



- 11. Containers of 110 gallons or less capacity which are not constructed of wood, paper, cardboard, fabric, or any other similar absorptive material, which have been emptied as specified in Title 40 of the Code of Federal Regulations, section 261.7 or inner liners removed from empty containers that once held hazardous waste or hazardous material and which are not excluded from regulation may be treated by the following technologies provided the treated containers and rinseate are managed in compliance with applicable requirements.**
- a. Rinsing with a suitable liquid capable of dissolving or removing the hazardous constituents which the container held.
  - b. Physical processes such as crushing, shredding, grinding or puncturing, that change only the physical properties of the container or inner liner, provided the container or inner liner is first rinsed and the rinseate is removed from the container or inner liner.
- 12. Multi-component resins may be treated by the following process:**
- a. Mixing the resin components in accordance with the manufacturer's instructions.
- 13. A waste stream technology combination certified by the Department pursuant to Section 25200.1.5 of the Health and Safety Code as appropriate for authorization under Permit by Rule.**
- Certified Technology Number: \_\_\_\_\_
- 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:**
- 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.
  - e. Ion exchange.
  - f. Reverse osmosis.
- 15. Aqueous wastes generated by reverse osmosis or the regeneration of demineralizer (ion exchange) columns that were used for recycling of wastewaters at facilities that maintain zero discharge of wastewaters derived from the treatment of cyanide-containing aqueous waste may be treated by the following technologies:**
- 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.
  - e. Ion exchange.
  - f. Reverse osmosis.
- 16. Rinseate from rinsing equipment used to transfer aqueous solutions containing cyanides such as containers, pumps, and hoses may be treated by the following technologies:**
- 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.
  - e. Ion exchange.
  - f. Reverse osmosis.
- 17. Aqueous wastes generated by the following onsite recycling activities 1) Rinsing spent anode bags prior to onsite reuse; or 2) Rinsing empty containers prior to onsite reuse may be treated by the following technologies:**
- 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.
  - e. Ion exchange.
  - f. Reverse osmosis.
- 18. Aqueous wastes generated by onsite laboratories conducting analyses and testing may be treated by the following technologies:**
- 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.
  - e. Ion exchange.
  - f. Reverse osmosis.
- 19. 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.
- 20. Process solutions containing cyanides added slowly to a rinse tank at a level that never exceeds 5,000 milligrams per liter cyanide in the rinse tank may be treated by the following technologies:**
- 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.
  - e. Ion exchange.
  - f. Reverse osmosis.

# Waste and Treatment Process Combinations

The Waste and Treatment Process Combinations pages list those waste and treatment combinations certified by DTSC pursuant to HSC §25200.1.5 for authorization under CE, CA, and PBR tiers. Each page is specific to a tier, with each tier specific page listing the wastes and treatment processes eligible under that tier. Note that some of the categories have volume or concentration restrictions that must be met in order to qualify for that tier. Additionally, some of the wastes refer to 22 CCR and others to the Health and Safety Code.

Complete one Waste and Treatment Process Combinations page for each unit, except CE-CL units.

(Note: the numbering of the instructions follows the data element numbers that are on the UPCF pages. These data element numbers are used for electronic submission and are the same as the numbering used in 27 CCR, division 3, subdivision 1, chapters 1-5.)

Please number all pages of your submittal. This helps your CUPA or local agency identify whether the submittal is complete and if any pages are separated.

606. UNIT ID NUMBER - Enter the unit ID number (same as item 606 from the Onsite Hazardous Waste Treatment Notification - Unit page).
1. FACILITY ID NUMBER - Leave this blank. This number is assigned by the CUPA. This is the unique number which identifies your facility.

627. WASTE AND TREATMENT PROCESS COMBINATIONS - CESQT 628. WASTE AND TREATMENT PROCESS COMBINATIONS - CESW 629. WASTE AND TREATMENT PROCESS COMBINATIONS - CA 630. WASTE AND TREATMENT PROCESS COMBINATIONS - PBR 631. WASTE AND TREATMENT PROCESS COMBINATIONS - CEL	Use the correct page for the unit. Check the waste and treatment process(es) that pertain to the unit. If the process is a technology certified by DTSC, please enter the Certified Technology Number (Cert. #). Certified technologies appropriate for authorization, and the eligible tiers, are listed below.
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Note that reactive and extremely hazardous wastes are not allowed to be treated under any of the onsite treatment tiers, except for certain wastes under Conditionally Exempt - Specified Wastestreams and Permit by Rule.

## CERTIFIED TECHNOLOGIES

DTSC is authorized to certify hazardous waste technologies. Appropriate certified technologies may be eligible for CE, CA or PBR onsite treatment tiers. As of April 1, 1999, there is one certified technology for these tiers. The certification is for aldehyde treatment processes and is eligible for the CESW tier. The approved technology is:

Neutralex Cert. #. 97-01-0024	SCIGEN 333 East Gardena Blvd. Gardena, CA 90248
Effective Date:	June 29, 1997 (expires June 29, 2000)
Description:	Batch treatment for 10 percent Formalin generated by medical, educational, and laboratory facilities. Chemically treats in a provided 8 liter vessel. After testing, allows for disposal to sanitary sewer.
Tier:	Authorized for the CESW tier.

A copy of published Certification Statements and additional updates may be obtained by contacting DTSC at (916) 322-3670 or from the Cal/EPA on-line Bulletin Board via modem at (916) 322-5041.