

Fact Sheet
May 2005

Fixed Treatment Unit Operating Under Conditionally Exempt-Small Quantity Treatment



Hazardous Waste Management Program

*DTSC is one of six
Boards and
Departments within
the California
Environmental
Protection Agency.
The Department's
mission is to restore,
protect and enhance
the environment,
to ensure public health,
environmental
quality and
economic vitality,
by regulating
hazardous waste,
conducting and
overseeing
cleanups, and
developing
and promoting
pollution prevention.*

State of California



California
Environmental
Protection Agency



INTRODUCTION

The Department of Toxic Substances Control (DTSC) developed this fact sheet to assist owners and operators of fixed treatment units (FTUs) in complying with Conditionally Exempt-Small Quantity Treatment (CESQT) laws and regulations. CESQT regulations are part of a tiered permitting system for hazardous waste treatment in California. This fact sheet describes the requirements for FTU owners and operators who would like to treat hazardous waste under the CESQT tier.

This fact sheet applies to FTUs only. For information regarding treatment in Transportable Treatment Units (TTUs), please see DTSC's fact sheet on TTUs titled "Transportable Treatment Unit Operating Under Conditionally Exempt -Small Quantity Treatment." This fact sheet supersedes the 1996 CESQT fact sheet and includes the revised definition of the term "treatment." Definitions of the terms used in this fact sheet are listed on pages nine through ten.

This fact sheet will help you determine if you are eligible to operate an FTU under CESQT. It will also help you understand the various administrative and technical operating requirements for conducting onsite treatment of hazardous waste. However, be advised that this fact sheet contains general information only and is not a substitute for the actual laws, the Health and Safety Code (Health & Saf. Code), division 20, chapter 6.5, and California Code of Regulations (Cal. Code Regs.), title 22, division 4.5.

You may contact your local Certified Unified Program Agency (CUPA) for additional information and instructions since the CUPA is responsible for reviewing notification forms from businesses located within its jurisdiction. A list of CUPA addresses and phone numbers is available on the California CUPA web site at www.calcupa.net/localagencylisting.pdf, and on the California Environmental Protection Agency (Cal/EPA) web site at www.calepa.ca.gov/CUPA/CUPAMail.htm.

Background on California's Tiered Permitting System

The Wright-Polanco-Lempert Hazardous Waste Treatment Permit Reform Act of 1992 established a five-tiered program for authorizing the treatment and storage of hazardous waste at many businesses required to have State authorization, but not federal authorization (i.e., authorization under the federal Resource Conservation and Recovery Act (RCRA)). This five-tiered program matches the regulatory requirements to the degree of risk posed by the facility's activities.

The permitting tiers consist of the following: Full Permit, Standardized Permit, Permit By Rule (PBR), Conditionally Authorized (CA), and Conditionally Exempt (CE). They are arranged in descending order of regulatory oversight.

- **The Full Permit tier** allows treatment and storage of RCRA and California only (non-RCRA) hazardous waste pursuant to Title 40, Code of Federal Regulations (C.F.R.), parts 264 and 270, and California Code of Regulations, title 22, section 66264.1 et seq., and section 66270.1 et seq. It includes all facilities requiring a RCRA permit (such as incinerators and land disposal facilities), and selected non-RCRA activities.
- **The Standardized Permit tier** allows offsite treatment and storage of non-RCRA and RCRA-exempt hazardous waste (Health & Saf. Code §25201.6). It includes, but is not limited to, recyclers, oil transfer

stations, and precious metals recyclers.

- **The PBR tier** allows onsite treatment of non-RCRA and RCRA-exempt hazardous waste (Cal. Code Regs., tit. 22, §67450.11). This tier is for more hazardous and higher volume wastestreams and processes than the two lower tiers.
- **The Conditionally Authorized tier** allows onsite treatment of non-RCRA and RCRA-exempt hazardous waste (Health & Saf. Code §25200.3). This tier is limited to single-hazard wastes and treatment in the unit cannot exceed 5,000 gallons or 45,000 pounds in a calendar month. However, there is no volume limit for treatment of specified dilute aqueous, acidic, alkaline, or oily wastes.
- **The Conditionally Exempt tier** allows onsite treatment of non-RCRA and RCRA-exempt hazardous waste (Health & Saf. Code §25201.5(a) and (c), 25201.14, and 25144.6(c)). This tier is for smaller quantities or less risky waste and treatment methods. It includes the following: Conditionally Exempt-Small Quantity Treatment, Conditionally Exempt-Specified Wastestreams, Conditionally Exempt-Commercial Laundries, and Conditionally Exempt-Limited.

Am I eligible to treat waste under CESQT?

You are eligible to treat waste under CESQT if your wastestreams and treatment processes are listed in the California Code of Regulations, title 22, section 67450.11. A list of those wastestreams and treatment processes is included in this fact sheet on pages six to eight. Additionally, to be eligible:

- You may only treat waste that is generated onsite and treatment must occur in tanks or containers;
- You may treat up to a total weight of **500 pounds**, or a total volume of **55 gallons**, of hazardous waste in any calendar **month**. These volumes apply to the total amount of waste treated by all units at your business (Health & Saf. Code §25201.5(a));
- You may not treat waste that is reactive or extremely hazardous;
- You may not treat waste in landfills, surface impoundments, injection wells, waste piles, land treatment units, or thermal destruction units (Health & Saf. Code §25201.5(b)); and
- You may not operate under the CESQT tier if you are required to get a permit or grant of authorization for any other hazardous waste management activity at your facility (Health & Saf. Code §25201.5(a)(2)).

Conditional Exempt Small Quantity Treatment Requirements

If you intend to operate under the CESQT tier, you must comply with the following requirements:

Notification: You must complete and submit the following forms to your CUPA (or DTSC in a non-CUPA jurisdiction):

- Business Activities Page;
- Business Owner/Operator Identification Page;
- Onsite Hazardous Waste Treatment Notification-Facility Page; and
- Onsite Hazardous Waste Treatment Notification–Unit Page of the Unified Program Consolidated Form (revised 1999).

Note: Your CUPA may require that your completed notification include a plot plan, flow diagrams and detailed descriptions of waste streams and treatment processes. This may require adding supplemental pages to the notification forms.

Each treatment unit requires a unit specific notification form. You must submit the forms at least **60 days** before beginning the first waste treatment. If you demonstrate good cause, the time period between notification and treatment can be shortened. Forms are available from your local CUPA, DTSC, or the Internet at www.calepa.ca.gov/Publications/Title27/.

Forms may be submitted in person, or sent by certified mail, with return receipt requested, to your CUPA. If you wish to submit the forms electronically, you should first contact your CUPA to determine if electronic submissions are possible.

If a change occurs to any information contained in your most recent notification, submit an amended notification package to your CUPA. Always keep a copy of the notifications that you submit and CUPA acknowledgments.

Generator Operating Standards:

Generators conducting CESQT treatment must comply with hazardous waste generator standards in California Code of Regulations, title 22, division 4.5, chapter 12. For an overview of these standards, see DTSC's fact sheets titled "Hazardous Waste Generator Requirements Fact Sheet" (January 2002) and "Accumulating Hazardous Wastes at Generator Sites Fact Sheet" (January 2002). Copies of these fact sheets are available on DTSC's Internet web site at

http://www.dtsc.ca.gov/HazardousWaste/upload/HWM_FS_Generator_Requirements.pdf and http://www.dtsc.ca.gov/HazardousWaste/upload/HWM_FS_Accumulating_HazWaste_Generators.pdf, respectively.

Operating Records: Maintain all records required by the hazardous waste generator standards. In addition, you must maintain the following records onsite for three years (Health & Saf. Code §25201.5(d)):

- Written operating instructions for the treatment unit and a record of the dates, amounts, and types of wastes treated, such as a treatment log book;
- A written inspection schedule and log of inspections conducted; and
- If discharging your waste to the sewer, records to demonstrate that you are in compliance with all applicable requirements for pretreatment and discharge.

Containers: If you treat hazardous waste in containers, you must comply with the standards for container storage and transfer activities specified in California Code of Regulations, title 22, division 4.5, chapter 14, section 66264.175, and chapter 15,

article 9 (commencing with section 66265.170). Requirements include proper management for all container transfer and storage areas, proper management of the containers to prevent leaks, and weekly inspections of the storage areas.

Tanks: If you treat hazardous waste in tanks (onground or aboveground) you must comply with the standards for storage and treatment of hazardous wastes in tanks applicable to generators.

Large Quantity Generators: If you generate 1,000 kilograms (approx. 2,200 pounds) or more of hazardous waste per month, you must comply with the standards for storage and treatment of hazardous wastes in tanks set forth in California Code of Regulations, title 22, division 4.5, chapter 15, article 10 (sections 66265.190-66265.199, except 66265.197)). Most new and existing tanks must undergo an integrity assessment and have secondary containment before being placed into service. The assessment must be in writing and certified by a qualified professional engineer (Cal. Code Regs., tit. 22, §66265.192(a)). Tanks must be reassessed every five years.

Several small categories of existing tanks may be temporarily exempt from secondary containment requirements (for details, see Cal. Code Regs., tit. 22, §66265.193). Those tanks must undergo an integrity assessment every year. The assessment must be in writing and certified by a professional engineer (see Cal. Code of Regs., tit. 22, §66265.191).

Small Quantities Generators: If you generate less than 1,000 kilograms (approx. 2,200 lbs) of waste per month, and the total waste accumulated onsite never exceeds 6,000 kilograms, you must

comply with the federal tanks standards incorporated into the California regulations by reference (see Cal. Code Regs, tit 22, §66262.34(d)). The significant difference is that you are not required to provide secondary containment and engineer certifications for your tank system.

Note: Generators treating hazardous waste in non-RCRA or RCRA-exempt *underground* tanks are subject to applicable standards in California Code of Regulations, title 23.

Ancillary Equipment: You are not required to have secondary containment for ancillary equipment for a tank or container treating hazardous waste if the ancillary equipment has undergone an integrity assessment pursuant to California Code of Regulations., title 22, section 66265.191 every two years from the date that retrofitting requirements would otherwise apply (Health & Saf. Code §25201.5(e)(1)).

Financial Assurance: You are exempt from financial assurance requirements (e.g., having to provide third party liability coverage for environmental accidents and financial assurance for closure (Health & Saf. Code §25245.4(c)).

Fees: If you conduct treatment authorized under CESQT, you will be billed a CESQT fee by your CUPA. You will be billed annually, until the unit has been certified closed according to Health and Safety Code section 25201.5(j), and you submit the closure certification to your CUPA. Also, if you operate during any part of a calendar year, you may be billed a CESQT fee for the entire year. *(Note: Each CUPA instituted a single fee system that allows for a single billing to cover the costs of oversight and inspection of your hazardous*

waste management activities (Cal. Code Regs., tit. 27, §15210)).

Closure of Treatment Units: You are not required to prepare and maintain a written closure plan. However, you must comply with all the requirements for proper closure as specified in Health and Safety Code section 25201.5(d)(8). Remove and decontaminate all waste residues, containment system components, soils, and other structures or equipment contaminated with hazardous waste from the unit. Remove the unit from service in a manner that minimizes the need for further maintenance and eliminates the escape of hazardous waste, hazardous constituents, leachate, contaminated runoff, or waste decomposition products to the environment after treatment is ceased. If hazardous waste contamination of the site has occurred, you must notify your local CUPA and DTSC.

When you permanently cease operation of a unit, you must notify your local CUPA, in writing, that you have properly closed the unit, pursuant to Health & Saf. Code section 25201.5(d)(8). The closure notification should include the following information: company name, address, EPA ID number, unit number, tier of authorization, and date of closure.

Corrective Action: You are exempt from Phase I Environmental Assessment Checklist requirements (Health & Saf. Code §25201.14(c)(5)).

Public Notice and Local Land Use: For purposes of local land use decisions, your facility is not considered a hazardous waste treatment facility if your facility is authorized under CESQT. Also, you are

not required to publish a public notice regarding your treatment operation.

Disclosure Requirement: You are exempt from the requirement to provide a disclosure statement regarding past environmental violations, compliance orders, convictions or judgments (Health & Saf. Code §25200.4).

Inspection Programs: Any authorized agency, including your local CUPA and DTSC may inspect your facility at any time. At a minimum, your facility will be inspected within two years of your initial notification, and then every three years thereafter (Health & Saf. Code §25201.4(b)(2)).

Training Classes: California Compliance School offers training on Tiered Permitting. The class focuses on how to comply with hazardous waste management requirements. Call California Compliance School at 1-800-337-1422, or access its web site at www.compliance.org for information regarding class times, locations, cost, and enrollment instructions. California Compliance School also offers four generator modules, with classes available at central locations statewide or at your worksite.

CESQT Wastestreams: The following are the eligible wastestreams and treatment processes for fixed treatment units operating under CESQT (Health & Saf. Code §25201.5 (a), and Cal. Code Regs., tit. 22, §67450.11):

1. Aqueous wastes containing hexavalent chromium may be treated by reduction of hexavalent chromium to trivalent chromium with sodium bisulfite, sodium metabisulfite, sodium

thiosulfate, ferrous sulfate, ferrous sulfide or sulfur dioxide, provided both pH and addition of the reducing agent are automatically controlled.

2. Aqueous wastes containing metals listed in California Code of Regulations, title 22, section 66261.24(a)(2), and/or fluoride salts may be treated by the following technologies:
 - (A) pH adjustment or neutralization.
 - (B) Precipitation or crystallization.
 - (C) Phase separation by filtration, centrifugation, or gravity settling.*
 - (D) Ion exchange.
 - (E) Reverse osmosis.
 - (F) Metallic replacement.
 - (G) Plating the metal onto an electrode.
 - (H) Electrodialysis.
 - (I) Electrowinning or electrolytic recovery.
 - (J) Chemical stabilization using silicates and/or cementitious types of reactions.
 - (K) Evaporation.*
 - (L) Adsorption.
3. Aqueous wastes with total organic carbon less than ten percent (10%) as measured by EPA Method 9060 described in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," SW-846, 3rd Edition, U.S. Environmental Protection Agency, 1986, and less than one percent (1%) total volatile organic compounds as measured by EPA Method 8240 described in "Test Methods for Evaluating Solid Waste, Physical/Chemical methods," SW-846, 3rd Edition, U.S. Environmental

4. Protection Agency, 1986, may be treated by the following technologies:

- (A) Phase separation by filtration, centrifugation or gravity settling, but excluding super critical fluid extraction.*
- (B) Adsorption.
- (C) Distillation.
- (D) Biological processes conducted in tanks or containers and utilizing naturally occurring microorganisms.
- (E) Photodegradation using ultraviolet light, with or without the addition of hydrogen peroxide or ozone, provided the treatment is conducted in an enclosed system.
- (F) Air stripping or steam stripping.

5. Sludges, dusts, solid metal objects, and metal workings which contain or are contaminated with metals listed in California Code of Regulations, title 22, section 66261.24(a)(2) and/or fluoride salts, may be treated by the following technologies:

- (A) Chemical stabilization using silicates and/or cementitious types of reactions.
- (B) Physical processes, which change only the physical properties of the waste such as grinding, shredding, crushing, or compacting.
- (C) Drying to remove water.*
- (D) Separation based on differences in physical properties such as size, magnetism, or density.

6. Alum, gypsum, lime, sulfur, or phosphate sludges may be treated by the following technologies:

- (A) Chemical stabilization using silicates and/or cementitious types of reactions.
- (B) Drying to remove water.*
- (C) Phase separation by filtration, centrifugation, or gravity settling.*

7. Wastes listed in California Code of Regulations, title 22, section 66261.120, that meet the criteria and requirements for special waste classification in section 66261.122 may be treated by the following technologies:

- (A) Chemical stabilization using silicates and/or cementitious types of reactions.
- (B) Drying to remove water.*
- (C) Phase separation by filtration, centrifugation or gravity settling.*
- (D) Screening to separate components based on size.
- (E) Separation based on differences in physical properties such as size, magnetism, or density.

8. Wastes, except asbestos, which have been classified by DTSC as special wastes pursuant to California Code of Regulations, title 22, section 66261.124, may be treated by the following technologies:

- (A) Chemical stabilization using silicates and/or cementitious types of reactions.
- (B) Drying to remove water.*
- (C) Phase separation by filtration, centrifugation, or gravity settling.*
- (D) Magnetic separation.

9. Inorganic acid or alkaline wastes may be treated by the following technology:

(A) pH adjustment or neutralization.

10. Soils contaminated with metals listed in California Code of Regulations, title 22, section 66261.24(a)(2), may be treated by the following technologies:

(A) Chemical stabilization using silicates and/or cementitious types of reactions.

(B) Screening to separate components by size.

(C) Magnetic separation.

11. Used oil, as defined in Health and Safety Code section 25250.1, unrefined oil waste, mixed oil, oil mixed with water and oil/water separation sludges may be treated by the following technologies:

(A) Phase separation by filtration, centrifugation, or gravity settling, but excluding super critical fluid extraction.*

(B) Distillation.

(C) Neutralization.

(D) Separation based on differences in physical properties such as size, magnetism, or density.

(E) Reverse osmosis.

(F) Biological processes conducted in tanks or containers and utilizing naturally occurring microorganisms.

12. Containers of 110 gallons or less capacity, which are not constructed of wood, paper, cardboard, fabric or any other similar absorptive material, and have been emptied as specified in California Code of Regulations, title 22, section 66261.7, or inner liners

removed from empty containers that once held hazardous waste or hazardous material, may be treated by the following technologies, if the treated containers and rinseate are managed in compliance with specified 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 as provided in California Code of Regulations, title 22, section 67450.11(a)(11)(A) and the rinseate is removed.

13. Multi-component resins may be treated by the following process:

(A) Mixing the resin components together in accordance with the manufacturer's instructions.

14. Certified Technology: You may treat any wastestream and treatment technology combination certified by DTSC as appropriate for authorization under CESQT, pursuant to Health and Safety Code section 25200.1.5

* **Note:** Authorizations or permits are not required if the owner or operator of the FTU conducts activities exempted under the definition of treatment (see the definition of treatment).

Definitions

Certified Unified Program Agency

(CUPA): A CUPA is a local agency, such as a county, city, or Joint Powers Agency that is certified by the Secretary for Environmental Protection to implement the Unified Program within a jurisdiction as specified in Health and Safety Code division 20, chapter 6.11. The CUPAs are responsible for consolidating, coordinating, and making consistent many environmental programs.

Fixed Treatment Unit (FTU): An FTU is any equipment that performs hazardous waste treatment that is permanently stationed at a single facility regardless of the period or frequency of treatment.

Onground Tank: A device meeting the definition of “tank,” situated in such a way that the bottom of the tank is on the same level as the adjacent surrounding surface so that the external tank bottom cannot be visually inspected (see Cal. Code Regs., tit. 22, §66260.10).

Phase I Environmental Assessment: A preliminary site assessment based on reasonably available knowledge of the facility, including, but not limited to, historical use of the property, prior releases, visual and other surveys, records, consultant reports, and regulatory agency correspondence.

Transportable Treatment Unit (TTU):

A TTU is any mobile equipment that performs treatment, is transported to a facility to perform a treatment, and is not permanently stationed at a single site.

Treatment: Any method, technique, or process which is not otherwise excluded, or

which is designed to change the physical, chemical, or biological character or composition of the hazardous waste or material it contains, or which removes or reduces its harmful properties or characteristics for any purpose. If the activity that you are conducting is consistent with this definition, you are required to obtain a permit or a grant of authorization through your CUPA. However, if your activity is not considered regulated treatment, you do not need a permit or grant of authorization. The following activities do not require a permit or a grant of authorization (see Health & Saf. Code §25123.5):

- Sieving or filtering liquid hazardous waste to remove solid fractions, without added heat, chemicals, or pressure, as the waste is added to or removed from a storage or accumulation tank or container (sieving or filtering does not include adsorption, reverse osmosis, or ultra-filtration).
- Phase separation of hazardous waste during storage or accumulation in tanks or containers, if the separation is unaided by the addition of heat or chemicals. If the phase separation occurs at a commercial offsite permitted storage facility, all phases of the hazardous waste must be managed as hazardous waste after separation.
- Combining two or more wastestreams that are compatible into a single tank or container if both of the following conditions apply:

1. The wastestreams are being combined solely for the purpose of consolidated accumulation or storage or consolidated offsite shipment, and they are not being combined to meet a fuel specification or to otherwise be chemically or physically prepared to be treated, burned for energy value, or incinerated.
 2. The combined wastestream is managed in compliance with the most stringent of the regulatory requirements applicable to each individual wastestream.
- Evaporating water from hazardous wastes in tanks or containers, such as breathing and evaporation through vents and floating roofs, without adding pressure, chemicals, or heat other than sunlight or ambient room lighting or heating.
 - Combining glutaraldehyde or orthophthalaldehyde, used by medical facilities to disinfect medical devices, with formulations containing glycine as the sole active chemical, if the process is carried out onsite. This activity is only allowed for medical facilities.

Unified Program: The Unified Hazardous Waste and Hazardous Materials Management Regulatory Program is commonly referred to as the Unified Program. The Unified Program consolidated several major environmental management and emergency management programs at the local government level to help businesses subject to waste management requirements comply with the

legal requirements (Health & Saf. Code div. 20, ch. 6.11).

Unit: A unit is a tank, container, or a combination of tanks or tank systems and/or containers located together that are used in sequence to treat or accumulate one or more compatible hazardous wastestreams. The devices are either plumbed together or otherwise linked so as to form one treatment system (see Cal. Code Regs., tit. 22, §66260.10).

Disclaimer

This fact sheet does not replace or supersede relevant statutes and regulations. The information contained in this fact sheet is based upon the statutes and regulations in effect as of the date of the fact sheet. Interested parties should always review the most recent relevant statutes and regulations.

For assistance or additional information, you can contact your local CUPA. A list of CUPA addresses and phone numbers is available on the California Environmental Protection Agency (Cal/EPA) web site at www.calepa.ca.gov/CUPA/CUPAMail.htm. You can also contact the DTSC office nearest you and the DTSC Public and Business Liaisons at (800) 72TOXIC (1-800-728-6942), or visit DTSC's Internet web site, at www.dtsc.ca.gov.

For more information, contact the DTSC office nearest you, or call the regional Regulatory Assistance Officers at (800) 72-TOXIC (800-728-6942). From outside California, call (916) 255-3545.

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