas in your response. Complete each table for each calendar year requested (i.e., 2018, 2019, 2020, 2021, and 2022). If the ultimate parent company is a multinational firm, limit your response to only financial information for United States operations.

Income statement information may also be provided as a separate attachment as long as it includes all requested information. See the General Instructions for guidance on submitting hardcopy or electronic copies of income statements and other attachments with the completed questionnaire.

**Table 63.-1. 2018 Income Statement Information**

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



**Table 63.-2. 2019 Income Statement Information**

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

**Table 63.-3. 2020 Income Statement Information**

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



Table 63.-4. 2021 Income Statement Information

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

Table 63.-5. 2022 Income Statement Information

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



**If the facility does not have an ultimate parent company, proceed to Section 9. (Comments). DO NOT COMPLETE THE REMAINDER OF THIS QUESTIONNAIRE.**



Claim Question 64. response as CBI.

64. What is the facility's relationship to the ultimate parent company? Select only one.

- Branch
  - Subsidiary
- 

Claim Question 65. response as CBI.

65. In what state or territory is the ultimate parent company organized as a legal entity?

State/Territory: \_\_\_\_\_

---

Claim Question 66. response as CBI.

66. 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>) and use the Size Standards Tool (<https://www.sba.gov/size-standards/index.html>) to determine if your business qualifies as small. 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.

- No
  - Yes
- 

Claim Question 67. response as CBI.

67. Select the classification(s) that best describes the business ownership of 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
-



Claim Question 68. response as CBI.

68. Select the category that best reflects the number of FTE employees at the ultimate parent company for calendar year 2022. For example, four half-time employees would be listed as two FTE employees. Only directly employed personnel should be counted; contracted workers should not be included. If the ultimate parent company is a multinational firm, limit your response to only FTE employees at United States operations. Round up to the nearest whole number. Select only one.

- 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

Claim Question 69. response as CBI.

69. Complete Table 69. with the estimated numbers 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 is a multinational firm, limit your response to only FTE employees at United States operations. Round up to the nearest whole number; do not include decimal points or commas in your response. If the ultimate parent company was not in business for one or more of the calendar years, enter "0" (zero) for those years.

**Table 69.. Ultimate Parent Company Total Employment for 2018 - 2022**

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



Claim Question 70. response as CBI.

70. Identify and report all facilities that the ultimate parent company operated in the United States in calendar year 2022. Include facilities that conduct metal finishing, electroplating, or chromium finishing as well as facilities that do not conduct any of these operations. Download the template file titled "Questionnaire ID\_Question 70\_Facilities Operated By Ultimate Parent Company.xlsx", read the instructions on the Instruction worksheet, enter the required information for each applicable facility into the List of Facilities worksheet, and submit a copy of the completed workbook with your completed questionnaire.

Include your completed file on removable media (e.g., CD, flash drive) with your questionnaire submission. See the General Instructions for guidance on submitting hardcopy or electronic copies of workbooks and other attachments with the completed questionnaire.

Claim Question 71. response as CBI.

71. Does the facility's ultimate parent company have operations in one or more foreign countries that are a source of international revenue? Complete Table 71. 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 your response in United States dollars (USD) and round to the nearest whole dollar; do not include decimal points or commas in your response. 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

**Table 71.. Ultimate Multinational Parent Company Total Annual Revenue for 2018 - 2022**

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

## 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, note where alternate units were used in your answers, or explain how any information and data submitted in response to this questionnaire may be considered not representative of normal operations. Year-to-year operations are expected to fluctuate; however, you may indicate if information provided for calendar year 2022 is not representative of typical production, wastewater generation, or wastewater management at the facility and why (e.g., COVID-19, supply chain disruptions, economic conditions, workforce shortages, government assistance programs such as the Paycheck Protection Program). If a question did not provide sufficient space for your response, you may continue it here. Include in the table the question number(s) to which your comment pertains.

Identify comments which contain confidential business information (CBI) by checking the corresponding CBI checkboxes. You may claim a comment, including any submitted files, as CBI by checking the corresponding checkbox in the row. Any comment where "Yes" is not individually marked will not be considered confidential and EPA may make the information available to the public without further notice to you. Refer to the Confidential Business Information section in the General Instructions and Enclosure #1 in the notification letter mailed to you by EPA for additional information regarding EPA's procedures for CBI.

### Comments

Question Number	Claim Comment 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.**

**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 CBI. 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.*

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Signature of Certifying Official

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Date

---

Printed Name of Certifying Official

---

Phone Number

---

Title of Certifying Official

---

Company Name

**THE CHROMIUM FINISHING 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**