



INES

ENVIRONMENTAL HEALTH & SAFETY
SOLUTIONS —————

Basic Hazardous Waste Management

22 CCR 66262.16(b)(7)(C) & 22 CCR 66262.17(a)(7)

Course Objective

- This course covers an introduction to the federal and State regulations regarding the classification, management, transportation, and disposal of hazardous waste for generators in California.
- Training will also cover the new Generator Improvements Rule (GIR) for California generators.

Introduction to Hazardous Waste Management



Student Manual
9th Edition



Course Outline

- Regulatory Overview & Recordkeeping Requirements
- Hazardous Waste Determination
- Hazardous Waste Management
- Shipping Requirements

HAZARDOUS WASTE

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

GENERATOR INFORMATION:
NAME _____
ADDRESS _____ PHONE _____
CITY _____ STATE _____ ZIP _____
EPA IDENTIFICATION 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 _____

D.O.T. PROPER SHIPPING NAME AND UN OR NA NO. WITH PREFIX

HANDLE WITH CARE!



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ENVIRONMENTAL HEALTH & SAFETY
SOLUTIONS —————

Regulatory Overview & Recordkeeping Requirements

Regulatory Overview & Recordkeeping Requirements

Hazardous Waste Regulations

Resource Conservation and Recovery Act
(RCRA): 40 CFR 260 – 268/273: US EPA



California Statutes: HSC Division 20,
Chapter 6.5: DTSC

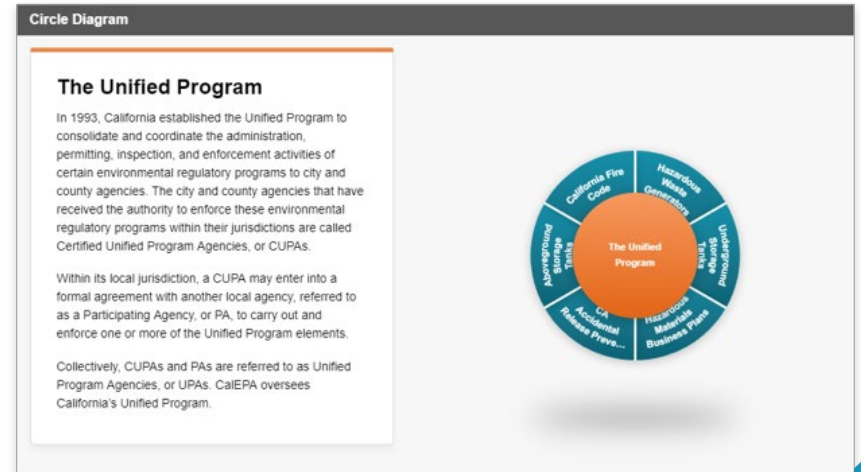


California Regulations: 22 CCR 66260 –
66268/66273: DTSC



Regulatory Overview & Recordkeeping Requirements

- CUPA will provide hazardous waste generator inspections
- Facilities with HMBPs will be inspected at least once every three years



Regulatory Overview & Recordkeeping Requirements

A generator is any person, by site, whose act or process produces hazardous waste or whose act first causes a waste to become subject to regulation as a hazardous waste.



Regulatory Overview & Recordkeeping Requirements

Generator category based on quantity of waste generated in a calendar month.

Generator Category	Acute Haz Waste	Extremely Haz Waste	Non-Acute Haz Waste
Large Quantity Generator (LQG)	> 1 kg	Any Amount	Any Amount
Large quantity generator (LQG)	Any Amount	> 1 kg	Any Amount
Large quantity generator (LQG)	Any Amount	Any Amount	≥ 1,000 kg
Small quantity generator (SQG)	≤ 1 kg	≤ 1 kg	< 1,000 kg
Very small quantity generator (VSQG)	≤ 1 kg		≤ 100 kg



Regulatory Overview & Recordkeeping Requirements

- Each site that generates hazardous waste must have an ID number

NES, INC. 1141 SIBLEY STREET - FOLSOMS - 95630 CAR000295089

Site Details myRCRAid

General Overview [How do I edit Site Information?](#)

Federal Generator Status Not a Generator	State Generator Status Not a Generator, Verified
Is Site Active No	Last Notification Date 05/02/2019

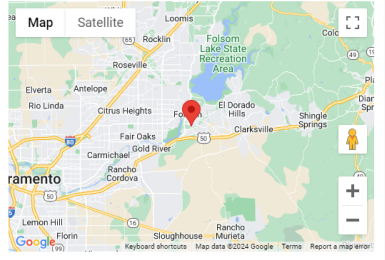
Site Mailing Address [How do I edit Site Information?](#)

1141 SIBLEY STREET
FOLSOM, CA 95630

Site Contact [How do I edit Site Information?](#)

STEVE REICHOW
1141 SIBLEY STREET
FOLSOM, CA 95630

Map



The map displays the site location in Folsom, California, marked with a red pin. The site is situated near the Folsom Lake State Recreation Area and the Folsom River. Surrounding areas include Roseville, Elverta, and Rancho Cordova. The map includes standard navigation controls like zoom in/out and a street view pegman.

Regulatory Overview & Recordkeeping Requirements

- California ID numbers issued by DTSC (≤ 100 kg non-acute or ≤ 1 kg acute RCRA hazardous waste in any month)
 - CAL – permanent;
 - CAC – provisional;
- EPA ID numbers issued by U.S. EPA (> 100 kg non-acute or > 1 kg acute RCRA hazardous waste in any month)
 - CAR – current
 - CA – not issued since 1995
 - CAD – not issued since 1993
 - CAT – preceded CAD
 - CAP – provisional

NES, INC. 1141 SIBLEY STREET - FOLSOMS - 95630 CAR000295089

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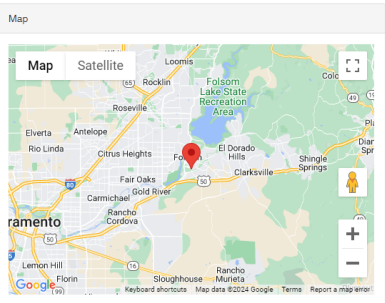
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Site Contact [How do I edit Site Information?](#)

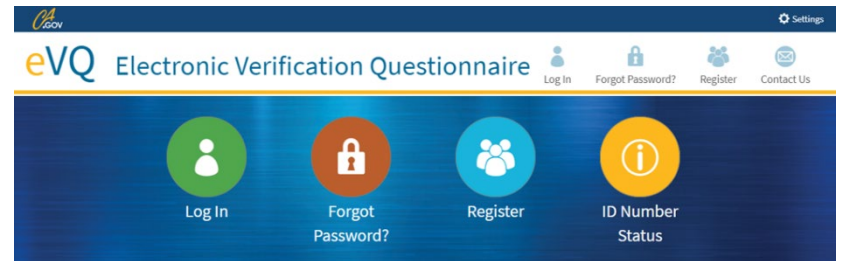
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Map



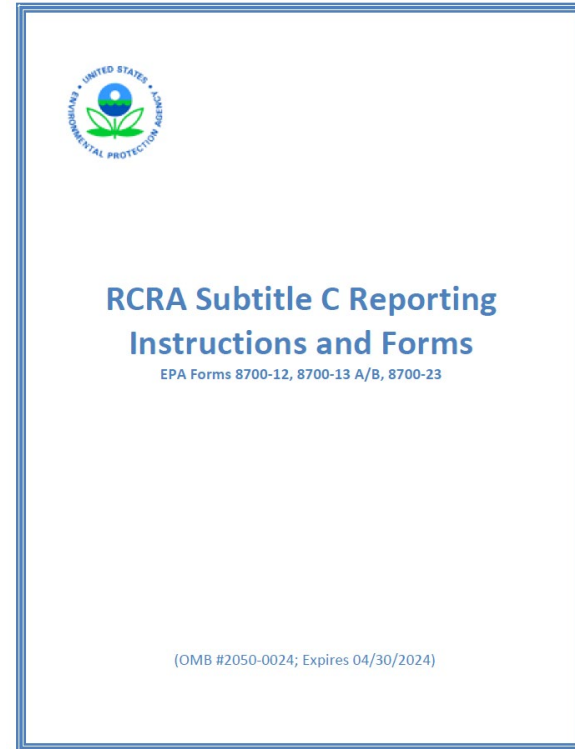
Regulatory Overview & Recordkeeping Requirements

- DTSC requires all generators to verify their ID numbers (State and federal) annually
- If ID numbers are not verified, they will be deactivated



Regulatory Overview & Recordkeeping Requirements

- U.S. EPA requires generators to re-notify
 - SQGs: Every four years (beginning 2024)
 - » Notification is made with EPA Form 8700-12 (or online: RCRAinfo) by September 1st
 - LQGs: Each even numbered year
 - » Notifications made as part of Biennial Report



Regulatory Overview & Recordkeeping Requirements

- Contingency Plan - LQGs
 - Outlines emergency actions involving hazardous waste incidents
 - Fire
 - Explosions
 - Spills & releases



Regulatory Overview & Recordkeeping Requirements

- Contents
 - Emergency Coordinator
 - Emergency procedures
 - Emergency services and arrangements to coordinate response actions
 - Emergency equipment
 - Evacuation Plan
 - Cal OES contact
- Copy maintained on-site



Regulatory Overview & Recordkeeping Requirements

- Reviewed and updated when
 - Regulations change;
 - Plan fails;
 - Facility changes design or response operations;
 - Emergency Coordinator changes; OR
 - Emergency equipment changes



Regulatory Overview & Recordkeeping Requirements

- Contingency Plan - LQGs
 - Quick Reference Guide (QRG)
 - Hazardous wastes and associated hazards
 - Maximum amount of each hazardous waste stream
 - Hazardous waste streams where exposure would require unique or special treatment
 - Map identifying hazardous waste accumulation areas
 - Street map with surrounding businesses
 - Locations of water supply (e.g. fire hydrant and its flow rate)
 - Notification systems (e.g., a fire alarm that rings offsite, smoke alarms)
 - Names and numbers of emergency coordinators



Regulatory Overview & Recordkeeping Requirements

Emergency Procedures - SQGs

- At all times, there must be at least one employee, either on the premises or on call, available to respond to an emergency
- Information must be posted next to telephones OR in areas directly involved in the generation and accumulation of hazardous waste
 - Name & number of Emergency Coordinator
 - Location of fire extinguishers & spill control equipment
 - Fire Department number

EMERGENCY PROCEDURES		
<small>Post near telephones and as appropriate</small>		
In case of a fire, spill, or other emergency involving hazardous chemicals or wastes, do the following:		
Major Emergency		
⇒ Evacuate the affected areas per the facility Evacuation Plan		
⇒ Call 911 and report the emergency		
⇒ Report the emergency to the facility Emergency Coordinator		
Minor Emergency		
⇒ Try to control the emergency if you are trained to do so and can do it safely		
⇒ Report the emergency to the facility Emergency Coordinator		
Facility Emergency Coordinators		
	<small>Name</small>	<small>Work Phone</small>
<small>Primary EC:</small>	_____	_____
<small>1st Alternate EC:</small>	_____	_____
<small>2nd Alternate EC:</small>	_____	_____
<small>3rd Alternate EC:</small>	_____	_____
Emergency Agencies		
Agency	Phone No.	
Fire Dept., Ambulance, Police	911	
Governor's Office of Emergency Services	(800) 852-7550	
	()	
Emergency Equipment		
Locations of fire extinguishers, fire alarms (if any), and equipment for controlling chemical spills are shown on the facility site plan posted with this notice.		
<small>This document is only a summary of emergency procedures. Refer to this facility's written emergency response plan for detailed procedures.</small>		

Regulatory Overview & Recordkeeping Requirements

- Generators must make (or attempt to make) arrangements with local authorities for mitigation of emergencies
 - Fire Department
 - Police Department
 - Emergency Responders
 - Hospitals
- Documentation must be made that arrangements were made (or attempted to be made)



Regulatory Overview & Recordkeeping Requirements

Biennial Report

- Required & certified by **RCRA** LQGs
- Report covers odd-numbered year (2023, 2025, etc.)
 - Contains amounts by waste code
 - Identifies source and origin of waste
 - Identifies disposal method (recycled, incinerated, etc.)
 - Describes waste minimization efforts
- Due March 1st of even-numbered year (2024, 2026, etc.)
- Copy kept on-site for three years

RCRAInfo

RCRAInfo is EPA's comprehensive information system providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976, the Hazardous and Solid Waste Amendments (HSWA) of 1984, and the Hazardous Waste Electronic Manifest Establishment Act of 2012. The system is used to track information provided by the regulated community concerning the generation, shipment, treatment, and disposal of hazardous wastes, as well as significant milestones of State/EPA activity supporting program planning, implementation, and accomplishment reporting. States may use RCRAInfo for some or all aspects of program implementation support, or may use their own system which transmits required data to EPA.

RCRAInfo Sign In

User Id

Password

Sign in

[Register](#) [Forgot User Id?](#) [Forgot Password?](#)

Regulatory Overview & Recordkeeping Requirements

Tank Assessments - LQGs

- Tank system and components certified by qualified Professional Engineer (PE)
- Supported and protected from corrosion
- Tested for tightness
- Protected from settlement, expansion, or contraction
- Must be completed prior to putting tank into service and then once every five years for new tanks



Regulatory Overview & Recordkeeping Requirements

- Shipping/Disposal documents
 - Uniform Hazardous Waste Manifest
 - Consolidated manifest receipts
 - Universal Waste tracking records
 - Three years from date of shipment

The image shows a sample of a Uniform Hazardous Waste Manifest form (EPA Form 8700-22). The form is divided into several sections:

- GENERAL INFORMATION:** Includes fields for Generator ID Number, Emergency Response Phone Number, Manifest Tracking Number, Generator's Site Address, Shipper's Name, Shipper's Company Name, and Designated Facility Name and Location.
- Facility's Name:** Includes fields for the facility's name and address.
- Containers:** A table with columns for No., Type, Quantity, and Unit.
- Waste Codes:** A table with columns for U.S. EPA Hazardous Waste Code, U.S. EPA Identification Number, and U.S. EPA Facility ID Number.
- Generator's Certification:** A section where the generator certifies that the waste is properly managed and that the manifest is accurate.
- Shipper's Certification:** A section where the shipper certifies that the waste is properly packaged and that the manifest is accurate.
- Facility's Certification:** A section where the facility certifies that the waste is properly received and that the manifest is accurate.

The form is marked with a large "VOID" watermark, indicating it is a sample and not a valid document.



Regulatory Overview & Recordkeeping Requirements

Hazardous Waste Training Requirements - SQGs

- Employees must be familiar with proper waste handling and emergency response procedures relevant to their responsibilities
- Annual training is a BMP
- Training should be documented





Regulatory Overview & Recordkeeping Requirements

Hazardous Waste Training Requirements - LQGs

- Personnel must successfully complete a program of either:
 - Classroom, computer-based, or electronic instruction; OR
 - On-the-job (OTJ) training
- Training must cover hazardous waste management procedures and emergency response training
- Training must be provided within 180 days of hire / job placement
- Annual training required
- Personnel involved in shipping hazardous waste must receive *DOT Hazmat Employee* training [49 CFR 172.704]
- Training records must be maintained until facility closes; or
- Three years for former employees



The logo for NES (Environmental Health & Safety Solutions) features the letters 'NES' in a large, bold, white sans-serif font. The letter 'N' is stylized with a blue vertical bar on its left side. The background is dark gray with a geometric pattern of overlapping lines in the top right corner.

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ENVIRONMENTAL HEALTH & SAFETY
SOLUTIONS —————

Hazardous Waste Determination



Hazardous Waste Determination

- A person who generates a waste must determine if the waste is hazardous by determining if the waste:
 - Is **excluded** from regulation
 - Is **listed**
 - Exhibits any hazardous waste **characteristics**
- Determinations can be made by:
 - Testing the waste
 - Generator's knowledge





Hazardous Waste Determination

- Waste is any discarded material of any form (liquid, semi-solid, solid, or gaseous) that is not excluded by regulation or statute:
 - **Relinquished** (disposed of, burned or incinerated, or accumulated, stored, or treated prior to or in lieu of disposal)
 - **Recycled** (applied to land in a manner constituting disposal, used in products that are applied to land, burned to recover energy, reclaimed, or speculatively accumulated)
 - *[Continued...]*





Hazardous Waste Determination

- **Inherently waste-like** materials when recycled (e.g., F020, F021 [with one exception], F022, F023, F026, and F028 – all dioxin-precursor waste)
- A material that poses a threat to human health and/or the environment that has been **mislabeled or unlabeled** for more than 10 days (i.e., 10 days from the day that the labeling deficiency was first discovered)
- A material that poses a threat to human health and/or the environment contained in a **deteriorated or damaged packaging** for more than 96 hours





Hazardous Waste Determination

- Materials that are not waste
 - Industrial wastewater discharges
 - Nuclear byproducts
 - Spent sulfuric acid used to produce virgin sulfuric acid
 - Pulping liquors reclaimed in a pulping liquor recovery furnace
 - Secondary materials that are returned to the original process





Hazardous Waste Determination

Wastes that are not hazardous waste

- Infectious wastes consisting only of animal carcasses
- Materials not classified as a solid waste that do not exhibit a hazardous waste characteristic
- Used oil re-refining distillation bottoms used as a feedstock for asphalt
- Used CFC refrigerants that are reclaimed
- Wastes generated from the extraction and processing of ores and minerals
 - Hazardous wastes generated in a tank or manufacturing process unit
 - Samples
 - Controlled substances
 - CRT glass





Hazardous Waste Determination

RCRA Hazardous Waste

- Listed
 - Unspent (U & P)
 - Spent (F & K)
- Characteristics
 - Ignitable (D001)
 - Corrosive (D002)
 - Reactive (D003)
 - Toxic (D004 – D043)

Non-RCRA Hazardous Waste

- Presumptive lists
 - Common name
 - Chemical constituents
- Characteristics
 - Ignitable
 - **Corrosive**
 - Reactive
 - **Toxic**





Hazardous Waste Determination

RCRA Listed Hazardous Wastes

- Spent Wastes
 - F-listed: Hazardous waste from non-specific sources
 - F001 – F039
 - K-listed: Hazardous waste from specific sources
 - K001 – K175
- Unspent Wastes
 - P-listed: Acute hazardous waste
 - P001 – P205
 - U-listed: Toxic hazardous waste (unless noted)
 - U001 – U411



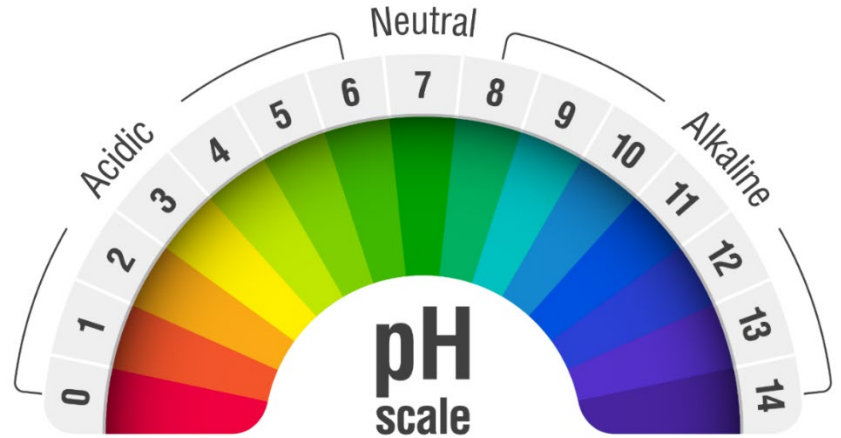
Hazardous Waste Determination

- Characteristics of Ignitability (D001)
 - Liquid (other than < 24% alcohol by volume) with a flash point < 140°F (60°C)
 - A solid that can cause fire through friction, absorption of moisture, or spontaneous chemical changes and, when ignited, burns vigorously and persistently
 - Is an ignitable compressed gas
 - Is an oxidizer



Hazardous Waste Determination

- Characteristics of Corrosivity (D002)
 - Aqueous with $\text{pH} \leq 2.0$ or ≥ 12.5 ; OR
 - Liquid that corrodes steel at a rate of more than $\frac{1}{4}$ inch (6.35 mm) per year



Hazardous Waste Determination

- Characteristics of Reactivity (D003)
 - Unstable and undergoes violent change without detonating;
 - Reacts violently with water;
 - Forms an explosive mixture with water;
 - Generates toxic gases, vapors, or fumes with water;
 - Cyanide- or sulfide-bearing waste producing toxic gases, vapors, or fumes @ pH 2 – 12.5;
 - Capable of detonation or an explosive reaction; OR
 - Forbidden explosive [49 CFR 173.51]



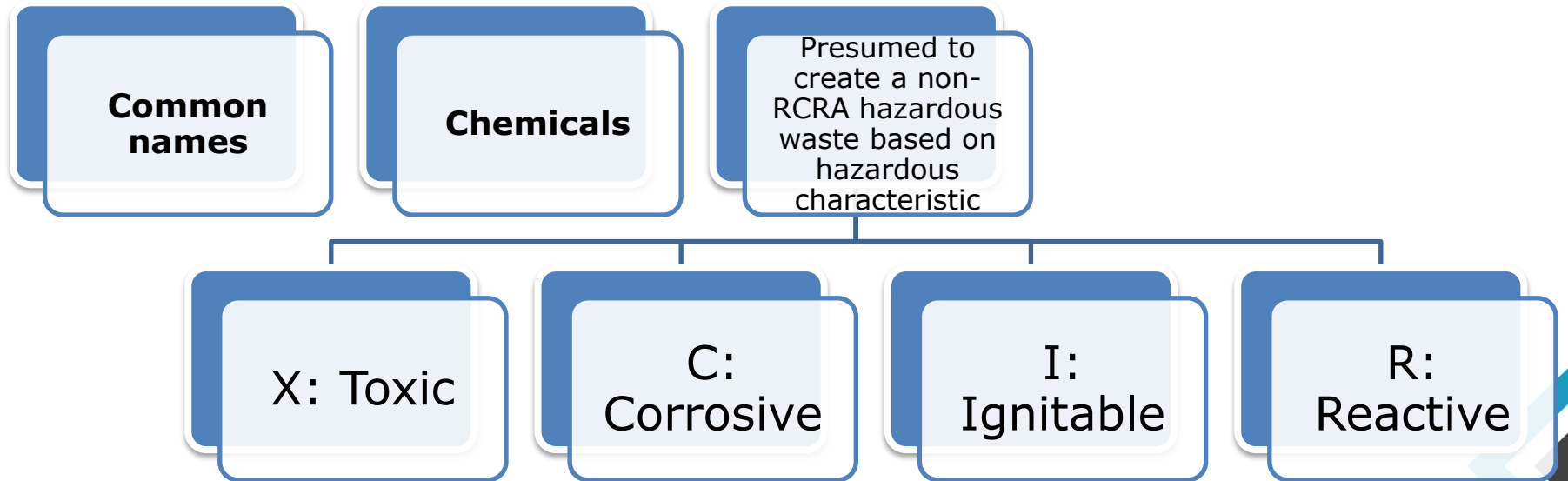
Hazardous Waste Determination

- Characteristics of Toxicity (D004 – D043)
 - Tested using EPA Toxicity Characteristic Leaching Procedure (TCLP)
 - Regulated if \geq specified threshold



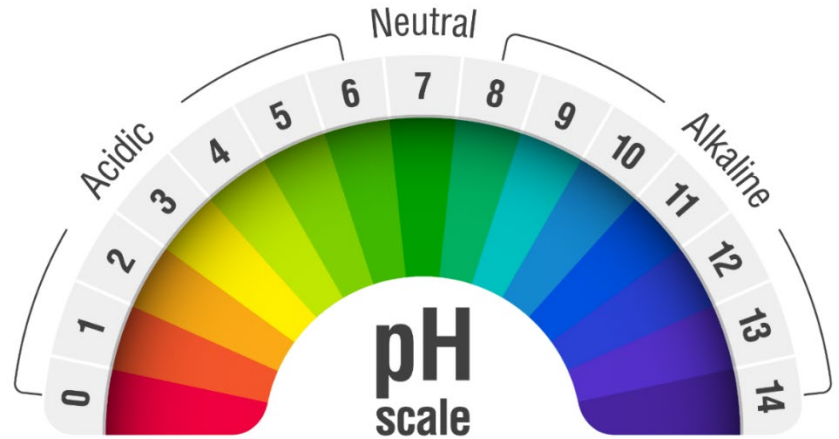
Hazardous Waste Determination

California Presumptive Lists



Hazardous Waste Determination

- Characteristics of Corrosivity (non-RCRA)
 - Non-aqueous wastes that yield $\text{pH} \leq 2.0$ or ≥ 12.5 when mixed with an equivalent weight of water
 - Non-liquids that corrode steel at a rate of more than $\frac{1}{4}$ inch (6.35 mm) per year when mixed with an equivalent weight of water



Hazardous Waste Determination

- Characteristics of Toxicity (non-RCRA)
 - Exceeds WET thresholds (Tables II & III);
 - Oral $LD_{50} < 2,500$ mg/kg;
 - Dermal $LD_{50} < 4,300$ mg/kg;
 - Inhalation $LC_{50} < 10,000$ ppm;
 - Aquatic 96-hr $LC_{50} < 500$ mg/L;
OR
 - Contains a listed carcinogen $\geq 0.001\%$ by weight (10 ppm)



Hazardous Waste Determination

Used oil is defined as oil that has been refined from crude oil or any synthetic oil that has been used, and, as a result of use or as a consequence of extended storage or spillage, has been contaminated with physical or chemical impurities.





Hazardous Waste Determination

Used Oil

- Crankcase oil
- Gear oil
- Vegetable or animal oil used as a lubricant
- Hydraulic oil
- Transformer oil
- Transmission fluid

Not Used Oil

- Antifreeze
- Brake fluid
- Fuels
- Other automotive wastes
- Solvents
- Oil with a flash point < 100°F
- Oil with ≥ 5 ppm PCBs
- Oil with > 1,000 ppm halogens





Hazardous Waste Determination

California Waste Codes

- Restricted Wastes 700-800
- Inorganics 100-199
- Organics 200-300
- Sludges 400-499
- Miscellaneous 500-600





Hazardous Waste Determination

Exemptions

- Contaminated containers
[22 CCR 66261.7]
- Spent lead-acid storage
batteries
[22 CCR 66266.80-81]
- Universal wastes
[22 CCR 66261.7]
- Used oil filters & used fuel
filters [22 CCR 66266.130 /
HSC 25250.22]





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Hazardous Waste Management

Hazardous Waste Management

A container is a device that is open or closed, and portable, in which material can be stored, handled, treated, transported, recycled, or disposed of.



Hazardous Waste Management

A tank is a stationary device designed to contain an accumulation of hazardous waste constructed primarily of non-earthen materials (e.g., wood, concrete, steel, plastic) that provide structural support.



Central Accumulation Areas

- Generators must have a designated Central Accumulation Area (CAA)
 - Generators can have multiple CAAs on-site
- LQGs: CAA must be > 50 ft from property line if ignitable (D001) or reactive (D003) waste present



Central Accumulation Areas

- Ignitable or Reactive hazardous waste - LQGs
 - “No Smoking” signs must be conspicuously placed wherever there is a hazard from ignitable or reactive waste



Central Accumulation Areas

Generator Category	Accumulation Time Limit & Volume
Large Quantity Generator (LQG)	90 days
Small quantity generator (SQG)	180 days / 6,000 kg 270 days when haz waste is shipped off-site 200 miles, or more 90 days for acute or extremely haz waste
Very small quantity generator (VSQG)	No time limit until 100 kg of non-acute or non-extremely haz waste is accumulated (180 days) OR 1 kg of acute or extremely haz waste is accumulated (90 days)

Central Accumulation Areas

- Emergency equipment
 - Internal communication devices
 - Fire extinguishers
 - Spill control & decon equipment
 - Water at adequate volume & pressure
- Equipment must be tested and maintained



Central Accumulation Areas

- Container labeling
 - The words “HAZARDOUS WASTE”
 - Generator’s name and address
 - Contents
 - Physical state
 - Hazardous properties
 - Accumulation start date
- Labels must be legible & visible for inspection

HAZARDOUS WASTE

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

GENERATOR INFORMATION:
NAME _____
ADDRESS _____ PHONE _____
CITY _____ STATE _____ ZIP _____
EPA IDENTIFICATION 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 _____

D.O.T. PROPER SHIPPING NAME AND UN OR NA NO. WITH PREFIX

HANDLE WITH CARE!

Central Accumulation Areas

- Used Oil containers & tanks must also be marked with "Used Oil"
- **Do not** mark used oil containers & tanks with "WASTE OIL"



Central Accumulation Areas

- Hazardous waste containers must be:
 - In good condition (no signs of rust, damage, or leakage)
 - Compatible with the waste
 - Closed (except when adding or removing waste)
 - Managed in a manner so they are not ruptured or caused to leak



Central Accumulation Areas

- Hazardous waste tanks must be labeled with:
 - “HAZARDOUS WASTE”
 - Accumulation start date
 - Hazardous property(ies) of the waste
 - This can be accomplished with DOT labels/placards, OSHA pictograms, or NFPA placards



Central Accumulation Areas

- Aisle space
 - Must allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation in an emergency



Central Accumulation Areas

- Incompatible hazardous waste cannot be mixed in the same container
- Incompatible hazardous waste must be separated or protected by a dike, berm, or wall

TECHNOTE: POTENTIALLY INCOMPATIBLE WASTES*		
GROUP 1-A	GROUP 1-B	POTENTIAL CONSEQUENCES
<ul style="list-style-type: none"> Acetylene sludge Alkaline caustic liquids Alkaline cleaner Alkaline corrosion liquids Alkaline corrosion battery fluid Caustic wastewater Lime wastewater Spent caustic Lime sludge Pickling liquor and other corrosive alkalis 	<ul style="list-style-type: none"> Acid sludge Spent sulfuric acid Battery acid Acidic chemical cleaners Electrolyte acid Acid and water Spent nitric acid Spent acid Toxic acid liquid or solvent 	<ul style="list-style-type: none"> Hest generation Violent reaction
<ul style="list-style-type: none"> Aluminum Beryllium Calcium Lithium Other reactive metals and metal hydrides Zinc powder Sodium Potassium Magnesium 	<ul style="list-style-type: none"> Any waste in Group 1-A or 1-B 	<ul style="list-style-type: none"> Fire Explosion Generation of flammable hydrogen gas
<ul style="list-style-type: none"> Alcohols 	<ul style="list-style-type: none"> Calcium Potassium Other water-reactive waste Lithium Metal hydrides SO₂, sulfonic chlorides, SOCl₂, thionyl chlorides, POCl₃, phosphorus trichloride, CCl₄, SOCl₂, dimethyl trichlorosilane Any concentrated waste in Group 1-A or 1-B 	<ul style="list-style-type: none"> Fire Explosion Hest generation Generation of flammable or toxic gases
<ul style="list-style-type: none"> Alcohols Nitrated hydrocarbons Unnitrated hydrocarbons Aldehydes Halogenated hydrocarbons Other reactive organic compounds and solvents 	<ul style="list-style-type: none"> Concentrated Group 1-A or 1-B Group 2 Wastes 	<ul style="list-style-type: none"> Fire Explosion Generation of flammable or toxic gases
<ul style="list-style-type: none"> Spent cyanide and sulfide solutions 	<ul style="list-style-type: none"> Group 1-B wastes 	<ul style="list-style-type: none"> Generation of toxic hydrogen cyanide Generation of hydrogen sulfide gas
<ul style="list-style-type: none"> Chlorates Chlorine Chlorites Chloric acid Hypochlorites Nitric acid-forming Perchlorates Perranganates Peroxides Nitrites Other strong oxidizers 	<ul style="list-style-type: none"> Acetic acid and other organic acids Group 2-A wastes Group 4-A wastes Concentrated mineral acids Other flammable and combustible wastes 	<ul style="list-style-type: none"> Fire Explosion Violent reaction


*Mixing a Group A material with a Group B material may have the listed consequences.





Central Accumulation Areas

Inspections

- Container inspections
 - Containers must be inspected weekly
 - Leaking containers
 - Deterioration of containers
 - Inspections should be documented
 - Tank inspections - LQGs
 - Each operating day
 - Inspections must be documented
 - Tank inspections - SQGs
 - Daily (if tank doesn't have secondary containment)
 - Weekly
 - Inspections should be documented
- 

Satellite Accumulation Areas

- Satellite Accumulation Area (SAA) requirements
 - At or near any point of generation
 - Under the control of operator of process generating waste
 - Only containers can be used
 - Limit of 55 gallons (1 qt for acute or extremely hazardous waste)
 - Incompatible wastes cannot be placed in same container
 - Incompatible waste must be separated



Satellite Accumulation Areas

- SAA requirements (continued)
 - Must meet all container management standards
 - Except weekly inspections not required
 - Hazardous Waste accumulated at a SAA can be stored on-site for no more than one year
 - Hazardous waste must be moved to CAA within three days

WORKPLACE ACCUMULATION CONTAINER

PROPER D.O.T. Shipping Name: _____

UN or NA #: _____

Generator: _____

Facility: _____

Address: _____

Phone: _____ City: _____

State: _____ Zip: _____

EPA ID No. _____

Workplace Accumulation Start Date: _____

HAZARDOUS WASTE

STATE AND FEDERAL LAW PROHIBITS 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.

HANDLE WITH CARE!

Composition: _____

Physical State of Waste: Solid _____ Liquid _____

Hazardous Properties: Toxic Flammable Corrosive Reactivity Other _____

EPA Waste No. _____

CA Waste No. _____

Date Placed in Hazardous Waste Storage Area: _____

Manifest Document Number: _____

Contaminated Containers (> 5 gallons)

- Containers must be:
 - Empty – no continuous stream for liquids
 - Marked “EMPTY” (BMP)
 - Marked with the date they became empty
 - Stored on-site no more than one year
 - Recycled
 - Recycle records kept for three years



Contaminated Containers (≤ 5 gallons)

- Containers that are 5 gallons or less **and** empty can be managed as municipal waste (trash)
- **Do not** dry containers; this may be considered treatment



Spent Lead-Acid Storage Batteries

- Management of batteries:
 - Stored upright on a pallet on a sealed surface
 - Stored to prevent the terminals from short circuiting
 - Stored on-site no more than one year (365 days; 180 days if > a ton) and marked with out-of-service date
- Recycle records are to be kept for three years



Universal Waste

- Examples of universal waste
 - Spent batteries
 - Spent lamps
 - Electronic devices (e-waste)
 - Mercury-containing devices
 - Aerosol cans (non-empty)
 - End-of-life solar panels



Universal Waste

- Must be kept in a closed container that is compatible with the waste
- Labeled
 - "UNIVERSAL WASTE"
 - Type of waste (e.g., "Waste Lamps", "Used Batteries", "Waste Aerosols")
 - Accumulation start date
- Stored on-site for no more than one year
- Tracking records kept for all off-site shipments



Drained Used Oil Filters & Fuel Filters

- Filters must be:
 - Drained (no free-flowing liquid)
 - Stored in a rainproof and closed container
 - Labeled “Drained Used Oil Filters” or “Drained Used Fuel Filters” with an accumulation start date
 - Stored on-site no more than one year (365 days; 180 days if > a ton)
- Recycle records are to be kept for three years



Maintenance & Operation

- Facilities must be
 - Maintained and operated to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste
 - Minor, Class II, & Class I violations
 - Up to \$70,000/per violation, per day for non-compliance



Potential Compliance Issue

Container Condition & Closure



Potential Compliance Issue

Damaged & Open Container



Potential Compliance Issue



Hazardous waste label not visible

Potential Compliance Issue

Hazardous Property

HAZARDOUS WASTE
STATE & FEDERAL LAW PROHIBITS IMPROPER DISPOSAL
IF FOUND, CONTACT THE NEAREST POLICE OR PUBLIC SAFETY AUTHORITY, OR THE U.S. ENVIRONMENTAL PROTECTION AGENCY OR THE CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCES CONTROL

GENERATOR INFORMATION:
NAME Shamrock Auto TELEPHONE 977-7777
ADDRESS 777 Lucky Ln St 77
CITY Shamrock STATE CA ZIP 95777

MANIFEST TRACKING NO. _____ ACCUMULATION START DATE 1/3/2020

EPA WASTE NO(S) D006 EPA ID NO. _____ CA WASTE NO. _____

CONTENTS, COMPOSITION: metal dust waste, chromium copper

PHYSICAL STATE: SOLID LIQUID HAZARDOUS PROPERTIES: FLAMMABLE TOXIC
 CORROSIVE REACTIVITY OTHER

PROPER D.O.T. SHIPPING NAME _____ UN or NA# _____

COMPLETE FOR TRANSPORT _____ COMPLETE FOR STORAGE _____ C-3

PRINTED BY: MESA LABEL EXPRESS, INC. POWAY, CA (858) 669-2320 FAX: (858) 669-2358 www.mesalabel.com

HANDLE WITH CARE!
CONTAINS HAZARDOUS OR TOXIC WASTES

Potential Compliance Issue



Lack of aisle space

Potential Compliance Issue



Failure to maintain & operate facility to minimize possibility of a fire, explosion, or release



NES

ENVIRONMENTAL HEALTH & SAFETY
SOLUTIONS —————

Shipping Requirements

Shipping Requirements

- Hazardous waste must be profiled for disposal and transported
 - By a registered hazardous waste transporter
 - Using a Uniform Hazardous Waste Manifest
 - To a permitted facility



Shipping Requirements

Exceptions

Universal Wastes

Used Oil

Hazardous Waste Generated by VSQGs

Shipping Requirements

- EPA form 8700-22 is the only manifest form that can be used
- Federal instructions included on the back of the manifest form

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

1. Generator ID Number		2. Page 1 of		3. Emergency Response Phone		4. Manifest Filing Number			
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:									
9a. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))						10. Containers	11. Total	12. Unit	13. Waste Codes
						No.	Quantity	WE/Vol.	
1.									
2.									
3.									
4.									
14. Special Handling Instructions and Additional Information									
15. GENERATOR/SOFFEROR'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/described, 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 consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 263.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.									
Generator/Sofferor's Printed/Typed Name						Signature	Month	Day	Year
16. International shipments: <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/leave: _____ 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 <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> 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

Shipping Requirements

- California has supplemental manifest instructions that include:
 - Submittal requirements
 - California waste codes
 - Hazardous waste management method codes

Effective
09/05/2006

Supplemental California Manifest Instructions

Revised June 2007

Federal and State hazardous waste manifest regulations changed on **September 5, 2006**.

Detailed manifest instructions are printed on the back of the new federal manifest. These Supplemental California Instructions cover additional California requirements. Please use the instructions printed on the new manifest for item by item directions. Materials are available at www.dtsdc.ca.gov (under ID numbers, Manifests & Fees, Hazardous Waste Manifests), including fact sheets and California's manifest regulations, sample manifests, and federal instructions. For load rejections and consolidated manifesting, refer to the regulations and fact sheets.

IMPORTANT MANIFEST CHANGES - PLEASE READ AND SAVE AS A REFERENCE

The U.S. Environmental Protection Agency (EPA) revised the Uniform Hazardous Waste Manifest and requires the use of only the new version nationally after September 4, 2006. **States are no longer allowed to modify the form or the instructions.** Old versions of the California manifest, or manifests from other states, may not be used after September 4, 2006. The new manifest form is no longer color coded, and the new six-part form does not include a copy for generators to submit to their state, although California requires the generator to submit a copy.

Additional Information and Instruction Changes:

- Adds space for emergency response number;
- Adds Generator's site address;
- Allows up to six waste codes for each waste stream;
- Adds a box to indicate if waste stream is U.S. DOT regulated;
- Adds space for import/export information;
- Adds room for destination facilities to note discrepancies or if container residues exceed empty levels;
- Adds a new field for a manifest reference number when waste is rejected or if container residues are shipped on a new manifest;
- Adds a separate field for alternative facility information and signatures;
- Uses HW Report Management Codes to replace handling codes;
- Prohibits the use of fractions or decimal points in waste quantities in Item 10; and
- Discourages use of large quantity units in Item 11 (e.g. tons or cubic yards) when other units, i.e. pounds, are more accurate.

Where Do I Get Manifests?

California does not sell the new manifest forms. Forms are available only from private printers approved by EPA. EPA posts approved printers at www.epa.gov/epaoswer/hazwaste/gener/manifest/registry/index.htm.

Generators Must Submit Manifest Copies!

California requires generators and permitted transfer, treatment, storage, and disposal facilities (Facilities) to submit manifests. The federal manifest form does not include a Generator-to-State submittal page like the old manifest did (the blue page). Within 30 days of shipping the waste, generators must submit a copy of each manifest to DTSC. This copy can either be a legible photocopy or the "Generator Retains" copy, if the generators receive a signed facility copy back within 30 days. Generators may submit a copy of the "Generator Retains" copy (page 0), the top page (the most legible one - page 1), or any other page, as long as it is legible.

What About Submitting Manifests for Rejected Loads?

Generators should send copies of manifests they sign when receiving rejected waste or container residues to the Department of Toxic Substances Control's (DTSC) Facility Manifests at P.O. Box 3000. Facilities signing new manifests for rejected loads should submit the generator copy to DTSC Generator Manifests at P.O. Box 400. See the rejected load fact sheet on DTSC's web site.

How Are California Manifest Requirements Different from Federal?

- California requires conditionally exempt small quantity generators to use manifests and regulates more waste as hazardous.
- DTSC uses the submitted generator and facility manifest copies for cradle-to-grave tracking of waste.
- California's definition of an "empty" container is more stringent. Non-empty containers must be manifested, including bulk containers, whether the waste is federal RCRA or non-RCRA.
- Facilities in other states are required to submit copies to DTSC when waste generated in California is received out of state. Out-of-state generators sending waste to California facilities, or that will be exported through California, are encouraged to submit manifest copies.

Where Do I Find California Waste Codes?

The new manifest has six blank boxes for waste codes for each waste stream. The new manifest is RCRA regulated, at least one box must include a RCRA waste code. For waste generated in or shipped to California, a CA state waste code is also required. The additional boxes are for other states' codes when the waste is sent out of state to a state with codes, or for extra RCRA codes. California Waste Codes are printed on the reverse side of these instructions only, not on the instructions printed on the manifest. They are also found in Title 22, California Code of Regulations, Appendix XII to Chapter 11 of Division 4.5.

What are Hazardous Waste Report Management Method Codes (HWRMM Codes)?

Previously, California's manifest instructions required Designated Facilities to use one of 10 handling codes to report how the waste was handled at that facility. The new manifest uses 28 Management Method Codes. These are the same codes used in Biennial Reports. One of the HWRMM codes shown on the other side must be added on the manifest by the Facilities only. Generators and transporters do not add these codes.

Contact Information:

First, visit the DTSC web page at www.dtsdc.ca.gov/IDManifest for training information and review the basic instructions printed on the manifest. This document includes Supplemental Instructions only for use in California. For more information, contact your transporter or facility, or call DTSC's Regulatory Assistance Officer at 800-72-TOXIC.

Where Do I Mail Manifests?

Same P.O. Boxes - No Change

GENERATORS SEND TO:

DTSC Generator Manifests
P.O. Box 400
Sacramento, CA 95812-0400

TSD/Facility DESIGNATED FACILITIES SEND TO:

DTSC Facility Manifests
P.O. Box 3000
Sacramento, CA 95812-3000

Shipping Requirements

- Generator is responsible for information in boxes 1 – 15
- Box 16 is for international shipments
- Box 17 is for transporter's acknowledgement of receipt
- Boxes 18 – 20 are to be completed by designated facility (TSD/F)

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	
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						
GENERATOR	9a. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	ID Containers No.	Type	11. Total Quantity	12. U.S. Vol / No	13. Waste Codes
	1					
	2					
	3					
	4					
14. Special Handling Instructions and Additional Information						
15. GENERATOR/SUPPLIER'S CERTIFICATION: I hereby declare that the contents of the consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, labeled and stowed/secured, 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 the consignment conform to the terms of the applicable Export Agreement of Consent. I certify that the waste minimization statement identified in 40 CFR 263.22(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.						
Generator/Supplier's Printed/Typed Name		Signature		Month	Day	Year
16. International shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> 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						
9a. Discrepancy Indication: Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection						
				Manifest Reference Number		
19. Alternate Facility (or Generator) _____ U.S. EPA ID Number _____						
Facility's Phone _____						
9c. Signature of Alternate Facility (or Generator) _____ Month _____ Day _____ Year _____						
20. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)						
				4		
21. Designated Facility Owner or Operator: Certification of receipt of receipt of 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

Shipping Requirements

- Uniform Hazardous Waste Manifest
 - Page 1 – TSDF to EPA's e-Manifest system
 - Within 30 days of receipt
 - Page 2 – TSDF signed copy
 - Within 35 days of shipment
 - Page 3 – TSDF copy
 - Page 4 – Transporter copy
 - Page 5 – Generator initial copy
 - Copy to DTSC within 30 days of shipment

Form Approved OMB No. 2070-0118

UNIFORM HAZARDOUS WASTE MANIFEST

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

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

6 Generator Phone

7 Transporter 1 Company Name U.S. EPA ID Number

8 Transporter 2 Company Name U.S. EPA ID Number

9 Designated Facility Name and Address U.S. EPA ID Number

Facility Name

By	No. U.S. DOT Classification (including Proper Shipping Name, Hazard Class, G Number, and Packing Group (if any))	10 Containers		11 Total Quantity	12 ICA 55 Code	13 Waste Codes
		No.	Type			

14 Update handling instructions and additional information

15 GENERATOR/TRANSPORTER CERTIFICATION I hereby declare that the contents of this consent agreement are true and accurately described above by the proper shipping name, and are classified, packaged, labeled and submitted, and are in all respects in proper condition for transport, in compliance with applicable international and national governmental regulations. I expect adherence with the above. I certify that the contents of this consent agreement conform to the terms of the attached TSDF and the background of consent. I certify that the waste description, quantity, classification, GHS, DOT, and if any, emergency response or RCRA, are in correct quantity, generation or use.

Generator/Transporter Printed name Signature Month Day Year

16 TRANSPORTER CERTIFICATION I hereby declare that the contents of this consent agreement are true and accurately described above by the proper shipping name, and are classified, packaged, labeled and submitted, and are in all respects in proper condition for transport, in compliance with applicable international and national governmental regulations. I expect adherence with the above. I certify that the contents of this consent agreement conform to the terms of the attached TSDF and the background of consent. I certify that the waste description, quantity, classification, GHS, DOT, and if any, emergency response or RCRA, are in correct quantity, generation or use.

Transporter Signature for origin and destination Port of entry/exit Date leaving U.S.

17 SIGNATURE AND CERTIFICATION OF RECEIVING FACILITY

18 Accepting Facility Printed name Signature Month Day Year

19 Accepting Facility Printed name Signature Month Day Year

20 Company

21 Discharge Manifest Name Quantity Type Phase Partial Phase Full Phase

22 Address Facility or Generator Manifest Tracking Number U.S. EPA ID Number

Facility Name

23 Signature of Accepting Facility or Generator Month Day Year

24 Accepting Facility Report Management Method Code (i.e., codes for hazardous waste treatment, storage, and recycling system)

25 Designated Facility Name or Generator Certificate of Weight of Hazardous Waste (i.e., codes for the manifest event) or other ID No. Month Day Year

26 Date of Receipt Signature Month Day Year

EPA Form 8700-02 (Rev. 12-11) Previous editions are obsolete. DESIGNATED FACILITY TO EPA'S e-MANIFEST SYSTEM



Consolidated Manifest

- Manifest used by a consolidated transporter to combine HW shipments from multiple generators (can only combine same wastes)
- Placed on one manifest per HSC 25160.2
 - Quantities based on combined receipts
- Both generator and transporter section of manifest identify consolidated transporter's name, ID numbers, and address






Consolidated Manifest

Receipts

- Legible receipts attached for each pickup with the manifest
- Receipts must be signed by transporter & generator
- Copy of receipts must be left with the generator
- Receipts retained by generator for three years from date of shipment
- Receipt contents:
 - Name, address, EPA ID #, contact person name and phone #, and generator signature
 - Date of shipment
 - Manifest tracking number
 - Volume/quantity of each waste
 - CA waste codes
 - Eligible waste type
 - Proper shipping description



Consolidated Manifest – Authorized Waste Streams

- ***Used oil***
 - Contents of an oil/water separator
 - Solids contaminated with used oil
 - Brake fluid
 - Antifreeze
 - Antifreeze sludge
 - Parts-cleaning solvents
 - Asbestos & asbestos-containing materials
 - Inks from the printing industry
 - Chemicals and laboratory packs collected from K-12 schools
 - Filters from dispensing pumps for diesel and gasoline fuels
 - Hydroxide sludge (contaminated solely with metal from wastewater treatment process)
 - Paint-related wastes, including paints, thinners, filters, and sludge
 - Spent photographic solution
 - Dry cleaning solvents including perchloroethylene, naphtha, and silicone-based solvents
 - Filters, lint, and sludge contaminated with dry cleaning solvent
 - Retail hazardous waste collected from retailers
 - Absorbents contaminated with wastes on this list
- 



Summary

- CUPA will inspect facilities with HMBPs every three years
- Penalties for non-compliance
 - Up to \$70,000 per violation per day
- Facility must be maintained and operated to prevent incident or spill
- Hazardous waste cannot be treated on-site (unless authorized or permitted)
- Hazardous waste cannot be thrown in the trash or discharged to the sewer
- Hazardous wastes cannot be accumulated on-site at the CAA for more than 90/180 days
- Hazardous wastes cannot be accumulated on-site at the SAA for more than one year
- Universal waste cannot be accumulated on-site for more than one year
- Hazardous wastes can only be transported by a registered hazardous waste transporter



THANK YOU!



Contact Us at:
NES-EHS.com

NES

ENVIRONMENTAL HEALTH & SAFETY
SOLUTIONS

916.353.2360

1.800.637.2384