State of New Jersey
Department of Environmental Protection
Air Quality Permitting

General Permit (GP-015A) for Plating, Etching, Pickling and Electropolishing Operations

This General Permit allows for the construction, installation, reconstruction, modification and operation of:

Non-MACT Plating, Etching and Pickling Operation:

A tank or vessel that does not use, emit or contain any of the plating and polishing metal HAP, as define in this General Permit; and is used for the following operation:

1. Plating;
2. Etching; and/or
3. Pickling

MACT Plating and Electropolishing Operation:

A tank or vessel that uses, emits or contains one or more of the plating and polishing metal HAP, as define in this General Permit; and is used for the following operation:

1. Electroplating other than Hexavalent (subject to 40 CFR Part 63, Subpart N) Chromium Electroplating;
2. Electroless Plating or Non-Electrolytic Plating;
3. Other non-electrolytic metal coating processes, such as chromate conversion coating, nickel acetate sealing, sodium dichromate sealing, and manganese phosphate coating;
4. Electroforming; and/or
5. Electropolishing.

Each facility may possess only one GP-015A at any time. If a facility wants to add new equipment, replace or make changes to existing equipment that is already registered under GP-015A, then a new General Permit registration is required. This new General Permit registration will supersede the existing General Permit.

I. DEFINITIONS

The terms used in this General Permit shall have the meanings given to them in N.J.A.C. 7:27 et seq, MACT and/or as defined below:

Batch Electrolytic Process Tank means a tank used for electrolytic process in which a part or group of parts, typically mounted on racks or placed in barrels, is placed in the tank and immersed in an electrolytic process solution as a single unit for a predetermined period of time, during which none of the parts are removed from the tank and no other parts are added to the tank, and after which the part of or parts are removed from the tank as a unit.

Bath means the liquid contents of a tank, which is used for electroplating, electroforming, electropolishing, or other metal coating processes at a plating and polishing facility.

Capture system means the collection of components used to capture gases and fumes released from one or more emissions points and then convey the captured gas stream to a control device, as part of a complete control system. A capture system may include, but is not limited to, the following components as applicable to a given capture system design: duct intake devices, hoods, enclosures, ductwork, dampers, manifolds, plenums, and fans.

Composite Mesh Pad means a type of control device similar to a mesh pad mist eliminator except that the device is designed with multiple pads in series that are woven with layers of material with varying fiber diameters, which produce a coalescing effect on the droplets or PM that impinge upon the pads.

Continuous Electrolytic Process Tank (also called Reel-to-Reel Electrolytic Plating) means a tank that uses an electrolytic process and in which a continuous metal strip or other type of continuous substrate is fed into and removed from the tank continuously.

Control Device means equipment that is part of a control system that collects and/or reduces the quantity of a pollutant that is emitted to the air. The control device receives emissions that are transported from the process by the capture system.

Control System means the combination of a capture system and a control device. The capture system is designed to collect and transport air emissions from the affected source to the control device. The overall control efficiency of any control system is a combination of the ability of the system to capture the air emissions (i.e., the capture efficiency) and the control device efficiency. Consequently, it is important to achieve good capture to ensure good overall control efficiency. Capture devices that are known to provide high capture efficiencies include hoods, enclosures, or any other duct intake devices with ductwork, dampers, manifolds, plenums, or fans.

Conversion Coatings means coatings that form a hard metal finish on an object when the object is submerged in a tank bath or solution that contains the conversion coatings.

Cyanide Plating means plating processes performed in tanks that use cyanide as major bath ingredient and that operate at pH of 12 or more.

Deviation means any instance in which an affected source or an owner or operator of such an affected source:

(1) Fails to meet any requirement or obligation established by this general permit including, but not limited to, any equipment standard (including emissions and operating limits), management practice, or operation and maintenance requirement;

(2) Fails to meet any term or condition that is included in this general permit; or

(3) Fails to meet any equipment standard (including emission and operating limits), management standard, or operation and maintenance requirement in this general permit during startup, shutdown, or malfunction.

Dry Mechanical Polishing means a process used for removing defects from and smoothing the surface of finished metals and formed products after plating or thermal spraying using automatic or manually-operated machines that have hard-faced abrasive wheels or belts and where no liquids or fluids are used to trap the removed metal particles. The affected process does not include polishing with use of pastes, liquids, lubricants, or any other added materials.

Electroforming means an electrolytic process that is used for fabricating metal parts. This process is essentially the same as electroplating except that the plated substrate (mandrel) is removed leaving only the metal plate. In electroforming, the metal plate is self-supporting and generally thicker than in electroplating.

Electroless Plating (also called Non-Electrolytic Plating) means a non-electrolytic process in which metallic ions in a plating bath or solution are reduced to form a metal coating at the surface of a catalytic substrate without the use of external electrical energy. Examples include, but are not limited to, chromate conversion coating, nickel acetate sealing, sodium dichromate sealing, and manganese phosphate coating.

Electrolytic plating processes means electroplating and electroforming, where metallic ions in a plating bath or solution are reduced to form a metal coating on the surface of parts and products using electrical energy.

Electroplating (also called Electrolytic Plating) means an electrolytic process, in which metal ions in solution are reduced onto the surface of the work piece (the cathode) via an electrical current. The metal ions in the solution are usually replenished by the dissolution of metal from solid anodes fabricated of the same metal being plated, or by

direct replenishment of the solution with metal salts or oxides.

Electropolishing (also called electrolytic polishing) means an electrolytic process performed in a tank after plating, in which work piece is attached to an anode immersed in a bath, and the metal substrate is dissolved electrolytically, thereby removing the surface contaminant. Electropolishing does not include bench-scale operations.

Etching means a process of using strong acid or mordant to cut into the unprotected parts of a metal surface to create a design in intaglio (incised) in the metal.

Flash Electroplating means an electrolytic process performed in a tank that is used no more than 3 cumulative minutes per hour or no more than 1 cumulative hour per day.

HAP or Hazardous Air Pollutant means an air contaminant listed in or pursuant to 42 U.S.C. §7412(b).

MACT or **Maximum Achievable Control Technology** means the regulation establishing performance or emission standard promulgated under section 112 of the Clean Air Act (42 U.S.C.A. § 7412) at 40 CFR Part 63 (relating to National Emission Standards for Hazardous Air Pollutants for Source Categories).

Maintenance means any process at a plating facility that is performed to keep the process equipment or the facility operating properly and is not performed on items to be sold as products.

Mesh Pad Mist Eliminator means a type of control device, consisting of layers of interlocked filaments densely packed between two supporting grids that remove liquid droplets and PM from the gas stream through inertial impaction and direct interception.

Metal Coating Operation means any process performed in a tank that contains liquids, to the surface of parts and products used in manufacturing. These processes include but are not limited to: non-chromium electroplating; electroforming; non-electrolytic metal coating processes, such as chromate conversion coating, electroless nickel plating, nickel acetate sealing, sodium dichromate sealing, and manganese phosphate coating.

Metal HAP content of material used in plating and polishing means the HAP content as determined from an analysis or engineering estimate of the HAP contents of the tank bath or solution, in the case of plating, metal coating, or electropolishing. Safety data sheet (SDS) information may be used in lieu of testing or engineering estimates but is not required to be used.

NESHAP or National Emission Standards for Hazardous Air Pollutants (also known as Maximum Achievable Control Technology, MACT) Subpart WWWWWW means the federal National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Plating and Polishing Operations (NESHAP), Subpart WWWWWW codified at 40 CFR § 63.11504 seq.

Non-Cyanide Electrolytic Plating and Electropolishing Processes means electroplating, electroforming, and electropolishing performed without cyanide in the tank. These processes do not use cyanide in the tank and operate at pH values less than 12. These processes use electricity and add or remove metals such as metal HAP from parts and products used in manufacturing.

Non-Electrolytic Plating (also called Electroless Plating) means a process in which metallic ions in plating bath or solution are reduced to form a metal coating at the surface of a catalytic substrate without the use of external electrical energy. Examples include chromate conversion coating, nickel acetate sealing, electroless nickel plating, sodium dichromate sealing, and manganese phosphate coating.

Packed-Bed Scrubber means a type of control device that includes a single or double packed bed that contains packing media on which PM and droplets impinge are removed from the gas stream. The packed-bed section of the scrubber is followed by a mist eliminator to remove any water entrained from the packed-bed section.

Pickling (metal) means a metal surface treatment in an acid solution used to remove oxides or other compounds from the surface of a metal by chemical or electrochemical action for cleaning and surface activation.

Plating means a manufacturing **process** in which a thin layer of metal coats a substrate. This can be achieved through **electroplating**, which requires an electric current, or through **electroless plating**, which is in autocatalytic chemical **process**.

Plating and Polishing Metal HAP means any compound of any of the following metals: cadmium, chromium, lead, manganese, and nickel, or any of these metals in the elemental form, with the exception of lead. Any material that does not contain cadmium, chromium, lead, or nickel in any amounts greater than or equal to 0.1 percent by weight (as the metal), and does not contain manganese in the amounts greater than or equal to 1.0 percent by weight (as the metal), as reported on the Material Safety Data Sheet for the material, is not considered to be plating metal HAP.

Plating and Polishing Process Tanks means any tank in which a process is performed at an affected plating facility. The processes performed in plating tanks include the following: electroplating processes other than chromium electroplating (*i.e.*, non-chromium electroplating) performed in a tank; electroless plating; and non-electrolytic metal coating processes, such as chromate conversion coating, nickel acetate sealing, sodium dichromate sealing, and manganese phosphate coating; and electropolishing. This term does not include tanks containing solutions that are used to clean, rinse or wash parts prior to placing the parts in a plating process tank, or subsequent to removing the parts from a plating process tank. This term also does not include any bench-scale operations.

Potential to Emit or PTE means the same as that term is defined by the EPA at 40 CFR 70.2 or any subsequent amendments thereto. In general, the potential to emit is the maximum aggregate capacity of a source operation or of a facility to emit an air contaminant under its physical and operational design. Any physical or operational limitation on the capacity of a source operation or a facility to emit an air contaminant, including any limitation on fugitive emissions as a result of any applicable requirement, control apparatus, and restrictions on hours of operation or on the type or amount of material combusted, stored or processed, shall be treated as part of its design, if the limitation is Federally enforceable. Unless otherwise indicated, source-related fugitive emissions shall be included in the determination of potential to emit. However, the determination shall not include the holding by the owner or operator of emission reductions that are banked pursuant to N.J.A.C. 7:27-18.8.

Short-Term Plating means an electroplating process, that is used no more than 3 cumulative minutes per hour or 1 hour cumulative per day.

Startup of the Tank Bath means when the components or relative proportions of the various components in the bath have been altered from the most recent operating period. Startup of the bath does not include events where only the tank's heating or agitation and other mechanical operations are turned back on after being turned off for a period of time.

Tank Cover for Batch Process Units means a solid structure made of an impervious material that is designed to cover the entire open surface of tank or process unit that is used for plating or other metal coating processes.

Tank Cover for Continuous Process Units, means a solid structure or combination of structures, made of an impervious material that is designed to cover at least 75 percent of the open surface of the tank or process unit that is used for continuous plating or other continuous metal coating processes.

Thermal Spraying (also Referred to as Metal Spraying or Flame Spraying) means a process in which a metallic coating is applied by projecting heated, molten, or semi-molten metal particles onto a substrate. Commonly-used thermal spraying methods include high velocity oxy-fuel (HVOF) spraying, flame spraying, electric arc spraying, plasma arc spraying, and detonation gun spraying. This operation does not include spray painting at ambient temperatures.

Wetting Agent/Fume Suppressant means any chemical agent that reduces or suppresses fumes or mists from a plating tank by reducing the surface tension of the tank bath.

II. AUTHORITY

This General Permit is issued under the authority of N.J.S.A. 26:2C-9.2. This General Permit shall allow for inspection and evaluation to assure conformance with all provisions of N.J.A.C. 7:27 et seq. An opportunity for public comment on this General Permit was provided on June 4, 2018.

III. APPLICABILITY

This General Permit allows for the construction, installation, reconstruction, modification and operation of:

Non-MACT Plating, Etching and Pickling Operation:

A tank or vessel that does not use, emit or contain any of the plating and polishing metal HAP, as define in this General Permit; and is used for the following operation:

1. Plating;
2. Etching; and/or
3. Pickling

MACT Plating and Electropolishing Operation:

A tank or vessel that uses, emits or contains one or more of the plating and polishing metal HAP, as define in this General Permit; and is used for the following operation:

1. Electroplating other than Hexavalent (subject to 40 CFR Part 63, Subpart N) Chromium Electroplating;
2. Electroless Plating or Non-Electrolytic Plating;
3. Other non-electrolytic metal coating processes, such as chromate conversion coating, nickel acetate sealing, sodium dichromate sealing, and manganese phosphate coating;
4. Electroforming; and/or
5. Electropolishing.

Each facility may possess only one GP-015A at any time. If a facility wants to add new equipment, replace or make changes to existing equipment that is already registered under GP-015A, then a new General Permit registration is required. The new General Permit registration will supersede the existing General Permit.

IV. EXCLUSIONS

This General Permit shall not be used for the following equipment:

1. Any equipment for which another specific General Permit has been established pursuant to N.J.A.C. 7:27-8.8;

2. Plating tanks that are subject to the requirements of 40 CFR Part 63, Subpart N

(National Emission Standards for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks);

3. Steel Pickling that are subject to the requirements of 40 CFR Part 63, Subpart CCC (National Emission Standards for Hazardous Air Pollutants for Steel Pickling – HCl Process Facilities and Hydrochloric Acid Regeneration Plants);

4. Dry Mechanical Polishing; and

5. Thermal Spraying (also referred to as metal spraying or flame spraying).

V. EQUIPMENT / CONTROL SPECIFICATIONS

Non-MACT Plating, Etching and Pickling Operation:

Specific Requirement:

- Must meet the management practices to minimize or eliminate potential emissions, as applicable and practicable.

MACT Plating and Electropolishing Operation:

Specific Requirements:

The owner or operator must be in compliance with the applicable management practices and equipment standards at all times.

- **Electrolytic Process Tank (Non-cyanide electroplating, electroforming or electropolishing) with pH<12**
  - Use wetting agent/fume suppressant (WAFS), control device or tank cover; and
  - Management practices to minimize or eliminate potential emissions.

- **Flash or Short-Term Electroplating Tank**
  - Limit plating time to no more than 1 cumulative hr/day or 3 cumulative min/hr or use tank covers for at least 95% of the plating time; and
  - Management practices to minimize or eliminate potential emissions.

- **Process Tank that is used both for short-term electroplating and for electrolytic processing of longer duration** (i.e., processing that does not meet the definition of short-term or flash electroplating), whichever applies to the process operation:
  - Use wetting agent/fume suppressant (WAFS), control device or tank cover; or

- Limit plating time to no more than 1 cumulative hr/day or 3 cumulative min/hr or use tank covers for at least 95% of the plating time; and
- Management practices to minimize or eliminate potential emissions.

- **Cyanide Electroplating Tank with pH ≥12**
  - Measure and record the pH of the bath upon start-up of the bath; and
  - Management practices to minimize or eliminate potential emissions.

- **Electroless or Non-Electrolytic Plating Tank or Other Non-Electrolytic Metal Coating Operations** (such as chromate conversion coating, nickel acetate sealing, sodium dichromate sealing, and manganese phosphate coating):
  - Management practices to minimize or eliminate potential emissions.

Notification, Reporting, and Recordkeeping Requirements:

- Submit an Initial Notification in accordance with 40 CFR 63.11509(a).
- Submit a Notification of Compliance Status in accordance with 40 CFR 63.11509(b). If a facility makes a change to any items and does not result in a deviation, an amended Notification of Compliance Status should be submitted within 30 days of the change.
- Prepare an annual Certification of Compliance Reports in accordance with 40 CFR 63.11509(b). These reports need not be submitted unless a deviation from the requirements has occurred during the reporting year, in which case, the annual report must be submitted along with the deviation report.
- Submit the deviation report with the corrective action taken, if any deviations from the compliance requirements occurred during the year.

VI. POTENTIAL TO EMIT (PTE)

1. The potential to emit (PTE) from each tank or vessel permitted under this General Permit shall be less than the reporting thresholds for all air contaminants listed in N.J.A.C. 7:27-8, Appendix 1, Table A and N.J.A.C. 7:27-17.9, Table 2, as applicable.

2. The maximum surface area of each tank or vessel shall be 500 square feet or less.

VII. SUBMITTAL / CONTACT INFORMATION

For assistance or contact information, please go to the following resources:

1. Air Compliance and Enforcement at:
   http://www.nj.gov/dep/enforcement/air.html

2. Small Business Assistance Program at:
   http://www.nj.gov/dep/aqes/sbap/index.html

3. Bureau of Stationary Sources at:
   http://www.nj.gov/dep/aqpp/

4. USEPA Region 2
   Director, Division of Enforcement & Compliance Assistance
   290 Broadway
   New York, NY 10007-1866
   https://www.epa.gov/aboutepa/epa-region-2

5. Link: 40 CFR Part 63 Subpart WWWWWW
   https://www.ecfr.gov/ (Title 40, Protection of Environment; Part 63 – National Emission Standards for Hazardous Air Pollutants for Source Categories; Subpart WWWWWW – National Emission Standards for Hazardous Air Pollutants for Plating and Polishing Operations)

VIII. COMPLIANCE PLAN

The Equipment covered by this General Permit is subject to the applicable requirements listed on the following page.

COMPLIANCE PLAN: Plating, Etching, Pickling and Electropolishing Operations

Ref. #	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	**All Non-MACT Plating, Etching and Pickling Operations; and MACT Plating and Electropolishing Operations** are subject to the requirements from Ref. #2 through Ref. #10. [N.J.A.C. 7:27-8.13(a)]	None.	None.	None.
2	All conditions contained in the document "General Procedures for General Permits" posted at the web page address, http://www.nj.gov/dep/aqpp/genproc.htm in addition to this Compliance Plan, shall also be subject to enforcement.	None.	None.	None.
3	This equipment shall not cause any air contaminant, including an air contaminant detectable by the sense of smell, to be present in the outdoor atmosphere in such quantity and duration which is, or tends to be, injurious to human health or welfare, animal or plant life or property, or would unreasonably interfere with the enjoyment of life or property, except in areas over which the owner or operator has exclusive use or occupancy. [N.J.A.C. 7:27-5]	None.	None.	Any operation of the equipment which may cause a release of air contaminants in a quantity or concentration which poses a potential threat to public health, welfare, or the environment or which might result in citizen complaints shall be reported by the Permittee as required by the Air Pollution Control Act. Such notification shall be made by calling the Environmental Action Hotline at (877) 927-6337. [N.J.S.A. 26:2C-19(e)]
4	No Visible Emissions, exclusive of condensed water vapor, except for no more than 3 minutes in any consecutive 30-minute period. [N.J.A.C 7:27-8.13(a)]	None.	None.	None.

Ref. #	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
5	The permittee shall ensure all tanks or vessels included in this General Permit are easily identifiable by clear and conspicuous labeling. The labeling shall also include the width and length of the tank or vessel. [N.J.A.C. 7:27-8.13(a)]	None.	None.	None.
6	Maximum No. of Billable Compliance Inspections <= 4 inspections. The equipment covered by this permit will be subject to inspection fees for the maximum periodic compliance inspections (as defined in N.J.A.C.7:27-8.1) over the life of the Certificate, after it receives final approval for a five-year duration. The permittee will be invoiced for a service fee per inspection pursuant to N.J.A.C. 7:27-8.6 after the periodic compliance inspection is conducted. [N.J.A.C. 7:27-8.13(e)]	None.	None.	None.
7	The potential to emit (PTE) from each tank or vessel permitted under this General Permit, shall be less than the reporting thresholds for all air contaminants listed in N.J.A.C. 7:27-8, Appendix 1, Table A and N.J.A.C. 7:27-17.9, Table 2, as applicable. [N.J.A.C.7:27-8.13(h)]	None.	None.	None.
8	The maximum surface area of each tank or vessel shall be 500 square feet or less. [N.J.A.C.7:27-8.13(h)]	None.	None.	None.

Ref. #	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
9	The permittee must meet the following management practices to minimize or eliminate potential emissions, as applicable and practicable: 1. Minimize bath agitation when removing any parts processed in the tank, except when necessary to meet part quality requirements. 2. Maximize the draining of bath solution back into the tank by extending drip time when removing parts from the tank; using drain boards (also known as drip shields); or withdrawing parts slowly from the tank. 3. Optimize the design of barrels, racks, and parts to minimize drag out of bath solution (such as by using slotted barrels and tilted racks, or by designing parts with flow-through holes to allow the tank solution to drip back into the tank). 4. Use tank covers, if already owned and available at the facility. 5. Minimize or reduce heating of process tanks, (e.g., when doing so would not interrupt production or adversely affect part quality). 6. Perform regular repair, maintenance, and preventive maintenance of racks, barrels, and other equipment associated with affected sources. [N.J.A.C. 7:27-8.13(a)]	None.	None.	None.

Ref. #	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
10	The permittee must meet the following management practices to minimize or eliminate potential emissions, as applicable and practicable (Continuation from Ref #9): 7. Minimize bath contamination, such as through the prevention or quick recovery of dropped parts, use of distilled/de-ionized water, water filtration, pre-cleaning of parts to be plated, and thorough rinsing of pre-treated parts to be plated. 8. Maintain quality control of chemicals, and chemical and other bath ingredient concentrations in the tanks. 9. Perform general good housekeeping, such as regular sweeping or vacuuming, if needed, and periodic wash downs. 10. Minimize spills and overflow of tanks. 11. Use squeegee rolls in continuous or reel-to-reel plating tanks. 12. Perform regular inspections to identify leaks and other opportunities for pollution prevention. [N.J.A.C7.:27-8.13(a)]	None.	None.	None.

Ref. #	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
11	**All MACT Plating and Electropolishing Operations** are also subject to the requirements from Ref. #12 through Ref. #20, as applicable to their operation. [N.J.A.C. 7:27-8.13(a)]	None.	None	None.
12	**For All MACT Plating and Electropolishing Operations: Applicable Management Practices** The owner or operator must meet the following requirements: 1. The owner or operator must implement the applicable management practices in Ref. #9 and #10 during all times that the affected tank or process is in operation. 2. The owner or operator must state in the Notification of Compliance Status that the management practices in Ref. #9 and #10 have been implemented, as practicable. [40 CFR 63.11508(d)]	None	The owner or operator must maintain files of information (including all reports and notifications) and recorded in a form suitable and readily available for expeditious inspection and review. The files shall be retained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. [40 CFR 63.11509]	The owner or operator must submit a Notification of Compliance Status in accordance with 40 CFR 63.11509(b). Notification and/or report must be submitted to the address listed at Section VII., Submittal/Contact Information, Number 4. [40 CFR 63.11509]

Ref. #	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
13	**For All MACT Plating and Electropolishing Operations: Initial Notification and Notification of Compliance Status** The owner or operator must submit an Initial Notification and Notification of Compliance Status, as applicable. [40 CFR 63.11509]	The owner or operator must submit an Initial Notification and Notification of Compliance Status as follows: 1. The Initial Notification must include the information specified in 40 CFR 63.9(b)(2)(i) through (iv) of the General Provisions. 2. The Notification of Compliance Status must include the items specified as follows: (i) List of affected sources and the plating and polishing metal HAP used in, or emitted by, those sources. (ii) Methods used to comply with the applicable management practices and equipment standards. (iii) Description of the capture and emission control systems used to comply with the applicable equipment standards. (iv) Statement by the owner or operator of the affected source as to whether the source is in compliance with the applicable standards or other requirements. [40 CFR 63.11509]	The owner or operator must keep the following records: 1. Copy of any Initial Notification and Notification of Compliance Status submitted and all documentation supporting those notifications. 2. The records specified in 40 CFR 63.10(b)(2)(i) through (iii) and (xiv) of the General Provisions. 3. The records required to show continuous compliance with each management practice and equipment standard that applies, as specified in 40 CFR 63.11508(d). The files must be recorded in a form suitable and readily available for expeditious inspection and review; and must be maintained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. [40 CFR 63.11509]	The owner or operator must submit the following: 1. Submit an Initial Notification in accordance with 40 CFR 63.11509(a). 2. Submit a Notification of Compliance Status in accordance with 40 CFR 63.11509(b). If a facility makes a change to any of these items that does not result in a deviation, an amended Notification of Compliance Status should be submitted within 30 days of the change. 3. Submit an Annual Compliance Report along with the deviation report, **only if** a deviation occurred during the reporting year, and postmarked or delivered no later than January 31st of the year immediately following the reporting period. Notification and/or report must be submitted to the address listed at Section VII., Submittal/Contact Information, Number 4. [40 CFR 63.11509]

Ref. #	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
14	**For "Electrolytic" Process Tanks (Non-Cyanide Electroplating, Electroforming or Electropolishing Tanks) that operates at a pH of less than 12:** The owner or operator must comply with the requirements of one of the following: Option A, B or C, under Ref. #15, #16, or #17. [40 CFR 63.11507(a)]	None.	None.	None.
15	**A. If complying by using a wetting agent/fume suppressant (WAFS) in the bath of the affected tank:** 1. The owner or operator must initially add the WAFS in the amounts recommended by the manufacturer for the specific type of electrolytic process; 2. The owner or operator must add the WAFS in proportion to the other bath chemistry ingredients that are added to replenish the tank bath; and 3. If a WAFS is included in the electrolytic bath chemicals used in the affected tank according to the manufacturer's instructions, it is not necessary to add additional WAFS to comply with this general permit. [40 CFR 63.11507(a)(1)]	The owner or operator must demonstrate compliance with this requirement as follows: 1. Add WAFS to the bath of each affected tank according to the manufacturer's specifications and instructions. 2. State in the Notification of Compliance Status that WAFS have been added to the bath according to the manufacturer's specifications and instructions. 3. Prepare an Annual Certification of Compliance Report stating that WAFS have been added to the bath according to the manufacturer's specifications and instructions. [40 CFR 63.11508]	The owner or operator must record each time WAFS is added to the tank bath or record that the WAFS was added in the in the original make-up of the tank. The files must be recorded in a form suitable and readily available for expeditious inspection and review; and must be maintained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. [40 CFR 63.11509]	The owner or operator must submit the following: 1. Submit an Initial Notification in accordance with 40 CFR 63.11509(a). 2. Submit a Notification of Compliance Status in accordance with 40 CFR 63.11509(b). If a facility makes a change to any of these items that does not result in a deviation, an amended Notification of Compliance Status should be submitted within 30 days of the change. 3. Submit an Annual Compliance Report along with the deviation report, **only if** a deviation occurred during the reporting year, and postmarked or delivered no later than Januarys 31st of the year immediately following the reporting period. Notification and/or report must be submitted to the address listed at Section VII., Submittal/Contact Information, Number 4. [40 CFR 63.11509]

Ref. #	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
16	**B. If complying by capturing and exhausting emissions from the affected tank to any one of the following emission control devices: composite mesh pad, packed bed scrubber, or mesh pad mist eliminator:** The owner or operator must operate all capture and control devices according to the manufacturer's specifications and operating instructions. [40 CFR 63.11507(a)(2)]	The owner or operator must demonstrate compliance with this requirement as follows: 1. Install a control system designed to capture emissions from the affected tank and exhaust them to a composite mesh pad, packed bed scrubber, or mesh pad mist eliminator. 2. State in the Notification of Compliance Status that the control system was installed according to the manufacturer's specifications and instructions. 3. Prepare an Annual Certification of Compliance Report stating that the control system was operated and maintained according to the manufacturer's specifications and instructions. 4. Following any malfunction or failure of the capture or control devices to operate properly, take immediate corrective action to return the equipment to normal operation according to the manufacturer's specifications and operating instructions. [40 CFR 63.11508]	The owner or operator must keep the following records: 1. The owner or operator must record the results of all control system inspections, deviations from proper operation, and any corrective action taken. 2. The owner or operator must keep the manufacturer's specifications and operating instructions at the facility at all times in a location where they can be easily accessed by the operators. The files must be recorded in a form suitable and readily available for expeditious inspection and review; and must be maintained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. [40 CFR 63.11509]	The owner or operator must submit the following: 1. Submit an Initial Notification in accordance with 40 CFR 63.11509(a). 2. Submit a Notification of Compliance Status in accordance with 40 CFR 63.11509(b). If a facility makes a change to any of these items that does not result in a deviation, an amended Notification of Compliance Status should be submitted within 30 days of the change. 3. Submit an Annual Compliance Report along with the deviation report, **only if** a deviation occurred during the reporting year, and postmarked or delivered no later than January 31st of the year immediately following the reporting period. Notification and/or report must be submitted to the address listed at Section VII., Submittal/Contact Information, Number 4. [40 CFR 63.11509]

Ref. #	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
17	**C. If complying by covering the tank surface:** **1. <u>For Batch Electrolytic Process Tanks</u>:** The owner or operator must use a tank cover, over all of the effective surface area of the tank for at least 95% of the electrolytic process operating time. **2. <u>For Continuous Electrolytic Process Tanks</u>**: The owner or operator must cover at least 75% of the surface of the tank whenever the electrolytic process tank is in operation. [40 CFR 63.11507(a)(3)]	The owner or operator must demonstrate compliance with this requirement as follows: **<u>For Batch Electrolytic Process Tanks</u>:** 1. Operate the tank with the cover in place at least 95% of the electrolytic process operating time. 2. State in the Notification of Compliance Status that the tank was operated with the cover in place at least 95% of the electrolytic process operating time. 3. Prepare an Annual Certification of Compliance Report stating that the tank was operated with the cover in place at least 95% of the electrolytic process time. **<u>For Continuous Electrolytic Process Tanks</u>:** 1. Operate the tank with at least 75% of the surface covered during all periods of electrolytic process operation. 2. State in the Notification of Compliance Status that the tank was operated with the surface cover in place whenever the continuous electrolytic process is in operation. 3. Prepare an Annual Certification of Compliance Report stating that the tank was operated with at least 75% of the surface covered during all periods of electrolytic process operation. [40 CFR 63.11508]	The owner or operator must record the times that the tank is operated and the tank is covered on a daily basis. The files must be recorded in a form suitable and readily available for expeditious inspection and review; and must be maintained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. [40 CFR 63.11509]	The owner or operator must submit the following: 1. Submit an Initial Notification in accordance with 40 CFR 63.11509(a). 2. Submit a Notification of Compliance Status in accordance with 40 CFR 63.11509(b). If a facility makes a change to any of these items that does not result in a deviation, an amended Notification of Compliance Status should be submitted within 30 days of the change. 3. Submit an Annual Compliance Report along with the deviation report, **<u>only if</u>** a deviation occurred during the reporting year, and postmarked or delivered no later than January 31st of the year immediately following the reporting period. Notification and/or report must be submitted to the address listed at Section VII., Submittal/Contact Information, Number 4. [40 CFR 63.11509]

Ref. #	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
18	**For Short-Term or "Flash" Electroplating Tank:** The owner or operator must comply with one of the two following requirements: 1. **Limit short-term or "flash" electroplating:** The owner or operator must limit short-term or "flash" electroplating to no more than 1 cumulative hour per day or 3 cumulative minutes per hour of plating time; OR 2. **Use a tank cover:** The owner or operator must use a tank cover for at least 95% of the plating time. [40 CFR 63.11507(b)]	The owner or operator must demonstrate compliance with this requirement as follows: **If Limiting Plating Time of the Tank:** 1. Limit short-term or flash electroplating to no more than 1 cumulative hour per day or 3 cumulative minutes per hour of plating time. 2. State in the Notification of Compliance Status that short-term or flash electroplating have been limited to no more than 1 cumulative hour per day or 3 cumulative minutes per hour of plating time. 3. Prepare an Annual Certification of Compliance Report stating that short-term or flash electroplating have been limited to no more than 1 cumulative hour per day or 3 cumulative minutes per hour of plating time. **If Operating Tank with a Cover:** 1. Operate the tank with the cover in place at least 95% of the electrolytic process operating time. 2. State in the Notification of Compliance Status that the tank was operated with the cover in place at least 95% of the electrolytic process time. 3. Prepare an Annual Certification of Compliance Report stating the tank was operated with the cover in place at least 95% of the electrolytic process time. [40 CFR 63.11508]	The owner or operator must keep the following records: **If Limiting Plating Time of the Tank to comply:** The owner or operator must record the times the tank is operated each day. **If Operating Tank with a Cover to comply:** The owner or operator must record the times the tank is operated and the tank is covered on a daily basis. The files must be recorded in a form suitable and readily available for expeditious inspection and review; and must be maintained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. [40 CFR 63.11509]	The owner or operator must submit the following: 1. Submit an Initial Notification in accordance with 40 CFR 63.11509(a). 2. Submit a Notification of Compliance Status in accordance with 40 CFR 63.11509(b). If a facility makes a change to any of these items that does not result in a deviation, an amended Notification of Compliance Status should be submitted within 30 days of the change. 3. Submit an Annual Compliance Report along with the deviation report, **only if** a deviation occurred during the reporting year, and postmarked or delivered no later than January 31st of the year immediately following the reporting period. Notification and/or report must be submitted to the address listed at Section VII., Submittal/Contact Information, Number 4. [40 CFR 63.11509]

Ref. #	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
19	**For Process Tanks that is used both for Short-Term Electroplating and for Electrolytic Processing of longer duration:** The owner or operator must meet the requirements specified above at Ref. #14, for **"Electrolytic" Process Tanks** or Ref. #18 for **Short-Term or Flash Electroplating,** whichever apply to the process operation. [40 CFR 63.11507(c)]	The owner or operator must demonstrate compliance with this requirement as specified above at Ref. #14 for **"Electrolytic" Process Tanks** or Ref. #18 for **Short-Term or Flash Electroplating,** whichever applies to the process operation. [40 CFR 63.11508]	The owner or operator must keep the records as specified above at Ref. #14 for **"Electrolytic" Process Tanks** or Ref. #18 for **Short-Term or Flash Electroplating,** whichever applies to the process operation. [40 CFR 63.11509]	The owner or operator must submit the following: 1. Submit an Initial Notification in accordance with 40 CFR 63.11509(a). 2. Submit a Notification of Compliance Status in accordance with 40 CFR 63.11509(b). If a facility makes a change to any of these items that does not result in a deviation, an amended Notification of Compliance Status should be submitted within 30 days of the change. 3. Submit an Annual Compliance Report along with the deviation report, **only if** a deviation occurred during the reporting year, and postmarked or delivered no later than January 31st of the year immediately following the reporting period. Notification and/or report must be submitted to the address listed at Section VII., Submittal/Contact Information, Number 4. [40 CFR 63.11509]

Ref. #	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
20	**For Electroplating Tanks that use Cyanide in the Plating Bath and operate at pH greater than or equal to 12:** The owner or operator must measure and record the pH of the bath upon start-up of the bath. No additional pH measurements are required. [40 CFR 63.11507(d)]	The owner or operator must demonstrate compliance with this requirement as follows: 1. The owner or operator must measure the pH of the bath solution upon start- up of the bath. No additional pH measurements are required. 2. Report in the Notification of Compliance Status the pH of the bath solution that was measured at start up 3. State in the Notification of Compliance Status that the applicable management practices have been implemented, as practicable. 4. Prepare an Annual Certification of Compliance Report stating that the applicable management practices have been implemented, as practicable. [40 CFR 63.11508]	The owner or operator must record the pH of the bath upon start-up of the bath. The files must be recorded in a form suitable and readily available for expeditious inspection and review; and must be maintained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. [40 CFR 63.11509]	The owner or operator must submit the following: 1. Submit an Initial Notification in accordance with 40 CFR 63.11509(a). 2. Submit a Notification of Compliance Status in accordance with 40 CFR 63.11509(b). If a facility makes a change to any of these items that does not result in a deviation, an amended Notification of Compliance Status should be submitted within 30 days of the change. 3. Submit an Annual Compliance Report along with the deviation report, **only if** a deviation occurred during the reporting year, and postmarked or delivered no later than January 31st of the year immediately following the reporting period. Notification and/or report must be submitted to the address listed at Section VII., Submittal/Contact Information, Number 4. [40 CFR 63.11509]