

Source Number: 207003 Page 1 of 2

#### **ASSIGNMENT TO**

#### **GENERAL AIR CONTAMINANT DISCHARGE PERMIT**

Lane Regional Air Protection Agency 1010 Main Street Springfield, OR 97477 Telephone: (541) 736-1056

Issued To: Quality Metal Finishing 1260 Wallis Street Eugene, OR 97402 Information Relied Upon: Application Number: 67329 Dated: July 29, 2021

Plant Site Location: 1260 Wallis Street Eugene, OR 97402 Land Use Compatibility Statement: From: City of Eugene Dated: March 13, 2001

**ASSIGNMENT:** The permittee identified above is assigned by the Lane Regional Air Protection Agency to the General ACDP listed below in accordance with ORS 468A.040, LRAPA 37-0060(2), and based on the land use compatibility findings included in the permit record.

Dated

Steven a. Dietric

Steven A. Dietrich, Director

<u>1-24-22</u>

General ACDP Issued in Accordance with LRAPA Section 37-0060:

General ACDP	Expiration	
Number	Date	Source Category Description
AQGP-026	12/01/2031	Plating and polishing operations subject to 40 CFR part 63
		subpart WWWWWW, as adopted under LRAPA titles 37
		and 44.
Rule Citation	LRAPA 37-8010, Table 1, Part B, 82	
SIC	3471	
NAICS	332813	

#### SUPPLEMENTAL INFORMATION:

Facility Contact:				
Name:	Michael Lowden, President			
Phone number:	(541) 343-4534			
Email address:	M_lowden@msn.com			
Permit Summary:				
Source Test Requirement	No	N/A		
NSPS (40 CFR Part 60)	No	N/A		
NESHAP (40 CFR Part 63)	Yes	Subpart WWWWW (6W)		
Reports Required:				
Annual	Yes	February 15 each year		
NSPS	No	N/A		
NESHAP	Yes	February 15 each year		
Other	N/A	N/A		
Public Notice:	Category I			

MKH 1/11/22: rr



Permit Number: AQGP-026 Expiration Date: December 1, 2031 Page 1 of 17

#### LANE REGIONAL AIR PROTECTION AGENCY

#### GENERAL

#### AIR CONTAMINANT DISCHARGE PERMIT

Lane Regional Air Protection Agency 1010 Main Street Springfield, OR 97477 Telephone: (541) 736-1056

This permit is being issued in accordance with the provisions of ORS 468A.040 and LRAPA 37-0060.

 ISSUED BY THE LANE REGIONAL AIR PROTECTION AGENCY

 Steven A. Dietrich, Director
 12-1-21

 Dated
 Dated

Plating and polishing operations including electroplating (other than chromium electroplating), electroless or non-electrolytic plating, non-electrolytic metal coating processes (e.g. chromate conversion coating, nickel acetate sealing, sodium dichromate sealing, manganese phosphate coating), thermal spraying, dry mechanical polishing of finished metals and formed products after plating or thermal spraying, electroforming, and electropolishing, subject to 40 C.F.R. part 63 subpart WWWWW, as adopted under LRAPA title 44.

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### **1.0 PERMIT ASSIGNMENT**

#### 1.1. Qualifications

The permittee must meet all of the following Conditions in order to qualify for assignment to this General Air Contaminant Discharge Permit (ACDP):

- a. The permittee is performing plating and polishing activities listed on the cover page of this permit, including supporting activities;
- b. The plating and polishing facility uses or has emissions of compounds of one or more plating and polishing metal hazardous air pollutants (HAP), which means any compound of the following metals: cadmium, chromium, lead, manganese, and nickel. With the exception of lead, plating and polishing metal HAP also include any of these metals in the elemental form;
- c. The source does not qualify for a Basic ACDP and a Simple or Standard ACDP is not required for the source; and
- d. The source is not having ongoing, recurring or serious compliance problems.

#### 1.2. Exclusions

This permit does not apply to any of the following process units or operations:

- a. Process units that are subject to the requirements of 40 C.F.R. part 63 subpart N (National Emission Standards for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks);
- b. Research and development process units;
- c. Process units that are used strictly for educational purposes;
- d. Plating, polishing, coating, or thermal spraying conducted to repair surfaces or equipment;
- e. Dry mechanical polishing conducted to restore the original finish to a surface; or
- f. Any plating or polishing process that does not use any material that contains cadmium, chromium, lead, or nickel in amounts of 0.1 percent or more by weight, and that does not use any material that contains manganese in amounts of 1.0 percent or more by weight, as reported on the Safety Data Sheet for the material.

#### 1.3. Assignment

LRAPA will assign qualifying permittees to this permit that have and maintain a good record of compliance with the LRAPA's Air Quality regulations and that LRAPA determines would be appropriately regulated by a General ACDP. LRAPA may rescind assignment of the permittee no longer meets the qualifications in Condition 1.1 above, conditions of LRAPA Section 37-0060, or the Conditions of this permit.

#### 1.4. Permitted Activities

Until this permit expires, is modified, or is revoked, the permittee is allowed to discharge air contaminants from processes and activities directly related to or associated with the air contaminant source(s) listed on the first page of this permit in addition to any categorically insignificant activities, as defined in LRAPA title 12, at the source. Discharge of air contaminants from any other equipment or activity not identified herein is not authorized by this permit.

#### 1.5. Relation to Local Land Use Laws

This permit is not valid outside of Lane County, or at any location where the operation of the permittee's processes, activities, and insignificant activities would be in violation of any local land use or zoning laws. For operation outside of Lane County, contact the Oregon Department of Environmental Quality for any necessary permits at (503) 229-5359. The permittee must obtain local land use approvals as, or where, applicable before operating this facility at any location.

### 2.0 GENERAL EMISSION STANDARDS AND LIMITS

#### 2.1. Visible Emissions

The permittee must comply with the following visible emission limits:

- a. Visible emissions from any air contaminant source must not equal or exceed an average of 20% opacity for a period or periods aggregating more than 3 minutes in any one hour; [LRAPA 32-010(3)]
- b. Aggregate times consist of the total duration of all reading during the observation period that are equal to or greater than the opacity percentage in the standard, whether or not the readings are consecutive; and [LRAPA 32-010(2)]
- c. The visible emission standard in this condition does not apply to fugitive emissions from a source or part of a source. [LRAPA 32-010(1)]

#### 2.2. Fugitive Emissions

The permittee must comply with the following:

- a. The permittee must take reasonable precautions to prevent particulate matter, including fugitive dust, from becoming airborne from all site operations from which it may be generated; [LRAPA 48-015(1)]
- b. The permittee must not allow visible fugitive particulate emissions to leave the permittee's property for a period or periods totaling more than 18 seconds in a six-minute period; [LRAPA 48-015(2)(a)]
- c. Compliance with the fugitive emissions standard in Condition 2.2.b is determined by EPA Method 22 at the downwind property boundary; and [LRAPA 48-015(2)(b)]
- d. If requested by LRAPA, the permittee must develop and implement a fugitive emission control plan to prevent any visible emissions from leaving the property of a source for more than 18 seconds in a six-minute period following the procedures of EPA Method 22. [LRAPA 48-015(3)]

#### 2.3. Particulate Matter Fallout

The permittee must not cause or permit the emission of any particulate matter larger than 250 microns in size at sufficient duration or quantity, as to create an observable deposition upon the real property of another person. LRAPA will verify that the deposition exists and will notify the permittee that the deposition must be controlled. [LRAPA 32-050]

#### 2.4. Nuisance and Odors

The permittee must comply with the following nuisance and nuisance odor requirements, as applicable:

a. The permittee must not cause or allow air contaminants from any source to cause a

Permit Number: AQGP-026 Expiration Date: December 1, 2031 Page 4 of 17 nuisance. Nuisance conditions will be verified by LRAPA personnel. [LRAPA 49-010]

#### 2.5. Startup, Shutdown, and Malfunction Provisions

At all times, including periods of startup, shutdown, and malfunction, the permittee must operate and maintain any affected source, including associated air pollution control devices and monitoring equipment, in a manner consistent with good air pollution control practices for minimizing emissions.

During a period of startup, shutdown, or malfunction, this general duty to minimize emissions requires that the permittee reduce emissions from the source to the greatest extent which is consistent with safety and good air pollution control practices. The general duty to minimize emissions during a period of startup, shutdown, or malfunction does not require the permittee to achieve emission levels that would be required by the applicable standard at other times if this is not consistent with safety and good air pollution control practices, nor does it require the permittee to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved.

Malfunctions must be corrected as soon as practicable after their occurrence. [40 CFR 63.6(e)]

# 3.0 NESHAP 6W APPLICABILITY

# 3.1. 40 C.F.R. Part 63 Subpart WWWWWW – Emission Standards for Plating and Polishing Operations

The permittee must comply with all applicable provisions of 40 C.F.R. 63.11504 - 63.11513 for all affected emissions to which this subpart applies by the applicable date in 63.11506. The permittee must also comply with all applicable provisions of 40 C.F.R. Part 63, Subpart A – NESHAP General Provisions. For a full text of the federal standard, please refer to 40 C.F.R. Part 63, Subpart WWWWW.

NESHAP Subpart WWWWWW is adopted and incorporated by reference in LRAPA title 44.

#### **3.2. NESHAP Compliance Dates**

For an existing affected source (began construction or reconstruction on or before March 14, 2008), the permittee must have achieved compliance with the applicable requirements by July 1, 2010.

For a new affected source (began construction or reconstruction after March 14, 2008), the permittee must be in compliance with applicable requirements upon startup.

# 4.0 NON-CYANIDE ELECTROLYTIC TANKS

The requirements within this section apply to all non-cyanide electroplating, electroforming, or electropolishing tanks (hereafter referred to as 'electrolytic' process tanks) that contain one or more plating and polishing metal hazardous air pollutants and that operates at a pH of less than 12. [40 CFR 63.11507(a)]

#### 4.1. Compliance Options and Associated Requirements

The permittee must not use any wetting agent or fume suppressants that contain per- or polyfluoroalkyl substances. For permittees that are already using these substances upon assignment to this permit, the permittee may continue to use any inventory that is already purchased until the inventory is depleted. [LRAPA 37-0069(1) and OAR 340-245-0110]

The permittee must comply with all of the applicable management practices in Condition 10.0 and either 4.1(a), (b), or (c) for each affected electrolytic process tanks:

#### a. Use a wetting agent/fume suppressant in the bath of the affected tank(s).

- i. <u>Initial Makeup</u>: The permittee must initially add the wetting agent/fume suppressant in the amounts recommended by the manufacturer for the specific type of electrolytic process; [40 CFR 63.11507(a)(1)(i)]
- ii. <u>Additions</u>: The permittee must add wetting agent/fume suppressant in proportion to the other bath chemistry ingredients that are added to replenish the bath, as in the original make-up of the bath, or in proportions such that the bath contents are returned to that of the original make-up of the bath. The permittee must retain sufficient documentation of each addition to demonstrate that wetting agent/fume suppressants added to the tank comply with the original make-up of the tank. [40 CFR 63.11507(a)(1)(ii)]
- iii. <u>Bath Chemicals with Suppressants</u>: If a wetting agent/fume suppressant is included in the electrolytic process bath chemicals used in the affected tank according to the manufacturer's instructions, it is not necessary to add additional wetting agent/fume suppressants to the tank to comply with this condition. The permittee must retain manufacturer's instructions and any associated records necessary to demonstrate that the instructions have been followed. [40 CFR 63.11507(a)(1)(iii)]
- iv. <u>Records</u>: The permittee must retain sufficient documentation to demonstrate that wetting agent/fume suppressants added to the tank bath are in the original makeup of the tank. The permittee must retain manufacturer information or other detailed product information (e.g., SDS) for each wetting agent/fume suppressant used in each affected tank. [40 CFR 63.11509(e) and LRAPA 34-016(1)]
- b. <u>Notification of Compliance Status</u>: In addition to the notification of compliance status requirements of Condition 12.2, the permittee must state whether wetting agent/fume suppressants are added to the bath according to the manufacturer's specifications and instructions. Capture and exhaust emissions from the affected tank(s) to a control device. Control devices must be either a composite mesh pad, packed bed scrubber, or mesh pad mist eliminator. [40 CFR 63.11507(a)(2) and 63.11508(d)(3)(iii)]
  - i. <u>Ongoing</u>: The permittee must operate and maintain all control devices according to the manufacturer's specifications and operating instructions. [40 CFR 63.11508(d)(2)]
  - ii. <u>Control System Malfunction/Failure</u>: The permittee must take immediate corrective actions following a malfunction or failure of the control device

according to manufacturer specifications and operating instructions. [40 CFR 63.11508(d)(4)(ii)]

- iii. <u>Control System Records</u>: The permittee must maintain records of all control system inspections, deviations from proper operations, and corrective actions taken. The permittee must maintain manufacturer's specifications and operating instructions at the facility and at all times be kept in a location readily accessible by the operators. [40 CFR 63.11508(d)(4)]
- iv. <u>Notification of Compliance Status</u>: In addition to the notification of compliance status requirements of Condition 12.2, the permittee must state whether the control device(s) were installed and operated according to the manufacturer's specifications and instructions. [40 CFR 63.11508(d)(4)]

#### c. Cover the surface of the affected tank(s). [40 CFR 63.11507(a)(3)]

- i. For Batch process tanks:
  - A. <u>Cover Requirement:</u> The permittee must install and use a tank cover over all of the effective surface area of the tank for at least 95 percent of the electrolytic process operating time. The permittee must record the times that the tank is operated and the times the tank is covered on a daily basis.
  - B. <u>Notification of Compliance Status</u>: In addition to the notification of compliance status requirements of Condition 12.2, the permittee must state whether the affected tank(s) are operated with the cover in place at least 95 percent of the electrolytic process time. [40 CFR 63.11508(d)(6)]
- ii. For Continuous process tanks:
  - A. <u>Cover Requirement:</u> The permittee must cover at least 75 percent of the surface area of the tank whenever the electrolytic process tank is in operation. [40 CFR 63.11508(d)(7)(i)]
  - B. <u>Notification of Compliance Status</u>: In addition to the notification of compliance status requirements of Condition 12.2, the permittee must state whether the tank is operated with the surface cover in place whenever the continuous electrolytic process is in operation. [40 CFR 63.11508(d)(7)(ii)]

# 5.0 'FLASH' OR SHORT-TERM ELECTROPLATING TANKS

The requirements within this section apply to all 'flash' or short-term electroplating tanks (AKA 'flash' process tanks) that uses or emits one or more plating and polishing metal hazardous air pollutants. [40 CFR 63.11507(b)]

#### 5.1. Compliance Options and Associated Requirements

The permittee must comply with all of the applicable management practices in Condition 10.0 and either 5.1(a) or (b) for each affected flash process tanks:

- a. Limit flash electroplating to no more than one (1) cumulative hour per day or three (3) cumulative minutes per hour of plating time.
  - i. <u>Operational Time</u>: The permittee must record the times that the affected tank is operated each day.
  - ii. <u>Notification of Compliance Status</u>: In addition to the notification of compliance status requirements of Condition 12.2, the permittee must state whether each affected tank is limited to no more than one (1) cumulative hour per day, or three

(3) cumulative minutes per hour of plating time. [40 CFR 63.11507(b)(1) and 63.11508(d)(5)]

- b. Use a tank cover for at least 95 percent of the plating time.
  - i. <u>Cover</u>: The permittee must install a tank cover on each affected tank and ensure the cover is in place for at least 95 percent of the plating time. The permittee must record the times that the tank is operated and the times the tank is covered on a daily basis. [40 CFR 63.11507(b)(2)]
  - ii. <u>Notification of Compliance Status</u>: In addition to the notification of compliance status requirements of Condition 12.2, the permittee must state whether each affected tank is operated with a cover in place for at least 95 percent of the operating time. [40 CFR 63.11508(d)(6)]

# 6.0 BOTH FLASH AND LONGER TERM TANK USE

For any process tank used in both flash electroplating and electrolytic processing for longer duration(s), the permittee must operate according to the requirements applicable to the specific process at any given time: [40 CFR 63.11507(c)]

- While the process tank is being used for flash electroplating, the permittee must comply with all applicable requirements of Condition 5.0.
- When the process tank is used for electroplating that does not meet the definition of flash electroplating, the permittee must comply with all applicable requirements of Condition 4.0. [40 CFR 63.11511]

The permittee must also comply with the applicable management practices in Condition 10.0.

# 7.0 CYANIDE-CONTAINING PROCESS TANKS

The requirements within this section apply to all electroplating tanks that use cyanide in the plating bath, operates at pH greater than 12, and contains one of more of the plating and polishing metal hazardous air pollutants. [40 CFR 63.11507(d)]

#### 7.1. Compliance Requirements

For each affected process tank the permittee must comply with all of the applicable management practices in Condition 10.0 and the following:

- a. <u>Measure and Record</u>: The permittee must measure and record the pH of the bath upon startup of the bath. No additional pH measurements are required. [40 CFR 63.11507(d)(1) and 40 CFR 63.11509(e)]
- b. <u>Notification of Compliance Status</u>: In addition to the notification of compliance status requirements of Condition 12.2, the permittee must state whether the pH of the of the bath solution for each affected tank was measured upon startup according to Condition 7.1a. [40 CFR 63.11508(c)(7)(i)]

# 8.0 DRY MECHANICAL POLISHING

The requirements within this section apply to all dry mechanical polishing machines that emit one or more of the plating and polishing metal hazardous air pollutants. [40 CFR 63.11507(e)]

#### 8.1. Control System, Filter, and Compliance Requirements

The permittee must operate a control system that captures particulate matter (PM) emissions from the dry mechanical polishing process and transports the emissions to a cartridge, fabric, or high efficiency particulate air (HEPA) filter. [40 CFR 63.11507(e)]

- a. <u>Ongoing</u>: The permittee must operate and maintain all control devices according to the manufacturer's specifications and operating instructions. [40 CFR 63.11507(e)(1)]
- b. <u>Control System Malfunction/Failure</u>: The permittee must take immediate corrective actions following a malfunction or failure of each control device according to manufacturer specifications and operating instructions. [40 CFR 63.11508(d)(4)(ii)]
- c. <u>Control System Records</u>: The permittee must maintain records of all control system inspections, deviations from proper operations, and corrective actions taken. The permittee must maintain manufacturer's specifications and operating instructions at the facility and at all times be kept in a location readily accessible by the operators. [40 CFR 63.11507(e)(2), 63.11508(d)(4)(iv) and (v), and 40 CFR 63.11509(e)]
- d. <u>Notification of Compliance Status</u>: In addition to the notification of compliance status requirements of Condition 12.2, the permittee must state whether each control system was installed and operated according to the manufacturer's specifications and instructions. [40 CFR 63.11508(c)(2)(ii)]

# 9.0 THERMAL SPRAYING OPERATIONS

The requirements within this section apply to each thermal spraying operation that applies one or more of the plating and polishing metal hazardous air pollutants. The permittee must comply with all of the applicable management practices in Condition 10.0. [40 CFR 63.11507(f)]

### 9.1. Permanent Thermal Spraying Operations

The permittee must operate a capture system that collects PM emissions from each permanent thermal spraying process and transports the emissions to a fabric, cartridge, or HEPA filter; a permanent thermal spraying operation constructed on or before March 14, 2008 may transport the emissions to a water curtain. [40 CFR 63.11507(f)(1) and (2)]

- a. <u>Control System O&M</u>: The permittee must operate and maintain all capture and control devices according to the manufacturer's specifications and operating instructions. [40 CFR 63.11508(d)(4)(i)]
- b. <u>Control System Instructions</u>: The permittee must the maintain manufacturer's specifications and operating instructions at the facility and at all times be kept in a location readily accessible by the operators. [40 CFR 63.11508(d)(4)(v)]
- c. <u>Control System Malfunction/Failure</u>: The permittee must take immediate corrective actions following a malfunction or failure of each control device according to manufacturer specifications and operating instructions. [40 CFR 63.11508(d)(4)(ii)]
- d. <u>Control System Records</u>: The permittee must maintain records of all control system inspections, deviations from proper operations, and corrective actions taken. [40 CFR 63.11508(d)(4)(iiv)]
- e. <u>Notification of Compliance Status</u>: In addition to the notification of compliance status requirements of Condition 12.2, the permittee must state whether each control system was installed and operated according to the manufacturer's specifications and instructions. [40 CFR 63.11508(c)(2)(ii)]

### 9.2. Temporary Thermal Spraying Operations

The permittee must document the amount of time the thermal spraying occurs each day, and where it is conducted. Thermal spraying operations complying with this Condition 9.2 instead of Condition 9.1 must not operate more than one (1) hour in any one day and must meet the

definition of 'temporary thermal spraying' in Condition 16.0. [40 CFR 63.11507(f)(3) and 63.11511]

a. <u>Notification of Compliance Status</u>: In addition to the notification of compliance status requirements of Condition 12.2, the permittee must state whether the management practices of Condition 10.0 have been implemented.

## 10.0 MANAGEMENT PRACTICES AND S.O.P.

The requirements within this section apply to all emissions units and control devices identified within Conditions 4.0 through 9.0 that contain, apply, capture, control, or emits one or more plating and polishing metal HAP (hazardous air pollutants).

#### 10.1. Management Practices

The permittee must comply with all of the following management practices during all times that the affected tank or process is in operation, as applicable: [40 CFR 63.11507(g)]

- a. <u>Minimize Bath Agitation</u>. The permittee must minimize bath agitation when removing any parts processed in a tank except when necessary to meet part quality requirements.
- b. <u>Maximize Draining</u>. The permittee must 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.
- c. <u>Optimize Design</u>. The permittee must optimize the design of barrels, racks, and parts to minimize dragout 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).
- d. <u>Use Tank Covers</u>. The permittee must use tank covers, if already owned and available at the facility whenever possible. Permittees must also comply with the following, as applicable: [LRAPA 37-0069(1) and OAR 340-245-0110]
  - i. Permittees operating tanks that emit nickel must have tank covers installed and operated according to Condition 4.0 or 5.0, as applicable, no later than January 1, 2022 unless otherwise approved by LRAPA in writing.
  - ii. Permittees that install or begin operating a new or additional tank that emits nickel after January 1, 2022 must have tank covers installed upon startup of the nickel-containing tank.
- e. <u>Minimize or Reduce Heating</u>. The permittee must minimize or reduce heating of process tanks when doing so would not interrupt production or adversely affect part quality.
- f. <u>Perform Routine Maintenance</u>. The permittee must perform regular repair, maintenance, and preventive maintenance of racks, barrels, and other equipment associated with tanks, thermal spraying, and dry mechanical polishing equipment.
- g. <u>Minimize Contamination</u>. The permittee must minimize bath contamination to the extent possible. Methods to be implemented may include but are not limited to: the prevention or quick recovery of dropped parts, use of distilled/de-ionized water, water filtration, precleaning of parts to be plated, or thorough rinsing of pre-treated parts to be plated.
- h. <u>Maintain Chemicals</u>. The permittee must maintain quality control of chemicals and other bath ingredient concentrations in the tanks.
- i. <u>Housekeeping</u>. The permittee must perform general good housekeeping, such as regular sweeping, vacuuming, or periodic washdowns.
- j. <u>Minimize Spills</u>. The permittee must minimize spills and overflow of tanks.

- k. <u>Use Squeegee Rolls</u>. The permittee must use squeegee rolls in continuous or reel-to-reel plating tanks.
- 1. <u>Perform Inspections</u>. The permittee must perform regular inspections to identify leaks and other opportunities for pollution prevention.

#### 10.2. Standard Operating Procedures

The permittee must establish and maintain a written Standard Operating Procedures manual (or equivalent) that describes how the facility's specific processes and procedures comply with each management practice of Condition 10.1. An SOP compliant with this Condition must be developed and retained on site within six (6) months of assignment to this permit or upon startup, whichever is later.

For management practices that are not applicable to any emissions units on site or otherwise not implemented, the SOP must explain why (*e.g.*, 'Facility X does not implement the squeegee roll management practice because there are no continuous or reel-to-reel plating tanks on site).

# **11.0 RECORDKEEPING REQUIREMENTS**

#### 11.1. General Compliance and Applicability Records

The permittee must keep the following records: [40 CFR 63.11509(e) and LRAPA 34-016]

- a. <u>Notifications</u>: A copy of all Initial Notification and Notifications of Compliance Status that are submitted and all documentation supporting those notifications.
- b. <u>Startup and Shutdowns</u>: The occurrence and duration of each startup or shutdown when the startup or shutdown causes the source to exceed any applicable emission limitation in the relevant emission standards.
- c. <u>Malfunctions</u>: The occurrence and duration of each malfunction of operation (*i.e.*, process equipment) or the associated air pollution control and monitoring equipment.
- d. <u>Maintenance</u>: All maintenance performed on the process equipment (tanks, dry mechanical polishing, and thermal spraying), air pollution control equipment, and monitoring equipment.
- e. <u>Continuous Compliance</u>: The records required to show continuous compliance with each management practice and equipment standard that applies.
- f. <u>Manufacturer Documentation</u>: The manufacturer documentation for any equipment or process that is required to comply according to manufacturer recommendations, instructions, or specifications.
- g. <u>Ampere Hours:</u> The total ampere hours for each tank that uses or has emissions of one or more of the plating and polishing metal HAPs (cadmium, chromium, lead, manganese, nickel).
  - i. Permittees being reassigned to this permit without the equipment necessary to monitor tank ampere hours may request that LPAPA provide additional time for the procurement and installation of this equipment.
  - ii. Requests must be submitted in writing to LRAPA no later than 30 days after assignment to this permit and include a description of the equipment that will

need to be procured and an estimated date on which the permittee believes installation will be completed.

iii. Requests must be submitted to the appropriate address in Condition 13.2. LRAPA may approve additional time but will require the installation and operation of equipment which provides for tank ampere hour recordkeeping no later than July 1, 2022.

#### 11.2. Excess Emissions

Unless otherwise specified, the permittee must maintain records of excess emissions as defined in LRAPA title 36 (recorded on occurrence). Typically, excess emissions are caused by process upsets, startups, shutdowns, or scheduled maintenance. In many cases, excess emissions are evident when visible emissions are greater than 20% opacity for 3 minutes or more in any 60 minute period.

#### 11.3. Retention of Records

Unless otherwise specified, the permittee must retain all records for a period of at least five (5) years from the date of each report or record and make them available to LRAPA upon request. The permittee must maintain at least the two (2) most recent years of records onsite or otherwise readily available electronically for expeditious review during an on-site inspection. [40 CFR 63.11509(f) and LRAPA 34-016(5)]

#### 11.4. Complaint Log

The permittee must maintain a log of all complaints received that specifically refer to air pollution, odor, or nuisance concerns associated with the permitted facility. The permittee must investigate the condition within 24 hours, if possible.

The log must include at least the following for each complaint or concern received: [LRAPA 34-016(1)]

- a. The date the complaint was received;
- b. The date and time the complaint states the condition was present;
- c. A description of the complaint;
- d. The location of the complainant or receptor relative to the plant site;
- e. The status of plant operations and activities during the complaint's stated time of pollution or odor condition;
- f. A description of the permittee's actions to investigate the validity of the complaint; and
- g. A description of any actions taken in response to the complaint investigation.

### **12.0 REPORTING REQUIREMENTS**

#### 12.1 NESHAP Initial Notification

The permittee must submit an initial notification if one has never been submitted, if the source is newly constructed and beginning operations, or upon request by LRAPA. An initial notification must comply the following: [40 CFR 63.11509(a)]

a. <u>Source Information Required</u>: The notification must include the name and address of the owner or operator, the address (physical location) of the affected source, an identification of the relevant standard (NESHAP 6W), the permittee's compliance date, identification of the emission points at the permitted facility, types of hazardous air pollutants emitted,

and a brief description of the nature, size, design, and method of operations;

- b. <u>Compliance Methods</u>: The notification must include a description of the compliance method(s) (e.g., use of wetting agent/fume suppressant) for each affected emissions unit;
- c. <u>Due Date</u>: The initial notification is due to LRAPA within 120 days of the source becoming subject to NESHAP 6W.
- d. <u>Where to Send</u>: Initial notifications must be submitted to the LRAPA office:

Lane Regional Air Protection Agency 1010 Main Street Springfield, OR 97477

#### **12.2.** NESHAP Notification of Compliance Status

The permittee must submit a notification of compliance status if one has never been submitted, if the source is newly constructed and beginning operations, or upon request by LRAPA.

If the permittee makes any changes that result in inaccurate information on the most recently submitted Notification of Compliance Status, the permittee must submit an amended notification of compliance status within 30 days of the change. The report information for which changes would require an amended notification are identified below with '30-day change notification required'.

The Notification of Compliance Status report must comply with all of the following: [40 CFR 63.11509(b)]

- a. <u>Information Required</u>. The report must contain the following information:
  - i. List of affected emissions units (tanks, thermal spraying, and dry mechanical polishing) and whether cadmium, chromium, lead, manganese, or nickel are used in, or emitted by, those emissions units [30-day change notification required];
  - ii. Identification or description of the 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 [30-day change notification required];
  - iv. Additional information, as applicable, identified under 'Notification of Compliance Status' throughout this permit for each emissions unit. (Note that each type of emissions unit covered by this permit identifies unique information that must be included with the Notification of Compliance Status); and
  - v. A statement by the owner or operator of the facility as to whether all management practices required by Condition 10.0 have been implemented.
  - vi. A statement by the owner or operator of the facility as to whether the source is in compliance with the applicable standards and requirements. [30-day change notification required]
- b. <u>Due Dates</u>: A new affected source is required to submit a notification of compliance status before close of business on the date of initial startup. An existing source was required to submit a notification of compliance status no later than July 1, 2010.
- c. <u>Where to Send</u>: The first Notification of Compliance Status must be submitted to the LRAPA office as listed below. Amended notifications of compliance status must be submitted to the LRAPA as listed below.

Lane Regional Air Protection Agency 1010 Main Street Springfield, OR 97477

#### 12.3. Annual Report

For each year this permit is in effect, the permittee must submit to LRAPA by **February 15** one (1) copy of an annual report for the previous calendar year that includes at least the following: [LRAPA 34-016(1)&(2) and 40 CFR 63.11509(c)]

- a. A statement or certification of whether all applicable management practices have been implemented on site; [40 CFR 63.11508(d)(8)(i)]
- b. A statement certifying whether any deviations of the requirements of this permit occurred during the reporting period. If any deviations occurred, the annual report must also include: [40 CFR 63.11509(d)]
  - i. Identification of the process tank or operation associated with the deviation;
  - ii. The date and time the deviation occurred;
  - iii. The permit Condition or description of the compliance requirement deviated from; and
  - iv. A description of the deviation and a description of the correction action(s) taken.
- c. A summary of complaints received relating to air quality concerns and the permittee's response or follow-up action(s); [LRAPA 34-016(5)]
- d. A description of any permanent changes made to processes or equipment that may affect air emissions;
- e. For each electrolytic process tank using wetting agents or fume suppressants to comply with Condition 4.1, the permittee must include the following: [LRAPA 34-016(5) and 40 CFR 63.11508(d)(3)]
  - i. The process or tank name or identification number;
  - ii. The type of electrolytic process;
  - iii. The name and type of wetting agent or fume suppressant used and the date(s) of each addition;
  - iv. A statement certifying that per- or polyfluoroalkyl substances are not used on site or a statement certifying how much of these products remain on site; and
  - v. Certification that the addition(s) were completed following the manufacturer's specifications and instructions.
- f. For each electrolytic process tank, dry mechanical polishing operation, and thermal spraying operation complying with the applicable requirements by using a control device, the permittee must include the following: [LRAPA 34-016(5) and 40 CFR 63.11508(d)(4)]
  - i. The process, operation, or tank name or identification number;
  - ii. The type of electrolytic process or other operation; and
  - iii. Certification that the control device(s) and system(s) were operated and maintained according to manufacturer's specifications and instructions.
- g. For each flash process tank limiting the hours or minutes to comply with Condition 5.1, the permittee must include the following: [LRAPA 34-016(5) and 40 CFR 63.11508(d)(5)]

- i. The tank name or identification number;
- ii. The process or tank type; and
- iii. Certification that the tank was limited to one hour per day or 3 minutes per hour.
- h. For each batch electrolytic process tank and each flash process tank using a cover to comply with Condition 4.1.c or 5.1.b, the permittee must include the following: [LRAPA 34-016(5) and 40 CFR 63.11508(d)(6)]
  - i. The tank name or identification number;
  - ii. The process or tank type; and
  - iii. Certification that the tank was operated with the cover in place for at least 95% of the electrolytic processing time.
- i. For each continuous electrolytic process tank using a cover to comply with Condition 4.1.c, the permittee must include the following: [LRAPA 34-016(5) and 40 CFR 63.11508(d)(7)]
  - i. The tank name or identification number;
  - ii. The process or tank type; and
  - iii. Certification that the tank was operated with at least 75% of the tank surface area covered during all electrolytic processing time.
- j. Total ampere hours for each tank that uses or has emissions of one or more of the plating and polishing metal HAPs (cadmium, chromium, lead, manganese, nickel). [LRAPA 34-016(5)]

#### 12.4. Excess Emissions

The permittee must notify LRAPA by telephone or in person of any excess emissions which are of a nature that could endanger public health.

- a. Such notice must be provided as soon as possible, but never more than one hour after becoming aware of the problem. Notice must be made to the LRAPA office identified in Condition 13.2.
- b. If the excess emissions occur during non-business hours, the permittee must notify LRAPA by calling the Oregon Emergency Response System (OERS). The current number is 1-800-452-0311.
- c. The permittee must submit follow-up reports when required by LRAPA.

#### 12.5. Initial Startup Notice

The permittee must notify LRAPA in writing of the date a new facility is started up. The notification must be submitted no later than seven (7) days after startup.

#### 12.6. Notice of Change of Ownership of Company Name

The permittee must notify LRAPA in writing using a LRAPA "Transfer Application Form" within 60 days after any of the following:

- a. Legal change of the name of the company as registered with the Corporations Division of the State of Oregon; or
- b. Sale or exchange of the activity or facility.

#### 12.7. Construction of Modification Notices

The permittee must notify LRAPA in writing using a LRAPA "Notice of Intent to Construct Form," or other permit application form, and obtain approval in accordance with LRAPA title 34 before:

a. Constructing, installing, or establishing a new stationary source that will cause an increase in any regulated pollutant emissions;

- b. Making any physical change or change in operation of an existing stationary source that will cause an increase, on an hourly basis at full production, in any regulated pollutant emissions; or
- c. Constructing or modifying any air pollution control equipment.

#### 12.8. Where to Send Reports and Notices

The reports, with the permit number prominently displayed, must be sent to LRAPA as identified in Condition 13.2.

### **13.0 ADMINISTRATIVE REQUIREMENTS**

#### 13.1. Reassignment to the General ACDP

A permittee that wishes to continue assignment to this General ACDP must submit to LRAPA an application for reassignment as follows:

- a. The application must be received by LRAPA within 30 days prior to the expiration date listed on this permit;
- b. The application must be sent to the LRAPA office identified in Condition 13.2.; and
- c. The permittee may submit an application for either a Simple or Standard ACDP at any time, but the permittee must continue to comply with the General ACDP until LRAPA takes final action on the Simple or Standard ACDP application.

#### 13.2. Permit Coordinator Addresses

All reports, notices, and applications should be directed to LRAPA as follows:

Lane Regional Air Protection Agency 1010 Main Street Springfield, OR 97477 541-736-1056

#### 13.3. LRAPA's web site

Information about air quality permits and the LRAPA's regulations may be obtained from the LRAPA web page at <u>www.lrapa.org</u>.

### 14.0 FEES

#### 14.1. Annual Compliance Fee

The annual fees specified in LRAPA 37-0020, Table 2, Part 2 and 3 are due on or by **December** 1 of each year this permit is in effect. Invoices indicating the amount, as determined by LRAPA regulations, will be mailed prior to the above date.

#### 14.2. Change of Ownership or Company Name Fee

The Non-Technical Permit Modification specific activity fee specified in LRAPA 37-0020, Table 2, Part 4 is due with an application for changing the ownership or the name of the company of a source assigned to this permit. Forms that require fees must be sent together to the address in Condition 14.3.

#### 14.3. Where to Submit Fees

Fees, with a permit number prominently displayed, must be submitted to:

Lane Regional Air Protection Agency 1010 Main Street Springfield, Oregon 97477

### **15.0 GENERAL CONDITIONS AND DISCLAIMERS**

#### 15.1. Other Regulations

In addition to the specific requirements listed in this permit, the permittee must comply with all other applicable legal requirements enforceable by LRAPA.

#### 15.2. Conflicting Conditions

In any instance in which there is an apparent conflict relative to conditions in this permit, the most stringent conditions apply.

#### 15.3. Masking of Emissions

The permittee must not cause or permit the installation of any device or use any means designed to mask the emissions of an air contaminant that causes or is likely to cause detriment to health, safety, or welfare of any person or otherwise violate any other regulation or requirement.

#### 15.4. LRAPA Access

The permittee must allow LRAPA's representatives access to the plant site and pertinent records at all reasonable times for the purposes of performing inspections, surveys, collecting samples, obtaining data, reviewing and copying air contaminant emissions discharge records and conducting all necessary functions related to this permit in accordance with ORS 468.095.

#### 15.5. Permit Availability

The permittee must have a copy of the permit available at the facility at all times.

#### 15.6. Outdoor Burning

The permittee may not conduct any outdoor burning except as allowed by LRAPA title 47.

#### 15.7. Asbestos

The permittee must comply with the asbestos abatement requirements in LRAPA title 43 for all activities involving asbestos-containing materials, including, but not limit to, demolition, renovation, repair, construction, and maintenance.

#### 15.8. Property Rights

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations.

#### 15.9. Termination, Revocation, Rescission, or Modification

LRAPA may modify or revoke this permit as authorized under LRAPA title 37.

## **16.0 ABBREVIATIONS, ACRONYMS, AND DEFINITIONS**

6W	40 C.F.R. part 63 subpart WWWWWW as adopted in OAR chapter 340 division 244	
ACDP	Air Contaminant Discharge Permit	
AQGP	Air Quality General Permit	
AQMA	Air Quality Maintenance Area	
calendar year	The 12-month period beginning January 1st and ending December 31 <sup>st</sup>	
CAO	Cleaner Air-Oregon	
Cd	Cadmium	
C.F.R.	Code of Federal Regulations	
Cr	Chromium	
DEQ	Oregon Department of Environmental Quality	
EPA	US Environmental Protection Agency	
НАР	Hazardous Air Pollutant as defined by LRAPA title 44	
HEPA	high efficiency particulate air	
LRAPA	Lane Regional Air Protection Agency	
Metal HAP	Cadmium, chromium, nickel, manganese, and lead	

Mn	Manganese		
NA	not applicable		
NESHAP	National Emissions Standards for Hazardous Air Pollutants		
Ni	Nickel		
OAR	Oregon Administrative Rules		
OERS	Oregon Emergency Response System		
ORS	Oregon Revised Statutes		
O&M	operation and maintenance		
Pb	lead		
PM	particulate matter		
PM <sub>10</sub>	particulate matter less than 10 microns in size		
PM <sub>2.5</sub>	particulate matter less than 2.5 microns in size		
PSEL	Plant Site Emission Limit		
SDS	Safety Data Sheet		
SIC	Standard Industrial Code		
SOP	Standard operating procedures		
VE	visible emissions		
VOC	volatile organic compound		
year	A period consisting of any 12- consecutive calendar months		

#### **Definition:**

**Temporary Thermal Spraying** means a thermal spraying operation that uses or emits any of the plating and polishing metal HAP, as defined in Condition 1.1.b, and that lasts no more than 1 hour in duration during any one day and is conducted in situ. Thermal spraying that is conducted in a dedicated thermal spray booth or structure is not considered to be temporary thermal spraying. [40 CFR 63.11511]

Jce: 03/02/10 MKH 05/05/11: rcl 8/30/11 DRD 6/1/20. MKH 10/12/21: rr 12/1/21 AQGP-026 plating and polishing

General Permit No.: AQGP-026r Source Number: 207003 Assessment Report Page 1 of 7



Lane Regional Air Protection Agency

# GENERAL AIR CONTAMINANT DISCHARGE PERMIT ASSESSMENT REPORT

### **PLATING AND POLISHING**

Quality Metal Finishing Source No. 207003 1260 Wallis Street Eugene, Oregon 97402 <u>https://qualitymetalfinishing.com/</u>

#### SOURCE DESCRIPTION AND QUALIFICATION

- This General Permit is designed to regulate air contaminant emissions from plating and polishing operations subject to the Plating and Polishing Operations National Emission Standard for Hazardous Air Pollutants (NESHAP) (40 CFR part 63 subpart WWWWW). The Plating and Polishing Operations NESHAP regulates facilities engaged in one or more of the following operations that uses, or has emissions of, compounds of one or more plating and polishing metal Hazardous Air Pollutant (HAP). Plating and polishing metal HAP means any compound of the following metals: cadmium (Cd), chromium (Cr), lead (Pb), manganese (Mn), and nickel (Ni). With the exception of lead, plating and polishing metal HAP also include any of these metals in the elemental form.
  - Electroplating other than chromium electroplating (i.e., nonchromium electroplating)
  - Electroless or non-electrolytic plating
  - Other non-electrolytic metal coating processes, such as chromate conversion coating, nickel acetate sealing, sodium dichromate sealing, and manganese phosphate coating; and thermal spraying
  - Dry mechanical polishing of finished metals and formed products after plating
  - Electroforming
  - Electropolishing
- 2. This General Permit does not apply to activities that are included in the exemptions from

the Plating and Polishing Operations NESHAP as follows:

- Process units 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).
- Research and development process units, as defined in 40 CFR 63.11511.
- Process units that are used strictly for educational purposes.
- Thermal spraying conducted to repair surfaces;
- Dry mechanical polishing conducted to restore the original finish to a surface to apply to restoring the original finish
- Any plating or polishing process that does not use any material that contains cadmium, chromium, lead, or nickel in amounts of 0.1 percent or more by weight, or that contains manganese in amounts of 1.0 percent or more by weight, as reported on the Safety Data Sheet for the material
- 3. The facilities assigned to this General Permit may not emit any other air pollution that requires regulation beyond that specified in this permit, except for other pollution emissions that also qualify for assignment, and are assigned, to other General Permits and categorically insignificant activities as defined under LRAPA Title 12. A facility that has experienced reoccurring or serious compliance problems is not eligible for assignment to this permit.
- 4. If this General Permit does not cover all requirements applicable to the facility, the other applicable requirements must be covered by assignment to one or more General Permit Attachments in accordance with LRAPA 37-0062, otherwise the facility must obtain a Simple or Standard Permit.
- 5. A facility requesting to be assigned to a General Permit Attachment, in accordance with LRAPA 37-0062, for a source category in a higher annual fee class, must be reassigned to the General Permit for the source category in the higher annual fee class.

#### ASSESSMENT OF EMISSIONS

- 6. Facilities assigned to this General Permit are sources of particulate matter (PM) and hazardous air pollutant (HAP) emissions.
- 7. LRAPA has assessed the level of emissions from these facilities and determined that facilities complying with the operational limits and monitoring requirements of this permit will remain area sources of federal hazardous air pollutants and compliant with applicable emission limits.

#### FACILITY EMISSION UNITS

8. The facility does not conduct any chromium plating, polishing, grinding, electropolishing, or electro forming. The facility has the following equipment and/or activities regulated by the permit:

Emission Unit (EU)	Pollution Controls
Zinc Electroplating	Work practices to minimize emissions
Electroless Nickel Plating	Work practices to minimize emissions
_	Nickel tank covered when not in use
Chromating of Aluminum (contains no chromium)	Work practices to minimize emissions
Nickel Acetate Seal	Work practices to minimize emissions
	Nickel tank covered when not in use
Chromating Zinc (chrome containing)	Work practices to minimize emissions
Chromating Zinc (non-chrome containing)	Work practices to minimize emissions

#### SOURCE TEST RESULTS

9. LRAPA does not have any record of source testing at this facility. Testing is not required by the permit for this facility.

#### SPECIFIC AIR PROGRAM APPLICABILITY

- 10. Facilities assigned to this General Permit are subject to the general visible emissions standards, nuisance requirements (control of fugitive dust and odors) in LRAPA titles 32 and 48. The permit contains requirements and limitations to ensure compliance with these standards.
- 11. The General Permit incorporates the regulations in 40 CFR part 63 subpart HHHHHH for the Plating and Polishing Operations NESHAP. The General Permit contains requirements and limitations to ensure compliance with these regulations. EPA promulgated the NESHAP on July 1, 2008. This NESHAP is adopted in LRAPA Title 44.
- 12. Oregon DEQ conducted a general activity-based risk screening for plating and polishing sources. This permit requires that sources with nickel-emitting tanks install tank covers on a specified timeline, unless otherwise approved by LRAPA. Approval to not install tank covers will be limited to facilities that demonstrate that all nickel-containing tanks are controlled by a composite mesh pad, packed bed scrubber, or mesh pad mist eliminator. Additionally, facilities must not use any wetting agent or fume suppressants that contain per- or polyfluoroalkyl substances. Permittees can use existing purchased inventory of these fume suppressants until they are exhausted.

#### COMPLIANCE ASSURANCE

- 13. Permittees are required to maintain records of notifications, startup and shutdowns, malfunctions, maintenance activities, production, compliance, work practice activities, and complaints received at the facility that relate to air pollution concerns. These items are reported to LRAPA annually, as applicable.
- 14. LRAPA staff members review annual report submittals and perform site inspections of the permitted facilities on a routine basis; inspections may be performed more frequently if complaints are received.

#### **REVOCATION OF ASSIGNMENT**

15. Any facility that fails to demonstrate compliance, generates complaints, or fails to conform to the requirements and limitations contained in the permit may have its assignment to the General Permit revoked. The facility would then be subject to a more stringent level of permitting.

#### PUBLIC NOTICE

16. General Air Contaminant Discharge Permits are authorized by LRAPA Rules and Regulations and are part of the State Implementation Plan. As part of the General ACDP issuance process under LRAPA title 31, the public was provided at least 30 days to submit written comments. There were no comments received during the public comment period.

#### DEFINITIONS

17. The terms not defined in the General Permit use the definitions found in LRAPA title 12, 40 CFR part 63 subpart A (General Provisions §63.2), or 40 CFR part 63 subpart WWWWW (§63.11511).

**Batch electrolytic process tank** means a tank used for an 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 (i.e., as a batch) 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 or parts are removed from the tank as a unit.

**Bench-scale** means any operation that is small enough to be performed on a bench, table, or similar structure so that the equipment is not directly contacting the floor.

**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** 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. This process is also called reel-to-reel electrolytic plating.

**Cyanide plating** means plating processes performed in tanks that use cyanide as a major bath ingredient and that operate at pH of 12 or more, and use or emit any of the plating and polishing metal HAP. The cyanide in the bath works to dissolve the HAP metal added as a cyanide compound (e.g., cadmium cyanide) and creates free cyanide in solution, which helps to corrode the anode. These tanks are self-regulating to a pH of 12 due to the caustic nature of the cyanide bath chemistry.

**Deviation** means any instance in which an affected source fails to meet any Condition of the permit. This includes but is not limited to, any equipment standard (including emissions and operating limits), management practice, or operation and maintenance requirement. Deviation also includes failing to meet any Condition of this 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 with any of the plating and polishing metal HAP 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.

**Electroless plating** means a non-electrolytic process that uses or emits any of the plating and polishing metal HAP 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. Electroless plating is also called non-electrolytic plating. 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 that use or emit any of the plating and polishing metal HAP 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** means an electrolytic process that uses or emits any of the plating and polishing metal HAP 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 metal anodes fabricated of the same metal being plated, or by direct replenishment of the solution with metal salts or oxides; electroplating is also called electrolytic plating.

**Electropolishing** means an electrolytic process performed in a tank after plating that uses or emits any of the plating and polishing metal HAP in which a work piece is attached to an anode

immersed in a bath, and the metal substrate is dissolved electrolytically, thereby removing the surface contaminant; electropolishing is also called electrolytic polishing. For the purposes of this permit, electropolishing does not include bench-scale operations.

**Flash electroplating** (or short-term electroplating) means an electrolytic process performed in a tank that uses or emits any of the plating and polishing metal HAP and that is used no more than 3 cumulative minutes per hour or no more than 1 cumulative hour per day.

**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 HAP content of material used in plating and polishing means either 1) for plating, metal coating, or electropolishing this is the HAP content as determined from an analysis or engineering estimate of the HAP contents of the tank bath or solution; or 2) for thermal spraying this is the HAP content of the metal coating being applied. Safety data sheet (SDS) information may be used in lieu of testing or engineering estimates.

**Non-cyanide electrolytic plating and electropolishing processes** means electroplating, electroforming, and electropolishing that uses or emits any of the plating and polishing metal HAP 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. Both electroplating and electroforming can be performed with cyanide as well.

**Non-electrolytic plating** means a process that uses or emits any of the plating and polishing metal HAP 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. Non-electrolytic plating is also called electroless plating. Examples include chromate conversion coating, nickel acetate sealing, electroless nickel plating, sodium dichromate sealing, and manganese phosphate coating.

**Plating and polishing facility** means a facility engaged in one or more of the following processes that uses or emits any of the plating and polishing metal HAP: electroplating processes other than chromium electroplating (i.e., non-chromium electroplating); electroless plating; other non-electrolytic metal coating processes performed in a tank, such as chromate conversion coating, nickel acetate sealing, sodium dichromate sealing, and manganese phosphate coating; thermal spraying; and the dry mechanical polishing of finished metals and formed products after plating or thermal spraying. Plating is performed in a tank or thermally sprayed so that a metal coating is irreversibly applied to an object. Plating and polishing does not include any bench-scale processes.

**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 contains cadmium, chromium, lead, or nickel in amounts greater than or equal to 0.1 percent by weight (as the metal), and contains manganese in 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 considered to be a plating and polishing metal HAP.

**Repair** means any process used to return a finished object or tool back to its original function or shape.

Short-term electroplating: (see flash electroplating).

**Startup of the tank bath** is 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.

**Temporary thermal spraying** means a thermal spraying operation that uses or emits any of the plating and polishing metal HAP and that lasts no more than 1 hour in duration during any one day and is conducted in situ. Thermal spraying that is conducted in a dedicated thermal spray booth or structure is not considered to be temporary thermal spraying.

**Thermal spraying (also referred to as metal spraying or flame spraying)** is a process that uses or emits any of the plating and polishing metal HAP 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.

AQGP-026r, Plating and Polishing General ACDP RevRept MKH 10/12/21