

Amend section 67450.11 to read as follows:

Section 67450.11. List of Influent Waste Streams and Treatment Process(es) for Influent Waste Streams Eligible for Treatment Pursuant to Permit by Rule.

(a) ...

* * * *

(d)(1) Notwithstanding subsection (a), cyanide-containing aqueous wastes listed in subsection (d)(2) are eligible for treatment by TTUs operating pursuant to section 67450.2(a) or FTUs operating pursuant to section 67450.2(b) provided that:

- (A) treatment of the waste is not regulated under the federal Resource Conservation and Recovery Act of 1976, as amended (42 U.S.C., section 6901 et seq.);
- (B) the waste is not extremely hazardous pursuant to sections 66261.107 or 66261.110 (except for waste identified in paragraphs (d)(2)(D) and (E) of this subsection;
- (C) the waste to be treated is a hazardous waste only because it contains cyanide or a combination of cyanide and metals listed in section 66261.24(a)(2);
- (D) the treatment is conducted solely for the purpose of treating cyanide-containing waste in accordance with processes listed in subsection (d)(3), or (d)(7); or the purpose of treating spent process solutions by electrowinning pursuant to subsection (d)(6);
- (E) the owner or operator of the TTU and/or FTU is in compliance with the requirements of (d)(4);
- (F) all treatment is conducted in tanks or containers; and
- (G) all discharges to air comply with applicable federal, state, and local air pollution control and worker safety statutes and regulations.

(2) Cyanide-containing wastes eligible for treatment pursuant to this subsection are:

- (A) Aqueous wastes generated by rinsing workpieces and fixtures holding workpieces that were processed in cyanide containing solutions;
- (B) Aqueous wastes generated by regeneration of demineralizer (ion exchange) columns that were used for recycling of wastewaters at facilities that have eliminated the discharge of wastewaters (other than sanitary discharges.)
- (C) Aqueous wastes generated by rinsing containers, pumps, hoses, and other equipment used to transfer cyanide solutions onsite;
- (D) Spent process solutions managed in accordance with the requirements of subsection (d)(6); and
- (E) Spent process solutions identified in managed in accordance with the requirements of subsection (d)(7).

(3) The following processes may be used to treat the wastes described in subsection (d)(2) subject to conditions specified in this section:

- (A) Oxidation by addition of hypochlorite;

- (B) Oxidation by addition of peroxide or ozone, with or without the use of ultraviolet light;
- (C) Alkaline chlorination;
- (D) Electrochemical oxidation; or
- (E) Ion exchange.

(4) The owners or operators of all sites or facilities subject to this subsection shall implement the following to reduce waste generation, and minimize or eliminate releases to work areas and the environment:

(A) Spill and Release Prevention. Use holding racks and drain boards between all process and rinse tanks to contain plating drag-out, rinse solution drag-out, and return drag-out solutions to process tanks.

(B) Pollution Prevention.

1. Use countercurrent rinsing to reduce water use and wastewater generation;
2. At a minimum, every four (4) years, review the use of cyanide containing process baths to determine if a non-cyanide alternative with equivalent results is available as part of:
 - i. the Source Reduction Evaluation Review and Plan pursuant to Health and Safety Code section 25244.19,
 - ii. an Environmental Management System, or
 - iii. an environmental performance evaluation plan; and
3. Provide initial and annual training to employees on how to reduce wastes in the production area, including but not limited to procedures to:
 - i. Reduce drag-out of plating baths,
 - ii. Minimize contaminants in process baths,
 - iii. Extend process bath life,
 - iv. Minimize chemical spills and splashes from process and rinse solutions handling practices, and
 - v. Respond to chemical spills to reduce waste and minimize releases from process and rinse solutions handling practices.

(5) Non-aqueous cyanide containing wastes may not be treated under the authority of this subsection.

(6) Spent process solutions containing recoverable amounts of metal may be treated by electrowinning in order to recover those metals provided that the owner or operator is in compliance with all other applicable requirements of this section. Incidental treatment of cyanide contained in the spent process solution by the electrowinning process is also

authorized by this subsection. For the purposes of this section, electrowinning means the electrodeposition of metals from spent process solution.

(7) Spent cyanide-containing process solutions may be treated by slow addition to the rinsates identified in paragraphs (d)(2)(A) and (C) of this subsection for the purpose of reducing cyanide processing hazards provided that the owner or operator is in compliance with the following requirements. Solutions resulting from the mixing authorized in this subsection shall be further treated by processes listed in subsection (d)(3) in accordance with the other provisions of this section. Owners or operators managing this cyanide-containing spent process solutions shall ensure the following:

- (A) the concentration of cyanide in solutions treated in accordance with subsection (d)(3) shall not exceed 5000 parts per million (ppm);
- (B) residual solids removed by the treatment process, such as filtercakes and sludges from clarifiers, shall be recycled by a facility that recovers metals from the residual materials; and
- (C) The following records are maintained at the facility for a minimum of three years from the last date of any activity authorized pursuant to this paragraph of this subsection and makes it available to authorized representatives of the Department, the CUPA, or the U.S. EPA upon request:
 - 1. Written approval from the agency operating the POTW receiving the facility's discharges required by subsection 67450.3(a)(7)(A) or 67450.3(c)(5)(A);
 - 2. A written method for ensuring that the concentration of cyanide entering the treatment system from the rinsewater stream does not exceed 5000 ppm; and
 - 3. Documentation that the residual materials generated by the treatment pursuant to paragraph (d)(7)(B) of this subsection have been sent to a recycling facility for metals recovery.

NOTE: Authority cited: Sections 25150, ~~58004~~, and 58012, Health and Safety Code. Reference: Sections 25150, 25200, ~~and 25200.2~~, and 25201 Health and Safety Code.

Proposed Language: Permit by Rule for Treatment of Aqueous Wastes with Cyanides

Page 4

Amend title 27, division 3, subdivision 1, chapter 4, C., Information Description -- Permit by Rule (PBR) Waste and Treatment Process Combinations, to read as follows:

* * * * *

IV HAZARDOUS WASTE				
C. Onsite Tiered Permitting - Waste and Treatment Process Combinations				
INFORMATION DESCRIPTION - Permit by Rule (PBR) Waste and Treatment Process Combinations. These are all of the eligible waste streams and treatment processes that are available within the tier. NOTE: PBR codes are the same as CESQT, except that items 630-14a through 630-17 cannot be treated under CESQT.				
ID	ELEMENT	EDIT CRITERIA / CODE	LENGTH	TYPE
630-10d	Used Oil, Mixed Oil, Oily Water, O/W Sludges - Separation by Size, Magnetism, or Density	Y or N	1	AN
630-10e	Used Oil, Mixed Oil, Oily Water, O/W Sludges - Reverse Osmosis	Y or N	1	AN
630-10f	Used Oil, Mixed Oil, Oily Water, O/W Sludges - Biological Process Using Microorganisms	Y or N	1	AN
630-11a	Containers (< 110 Gallons) or Liners - Rinsing with Liquid	Y or N	1	AN
630-11b	Containers (< 110 Gallons) or Liners - Crush, Shred, Grind, or Puncture	Y or N	1	AN
630-12a	Multi-component Resins - Mixing per Manufacturer's Instructions	Y or N	1	AN
630-13	Wastestream & Treatment Technology Combination Certified by DTSC per HSC 25200.1.5	Valid Certified Technology Number	10	AN
<u>630-14a</u>	<u>Cyanide Rinsewater, Cyanide Destruction – Oxidation by Addition of Hypochlorite</u>	<u>Y or N</u>	<u>1</u>	<u>AN</u>
<u>630-14b</u>	<u>Cyanide Rinsewater, Cyanide Destruction – Oxidation by Addition of Peroxide or Ozone, with or without Ultraviolet Light</u>	<u>Y or N</u>	<u>1</u>	<u>AN</u>
<u>630-14c</u>	<u>Cyanide Rinsewater, Cyanide Destruction – Alkaline Chlorination</u>	<u>Y or N</u>	<u>1</u>	<u>AN</u>
<u>630-14d</u>	<u>Cyanide Rinsewater, Cyanide Destruction – Electrochemical Oxidation</u>	<u>Y or N</u>	<u>1</u>	<u>AN</u>
<u>630-14e</u>	<u>Cyanide Rinsewater, Cyanide Removal – Ion Exchange</u>	<u>Y or N</u>	<u>1</u>	<u>AN</u>
<u>630-15a</u>	<u>Demineralizer Regenerate with Cyanides, Cyanide Destruction - Oxidation by Addition of Hypochlorite</u>	<u>Y or N</u>	<u>1</u>	<u>AN</u>

Proposed Language: Permit by Rule for Treatment of Aqueous Wastes with Cyanides

630-15b	<u>Demineralizer Regenerate with Cyanides, Cyanide Destruction - Oxidation by Addition of Peroxide or Ozone, with or without Ultraviolet Light</u>	<u>Y or N</u>	<u>1</u>	<u>AN</u>
630-15c	<u>Demineralizer Regenerate with Cyanides, Cyanide Destruction - Alkaline Chlorination</u>	<u>Y or N</u>	<u>1</u>	<u>AN</u>
630-15d	<u>Demineralizer Regenerate with Cyanides, Cyanide Destruction - Electrochemical Oxidation</u>	<u>Y or N</u>	<u>1</u>	<u>AN</u>
630-15e	<u>Demineralizer Regenerate with Cyanides, Cyanide Removal - Ion Exchange</u>	<u>Y or N</u>	<u>1</u>	<u>AN</u>
630-16a	<u>Transfer Equipment Rinsate with Cyanides, Cyanide Destruction – Oxidation by Addition of Hypochlorite</u>	<u>Y or N</u>	<u>1</u>	<u>AN</u>
630-16b	<u>Transfer Equipment Rinsate with Cyanides, Cyanide Destruction – Oxidation by Addition of Peroxide or Ozone, with or without Ultraviolet Light</u>	<u>Y or N</u>	<u>1</u>	<u>AN</u>
630-16c	<u>Transfer Equipment Rinsate with Cyanides, Cyanide Destruction – Alkaline Chlorination</u>	<u>Y or N</u>	<u>1</u>	<u>AN</u>
630-16d	<u>Transfer Equipment Rinsate with Cyanides, Cyanide Destruction – Electrochemical Oxidation</u>	<u>Y or N</u>	<u>1</u>	<u>AN</u>
630-16e	<u>Transfer Equipment Rinsate with Cyanides, Cyanide Removal – Ion Exchange</u>	<u>Y or N</u>	<u>1</u>	<u>AN</u>
630-17a	<u>Process solutions with Cyanides added slowly to rinse tanks, Cyanide Destruction – Oxidation by Addition of Hypochlorite</u>	<u>Y or N</u>	<u>1</u>	<u>AN</u>
630-17b	<u>Process solutions with Cyanides added slowly to rinse tanks, Cyanide Destruction – Oxidation by Addition of Peroxide or Ozone, with or without Ultraviolet Light</u>	<u>Y or N</u>	<u>1</u>	<u>AN</u>
630-17c	<u>Process solutions with Cyanides added slowly to rinse tanks, Cyanide Destruction – Alkaline Chlorination</u>	<u>Y or N</u>	<u>1</u>	<u>AN</u>
630-17d	<u>Process solutions with Cyanides added slowly to rinse tanks, Cyanide Destruction – Electrochemical Oxidation</u>	<u>Y or N</u>	<u>1</u>	<u>AN</u>

630-17e	Process solutions with Cyanides added slowly to rinse tanks, Cyanide Removal – Ion Exchange	Y or N	1	AN
630-18	Electrowinning Process Solutions with Cyanides, Metal Recovery	Y or N	1	AN

Amend title 27, division 3, subdivision 1, chapter 6, “Unified Program Consolidated Form – Onsite Tiered Permitting, Permit by Rule Page, Waste and Treatment Process Combinations,” by adding the following items to the end of the existing form:

* * * *

- 14. Aqueous wastes generated by rinsing products and fixtures holding products that were processed in cyanide containing solutions may be treated by the following technologies:**
- Oxidation by addition of hypochlorite
 - Oxidation by addition of peroxide or ozone, with or without the use of ultraviolet light
 - Alkaline chlorination
 - Electrochemical oxidation
- 15. Aqueous wastes generated by regeneration of demineralizer (ion exchange) columns that were used for recycling of wastewaters at facilities that have eliminated the discharge of wastewaters (other than sanitary discharges) may be treated by the following technologies:**
- Oxidation by addition of hypochlorite
 - Oxidation by addition of peroxide or ozone, with or without the use of ultraviolet light
 - Alkaline chlorination
 - Electrochemical oxidation
- 16. Rinsate from rinsing equipment used to transfer aqueous solutions containing cyanides such as containers, pumps, and hoses may be treated by the following technologies:**
- Oxidation by addition of hypochlorite
 - Oxidation by addition of peroxide or ozone, with or without the use of ultraviolet light
 - Alkaline chlorination
 - Electrochemical oxidation

17. Process solutions containing cyanides added slowly to a rinse tank at a level that never exceeds 5000 ppm cyanide in the rinse tank may be treated by the following technologies:

- ⊕ Oxidation by addition of hypochlorite
- ⊕ Oxidation by addition of peroxide or ozone, with or without the use of ultraviolet light
- ⊕ Alkaline chlorination
- ⊕ Electrochemical oxidation

18. Process solutions containing cyanides with recoverable amounts of metal may be treated by the following technology:

- ⊕ Electrowinning to recover metals prior to further treatment, including destruction of incidental amounts of cyanide by electrochemical oxidation resulting from the electrowinning process