Onsite Tiered Permitting - Flowchart

(For non-RCRA or exempt hazardous waste facilities conducting onsite treatment.)

1. Aqueous wastes with chromium VI
   - Reduction to chromium III

   - ≤ 55 gallons/mo./facility+
     - CESQT
       - Note – Automated addition of acid and reducing agents §67450.11(a)(1)(A)

     - <750 ppm
       - CA*

     - ≥ 750 ppm
       - PBR
       - Note – Automated addition of acid and reducing agents §67450.11(a)(1)(A)

CESQT - Conditionally Exempt Small Quantity Treatment
(Health and Safety Code (HSC § 25201.5(a))
+A CESQT facility can only treat a total volume of not more than 55 gallons/month

CESW - Conditionally Exempt Specified Wastestream (HSC § 25201.5(c))
CEL - Conditionally Exempt-Limited (HSC § 25201.14)
CECL - Conditionally Exempt Commercial Laundries (HSC § 25144.6(c))
CA - Conditional Authorization (HSC § 25200.3)
PBR - Permit by Rule (Title 22, CCR, Div. 4.5, Chapter 45)

*Must be hazardous solely due to this characteristic
In tanks or containers, such as breathing and evaporation through vents and floating roofs, without the addition of pressure, chemicals, or heat other than sunlight or ambient room lighting or heating. [HSC, § 25123.5 (b)(1)(A) and (b)(2)(D)]

pH Adjustment (>2 or ≤12.5)
- Precipitation or Crystallization
- Ion Exchange
- Reverse Osmosis
- Metallic Replacement
- Plating onto an Electrode
- Electrodialysis
- Electrowinning or Electrolytic recovery
- Chemical Stabilization
- Adsorption

During storage or accumulation in tanks or containers only if the separation is unaided by the addition of heat or chemical.** [HSC, § 25123.5 (b)(1)(A) and (b)(2)(B)]

**Containers must be closed except when adding/removing hazardous wastes (T22, § 66265.173)
Aqueous wastes with metals listed in T22 § 66261.24

- Ion Exchange
- Reverse Osmosis
- Adsorption
- pH Adjustment (≥ 2, < 12.5)
- Electrowinning or electrolytic recovery (no hydrochloric acid)

During storage or accumulation in tanks or containers only if the separation is unaided by the addition of heat or chemical.**
[HSC, § 25123.5 (b)(1)(A) and (b)(2)(B)]

Must be hazardous solely due to this characteristic
Containers must be closed except when adding/removing hazardous wastes (T22, § 66265.173)

>55 gallons/mo.
& <1,400 ppm

NO authorization required
Aqueous waste with organic compounds not listed and containing <10% total organic carbon and <1% volatile organic compound

- Adsorption
- Distillation
- Biological Processes
- Photodegradation (with or without ozone or hydrogen peroxide)
- Air Stripping

During storage or accumulation in tanks or containers only if the separation is unaided by the addition of heat or chemical.**  [HSC, § 25123.5 (b)(1)(A) and (b)(2)(B)]

≤ 55 gallons/mo./facility+  →  CESQT

>55 gallons/mo.  →  PBR

NO authorization required

*Must be hazardous solely due to this characteristic
**Containers must be closed except when adding/removing hazardous wastes (T22, § 66265.173)
Aqueous waste with organic compounds listed in § 66261.24(a)(1)(B) or § 66261.24(a)(2)(B)

- Adsorption

<750 ppm

- Phase Separation excluding super critical fluid extraction

During storage or accumulation in tanks or containers only if the separation is unaided by the addition of heat or chemical.**

[HSC, § 25123.5 (b)(1)(A) and (b)(2)(B)]

CA*

NO authorization required

*Must be hazardous solely due to this characteristic

**Containers must be closed except when adding/removing hazardous wastes (T22, § 66265.173)
In tanks or containers, such as breathing and evaporation through vents and floating roofs, without the addition of pressure, chemicals, or heat other than sunlight or ambient room lighting or heating. [HSC, § 25123.5 (b)(1)(A) and (b)(2)(D)]

4a

Sludges, dusts, solid metal objects, workings (containing or contaminated with metals listed in § 66261.24(a)(2) and or fluoride salts)

- Grinding
- Shredding
- Crushing
- Compact
- Separation (based on size, magnetism or density).

- Drying (to remove water)

- Chemical stabilization

<500 lbs/mo./facility+

CESQT

>500 lbs/mo.

PBR

NO authorization required
Wastewater treatment sludges, solid metal objects, metal workings containing or contaminated with metals and Dusts containing ≤750 ppm metal (except asbestos) (§ 66261.24(a)(1)(B) or § 66261.24(a)(2)(A)

In tanks or containers, such as breathing and evaporation through vents and floating roofs, without the addition of pressure, chemicals, or heat other than sunlight or ambient room lighting or heating. [HSC, § 25123.5 (b)(1)(A) and (b)(2)(D)]

Drying (to remove water)

- Centrifuge
- Gravity Settling
- Grinding
- Shredding
- Crushing
- Compact
- Separation (based on size, magnetism or density).

≤ 45,000 lbs/mo.

CA*

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. For this activity, sieving or filtering does not include adsorption, reverse osmosis, or ultrafiltration. [HSC, § 25123.5 (b)(1)(A) and (b)(2)(B)]

*Must be hazardous solely due to this characteristic
During storage or accumulation in tanks or containers only if, the separation is unaided by the addition of heat or chemical.** [HSC, § 25123.5 (b)(1)(A) and (b)(2)(B)]

- Phase Separation

- Drying (to remove water)

In tanks or containers, such as breathing and evaporation through vents and floating roofs, without the addition of pressure, chemicals, or heat other than sunlight or ambient room lighting or heating. [HSC, § 25123.5 (b)(1)(A) and (b)(2)(D)]

- Chemical Stabilization

*Must be hazardous solely due to this characteristic

**Containers must be closed except when adding/removing hazardous wastes (T22, § 66265.173)
During storage or accumulation in tanks or containers only if, the separation is unaided by the addition of heat or chemical.** [HSC, § 25123.5 (b)(1)(A) and (b)(2)(D)]

- Phase Separation
  - Screening to separate components (based on size)
  - Separation (based on size, magnetism or density)
- Drying (to remove water)

In tanks or containers, such as breathing and evaporation through vents and floating roofs, without the addition of pressure, chemicals, or heat other than sunlight or ambient room lighting or heating. [HSC, § 25123.5 (b)(1)(A) and (b)(2)(D)]

- Chemical Stabilization

**Must be hazardous solely due to this characteristic
**Containers must be closed except when adding/removing hazardous wastes (T22, § 66265.173)
Special Wastes (except asbestos)
T22, § 66261.124

During storage or accumulation in tanks or containers only if the separation is unaided by the addition of heat or chemical.**
[HSC, § 25123.5 (b)(1)(A) and (b)(2)(B)]

7a

Phase Separation by filtration, centrifuge, or gravity separation

≤ 500 lbs/mo./facility+

CESQT

Chemical Stabilization

PBR

Drying to remove water

>45,000 lbs/mo.

In tanks or containers, such as breathing and evaporation through vents and floating roofs, without the addition of pressure, chemicals, or heat other than sunlight or ambient room lighting or heating.
[HSC, § 25123.5 (b)(1)(A) and (b)(2)(D)]

Magnetic Separation

NO authorization required

Drying (by pressing or passive evaporation)

CESW

**Containers must be closed except when adding/removing hazardous wastes (T22, § 66265.173)
During storage or accumulation in tanks or containers only if the separation is unaided by the addition of heat or chemical.**

[HSC, § 25123.5 (b)(1)(A) and (b)(2)(B)]

- Phase Separation
  - Screening to separate components based on size
  - Magnetic Separation
  - Drying (by pressing or passive evaporation)

NO authorization required

*Must be hazardous solely due to this characteristic

**Containers must be closed except when adding/removing hazardous wastes (T22, § 66265.173)
**8 a**

**Inorganic acid or alkaline wastes**

- pH Adjustment
- Neutralization

- ≤ 55 gallons/mo./facility+
- >55 gal. or >500 lbs/mo.

- <10% acid/base by wt.
- >10% acid/base by wt.

- CESQT
- CA*

**8 b**

**Corrosive waste**
from regeneration of ion exchange residues (used to demineralize water)
HSC, § 25201.13

- <10% acid/base by wt.
- >10% acid/base by wt.

- NO authorization required
- Go to 8 a

**8 c**

**Acid/alkaline wastes**
corrosive due to presence of food products AND generated by SIC group 20
HSC, § 25201.5

- <10% acid/base by wt.
- >10% acid/base by wt.

- NO authorization required
- CESW

*Must be hazardous solely due to this characteristic.

North American Industry Classification System (NAICS) was adopted in 1997
to replace the Standard Industrial Classification (SIC) system
Neutralization

Acid/alkaline wastes from Biotechnology manufacturing or process by SIC Code subgroups 283, 2833, 2834, 2836, 8731, 8732, 8733 HSC, § 25201.15

Laboratory conducting treatment pursuant to HSC, § 25200.3.1

Neutralization

NO authorization required

<10% acid/base by wt.

Neutralization

NO authorization required

>10% acid/base by wt.

Go to 8 a

Acid/alkaline wastes from Pharmaceutical manufacturing or process development by NAICS Code subgroups 325411 and 325412 HSC, § 25201.17

Neutralization

NO authorization required if treatment complies with HSC § 25201.17 AB2155 (Stats., 2006, Ch. 741)

North American Industry Classification System (NAICS) was adopted in 1997 to replace the Standard Industrial Classification (SIC) system
Soils contaminated with metals
T22, § 66261.24(a)(2)

- Screening
- Magnetic Separation

- Chemical Stabilization

<500 lbs/mo./facility+ CESQT

<45,000 lbs/mo./unit CA*

>45,000 lbs/mo. PBR

<500 lbs/mo./facility+ CESQT

>500 lbs/mo. PBR

*Must be hazardous solely due to this characteristic
During storage or accumulation in tanks or containers only if the separation is unaided by the addition of heat or chemical.**

[HSC, § 25123.5 (b)(1)(A and (b)(2)(B)]

**Containers must be closed except when adding/removing hazardous wastes (T22, § 66265.173)
**Must be hazardous solely due to this characteristic.**

**Containers must be closed except when adding/removing hazardous wastes (T22, § 66265.173)**

10 b

Oil mixed with water OR oil-water separation sludge

- Separation (based on size magnetism or density)
- Reverse Osmosis

CA*

Phase Separation

If avg. amount of oil recovered /mo. <25 barrels AND aqueous waste from gravity settling is non-hazardous

CESW

During storage or accumulation in tanks or containers only if the separation is unaided by the addition of heat or chemical.** [HSC, § 25123.5 (b)(1)(A) and (b)(2)(B)]

NO authorization required

10 c

Used oil mixed with water hazardous ONLY because of oil content, EXCLUDING contaminated groundwater, water containing gasoline, or >2% diesel

- Gravity Separation (where aqueous waste is non-hazardous)
- Centrifugation
- Membrane Technology (such as reverse osmosis)
- Heating ≤20 degrees F below flashpoint of the used oil component of the mixture
- Addition of demulsifiers (to water containing used oil)

If recovered used oil is properly transported to an authorized offsite oil recycler

CEL

If recovered used oil is NOT properly transported to an authorized offsite oil recycler

10 (a) or (b)
Photographic Wastes
(HSC, § 25143.13)
(Silver-only RCRA-exempt wastestreams or photoimaging solution)

NO authorization required
SB 2111 (Stats. 1998, Ch. 309); Amended SB 2035 (Stats. 2000, Ch. 343)

Dry Cleaning wastes
(HSC, §25201.8)
(hazardous solely due to PCE [perchloroethylene] content)

NO authorization required
AB1772 (Stats. 1992, Ch. 1345); Amended SB1191 (Stats. 1995, Ch. 639)

<180 gal./mo.

Commercial laundry facility
HSC, § 25144.6

Reusable textile materials
(uniforms, gloves, linens and towels).

CECL
16a Laboratory Waste
HSC § 25200.3.1

NO authorization required
if treatment complies with
HSC, § 25200.3.1
AB 966 (Stats. 1998, Ch. 506)

16b Quality Control or Quality Assurance Laboratory
(HSC, § 25201.5(c)(8))

NO authorization required
if treatment complies with
HSC § 25200.3.1
AB 966 (Stats. 1998, Ch. 506)
Wastestream/ Technology Combination Certified by DTSC (HSC § 25200.3.(a)(10), § 25201.5(c)(9))

17

Healthcare Facilities
- treating formaldehyde

18

Technology Certified by DTSC (HSC § 25200.1.5, § 25201.5(c)(10))

Healthcare Facilities
- treating glutaraldehyde or orthophthalaldehyde with glycine per HSC § 25123.5(c)

NO authorization required if treatment complies with HSC § 25200.3.1 AB 966 (Stats. 1998, Ch. 506)

*Must be hazardous solely due to this characteristic
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. For this activity, sieving or filtering does not include adsorptions, reverse osmosis, or ultrafiltration. [HSC, § 25123.5 (b)(1)(A) and (b)(2)(B)]

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.** [HSC, § 25123.5 (b)(1)(A) and (b)(2)(B)]

Consolidation from remote sites (HSC, § 252110.10, § 25121.3)

NO authorization required

Special authorization; Notification required.
UPCF hwf1196

**Containers must be closed except when adding/removing hazardous wastes (T22, § 66265.173)
Cyanide Treatment (T22 § 67450.11 (d)(2))

A. Aqueous wastes from rinsing workpieces and fixtures
   T22, § 67450.11 (d)(2)(A)

B. Aqueous wastes from reverse osmosis or the regeneration of demineralizer (ion exchange) columns at facilities with zero discharge
   T22, § 67450.11 (d)(2)(B)
   - Oxidation by addition of hypochlorite (bleach)
   - Oxidation by addition of peroxide or ozone, with or without the use of ultraviolet light
   - Alkaline chlorination
   - Electrochemical oxidation
   - Ion exchange
   - Reverse osmosis

C. Aqueous wastes from rinsing containers, pumps, hoses, and other equipment used to transfer cyanide solutions onsite
   T22, § 67450.11 (d)(2)(C)

D. Aqueous wastes from the following onsite recycling activities:
   - Rinsing spent anode bags prior to onsite reuse
   - Rinsing empty containers prior to onsite reuse
   T22, § 67450.11 (d)(2)(D)

E. Aqueous wastes from onsite laboratories
   T22, § 67450.11 (d)(2)(E)
Cyanide Treatment (T22, § 67450.11 (d)(2))

Spent Solutions managed in accordance with the requirements of § 67450.11(d)(6). T22, § 67450.11 (d)(2)(F)

Electrowinning (only for metal recovery)

To the aqueous solution in waste streams A, B, C, D, or E

PBR

Spent Solutions managed in accordance with the requirements of § 67450.11(d)(7). T22, § 67450.11 (d)(2)(G)

Slow Bleeding to the aqueous solution in waste streams (A) and (C)

Resulting solution must be treated by:
- oxidation,
- alkaline chlorination,
- electrochemical oxidation,
- ion-exchange, or
- reverse osmosis

PBR

Additional Requirements for Dilution of Process Solutions:
- Total cyanide concentration limited to 5,000 mg/l after dilution
- Written approval from the agency operating the POTW
- Waste analysis plan (cyanides)
- The residual solids removed are recycled by a facility that recovers metals including documentation
- By January 30 - Prepare justification statement when residuals are not recycled for the previous calendar year
- Records maintained at the facility for 3 years

For all Cyanide Treatments under PBR:
- Comply with Best Management Requirements
- Employee training (Initial and annual training to employees, who handle cyanide process solutions, cyanide rinse waters, or manage cyanide waste)
- Evaluate cyanide alternatives every 4 years
Transportable Treatment Units

Note - SUBMIT TTU NOTIFICATIONS TO DTSC, NOT TO THE CUPA.

WASTE STREAM & TREATMENT PROCESSES

-CE-
HSC, §25201.5

TTU Owner/Operator is AUTHORIZED

DTSC FORMS
1199 (unit)
1198 (site)

-PBR-
Title 22, CCR
§ 67450.11

TTU May ONLY operate if TTU Owner / Operator is AUTHORIZED

DTSC FORMS
1199 (unit)
1197 (site)

ALL OTHERS

Standardized Permit, Variance, or RD&D

Contact DTSC Regional Staff

Note: SUBMIT TTU NOTIFICATIONS TO DTSC, NOT TO THE CUPA.
PBR Collection Facilities

1. Temporary or Permanent Household Hazardous Waste Collection Facilities (THHWCF and PHHWCF)
   - Wastestreams accepted in:
     - THHWCF T22, § 67450.4(a) or
     - PHHWCF -T22, § 67450.25(a)

2. School Hazardous Waste Collection, Consolidation, and Accumulation Facility
   - Wastestreams in T22, § 67450.42