



# Hazardous Waste 101

Presented by

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**Virtual Conference**



[www.calcupa.org](http://www.calcupa.org)

# Hazardous Waste: The Basics

These are topics you need to know well!

Learning Hazardous Waste laws and regulations takes time....even years to grasp all topics!



# Areas To Be Covered

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- Introduction to Hazardous Waste
- Hazardous Waste Classification
- Generator Status & Requirements
- On Site Storage and Handling
- Container Management
- Special Considerations
- Transportation, Disposal, and Recordkeeping
- Tiered Permitting Basics
- Common Industry Wastes
- Hazardous Waste Inspections and Violations

# Who Regulates Hazardous Waste?

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## Governing Agencies

### **Federal:** US Environmental Protection Agency (**EPA**)

Resource Conservation and Recovery Act (**RCRA**) , 1976/ adopted 1982

*Code of Federal Regulations (40 CFR), RCRA Subtitle C, Code of Federal Regulations Title 49, Subchapter C*

### **State:** CA Department of Toxic Substances Control (**DTSC**)

Hazardous Waste Control Law

*Health & Safety Code (**HSC**)*

*Title 22, Ca. Code of Regulations (**22 CCR**)*

### **Local:** Certified Unified Program Agencies (**CUPA**)

*Health & Safety Code (**HSC**) Ch 6.11 and Title 27, Ca. Code Regulations (**27 CCR**)*

# Hazardous Waste Generator Improvement Rule

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Federal changes went into effect on May 30, 2017

DTSC *is required* to adopt provisions within the rule that are more stringent (seven).

DTSC *may* adopt provisions that are less stringent or neither less nor more stringent, *but is not required to*

**GIR does NOT go into effect in CA until DTSC adopts it.**



# POP QUIZ

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# Is it a Waste?



# Statutory Definition of “Waste”

*HSC § 25124*

The term “waste” means “any solid, liquid, semisolid, or contained gaseous **discarded** material that **is not excluded** by this Chapter or by regulations...”





# POP QUIZ



# Is it Hazardous?



# Definition: Hazardous Waste

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A solid waste, or combination of solid wastes, which because of its **quantity, concentration, or physical, chemical, or infectious characteristics** may (1) cause, or significantly contribute to, an **increase in mortality** or an increase in serious irreversible, or incapacitating reversible **serious illness** or (2) pose a substantial present or **potential hazard to human health or the environment** when improperly treated, stored, transported, or disposed of, or otherwise managed...



# Two Types of RCRA Hazardous Waste

22 CCR 66261.3  
40 CFR 261.31

A waste that meets any of the criteria for the identification of a hazardous waste

## Listed



## Characteristic



**Ignitable** chemicals generally are liquids with flash points below 60°C or 140°F.



**Reactive** chemicals ignite or create poisonous vapors when mixed with other products or can explode when exposed to heat, air, water, or shock.



**Corrosive** chemicals are generally aqueous wastes with a pH less than or equal to 2.0 or greater than or equal to 12.5.



**Toxic** chemicals may cause long-term illness (such as cancer). Pesticides, paint thinners, many auto products, and some cleaners are toxic.

# RCRA Listed Wastes

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**F Code**: Common manufacturing & industrial processes, multi-use **non-specific sources** wastes (F001-F039)

- Spent solvents F001-F005, Spent cyanide plating bath F007

**K Code**: Waste from **specific industries** or specific sources

- Wastewater sludge, ink formulation, pesticides etc.

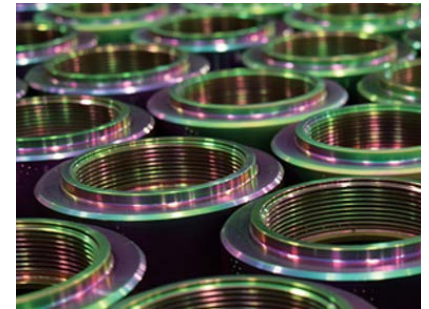
**The P & U Lists**: Pure/Commercial grade **UNUSED** chemicals.

**U Code**: HW from discarded chemical products.

Ex: Benzene U019

**P Code**: **Acutely hazardous, unused/off-spec. chemicals**

- Sodium cyanide P106, silver cyanide
- Nicotine



(22 CCR §66261.30, 66261.100, 66261.101)

# P-Listed: Acutely Hazardous

List of wastes that are **Acutely Hazardous**

Must be managed as P-listed RCRA hazardous waste, if two conditions are met:

1. Contains a sole active ingredient from the P list
- AND**
2. It has not been used for its intended purpose



# California HW aka “Non-RCRA” Waste

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List of chemicals that are presumed to be hazardous in California

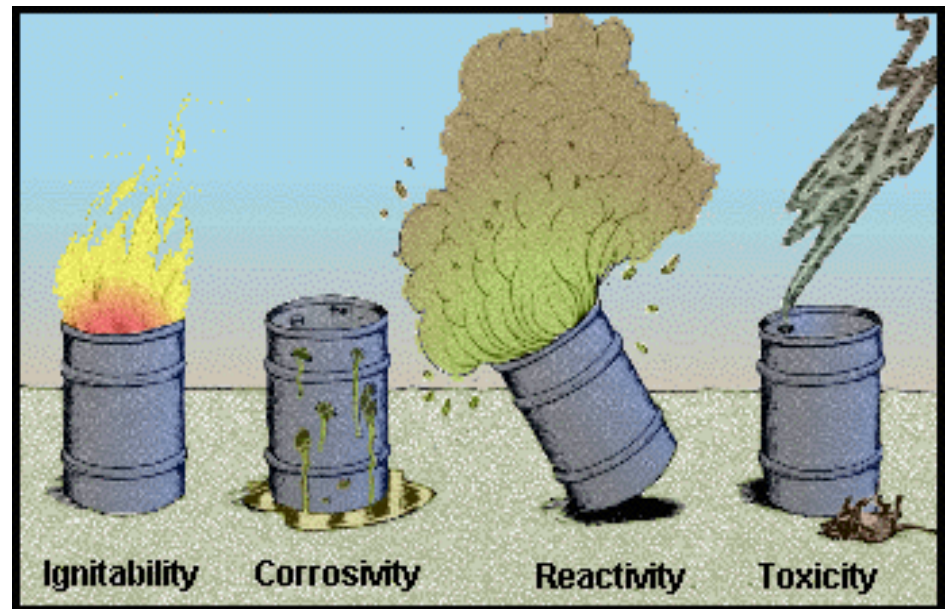
CA- Listed waste:

- M listings (Mercury-containing materials)
- **22 CCR, Chapter 11, Appendix X**
- Excluded under 40 CFR 261.4 and exhibit any of the Article 3 criteria
- Used Oil\*, HHW, Mining waste, landfill leachate
- Corrosive wastes (solids and semi-solids)
- Toxic wastes (TTLC, STLC and aquatic toxicity)
- Containers that are “RCRA empty” but not “California empty”

# Four HW Characteristics

Four characteristics are used to determine whether a waste is hazardous:

- **Ignitability (D001)**
- **Corrosivity (D002)**
- **Reactivity (D003)**
- **Toxicity (D004-043)**



DTSC, HWG Advanced topics (picture credit)

Each has its own **D Code**  
*(22 CCR Chapter 11, Article 3)*



# Ignitability

22 CCR §66261.21

Wastes which will easily catch fire exhibit the hazardous waste characteristic of ignitability:

- Has a **flash point less than 140° F**,
- Is **readily ignitable**,
- Is an **oxidizer** (as defined in 49 CFR),
- **EPA waste code D001**



Examples: solvents (i.e., acetone, >24% alcohol solutions); paint thinners; metal or mineral dusts (e.g., aluminum, magnesium, or phosphorus).

# Corrosivity

22CCR §66261.22

- Liquid wastes or solid wastes when mixed with water, which have a pH  $\leq 2$ , or  $\geq 12.5$
- Corrosives are acids (low pH) or bases (high pH).
- If a liquid waste **corrodes steel** at a rate greater than 0.25 inches per year, the waste is corrosive and is thus hazardous.

**EPA waste code D002**

*Examples: caustic hot tank liquid wastes,  
metal finishing process tank wastes*



\* CA regulates corrosive solids as well as corrosive liquids

# Reactivity

22 CCR §66261.23

- A waste which is **unstable and/or produces toxic gases when mixed with water.**
- Normally unstable and readily undergo violent change without detonating
- React violently with water

## EPA Waste Code D003

*Examples of reactive wastes are: picric acid, peroxide forming ch  
ethyl ethers, dinitro compounds, sodium metal*



# Toxicity

**22CCR §66261.24**

- A waste which exhibits the characteristic of toxicity has a potential, when eaten, inhaled, or touched to harm humans or the environment
- Eight elements to the Toxicity Characteristic



## **EPA Waste Codes (D004 - D043)**

As you will see, toxicity testing can be complicated...

# POP QUIZ

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# Toxicity Testing



Toxicity tests look for one or all of the following:

- Whether a concentration of the waste will kill one-half of the laboratory animals exposed to it (**Exposure Testing**)
- Whether the waste can build up in an organism's body until it reaches a concentration that causes a disease or a disorder (**Bioaccumulation Testing**)
- Whether the waste can drain through a landfill and potentially contaminate groundwater (**Landfill Testing**)



# Exposure Testing Types

The dose/concentration of a substance that kills one-half (50%) of the test subjects (laboratory animals)

## Acute Lethal Dose 50 (stated as **LD-50**)

1. Oral  $LD50 < 2500 \text{ mg/Kg}$
2. Dermal  $LD50 < 4300 \text{ mg/kg}$

*Extremely hazardous waste- Arsenic, Cyanide, Beryllium etc.*

## Lethal Concentration 50 (**LC-50**)

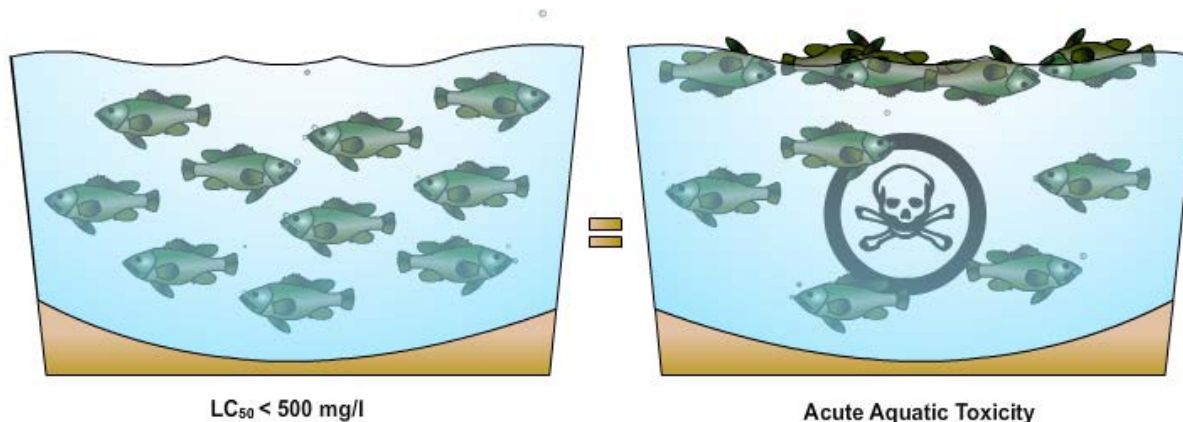
3. Inhalation  $LC50 < 10,00 \text{ ppm}$



memeguy.com

# Aquatic Toxicity – Fish Bioassay

4. **Aquatic toxicity:** Place unknown waste in a test water tank and introduce one of three acceptable fish species: *fathead minnows*, *rainbow trout* or *golden shiners*.



Waste is hazardous by aquatic toxicity if a 96-hour LC<sub>50</sub> is less than 500 mg/liter. 96-hour LC<sub>50</sub> < 500 mg/l = acute aquatic toxicity



# Bioaccumulation Testing

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Some chemicals have a specific regulatory threshold. When laboratory results indicate that the concentration equals or exceeds the regulatory threshold, the waste is toxic and hazardous.

*5. Total Threshold Limit Concentration (TTLC)*

&

*6. Soluble Threshold Limit Concentration (STLC)*

# CA Toxicity Tests: TTLC & STLC (WET)

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The **TTLC (solid)** and **STLC (liquid)** is the maximum concentration allowed for a waste to be considered potentially non-hazardous.

If the concentration of a waste is greater than the allowed TTLC/STLC value for that waste, the waste is toxic (and is thus a hazardous waste).

What if a waste is analyzed and the concentration is found to lie between the accepted TTLC and STLC values for that substance?

**Further analysis may be required...**

# Nickel Example

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## For Nickel:

TTLIC(mg/kg)

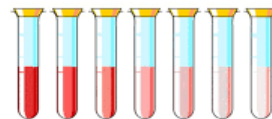
2,000

(Straight up)

STLC(mg/l)

20

(10x dilution)



Dilutions

TTLIC Result (mg/kg)

300

Now what?

Must test STLC!

# Toxicity Characteristic Leaching Procedure

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7. **Toxicity Characteristic Leaching Procedure (TCLP)** is a **Federal test performed on wastes intended for landfill disposal** to determine the levels of certain metals and organics present in the waste.

**In California, the TCLP procedure is not as commonly used as the WET test (STLC)** and is usually performed after the WET test.



# Carcinogenicity

22CCR §66261.24 (a)(7)

8. List of 16 carcinogenic substances

Hazardous if present in a waste in single or combined concentration exceeding 10 ppm (0.001%)

Ex: Vinyl Chloride

- No testing required. If present, Toxic !



<https://omnexus.specialchem.com/selection-guide/polyvinyl-chloride-pvc-plastic>

# Mixture Rule

22 CCR §§66261.3, 66261.30, 66261.100, 66261.101

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*“It’s like the mafia. Once you’re in – you’re in. There’s no getting out.” – Kelly Slater*

- If the waste mixture contains a RCRA listed waste, it is always a hazardous waste (except F003 no longer ignitable).
- Waste mixed with characteristic hazardous waste are hazardous waste only if the resulting mixture still exhibits a hazardous waste characteristic

Intentional mixture to avoid regulations, is treatment and requires authorization.

# POP QUIZ

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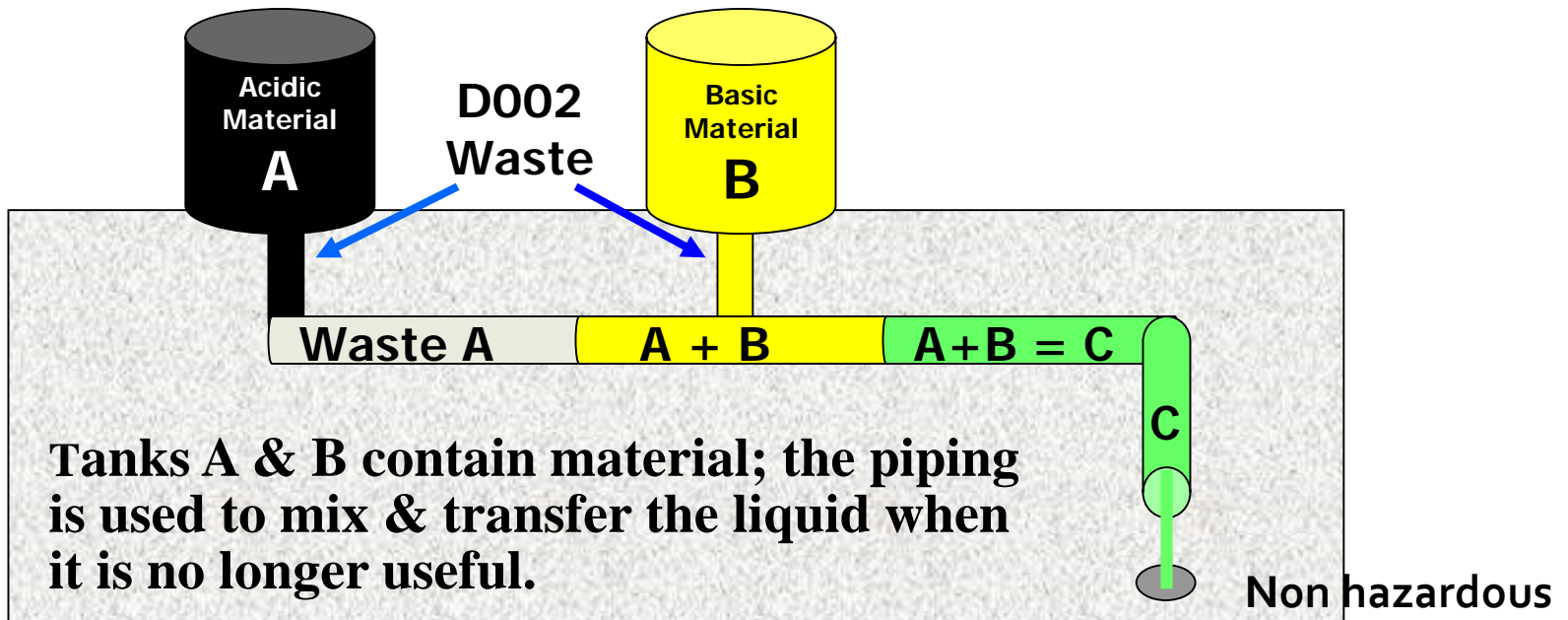
# HAZARDOUS WASTE DETERMINATION & POINT OF GENERATION





# HW Classification & POG

**Point of generation (POG):** is when a material first meets the definition of a solid waste. Once a solid waste, then the waste determination must be made.



Where is (are) the point(s) of generation?

# 40 CFR 262.11(a)

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- “The hazardous waste determination for each solid waste must be made at the point of waste generation, **before any dilution, mixing, or other alterations** of the waste occurs, ...

# Hazardous Waste Determination

22 CCR 66262.11

Who makes the waste determination? **The GENERATOR!**

The generator can make a waste determination by either:

1. **Testing** a representative sample...; or
2. Applying **knowledge** of the hazard characteristic of the waste in light of the materials or the processes used and the characteristics set forth in article 3 of chapter 11 of this division.

Process knowledge should include detailed information on the wastes obtained from existing documented waste analysis data or studies conducted on hazardous wastes generated by processes similar to that which generated the waste.

# Records Retention: HW Determination

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- 22 CCR 66262.40(c)
  - “A generator shall keep records of any test results, waste analyses, or other determinations made in accordance with section 66262.11 for at least 3 years from the date that the waste was last sent to on-site or off-site treatment, storage, or disposal.”

# Failed to Make a HW Determination

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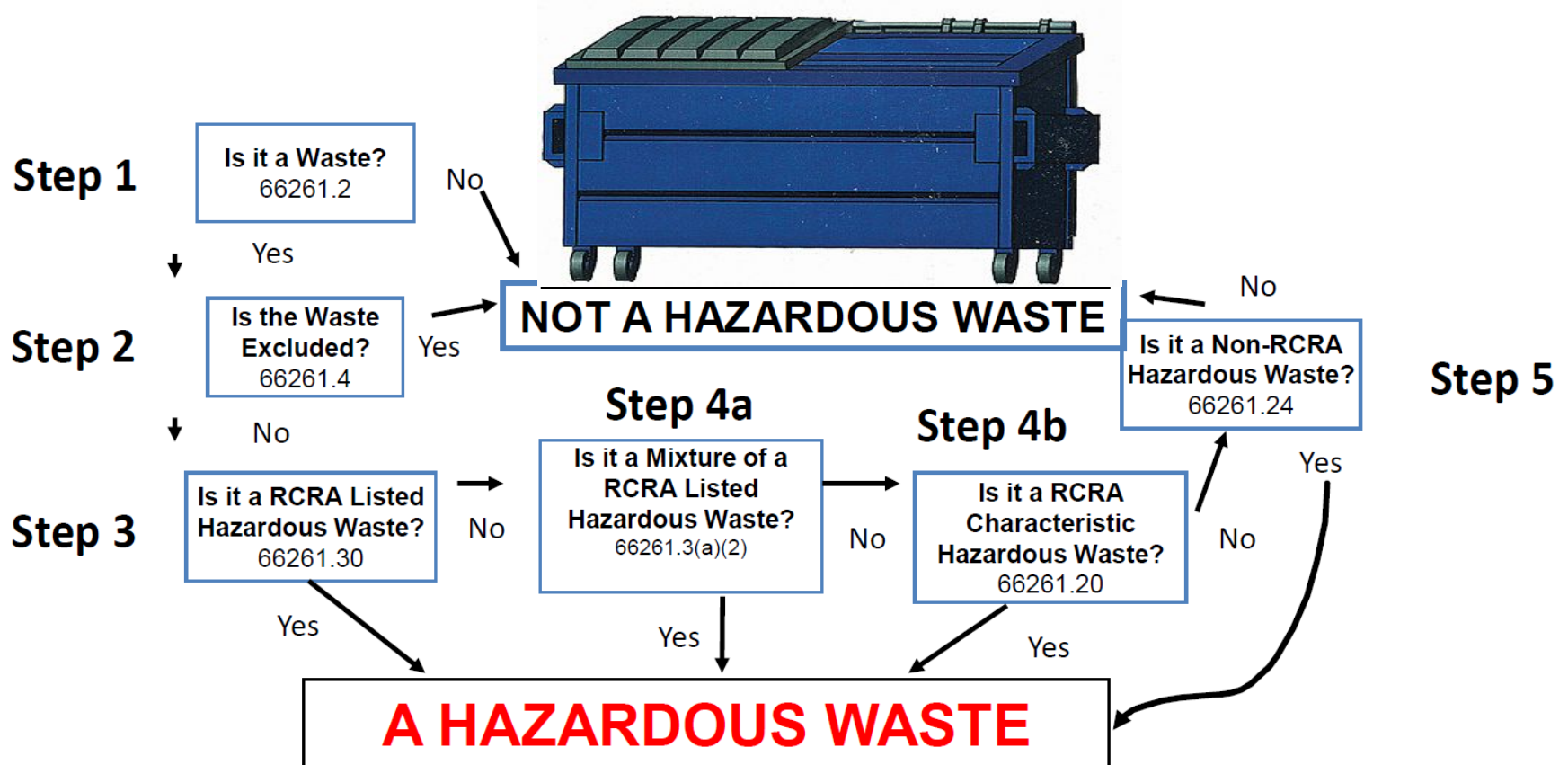
Waste determination is important because...

- Required by 22 CCR 66262.11
- Determines HW Generator Status
- Designates level of regulatory requirements
- Ensures Proper HW Management from POG
- Unknown or questionable waste streams may be laboratory tested



It is the generator's responsibility to make the determination

# Summary Flowchart for HW ID process



# Questions???

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# Hazardous Waste Generator Requirements





# HW Generator & Generator Status

HSC 25123.3,  
22 CCR § 66262.34

## HW Generator definition per 40 CFR 260.10:

Any person, by site, whose act or process produces a hazardous waste, or who causes it to be subject to regulation. This includes any facility that **stores, accumulates, produces, treats, recycles, handles, transports or disposes** of a hazardous waste.

### “Waste Counting”

Generator status is determined by *counting* **the entire quantity of hazardous waste it produces (generates) in a month**, pursuant to section 66262.34 of Title 22, to determine its generator status (SQG/LQG) for that month.

# Generator Status Impacts

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- Accumulation time & quantity limits
- Storage and inspection requirements
- Employee training & emergency preparedness requirements
- Biennial Reporting and waste minimization requirements
- Tank system standards
- Which EPA ID number is required
- Closure requirements
- And more...



**Conditionally Exempt  
Small Quantity  
(CESQG)**



**Small Quantity  
Generator (SQG)**



**Large Quantity  
Generator (LQG)**

# Hazardous Waste Generator Classes



# Determining Generator Status

	CESQG	SQG	LQG
Total amount of Hazardous Waste Generated in a Month	100 Kg or less*	Less than 1000 Kg	1000 Kg or more
Acutely/Extremely Hazardous Wastes	≤ 1 Kg*	≤ 1 Kg	More than 1 Kg

\* In CA, generators of 100 Kg or less are regulated as SQGs.

RCRA LQG: >1,000 Kg / 270 gal / 2,200 lbs of RCRA regulated hazardous waste in a calendar month (only RCRA waste is counted).

100 Kg ~ 27 gal ~ 220 lbs  
 1000 Kg ~ 270 gal ~ 2,200 lbs

# Waste Counting Basics

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In general, for purposes of monthly generator status, all hazardous wastes must be included in a count.

However, for other purposes, only certain hazardous wastes must be counted (i.e. RCRA LQG determination for RCRA requirements).

**Pay attention to exactly what must be counted when determining a particular generator status**

# Does it count?

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**Used oil** sent for recycling?

✓ Count

**Waste solvent** recycled on-site (i.e. solvent still)?

✓ Count

**Metal used oil filters?**

✗ Do not count if drained and managed as scrap metal

**Auto Batteries?**

✗ Do not count if recycled

# Waste Counting Made Easy

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## Count RCRA Waste

- ✓ If RCRA LQG, then also a CA LQG and subject to Biennial Report

## Look at largest waste stream

- ✓ If disposed offsite, and is over 1,000 Kg /270 gal/month, then already a LQG

## Utilize DTSC's Hazardous Waste Tracking System and EPA's e-Manifest

<https://dtsc.ca.gov/counting-hazardous-waste/>

# POP QUIZ

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# Accumulation Times

22 CCR § 66262.34

The **storage time** limit is based on:

- The quantity of hazardous waste stored;
- The rate that the waste is generated.

**Satellite storage accumulation** may also be used in conjunction with the other storage time options.



# Accumulating Waste Too Long

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22 CCR § 66262.34

Failure to send hazardous waste offsite for treatment, storage, or disposal within accumulation time limits (90/180/270 days).

- At least Class II due to clear economic advantage

Failure to meet the conditions of satellite accumulation regulations.

# Accumulation Times by Generator Status

HSC § 25123.3(c)

	CESQG	SQG	LQG
<b>Non-Acutely Hazardous Wastes</b>	<b>180 days</b> After date 100 Kg of total HW is reached	<b>180 days</b>	<b>90 days</b>
<b>If transported &gt;200 mi</b>	<b>270 days</b> After date 100 Kg of total HW is reached	<b>270 days</b>	<b>90 days</b>
<b>Acutely/Extremely Hazardous Wastes</b>		<b>90 days</b> From date 1 Kg acutely HW first accumulated	<b>90 days</b> From date 1 Kg acutely HW first accumulated
Accumulation quantity limit:		<b>6000 Kg</b>	<b>No accumulation Limit</b>

# Satellite Accumulation

22 CCR § 66262.34

Allows storage of small amounts of HW **up to 1 year**

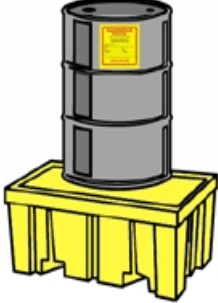
More than one satellite accumulation site can be used regardless of generator status as long as:

- Waste stored at initial **point of generation**
- Under the **control of operator** of the process
- **55 gallon max** (or 1 quart if extremely HW) per area
- Stored in containers/drums (**not tanks**) & have a **full HW label**

# Satellite Accumulation (Cont.)

- Within **3 days after reaching maximum** storage quantity, a **new accumulation date** must be marked on container
- Waste is **removed offsite within** the specified accumulation time limit (**90/180/270 days**) from the date the 55 gal is reached

**HAZARDOUS WASTE  
SATELLITE  
ACCUMULATION POINT**



**HAZWASTE CONTAINER MUST BE:**

- ✓ Marked "Hazardous Waste"
- ✓ Maintained at point of generation
- ✓ Under the control of the operator
- ✓ Closed unless being filled

**MAXIMUM VOLUME LIMITS**

- ✓ 55 Gallons of Hazardous Waste
- ✓ 1 Quart of Acutely Hazardous Waste

**WHEN THE CONTAINER IS FULL**

- ✓ Assign accumulation start date
- ✓ Move to HWAA within 72 hours

# Satellite Accumulation Examples



**HAZARDOUS WASTE SATELLITE ACCUMULATION**

**Generator Information:**

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_ PHONE \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

EPA ID# \_\_\_\_\_

**COMPOSITION:** \_\_\_\_\_ %  
(No abbreviations or chemical formulas)

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**HAZARD CLASS**

Solid

Liquid

**HAZARD CLASS**

Flammable

Corrosive

Toxic/Poison

Reactive

SATELLITE ACCUMULATION START DATE: \_\_\_\_/\_\_\_\_/\_\_\_\_

WASTE STORAGE ROOM START DATE: \_\_\_\_/\_\_\_\_/\_\_\_\_ Loc./Lab: \_\_\_\_\_

853 (800) 421-6710 On-site accumulation time shall not exceed one year - 22 CCR 66262.34(a)(1)(B) SHL-0036-1/N-0035



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# LQG Requirements

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In addition to the same requirements SQG's are subject to, LQG's are also subject to the following:

- Reduced **Accumulation times**
- **Contingency plan more detailed** and scaled to the size and complexity of the facility
- **Training** more detailed & must be **documented**
- **Ignitable/Reactive waste** must be stored 50 ft from property line

# LQG Requirements (Cont.)

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- **HW Tank System** is subject to a P.E. Assessment
- **Additional record-keeping** may apply (i.e. Biennial report, SB-14, daily tank inspections, training records ...)
- Air Emission requirements may apply to **VOC** wastes (Subparts BB and CC)



# Biennial Reporting & Source Reduction (SB14)

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## Biennial report

- RCRA LQGs only
- Submitted to DTSC
- Due March 1 of even-numbered years for previous year

## Source Reduction (SB 14)\*

- If generating >12,000 Kg of HW or > 1 Kg of acutely HW in a year
- Every 4 years, includes:
  - \_ Source Reduction Evaluation Review and Plan
  - \_ Hazardous Waste Management Performance Report
  - \_ Summary Progress Report (SPR)

# POP QUIZ

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# Employee Training & Contingency Plans



# Basic Training Requirements

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## Basic Training:

- SQG's and LQG's must ensure all employees are thoroughly familiar with **proper waste handling & emergency procedures**, relevant to their responsibilities during normal facility operations and emergencies.

## Training documentation:

- Not required for CESQG/SQG
- May be **required** for other CUPA programs (i.e. HMBP)

# LQG Training Requirements

22 CCR § 66265.16

- Personnel must complete training within six months of hire or new assignment / position and annually thereafter.
- Employees shall not work in unsupervised positions until they have completed the training.
- Directed by a person trained in hazardous waste management procedures
- Shall include instruction on hazardous waste management procedures (including contingency plan implementation) relevant to their positions



# LQG Recordkeeping

22 CCR §66265.16

- Training records on current personnel **must be documented** and kept until the business closes
- Training records on former employees must be kept for at least three years



# Emergency Planning

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The **contingency plan** will help emergency responders handle any emergency involving stored hazardous waste.

All hazardous waste generators are responsible to **plan for emergencies at their business** & must have a contingency plan.



# Contingency Plan

22 CCR § 66265.50 - 66265.56

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A **contingency** plan is a written plan that has **emergency procedures designed to minimize hazards** to human health and the environment.

**LQGs must complete a full contingency plan.**

**CESQG/SQGs may opt to post a simpler plan** including emergency information containing the location of emergency equipment, contact names and phone numbers.



# Emergency Response & Contingency Plan Violations

- Facility does not have a contingency plan to mitigate fires, explosions or release of hazardous waste
- Facility is not maintained and operated to minimize possibility of fire, explosion, or release of hazardous waste



<https://www.youtube.com/watch?v=PcDkgcYI-Gw>

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# Universal Waste Basics



# Universal Waste

22 CCR §66273.13

**Universal waste (UW)** is a type of hazardous waste that is very **common** and poses a **lower risk** to the environment than other hazardous wastes.

**Universal Waste Rule** governs storage and disposal with the intent to protect the environment from less hazardous waste streams that have the potential to contaminate natural resources.



A purple rectangular label with the words "UNIVERSAL WASTE" in large white capital letters at the top. Below the title is a white rectangular area containing five lines of text, each followed by a horizontal line for writing: "SHIPPER", "ADDRESS", "CITY, STATE, ZIP", "CONTENTS", and "ACCUMULATION START DATE".

# Common Universal Wastes: Mercury-containing

**Fluorescent tubes**, bulbs, & other mercury-containing lamps

Electrical Switches & Relays

Mercury thermometers

Thermostats



# Common Universal Wastes: Electronic Waste

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**E-Waste:** Consumer electronic devices such as TVs, monitors, computers, printers, VCRs, cell phones, radios, microwaves ...



# Common Universal Waste: Batteries/Aerosols

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Most household **batteries**,  
(including alkaline &  
rechargeable)



Non-empty **aerosol** cans  
that contain hazardous  
materials



# Universal Waste Handler Basics *22 CCR §§66273.30 - 66273.41*

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## **Cannot be:**

- Disposed to regular trash
- Stored more than 12 months

## **Must be:**

- Labeled to identify Universal Waste type
- Stored in a manner to prevent a release to the environment.

## **Can be transported to:**

- Hazardous waste recycling facility
- Hazardous waste land disposal facility
- Consolidation point (multi-facility business is accumulating at one location)

## **Appropriate shipping receipts must be kept for 3 years**

(such as Bill of Lading, manifests not required for UW)



# Photovoltaic Modules... HW or UW?

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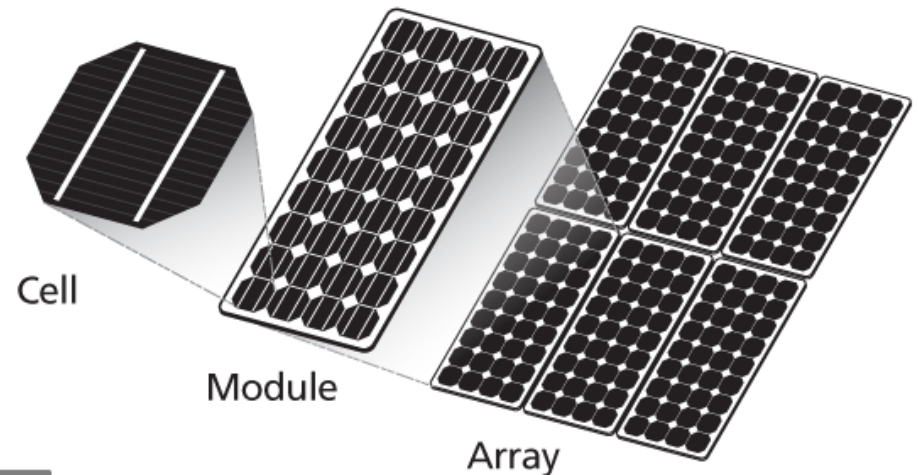
- Waste solar panels may be hazardous due to heavy metal content (lead, cadmium, chromium, etc.)
- Legislation has been passed that authorizes DTSC to adopt regulations to designate used/spent solar panels that are hazardous wastes as universal waste.
- New regulation has been approved by DTSC to manage PV modules (solar panels) as a universal waste.

# Photovoltaic Modules - Notification

- Starting **January 1, 2021**, businesses that want to manage PV Modules as UW must notify DTSC 15 days prior to disposal:

Complete notification forms on DTSC's website to handle, treat, or dispose of PV modules.

Notification must be submitted for each universal waste handling facility.



# POP QUIZ

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# BREAK TIME!



# Containers and Tanks

22 CCR § 66260.10

## Definitions:

- **“Container”** means any device that is open or closed, and **portable** in which a material can be stored, handled, treated, transported, recycled or disposed of.
  
- **“Tank”** means a **stationary** device, designed to contain an accumulation of hazardous waste which is constructed primarily of nonearthen materials (e.g., wood, concrete, steel, plastic) which provide structural support.
  
- Portable Tank?? (Read: Container)
  - Referenced in 22 CCR 66262.34

# Use and Management of Containers

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➤ Large Quantity Generators:

22 CCR 66262.34(a)(1)(A) -> 22 CCR **Ch. 15 Article 9 (66265.170-178)**

➤ Small Quantity Generators:

HSC 25123.3(h)(1)(B) -> 40 CFR 262.34(d)(2) ->

**40 CFR subpart I of part 265 except for .176 and .178 (265.170-174 & .177)**

**.176 = Ignitable & Reactive** wastes 50 ft from property line

**.178 = Compliance Air Emission Standards**

<https://rcrapublic.epa.gov/files/14826.pdf>

(RCRA Online)

# Container Must Be in Good Condition

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HW held in containers that are not in good condition

- severe rust
- structural defects
- or leaks

shall be transferred to a container that is in good condition



# Containers Must Be Inspected Weekly

- Inspect container storage and transfer areas for:
  - Leaks
  - Deterioration
  - Corrosion
  
- Note: Weekly inspection records are recommended, but not required





# Container Labeling

**HAZARDOUS WASTE**

STATE AND FEDERAL LAWS PROHIBIT IMPROPER DISPOSAL  
IF FOUND, CONTACT THE NEAREST POLICE OR PUBLIC SAFETY AUTHORITY, THE U.S. ENVIRONMENTAL PROTECTION AGENCY OR THE CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCE CONTROL

**GENERATOR'S INFORMATION:**

NAME \_\_\_\_\_  
ADDRESS \_\_\_\_\_ PHONE \_\_\_\_\_  
CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_  
EPA ID NO. \_\_\_\_\_ MANIFEST TRACKING NO. \_\_\_\_\_  
EPA WASTE NO. \_\_\_\_\_ CA WASTE NO. \_\_\_\_\_ ACCUMULATION START DATE \_\_\_\_\_  
CONTENTS, COMPOSITION: \_\_\_\_\_

PHYSICAL STATE:  SOLID  LIQUID

HAZARDOUS PROPERTIES:  FLAMMABLE  TOXIC  
 CORROSIVE  REACTIVITY  OTHER \_\_\_\_\_

UN/NA NO. WITH PREFIX \_\_\_\_\_

\_\_\_\_\_ ]  
\_\_\_\_\_ ]  
\_\_\_\_\_ ]

D.O.T. PROPER SHIPPING NAME

**HANDLE WITH CARE!**

- "Hazardous Waste"
- Name
- Address
- Composition and Physical State
- Hazardous Properties
- Accumulation Start Date

Pre-transport labeling and marking requirements:

22 CCR 66262.31 & 66262.32; 49 CFR 172

Note: Yellow HW Sticker Not Required

# Special Labeling Considerations

---

## Stationary HW Tanks

“Hazardous Waste” & the initial date of accumulation

*22 CCR §66262.34(f)(2-3)*

## Metal Drained Used Oil Filters

“Drained Used Oil Filters” & the initial date of accumulation

*22 CCR §66266.130(c)*



Universal Waste, Excluded Recyclable Materials, Damaged Lead-Acid Batteries, etc.

# Aisle Space

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Businesses **must maintain adequate aisle space** to accommodate **unobstructed movement** of personnel, fire/spill control/decontamination equipment in an **emergency**.



# Compatibility (Wastes & Containers)

Container & Waste	Commingling in a Container	Unwashed Containers	Separation from Incompatibles
			

# Beware of Incompatibility

40 CFR § 265.177  
22 CCR § 66265.177

The purpose of this is to prevent **fires, explosions, reactions, gaseous emissions, leaching,** or other discharge of hazardous waste or hazardous waste constituents which **could result from the mixing of incompatibles**

- Flammables and oxidizers
- Flammables and any ignition source
- Acids and cyanides
- Strong acids and strong alkalines
- Concentrated acids and water
- Organic solvents and corrosives
- Corrosives and other reactive materials

Examples of Potentially Incompatible Waste:  
Appendix V, Ch. 15, 22 CCR (Appendices after Article 18 § 66265.174)

# Container Management (SQG & LQG)

A container holding hazardous waste shall always be closed during transfer and storage, except when it is necessary to add or remove waste.



40 CFR § 265.173(a)  
22 CCR § 66265.173(a)

# Open Containers



# Handled to Prevent Rupture and Leaks

---

Hazardous waste containers must not be opened, handled, transferred, or stored in a manner that might **rupture** them or cause them to **leak**.





# Empty Containers

22 CCR § 66261.7

That previously held a hazardous material or waste:

- **Non-pourable** when inverted
- No remains that can be **removed feasibly by physical methods**

## Empty Containers of 5 gallons or less:

- May be **landfilled**

## Empty Containers of more than 5 gallons:

- Must be sent for **recycling** or manufacturer for **refilling**
  - Keep records for 3 years
- Managed within **1 year**
- Marked with the **date emptied**

# Portable Tanks vs Stationary Tanks

## Portable Tank

- Designed to be portable (by manufacturer)
  - No aftermarket welds, or caster wheels
  - No hard plumbing



# Portable Tanks vs Stationary Tanks

## Stationary Tank

- Not designed to be moved
- Bolted down/secured
- Hard Plumbed



# Tank Systems

22 CCR § 66260.10

“Tank system” means a hazardous waste transfer, storage or treatment tank and its associated ancillary equipment and containment system.



# SQG vs LQG Tanks

40 CFR § 265.201  
22 CCR § 66265.173(a)

SQG Tanks	LQG Tanks
Uncovered Tanks -> <ul style="list-style-type: none"><li>• 2 ft freeboard</li></ul>	Certified by Professional Engineer <ul style="list-style-type: none"><li>• Civil, Structural, Geotechnical;<ul style="list-style-type: none"><li>• not mechanical or chemical</li></ul></li><li>• Re-certified every 5 years</li></ul>
Continuous Flow -> <ul style="list-style-type: none"><li>• cutoff system or by-pass</li></ul>	Secondary Containment Required <ul style="list-style-type: none"><li>• double walled, vault, external liner (berm), etc.</li></ul>
Secondary Containment = No <ul style="list-style-type: none"><li>• Daily Inspections + Weekly Inspections</li></ul>	Spill and overflow prevention <ul style="list-style-type: none"><li>• Including 2 ft freeboard</li></ul>
Secondary Containment = Yes <ul style="list-style-type: none"><li>• Weekly Inspections</li></ul>	Daily Tank Inspection 66265.195 (documented) Spills, leaks, etc.
	Air Emission Requirements

# Tanks (From Treatment Units)



# Tanks (From Treatment Units)

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# Container and Tank Questions?





# Hazardous Waste Transportation

- Handler ID Number (State or EPA ID)



- Maintaining an ID Number and Paying Fees (eVQ)
- Manifesting
- Self-Hauling
- Recordkeeping

# Get a HW ID Number

22 CCR § 66262.12

<https://dtsc.ca.gov/apply-for-hazardous-waste-epa-id-number/>

EPA ID Number	State ID Number
Generating >100 kg of RCRA hazardous waste and/or 1 kg of acutely hazardous waste per calendar month.  (RCRA SQG and RCRA LQG)	Generating ≤100 kg of RCRA hazardous waste and/or 1 kg of RCRA acutely hazardous waste per month, and any amount of a non-RCRA hazardous waste.  (All other Generators)
<b>CAR, CA, CAD, CAT</b>	<b>CAL, CAH (HHW)</b>
RCRAInfo <a href="https://rcrainfo.epa.gov/rcrainfoprod/action/secured/login">https://rcrainfo.epa.gov/rcrainfoprod/action/secured/login</a>	DTSC Form 1358 <a href="https://dtsc.ca.gov/permanent-state-epa-id-numbers/">https://dtsc.ca.gov/permanent-state-epa-id-numbers/</a>

**Temporary ID:** Issued to people/businesses that don't typically generate waste. Valid for 90 days.

# Annual Electronic Verification Questionnaire

<https://evq.dtsc.ca.gov/Home.aspx>

To keep a HW ID Number **Active**, you must complete the eVQ annually.

- Manifest Fees (\$7.50; first 4 exempt if <100 employees)
- Annual Verification Fee
  - <50 employees = No Charge
  - 50 - 74 = \$150
  - 75 - 99 = \$175
  - 100 - 249 = \$200
  - 250 - 499 = \$225
  - 500 or more = \$250
- Verification (re-notification) of HW Management Activities

# Shipping Document Types

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- Uniform Hazardous Waste Manifest
- Consolidated Manifest Receipts
  - Commonly used for used oil, solids contaminated with used oil, and antifreeze.
- Other Receipts and Bill of Lading
  - Universal Waste, Drained Used Oil Filter, Lead-Acid Batteries

# Uniform HW Manifests

- Each party in the chain of shipping signs and keeps one of the manifest copies, creating a "cradle-to-grave" tracking of the hazardous waste
- EPA ID numbers are needed by all parties on the manifest
- Hazardous waste transporters in California must be registered with the Department of Toxic Substances Control

Please print or type. Form Approved OMB No. 2050-0039

**UNIFORM HAZARDOUS WASTE MANIFEST** 1. Generator ID Number 2. Page 1 of 3. Emergency Response Phone 4. Manifest Tracking Number **JJK**

5. Generator's Name and Mailing Address Generator's Site Address (if different than mailing address)

Generator's Phone: \_\_\_\_\_

6. Transporter 1 Company Name U.S. EPA ID Number \_\_\_\_\_

7. Transporter 2 Company Name U.S. EPA ID Number \_\_\_\_\_

8. Designated Facility Name and Site Address U.S. EPA ID Number \_\_\_\_\_

Facility's Phone: \_\_\_\_\_

St HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
		No.	Type			
1						
2						
3						
4						

14. Special Handling Instructions and Additional Information

15. GENERATOR'S/OFFICER'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/packaged, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this assignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Officer's Printed/Typed Name \_\_\_\_\_ Signature \_\_\_\_\_ Month \_\_\_\_\_ Day \_\_\_\_\_ Year \_\_\_\_\_

16. International Shipments  Import to U.S.  Export from U.S. Port of entry/exit: \_\_\_\_\_ Date leaving U.S.: \_\_\_\_\_

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name \_\_\_\_\_ Signature \_\_\_\_\_ Month \_\_\_\_\_ Day \_\_\_\_\_ Year \_\_\_\_\_

Transporter 2 Printed/Typed Name \_\_\_\_\_ Signature \_\_\_\_\_ Month \_\_\_\_\_ Day \_\_\_\_\_ Year \_\_\_\_\_

18. Discrepancy

18a. Discrepancy Indication Space  Quantity  Type  Residue  Partial Rejection  Full Rejection

Manifest Reference Number: \_\_\_\_\_

18b. Alternate Facility (or Generator) U.S. EPA ID Number \_\_\_\_\_

Facility's Phone: \_\_\_\_\_

18c. Signature of Alternate Facility (or Generator) \_\_\_\_\_ Month \_\_\_\_\_ Day \_\_\_\_\_ Year \_\_\_\_\_

19. Hazardous Waste Report Management Method Codes (i.e. codes for hazardous waste treatment, disposal, and recycling systems)

1	2	3	4
---	---	---	---

20. Designated Facility Owner or Operator. Certification of receipt of hazardous materials covered by the manifest except as noted in item 18a

Printed/Typed Name \_\_\_\_\_ Signature \_\_\_\_\_ Month \_\_\_\_\_ Day \_\_\_\_\_ Year \_\_\_\_\_

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete. DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM



# Uniform HW Manifests

- DOT Proper Shipping Name (49 CFR 172)
- Total quantity cannot be a decimal
- Must have a waste code
- Generator copy should have the transporters signature
- Final copy should have TSDFs signature

Generators  
Responsibility

Transporters  
Responsibility

TSDFs  
Responsibility

Form Approved OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number  
2. Page 1 of 3  
3. Emergency Response Phone  
4. Manifest Tracking Number **JJK**

5. Generator's Name and 13000 Address  
Generator's Site Address (if different than mailing address)

6. Generator's Phone  
7. Transporter 1 Company Name  
8. Designated Facility Name and Site Address

9. U.S. EPA ID Number

10. Containers  
11. Total Quantity  
12. Unit Wt./Vol.  
13. Waste Codes

14. Special Handling Instructions and Additional Information

15. GENERATOR SUFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled, packaged, and stored in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (I am a large quantity generator) or (b) (I am a small quantity generator) is true.

16. International Shipments  
17. Transporter Acknowledgment of Receipt of Materials  
18. Discrepancy  
18a. Discrepancy Indication Space  
18b. Alternate Facility (or Generator)  
19. Hazardous Waste Report Management Method Codes  
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in item 18a

PA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM



# Uniform HW Manifests

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- Business must retain the **Generator Copy** of the manifest until they receive the signed copy from the designated facility (**TSDF copy**). With e-Manifest, generators need to work with receiving facilities to ensure TSDF copies are available.
- TSDF's are required to ensure manifest data is available through RCRAInfo (e-Manifest System)
- Records must be **kept for 3 years**

# Generator Manifest Copy Submission to DTSC

- Generators required to send **generator copies** to DTSC within 30 days of the shipment (unless generator copy started in **e-manifest**)
  - CCR 66262.23(a)(4), HSC 25160(b)(1)(C)

Department of Toxic Substances Control

Hazardous Waste Tracking System

Search by ID Number or Handler Name

2,774	10	88
ID Numbers Issued in 2021	Manifests Reported in 2021	Tons of Waste Handled in 2021

RCRA Info

Home Reports USITS Settings Tools

Search

Handler e-Manifest

Search Criteria

Manifest Tracking Number Status

Site Type Handler Id

Date Range Type Date Range

Start Date End Date

Search Reset



# Exception Reporting

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- If a Generator has not received a signed copy of the manifest from the TSDF after **35 days** from the date the waste was shipped, the Generator is required to contact the Transporter and TSDF to determine the status of the waste shipment.
- If after contact with the TSDF and Transporter the Generator has not received a signed copy of the manifest, then a Generator files an exception report within:
  - 45 days for LQGs
  - 60 days for SQGs

# Consolidated Manifesting Procedure *HSC §25160.2*

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- 1 transporter, multiple HWGs, 1 day, 1 uniform hazardous waste manifest (“Milk-Run”)
- Only **eligible waste streams** allowed
- Leaves a **receipt** of the pickup with the generator
- The generator shall **retain each receipt for at least 3 years**
- Receipt shall contain:
  - Date of shipment, **Manifest#**, Volume/quantity of waste codes
  - Generator – Name, address, ID#, contact name, Phone#, signature, certified waste minimization
  - Transporter – name, address, ID#, signature
  - TSDF – name, address, ID#

# Consolidated Manifesting Procedure *HSC §25160.2*

---

## Eligible waste streams HSC 25160.2(c)

### ➤ All HWG:

➤ **Used Oil** & contents of oil/water separator

➤ **SQGs** (or LQGs if waste generated minus used oil shipped on consolidated manifest is  $\leq 1000\text{kg}$ ):

➤ **Solids with used oil**, brake fluid, **antifreeze** + sludge, parts cleaning solvents, hydroxide sludge with metals from treatment, “paint related”, photographic solutions, dry cleaning solvents + filters/lint/solvents, asbestos, inks from printing industry, K-12 lab packs, absorbents contaminated with the above, fuel filters.

➤ New Law: Unsold Retail Waste with certain conditions.

# Self-Hauling Used Oil to a Used Oil Collection Center

- Transporter is the generator of the used oil.
- Up to 20 gallons in 5-gallon containers
  - Or, up to 55 gal of oil by contacting the collection center first



# Self-Hauling CESQG Waste to HHW

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- Exempt from manifesting and registration as a hazardous waste hauler.
- Total amount  $\leq 5$  gallons or  $\leq 50$  lbs.
- OR,  $\leq 27$  gallons or  $\leq 220$  lbs. IF:
  - Contact the HHW ahead of each delivery
  - Receive confirmation that they will accept the waste at the quantities specified
  - Receive instructions for packaging (closed containers, prevent tipping, spilling, breaking)
- Recommend CESQG ask for a receipt of drop-off at HHW  
(demonstrate compliance with HSC 25218.5)

# E-Manifesting

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- E-Manifest system launched on 6/30/2018 in all states
- Receiving facilities are required to submit all manifests to EPA's e-Manifest system
- EPA charges receiving facilities a fee for each manifest
- E-Manifest data available to the public within 90 days of receiving facility signing

<https://rcrainfo.epa.gov/rcrainfoprod/action/secured/login>

# E-Manifesting

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## Three options for HW manifest creation:

### 1. Electronic

- ✓ e-Manifest is created and signed by all entities listed on the manifest
- ✓ This is EPA's goal

### 2. Paper

- ✓ Generator, transporter, and receiving facility all sign on paper
- ✓ Receiving facility submits to the system within 30 days

### 3. Hybrid

- ✓ Generator creates/signs paper manifest, transporter transfers to e-Manifest and signs it, then receiving facility signs

[https://www.epa.gov/sites/production/files/2018-05/documents/uniform\\_hazardous\\_waste\\_manifest.pdf](https://www.epa.gov/sites/production/files/2018-05/documents/uniform_hazardous_waste_manifest.pdf)

# E-Manifesting - What Inspectors Should Know...

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- Will manifests prior to 06/30/18 be available in the system?
- Will land disposal records (LDR) be available in the system?
- Will bill of lading for UW be available in the system?
- Do generators have to register in the system?
- Do generators require a federal EPA ID number to register?

**No**



# E-Manifesting In California

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Same as nationally, except:

- DTSC still collects manifests from generators and transporters
- DTSC no longer collects manifests from receiving facilities
- DTSC continues using the HWTS
- The HWTS downloads facility manifests from the e-Manifest system
- e-Manifesting applies to RCRA and Non-RCRA waste

# Transportation Questions?



# Tiered Permitting Basics

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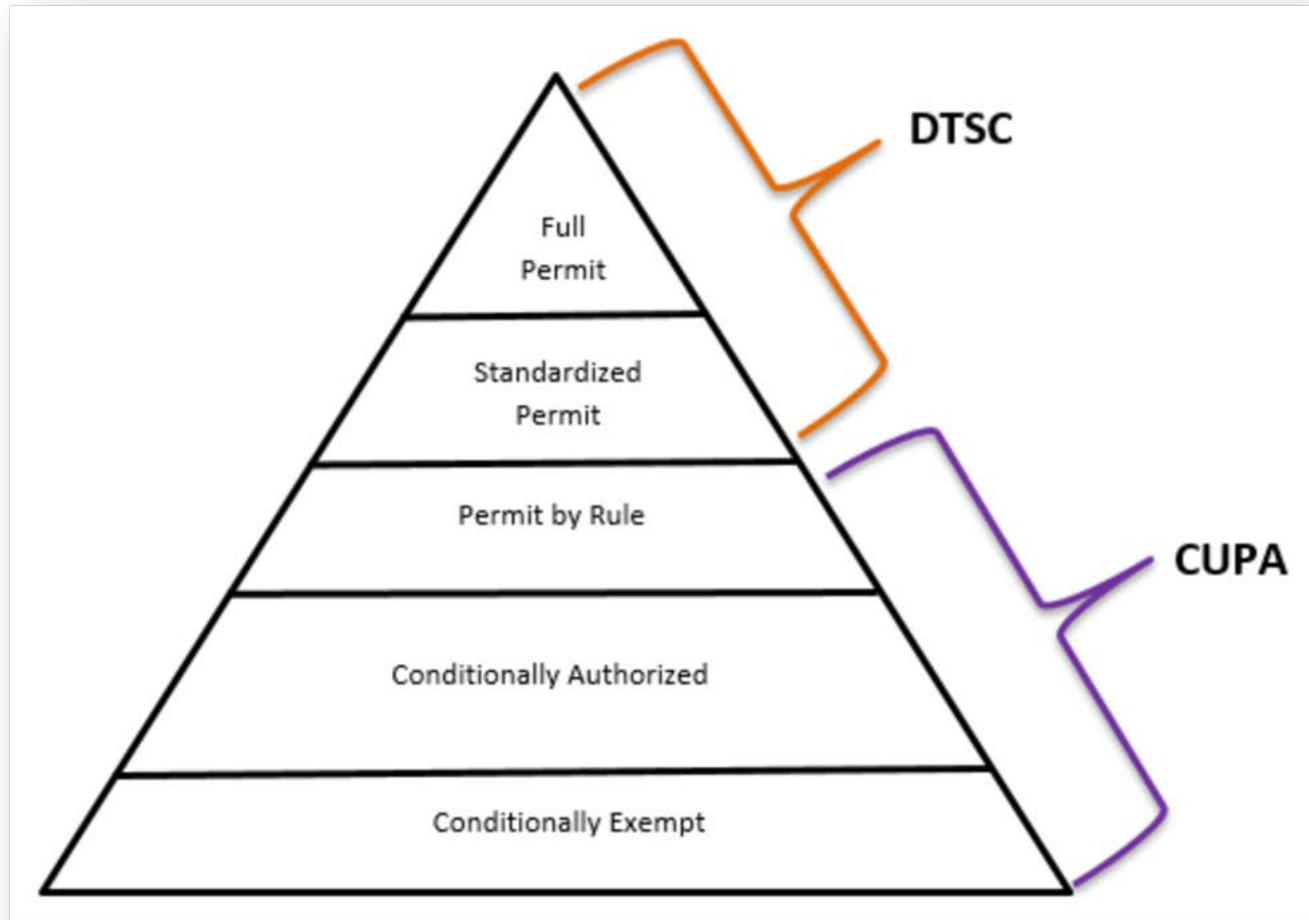


# Tiered Permitting Basics

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

# Tiered Permitting tiers!



# 'Treatment' – HSC defined

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- California Health and Safety Code Section 25123.5
  - **Treatment** “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 material contained therein, or which removes or reduces its harmful properties or characteristics for any purpose.”

# Common HW treatment observed

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- Ion exchange filtration
- pH adjustment (neutralization)
- Precipitation / Flocculation
- Filtering (i.e. activated carbon)
- Active evaporation (heating)
- Container crushing or rinsing
- Biological treatments

# 'Treatment' exemptions...

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- Phase separation in tanks/containers when not aided by heat or chemicals.
- Sieving/filtering liquid HW to remove solid fractions.
- Combining compatible HW streams.
- Passive evaporation (not aided by heat, pressure, chemicals, etc.).
- Aerosol can puncturing (draining)
- Used metal oil/fuel filter crushing

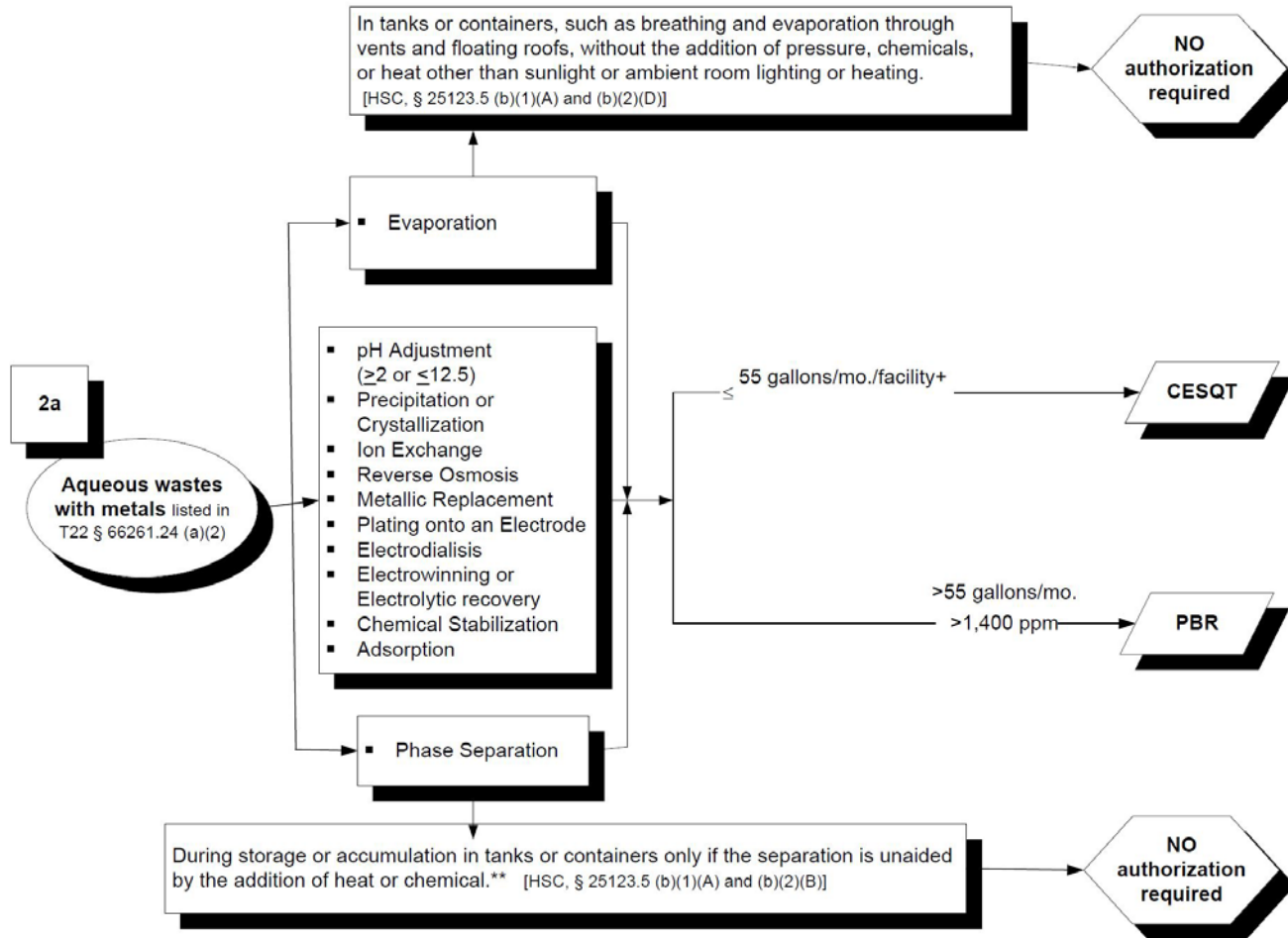


# Evaluating potential HW treatment

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- Is it a waste.....?
- Is it a hazardous waste.....?
- Is 'treatment' occurring...?
- Is the 'treatment' exempt.....?
- Tiered Permitting Authorization
  - Start with the DTSC Tiered Permitting Flowchart
    - <https://dtsc.ca.gov/wp-content/uploads/sites/31/2016/01/onsite-tiered-permitting-flowchart.pdf>

# DTSC TP Flowchart



# Seeking TP Treatment Authorization

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- Use [DTSC -TP Flowchart](#) to find eligible hazardous waste streams.
- What type of permitted treatment is allowed for that waste stream.
- Which TP tier is that waste stream and treatment technology eligible under.
- Submit TP Notification to CUPA via CERS, obtain CUPA treatment authorization, and follow tier operating requirements.

# Metal Finishing ... 'Plating'



# Cone Tank..... Flocculation ???

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# Hot tank sludge being evaporated?

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# HW compaction

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# CUPA Conference TP training...

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- Tiered Permitting Overview
- **2/23/2021 – 1300 hours** – Mike Dudasko (Yorke Eng.)
- Track B
  
- Additionally, DTSC has various Tiered Permitting fact sheets for treatment tiers that are very good reference sources.

<https://dtsc.ca.gov/publications-index/managing-waste-publications/>



# Tiered Permitting Questions

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➤ Questions?

# ➤ Hazardous Waste Generator Inspection Basics

The screenshot shows the DTSC (Department of Toxic Substances Control) website. The header includes the DTSC logo and navigation links: Hazardous Waste, Site Mitigation, Safer Products, Chemistry, Get Involved, Laws & Regulations, Newsroom, and Search. The main heading is "Managing Hazardous Waste" with the tagline "We strengthen regulations and streamline waste management". Below this is a prominent button: "Apply for a Hazardous Waste Identification Number".

The content is divided into two main columns:

- Federal EPA ID Number**
  - Generating more than 100 kg of RCRA hazardous waste and/or 1 kg of acutely hazardous waste per calendar month.
  - Permanent Federal EPA ID**: Issued to people or businesses who routinely generate or handle hazardous waste.
  - Temporary Federal EPA ID**: Issued to people or businesses who don't normally handle hazardous waste. Valid for 90 days.
- State EPA ID Number**
  - Generating less than 100 kg of RCRA hazardous waste and/or 1 kg of RCRA acutely hazardous waste per month, and any amount of a non-RCRA hazardous waste.
  - Permanent State EPA ID**: Issued to people or businesses who routinely generate or handle hazardous waste.
  - Temporary State EPA ID**: Issued to people or businesses who don't normally handle hazardous waste. Valid for 90 days.

# Hazardous Waste Inspection Basics

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- Pre-Inspection documentation review
  - Previous inspections, documented violations, enforcement?
  - CERS submittals
  - DTSC HWTS information review
    - Active EPA ID#
    - Hazardous waste shipment information
  - Other CUPA applicable inspection elements?
    - HMBP
    - Stormwater
    - APSA
    - Cal ARP

# Conducting basic HW Inspections

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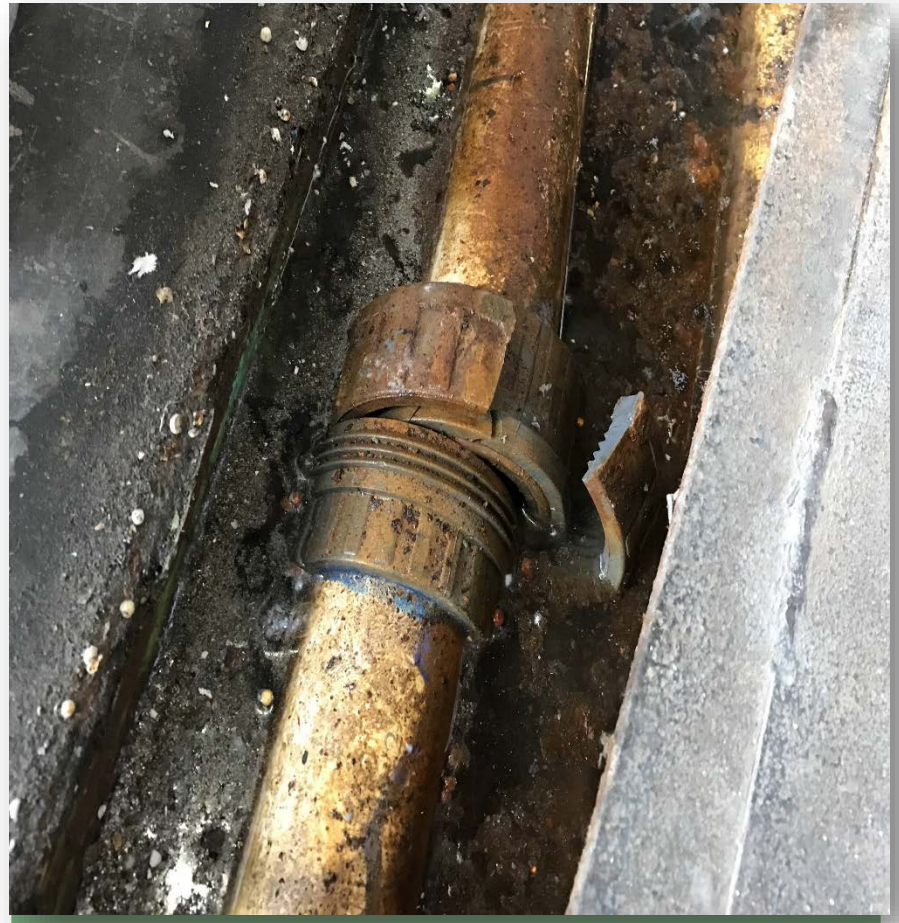
- Obtain and document inspection/photo consent
- Inquire and observed facility activities that may generate waste (points of waste generation).
- Observe HW accumulation area(s).
- Ask questions about facility chemical uses and take photos.
- Always check:
  - Dumpsters
  - Trash cans



# Conducting basic HW Inspections


Have the facility staff member who routinely completes that hazardous waste tank inspection demonstrate how they conduct their documented daily inspection.

Any problems here?



# Conducting basic HW inspections

- Waste Generator documentation review.
  - Uniform hazardous waste manifests, BOLs
  - Hazardous waste treatment/recycling logs
  - Hazardous waste determination documentation
  - Generator required inspection documentation
  - Employee training documentation (SQG vs. LQG)

	<b>COUNTY OF SACRAMENTO ENVIRONMENTAL MANAGEMENT DEPARTMENT 10690 ARMSTRONG AVENUE MATHER CA 95655 (916) 875-8550</b>	
REGULATED FACILITY	<b>NUTRIEN AG SOLUTIONS INC 14423 WALNUT GROVE THORNTON RD WALNUT GROVE, CA 95690</b>	Facility ID: FA0010425 Account ID: AR0001214 Issued: 10/26/2018
OWNER NAME :	<b>NUTRIEN AG SOLUTIONS INC</b>	
	<b>PERMITTED OPERATION(S):</b> PR0018911 5206 HAZARDOUS MATLS DISCLOSURE FEE 10-15 MATLS VALID FROM AUGUST 1, 2018 TO SEPTEMBER 1, 2019	
<small>Permits to operate and Annual Fee Payments are NOT TRANSFERABLE. Those referenced above are valid ONLY for this owner NUTRIEN AG SOLUTIONS INC. Permits become VOID on change of ownership. New owners must apply and pay for a new Permit(s) PRIOR to beginning operation or penalties will be assessed.</small>		
<small>Until the new permit is mailed to the facility, this Permit is considered extended for up to twenty five days after the expiration date if renewal fees have been paid.</small>		

# Conducting HW Inspections cont.

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- Complete detailed inspection report that documents inspection violations.
  - Be specific in noting violations observed ( ..." the blue poly 55 gallon drum in the southwest corner of the west warehouse was unlabeled and contained and unknown liquid..." )
  - Debrief the facility staff regarding the inspection(s) completed and explain violations noted.
  - Ensure that facility staff understand the violations noted and the return to compliance documentation required to clear the violation.

# From the HW Generator perspective...

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- Obtain you CUPA's hazardous waste inspection checklist and go over it
- Ensure your hazardous waste determination information is organized, accurate, and available
- Employee training. So important. Document it
- Inspection documentation available, organized, and complete





# Violation Classification

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UNIFIED PROGRAM  
ADMINISTRATION AND  
ADVISORY GROUP (UPAAG)  
ENFORCEMENT STEERING  
COMMITTEE  
ENFORCEMENT TECHNICAL  
ADVISORY GROUP

## **VIOLATION CLASSIFICATION GUIDANCE FOR UNIFIED PROGRAM AGENCIES**

Revised 03/06/2020

# Violation Classification

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- **Minor** – (HSC 25404.1.1) Does not meet the criteria of a class I or class II violation. Cannot be any of the following:
  - Results in injury, or threat to human safety or environment
  - Be a knowing or willful violation
  - Results in an emergency response from public agency
  - Result in economic benefit for the HW generator
  - Repeat/chronic violation
- Common inspection example – Incomplete hazardous waste accumulation label.

# Violation Classification

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- **Class II – (22 CCR 66260.10)** means a deviation from the requirements specified in Chapter 6.5 of Division 20 of the Health and Safety Code, or regulations, permit or interim status document conditions standards, or requirements adopted pursuant to that chapter, that is not a Class I violation.
  
- **Common Class II violations:**
  - Failure to provide adequate employee hazardous waste training (“... thoroughly knowledgeable...”)
  - Failure to make a hazardous waste determination
  - Storage of HW beyond generator status accumulation times
  - Minor violations that are observed as repeat violations (i.e. – hazardous waste label not properly completed)

# Violation Classification

---

## ➤ **Class I – (HSC 25110.8.5)**

### ➤ **“Class I violation” means any of the following:**

- (a) A deviation from the requirements of this chapter, or any regulation, standard, requirement, or permit or interim status document condition adopted pursuant to this chapter, that is any of the following:
  - (1) The deviation represents a significant threat to human health or safety or the environment because of one or more of the following:
    - (A) The volume of the waste.
    - (B) The relative hazardousness of the waste.
    - (C) The proximity of the population at risk.
  - (2) The deviation is significant enough that it could result in a failure to accomplish any of the following:
    - (A) Ensure that hazardous waste is destined for, and delivered to, an authorized hazardous waste facility.
    - (B) Prevent releases of hazardous waste or constituents to the environment during the active or postclosure period of facility operation.
    - (C) Ensure early detection of releases of hazardous waste or constituents.
    - (D) Ensure adequate financial resources in the case of releases of hazardous waste or constituents.
    - (E) Ensure adequate financial resources to pay for facility closure.
    - (F) Perform emergency cleanup operations of, or other corrective actions for, releases.

**Common inspection example – Disposal of hazardous waste at an unauthorized point.**

# Progressive Enforcement

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\*\*\*All regulatory inspections and enforcement actions should follow the agency's specific **Inspection and Enforcement Plan.**

1. -HW generator inspection - Notice of Violation
2. -Non compliance results in Re-Inspection
  - Second NOV documenting open violations
3. -Formal Enforcement
  - Administrative
  - Civil/Criminal

# Progressive Enforcement

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- CUPA AEO – Administrative Enforcement Order
  - CA HSC 25404.1.1
- Local Prosecutor (District Attorney Office)
  - Civil or Criminal cases

# Progressive Enforcement -

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- **CUPA – More Frequent Inspection Program (MFI)**
  - Increased inspection frequency
  - Payment of CUPA hourly rate for MFI inspection time
  - Incentive to have better HW regulatory compliance to get out of MFI program.

# Hazardous waste inspections

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➤ Questions?



# Where is HW coming from?



# Common Waste streams: Automotive

## Vehicle Maintenance:

- Used Oil
- Used Oil/Fuel Filters
- Waste Antifreeze
- Brake/Transmission/ Hydraulic oils
- Parts Washer Waste
- Aerosols
- Contaminated Rags
- Contaminated Absorbent
- Sludge from traps & oil/water separators



# Common Waste streams: Automotive

## Auto Body:

- Waste Paint Thinner
- Waste Paint Sludge
- Sanding Dust
- Used Paint Booth Filters
- Aerosols
- Solvent Wastes
- Contaminated Rags
- Paint Gun Washing Waste



# Common Wastestreams: Retail Stores

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- Household Cleaners
- Pesticides
- Waste Paint
- Returned Cosmetics & Fragrances
- Lotions & Nail Polish
- Returned electronics and other E-waste



# Common Wastestreams: Dry Cleaners

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- Waste Filters/Media
- Stoddard Solvent
- Sludge from Machines
- Hydrocarbon Waste



# Common Wastestreams: Schools, Colleges, & Universities

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## Classes:

- Art Classes: Waste paint
- Chemistry Classes: spent lab chemicals or lab wastes
- Biology Classes: Dissection specimens (formaldehyde?)
- Photography Classes? Used photo fixer waste
- Surfboard Making Classes? Resin & acetone wastes
- Auto Shop Classes? Used oil & antifreeze, etc.

## Maintenance:

- Used paint cans/aerosols
- Universal wastes (lamps/batteries)
- Asbestos removed after construction
- E-waste (computers, TVs, etc.)



# Common Wastestreams: Biotechnology / R&D Facilities

- Solvent wastes
- Corrosive liquids
- Lab debris
- Satellite containers
- Expired/deteriorated chemicals
- P-listed chemicals
- Chemical waste from analytical machines



# Common Wastestreams: Machine Shops

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- Sludge w/heavy metals or oils
- Solvents
- Water-soluble coolant
- Cutting fluids/oils
- Waste oil
- Scrap metals
- Bead-blast media





# Contact Information

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