Tiered Permitting Overview

22nd California CUPA Conference Th-B1

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Emphasis on Overview

Closer Than This

But Not This Close

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Tiered Permitting Overview – Agenda

- Background
- Overview of Tiers
- The Wastes and Treatment Processes
- FTU vs. TTU
- Compliance Requirements – PBR
- Compliance Requirements – CA
- Compliance Requirements – CEL/CESW/CESQT
- Common Violations/Issues

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Disclaimer

- You must refer to the regulations (CA Title 22, Div. 4.5), statutes [Health & Safety Code (HSC) Div. 20, Ch. 6.5], or DTSC Guidance
  - Abbreviated content in some references
  - Need to review the facts of each situation
- We will focus on more common industry situations
  - Not household hazardous waste collection facilities
  - Not school hazardous waste collection, consolidation, and accumulation facilities

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Background

- EPA (40 CFR 270) does not require a permit for the following hazardous waste treatment activities:
  - Totally enclosed treatment facilities
    - Directly connected to process equipment to avoid releases
  - Elementary neutralization units
    - Treatment of wastes hazardous solely by corrosivity
  - Wastewater treatment units
    - Tank treatment prior to POTW/NPDES permitted discharge
  - Generator self-treatment in tanks or containers

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California Statutory Differences

- California's Toxic Substances Control Program facility permitting pre-dated RCRA regulations
- California became authorized to enforce RCRA on August 1, 1992
- Measures were needed to correct regulatory misalignments

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California Statutory Differences

- AB 1772* overhauled state permitting program and established a five-tiered permitting system
  - Filled in the gap between federal exemptions from permitting and CA hazardous waste control program
  - Balanced regulatory requirements with risks posed by the facility
  - Referred to as Tiered Permitting Program (TPP)

*1992 – Polanco, Wright, and Lempert

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Facilities Subject to TPP

- California generators treating their own hazardous waste that is:
  - Non-RCRA hazardous waste
  - RCRA hazardous waste that does not need an EPA treatment permit
    - Totally Enclosed Treatment, Elementary Neutralization, Wastewater Treatment; or
    - Generator treatment in tanks or containers

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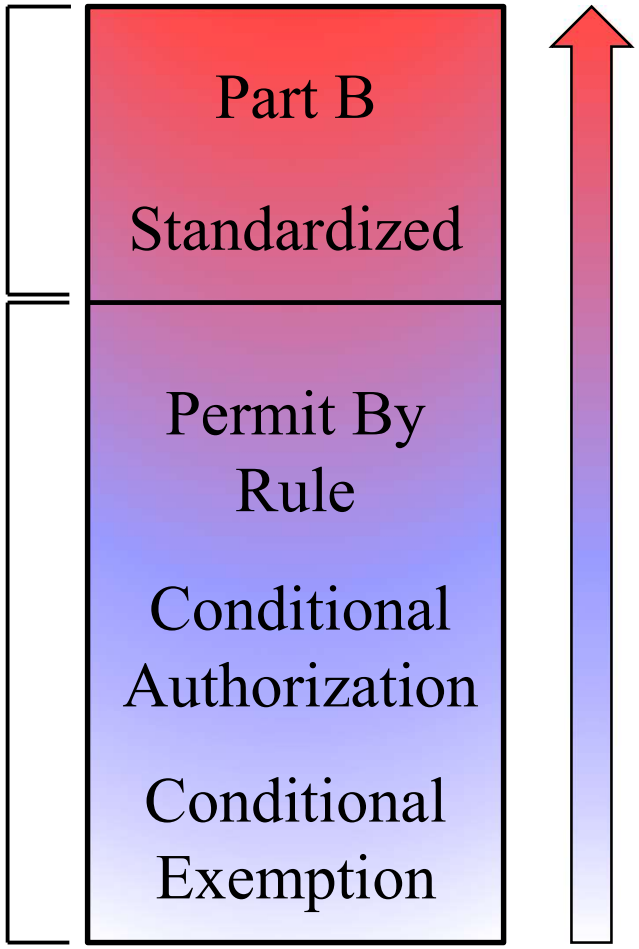
Treatment Tiers

Applies to Off-Site Hazardous Waste (Commercial TSDFs)

Tiers for On-Site Waste Treatment by Generators



DTSC Oversight

CUPA Oversight

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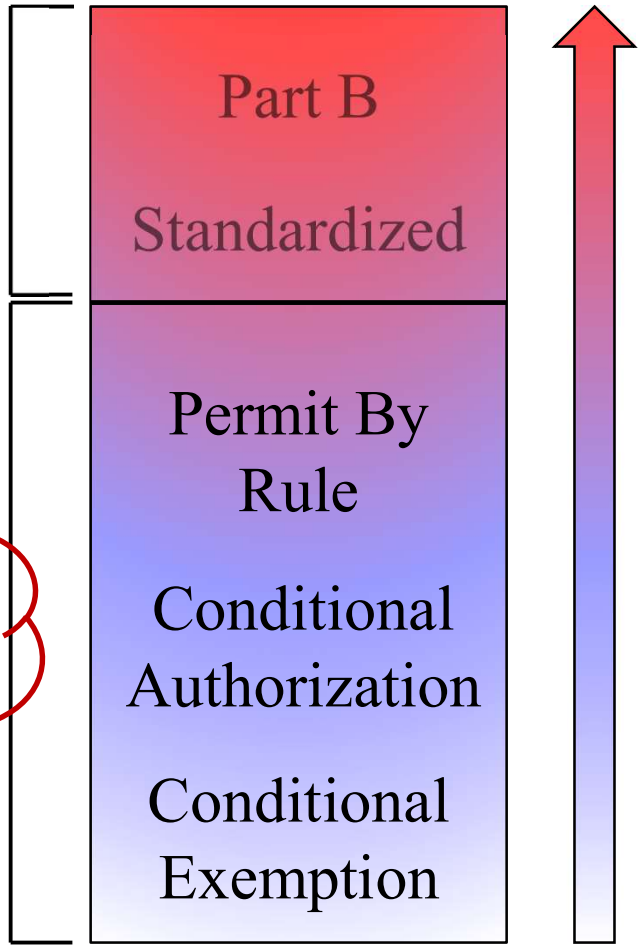
Treatment Tiers

Applies to Off-Site Hazardous Waste (Commercial TSDFs)

This is what we will be talking about

Tiers for On-Site Waste Treatment by Generators



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Treatment

- Defined in HSC 25123.5

  Except as provided in (b) and (c) means any method, technique, or process which is not otherwise excluded from the definition of treatment by this chapter and which is designed to change the physical, chemical, or biological character or composition of any hazardous waste or any material contained therein, or which removes or reduces its harmful properties or characteristics for any purpose.

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Exclusions from Treatment

- (b)(2)(A) 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 purposes of this subparagraph, sieving or filtering does not include adsorption, reverse osmosis, or ultrafiltration.

- (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.

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Exclusions from Treatment

- (b)(2)(C) Combining two or more waste streams that are not incompatible into a single tank or container if both of the following conditions apply:
  - (i) The waste streams 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.
  - (ii) The combined waste stream is managed in compliance with the most stringent of the regulatory requirements applicable to each individual waste stream.

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Exclusions from Treatment

- (b)(2)(D) Evaporation of water from hazardous wastes 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.
- (c) "Treatment" does not include the combination of glutaraldehyde or orthophthalaldehyde, which is used by medical facilities to disinfect medical devices, with formulations containing glycine as the sole active chemical, if the process is carried out on-site.

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Exclusions from Treatment

- HSC 25201.12 "…a hazardous waste facilities permit or other grant of authorization from the department… are not required for a facility, with regard to the facility's operation of a physical process to remove air pollutants from exhaust gases prior to their emission to the atmosphere, as permitted by an air pollution control district or an air quality management district, unless a permit is required for that operation pursuant to the federal act."

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Recycling (Brief Comment)

Not Subject to Tiered Permitting:

- HSC 25143.2(b) – not treatment if use/reuse in industrial process or returned to original process (but no reclamation allowed)
- HSC 25143.2(c) – allows treatment without full or tiered permitting if waste generated on-site is recycled on-site and managed as hazardous waste
- HSC 25143.2(d) – applies to non-RCRA hazardous waste recycled in certain ways (some allow filtering, screening, grinding, sorting, etc.)

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What Treatment May Look Like

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Tip for Industry and Inspectors

- If you have a wastewater discharge to sewer or NPDES:
  - Look upstream to determine all wastes that are discharged to wastewater
  - Are they hazardous at point of generation?
  - How are the waste characteristics changed (i.e., "treated")
- These would be Category A wastes for SB 14 waste minimization reporting

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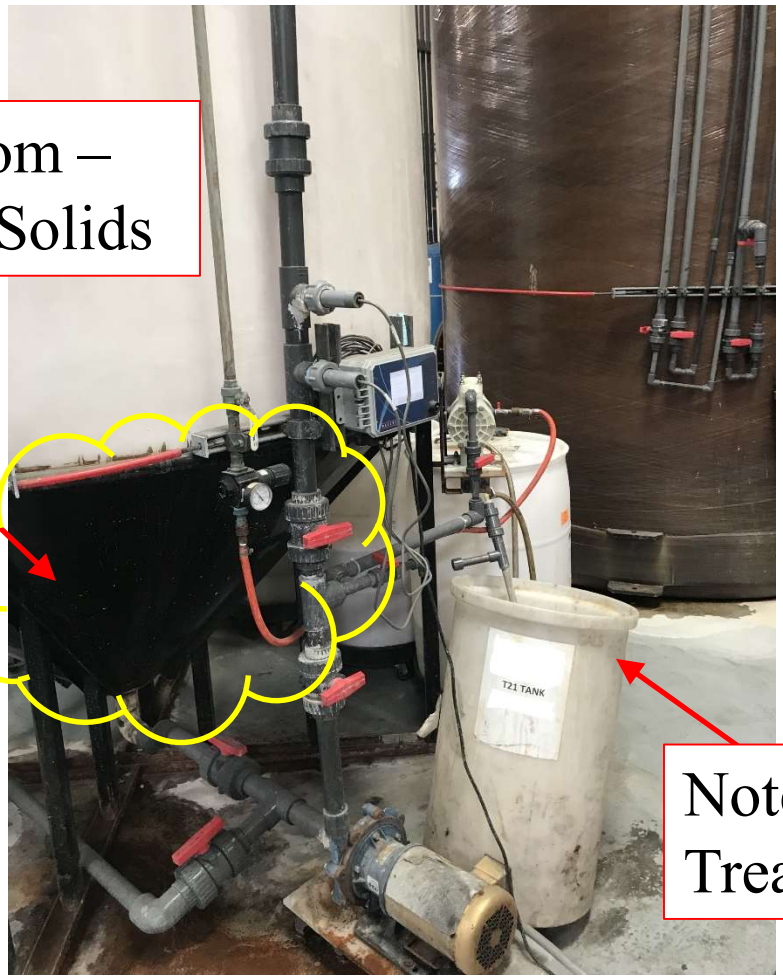
What Treatment May Look Like

Note Cone Bottom – Used to Collect Solids



Note Tank for Adding Treatment Chemicals

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Permit By Rule (PBR)

- Higher hazard waste streams (stronger acids, more metals, etc.)
- Higher volumes (varies by waste)
- More processes are permissible under this tier
- May include combination of waste treatment processes
- Cyanide waste streams

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Conditional Authorization (CA)

- Usually a hazardous waste due to only one characteristic
- Often metal-containing wastewaters
- Limits are frequently:
  - 5,000 gallons per month
  - 45,000 pounds per month

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Conditional Exemption (CE)

- Smaller quantities
- Less hazardous waste streams
- Low-risk treatment techniques
  - Container rinsing for purposes of making it empty (Section 66261.7)
  - Neutralization

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Program Has Evolved

- Some CE waste streams were not previously included, and this required CA or PBR
  - Demineralizer regeneration wastes
  - Biotech CIP kill wastes
  - Food wastes
  - Laboratory wastes

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Important Consideration for TPP

- Waste must be hazardous at point of generation (POG)
- Not subject to permitting under RCRA
- Must meet waste description
- Treated by one of the methods specified

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Point of Generation

- Not always clear
- Work upstream to find point of discard
  - Not always at sewer discharge
  - Could be discharge from process to line that ultimately goes to sewer
  - Look for other streams entering the wastewater line

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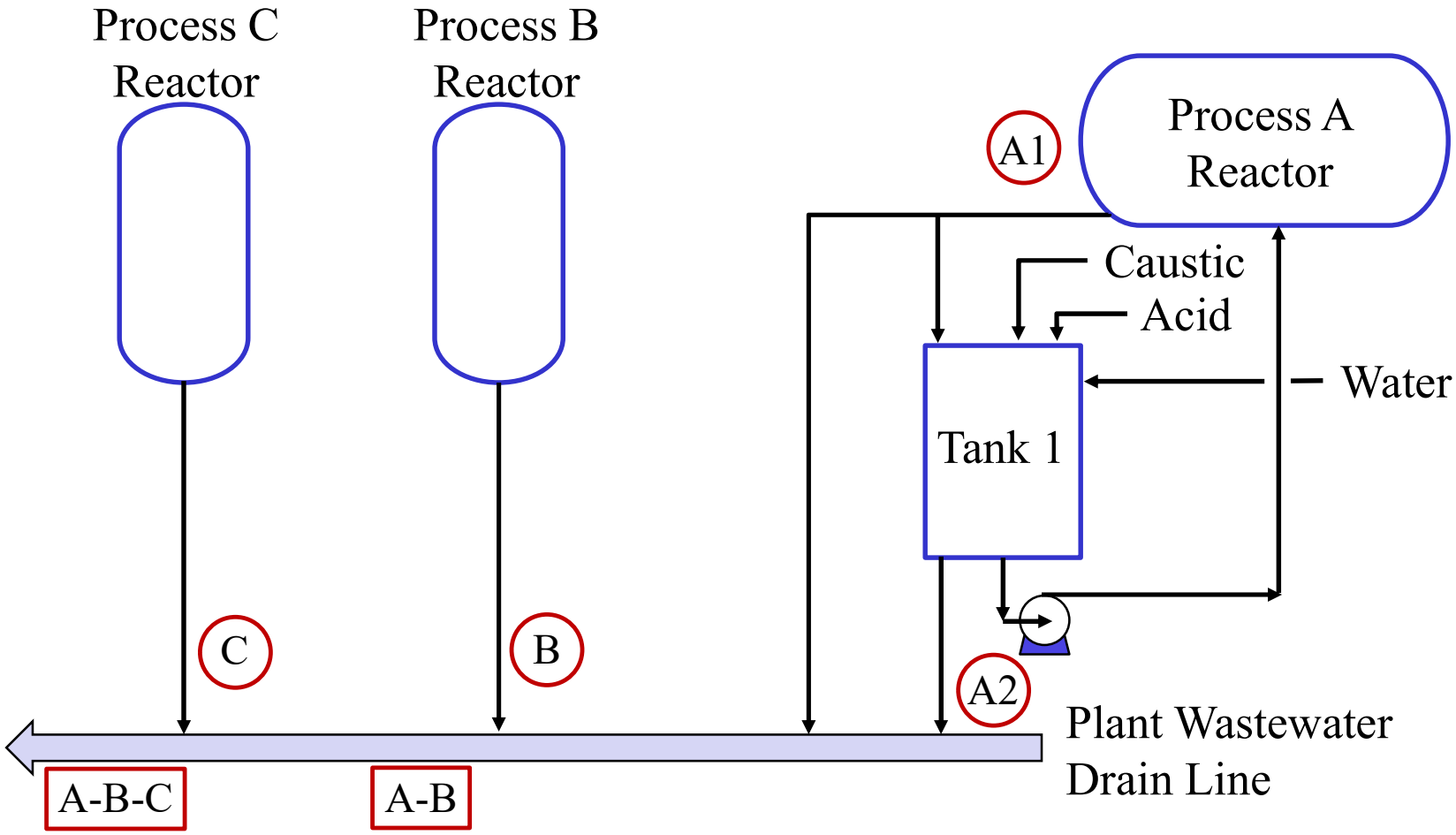
Example – Points of Generation



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Points of Generation

- A1 POG only if it goes to a drain
- If system flushes first with caustic then later with acid, A2 may be POG if Tank 1 is part of process or Tank 1 is Treatment Tank
- B and C are POGs
- A-B or A-B-C are separate POGs if the waste stream changes after addition

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The Tiered Permitting Flowchart

- The simplest and best reference (7/2010)
- Read as five columns:
  - Waste type and limits
  - Treatment techniques
  - Volume limits
  - Concentration limit (not always)
  - Applicable tier

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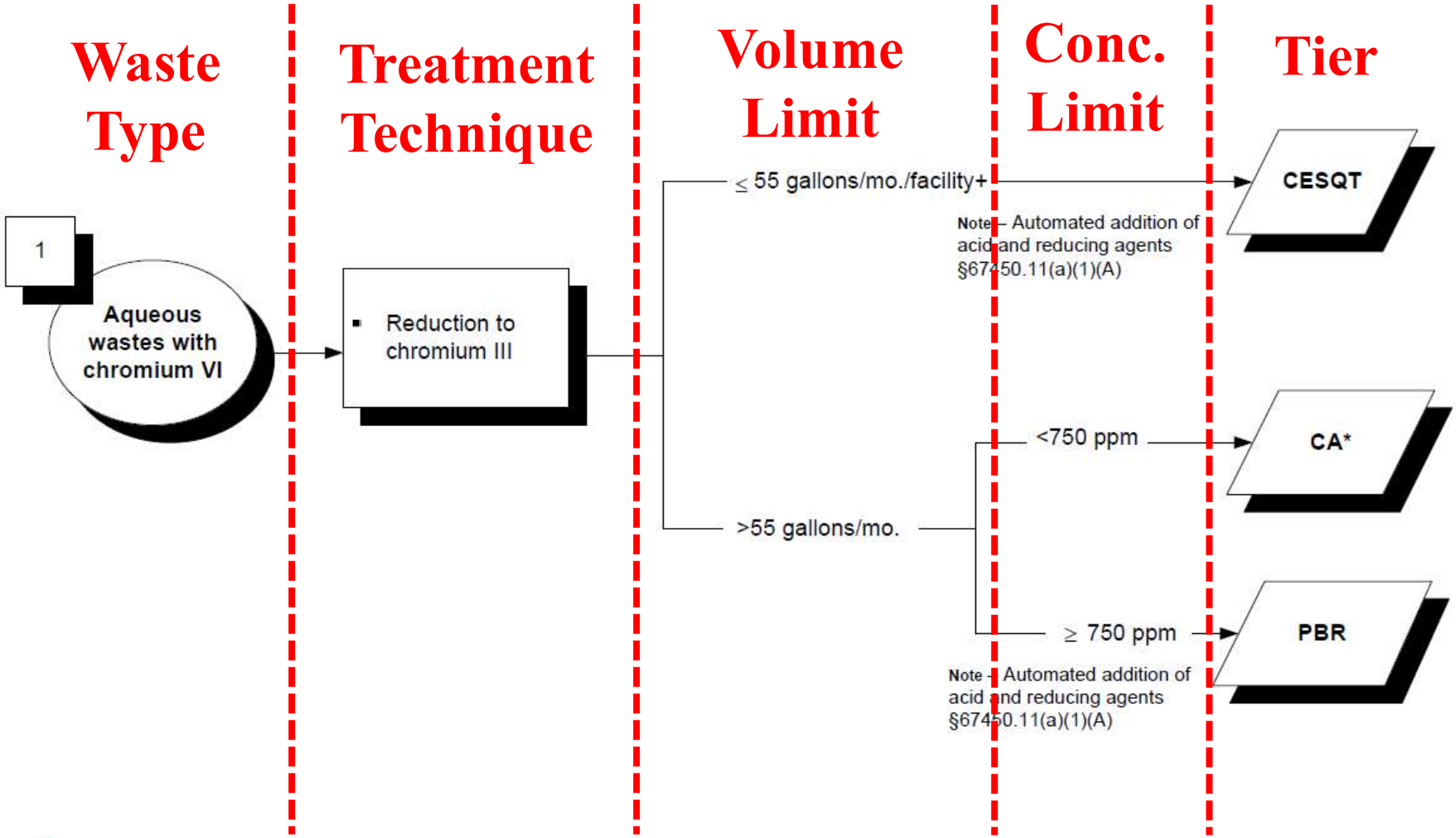
Example



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Wastes and Treatment Methods

Waste Stream	Allowable Treatment Methods
1. Aqueous wastes with Chromium-VI	• Reduction to Chromium-III
2a. Aqueous wastes with metals [listed in Section 66261.24(a)(2)] [CAM 17 List]	• Evaporation • pH adjustment • Precipitation or crystallization • Ion exchange • Reverse osmosis • Metallic replacement • Plating onto an electrode • Electrodialisis • Electrowinning or electrolytic recovery • Chemical stabilization • Adsorption • Phase separation

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Wastes and Treatment Methods

Waste Stream	Allowable Treatment Methods
2b. Aqueous wastes with metals (listed in Section 66261.24) [RCRA and CAM 17 lists]	• Ion exchange • Reverse osmosis • Adsorption • pH adjustment • Electrowinning or electrolytic recovery (no hydrochloric acid) • Phase separation
3a. 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 • Phase separation excluding super critical fluid extraction

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Wastes and Treatment Methods

Waste Stream	Allowable Treatment Methods
3b. Aqueous waste with organic compounds listed in Section 66261.24(a)(1)(B) or Section 66261.24(a)(2)(B) [TCLP and CA Persistent and Bioaccumulative Toxics]	• Adsorption • Phase separation excluding super critical fluid extraction
4a. Sludges, dusts, solid metal objects, workings (containing or contaminated with metals listed in Section 66261.24(a)(2) and/or fluoride salts) [CAM 17]	• Drying (to remove water) • Grinding • Shredding • Crushing • Compact • Separation (based on size, magnetism or density). • Chemical stabilization

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Wastes and Treatment Methods

Waste Stream	Allowable Treatment Methods
4b. Wastewater treatment sludges, solid metal objects, metal workings containing or contaminated with metals and dusts containing <750 ppm metal (except asbestos) [TCLP and CAM17]	• Drying (to remove water) • Centrifuge • Gravity settling • Grinding • Shredding • Crushing • Compact • Separation (based on size, magnetism or density). • Filtration (refer to HSC 25123.5)

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Wastes and Treatment Methods

Waste Stream	Allowable Treatment Methods
5. Alum, gypsum, lime, sulfur, or phosphate sludges	• Phase separation • Drying (to remove water) • Chemical stabilization
6. Waste listed in Section 66261.120, which meets the criteria and requirements for classification as special wastes in Section 66261.122 and Section 66261.124	• Phase separation • Screening to separate components (based on size) • Separation (based on size, magnetism or density) • Drying (to remove water) • Chemical stabilization

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Wastes and Treatment Methods

Waste Stream	Allowable Treatment Methods
7a. Special Wastes (except asbestos) Section 66261.124	• Phase separation by filtration, centrifuge, or gravity separation • Chemical stabilization • Drying (to remove water) • Magnetic separation • Drying (by pressing or passive evaporation)
7b. Special Wastes Section 66261.124	• Phase separation • Screening to separate components based on size • Magnetic separation • Drying (by pressing or passive evaporation)

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Wastes and Treatment Methods

Waste Stream	Allowable Treatment Methods
8a. Inorganic acid or alkaline wastes	• pH Adjustment • Neutralization
8b. Corrosive waste from regeneration of ion exchange residues (used to demineralize water)	• Neutralization*
8c. Acid/alkaline wastes corrosive due to presence of food products AND generated by SIC group 20	• Neutralization*

*No authorization may be needed

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Wastes and Treatment Methods

Waste Stream	Allowable Treatment Methods
8d. Acid/alkaline wastes by laboratory conducting treatment pursuant to HSC Section 25200.3.1	• Neutralization*
8e. Acid/alkaline wastes from Bio-technology manufacturing or process development by SIC Code subgroups 283, 2833, 2834, 2836, 8731, 8732, 8733	• Neutralization*
8f. Acid/alkaline wastes from pharmaceutical manufacturing or process development by NAICS Code subgroups 325411 and 325412	• Neutralization*

*No authorization may be needed

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Wastes and Treatment Methods

Waste Stream	Allowable Treatment Methods
9. Soils contaminated with metals Section 66261.24(a)(2) [CAM 17]	• Screening • Magnetic separation • Chemical stabilization
10a. Used oil, unrefined oil waste, mixed oil, oil mixed with water or oil/water separator	• Distillation • Neutralization • Separation (based on size, magnetism or density) • Reverse osmosis • Biological processes • Phase separation (excluding supercritical fluid extraction)
10b. Oil mixed with water OR oil-water separation sludge	• Separation (based on size, magnetism or density) • Reverse osmosis • Phase separation

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Wastes and Treatment Methods

Waste Stream	Allowable Treatment Methods
10c. 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°F below flashpoint of the used oil component of the mixture • Addition of demulsifiers (to water • containing used oil)

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Wastes and Treatment Methods

Waste Stream	Allowable Treatment Methods
11a. Containers ≤110-gallon capacity (no wood, paper, cardboard, fabric or other absorptive material)	• Rinsing • Crushing • Shredding • Grinding • Puncturing
11b. Aerosol cans	• Puncturing • Draining • Crushing No authorization may be needed

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Wastes and Treatment Methods

Waste Stream	Allowable Treatment Methods
12. Resins	• Treatment of resins including multicomponent and pre-impregnated resins (mixed or cured in accordance with manufacturer's instructions) • Treatment of multi-component resins, mixed in accordance with manufacturer's instructions

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Wastes and Treatment Methods

Waste Stream	Allowable Treatment Methods
13. Photographic Wastes (Silver-only RCRA-exempt waste-streams or photoimaging solution	• Silver recovery*
14. Dry Cleaning wastes	• No authorization OR refer to 3a
15. Commercial Laundry Facility	• Reusable textile materials (uniforms, gloves, linens and towels)
16a. Laboratory Waste	• No authorization or CESW
16b. Quality Control or Quality Assurance Laboratory	• No authorization or CESW

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Wastes and Treatment Methods

Waste Stream	Allowable Treatment Methods
17. Waste Stream/Technology Combination Certified by DTSC	• None specified (as certified by DTSC)
18. Technology Certified by DTSC	• Healthcare facilities treating formaldehyde • Healthcare facilities treating glutaraldehyde or orthophthalaldehyde with glycine per HSC Section 25123.5(c)
19. Consolidation from remote sites	• Special authorization (notification required)

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Overview – Cyanide Treatment

Waste Stream	Allowable Treatment Methods
A. Aqueous wastes from rinsing workpieces and fixtures	• 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
B. Aqueous wastes from reverse osmosis or regeneration of demineralizer (ion exchange) columns at facilities with zero discharge	
C. Aqueous wastes from rinsing containers, pumps, hoses, and other equipment used to transfer cyanide solutions onsite	
D. Aqueous wastes from the following on-site recycling activities: • Rinsing spent anode bags prior to on-site reuse • Rinsing empty containers prior to on-site reuse	
E. Aqueous wastes from on-site laboratories	

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Overview – Cyanide Treatment

Waste Stream	Allowable Treatment Methods
F. Spent Solutions managed in accordance with the requirements of Section 67450.11(d)(6)	Electrowinning (only for metal recovery) (to the aqueous solution in waste streams A, B, C, D, or E)
G. Spent Solutions managed in accordance with the requirements of Section 67450.11(d)(7)	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 • Reverse osmosis

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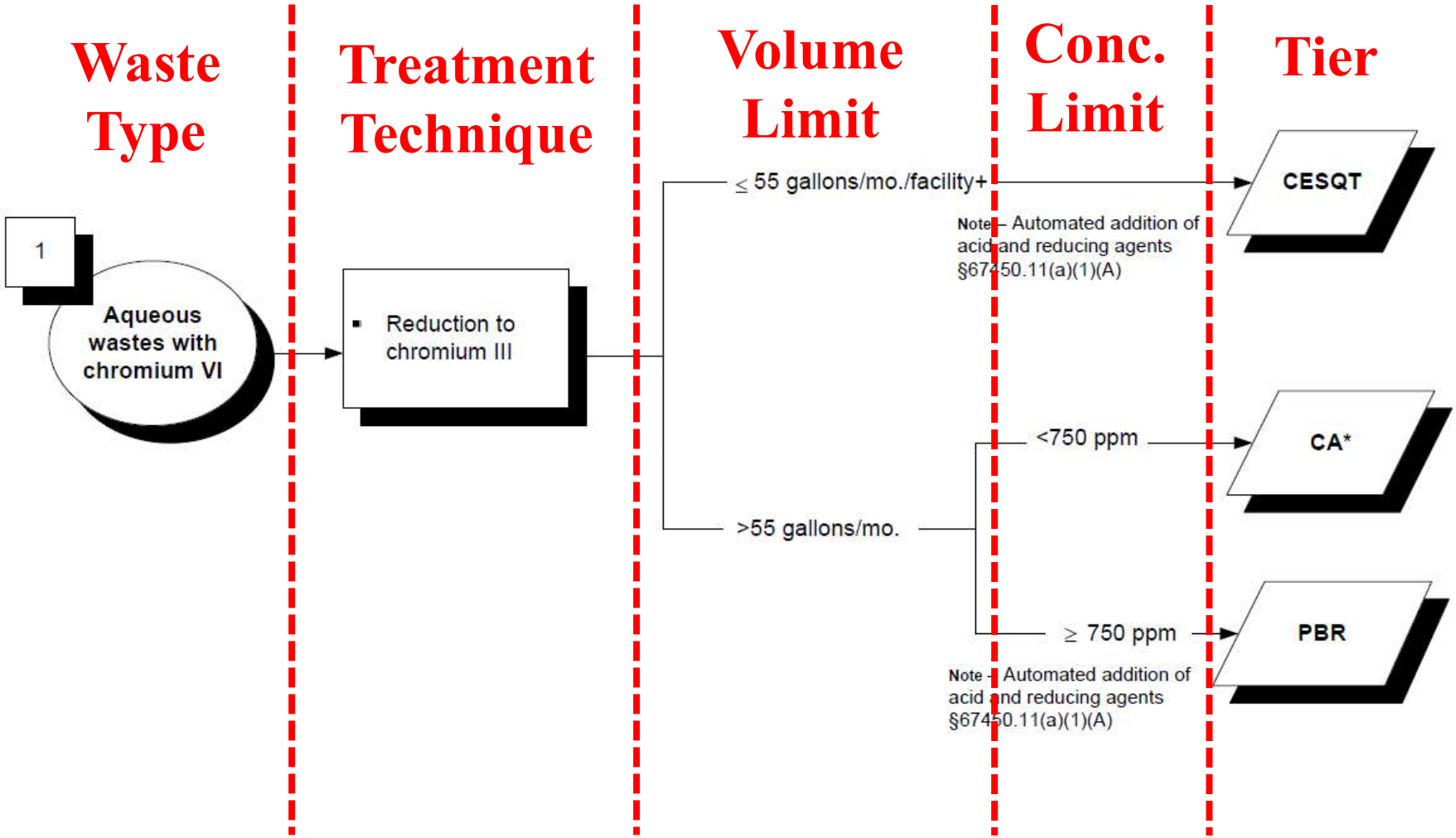
Example



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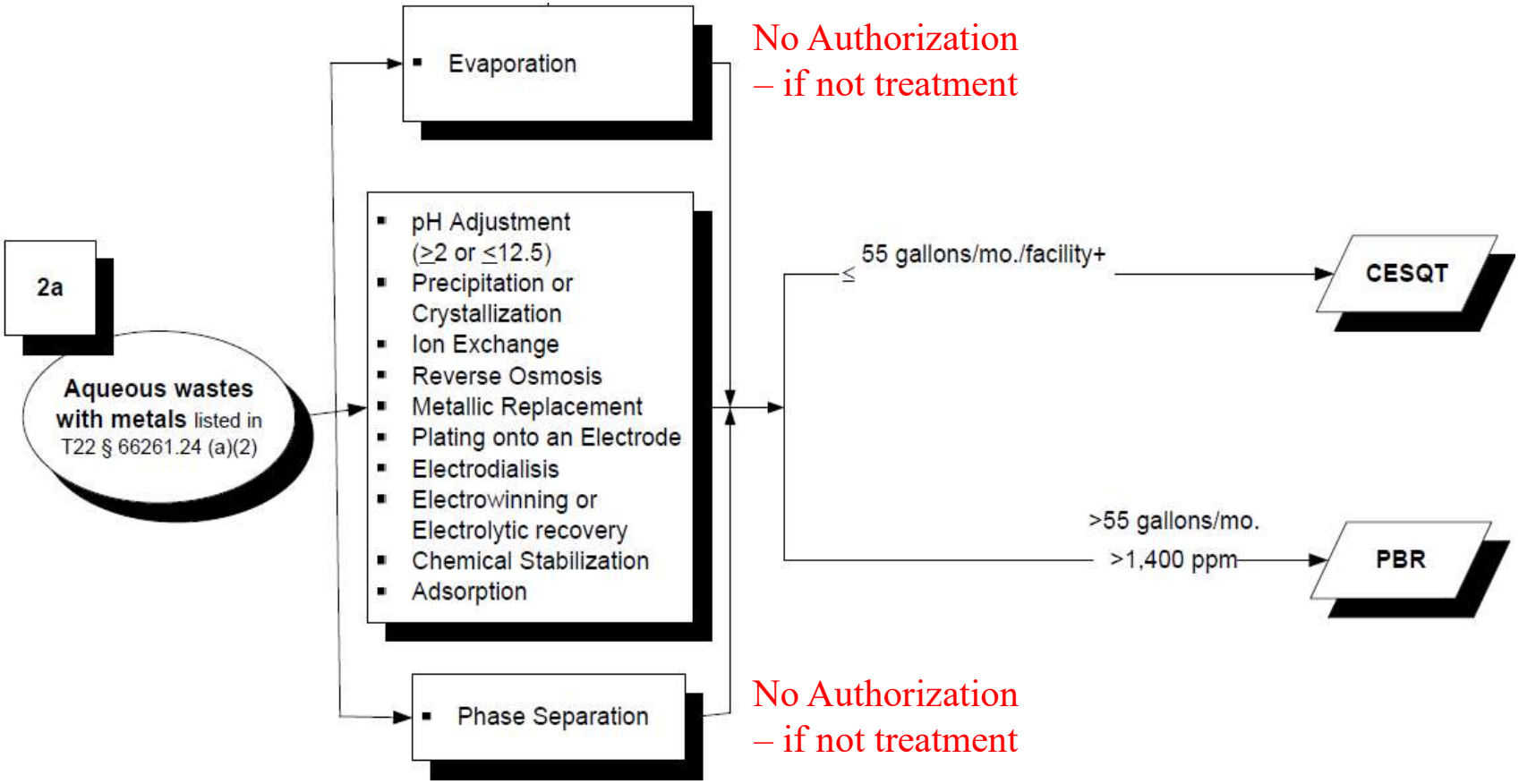
Examples



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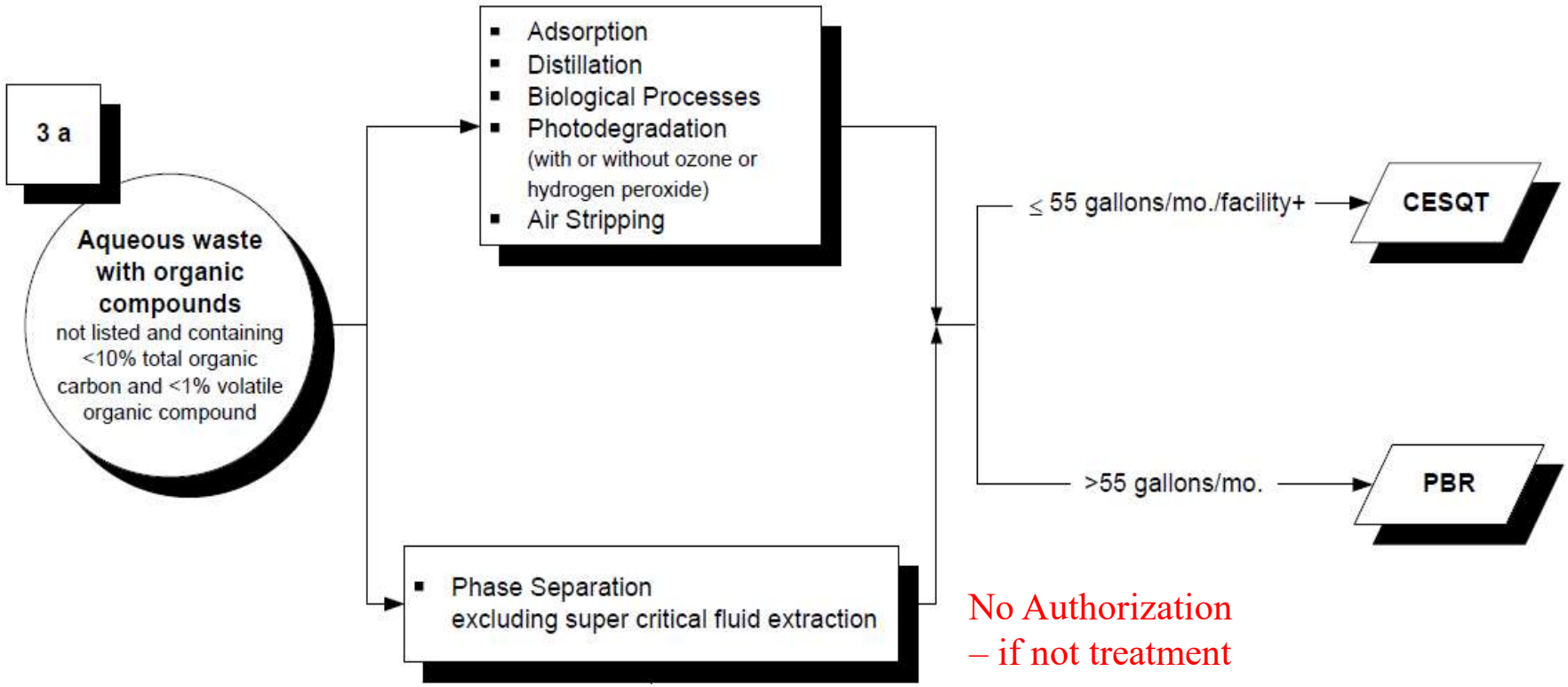

No Authorization
– if not treatment

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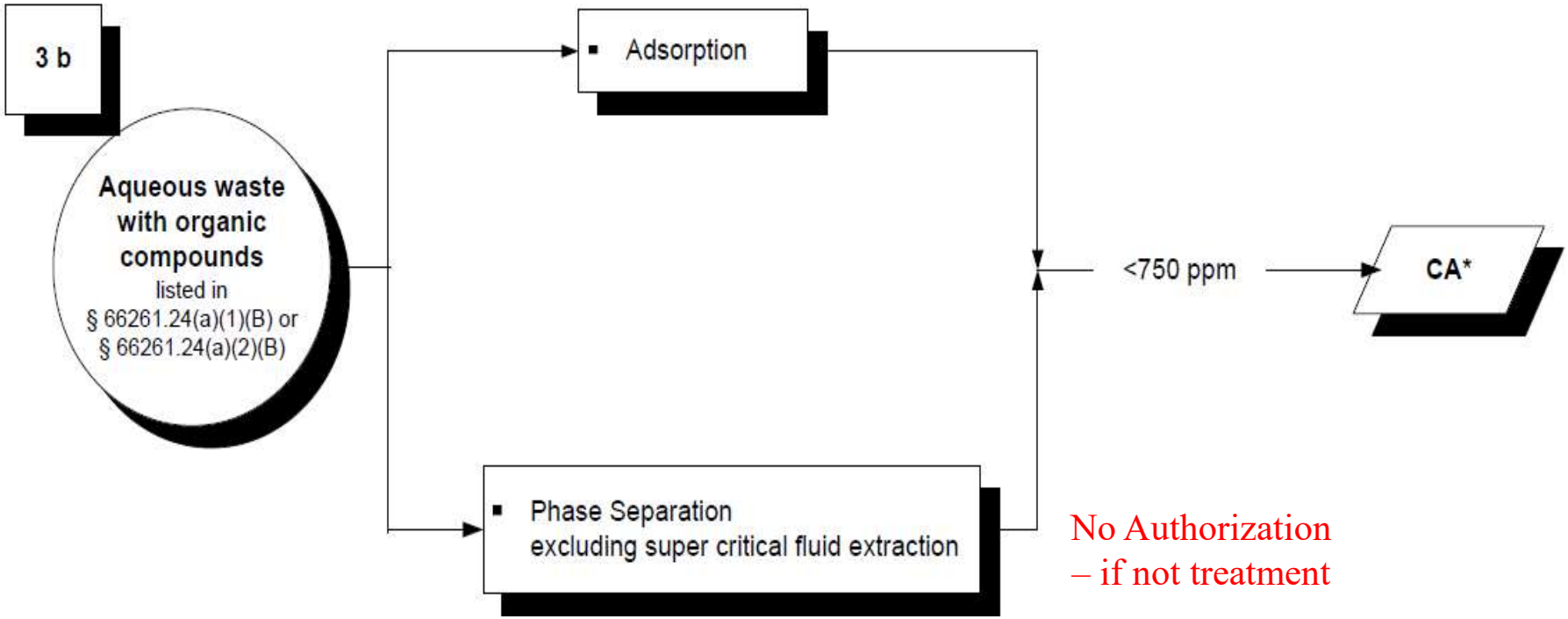
Examples



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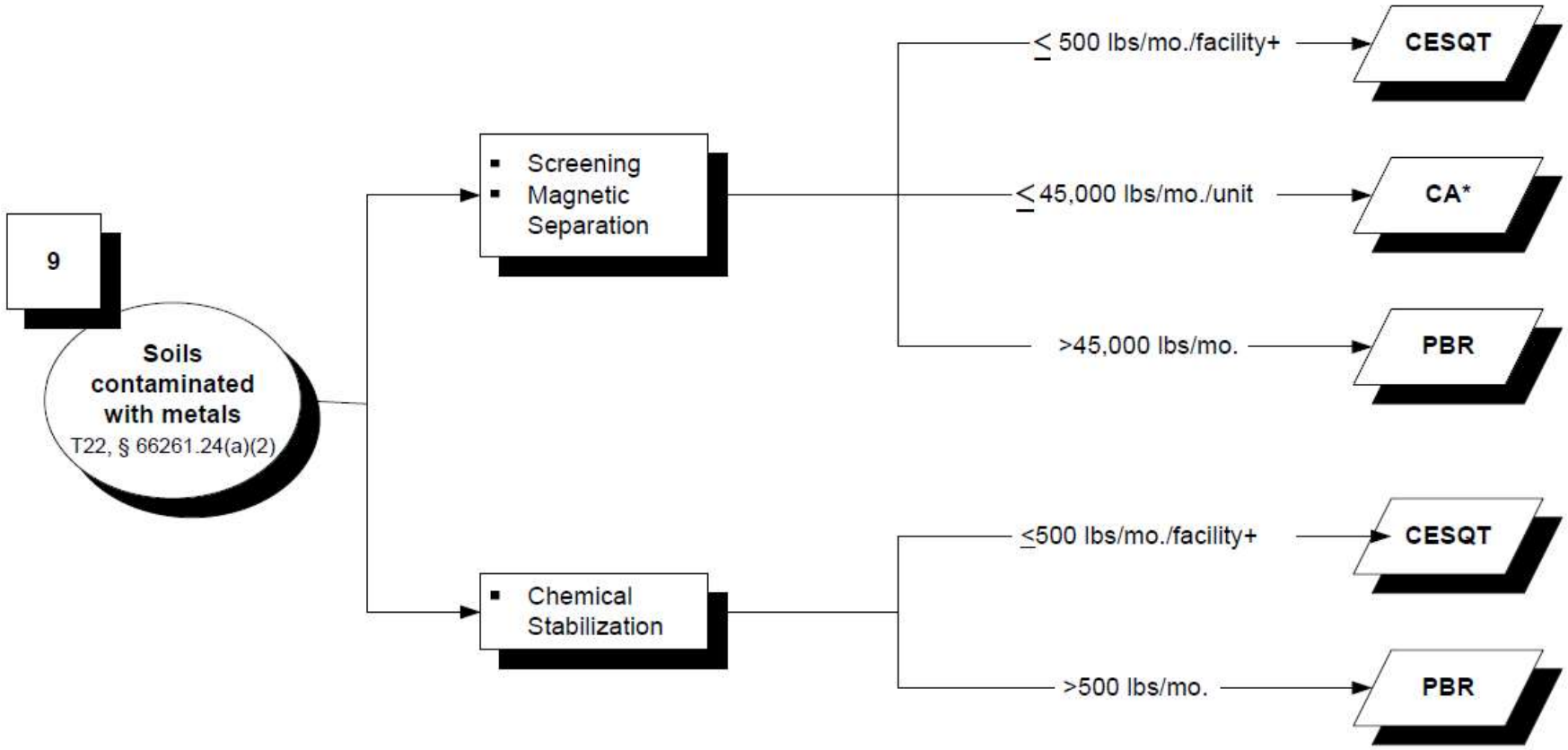

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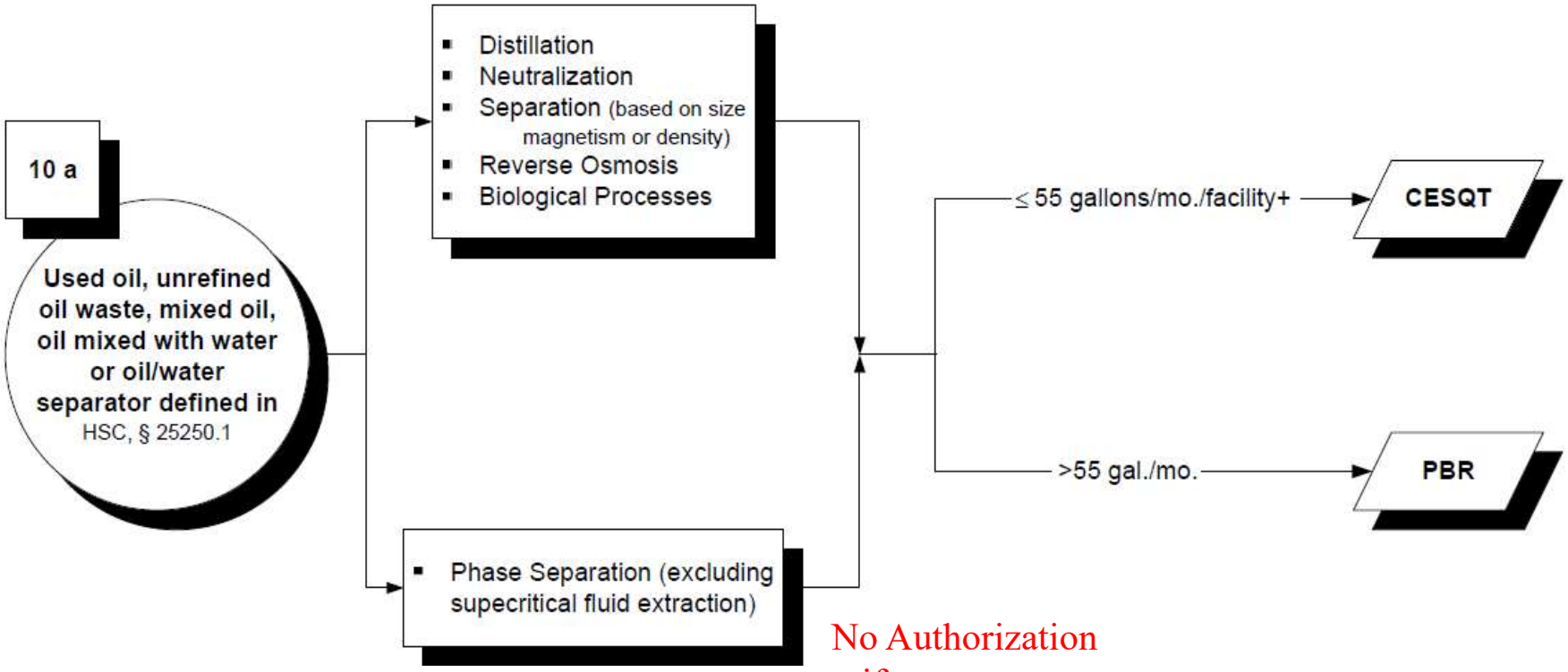

No Authorization
– if not treatment

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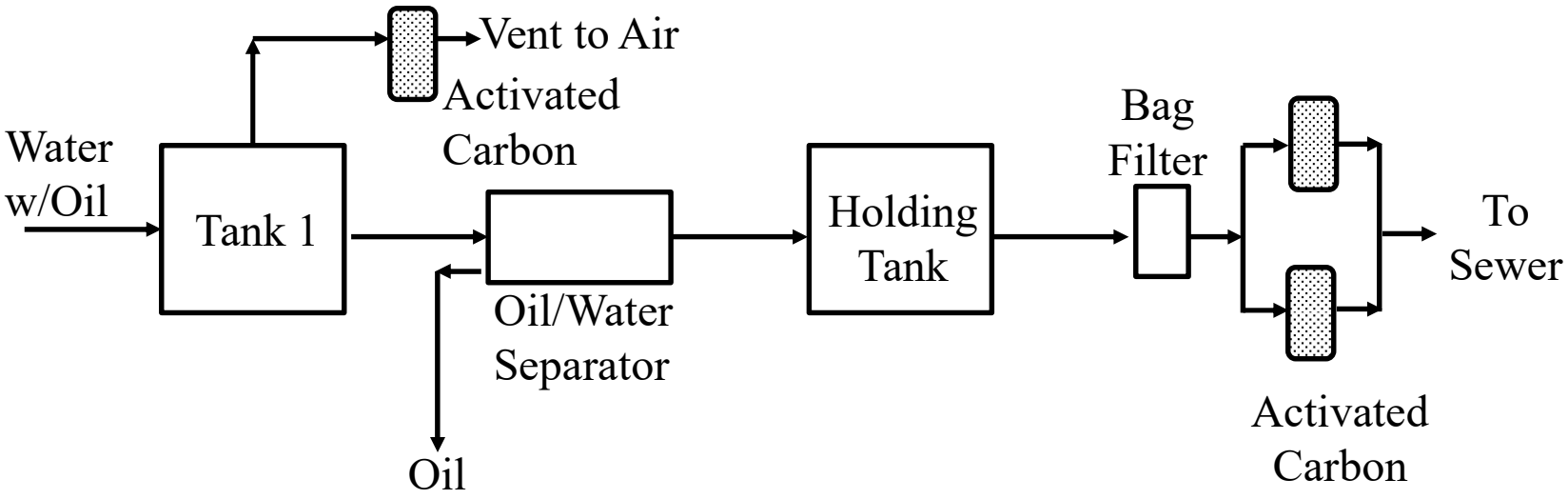
Example 1 – Evaluating a Process



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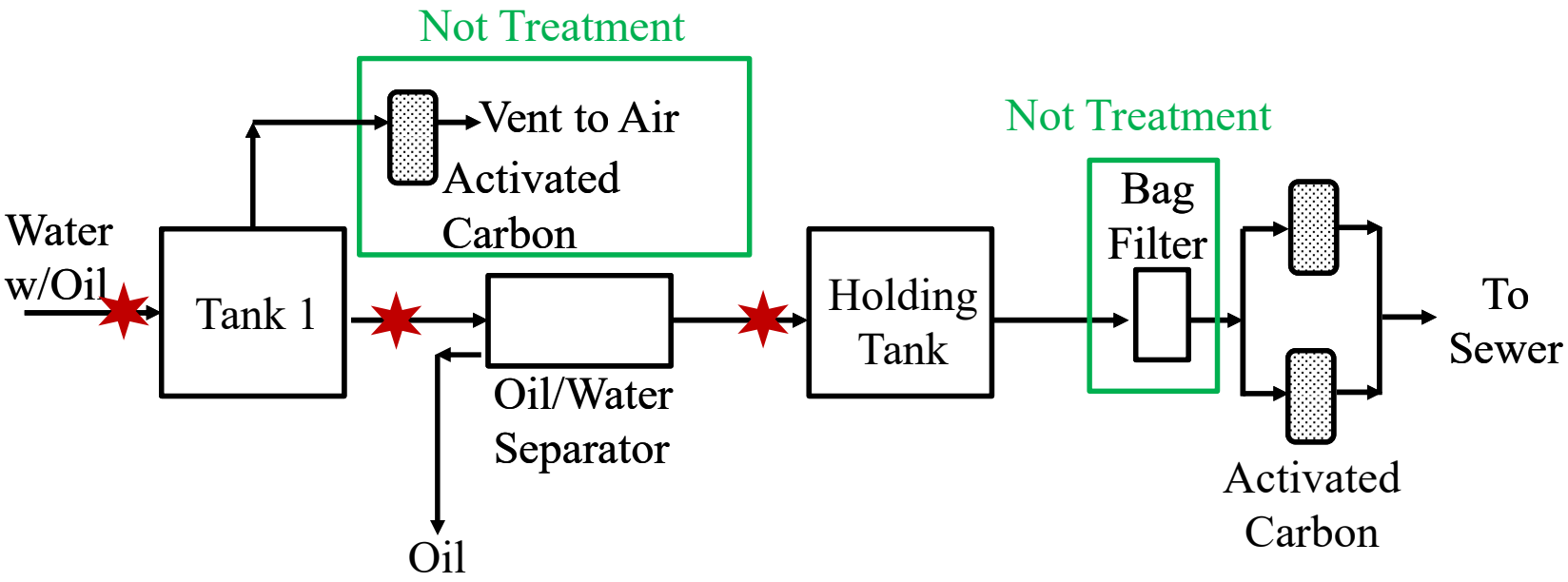

Hazardous Waste

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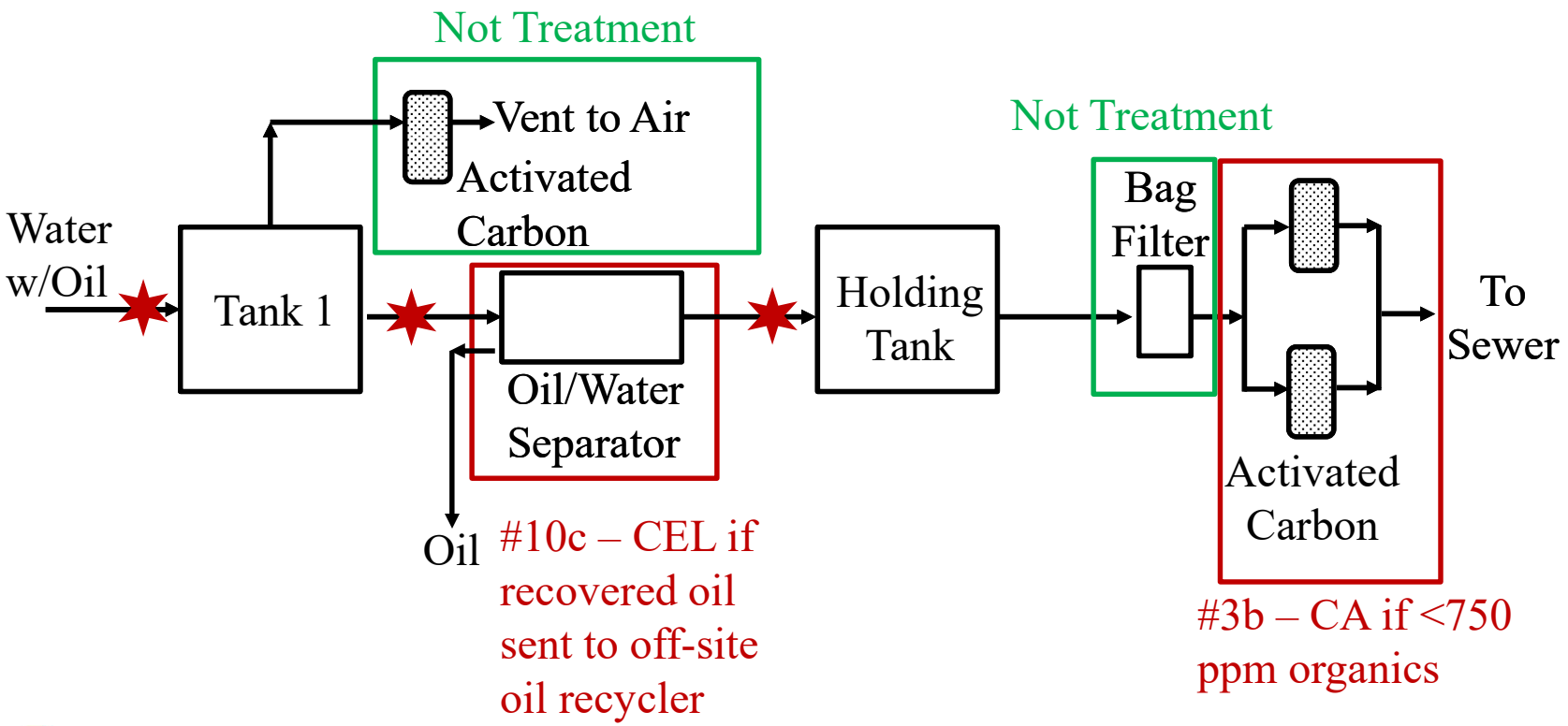

★ Hazardous Waste

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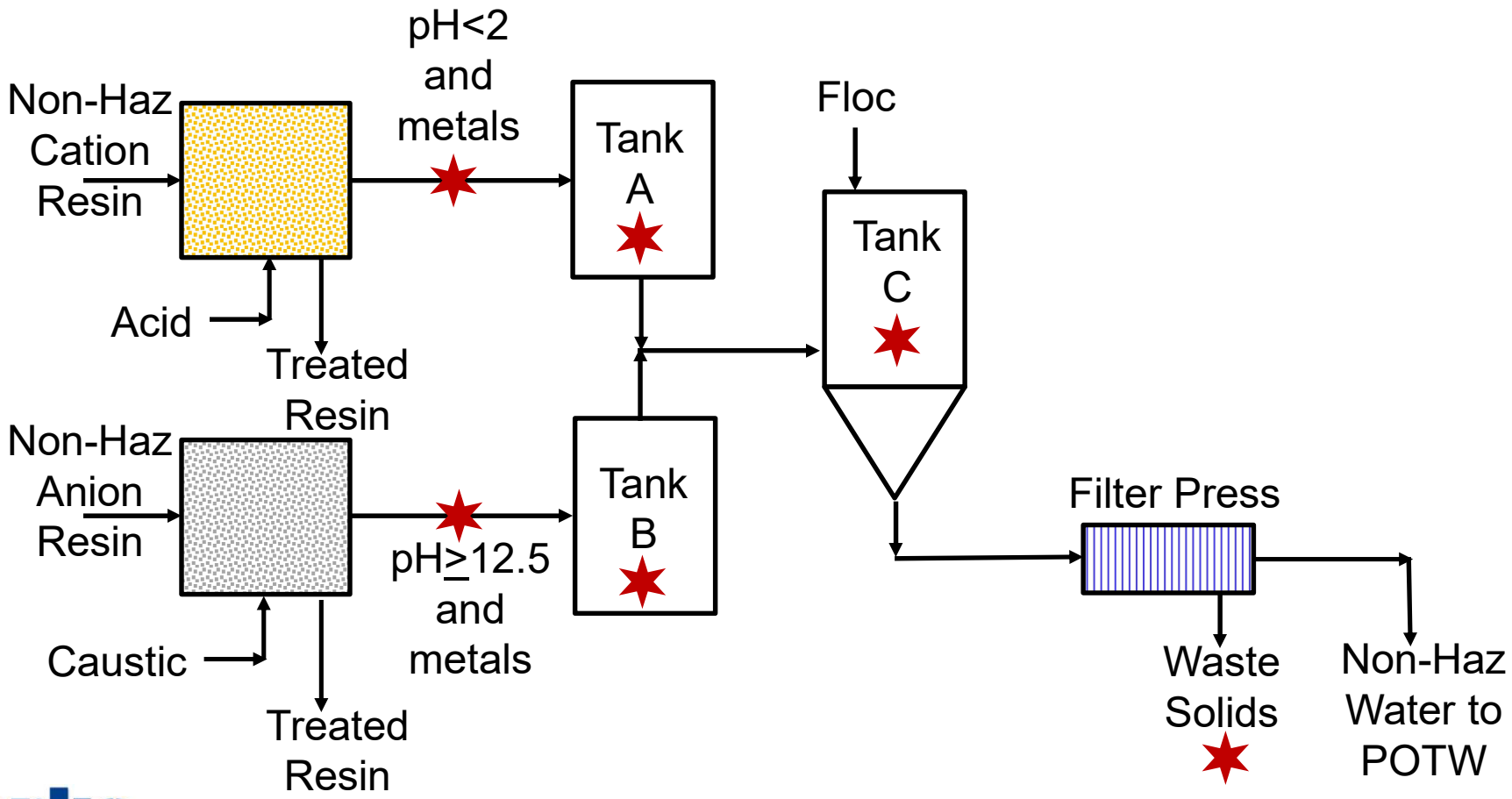
Example 2 – Evaluating a Process



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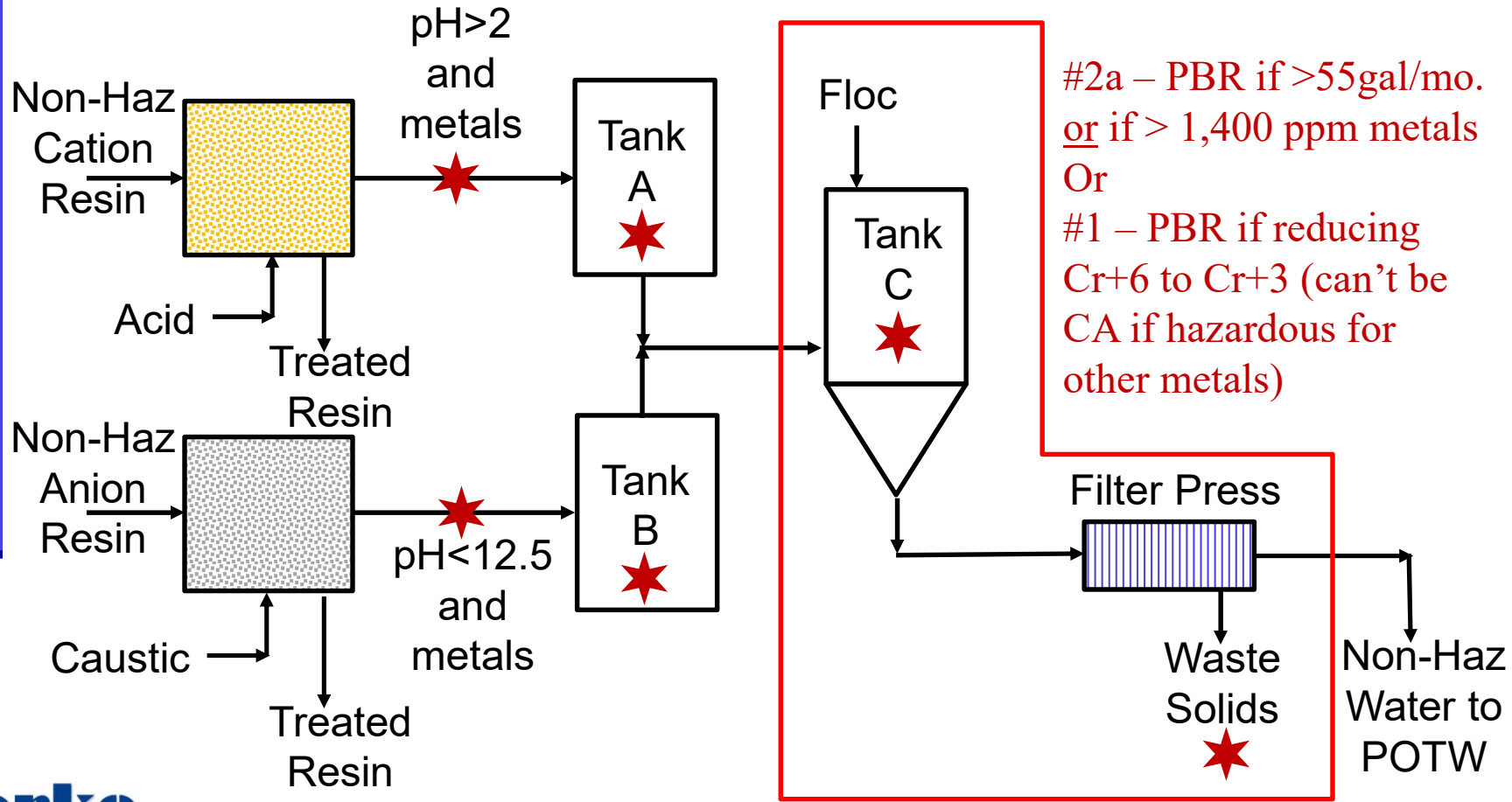
Example 2 – Evaluating a Process



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FTU vs. TTU

- Fixed Treatment Unit (FTU) remains at one site
  - 22 CCR 66260.10 – "Fixed Treatment Unit" means any equipment which performs treatment as defined in this section and which is permanently stationed, or which is periodically assembled for use, at a single facility for the purpose of performing treatment, regardless of the period or frequency of treatment.
- Transportable Treatment Unit (TTU) can move from one site to another

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Another Definition

- 22 CCR 66260.10 – "Unit" means *a tank, a 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 waste streams. *The devices are either plumbed together or otherwise linked so as to form one system.* This definition only applies to Conditional Exemption, Conditional Authorization, and Permit By Rule operations.

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TTU Summary

- CE or PBR obtained by TTU owner/operator
- TTU notification forms sent to **DTSC,** not CUPA
- Must adhere to same waste stream, treatment method, and volume limits in TPP Flowchart
- Annual notification by March 1st or as specified

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TTU Summary

- Site-specific notifications to DTSC
  - 21 days prior to work on each site (Form 1197)
  - Includes certification that local CUPA has been notified
  - Submitted by certified mail
- Follows same general standards for PBR or CE units
- Must only treat on-site generated waste

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PBR Requirements (22 CCR 67450)

- Notification
  - 60 days before first treatment
  - Complete forms in CERS
    - Business Activities Page
    - Owner/Operator Identification Page
    - On-Site Haz Waste Treatment Notification – Facility Page and Unit Page (one for each)
  - Notify property owner, if different

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PBR Requirements (22 CCR 67450)

- Annual notification by January 1st
- Prepare annual report [Section 67450.3(c)(10)] when requested
  - Owner name, address, EPA ID #, etc.
  - ID of each FTU operated
  - # of days each FTU operated
  - Amount of hazardous waste treated and waste composition and characteristics
  - Composition and characteristics of wastewater and residuals and where managed

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PBR Requirements

- Generator Operating Standards
  - Must comply with 22 CCR Ch. 15, Generator Standards
  - Time limits for waste accumulation
  - LQG Tank Systems must be certified by P.E.
    - Uploaded in CERS for PBR units
  - Containers meet Section 66264.175, which includes secondary containment

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PBR Requirements

- Recordkeeping
  - Waste Analysis Plan [Section 66265.13(b)]
    - Parameters to be monitored
    - Test methods
    - Sampling frequency and techniques
    - Methods to determine effective treatment

  - Inspection Schedule [Section 66265.15(b)]
    - What, when, and how will be inspected

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PBR Requirements

- Recordkeeping (cont.)
  - Training documents [Section 66265.16(d)]
    - SB 673 enhanced training – includes emergency response training, all facility awareness training, and function specific training; DOT training
  - Contingency Plan (Section 66265.52)
  - Most recent CUPA Notification [Section 67450.2(b)(2)]
  - Air District Permit – if required [Section 67450.3(c)(8)(f)]

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PBR Requirements

- Recordkeeping (cont.)
  - Documentation related to Environmental Investigation (Section 67450.7) within 1 year
    - Phase 1 Environmental Assessment to document past releases, spills, etc. from facility (DTSC Form 1151)
    - Corrective action workplan within 90 days
  - Documentation of any convictions, judgements, settlements, or orders resulting from environmental violations concerning the operation of the facility within previous 3 years [Section 67450.2(b)(3)(F)]

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PBR Requirements

- Recordkeeping (cont.)
  - Closure Plan [Section 67450.3(c)(11)(B)]
    - Describes how and when each unit will be closed considering maximum operation
    - Refers to applicable Ch. 15 standards
      - Closure General (Section 66265.14)
      - Containers (Section 66265.178)
      - Tanks (Section 66265.197)

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PBR Requirements

- Recordkeeping (cont.)
  - Closure Plan [Section 67450.3(c)(11)(B)]
    - Maximum inventory of waste in unit at any time
    - Estimate of when closure will occur
    - Closure schedule (at least total time to close each unit)
    - Maintain closure plan (modify as required)

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PBR Requirements

- Closure Details
  - Within 90 days of treating last volume of HW; treat or remove all HW per the Closure Plan
    - OR demonstrate that longer than 90 days is required
  - Complete closure within 180 days
  - Notify CUPA at least 15 days prior to completing closure (often overlooked)
  - Continue to comply until closure certification is submitted signed by P.E. and owner/operator

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PBR Closure

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PBR Closure

Before Closure

After Closure

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PBR Closure

Another Unit – Before Closure

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PBR Closure

Another Unit – Before Closure

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PBR Closure – Report

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PBR Requirements

- Financial Assurance (Section 67450.13)
  - Prepare written closure cost estimate for each unit
    - Actual cost to close (adjust for changes)
    - May consider using own staff/equipment and salvage value of wastes/treatment equipment
    - Estimate is submitted in CERS
    - Adjusted annually for inflation by March 1st

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PBR Requirements

Closure Cost Calculations				
Item No.	**Activity**	**Comment**	**Cost 2013**	**Cost 2016 (Adj. for inflation)**
1	Removal, Treatment, or Disposal of Waste Inventories	Removal will be performed in-house. -Treatment of remaining waste streams will be performed in-house. -Treated water will be discharged to sewer. -Waste sludge to be hauled off-site.	$ 2,328.00	$ 2,465.46
2	Removal and disposal of any residual grit, sand, and debris. -The main area (and adjacent) is entirely concrete, with 6" concrete berms, thus there is no exposed soil that needs to be removed. -Waste water treatment sump will be emptied of both sediment and water.	Removal will be performed in-house. -No exposed soil is present, sub-concrete contamination is likely minimal/non-existent. -(based on contractor estimate)	$ 975.00	$ 1,032.57
2	Decontamination of equipment and infrastructure by pressure washing.	Decontamination of equipment will be performed in-house (approximately 2 days).	$ 500.00	$ 529.52

Year	Q4 Price Deflator	Increase Ratio	
2013	105.935	-	From 4Q 2012
2016	112.19	1.059	Back to 2013 year

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PBR Requirements

- Financial Assurance (cont.)
  - If estimate <$10,000 – submit statement certifying facility can fund closure needs
  - If estimate >$10,000 – obtain financial assurance for closure naming CUPA
    - Closure trust fund, surety bond, closure letter of credit, closure insurance, corporate financial test

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PBR Requirements

- Fees – $1,719 each year (or partial year) plus local CUPA fees (optional)
- Plot Plan showing PBR Unit location on-site
- Mark exterior with owner/operator ID # and Unit Identifier
- Security – Prevent unknowing entry, minimize unauthorized entry
  - 24-hour surveillance (guards, personnel, video)
  - Gates or barriers to control entry

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PBR Requirements – Special for Cyanide Waste Treatment

- Total cyanide limited to 5,000 mg/L after dilution
- Written approval from POTW required
- Residual solids are recycled for metals recovery
  - Justification required by Jan. 30th if not recycled
- Comply with Best Management Requirements (e.g., holding racks, countercurrent rinsing, evaluate non-cyanide alternatives every 4 years)
- Initial and annual training for handlers of cyanide solutions, rinse waters, or wastes

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PBR Requirements

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Tiered Permitting Overview – Agenda

- Background
- Overview of Tiers
- The Wastes and Treatment Processes
- FTU vs. TTU
- Compliance Requirements – PBR
- Compliance Requirements – CA
- Compliance Requirements – CEL/CESW/CESQT
- Common Violations/Issues

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Conditional Authorization Requirements (HSC 25200.3)

Mostly Similar to PBR

- Treat only identified wastes, by listed treatment methods, in specified quantities
  - Generally limited to no more than 5,000 gallons or 45,000 pounds per month
- Notification via CERS at least 60 days prior
- Maintain record of any environmental violations for previous 3 years (with initial notification)
- No annual notification required

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*Not listed for PBR

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Conditional Authorization Requirements (Similar to PBR)

- Generator standards in 22 CCR Ch.15, accumulation time limits, marking/labeling, etc.
- LQG Tank Systems must be certified by P.E. (every 5 years)
- Containers meet Section 66264.175, which includes secondary containment
- Recordkeeping
  - Inspection Schedule
  - Written Operating Instructions
  - Record data on waste concentrations, amounts

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Conditional Authorization Requirements (Similar to PBR)

- If discharge to sewer, records that show compliance with permit
- Annual Waste Minimization Statement
- Tanks must have secondary containment and have P.E. integrity assessment (5 years)
- Ancillary equipment not required to have containment if integrity assessed every 2 years

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Conditional Authorization Requirements (Similar to PBR)

- Maintain Closure Cost Estimate
- Financial Assurance
  - Prepare written closure cost estimate for each unit
    - Actual cost to close (adjust for changes)
    - May consider using own resources and salvage value of wastes/treatment equipment
    - Submit estimate in CERS, adjust annually by March 1st

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Conditional Authorization Requirements (Similar to PBR)

- Financial Assurance (cont.)
  - If estimate <$10,000 – submit statement certifying facility can fund closure needs
  - If estimate ≥$10,000 obtain financial assurance for closure naming CUPA using mechanisms listed under PBR

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Conditional Authorization Requirements (Similar to PBR)

- Security provisions as in PBR
- Closure
  - Closure Plan not required
  - Comply with proper closure in HSC 25200.3
    - Minimizes need for further maintenance and eliminates release of hazardous waste or constituents to the environment
    - Notify CUPA in writing when operations cease

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Conditional Authorization Requirements (Similar to PBR)

- Documentation related to Environmental Investigation within 1 year
  - Phase 1 Environmental Assessment to document past releases, spills, etc. from facility (DTSC Form 1151)
  - Corrective action workplan within 90 days if needed
- Fees – $1,719 each year plus local fees

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Tiered Permitting Overview – Agenda

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Conditional Exemption [HSC 25201.5(a) and (c) and 25144.6(c)]

- CE – Small Quantity Treatment
  - No more than 500 pounds or 55 gallons/month
- CE – Specified Waste Streams
  - No volume limits except for oil/water mixtures and separation sludges (<1,050 gals./mo. oil)
- CE – Limited
  - No volume limit but must be collection of used oil from water and oil must be transported to off-site oil recycler

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Conditional Exemption [HSC 25201.5(a) and (c) and 25144.6(c)]

- CE – Commercial Laundries
  - Requires following management methods
  - Sound construction of containers and wash water conveyances (inspected twice a year)
  - Sludge collected and managed appropriately
  - Written operating instructions/treatment record
  - Inspection schedule and log
  - Perform proper closure
  - Fees

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Conditional Exemption Requirements

- Treat only identified wastes by listed methods or waste in limited quantities
- Notification via CERS at least 60 days prior
- No annual notification
- Generator operating standards in 22 CCR Ch. 15, accumulation time limits, marking/labeling, etc.
  - LQG Tank Systems must be certified by P.E. (5 years)
  - Containers meet Section 66264.175, which includes secondary containment

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Conditional Exemption Requirements

- Recordkeeping
  - Inspection schedule and log
  - Written operating instructions
    - Record data on waste concentrations, amounts
  - If discharge to sewer, records that show compliance with permit

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Conditional Exemption Requirements

- Exempt from Financial Assurance Requirements
- No formal Closure Plan required
- Follow closure per HSC 25201(d)(8)
  - Remove waste and decontaminate residues, containment system, soils, structures
  - Notify CUPA you ceased operation and properly closed unit

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Conditional Exemption Requirements

- LQG – Tanks must have secondary containment and have P.E. integrity assessment (5 years)
- SQG – Follow federal tank standards (secondary containment and P.E. certification not required)
- Ancillary equipment not required to have containment if integrity assessed every 2 years
- Record of any environmental violations for previous 3 years – not required

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Conditional Exemption Requirements

- Fees
  - $38 per unit (not adjusted for inflation) under DTSC
  - Or as billed by CUPA

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Tiered Permitting Overview – Agenda

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Tier Permitting – Common Violations/Issues

Category	Description/Examples
Documentation	Not maintaining required documents (WAP, contingency plan, training, etc.)
Unauthorized Treatment	Non-filer or incorrect tier, change in equipment
FTU Markings	Not marking exterior with O/O, facility ID, unit ID
Tank Certifications	No assessment or 5-year reassessment; or assessment is inadequate (lacks information)

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Tier Permitting – Common Violations/Issues

Category	Description/Examples
Records and Documents	Make documents available where FTU operates; Submit signature page; maintain records for 3 years

Oftentimes, each facility had more than one violation

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Thank You!

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Tiered Permitting Overview – Agenda

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- Compliance Requirements – CEL/CESW/CESQT
- Common Violations
- Supplemental Info – CERS Screens

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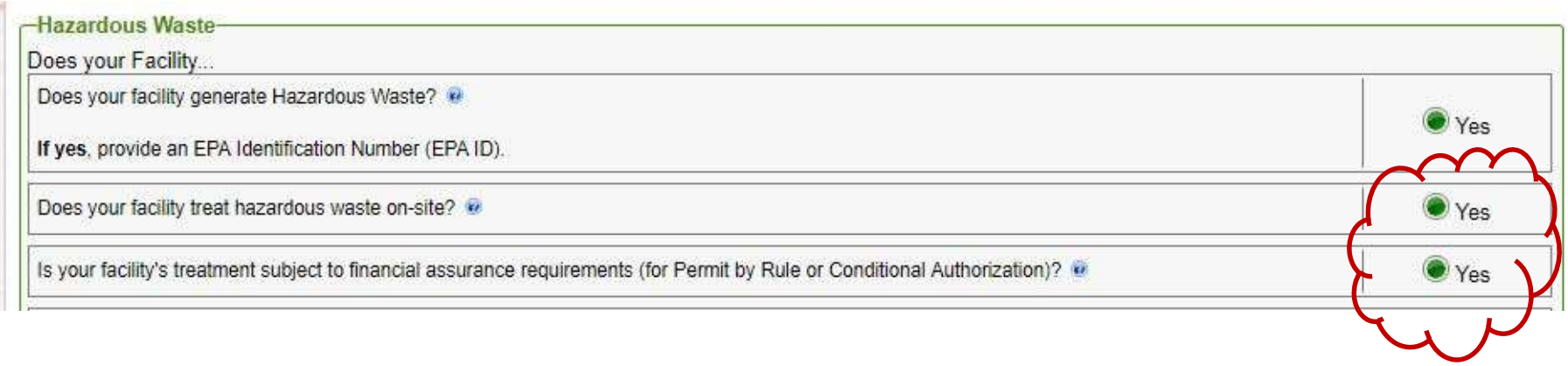
CERS Examples – PBR

Business Activities Page



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CERS Examples – PBR

After hitting Start, the required pages become visible

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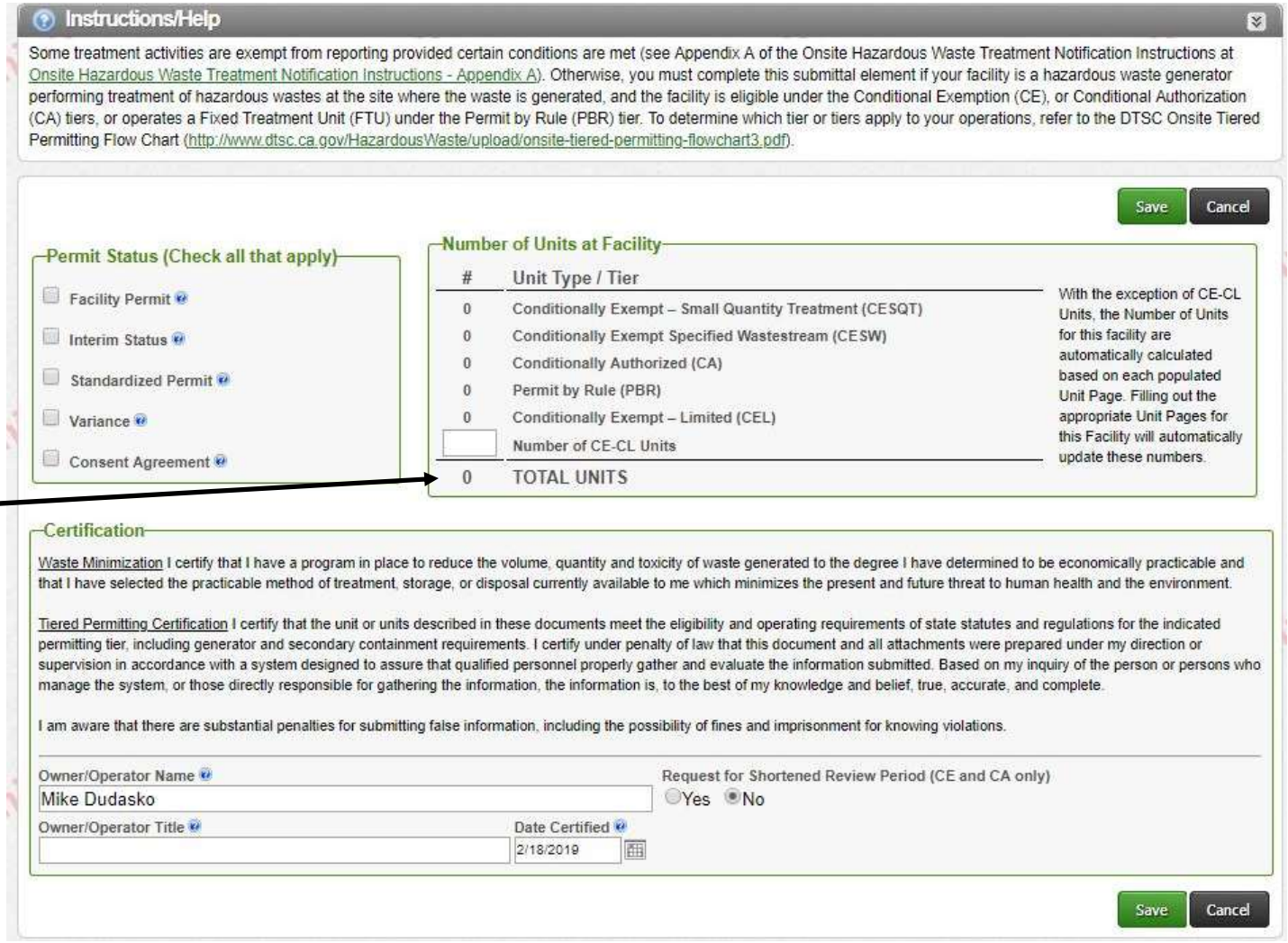
CERS Examples – PBR

Populates Automatically



Instructions/Help

Some treatment activities are exempt from reporting provided certain conditions are met (see Appendix A of the Onsite Hazardous Waste Treatment Notification Instructions at Onsite Hazardous Waste Treatment Notification Instructions - Appendix A). Otherwise, you must complete this submittal element if your facility is a hazardous waste generator performing treatment of hazardous wastes at the site where the waste is generated, and the facility is eligible under the Conditional Exemption (CE), or Conditional Authorization (CA) tiers, or operates a Fixed Treatment Unit (FTU) under the Permit by Rule (PBR) tier. To determine which tier or tiers apply to your operations, refer to the DTSC Onsite Tiered Permitting Flow Chart (http://www.dtsc.ca.gov/HazardousWaste/upload/onsite-tiered-permitting-flowchart3.pdf).

Save Cancel

Permit Status (Check all that apply)

- Facility Permit
- Interim Status
- Standardized Permit
- Variance
- Consent Agreement

Number of Units at Facility

#	Unit Type / Tier
0	Conditionally Exempt – Small Quantity Treatment (CESQT)
0	Conditionally Exempt Specified Wastestream (CESW)
0	Conditionally Authorized (CA)
0	Permit by Rule (PBR)
0	Conditionally Exempt – Limited (CEL)
	Number of CE-CL Units
0	TOTAL UNITS

With the exception of CE-CL Units, the Number of Units for this facility are automatically calculated based on each populated Unit Page. Filling out the appropriate Unit Pages for this Facility will automatically update these numbers.

Certification

Waste Minimization I certify that I have a program in place to reduce the volume, quantity and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment.

Tiered Permitting Certification I certify that the unit or units described in these documents meet the eligibility and operating requirements of state statutes and regulations for the indicated permitting tier, including generator and secondary containment requirements. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete.

I am aware that there are substantial penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Owner/Operator Name: Mike Dudasko

Request for Shortened Review Period (CE and CA only): Yes / No

Owner/Operator Title:

Date Certified: 2/18/2019

Save Cancel

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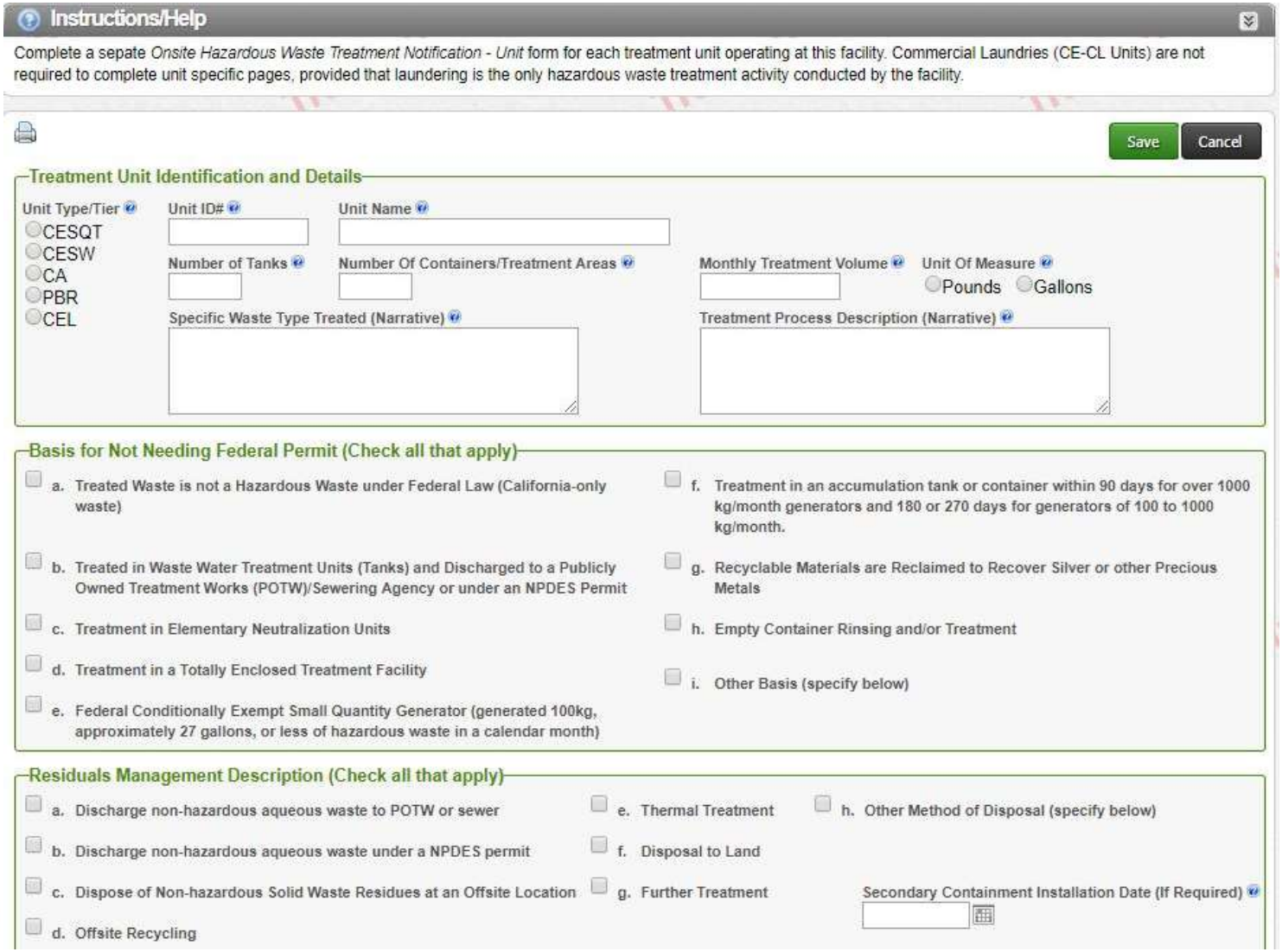
CERS Examples – PBR



Instructions/Help

Complete a sepate *Onsite Hazardous Waste Treatment Notification - Unit* form for each treatment unit operating at this facility. Commercial Laundries (CE-CL Units) are not required to complete unit specific pages, provided that laundering is the only hazardous waste treatment activity conducted by the facility.

Save Cancel

Treatment Unit Identification and Details

Unit Type/Tier: CESQT, CESW, CA, PBR, CEL

Unit ID#

Unit Name

Number of Tanks

Number Of Containers/Treatment Areas

Monthly Treatment Volume

Unit Of Measure: Pounds, Gallons

Specific Waste Type Treated (Narrative)

Treatment Process Description (Narrative)

Basis for Not Needing Federal Permit (Check all that apply)

a. Treated Waste is not a Hazardous Waste under Federal Law (California-only waste)

b. Treated in Waste Water Treatment Units (Tanks) and Discharged to a Publicly Owned Treatment Works (POTW)/Sewering Agency or under an NPDES Permit

c. Treatment in Elementary Neutralization Units

d. Treatment in a Totally Enclosed Treatment Facility

e. Federal Conditionally Exempt Small Quantity Generator (generated 100kg, approximately 27 gallons, or less of hazardous waste in a calendar month)

f. Treatment in an accumulation tank or container within 90 days for over 1000 kg/month generators and 180 or 270 days for generators of 100 to 1000 kg/month.

g. Recyclable Materials are Reclaimed to Recover Silver or other Precious Metals

h. Empty Container Rinsing and/or Treatment

i. Other Basis (specify below)

Residuals Management Description (Check all that apply)

a. Discharge non-hazardous aqueous waste to POTW or sewer

b. Discharge non-hazardous aqueous waste under a NPDES permit

c. Dispose of Non-hazardous Solid Waste Residues at an Offsite Location

d. Offsite Recycling

e. Thermal Treatment

f. Disposal to Land

g. Further Treatment

h. Other Method of Disposal (specify below)

Secondary Containment Installation Date (If Required)

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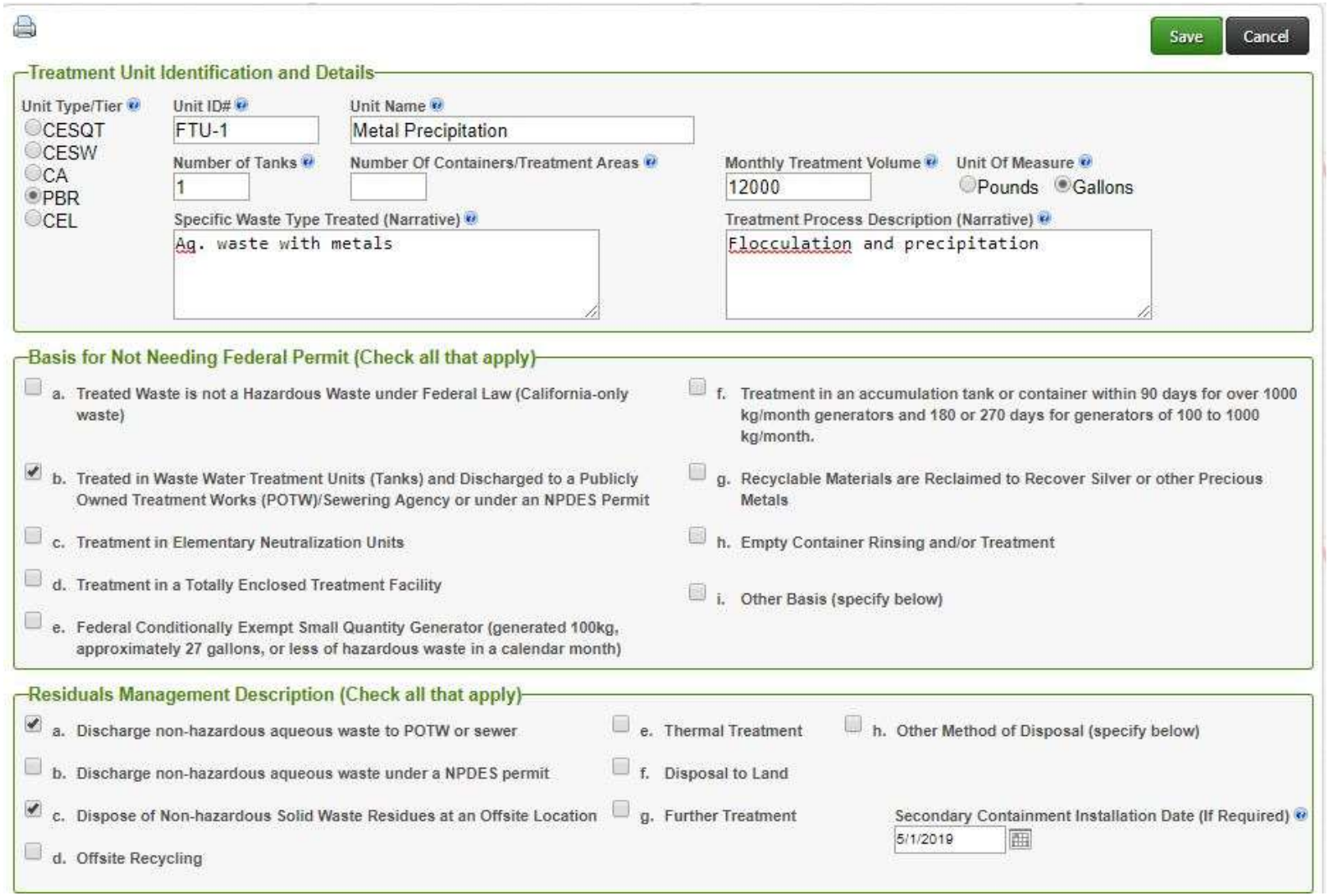
CERS Examples – PBR



Save Cancel

Treatment Unit Identification and Details

Unit Type/Tier: ○ CESQT ○ CESW ○ CA ◉ PBR ○ CEL

Unit ID#: FTU-1

Unit Name: Metal Precipitation

Number of Tanks: 1

Number Of Containers/Treatment Areas:

Monthly Treatment Volume: 12000

Unit Of Measure: ○ Pounds ◉ Gallons

Specific Waste Type Treated (Narrative): Ag. waste with metals

Treatment Process Description (Narrative): Flocculation and precipitation

Basis for Not Needing Federal Permit (Check all that apply)

- ☐ a. Treated Waste is not a Hazardous Waste under Federal Law (California-only waste)
- ☑ b. Treated in Waste Water Treatment Units (Tanks) and Discharged to a Publicly Owned Treatment Works (POTW)/Sewering Agency or under an NPDES Permit
- ☐ c. Treatment in Elementary Neutralization Units
- ☐ d. Treatment in a Totally Enclosed Treatment Facility
- ☐ e. Federal Conditionally Exempt Small Quantity Generator (generated 100kg, approximately 27 gallons, or less of hazardous waste in a calendar month)
- ☐ f. Treatment in an accumulation tank or container within 90 days for over 1000 kg/month generators and 180 or 270 days for generators of 100 to 1000 kg/month.
- ☐ g. Recyclable Materials are Reclaimed to Recover Silver or other Precious Metals
- ☐ h. Empty Container Rinsing and/or Treatment
- ☐ i. Other Basis (specify below)

Residuals Management Description (Check all that apply)

- ☑ a. Discharge non-hazardous aqueous waste to POTW or sewer
- ☐ b. Discharge non-hazardous aqueous waste under a NPDES permit
- ☑ c. Dispose of Non-hazardous Solid Waste Residues at an Offsite Location
- ☐ d. Offsite Recycling
- ☐ e. Thermal Treatment
- ☐ f. Disposal to Land
- ☐ g. Further Treatment
- ☐ h. Other Method of Disposal (specify below)

Secondary Containment Installation Date (If Required): 5/1/2019

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CERS Examples – PBR

It is the TPP Flowchart in text form (sort of)

At least one Waste and Treatment Combination must be provided.

Permit by Rule (PBR) - Waste and Treatment Process Combinations

1. **Aqueous wastes containing hexavalent chromium may be treated by the following process:**
   - ☐ Reduction of hexavalent chromium to trivalent chromium with sodium bisulfite, sodium metabisulfite, sodium thiosulfite, ferrous sulfate, ferrous sulfide, or sulfur dioxide provided both pH & addition of the reducing agent are automatically controlled

2. **Aqueous wastes containing metals listed in Title 22, CCR, Section 66261.24(a)(2) and/or fluoride salts may be treated by the following technologies:**
   - ☑ pH Adjustment / Neutralization
   - ☑ Precipitation or Crystallization
   - ☐ Phase Separation by Filter, Centrifuge, or Gravity Settling
   - ☐ Ion Exchange
   - ☐ Reverse Osmosis
   - ☐ Metallic Replacement
   - ☐ Plating onto an Electrode
   - ☐ Electrodialysis
   - ☐ Electrowinning or Electrolytic Recovery
   - ☐ Chemical Stabilization Using Silicates or Cementitious Reactions
   - ☐ Evaporation
   - ☐ Adsorption

3. **Aqueous wastes with total organic carbon less than 10% as measured by EPA Method 9060 and less than 1% total volatile organic compounds as measured by EPA Method 8240 may be treated by the following technologies:**
   - ☐ Phase separation by filter, centrifuge, or gravity settling, but excluding super critical fluid extraction
   - ☐ Adsorption
   - ☐ Distillation
   - ☐ Biological processes conducted in tanks or containers and utilizing naturally occuring microorganisms
   - ☐ Photodegradation using ultraviolet light, with or without the addition of hydrogen peroxide or ozone, provided the treament is conducted in an enclosed system
   - ☐ Air stripping or steam stripping

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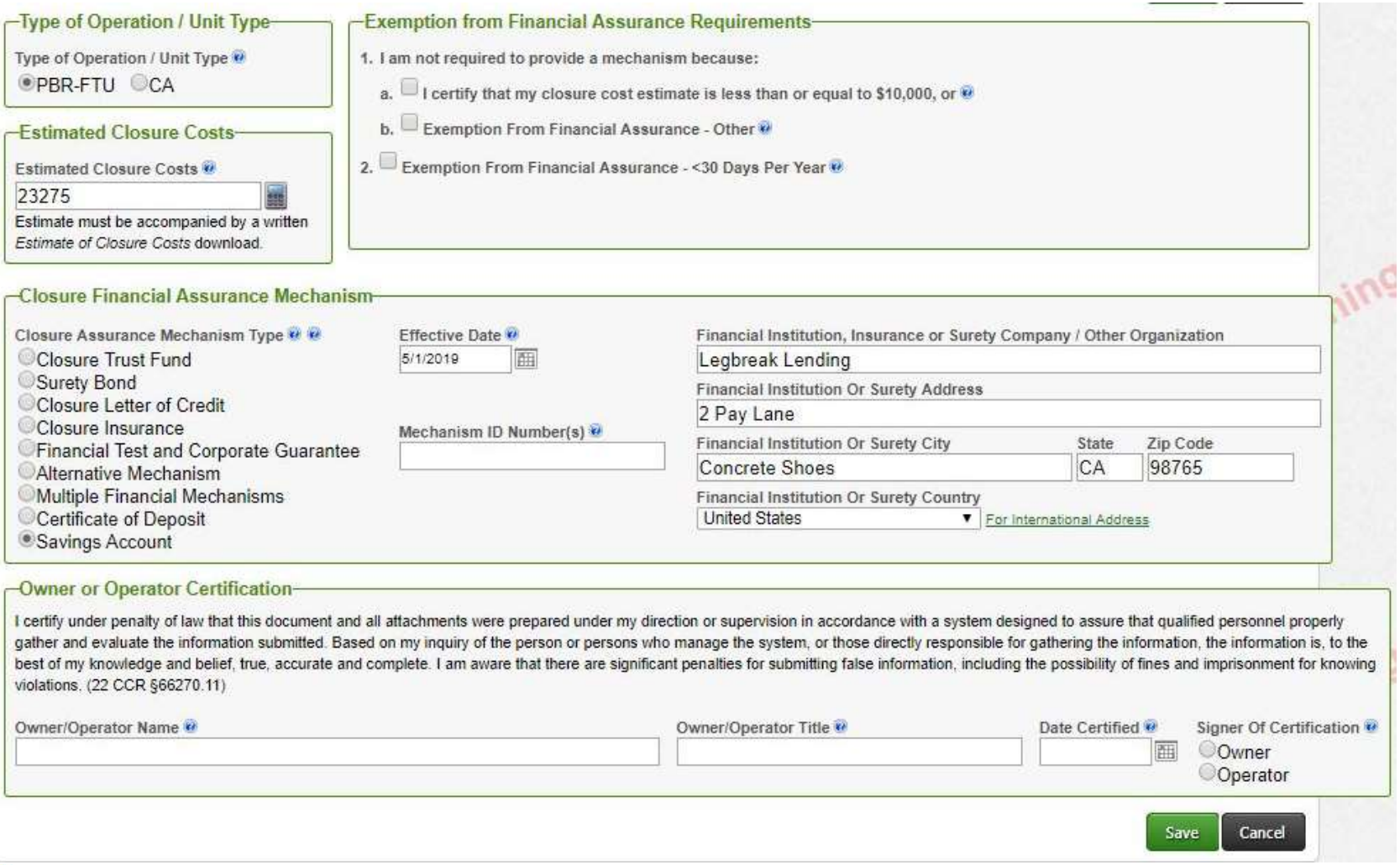
CERS Examples – PBR



Type of Operation / Unit Type

Type of Operation / Unit Type
(•) PBR-FTU ( ) CA

Estimated Closure Costs

Estimated Closure Costs
23275
Estimate must be accompanied by a written *Estimate of Closure Costs* download.

Exemption from Financial Assurance Requirements

1. I am not required to provide a mechanism because:
   a. [ ] I certify that my closure cost estimate is less than or equal to $10,000, or
   b. [ ] Exemption From Financial Assurance - Other
2. [ ] Exemption From Financial Assurance - <30 Days Per Year

Closure Financial Assurance Mechanism

Closure Assurance Mechanism Type
( ) Closure Trust Fund
( ) Surety Bond
( ) Closure Letter of Credit
( ) Closure Insurance
( ) Financial Test and Corporate Guarantee
( ) Alternative Mechanism
( ) Multiple Financial Mechanisms
( ) Certificate of Deposit
(•) Savings Account

Effective Date: 5/1/2019

Mechanism ID Number(s):

Financial Institution, Insurance or Surety Company / Other Organization: Legbreak Lending

Financial Institution Or Surety Address: 2 Pay Lane

Financial Institution Or Surety City: Concrete Shoes

State: CA

Zip Code: 98765

Financial Institution Or Surety Country: United States

For International Address

Owner or Operator Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations. (22 CCR §66270.11)

Owner/Operator Name

Owner/Operator Title

Date Certified

Signer Of Certification
( ) Owner
( ) Operator

Save Cancel

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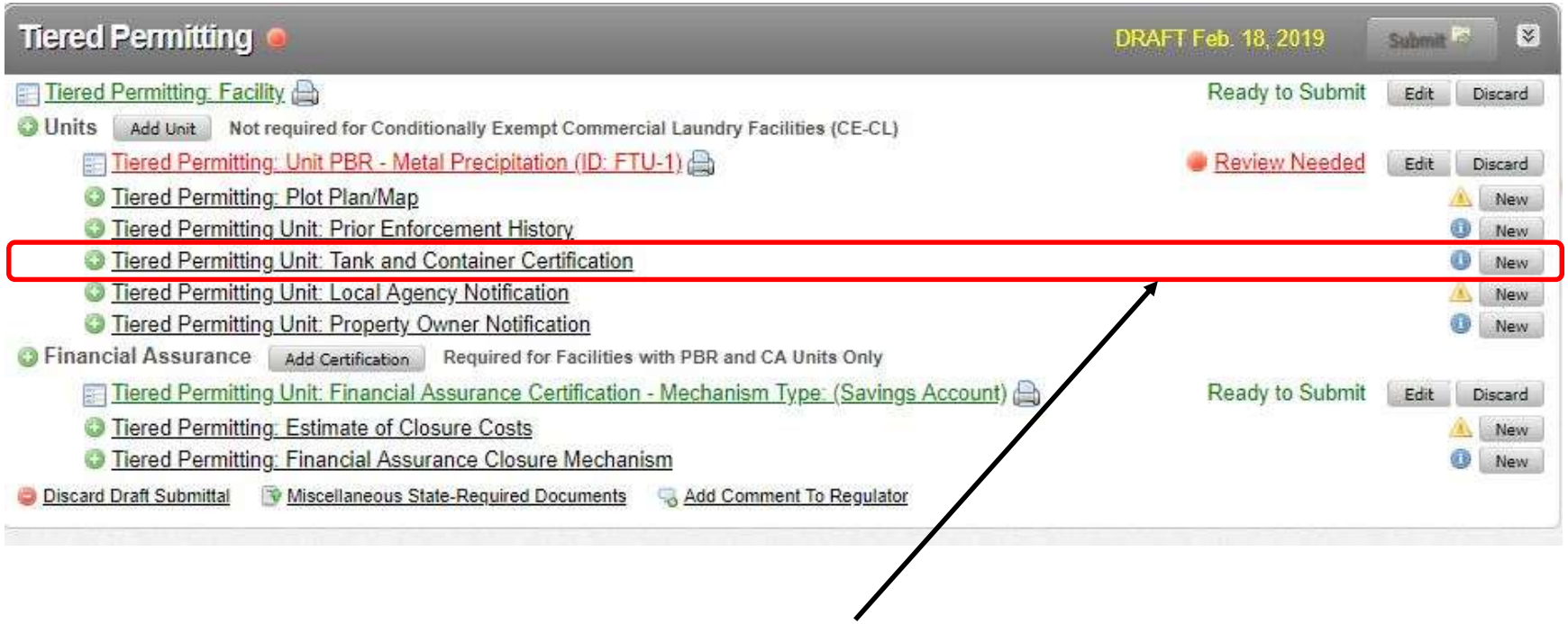
CERS Examples – PBR



Must submit P.E. tank certification for PBR Units

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Thank You!

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