Dufour Seminars & Training Presents...

Hazardous Waste & Universal Waste Compliance Basic Training
November 8, 2018

Presented by:

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### PURPOSE OF TRAINING:
This program is intended to meet regulatory requirements and good management practices for hazardous wastes and universal wastes. It has been designed to address expectations of local CUPAs during unified inspections by fully integrating federal, state and local hazardous waste and universal waste requirements. The material herein has been updated through April 2017.

### WARNING TO USERS:
The information in this material is highly summarized for training purposes. Users are advised to consult laws, regulations, and other references for more thorough and authoritative guidance. Application of this training to meet regulatory requirements is a determination to be made by the employer based on regulatory information provided.

### PRESENTER’S BIOGRAPHY:
James T. Dufour is an environmental attorney and Certified Industrial Hygienist with decades of experience in environmental and OSHA regulatory compliance. His experience includes 6 years with the U.S. AEC and DOE in Oak Ridge, TN; and 7 years with Stauffer Chemical Company in Westport, CT and San Francisco, CA. He has also been a consultant to the U.S. EPA, Fed/OSHA, NIOSH, California Chamber of Commerce, and several state trade associations, as well as private firms. Jim has worked with manufacturing facilities, refineries and chemical plants on various environmental and OSHA compliance projects, enforcement defense cases, and hazardous waste and HAZWOPER training and other issues. He has written a dozen authoritative compliance manuals addressing California environmental and OSHA regulatory requirements published by the California Chamber. The principal office of his firm, Dufour Law – Regulatory Compliance Services, is located at 819 F Street, Sacramento, CA 95814. Telephone (916) 553-3111 and facsimile (916) 400-2591. Email: dufourlaw@dufourlegal.com

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HAZARDOUS & UNIVERSAL WASTE MANAGEMENT TRAINING:

1. INTRODUCTION TO HAZARDOUS WASTE REGULATIONS
2. REGULATED HAZARDOUS WASTES AND EXCLUDED WASTES
3. IDENTIFICATION AND CLASSIFICATION OF HAZARDOUS WASTES
4. ON-SITE MANAGEMENT REQUIREMENTS FOR HAZARDOUS WASTE
5. UNIVERSAL WASTE MANAGEMENT
6. ADMINISTRATIVE REQUIREMENTS FOR HAZARDOUS WASTE GENERATORS, INCLUDING PERMITTING TO TREAT HAZARDOUS WASTE
7. OFF-SITE HAZARDOUS WASTE TRANSPORTATION REQUIREMENTS

APPENDIX: TIERED PERMITTING FLOW CHART
1. Introduction

THE FOLLOWING TOPICS ARE INCLUDED IN THE INTRODUCTION:

1.1 Why You Are Here – Hazardous Waste Regulation Training Requirements
1.2 Enforcement of Hazardous Waste Violations
1.3 Applicable Laws and Regulations
1.4 New Developments
1. Introduction

1.1 Why You are Participating in this Training

All hazardous waste handling employees must receive initial and annual training:

✓ Large quantity generator (LQG) [1,000 kgs (2,200 pounds) of hazardous waste (RCRA, NON-RCRA including waste oil) or more than 1 kg of acute or extremely hazardous waste in any month] personnel must be initially trained and annually retrained to the extent required at 22 CCR § 66265.16, as referenced by § 66262.34 (conditions for storage permit exemption).

✓ Small quantity generators (SQG) must be trained to be “thoroughly familiar with proper waste handling and emergency procedures relevant to their responsibilities during normal facility operations and emergencies,” set forth at 22 CCR § 66262.34(d)(2), referencing federal regulations at 40 CFR § 262.34(d), (e) and (f)*.

NOTE: Although SQG training appears to be less stringent than LQGs, no generator can afford to have employees that do not know how to properly handle hazardous wastes. CUPA requirements for Hazardous Materials Business Plans require such training annually. [HSC § 25505 and 19 CCR § 2659]. Further, under the EPA's new Hazardous Waste Generator Improvement Rule, the distinction between LQG and SQG training will be largely eliminated. [See 1.4]

✓ There is no CESQG [less than 100 kgs (220 pounds) in any one month] exempt generator status in California, so all hazardous waste management and handling by employees is subject to the above training requirements and all other applicable regulations.

*Note: This is an obsolete reference to the federal regulation since the Generator Improvements Rule (see 1.4). The updated federal reference is 40 CFR 262.16(c)(9).
The hazardous waste laws provide for 3 types of enforcement: administrative, civil and criminal:

- **Administrative Actions** are signaled by the issuance of a Notice of Violation by the enforcement agency: U.S. EPA, California DTSC, or local Certified Unified Program Agency (CUPA). If minor violations, a 30-day notice to comply will be issued with no penalty. More serious violations usually result in a negotiated settlement setting forth actions to abate the violations and penalties. Monetary penalties up to $70,000* for each violation may be assessed pursuant to a regulatory formula [22 CCR § 66272]. Federal enforcement is comparable, but less frequent in California.

- **Civil Actions** are brought by District Attorneys or the Attorney General in state court. These actions are instituted to obtain an enforceable abatement order and to obtain court assessed civil penalties of up to $70,000* for each day of violation for most offenses, and up to $250,000 per day for others. Comparable civil cases can be brought by federal enforcers in U.S. District Courts.

- **Criminal Prosecutions** are possible, which may result in felony and misdemeanor criminal penalties (imprisonment and fines) against individuals engaged in hazardous waste violations; such cases usually require a knowing violation. However, California law imposes felony penalties for hazardous waste violations if the defendant “knew of, or should have known,” and misdemeanor penalties in cases of innocent error. Threat of criminal enforcement is persuasive in obtaining civil settlements.

Links: Notice To Comply/Minor Violations, HSC § 25404.1 and .2; Administrative Civil Enforcement HSC §§ 25180–25187; Hazardous Waste Penalty Regulation, 22 CCR § 66272 and Criminal Enforcement, HSC § 25189; *AB 245, Chap. 499, Statutes of 2017
California hazardous waste generators are subject to U.S. EPA, Cal/EPA Department of Toxic Substances Control (DTSC) and local CUPA inspections, as shown by the following examples. CUPA inspections alone exceed 100,000 per year.

**U.S. EPA**

- Rho-Chem, Inglewood (9/26/18)—Improper management of hazardous wastes: failure to characterize, obtain permit to store and treat hazardous waste over 90 days, conduct inspections ($120,527 plus $353,000 for emergency response equipment for LA County Fire Department).
- Valero Refinery, Benicia (10/5/16)—Failure to properly characterize and manage wastes containing benzene ($157,800).
- SoCal Edison, Avalon on Catalina Island (9/8/16)—Storage of hazardous waste over 90 days and universal waste over 1 year without permits, and training violation ($39,127).
- Crosby & Overton, Long Beach (8/3/16)—Battery mismanagement and other violations ($78,570).
- Bachem Pharmaceuticals, Torrance (8/3/16)—Ignitible and corrosive hazardous waste tank and container storage violations ($22,376 plus $29,000 SEP).
- East Bay Municipal Utility District, Oakland (9/30/15)—Receipt without a permit and improper labeling of hazardous waste ($99,000).
- Anaplex Corporation, Paramount (5/14/15)—Violation of hazardous waste container labeling and closure rules, training violations, and exceedance of sewer discharge limitations ($142,000).
### 1.2 Enforcement of Hazardous Waste Violations, cont.

#### State DTSC

- **GEM/Stericycle, Rancho Cordova (October 2018)**—Numerous violations for mismanagement of hazardous waste resulting in a fire, including failure to comply with permit, improper storage and training ($1.4 million)
- **Advanced Steel Recovery, Fontana (July 2018)**—Failure to properly handle heavy metal-contaminated waste ($170,000)
- **Torrance Refining Co., Torrance (June 2018)**—Illegal storage of hazardous waste ($150,000)
- **Panoche Water District, Firebaugh (February 2018)**—FELONY CRIMINAL CHARGES PENDING against PWD General Manager and 4 employees for unlawful disposal and transportation of hazardous waste
- **Sims Recycling Solutions, Roseville (December 2017)**—Hazardous and universal waste training violations—some repeat—and improper handling of hazardous waste ($400,000)
- **Woodland Biomass Power, Woodland (May 2017)**—Illegal disposal of agricultural materials combustion waste ($4.2 million)
- **Gallo Glass, Modesto (3/6/17)**—Improper (sham) recycling of hazardous dust into glass bottle ($2 million) [**Note:** On August 11, 2016, Ardagh/St. Gobain Containers was fined $3.5 million for the same offense.]
- **Apple Computer, Sunnyvale (12/6/16)**—Mismanagement of e-wastes, including unpermitted shredding ($450,000)
- **Panda Trading, Maywood, Los Angeles County (9/19/16)**—FELONY CRIMINAL GUILTY PLEA by a scrap metal recycler for numerous hazardous waste violations; the owner was sentenced to 16 months imprisonment, but suspended pending payment of $53,568 restitution and 1,000 hours of community service, plus 3 years probation
- **Federal Express (6/13/16)**—Failure to characterize and manage wastes from 1,500 broken containers ($3.4 million)
- **Pacific Steel, National City (1/12/16)**—Scrap metal recycler fined $138,000 for hazardous waste contamination of soils

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CUPAs—Most Notably, Dumpster Diving Cases [See next page for access to comprehensive listing of CUPA enforcement cases.]

- Kmart $ 8.7 million (May 22, 2009)
- Walmart $24.7 million (April 6, 2010)
- Target $22.5 million (March 2, 2011)
- CVS Pharmacy $13.8 million (April 16, 2012)
- Costco $ 2.6 million (June 1, 2012)
- Walgreens $16.6 million (December 13, 2012)
- Safeway Stores $ 9.9 million (January 5, 2014)
- TJX Companies (TJ Maxx, Marshalls) $ 2.8 million (September 16, 2014)
- Dollar Tree Stores, Inc. $ 2.7 million (April 24, 2015)
- Comcast Cable $26 million (December 15, 2015)
- Dollar General $ 1.1 million (April 2017)
- Big Lots $ 3.5 million (April 21, 2017)
- Home Depot $27.8 million (March 2018)
- Whole Foods $ 1.6 million (September 24, 2018)
Walgreens to Pay $16.57 Million for Hazardous Waste Disposal Violations

A waste audit of dumpsters at the Walgreens at 2222 University Ave. in San Diego was performed on Oct. 11, 2011 by Department of Environmental Health regulators, District Attorney Investigators and City Attorney Investigators.

December 15, 2011 / 12:00pm

A judge in Alameda Superior Court ordered the Walgreen Company to pay $16.57 million as part of a settlement of a civil environmental prosecution for hazardous waste disposal violations throughout California, including San Diego, the District Attorney’s Office announced Thursday.

Prescription Drug Deaths Down in San Diego

more than six years. The hazardous waste included pesticides, bleach, paint, aerosols, automotive products and solvents, pharmaceutical and bio hazardous waste, and other toxic, ignitable and corrosive materials. The settlement also resolves allegations that Walgreens unlawfully disposed of customer records containing confidential medical information without preserving confidentiality. All 36 Walgreens stores in San Diego County were involved in the violations.

During the summer and fall of 2011, investigators from the San Diego District Attorney’s Office Environmental Protection Unit and County Department of Environmental Health regulators, along with other district attorney investigators and environmental regulators statewide, conducted a series of waste inspections of dumpsters belonging to Walgreens’ stores. The inspections revealed that Walgreens routinely and systematically sent hazardous waste to local landfills and failed to take measures to protect the privacy of their pharmacy customers’ confidential medical information. During the statewide inspections, 34 of 37 Walgreens stores were in violation of state law, including three retailers investigated in San Diego County.

Under the final judgment, Walgreens must pay $16.57 million in civil penalties and costs. It also funds supplemental environmental projects furthering consumer protection and environmental enforcement in California. The retailer will be bound under the terms of a permanent injunction prohibiting similar future violations of law. Under the settlement, Illinois-based Walgreen Co. will pay $223,000 in civil penalties and cost recovery to San Diego County Department of Environmental Health and $507,750 in civil penalties and cost recovery to the San Diego County District Attorney’s Office.

Stores are now required to retain their hazardous waste in segregated, labeled containers so as to minimize the risk of exposure to employees and customers and to ensure that incompatible wastes do not combine to cause dangerous chemical reactions. Hazardous waste produced by California Walgreens stores through damage, spills and returns is now being collected by state-registered haulers, taken to proper disposal facilities and properly documented and accounted for. The settlement also requires Walgreens to take proper steps to preserve the confidentiality of their pharmacy customer’s medical information.
## Unified Program Regulator Directory

### Unified Program Agency Enforcement Summaries

Beginning in 2012 the Unified Program began posting Formal Enforcement Summary do. Eventually complete enforcement summary data will be available in the California Env...

<table>
<thead>
<tr>
<th>Year</th>
<th>Name</th>
<th>CUPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>DIC Trucking - Nelson Castellano</td>
<td>Los Angeles County Fire</td>
</tr>
<tr>
<td>2018</td>
<td>Libra One</td>
<td>Orange County Environm</td>
</tr>
<tr>
<td>2018</td>
<td>Albertson's Milk and Bread Plant</td>
<td>Los Angeles County Fire</td>
</tr>
<tr>
<td>2018</td>
<td>Intertek Inc</td>
<td>Los Angeles County Fire</td>
</tr>
<tr>
<td>2018</td>
<td>Gateway Inc (Menifee Mall)</td>
<td>Los Angeles County Fire</td>
</tr>
</tbody>
</table>

- **Home Depot USA, INC (statewide)** | Los Angeles County Fire |

### FORMAL ENFORCEMENT SUMMARY

**CUPA**

**VARIOUS UPA's STATEWIDE**

**Date Submitted**

**03-08-18**

#### I. FACILITY IDENTIFICATION

- **Business Name:** [Link: Unified Program Agency Enforcement Summaries]
- **Home Depot USA, INC.**
- **Business Site Address:** 2455 Paces Ferry Rd. Atlanta, GA 30339

#### VIOLATION SUMMARY

<table>
<thead>
<tr>
<th>Type of Violation</th>
<th>Details</th>
</tr>
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<tbody>
<tr>
<td><strong>HAZARDOUS MATERIALS</strong></td>
<td>Violation of the California Health and Safety Code, Division 20, Chapters 6.5 and 6.95, Section 117600, et seq. Involving violations of hazardous waste management, universal waste, record keeping, disposal, training, inspections, medical waste act, waste determination, manifest, transportation, hazardous materials business plan and inventory, and Civil Code 1798.81 related to privacy protection.</td>
</tr>
</tbody>
</table>

#### FORMAL ENFORCEMENT ACTION

- **Type of Enforcement Action:** CIVIL
- **Date of Initial Enforcement Action:** 2013
- **Date of Final Disposition:** March 2018
- **Cash Fines/Penalties Imposed:** $16,637,000
- **Total Costs Recovered:** $1,850,000
- **Value of SEP Penalties Imposed:** $2,513,000

#### DESCRIPTION OF FINAL DISPOSITION

- **NARRATIVE:** (i.e. describe probation conditions, final sentencing conditions, consent order compliance schedule, etc)

*Prepared by: W. Jones, CFB Enforcement IC (323) 890-4042.*
1. Introduction

1.2 Enforcement of Hazardous Waste Violations—Advice on How to Stay Out of Trouble

1. Establish waste management policies as a priority.
2. Get real California expert compliance advice.
3. Audit, audit, audit!
4. Use the State’s own checklist for the audit—not commercial or consultant RCRA-based formats. [See CUPA inspection form on next page.]
5. Correct any violation discovered ASAP.
6. If no harm to the environment, consider voluntary self-reporting.
7. If harm to the environment—for example, hazardous wastes discharged to sewer or to a non-hazardous disposal site—correct practices and wait for the statute of limitations to expire.

**Note:** Attorney-client privilege is essential to an effective audit program.
1. Introduction

1.3 Applicable Laws and Regulations
1. Introduction

1.3 Applicable Laws and Regulations

Type in a specific section or key word (e.g., “25200” or “treatment permit”)

California Legislative Information

Code Search

Code:

Section:

Search

SELECT CODES

- California Constitution - CON
- Business and Professions Code - BPC
- Civil Code - CIV
- Code of Civil Procedure - CCP
- Commercial Code - COM
- Corporations Code - CORP
- Education Code - EDC
- Elections Code - ELEC
- Evidence Code - EVID
- Family Code - FAM
- Financial Code - FIN
- Fish and Game Code - FGC
- Food and Agricultural Code - FAC
- Government Code - GOV
- Harbors and Navigation Code - HNC
- Health and Safety Code - HSC
- Insurance Code - INS
- Labor Code - LAB
- Military and Veterans Code - MVC
- Penal Code - PEN
- Probate Code - PROB
- Public Contract Code - PCC
- Public Resources Code - PRRC
- Public Utilities Code - PUC
- Revenue and Taxation Code - RTC
- Streets and Highways Code - SHC
- Unemployment Insurance Code - UIC
- Vehicle Code - VEH

FIND RESULTS:

All of these words or phrases: treatment permit

at least one of these words or phrases:
The hazardous waste regulations in California are codified under Social Security – Click on it.
Title 22. Social Security

Division 1. Employment Development Department
Division 2. Department of Social Services - Department of Health Services
Division 3. Health Care Services
Division 4. Environmental Health
Division 4.5. Environmental Health Standards for the Management of Hazardous Waste
Division 5. Licensing and Certification of Health Facilities, Home Health Agencies, Clinics, and Referral Agencies
Division 6. Licensing of Community Care Facilities
Division 7. Health Planning and Facility Construction
Division 8. Nondiscrimination in State-Supported Programs and Activities
Division 9. Prehospital Emergency Medical Services
Division 10. California Medical Assistance Commission
Division 11. Department of Community Services and Development
Division 12. Child Care Facility Licensing Regulations
Division 13. Department of Child Support Services
Division 14. California Office of Health Information Integrity

Link: Title 22, CA Code of Regulations
HAZARDOUS WASTE IDENTIFICATION
ON-SITE MANAGEMENT
UNIVERSAL WASTE
### Inspection Statistics
Fiscal Year 2012-2013

<table>
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<th>Program</th>
<th># of Regulated Businesses</th>
<th># of Regulated Businesses Inspected</th>
<th># of Routine Inspections</th>
<th># of Other Inspections</th>
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<td>HMRRP Hazardous Materials Release Response Plans</td>
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<td>44,351</td>
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<td>CalARP California Accidental Release Prevention</td>
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<td>958</td>
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<td>UST Underground Storage Tank Facilities</td>
<td>14,225</td>
<td>13,091</td>
<td>13,285</td>
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<td>APSA Aboveground Petroleum Storage Tank</td>
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<td>4,023</td>
<td>3,586</td>
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<td>Hazardous Waste Generators (A/I)</td>
<td>88,921</td>
<td>35,954</td>
<td>33,613</td>
<td>9,261</td>
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<td>LOGR RCRA Large Quantity Generators</td>
<td>1,604</td>
<td>674</td>
<td>631</td>
<td>273</td>
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<tr>
<td>Onsite Hazardous Waste Treatment (PBR, CA, CE)</td>
<td>1,450</td>
<td>628</td>
<td>550</td>
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<td>HHW Household Hazardous Waste</td>
<td>208</td>
<td>82</td>
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### Violation and Enforcement Statistics
Fiscal Year 2012-2013

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<td>Minor</td>
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<td>12,833</td>
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<td>AEOs Issued within 240 Days</td>
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<td>37</td>
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<td># of Civil/Criminal Referrals</td>
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<td>55</td>
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<tr>
<td>Referred within 60 Days</td>
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<td>1</td>
<td>43</td>
<td>5</td>
<td>52</td>
<td>2</td>
<td>1</td>
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<tr>
<td>Cash Fines/Penalties Imposed</td>
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<td>$1,476,851</td>
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<td>Value of SEP Penalties Imposed</td>
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<td>$954,825</td>
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<td>$68,676</td>
<td>$76,492</td>
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Totals are generated using Fiscal Year 2012-2013 Annual Summary Report 4 data submitted by Certified Unified Program Agencies (CUPAs).

For purposes of summarizing data, a "0" (zero) was placed in fields that were not complete or where "N/A" was noted in the Annual Summary Report submitted by the CUPA.
Federal [None of these rule changes have been added to Title 22 California regulations—yet]

➢ U.S. EPA Hazardous Waste Generator Improvements Rule [60 changes to 40 CFR § 262*]:

✓ Touted as good news, but only 2 of 60 revisions are (CESQGs and SQGs can have limited exclusions over their 100 kgs/1,000 kgs monthly limit without losing their lower status; and CESQGs (now called VSQGs, or Very Small Quantity Generators) can send hazardous wastes to a larger co-owned facility for management.

✓ SQGs must re-file for EPA ID Number every 4 years and meet LQG requirements for emergency response and employee training, and closure requirements.

✓ ALL generators (examples of the 60 changes):

• Must improve waste characterization practices and documentation.

• All hazardous waste must be included in generator size determination (similar to California’s SB 612 requirement).

• Full hazardous waste labeling of containers on-site and shipped (same as California).

• Major changes in LQG biennial reporting.

• Closure of a generator site requires notification and “clean closure”, or TSDF landfill closure requirements will apply.

• Violations of conditions for storage permit exemption can be enforced as a permitting violation.

*Note: Published November 28, 2016 in the Federal Register [81 FR 85808; CFR reference is 40 CFR 262.1-.18]
Where is the Hazardous Waste Generator Improvements Rule in Effect?

On this page:

- [Links to Generator Improvements State Regulations]

On November 28, 2016, [EPA issued a rule that finalizes] a much-needed update to the hazardous waste generator regulations to make the rules easier to understand, facilitate better compliance, provide greater flexibility in how hazardous waste is managed and close important gaps in the regulations. This map shows the states where the Generator Improvements final rule is in effect.
Federal (continued)

- Other important federal hazardous waste management regulations not yet adopted in California:
  - Legitimate Hazardous Waste Recycling Versus Sham Recycling—Objective criteria to exclude recyclable materials from hazardous waste regulation [40 CFR 260.43 definition and 261.2 Definition of Solid Waste (November 28, 2016)]. This issue is statutory in California on a case-by-case basis under HSC § 25143.2, not Title 22 regulations.
  - Solvent-Contaminated Wipes Exclusion from Regulation as Hazardous Waste—Provisions for relaxed management of solvent-contaminated rags and other materials either recycled or disposed [40 CFR 261.4(a)(26) and (b)(18) (July 31, 2013)]. There is no relief in California except for recycling or classification as non-hazardous.
  - Academic Laboratory Hazardous Waste Rule—Relaxes requirements for hazardous waste accumulation in academic institutions (colleges, teaching hospitals and research institutes) [40 CFR 262.200, et seq. (December 1, 2008)]. There is no relief for academic laboratories from Title 22 hazardous waste management requirements.
Federal (cont.)

Electronic Manifests:

- It will eventually replace hard copy manifests with electronic manifests in all 50 states.
- There will be an incentive based into the fee structure to encourage electronic manifests— for example, $20 fee for hard copy, $4 for electronic. Fees will be paid by destination facilities, which will add the cost to generator charges.
- There will be a significant learning curve because the entire hazardous waste commerce system is based on hard copy manifests.
- California has taken no position on electronic manifests to-date, except for a voluminous 2-year spot bill (Assembly Bill 1441), which is currently inactive in the Legislature.
State

Sham recycling [U.S. EPA regulation published on January 13, 2015; effective July 1, 2015; 40 CFR § 261.2(g); and definition of legitimate recycling at § 260.10] is being implemented in California without a state regulation. Sham recycling means the hazardous waste is being incorporated into a product without adding any benefit to the product (“going along for the ride”).

✓ U.S. EPA regulations objectively define legitimate recycling as meeting 4 conditions:
   1. Recycled material must make a valuable addition to the process or product;
   2. Recycling must produce a valuable product;
   3. Recycled material must be managed as a valuable commodity; and
   4. Product must be comparable to a legitimate product in terms of health, safety, and environmental protection.

✓ DTSC and CUPAs are conducting inspections and investigations or recycling activities on a priority basis.

✓ Attorney General settled a civil case against Ardagh Glass (formerly Saint Gobain Containers), a wine bottle manufacturer for recycling air pollution scrubber material for $3.5 million (August 11, 2016), and a similar case against Gallo Glass for $2 million (March 1, 2017).
State (cont.)

Advisory draining of used oil filters:

✓ Advisory warns generators that used oil and fuel filters are NOT deemed non-hazardous pursuant to 22 CCR § 66266.130 if:
  - A valve prevents all oil or fuel from draining by gravity.
  - Filters do not have a metal housing.
  - No commingling of exempt and non-exempt oil/fuel filters.

✓ These strict requirements apply to both the generator and any service firm collecting them.
ADVISORY: DRAINING OF USED OIL FILTERS

Improperly drained used oil filters must be managed as hazardous waste under California’s Hazardous Waste Control Law

During recent inspections, the Department of Toxic Substances Control (DTSC) discovered a significant number of undisposed or improperly drained used oil filters that have been sent to metal recycling facilities by generators of those filters.

This advisory explains DTSC’s regulations governing the management of used oil filters and highlights the draining techniques that DTSC has found to be most effective at removing residual oil from the filters.

Generators who do not wish to manage used oil filters as hazardous waste must satisfy California Code of Regulations, Title 22, section 66268.130.

Generators who drain oil filters at the facility where they were removed from vehicles and use the draining techniques described in the regulations are not required to obtain a hazardous waste permit or other form of authorization. Individual do-it-yourself (DIY) oil changers (does not include oil change or vehicle repair businesses) can take their used oil filters to either a Certified Collection Center approved by the Department of Resources, Recycling and Recovery (CalRecycle) or to a Household Hazardous Waste Collection Facility. Only Certified Collection Centers and Household Hazardous Waste Collection Facilities are allowed to accept DIY oil filters without a permit from DTSC.

The Certified Collection Centers and Household Hazardous Waste Collection Facilities are responsible, like all other generators, for properly draining all oil filters they receive before shipping them off-site for recycling. If the oil filters are not properly drained, they must be managed and shipped as hazardous waste under a hazardous waste manifest. Properly drained oil filters may be sent to recycling facilities using a bill of lading, and those facilities are allowed to process them without a permit or other authorization from DTSC. Recycling facilities accepting unmanaged oil filters or other filter media cartridges that have not been properly drained or other written authorization from DTSC may not be returned to the original generator for further draining.

Transporters may also consolidate properly drained filters they collect from various generators (in a ‘milk run’), and create a new bill of lading that identifies the transporter as the generator. Transporters that create a new bill of lading for a consolidated shipment are considered the generator of that shipment and are responsible for compliance with, and any violation of, section 66268.130. Transportation of unmanaged filters without a manifest or a registered hazardous waste hauler violates the California Hazardous Waste Control Law.

Frequently Asked Questions:

I’ve had no issues with draining my oil filters before. What’s different?

In the past, most metal canister type oil filters were designed so that gravity draining alone was effective at removing the free flowing oil. To meet vehicle manufacturer and vehicle warranty specifications, oil filters in use today are equipped with an anti-drip-back valve device located just inside the filter inlet openings. This valve keeps oil in the filter when the engine is turned off. Most auto manufacturers require anti-drip-back valves and most filter manufacturers now produce oil filters with anti-drip-back protection that will last for at least 12 hours. This valve ensures the filter is always full of oil when the vehicle is started.

How does this new filter design affect me?

Anti-drip-back valves have been found to prevent oil from fully draining from filters using traditional gravity draining techniques. This belief is believed to be the primary reason for the undisposed or improperly drained oil filters that DTSC has found.

Tips for Draining Oil from Filters:

The regulations allow generators to manually manipulate the anti-drip-back valve to allow the free-flowing oil to exit the filter. However, this valve manipulation can be difficult and time-consuming, because the valve must be held open long enough to allow the oil to drain. It can also be difficult to hold the filter at the proper angle as the valve is being held open. Crushing or puncturing filters prior to gravity-draining (with the hole at the lowest point to facilitate drainage) is the most effective method for properly and reliably draining oil from the filters.

Gravity draining alone does not effectively or reliably drain spin-on canister filters, the most common type of oil filter. Therefore, one of the other allowable method of draining should be used to drain those filters. To ensure that filters are emptied of all free-flowing oil, DTSC recommends that the filters be punctured, crushed, or opened before draining.

Special Note for Filters without Metal Housing:

Filters, including used oil filters without metal housing (also known as filter media cartridges or inserts), are not considered recyclable and cannot be managed in the same way as those with metal housings. See Section 22144.7 of the California Health and Safety Code for more information regarding management of used fuel filters. Unless a generator demonstrates the used filter media cartridges or inserts do not exhibit a hazardous waste characteristic, these must be collected and managed as hazardous waste, transported by a registered hazardous waste transporter with hazardous waste manifests, and sent to an authorized hazardous waste facility. These oil and fuel filter cartridges may not be mixed with used oil filters that have metal housings and are being recycled.

This comingling would be a violation of the Hazardous Waste Control Law.
2. Regulated Hazardous Wastes and Conditionally Excluded Wastes

THE FOLLOWING TOPICS ARE INCLUDED IN THIS SECTION:

2.1 Regulated Wastes
2.2 Conditionally Excluded Potential Hazardous Wastes
2. Regulated Hazardous Wastes and Conditionally Excluded Wastes

2.1 Regulated Hazardous Wastes and Conditionally Excluded Wastes

➢ Wastes regulated under the Hazardous Waste Law and regulations include solid, liquid, semi-solid or contained gaseous material that is or will be:

✓ Discarded or abandoned;
✓ Has served its intended purpose;
✓ A manufacturing or mining by-product; or is
✓ Garbage, refuse, or sludge.

➢ Unless excluded by law or regulation from hazardous waste management requirements by an exclusion from the definition of solid waste or hazardous waste [22 CCR § 66261.2, .3, AND .4], a waste material listed as hazardous waste or exhibits a characteristic(s) of hazardous waste is regulated as hazardous waste during any of the following activities:

✓ Discarded
✓ Reclaimed
✓ Reused
✓ Stored for any of these purposes
✓ Recycled

Note: Hazardous wastes legitimately reused or recycled on- or off-site in full compliance with Health and Safety Code § 25143.2, .9, and .10 are Excluded Recyclable Materials (ERMs). [See form, next page]. The new definition of sham recycling in federal RCRA regulations at 40 CFR 261.2(g) may affect recycling practices federally, but has not been adopted into state law or regulations. (See 1.4)
<table>
<thead>
<tr>
<th>FIELD</th>
<th>VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSINESS NAME</td>
<td>[Redacted]</td>
</tr>
<tr>
<td>FACILITY ID</td>
<td>[Redacted]</td>
</tr>
<tr>
<td>DATES OF REPORTING/PERIOD</td>
<td>Beginning Date: [Redacted]; Ending Date: [Redacted]</td>
</tr>
<tr>
<td>I. TYPE OF RECYCLING ACTIVITIES</td>
<td>1. Do you recycle more than 100 kg/month of excluded or exempted recyclable material at the same location at which the material was generated (on-site recycling)?</td>
</tr>
<tr>
<td>4. If YES, are you both the generator and recycler?</td>
<td>Complete one Recyclable Materials Report. Do not complete Parts II and V.</td>
</tr>
<tr>
<td>2. Do you recycle more than 100 kg/month of non-manifested, excluded recyclable materials received from an off-site location (off-site recycling)?</td>
<td>Yes</td>
</tr>
<tr>
<td>5. If YES, are you an off-site recycler but not the generator?</td>
<td>Complete a Recyclable Materials Report for each generator that sends you materials.</td>
</tr>
</tbody>
</table>

---

**Businesses that only send recyclable materials to off-site recyclers are not required to file this report.**

### II. OFF-SITE GENERATOR OF RECYCLABLE MATERIAL

<table>
<thead>
<tr>
<th>FIELD</th>
<th>VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>STREET ADDRESS</td>
<td>[Redacted]</td>
</tr>
<tr>
<td>PHONE</td>
<td>[Redacted]</td>
</tr>
<tr>
<td>CITY</td>
<td>[Redacted]</td>
</tr>
<tr>
<td>STATE</td>
<td>[Redacted]</td>
</tr>
<tr>
<td>ZIP CODE</td>
<td>[Redacted]</td>
</tr>
</tbody>
</table>

### III. CERTIFICATION SECTION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete.

**signature of certifier**

**date**

**name of document preparer**

**name of signer (print)**

**title of signer**

---

**IV. RECYCLABLE MATERIAL INFORMATION**

<table>
<thead>
<tr>
<th>FIELD</th>
<th>VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>RECYCLABLE MATERIAL NUMBER</td>
<td>[Redacted]</td>
</tr>
<tr>
<td>COMMON NAME OF RECYCLABLE MATERIAL</td>
<td>[Redacted]</td>
</tr>
<tr>
<td>QUANTITY DURING TWO YEAR REPORTING PERIOD</td>
<td>[Redacted]</td>
</tr>
<tr>
<td>UNITS</td>
<td>[Redacted]</td>
</tr>
</tbody>
</table>

**RECYCLABLE MATERIAL DESCRIPTION**

**RECYCLING PROCESS AND BENEFICIAL USE OF RECYCLABLE MATERIAL**

**AUTHORIZING PROVISION OF HAP/G R. 2153.2**: [Redacted]

**B. PRODUCT AND CONSTITUENT INFORMATION: OFF-SITE ONLY**

**HAZARDOUS CONSTITUENT**: In Recyclable Material | In Final Product | Per Tonne Production |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>UNITS</strong></td>
<td>[Redacted]</td>
<td>[Redacted]</td>
</tr>
<tr>
<td><strong>%</strong></td>
<td>[Redacted]</td>
<td>[Redacted]</td>
</tr>
</tbody>
</table>

**HAZARDOUS CONSTITUENT**: In Recyclable Material | In Final Product | Per Tonne Production |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>UNITS</strong></td>
<td>[Redacted]</td>
<td>[Redacted]</td>
</tr>
<tr>
<td><strong>%</strong></td>
<td>[Redacted]</td>
<td>[Redacted]</td>
</tr>
</tbody>
</table>

If more than four constituents are recycled, attach additional sheets using the same format.

### V. DOCUMENTATION OF KNOWN MARKET (Off-site recyclers only)

**DOCUMENTATION IS ATTACHED**: Off-site recyclers must attach documentation that there was a known market for disposal of the recyclable material and any products manufactured from the recyclable materials and provide a copy of this report to the generator when the report is submitted to the CUPA. [HAP/G R. 2153.2(b)(3)(C)(A)]
2. Regulated Hazardous Wastes and Conditionally Excluded Wastes

2.1 Regulated Hazardous Wastes and Conditionally Excluded Wastes, cont.

- California regulations also include as wastes potentially regulated as hazardous waste, any hazardous material product that is:
  - Mislabeled or not adequately labeled, unless relabeled within 10 days of discovery.
  - Is packaged in deteriorated or damaged containers, unless the material is repackaged within 96 hours of discovery.

- **WARNING**: California hazardous waste regulations are more onerous than other states because:
  - More wastes are considered hazardous;
  - There are no conditionally exempt small volume generator (CESQG) exemptions from regulation;
  - It is harder to meet excluded recyclable material (ERM) exclusions in the state; federal ERMs are non-RCRA hazardous wastes in California if state ERM criteria are not met; and
  - Surveillance by federal, state, and local CUPAs practically guarantee discovery of violations.

---

**Links**: Definition of waste: 22 CCR § 66261.2; Definition of Hazardous Waste: § 66261.3; Exclusions: § 66261.4; Excluded Recyclable Materials: HSC § 25143.2
2. Regulated Hazardous Wastes and Conditionally Excluded Wastes

2.2 Conditionally Excluded Wastes

Certain types of potential hazardous waste may be managed as non-hazardous if conditions or rules are followed:

- **Empty Containers:** If completely empty, small (5 gallons or less) containers may be disposed as non-hazardous, including empty aerosol cans (partially-filled cans are universal wastes). Larger empty containers must be reused or recycled within 1 year to be exempt, and labeled during this period. Containers previously holding RCRA acute hazardous waste residues [22 CCR § 66261.33(e)] or California extremely hazardous substances (see state list of chemicals with asterisks at 3.4) must be triple-rinsed. [§ 66261.7(d)]

- **Empty Tanks (USTs or AGTs):** Closed and empty hazardous materials storage tanks remain hazardous waste until certified and approved as non-hazardous [§ 67383]. A UPCF form must be submitted to the CUPA after certification by a licensed safety professional.

- **Lead-Acid Storage Batteries:** Up to 10 if held for reclamation. [§ 66266.81(a)(l)]

- **Waste Oil and Fuel Filters:** Used oil and fuel filters with some metal content, if no free-flowing liquid is present may be managed as “non-hazardous” if recycled or reclaimed for metals/energy within 1 year [§ 66266.130 and HSC § 25144.7]. The containers must be closed, labeled “Drained Filters,” and dated.

- **Scrap Metal:** [Except for mercury, magnesium, beryllium, and battery scrap] with no free-flowing oil and not powdered or contaminated with other hazardous waste.

- **Universal Wastes:** Covered in Part V.

*Note:* Treated wood waste is a hazardous waste, but subject to similar rules. (See page 39.)
2. Regulated Hazardous Wastes and Conditionally Excluded Wastes

2.2 Conditionally Excluded Wastes, cont.

Empty Drums: Must be drip-dry and labeled on date emptied, and recycled within 1 year.
This form must be used to certify tank decontamination by a state licensed safety professional and submitted to the CUPA.
2. Regulated Hazardous Wastes and Conditionally Excluded Wastes

2.2 Conditionally Excluded Wastes, cont.

Wrong: Only 10 or less batteries are exempt

Scrap Metal: No free-flowing oil or dust allowed
2. Regulated Hazardous Wastes and Conditionally Excluded Wastes

2.2 Conditionally Excluded Wastes, cont.

**DRAINED USED OIL FILTERS**

Accumulation Start Date: ______________

Completely Drained Filters (Oil or Fuel) with Metal:
Stored in labeled, covered drum for up to 1 year
2. Regulated Hazardous Wastes and Conditionally Excluded Wastes

2.2 Conditionally Excluded Wastes, cont.

➢ Treated wood waste (TWW), including utility poles, fence posts, decking and stairway materials, landscape timbers, railroad ties, and other pesticidal-treated wood is statutory hazardous waste. The type or concentration of the treatment chemical is not relevant.

➢ Management of treated wood waste is regulated under specific Title 22 regulations quite different from other hazardous waste requirements, but practical by necessity:
  ✓ TWW must be segregated from other wastes;
  ✓ TWW bundles must be labeled on-site and during shipment:

  \[
  \text{Treated Wood Waste—Do Not Burn or Scavenge}
  \]

  \[
  \text{TWW Handler:}
  \]

  \[
  \text{Name:} \________________________
  \text{Address:} \________________________
  \text{Accumulation Date:} \________________________
  \]

  ✓ No more than 1,000 pounds of TWW may be stored, and only for up to 30 days;
  ✓ TWW disposal must be arranged for and transported to a non-hazardous waste disposal site allowed to accept TWW. (Hazardous waste transportation rules do not apply.)
  ✓ The disposal facility must be advised of the TWW delivery.

\[\text{Links: Treated Wood Waste Standard: HSC § 25150.7 and 8; DTSC regulation: 22 CCR § 67386}\]
2. Regulated Hazardous Wastes and Conditionally Excluded Wastes

2.2 Conditionally Excluded Wastes, cont.

Examples of Treated Wood Waste

Old PT wood
3. Identification and Classification of Hazardous Wastes

THE FOLLOWING TOPICS ARE INCLUDED IN THIS SECTION:

3.1 Hazardous Waste Determination Procedure
3.2 Hazardous Waste Determination Procedure—RCRA Listed Wastes
3.3 Hazardous Waste Determination Procedure—RCRA Characteristic Wastes
3.4 Hazardous Waste Determination Procedure—California Only Hazardous Wastes
3. Identification and Classification of Hazardous Waste

3.1 Hazardous Waste Determination Procedure

➢ Determination of whether a hazardous waste is generated

Once it is determined a waste is generated and it is not excluded from regulation as a hazardous waste, and it will not be reused on-site, it must be characterized! Characterization can be based on knowledge and/or testing of a representative sample of the waste. [22 CCR § 66262.10 and .11]

➢ The characterization process

First, determination of whether the waste is a RCRA listed federal hazardous waste; if not,

Second, determination of whether the waste exhibits any RCRA hazardous characteristics: ignitability, corrosivity, reactivity, or toxicity; if not,

Third, determination of whether the waste exhibits any additional state characteristics (corrosivity and toxicity) or is used lubricating oil, or is listed or described by the state list of hazardous wastes.
Hazardous Waste Characterization Involves Knowledge and/or Testing

Does paint have lead (toxicity)—Knowledge and/or testing?
Other hazards which do not result in classification:

Ingestion may cause severe irritation to the mouth, throat and stomach. Contact with metals may release small amounts of flammable hydrogen chloride. Prolonged skin contact may cause dermatitis (rash), characterized by red, dry, itching skin. May cause respiratory tract irritation. Prolonged or repeated inhalation of fumes or vapours, may cause chronic lung effects, such as bronchitis, and blood vessel erosion. Chronic or high levels of hydrogen chloride may result in severe dermatitis.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS No.</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrogen chloride</td>
<td>7647-01-9</td>
<td>26.0 - 26.9</td>
</tr>
<tr>
<td>Tetraethylammonium</td>
<td></td>
<td>0.5 - 1.5</td>
</tr>
</tbody>
</table>

SECTION 4. FIRST-AID MEASURES

Description of first aid measures:

**Ingestion:**
1. Do NOT induce vomiting. Have victim rinse mouth with water, then give one to two glasses of water to drink. Seek immediate medical attention/advice.
2. Never give anything by mouth if victim is unconscious.

**Inhalation:**
1. Immediately remove person to fresh air. If breathing has stopped, give artificial respiration. If breathing is difficult, give oxygen by qualified medical personnel only.
2. Seek immediate medical attention/advice.

**Skin contact:**
1. Take off all contaminated clothing immediately. Immediately flush skin with gently flowing, running water for at least 20 minutes. Do not scrub area of contact. Cover wound with sterile dressing. Seek immediate medical attention/advice.
2. Wash contaminated clothing before reuse. Leather shoes and gloves that have been contaminated with the solution may need to be destroyed.

**Eye contact:**
1. Immediately flush eyes with running water for at least 20 minutes. Protect uninvolved eye. Seek immediate medical attention/advice.

Most important symptoms and effects, both acute and delayed:

1. May cause serious eye irritation or damage. Symptoms may include redness, pain, tearing and conjunctivitis. Direct skin contact may cause concordate skin burns, deep ulcerations and possibly permanent lesions. May cause severe irritation and corrosive damage in the mouth, throat and stomach. Symptoms may include abdominal pain, vomiting, burns, perforation, bleeding and eventually death. May cause serious irritation to the nose, throat and respiratory tract. Symptoms may include coughing, choking and wheezing. Do not result in pulmonary edema (fluid accumulation). Symptoms of pulmonary edema (chest pain, shortness of breath) may be delayed. Prolonged or repeated inhalation of fumes or vapours, may cause chronic lung effects, such as bronchitis, and blood vessel erosion.

Indication of any immediate medical attention and special treatment needed:

1. Immediate medical attention is required. Cause burns. Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

**Extinguishing media:**

<table>
<thead>
<tr>
<th>Suitable extinguishing media</th>
<th>Unsuitable extinguishing media</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Water spray may be used to cool closed containers to prevent pressure buildup and possible autoignition or explosion when exposed to extreme heat.</td>
<td>Do not use direct streams of water, which can result in a dust cloud and explosion hazard.</td>
</tr>
</tbody>
</table>

**Special hazards arising from the substance or mixture | Conditions of flammability:**

- Not considered flammable. Burning produces noxious and toxic fumes. Contact with water may release small amounts of flammable hydrogen chloride. Prolonged skin contact may cause dermatitis (rash), characterized by red, dry, itching skin. May cause respiratory tract irritation. Prolonged or repeated inhalation of fumes or vapours, may cause chronic lung effects, such as bronchitis, and blood vessel erosion. Chronic or high levels of hydrogen chloride may result in severe dermatitis.

**Flammability classification (OSHA 29 CFR 1910.104):**

- Non-flammable.

**Explosion Data: Sensitivity to Mechanical Impact / Static Discharge:**

- Not expected to be sensitive to mechanical impact or static discharge.

**Hazardous combustion products:**

- Hydrogen chloride gas Chlorine Hydrogen Carbon oxides Nitrogen oxides

**Special protective equipment and precautions for firefighters:**

- Firefighters must use standard protective equipment including their resistant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

**Special fire-fighting procedures:**

- Firefighters should use proper protective equipment and self-contained breathing apparatus with fully face piece operated in positive pressure mode. A fully by chemical resistant suit should also be worn. Move containers from fire area if safe to do so. Water spray may be used in cooling equipment exposed to heat and flame. Dike for water control. Do not allow runoff from firefighting to enter drains or water sources.

SECTION 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures:**

- All persons dealing with clean-up should wear the appropriate protective equipment in storing and handling apparatus. Keep all other personal protective equipment away from the spill area.

**Environmental precautions:**

- Ensure spilled product does not enter drains, sewers, swales, or confined spaces. For large spills, dilute the area to prevent spreading.

**Methods and material for containment and cleaning up:**

- Remove all sources of ignition. Ventilate area of release. Stop spillage before it can enter water sources; protect it if possible. Dike for water control. Neutralize with sodium bicarbonate or a mixture of cooking soda and water. Contains and barrier spill kits with non-corrosive, inert absorbent materials (e.g., sand), then place containment material into a container for later disposal (see Section 13). Contact the proper local authorities.

**Special spill response procedures:**

- If a spill occurs in excess of the EPA reportable quantity to media in the environment, immediately notify the national response center in the United States (phone: 1-800-424-8802). USE CERCLA Reportable quantity (RQ): Hydrochloric acid (5000 lbs / 2270 kg).

SECTION 7. HANDLING AND STORAGE

**Procedures for safe handling:**

- Use in a well-ventilated area. Wear protective gloves/clothing and eye/face protection. See Section 8 for additional personal protection advice when handling this product. Do not reheat. Avoid breathing vapor or mist. Avoid contact with skin, eyes and clothing. Keep away from extreme heat and flame. Keep away from bases, metals and other incompatibles. Keep container tightly closed when not in use. Keep only in original containers. Wash thoroughly after handling.
SECTION 8. EXPOSURE CONTROL / PERSONAL PROTECTION

Exposure Limits:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TWA</td>
<td>STEL</td>
</tr>
<tr>
<td>Hydrogen chloride</td>
<td>20 ppm</td>
<td>20 ppm</td>
</tr>
<tr>
<td>Tetrahydrofurfurylamine</td>
<td>10 ppm</td>
<td>10 ppm</td>
</tr>
</tbody>
</table>

Exposure controls

Ventilation and engineering measures:
Use general or local exhaust ventilation to maintain air concentration below recommended exposure limits.

Respiratory protection:
If the TLV is exceeded, a NIOSH/MAA-approved respirator is advised. Confirmation of which type of respirator is most suitable for the intended application should be obtained from respiratory protection suppliers. Respirators should be selected based on the form and concentration of contaminant in air, and in accordance with OSHA (29 CFR 1910.134) or CSA Z94 4-00.

Skin protection:
Wear chemical protective gloves (e.g. nitrile), boots, aprons, and protective clothing to prevent prolonged or repeated skin contact. Wear impervious gloves, such as butyl rubber. Unperishable material (polyvinyl alcohol). Advice should be sought from a physician or pharmacist.

Eye / face protection:
Chemical splash goggles must be worn when handling this material. A face shield may also be necessary.

Other protective equipment:
Other equipment may be required depending on workplace standards. An eyewash station and safety shower should be available in the immediate working area.

General hygiene considerations:
Avoid breathing vapors or mist. Avoid contact with skin, eyes and clothing. Do not eat, drink, smoke or use cosmetics while working with this product. Upon completion of work, wash hands before eating, drinking, smoking or use of toilet facilities. Remove and wash contaminated clothing before re-use. Do not take contaminated clothing home.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Colorless liquid.
Odor: Odorless.
Odor threshold: Not applicable.
pH: 2.0
Melting point: N/A
Freezing point: N/A
Initial boiling point and boiling range: Not applicable.
Flash point: 110°C (230°F)
Flammable range (closed): Not applicable.
Evaporation rate (Stokes): Not applicable.
Ignitability: Not applicable.
Corrosivity: Not applicable.

SECTION 10. STABILITY AND REACTIVITY

Reactivity:
Not normally reactive. Contact with metals may release small amounts of flammable hydrogen gas. Corrosive in contact with metals.

Chemical stability:
Stable under the recommended storage and handling conditions prescribed.

Possibility of hazardous reactions:
Not applicable.

Conditions to avoid:
Avoid contact with incompatible materials.

Incompatible materials:
Strong oxidizing agents, metals (e.g. aluminum, brass, copper), alkaline earth metals, reactive agents.

Hazardous decomposition products:
Not known, refer to hazardous combustion products in Section 5.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure:
Routes of entry: Inhalation: YES, Skin: YES, Oral: YES.

Routes of entry: Inhalation: YES, Skin: YES, Oral: YES.

Routes of exposure: Skin: YES, Eye: NO.
Potential Health Effects:

Signs and symptoms of short-term (acute) exposure:

Signs and symptoms inhalation:
- Inhalaion of high concentrations of fumes or mist may cause severe irritation and corrosive damage to the nose, throat and upper respiratory tract. Symptoms may include coughing, choking and wheezing. Could result in pulmonary edema (fluid accumulation). Symptoms of pulmonary edema (chest pain, shortness of breath) may be delayed.

Signs and symptoms ingestion:
- May cause severe irritation and corrosive damage in the mouth, throat and stomach. Symptoms may include abdominal pain, vomiting, burns, perforation, bleeding and eventual death.

Signs and symptoms skin:
- This material is classified as hazardous under OSHA regulations (29CFR 1910.1200) (Maxcom 2012). Classification: Skin corrosion/irritation - Category 1. Causes severe skin burns and eye damage. Direct skin contact may cause severe skin burns, deep ulcerations and possibly permanent scarring.

Signs and symptoms eyes:
- This material is classified as hazardous under OSHA regulations (29CFR 1910.1200) (Maxcom 2012). Classification: Eye damage/irritation - Category 1. Causes serious eye damage.

Potential Chronic Health Effects:
- Chronic skin contact with low concentrations may cause dermatitis. Prolonged or repeated inhalation of fumes or vapors, may cause chronic lung effects, such as bronchitis, and both nasal and respiratory irritation.

Mutagenicity:
- Not expected to be mutagenic in humans.

Carcinogenicity:
- No components are listed as carcinogens by ACGIH, IARC, OSHA or NTP.

Reproductive effects & Teratogenicity:
- Not expected to cause reproductive effects.

Sensitization to material:
- Not expected to be a skin or respiratory sensitizer.

Specific target organ effects:
- Target Organs: Eyes, skin, respiratory system and digestive system.

This material is classified as hazardous under OSHA regulations (29CFR 1910.1200) (Maxcom 2012). Classification: Specific target organ toxicity - single exposure - Category 3. May cause respiratory irritation.

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Initiation:
- Corrosive.

Medical conditions aggravated by overexposure:
- Pre-existing skin, eye and respiratory disorders.

Synergistic materials:
- Not available.

Toxicological data:
- The calculated ATE values for this mixture are:
  - ATE 99% = 95.83 mg/L
  - ATE Inhalation (mice) = 25.56 mg/L

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity:
- Because of the low pH of this product, it would be expected to produce significant aquatic toxicity upon exposure to aquatic organisms and aquatic systems. The product should not be allowed to enter drains or water courses, or be deposited where it can affect ground or surface water.

Ecotoxicity data:

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS No</th>
<th>Toxicity to Fish</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrogen cyanide</td>
<td>7647-31-0</td>
<td>LC50 / 96h</td>
</tr>
<tr>
<td></td>
<td></td>
<td>86.2 mg/L (Griffin Test)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS No</th>
<th>Toxicity to Daphnia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrogen cyanide</td>
<td>7647-31-0</td>
<td>EC50 / 48h</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7.8 mg/L</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS No</th>
<th>Toxicity to Algae</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrogen cyanide</td>
<td>7647-31-0</td>
<td>EC50 / 96h or 72h</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.61 mg/L/12 hours</td>
</tr>
</tbody>
</table>

Persistence and degradability:
- Biodegradation is not applicable to inorganic materials.

Bioaccumulation potential:
- No data is available on the product itself.

Mobility in soil:
- No data is available on the product itself.

Other Adverse Environmental effects:
- No additional information.

SECTION 13: DISPOSAL CONSIDERATIONS

Handling for Disposal:
- Handle waste according to recommendations in Section 7. Empty containers retain residual liquid and must be disposed of as waste.

Methods of Disposal:
- Dispose in accordance with all applicable federal, state, provincial and local regulations.

RCRA:
- If this product, as applied, becomes a waste in the United States, it may meet the criteria of a hazardous waste as defined under RCRA, Title 40 CFR 261. It is the responsibility of the waste generator to determine the proper waste identification and disposal method. For disposal of unused or waste material, check with local, state and federal environmental agencies.

SECTION 14: TRANSPORTATION INFORMATION

Regulatory Information UN Number UN proper shipping name Transport rate classes Packing Group Label

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**SECTION 15 - REGULATORY INFORMATION**

**US Federal Information:**
Components listed below are present on the following U.S. Federal chemical lists:

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS #</th>
<th>TSCA Inventory</th>
<th>CERCLA Reportable Quantity (RO) (40 CFR 302)</th>
<th>SARA TITLE: Sec. 302, Extremely Hazardous Substance, 40 CFR 307</th>
<th>SARA TITLE II: Sec. 311, 40 CFR 311, Specific Toxic Chemical</th>
<th>Toxic Chemical</th>
<th>derosim concentrations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrogen chloride</td>
<td>7647-01-0</td>
<td>Yes</td>
<td>5000 lb/2270 kg</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>1%</td>
</tr>
<tr>
<td>Tetracetyldimethyamine</td>
<td>112-75-4</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**SARA TITLE III: Sec. 302, 40 CFR 307, Hazard Classes: Acute Health Hazard, Chronic Health Hazard**

Under SARA Sections 311 and 312, the EPA has established thresholds for the reporting of hazardous chemicals. The current thresholds are 500 pounds for the threshold planning quantity (TPQ), whichever is lower, for extremely hazardous substances and 10,000 pounds for all other hazardous chemicals.

**US State Right to Know Laws:**
The following chemicals are specifically listed by individual States:

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS #</th>
<th>Listed</th>
<th>Type of Toxicity</th>
<th>CA</th>
<th>MA</th>
<th>MN</th>
<th>NJ</th>
<th>PA</th>
<th>RI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrogen chloride</td>
<td>7647-01-0</td>
<td>No</td>
<td>N/A</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Tetracetyldimethyamine</td>
<td>112-75-4</td>
<td>No</td>
<td>N/A</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

**Canadian Information:**
Canadian Environmental Protection Act (CEPA) information: All ingredients listed appear on the Domestic Substances List (DSL).

**WHMIS Information:** Refer to Section 2 for a WHMIS Classification for this product.

**This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.**

**International Information:**
Components listed below are present on the following International Inventory list:

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS #</th>
<th>UNSDS</th>
<th>GHS</th>
<th>EU TSCA</th>
<th>Japan EINECS/ELINCS</th>
<th>Korea KOSHA</th>
<th>Canada CI</th>
<th>China CTCS</th>
<th>US EPA TSCA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrogen chloride</td>
<td>7647-01-0</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Tetracetyldimethyamine</td>
<td>112-75-4</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**SECTION 16 - OTHER INFORMATION**

**Legend:**
- ACS: American Conference of Governmental Industrial Hygienists
- CA: California
- CAS: Chemical Abstract Services
- CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act of 1980
- CFR: Code of Federal Regulations
- DOT: Department of Transportation
- EPA: Environmental Protection Agency
- HPA: Hazardous Materials Packaging Act
- HSD: Hazardous Substances Data Bank
- IARC: International Agency for Research on Cancer
- Inh: Inhalation
- IUCLID: International Uniform Chemical Information Database
- MA: Massachusetts
- MI: Michigan
- NIOSH: National Institute for Occupational Safety and Health
- NJ: New Jersey
- NTP: National Toxicology Program
- OSHA: Occupational Safety and Health Administration
- PA: Pennsylvania
- PEL: Permissible exposure level
- RCRA: Resource Conservation and Recovery Act
- RI: Rhode Island
- RTECS: Registry of Toxic Effects of Chemical Substances
- SARA: Superfund Amendments and Reauthorization Act
- SDLL: Short Term Exposure Limit
- TCEQ: Transportation of Dangerous Goods Act & Regulations
- TLV: Threshold Limit Values
- TWMA: Time Weighted Average
- WHMIS: Workplace Hazardous Materials Information System

**WARNING:** Ignore Federal RO in California
3. Identification and Classification of Hazardous Waste

3.2 Hazardous Waste Determination Procedure—RCRA Listed Wastes

To determine whether the wastes are hazardous the following criteria must be addressed:

- **Listed hazardous in Title 22 §§ 66261.30-.33** [RCRA listed Hazardous Wastes]. Or exhibits any of the following hazardous characteristics:
  - **Ignitable**: a liquid with a flashpoint equal to or less than 140°F spontaneously combustible solids, flammable gases and oxidizers. [RCRA ignitable – 22 CCR § 66261.21]
  - **Corrosive**: pH equal to or less than 2 or equal to or more than 12.5. [RCRA corrosive if liquid, non-RCRA corrosive if solid – § 66261.22]
  - **Reactive**: unstable materials, for example, a water reactive chemical or an explosive. [RCRA reactive - § 66261.23]
  - **Toxic**: exceeds regulatory limits of toxic constituents and biological tests based on the following:
    1) Toxicity Characteristic Leaching Procedure (TCLP) regulatory limits [RCRA toxicity - § 66261.24]
    2) California Toxicity: Total Threshold Limit Concentrations (TTLC) [non-RCRA toxicity].
    3) Soluble Threshold Limit Concentration (STLC) using the Waste Extraction Test (WET) [non-RCRA toxicity].
    4) Presence of any of 16 carcinogenic compounds in excess of 0.001% by weight [non-RCRA toxicity].
    5) Whole animal, bioassay tests, an example, the aquatic 96-hour LC50 of 500 mg/l or less (minnow) test. Acute oral toxicity (animal – data rarely used) was amended from 5000 mg/kg to 2,500 mg/kg LD50 [non-RCRA toxicity].

- Used lubricating oil must be considered and managed as a hazardous waste by a California generator [§ 66279].
- California List of presumed hazardous wastes [§ 66261, Appendix X].
4 lists of RCRA hazardous wastes based on criteria, including toxicity to humans, persistence or bioaccumulation in the environment, or other environmental or physical harm that may result from the waste [22 CCR §§ 66261.30 -.33 (RCRA Lists)].

The following “listed” wastes are deemed to be hazardous wastes unless specifically delisted through petition to U.S. EPA or otherwise excluded from regulation:

- **Hazardous Wastes From Non-Specific Sources**: Wastes generated from general industrial and commercial processes. Includes the waste’s EPA hazardous waste number beginning with “F” (“F wastes”) and hazardous characteristic each waste exhibits.

- **Hazardous Wastes From Specific Sources**: Wastes resulting from certain types of industrial or commercial processing. Includes the waste’s EPA hazardous waste number beginning with “K” (“K wastes”) and hazardous characteristics each waste exhibits.

- **Discarded Commercial Chemical Products, Off-Specification Species, Container Residues, and Spill Residues Thereof** are included on 2 alphabetical lists of chemicals that are wastes or otherwise discarded from any industrial or commercial activity, off-specification products, residues in soil, water, or debris, etc. Chemicals on the first list are acutely hazardous wastes based on toxicity and/or reactivity. These wastes have the EPA waste number beginning with “P” (“P wastes”). The second list’s wastes are from similar sources, however, do not exhibit acute toxicity or reactivity characteristics. They are designated by the EPA hazardous waste number beginning with “U” (“U wastes”). The hazardous characteristic of “U” wastes is toxicity.
To determine whether wastes are hazardous under RCRA, the following criteria must be addressed:

- **Listed hazardous** in Title 22 §§ 66261.30-.33 [RCRA listed Hazardous Wastes], or exhibits any of the following hazardous characteristics:
  - **Ignitable**: a liquid with a flashpoint equal to or less than 140°F spontaneously combustible solids, flammable gases and oxidizers. [RCRA ignitable – 22 CCR § 66261.21]*
  - **Corrosive**: pH equal to or less than 2 or equal to or more than 12.5. [RCRA corrosive if liquid, non-RCRA corrosive if solid – § 66261.22]
  - **Reactive**: unstable materials, for example, a water reactive chemical or an explosive. [RCRA reactive - § 66261.23]
  - **Toxic**: exceeds regulatory limits of toxic constituents and biological tests based on the following:
    1) Toxicity characteristic Leaching Procedure (TCLP) regulatory limits [RCRA toxicity - § 66261.24]

*Note: The federal exclusion for solvent-contaminated wipes essentially eliminates the characteristic of ignitability for such wastes but has not been adopted in California. (See 1.4)
A waste exhibits the toxicity characteristic if it equals or exceeds specified concentrations of certain metal and organic compounds, as listed below, based on a laboratory analysis following an extraction procedure on a representative sample of the waste. This testing procedure is called the Toxicity Characteristic Leaching Procedure (TCLP).

<table>
<thead>
<tr>
<th>Hazardous Constituent and Waste Number</th>
<th>Regulatory Level (mg/l)</th>
<th>Hazardous Constituent and Waste Number</th>
<th>Regulatory Level (mg/l)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arsenic (D004)</td>
<td>5.0</td>
<td>Hexachlorobenzene (D032)</td>
<td>0.13</td>
</tr>
<tr>
<td>Barium (D005)</td>
<td>100.0</td>
<td>Hexachlorobutadiene (D033)</td>
<td>0.5</td>
</tr>
<tr>
<td>Benzene (D018)</td>
<td>0.5</td>
<td>Hexachlorethane (D034)</td>
<td>3.0</td>
</tr>
<tr>
<td>Cadmium (D006)</td>
<td>1.0</td>
<td>Lead (D008)</td>
<td>5.0</td>
</tr>
<tr>
<td>Carbon Tetrachloride (D019)</td>
<td>0.5</td>
<td>Lindane (D013)</td>
<td>0.4</td>
</tr>
<tr>
<td>Chlordane (D020)</td>
<td>0.03</td>
<td>Mercury (D009)</td>
<td>0.2</td>
</tr>
<tr>
<td>Chlorobenzene (D021)</td>
<td>100.0</td>
<td>Methoxychlor (D014)</td>
<td>10.0</td>
</tr>
<tr>
<td>Chloroform (D022)</td>
<td>6.0</td>
<td>Methyl ethyl ketone (D035)</td>
<td>200.0</td>
</tr>
<tr>
<td>Chromium (D007)</td>
<td>5.0</td>
<td>Nitrobenzene (D036)</td>
<td>2.0</td>
</tr>
<tr>
<td>o-Cresol (D023)</td>
<td>200.0</td>
<td>Pentachlorophenol (D037)</td>
<td>100.0</td>
</tr>
<tr>
<td>m-Cresol (D024)</td>
<td>200.0</td>
<td>Pyridine (D038)</td>
<td>5.0</td>
</tr>
<tr>
<td>p-Cresol (D025)</td>
<td>200.0</td>
<td>Selenium (D010)</td>
<td>1.0</td>
</tr>
<tr>
<td>Cresol (D026)</td>
<td>200.0</td>
<td>Silver (D011)</td>
<td>5.0</td>
</tr>
<tr>
<td>2,4-D (D016)</td>
<td>10.0</td>
<td>Tetrachloroethylene (D039)</td>
<td>0.7</td>
</tr>
<tr>
<td>1,4-Dichlorobenzene (D027)</td>
<td>7.5</td>
<td>Toxaphene (D015)</td>
<td>0.5</td>
</tr>
<tr>
<td>1,2-Dichloroethane (D028)</td>
<td>0.5</td>
<td>Trichloroethylene (D040)</td>
<td>0.5</td>
</tr>
<tr>
<td>1,1-Dichloroethylene (D029)</td>
<td>0.7</td>
<td>2,4,5-Trichlorophenol (D041)</td>
<td>400.0</td>
</tr>
<tr>
<td>2,4-Dinitrotoluene (D030)</td>
<td>0.13</td>
<td>2,4,6-Trichlorophenol (D042)</td>
<td>2.0</td>
</tr>
<tr>
<td>Endrin (D012)</td>
<td>0.02</td>
<td>2,4,5-TP (Silver) (D017)</td>
<td>1.0</td>
</tr>
<tr>
<td>Heptachlor (as its epoxide) (D013)</td>
<td>0.008</td>
<td>Vinyl chloride (D043)</td>
<td>0.2</td>
</tr>
</tbody>
</table>

A waste exhibiting the characteristic of toxicity is assigned the EPA hazardous waste number corresponding to the toxic contaminant causing it to be hazardous on the list of regulatory levels.
To determine whether wastes are California characteristic (Non-RCRA) or listed/statutory hazardous wastes, the following criteria must be addressed:

- **California Toxicity:**
  1. Total Threshold Limit Concentrations (TTLC) [non-RCRA toxicity].
  2. Soluble Threshold Limit Concentration (STLC) using the Waste Extraction Test (WET) [non-RCRA toxicity].
  3. Presence of any of 16 carcinogenic compounds in excess of 0.001% by weight [non-RCRA toxicity].
  4. Whole animal, bioassay tests, an example, the aquatic 96-hour LC$_{50}$ of 500 mg/l or less (minnow) test. Acute oral toxicity (animal – data rarely used) was amended from 5000 mg/kg to 2,500 mg/kg LD$_{50}$ [non-RCRA toxicity].

- **Solid corrosivity** if 50% solid waste in water exhibits pH of 2.0 or less, or 12.5 or greater [§ 66261.22(a)(4)].

- **Used lubricating oil** must be managed as a hazardous waste by a California generator [§ 66279.21].

- **Treated wood waste** of any type is a hazardous waste in this state [§ 67386].

- **California List** of presumed hazardous wastes [§ 66261, Appendix X].
### California Toxicity Characteristic Constituents and STLC and TTLC regulatory limits.

Note that b is an exemption for non-finely divided metals (scrap metal) and non-friable asbestos.

<table>
<thead>
<tr>
<th>Metals</th>
<th>STLC mg/l (ppm)</th>
<th>TTLC Wet-Weight mg/kg (ppm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antimony and/or antimony compounds</td>
<td>15</td>
<td>500</td>
</tr>
<tr>
<td>Arsenic and/or arsenic compounds</td>
<td>5.0</td>
<td>500</td>
</tr>
<tr>
<td>Asbestos</td>
<td>1.0 (as %)</td>
<td></td>
</tr>
<tr>
<td>Barium and/or barium compounds (excluding barite)</td>
<td>100</td>
<td>10,000</td>
</tr>
<tr>
<td>Beryllium and/or beryllium compounds</td>
<td>0.75</td>
<td>75</td>
</tr>
<tr>
<td>Cadmium and/or cadmium compounds</td>
<td>1.0</td>
<td>100</td>
</tr>
<tr>
<td>Chromium 4 compounds</td>
<td>5.0</td>
<td>500</td>
</tr>
<tr>
<td>Chromium and/or chromium (III) compounds</td>
<td>8.0</td>
<td>8,000</td>
</tr>
<tr>
<td>Cobalt and/or cobalt compounds</td>
<td>25</td>
<td>2,500</td>
</tr>
<tr>
<td>Copper and copper compounds</td>
<td>180</td>
<td>18,000</td>
</tr>
<tr>
<td>Mercury and/or mercury compounds</td>
<td>0.2</td>
<td>20</td>
</tr>
<tr>
<td>Molybdenum and/or molybdenum compounds</td>
<td>350</td>
<td>3,500</td>
</tr>
<tr>
<td>Nickel and/or nickel compounds</td>
<td>20</td>
<td>2,000</td>
</tr>
<tr>
<td>Selenium and/or selenium compounds</td>
<td>1.0</td>
<td>100</td>
</tr>
<tr>
<td>Silver and/or silver compounds</td>
<td>5.0</td>
<td>500</td>
</tr>
<tr>
<td>Thallium and/or thallium compounds</td>
<td>7.0</td>
<td>700</td>
</tr>
<tr>
<td>Vanadium and/or vanadium compounds</td>
<td>24</td>
<td>2,400</td>
</tr>
<tr>
<td>Zinc and/or zinc compounds</td>
<td>250</td>
<td>2,500</td>
</tr>
</tbody>
</table>

**Organic Compounds**

<table>
<thead>
<tr>
<th>Compound</th>
<th>STLC mg/l (ppm)</th>
<th>TTLC mg/kg (ppm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aldrin</td>
<td>0.14</td>
<td>1.4</td>
</tr>
<tr>
<td>Chlorodane</td>
<td>0.23</td>
<td>2.5</td>
</tr>
<tr>
<td>DDE, DDE, DDD</td>
<td>0.1</td>
<td>1.0</td>
</tr>
<tr>
<td>2,4-Dichlorophenoxyacetic acid</td>
<td>10.0</td>
<td>100</td>
</tr>
<tr>
<td>Dieldrin</td>
<td>0.8</td>
<td>8.0</td>
</tr>
<tr>
<td>Dioxin (2,3,7,8-TCDD)</td>
<td>0.001</td>
<td>0.01</td>
</tr>
<tr>
<td>Endrin</td>
<td>0.02</td>
<td>0.2</td>
</tr>
<tr>
<td>Heptachlor</td>
<td>0.47</td>
<td>4.7</td>
</tr>
<tr>
<td>Kepone</td>
<td>2.1</td>
<td>21</td>
</tr>
<tr>
<td>Lead compounds, organic</td>
<td></td>
<td>13</td>
</tr>
<tr>
<td>Lindane</td>
<td>0.4</td>
<td>4.0</td>
</tr>
<tr>
<td>Methoxychloror</td>
<td>10</td>
<td>100</td>
</tr>
<tr>
<td>Mirex</td>
<td>2.1</td>
<td>21</td>
</tr>
<tr>
<td>Pentachlorophenol</td>
<td>1.7</td>
<td>17</td>
</tr>
<tr>
<td>Polychlorinated biphenyls (PCBs)</td>
<td>5.0</td>
<td>50</td>
</tr>
<tr>
<td>Toxaphene</td>
<td>0.5</td>
<td>5</td>
</tr>
<tr>
<td>Trichloroethylene</td>
<td>204</td>
<td>2,040</td>
</tr>
<tr>
<td>2,4,5-Trichlorophenoxypropionic acid</td>
<td>1.0</td>
<td>10</td>
</tr>
</tbody>
</table>

a STLC and TTLC values are calculated on the concentrations of the elements, not the compounds.
b In the case of asbestos and elemental metals, the specified concentration limits apply only if the substances are in a friable, powdered or finely divided state. Asbestos includes chrysotile, amosite, crocidolite, tremolite, anthophyllite, and actinolite in the case of asbestos and elemental metals, the specified concentration limits apply only if the substances are in a friable, powdered or finely divided state. Asbestos includes chrysotile, amosite, crocidolite, tremolite, anthophyllite, and actinolite in the case of asbestos and elemental metals, the specified concentration limits apply only if the substances are in a friable, powdered or finely divided state. Asbestos includes chrysotile, amosite, crocidolite, tremolite, anthophyllite, and actinolite.

d If the soluble chromium, as determined by the TCLP set forth in Appendix I of Chapter 18 of this division, is less than 5 mg/l, and the soluble chromium, as determined by the procedures set forth in Appendix II of Chapter 11, equals or exceeds 50 mg/l and the waste is not otherwise identified as a RCRA hazardous waste pursuant to section 66261.100, then the waste is a non-RCRA hazardous waste.

e Excluding molybdenum disulfide.
3. Identification and Classification of Hazardous Waste


- Presence of carcinogenic constituents:

  Waste is hazardous if it contains a carcinogenic constituent (listed below) in a single or combined concentration of 0.001% by weight:

  - 2-Acetylaminofluorene (2-AAF)
  - Acrylonitrile
  - 4-Aminodiphenyl
  - Benzidine and its salts
  - bis (Chloromethyl) ether
  - Methyl chloromethyl ether
  - B-Propiolactone (BPL)
  - 3,3-Dichlorobenzidine and its salts
  - 4-Dimethylaminoazobenzene
  - Ethyleneimine (EL)
  - a-Naphthylamine (1-NA)
  - B-Naphthylamine (2-NA)
  - 4-Nitrobiophenyl (4-NBP)
  - N-Nitrosodimethylamine (NDMA)
  - 1,2-Dibromo-3-chloropropane (DBPC)
  - Vinyl Chloride (VCM)

- Aquatic bioassay toxicity test (used to test non-quantitative toxicity criteria at 500 mg/l (1 to 2,000 dilution in minnow testing).

- Used lubricating oil (statutory definition).

- Treated wood waste (statutory definition).

- California List of Presumed Hazardous Wastes.
Appendix X
List of Chemical Names and Common Names for Hazardous Wastes and Hazardous Materials

(a) This subdivision sets forth a list of chemicals which create a presumption that a waste is a hazardous waste. If a waste consists of or contains a chemical listed in this subdivision, the waste is presumed to be a hazardous waste unless it is determined that the waste is not a hazardous waste pursuant to the procedures set forth in section 6262.11. The hazardous characteristics which serve as a basis for listing the chemicals are indicated in the list as follows: (X) toxic, (C) corrosive, (I) ignitable and (R) reactive. A chemical denoted with an asterisk is presumed to be an extremely hazardous waste unless it does not exhibit any of the criteria set forth in section 6261.110 and section 6261.113. Trademark chemical names are indicated by all capital letters.

1. Acetaldehyde (X,I)
2. Acetic acid (X,C,I)
3. Acetone, Propanone (l)
4. Acetone cyanohydrin (X)
5. Acetonitrile (X,I)
6. * 2-Acetylaminofluorene, 2-AAF (X)
7. Acetyl benzoyl peroxide (X,I,R)
8. * Acetyl chloride (X,C,R)
9. Acetyl peroxide (X,I,R)
10. Acridine (X)
11. * Acrolein, Aquatin (X,I)
12. * Acrylonitrile (X,I)
13. * Adiponitrile (X)
14. * Aldrin, 1,2,3,4,10,10-Hexachloro-1,4,4a,5,8,8a-hexahydro-1,4,5,8-endo-exodimethanophthalene (X)
15. * Allyl aluminum chloride (C,I,R)
16. * Allyl aluminum compounds (C,I,R)
17. Allyl alcohol, 2-Propan-1-ol (X,I)
18. Allyl bromide, 3-Bromopropene (X,I)
19. Allyl chloride, 3-Chloropropene (X,I)
20. Allyl chlorocarbonate, Allyl chlorofomate (X,I)
21. * Allyl trichlorosilane (X,C,I,R)
22. Aluminum (powder) (l)
23A. Aluminum chloride (X,C)
23B. * Aluminum chloride (anhydrous) (X,C,R)
24. Aluminum fluoride (X,C)
25. Aluminum nitrate (X,I)
26. * Aluminum phosphide, PHOSSTOXIN (X,I,R)
27. * 4-Aminodiphenyl, 4-ADP (X)
28. * 2-Aminopyridine (X)

791 Chemicals

Note: An asterisk means an extremely hazardous waste

29. * Ammonium arsenate (X,C)
30. * Ammonium bifluoride (X,C)
31. Ammonium chromate (X,I)
32. Ammonium dichromate, Ammonium bromochromate (X,C,I)
33. Ammonium fluoride (X,C)
34. Ammonium hydrosulfite (X,C)
35. Ammonium molybdate (X)
36. Ammonium nitrate (l,R)
37. Ammonium perchlorate (l,R)
38. Ammonium permanganate (X,I,R)
39. Ammonium persulfate (l,R)
40. Ammonium picrate (l,R)
41. Ammonium sulfide (X,C,I,R)
42. n-Amyl acetate, 1-Aethoxybutane (and isomers) (X,I)
43. n-Amyllamine, 1-Aminopentane (and isomers) (X,I)
44. n-Amyl chloride, 1-Chloropentane (and isomers) (X,I)
45. n-Amylene, 1-Pentene (and isomers) (X,I)
46. n-Amyl mercaptan, 1-Pentanethiol (and isomers) (X,I)
47. n-Amyl nitrite, n-Pentyl nitrite (and isomers) (X,I)
48. * Amyl trichlorosilane (and isomers) (X,C,R)
49. Aniline, Aminobenzene (X)
50. Anisyl chloride (X,C)
51. Anthracene (X)
52. Antimony (X)
53. Antimony compounds (X)
54. * Antimony pentachloride (X,C,R)
55. * Antimony pentaffluoride (X,C,R)
56. Antimony pentasulfide (X,I,J)
57. Antimony potassium tartrate (X)
58. Antimony sulfide, Antimony trisulfide (X,I)
59. Antimony trihalide, Antimony chloride (X,C)
60. Antimony trifluoride, Antimony fluoride (X,C)
61. Antimony trioxide, Antimony oxide (X)
62. Antimony trisulfide, Antimony sulfide (X,I,R)
63. * Arsenic (X)
64. * Arsenic acid and salts (X)
65. * Arsenic compounds (X)
Common Waste Descriptions

Electronic Universal Wastes

700. * Zirconium chloride, Zirconium tetrachloride (X,C,R)
701. Zirconium pioramate (I)

(b) This subdivision sets forth a list of common names of wastes which are presumed to be hazardous wastes unless it is determined that the waste is not a hazardous waste pursuant to the procedures set forth in section 06220.11. The hazardous characteristics which serve as a basis for listing the common names of wastes are indicated in the list as follows:

- (X) toxic
- (C) corrosive
- (I) ignitable
- (R) reactive

Acetylene sludge (C)
Acid and water (C)
Acid sludge (C)
APU Pbc (X)
Alkaline caustic liquids (C)
Alkaline cleaner (C)
Alkaline corrosive battery fluid (C)
Alkaline corrosive liquids (C)
Asbestos waste (X)
Aces (X)
Bag house wastes (X)
Battery acid (C)
Beryllium waste (X)
Bleach water (X)
Bleach and cleaning waste (X,C)
Bunker Oil (X)
Catalyst (X,C)
Caucus sludge (C)
Caucus wastewater (C)
Cleaning solvents (I)
Corrosion inhibitor (C)
Data processing fluid (I)
Dilution fluids (X,C)
Dilution mud (X)
Dyes (X)
Etching acid liquid or solvent (C,I)
Fluorine acid (C)
Fuel waste (X)
Fuel oil (C)
Insecticides (X)
Laboratory waste (X,C,R)
Lime and sulfur sludge (C)
Lime and water (C)
Lime sludge (X)
Lime wastewater (C)
Liquid cement (I)
Mine tailings (X,R)
Obsolete explosives (R)
Oil and water (X)
Oil Ash (X,C)
Paint (or varnish) remover or stripper (I)
Paint thinner (X,I)
Pickling liquor (C)
Pigments (X)
Plating waste (X,C)
Printing ink (X)
Retrograde explosives (R)
Sludge acid (C)
Soda ash (C)
Solvents (I)
Spent acid (C)
Spent caustic (C)
Spent (or waste) cyanide solutions (X,C)

(e) This subsection sets forth a list of electronic wastes that are presumed to be hazardous wastes and that are "covered electronic device[s]" pursuant to chapter 3.6 of part 3 of division 30 of the Public Resources Code section 42460 et seq., if they have a viewable screen size [as defined in sec. 09230.201, subsec. (b)(3)(C)] greater than four inches, unless it is determined that the electronic waste is not a hazardous waste pursuant to the procedures set forth in section 06220.11. The hazardous characteristic that serves as a basis for listing the common names of electronic wastes is Toxicity.

1. Cathode ray tube (CRT)-containing devices (CRT devices);
2. CRTs;
3. CRT-containing consumer monitors;
4. Liquid crystal display (LCD)-containing laptop computers;
5. LCD-containing desktop monitors;
6. CRT-containing televisions;
7. LCD-containing televisions (excluding LCD projection televisions);
8. Plasma televisions (excluding plasma projection televisions);
9. Portable DVD players with LCDs.


HISTORY
1. New section filed 5-24-91; effective 7-1-91 (Register 91, No. 22).
2. New subsection (c) and amendment of Note filed 6-7-2004 as an emergency; operative 6-7-2004 (Register 2004, No. 24). Pursuant to Public Resources Code section 42475.2, a Certificate of Compliance must be transmitted to OAL by 6-7-2003 or emergency language will be repealed by operation of law on the following day.
3. Amendment of subsection (c) and amendment of Note filed 12-27-2004 as an emergency; operative 12-27-2004 (Register 2004, No. 53). Pursuant to Public Resources Code section 42475.2, a Certificate of Compliance must be transmitted to OAL by 1-1-2007 or emergency language will be repealed by operation of law on the following day.
4. New subsection (c) and Note, including subsequent emergency amendments, refiled 5-5-2006 as an emergency; operative 5-6-2006 (Register 2006, No. 23). Pursuant to Health and Safety Code section 25214.10.2, this emergency regulation shall remain in effect for a period of two years or until revised by the department, whichever occurs sooner.
5. Amendment of subsection (c) and Note filed 12-29-2006 as an emergency; operative 12-29-2006 (Register 2006, No. 52). Pursuant to Health and Safety Code section 25214.10.2, this emergency regulation shall remain in effect for a period of two years or until revised by the department, whichever occurs sooner.
6. New subsection (c) and Note refiled 5-8-2008 as an emergency; operative 5-8-2008 (Register 2008, No. 19). Pursuant to Health and Safety Code section 25214.10.2, this emergency regulation shall remain in effect for a period of two years or until revised by the department, whichever occurs sooner.
7. Certificate of Compliance as to 5-8-2008 order, including further amendment of subsection (c), new subsections (c)(1)-(g) and amendments of Note, transmitted to OAL 12-19-2009 and filed 2-4-2009 (Register 2009, No. 6).
Practical approach to controlling risk of dumpster diving—Using the State List to keep obvious hazardous wastes out of dumpsters. Most common example—Chlorine bleach

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Concentration</th>
<th>Worker Exposure Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hypochlorite</td>
<td>7.1%</td>
<td>Not established</td>
</tr>
<tr>
<td>Sodium hydroxide</td>
<td>2 mg/m³ - TLV*</td>
<td>2 mg/m³ - PEL-TWA*</td>
</tr>
</tbody>
</table>

*TLV = ACGIH Threshold Limit Value - Ceiling  
*PEL-TWA = OSHA Permissible Exposure Limit - Time Weighted Average/Short Term Exposure Limit

None of the ingredients in this product are on the IARC, NTP or OSHA carcinogen lists.
The 2 active ingredients in liquid chlorine bleach are listed along with their hazardous characteristics. Unless you can prove by knowledge and/or testing that they are not hazardous, they are!

<table>
<thead>
<tr>
<th>No.</th>
<th>Chemical Name</th>
<th>Hazardous Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Acetaldehyde (X,I)</td>
<td>(X) Toxic</td>
</tr>
<tr>
<td>2</td>
<td>Acetic acid (X,C,I)</td>
<td>(C) Corrosive</td>
</tr>
<tr>
<td>3</td>
<td>Acetone, Propanone (I)</td>
<td>(I) Ignitable, (R) Reactive</td>
</tr>
<tr>
<td>4</td>
<td>Acetone cyanohydrin (X)</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Acetonitrile (X,I)</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>* 2-Acetylaminofluorene, 2-AAF (X)</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Acetyl benzoyl peroxide (X,I,R)</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>* Acetyl chloride (X,C,R)</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Acetyl peroxide (X,I,R)</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Acridine (X)</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>* Acrolein, Algin (X,I)</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>* Acrylonitrile (X,I)</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>* Adiponitrile (X)</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>* Aldrin, 1,2,3,4,10-Hexachloro-1,4,4a,5,8,8a-hexahydro-1,4,5,8-endos-exodimethanolap (X)</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>* Allyl aluminum chloride (C,I,R)</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>* Allyl alcohol, 2-Propen-1-ol (X,I)</td>
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<tr>
<td>17</td>
<td>Allyl bromide, 3-Bromopropene (X,I)</td>
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<tr>
<td>18</td>
<td>Allyl chloride, 3-Chloropropene (I)</td>
<td></td>
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<tr>
<td>19</td>
<td>Allyl chlorocarbonate, Allyl chlorofomate (X,I)</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>* Allyl trichlorosilane (X,C,R)</td>
<td></td>
</tr>
<tr>
<td>21A</td>
<td>Aluminum (powder) (I)</td>
<td></td>
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<tr>
<td>22A</td>
<td>Aluminum chloride (X,C)</td>
<td></td>
</tr>
<tr>
<td>23A</td>
<td>* Aluminum chloride (anhydrous) (X,C,R)</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>Aluminum fluoride (X,C)</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>Aluminum nitrate (X)</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>* Aluminum phosphide, PHOSSTOXIN (X,I,R)</td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>* 4-Aminodiphenyl, 4-ADP (X)</td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>* 2-Aminopyridine (X)</td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>Silver nitrate (X)</td>
<td>(X) Toxic</td>
</tr>
<tr>
<td>30</td>
<td>Silver stibnite, Silver tellurinoxoborate (X)</td>
<td>(C) Corrosive</td>
</tr>
<tr>
<td>31</td>
<td>Silver tetrazene (I,R)</td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>* Sodium (C.I,R)</td>
<td></td>
</tr>
<tr>
<td>33</td>
<td>Sodium aluminate (C)</td>
<td></td>
</tr>
<tr>
<td>34</td>
<td>* Sodium aluminum hydride (C,I,R)</td>
<td></td>
</tr>
<tr>
<td>35</td>
<td>* Sodium amide, Sodiumamide (C,I,R)</td>
<td></td>
</tr>
<tr>
<td>36</td>
<td>* Sodium arsenate (X)</td>
<td></td>
</tr>
<tr>
<td>37</td>
<td>* Sodium arsenite (X)</td>
<td></td>
</tr>
<tr>
<td>38</td>
<td>Sodium azide (I,R)</td>
<td></td>
</tr>
<tr>
<td>39</td>
<td>* Sodium bifluoride, Sodium acid fluoride (X,C)</td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>Sodium bromate (X,I)</td>
<td></td>
</tr>
<tr>
<td>41</td>
<td>* Sodium cacodylate, Sodium dimethylarsenate (X)</td>
<td></td>
</tr>
<tr>
<td>42</td>
<td>Sodium carbonate peroxide (I)</td>
<td></td>
</tr>
<tr>
<td>43</td>
<td>Sodium chlorate (X,I)</td>
<td></td>
</tr>
<tr>
<td>44</td>
<td>Sodium chlorite (X,I)</td>
<td></td>
</tr>
<tr>
<td>45</td>
<td>Sodium chromate (X,C)</td>
<td></td>
</tr>
<tr>
<td>46</td>
<td>* Sodium cyanide (X)</td>
<td></td>
</tr>
<tr>
<td>47</td>
<td>Sodium dichloroisocyanurate (I)</td>
<td></td>
</tr>
<tr>
<td>48</td>
<td>Sodium dichromate, Sodium biocrhmate (X,C,I)</td>
<td></td>
</tr>
<tr>
<td>49</td>
<td>Sodium fluoride (X)</td>
<td></td>
</tr>
<tr>
<td>50</td>
<td>* Sodium hydride (X,C,I,R)</td>
<td></td>
</tr>
<tr>
<td>51</td>
<td>Sodium hyposulphite, Sodium hyposulphite (I)</td>
<td></td>
</tr>
<tr>
<td>52</td>
<td>Sodium hydroxide, Caustic soda, Lye (X,C)</td>
<td></td>
</tr>
<tr>
<td>53</td>
<td>* Sodium hypochlorite (X,I,R)</td>
<td></td>
</tr>
<tr>
<td>54</td>
<td>* Sodium methylate, Sodium methoxide (C,I,R)</td>
<td></td>
</tr>
<tr>
<td>55</td>
<td>Sodium molybdate (X)</td>
<td></td>
</tr>
<tr>
<td>56</td>
<td>Sodium nitrate, Soda niter (X,I,R)</td>
<td></td>
</tr>
</tbody>
</table>

Sodium Hypochlorite – Toxic, Ignitable, Reactive and (X) an Extremely Hazardous Waste

Sodium Hydroxide – Toxic & Corrosive
Proper Dumpster Practices

**OK to Dispose:**
- Completely empty (drip-dry containers 5-gallons or less; if extremely hazardous material residue (*), must be triple rinsed.
- Completely empty aerosol containers (absolutely sure it is empty).
- Garbage, refuse with no chemical content, paper, packaging materials.
- Untreated wood waste.
- Incandescent light bulbs (have filaments).
- Metal objects that are not electronic devices.

**Prohibited:**
- Empty containers over 5-gallons.
- Unrinsed containers with extremely hazardous (*) residues.
- Full or partially-full containers if any ingredient is on state list (unless documentation shows non-hazardous).
- Full or partially-full aerosol containers.
- Treated wood waste.
- Asbestos-containing material.
- Batteries of any type.
- Fluorescent tubes and compact fluorescent lights.
- Electronic devices.
- Universal wastes, including any mercury-containing devices or novelty.
- Medical and biohazardous wastes, including pharmaceuticals [HSC § 117645(g)].
- Vitamins and supplements that exhibit characteristics of toxicity (e.g., zinc, selenium, etc.)
- Radioactive materials or isotopes [HSC § 114960].
- Any other waste prohibited by the solid waste service firm or the land disposal site it uses.
THE FOLLOWING REQUIREMENTS APPLY TO HAZARDOUS WASTE ACCUMULATION AND STORAGE AREAS:

4.1 Regulatory Framework for On-Site Management of Hazardous Wastes
4.2 Initial Point of Generation Requirements
4.3 Storage Time Limits as a Permit Exemption
4.4 Extended Storage Time or Practical Waste Management Under the Satellite Rule
4.5 Summary of Requirements for Storage Areas
4.6 Containment Requirements for Hazardous Wastes Packaged in Containers
4.7 Containment Requirements for Hazardous Wastes in Tanks
4.8 Storage Area Security and Signs
4.9 Additional Mandatory Storage Area Requirements
4.10 Hazardous Waste Storage Area Inspections
Hazardous waste regulations are organized based on location of hazardous wastes at a typical generator facility and in anticipation of the relative amounts of hazardous wastes likely to be held at each location:

- **Point of Generation Accumulation Area** (can be satellite accumulation if rules at 4.4 are followed) – containerization and labeling requirements.
- **Optional Separate Satellite Accumulation Area** – containerization and labeling requirements. (Also subject to rules at 4.4.)
- **Central Accumulation or Storage Area** (potentially large amount of hazardous waste) – essentially all requirements applicable to a hazardous waste treatment storage and disposal facility (TSDF).

*Note 1: The applicable regulations for storage areas were adopted verbatim from federal regulations designed for the amount of RCRA hazardous wastes a refinery or chemical plant could generate in a 90-day period. They are quite conservative for many California generators of mainly non-RCRA hazardous wastes.

*Note 2: New federal Generator Improvement Regulations use different nomenclature than state regulations. Not in effect in California. (See 1.4)
4. Physical Management Requirements for Hazardous Waste

4.2 Initial Point of Generation Requirements

➢ Generators must assure compliance by employees with the following initial point of generation requirements:

✓ Immediately package any hazardous waste generated in a suitable container and keep wastes segregated so as to not mix incompatible materials.
✓ Keep the container fully closed at all times except to add or remove wastes.
✓ Affix a label marked as illustrated by the following example.

*Note 1:* The accumulation start date is the day when the waste is first put in the container.

*Note 2:* Compliance with these requirements is an essential element of training and compliance.

Links: State Accumulation Regulation, Title 22 CCR Storage time - § 66262.34, Satellite rule - § 66262.34(e)
Mandatory On-Site Label Information

**Liquid OR Solid**

Name & Address of Generator

Mandatory On-Site Label Information and Information for Generator:

- **Waste Description, Point of Generation, PWI #**
- **Month/Day/Year**
- **Enter Date or “Emptied Daily” for a Recurrent Use Container**

**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**
- **City**
- **State**
- **Phone**
- **ZIP**
- **EPA Identification No.**
- **Tracking No.**
- **EPA Waste No.**
- **CA Waste No.**
- **Accumulation**
- **Start Date**

Contents, Composition:

- **Physical State:**
  - Liquid
  - Solid

- **Hazardous Properties:**
  - Flammable
  - Toxic
  - Corrosive
  - Reactivity
  - Other

D.O.T. Proper Shipping Name and UN or NA No. with Prefix:

Handle with Care!

Mark One or More Hazards:

**Note:** Major differences from RCRA regulations, which do not require information beyond hazardous waste/type of waste, hazard word or pictogram and start date.
Typical Compliant Point of Generation Accumulation Container
(Can also be considered satellite accumulation)

Example of “Closed Containers”
4. Physical Management Requirements for Hazardous Waste

4.3 Storage Time Limits as a Permit Exemption

Hazardous wastes can be stored at the point of generation or moved and stored at a central storage unit for a certain period of time from the accumulation start date without any permit requirement, as follows:

✓ 90 days if the generator is a large quantity generator, which means producing 1,000 kgs (2200 pounds or more) in a month of both RCRA and non-RCRA hazardous wastes combined.

✓ 180 days (or 270 days if the hazardous wastes are transported 200 miles or more for treatment/disposal) if the generator is a small quantity generator of less than 1,000 kgs in a month as long as the amount on site does not exceed 6,000 kgs.

*Note:* If acute or extremely hazardous wastes exceed 1 kg in any month, the 90-day limit applies.
These time limits can be extended up to 1 year based on the Satellite Accumulation Rule.

A violation of a storage time limitation is a failure to have a permit offense, which is a Class I violation subject to administrative, civil or criminal enforcement at the discretion of the enforcing agency. In a worst-case scenario, the generator can anticipate serious sanctions, including up to 6-figure penalties, permit fee restitution and facility closure requirements.

Links: State Accumulation Time Regulation 22 CCR § 66262.34
4. Physical Management Requirements for Hazardous Waste

4.4 Extended Storage Time or Practical Waste Management Under the Satellite Rule

➢ The Satellite Accumulation Rule allows the accumulation of a limited quantity of hazardous waste for an extended period, as long as precise rules are meticulously followed:

✔ The volume limitation is 55 gallons of total hazardous waste and 1 quart of acute or extremely hazardous waste at each satellite accumulation area (SAA). After the volume limit is reached, the 90- or 180-day time limit applies after a 3-day grace period used to remark the accumulation start date and move the container or containers to the facility’s established hazardous waste storage area.

✔ However, the total time limit is 1-year total from the date of initial accumulation to when the hazardous waste is transported off-site for treatment or disposal. **Note:** This is a major difference from RCRA regulations that allow an indefinite time to accumulate the 55 gallons.

✔ The accumulation must be in **containers, not tanks.**
4. Physical Management Requirements for Hazardous Waste

4.4 Extended Storage Time or Practical Waste Management Under the Satellite Rule, cont.

✓ The satellite accumulation area must be at or near the point of generation and under the control of the operator who generates the waste. There may be a satellite accumulation container or containers for separate incompatible wastes at each point of generation, if bona fide. Laboratory satellite wastes may be located “as close as practical” to the point of generation [HSC § 25200.3.1].

✓ Satellite accumulation container labels must comply with full California label requirements, except for being able to change the accumulation start date.

Note: There is a narrow exception to the 55-gallon SAA limit at 22 CCR § 66262.34(e)(2)(B) allowing more than one 55-gallon container in exceptional circumstances. Care should be exercised because it only applies to non-RCRA hazardous waste, and allows regulator review of the practice..

Link: State Satellite Rule Regulation 22 CCR § 66262.34(e)
Laboratory Point of Generation Recurrent Use Containers (Emptied Daily)

Laboratory Satellite Accumulation Container (Up to 55 Gallons Total)

Painting Operation Use of Satellite Accumulation (3 Containers, but Less than 55 Gallons)
Optional Recommended Supplemental Satellite Storage Label—
Use With Regular Label without a Start Date Until Full, or Just
Prior to Transportation

Note: Regulators favor a separate dated label for initial satellite accumulation.
Hazardous wastes must be managed in an on-site storage area in a manner providing safety for personnel and protection for the environment. Provisions assuring this level of protection include:

- Container and tank requirements for reducing VOC emissions from hazardous waste storage, if applicable.
- Adequate secondary containment for hazardous wastes packaged in containers. Generator storage is subject to a performance standard.
- Secondary containment for hazardous wastes stored in tanks pursuant to regulatory requirements.
- Storage unit security, signage, and special requirements for ignitable, reactive, and incompatible wastes.
- Storage unit safety equipment and communications.
- Storage area inspections
VOC Emission Controls: Hazardous wastes containing 500 parts per million (ppm) or more of VOCs must be contained and stored in a manner preventing VOC releases to the atmosphere [22 CCR § 66262.34(a)(1)(A)]. For containers, this requires packaging in closed DOT-approved drums, positive-closing devices during storage and other requirements set forth at 22 CCR § 66265.1087. For tanks, technical requirements with respect to design, venting and other aspects of containment are set forth at § 66265.1085.

Links: State Regulation: Title 22: Generator requirements - § 66262.34 (refers to following sections); Tanks - § 66265.190 - .200 and .1085; Containers - § 66265.170 –.177 and .1087 (containers); Security - § 66265.14; Inspections - § 66265.174 (containers) and .195 (tanks)
4. Physical Management Requirements for Hazardous Waste

4.6 Containment Requirements for Hazardous Wastes Packaged in Containers

Points of generation and satellite accumulation areas are not subject to a secondary containment policy given the relatively small volume of wastes handled and frequent surveillance. However, adequate secondary containment is required for storage areas given the environmental or safety concerns due to larger quantities of hazardous waste potentially present. Examples of engineered secondary containment:

- Sufficiently large floor surface.
- Sloped flooring designated to collect spilled material.
- Bermed or curbed area.
- Drainage system collecting and holding, or treating spillage.
- Practical non-engineered methods like pallets and other container protection systems equipped with secondary containment.

Spilled materials and collected water must be removed from secondary containment systems. Outdoor storage areas should be covered to minimize water accumulation and storm water pollution.

Links: Generator requirements at 22 CCR § 66262.34 referencing container requirements at 22 CCR § 66265.170 -.177 and preparedness and prevention at § 66265.30, et seq.
Compliant Hazardous Waste Storage Areas

Hazardous Waste Storage Area – Recurrent Use Container Label
Storage or treatment of hazardous wastes in tank systems usually triggers onerous regulatory requirements, including mandatory secondary containment for tanks and ancillary equipment. There is some relief for small quantity generators not treating hazardous wastes in tank systems. Most tiered-permitted treatment tanks are subject to special rules that went into effect on January 24, 1998, but with some flexibility in design if approved by DTSC or the CUPA. **Note**: these requirements do not currently apply to portable tanks, which are considered to be containers.

A certification by an independent qualified state registered professional engineer (mechanical or civil) of tank structural integrity and secondary containment is required for most hazardous waste storage and treatment tanks, and ancillary equipment on a 5-year frequency. Violation of this requirement has led to significant penalties due to daily fine assessment.

**Links:** Title 22 Hazardous Waste Tank Regulations at 22 CCR § 66265.190 - .200, .1085 and .195 (Inspections)
Tank storage of hazardous waste also triggers stringent operating requirements:

- Full “Hazardous Waste” labeling of the tank. Ancillary equipment (piping) labeling as “Hazardous Waste” is required (not a full container label).
- Recordkeeping of removals of hazardous wastes for off-site shipment on a log or label.
- Daily inspections.
- Release response procedures and DTSC/CUPA notification requirements (if a release cannot be mitigated in 24-hours).
- Separation and property line setback requirements for ignitable, reactive, and incompatible wastes.
- Closure and post-closure planning and implementation.

Links: Hazardous Waste Tank Regulations 22 CCR § 66265.190 - .202 and § 66262.34(f) for labeling
Hazardous wastewater treatment system meeting state tank containment requirements
4. Physical Management Requirements for Hazardous Waste

4.8 Storage Area Security and Signs

➢ Generators must provide sufficient security to prevent unauthorized entry into hazardous waste storage areas. This requirement is part of the general performance standard applicable to generators, and can usually be satisfied by external plant security and warning signs.

➢ Signs are required for permitted facilities at entrances and around hazardous waste storage areas (about every 25 feet).

WARNING!
HAZARDOUS WASTE STORAGE AREA
UNAUTHORIZED PERSONNEL KEEP OUT

➢ Generators should post a similar sign at hazardous waste storage areas as a means of controlling access and meeting the general performance standard.

Links: Preparedness and Prevention, Title 22 CCR §§ 66265.30 -.37, referenced by generator standards at 22 CCR § 66262.34
4. Physical Management Requirements for Hazardous Waste

4.9 Additional Mandatory Storage Area Requirements

➢ Ignitable and reactive hazardous wastes must be protected from sources of ignition, and are subject to a 50-foot property line set back.

➢ Incompatible wastes must be physically separated by a berm, held in separate secondary containers or by sufficient distance to prevent contact in the event of a release.

➢ Minimum aisle space must be provided for containers of hazardous waste to afford inspection and response to leakage. Drums must be stored in orderly rows, not bunches.

➢ An emergency communication system must be available at the hazardous waste storage area to signal an emergency and request assistance.

➢ Safety equipment and supplies must be available for routine waste handling and anticipated emergencies. Included at a minimum are gloves and protection clothing, goggles and/or face shields, spill control absorbent and clean up equipment, and an emergency eyewash/shower, if appropriate for the wastes stored.

Links: Preparedness and Prevention—22 CCR §§ 66265.30 - .37, referenced by generator standards at 22 CCR § 66262.34. A list of incompatible wastes is at 22 CCR Appendix V.
4. Physical Management Requirements for Hazardous Waste

4.10 Hazardous Waste Storage Area Inspections

- Hazardous waste storage areas must be inspected on a periodic scheduled basis and the inspection documented. A checklist and inspection log are the most convenient methods of documenting inspections.

- Tank storage areas must be inspected daily.

- Container storage areas must be inspected weekly. Satellite accumulation areas are exempt from the inspection requirement.
4. Physical Management Requirements for Hazardous Waste
4.10 Hazardous Waste Storage Area Inspections, cont.

- **Inspection should address the following items:**
  - ✓ Condition of containers (leaks or deterioration caused by corrosion or mechanical damage), or condition of tank systems for leaks and proper operating conditions.
  - ✓ Secondary containment status: free from defects, debris, waste or water accumulation, evidence of leakage into or out of containment.
  - ✓ Appropriate aisle space between containers.
  - ✓ Proper container labeling, including accumulation start date and compliance with storage time limits.
  - ✓ Functioning of the alarm/communication system.
  - ✓ Adequate supply of absorbent material and other cleanup supplies.
  - ✓ Safety equipment—personal protective equipment and safety showers/eyewashes—present and in proper working order.

- **The inspection, deficiencies, and corrective actions taken in response must be documented.**

_Links:_ Inspection requirements are located with container rules 22 CCR § 66265.174, and tank rules § 66265.195
# MODEL INSPECTION LOG
(Weekly for Containers/Daily for Tanks)

<table>
<thead>
<tr>
<th>Facility:</th>
<th>Inclusive Dates:</th>
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<tr>
<td>Date</td>
<td>Inspector’s Name</td>
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Areas Inspected

<table>
<thead>
<tr>
<th>General</th>
<th>Containers</th>
<th>Tanks</th>
</tr>
</thead>
</table>

Deficiencies Noted (✓) and Additional Comments on Reverse

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MODEL DEFICIENCY REPORT

Facility: ___________________________  Inclusive Dates: ___________________________

Note: Inspector, if a deficiency is noted, please complete the following information, make a copy, and report to the Facility Manager. You must verify that corrective actions have been taken.

<table>
<thead>
<tr>
<th>Date of Report</th>
<th>Description of Deficiencies</th>
<th>Corrective Action Needed</th>
<th>Correction Verified (Date)</th>
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5. Universal Waste Management

THE FOLLOWING TOPICS ARE INCLUDED IN THIS SECTION:

5.1 Wastes Regulated as Universal Wastes
5.2 Requirements for On-Site Management of Universal Wastes
5.3 Moving Universal Wastes for Off-Site Management
5. Universal Wastes

5.1 Wastes Regulated as Universal Wastes

The following are the wastes currently subject to the California consolidated universal waste rule as a condition of exclusion from hazardous waste regulation per 22 CCR § 66273:

- Fluorescent tubes, high intensity discharge, neon, mercury vapor, sodium vapor, and metal-halide lamps are regulated by this rule (March 6, 2000).*

- Batteries regulated under this rule are rechargeable devices governed by federal universal waste rule (Ni-Cad, sealed lead acid, lithium-ion, mercuric oxide, etc.)* plus alkaline, copper and zinc containing (except zinc electrode batteries) under the California regulation. (March 6, 2000)

- Thermostats containing elemental mercury ampoules. (March 6, 2000)*

- Cathode ray tubes, or CRTs (computer, TV, and other video display tubes),* with the exception of generators of 5 or fewer CRTs in any year, but they must be properly disposed through a reclaimer. (August 3, 2001)

- Electronic devices exhibiting toxicity and contains lead, copper, zinc, etc. at levels exceeding § 66261.24 thresholds. Presumed hazardous waste electronic devices are listed on the state list described at 4.4. (February 3, 2003)

**Note:** Photovoltaic modules will be added as a specific universal waste in 2018, but in the interim are probably hazardous or e-waste currently.
5. Universal Wastes

5.1 Wastes Regulated as Universal Wastes, cont.

✓ Mercury-containing motor vehicle switches, including the vehicles containing such switches. (March 15, 2003)*
✓ Mercury-containing switches (non-automotive) and products containing such switches. (March 15, 2003)*
✓ Dental amalgam waste. (March 15, 2003)
✓ Mercury-containing pressure or vacuum gauges. (March 15, 2003)*
✓ Mercury-added novelties. (March 15, 2003)*
✓ Mercury counterweights and dampers. (March 15, 2003)*
✓ Mercury thermometers. (March 15, 2003)*
✓ Mercury dilators and weighted tubing. (March 15, 2003)*
✓ Mercury-containing rubber flooring. (March 15, 2003)*
✓ Mercury-containing gas flow regulators. (March 15, 2003)*
✓ Waste aerosol cans not completely empty per 22 CCR § 66261.7 (by legislation SB 1158, HSC § 25201.6 on January 1, 2002; by final regulation effective March 15, 2003).

Notes: *RCRA or federally regulated universal wastes
**Universal waste aerosol cans can be processed with a puncturing device subject to CUPA notification and other requirements, and the empty can disposed as refuse [HSC § 25201.16]

Examples of Universal Wastes

- Sealed Lead-Acid Gel Batteries
- Electronic Devices
- Mercury-Containing Gas Meter
- Mercury-Ampoule from Thermostat
- Cathode Ray Tube
- Mercury Switches
- Thermometer
- Lamps
- Aerosol Cans
- Rechargeable & Alkaline Batteries
The state’s universal waste rule established the following requirements as conditions for exemption from hazardous waste regulation of universal wastes. All applicable regulatory requirements must be satisfied, or the person or facility generating the waste will be in violation of the hazardous waste control law.

- Standards for Universal Waste Handlers [§ 66273.30 - .39].
- Standards for Universal Waste Transporters [§ 66273.50 - .57].
- Standards for Destination Facilities [§ 66273.60 - .62].

**Note 1:** The UWR uses the term “handler” instead of generator; with respect to generators of universal wastes the distinction is insignificant.

**Note 2:** All exemptions, including households, terminated on February 8, 2006.

**Note 3:** Effective February 4, 2009, the previous version of UWR were amended to conform to “consolidated UWR,” which eliminated any distinction between small and large handlers, include more specific handling instructions for the more exotic universal wastes, and mandatory annual training.

**Links:** Universal Waste Regulation—22 CCR § 66273
5. Universal Wastes

5.2 Requirements for On-Site Management of Universal Wastes, cont.

Requirements applicable to generators of universal wastes can be summarized as follows:

✓ **Prohibitions**: Disposal, dilution, or treatment are prohibited.

✓ **Notifications**: SQHs (less than 5,000 kgs/year) are not required to notify U.S. EPA or DTSC. LQHs must have an EPA ID number (if RCRA, a federal one; if non-RCRA, a state one), but an existing hazardous waste number is sufficient [§ 66273.32(a) and (b)].

✓ **Receipt of Electronic Devices, Cathode Ray Tubes (CRTs), or CRT Glass** by any universal waste handler requires notification to DTSC for each location receiving such universal wastes. [See registration.]

✓ **Annual Reporting** of electronic devices, CRTs, or CRT glass from an off-site source is required by February 1 each year if more than 220 pounds are received in a year, or the handler generates over 5,000 kgs (11,000 pounds; about 200 CRTs), and treaters/recyclers (collectors and dismantlers). [See forms.]
Annual Report for e-waste Handling and Recycling Activity

- Each location that collected more than 220 lbs of e-waste (electronic devices, CRTs, and CRT glass) during one calendar year must submit this annual report to DTSC by February 1 of the next calendar year.

- Handlers and Generators must fill out “Handler” portions of the Annual Report form. Recyclers must fill out the whole Annual Report form.

Universal Waste Handlers may accept and accumulate e-wastes from offsite sources, remove batteries and ink cartridges from electronic devices (22 CCR Section 66273.71), and remove CRTs from CRT devices (22 CCR Section 66273.72). Handlers may not treat or alter e-wastes in any other way.

Universal Waste Generators cannot accept e-waste from offsite, but must submit this annual report if more than 11,000 lbs of e-wastes were generated in the last calendar year.

Universal Waste Handlers who Treat (Recyclers) must submit an annual report if they treat any electronic devices and/or CRT. This includes any activities such as dismantling electronic devices, removing yokes from CRTs, treating or breaking CRT glass, and/or treating printed circuit boards (22 CCR Sections 66273.72(a) and 66273.73(a) and (b)).

All section numbers are found in Title 22 of the California Code of Regulations (abbreviated 22 CCR).

Section 1: Business information (22 CCR Sections 66273.32(d) and 66273.74(b)) (Handlers and Recyclers)

Reporting Year: ___________________________ Check one: ☐ Handler  ☐ Generator  ☐ Recycler

Facility ID # (Optional. Found in your online reporting account, not CEW ID number): ___________________________

Business name: ___________________________ Telephone number: (____) ___________________________

Mailing address:
City: ___________________________ County: ___________ State: ___________ Zip Code: ___________

Contact person’s name: ___________________________ Contact telephone number: (____) ___________________________

Contact email address (optional): ___________________________ EPA/State ID number: ___________________________

Physical address (if different from mailing address): ___________________________
City: ___________________________ County: ___________ State: ___________ Zip Code: ___________

For recyclers only (22 CCR section 66273.74(b)):

Facility Description (warehouse, parking lot, shed): ___________________________ Number of days operated this year: ___________

Name and Mailing address of the owner/operator: ____________________________________________ ___________________________
City: ___________________________ State: ___________ Zip Code: ___________

Registration and annual reporting is required if electronic universal wastes are consolidated from off-site sources.
Management and Response to Release: The handler must comply with management requirements applicable to the different types of universal wastes. Releases must be recontainerized or separately managed as hazardous waste [§ 66273.33 and .37].

- Batteries must be contained in a manner preventing releases from both intact or damaged batteries (e.g., structurally sound and closeable containers). The generator can conduct certain activities, like sorting by type or mixing types, discharging, disassembling, removing from products or assemblies and removing electrolyte. 
  *Note*: Lithium and other batteries may need terminals insulated. (See supplier and shipper warnings).

- Thermostats with mercury ampoules must be containerized in a compatible, sound, closed container. Ampoules may be removed using a containment tray or pan in an area with good ventilation by properly trained employees.
5. Universal Wastes

5.2 Requirements for On-Site Management of Universal Wastes, cont.

- Lamps must be contained in “containers or packages that are structurally sound, adequate to prevent breakage, and compatible with the contents of the lamps. Such containers and packages shall remain closed and shall lack evidence of leakage, spillage or damage that could cause leakage under reasonably foreseeable condition. . . Any lamp that is broken or shows evidence of breakage, leakage, or damage must be containerized compatible with the contents.” Note: Fluorescent tubes may be crushed, but the generator must obtain a tiered permit for hazardous waste treatment and use a DTSC certified crushing device according to its instructions.

- Cathode ray tubes must be protected in structurally sound containers or other means of packaging, including shrink-wrapping. Disassembly of devices with CRTs is permitted.

- Reasonably comparable containment of other universal wastes is required [§ 66273.33].
Example of Compliant Universal Waste Battery Management

Note: Segregation and Labeling
Examples of Non-Compliant Universal Waste Lamp Storage Versus Compliant Practice (below, right)

Link: New Pig

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5. Universal Wastes

5.2 Requirements for On-Site Management of Universal Wastes, cont.

✓ Labeling/Marking: of each device container is required as follows:
  • Batteries: “Universal Waste - Battery(ies)”
  • Thermostats: “Universal Waste - Mercury-Containing Equipment”
  • Lamps: “Universal Waste - Lamps”
  • CRTs: “Universal Waste - CRTs”
  • Electronic Devices: “Universal Waste - Electronic Devices”

✓ Time Limits: for accumulation and storage of universal wastes is limited to 1 year. The provision for storage for over 1 year to facilitate recycling was removed from the regulation. Documentation of compliance with the time limit can be by:
  • Marking the label or container with the date of first accumulation.
  • Marking each item contained.
  • Posting or documenting the date of receipt in the storage area.
  • Maintaining an inventory system.
  • Any other effective method.

Note: The consolidated UWR tightened up labeling requirements.

Links: Labeling/markning: § 66273.34; time limits: § 66273.35
5. Universal Wastes

5.2 Requirements for On-Site Management of Universal Wastes, cont.

Example of a commercial Universal Waste label – Modified format for use in California

UNIVERSAL WASTE

FEDERAL AND STATE LAW PROHIBITS IMPROPER DISPOSAL

THE FOLLOWING MATERIALS ARE REGULATED AS A UNIVERSAL WASTE IN ACCORDANCE WITH 40 CFR § 273/22 CCR § 66273

☐ UNIVERSAL WASTE – BATTERY(IES)
☐ UNIVERSAL WASTE – MERCURY THERMOSTATS
☐ UNIVERSAL WASTE – MERCURY-CONTAINING EQUIPMENT
☐ UNIVERSAL WASTE – AEROSOL CANS (PART FILLED)
☐ UNIVERSAL WASTE – LAMP(S)
☐ UNIVERSAL WASTE – ELECTRONIC DEVICE(S)
☐ UNIVERSAL WASTE – CRT(S)

ACCUMULATION START DATE: ______________________

__________________________

__________________________

D.O.T. PROPER SHIPPING NAME AND UN OR NA NO. WITH PREFIX (REQUIRED DURING TRANSPORT, WHEN MATERIAL IS ALSO REGULATED BY 49 CFR PART 172.180)

HANDLE WITH CARE!
Employee training: must be provided initially and annually to employees who manage universal wastes, including proper handling in compliance with the regulation and emergency procedures, proper disposition, and applicable regulatory requirements. This training is comparable to point-of-generation training for hazardous waste handlers and must be documented (sign-in sheet is acceptable). Generating employees are exempt, but it is in the employer’s best interest that they clearly understand universal wastes cannot be disposed and the employer’s management procedures.
5. Universal Wastes

5.3 Moving Universal Wastes for Off-Site Management

✓ **Off-Site Shipment:** may be by self-transportation or universal waste transporter, which is not required to be a registered hazardous waste transporter; a manifest is not required. During self-transportation, a handler must meet transporter requirements (no disposal and delivery to a universal waste handler or a permitted destination facility.) **Note:** If DOT hazardous materials transportation requirements are applicable (e.g., liquid mercury-containing wastes), shipping must be in compliance with 49 CFR §§ 172, *et seq.* provisions for a hazardous material shipment, not hazardous waste. In such cases, hazardous waste manifests and labels are not required, and the shipping name cannot be listed as “hazardous waste” or “waste”.

✓ **Tracking Shipments:** (recordkeeping) with receipts is required for all shipments or off-site deliveries, and maintained for at least 3 years.

✓ **Cost-Effective Management:** given the flexibility provided in the Universal Waste Regulation, handlers should take advantage of every opportunity to establish a cost-effective universal waste management system by using universal waste service firms and self-transportation, if appropriate.

---

**Links:** Training: § 66273.36; off-site shipments: § 66273.38; tracking: § 66273.39

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eRecycle: Managing Unwanted Electronic Devices

Unwanted electronic devices should be reused or recycled. Computers, monitors, televisions and other electronic equipment should NOT be disposed of with regular garbage; in fact, this is illegal in California. Functioning electronics can be sold or donated thereby prolonging their useful life. Nonfunctioning electronics that cannot be repaired should be recycled by an organization qualified to do so.

The search feature below enables you to find organizations that recover unwanted electronics. The organizations listed in this directory are participants in the Covered Electronic Waste Recovery and Recycling Program established by California’s Electronic Waste Recycling Act of 2003. You should contact any of the listed organizations to determine the details of their services, hours, and any potential charges before loading up your vehicle.

Other useful Information

- Household hazardous waste programs sponsored by local governments
- Guidance on battery and fluorescent tube recycling.
- Laws and policies affecting e-waste management.
- An internet search with your preferred search engine will likely return a wealth of information about reuse and recycling opportunities.

Important Reminder: Many electronic products (computers, cell phones, PDAs, etc) are used to store personal information. Before donating or recycling your equipment, remember to remove all sensitive and personal information from its memory. Note that simply using your keyboard or mouse to delete files does not necessarily completely remove the information from your device’s memory. Your local software store can provide you with the necessary drive cleaning software appropriate for your system.

DISCLAIMER: The California Department of Resources Recycling and Recovery (CalRecycle) is dedicated to providing timely and accurate information to its constituents so that solid wastes can be managed in accordance with all applicable laws and policies. Due to the rapidly evolving nature of laws and policies pertaining to the management of electronic product discards, CalRecycle cannot guarantee that organizations listed as resources within this website are in full compliance with applicable rules at all times. CalRecycle conducts ongoing efforts to determine the scope of these organizations’ activities; however these may change without CalRecycle’s knowledge. The inclusion or exclusion of an organization from this list does not constitute an endorsement of that organization’s regulatory status or environmental performance. For additional information, please also refer to electronic waste management standards administered by the Department of Toxic Substances Control.
6. Administrative Requirements for Hazardous Waste Generators, Including Permitting to Treat Hazardous Waste

THE HAZARDOUS WASTE REGULATIONS IMPOSE A NUMBER OF ADMINISTRATIVE REQUIREMENTS ON GENERATORS OF HAZARDOUS WASTE:

6.1 Recordkeeping of the Types and Amounts of Hazardous Wastes Generated

6.2 Obtaining and Maintaining a U.S. EPA Identification Number

6.3 Submission of Applicable CUPA Unified Program Forms Relevant to Hazardous Waste Management

6.4 LQG-Only Reporting: Biennial Report and SB 14 Hazardous Waste Source Reduction Plan

6.5 Emergency Preparedness and Contingency Plan

6.6 Training Requirements for Hazardous Waste Handlers

6.7 Permit-Required On-Site Treatment of Hazardous Waste

Links: Title 22 CCR—Emergency Plan - § 66265.30 - 37; Contingency Plan - § 66265.50 - 56; Employee Training - § 66265.16; Identification Number - § 66262.12; Biennial Generator Report - § 66262.41; On-Site Treatment Permitting – HSC §§ 25200 et seq., 22 CCR § 67450
Generators of hazardous waste are required to maintain documentation of the volume and types of hazardous waste generated to determine applicability of certain reporting requirements and to have information necessary to prepare such reports.

The regulatory reporting requirements based on the type and volume of hazardous waste generation are:

- Determination of whether the generator is a LQG, SQG, or CESQG under both federal and state regulations.
- Obtaining proper U.S. EPA ID Number.
- Certification of a hazardous waste minimization program on each hazardous waste manifest.
- Biennial generator report.
- Hazardous waste source reduction plan.
- Hazardous waste fees.
- Qualification for government hazardous waste collection programs (if available in the community).
A log of waste generation maintained on a monthly basis is the only method of meeting this requirement. Keeping track of shipments on a quarterly or semi-annual basis is an inaccurate means of determining monthly and, in some cases, annual generation.

**Note 1:** The U.S. EPA’s application for an EPA ID Number requires disclosure of LQG or SQG status, but the state ID Number form does not. To an increasing extent, CUPAs are requiring submission of a form based on the LA County CUPA’s Hazardous Waste Generator Form to audit such determinations.

**Note 2:** Compliance with new state law and regulation on counting all hazardous wastes toward generator size will require more diligent determination of a facility’s actual total hazardous waste generation by including consolidated “milk-run” manifested wastes, treated hazardous wastes; and possibly treated wastewaters that exhibit hazardous waste characteristics.

**Links:** Accumulation Time – 22 CCR § 66262.34; Counting all Wastes Toward Generator Size § 66262.34(i); Senate Bill 612, HSC § 25158.1
# 6. Administrative Requirements

## 6.1 Recordkeeping of the Types and Amounts of HazWaste Generated, cont.

<table>
<thead>
<tr>
<th>MONTH</th>
<th>TOTAL VOLUME OF HW GENERATED (in kgs)</th>
<th>RCRA</th>
<th>NON-RCRA (INCLUDING USED OIL)</th>
<th>RCRA ACUTE HAZARDOUS WASTE*</th>
<th>CALIFORNIA EXTREMELY HAZARDOUS WASTE*</th>
<th>SPILL CLEAN-UP MATERIAL CONTAMINATED WITH RCRA ACUTE HAZARDOUS WASTE*</th>
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*Probably not applicable to most generators
U. S. EPA takes action against metal finishing company to protect community, environment from improperly managed hazardous waste / Alloy Processing fined $150,000 for violations at its Compton facility

Release date: 03/30/2009

Contact Information: Francisco Arcaute, (213) 244-1815, cell (213) 798-1404, arcaute.francisco@epa.gov

(03/30/09) LOS ANGELES - The U. S. Environmental Protection Agency today fined Alloy Processing, a metal finishing company located in Compton, Calif., $150,000 for failing to comply with federal hazardous waste management regulations.

The EPA inspected the Alloy Processing facility in Compton in March 2008, and found that the company failed to properly classify and manage hazardous wastes generated by the company, as well as other hazardous waste management violations, including:

* Failure to submit biennial reports;
* Failure to obtain an EPA identification number;
* Failure to perform waste determinations;
* Storage of hazardous waste without a permit;
* Failure to develop and implement a personnel training program.

"Strict enforcement of hazardous waste regulations not only protects the health and environment of a local community, it also helps ensuring a level playing field for all businesses, regardless of their size" said Jeff Scott, the EPA's Waste Management Division director for the Pacific Southwest Region. "This agency will see that Alloy Processing, as well as any other delinquent businesses, comply with all hazardous waste regulations or face costly fines and legal action."

Firms that handle hazardous waste must properly handle and store waste to prevent spills and safeguard worker health. The EPA administers programs under the Resource Conservation and Recovery Act, which provides for safe management of solid and hazardous waste.

For more information on the Resource Conservation and Recovery Act program, please visit: http://www.epa.gov/compliance/basics/cleanup.html#rora

###
6. Administrative Requirements

6.2 Obtaining and Maintaining an EPA ID Number

➢ A U.S. EPA ID Number is a unique 3-letter, 9-digit number assigned to a facility generating hazardous waste.

➢ Any facility generating any hazardous waste in California is required to obtain an EPA ID Number.

➢ A generator facility is a discrete geographic location requiring 1 and only 1 EPA ID Number. EPA ID Numbers can be requested as a(n):
  ✓ Permanent number.
  ✓ Provisional for 1-time non-emergency situations, valid for 90 days.
  ✓ Emergency for 1-time cleanup operations for government agencies only.

➢ Provisional and emergency numbers are assigned by both agencies online.
6. Administrative Requirements
6.2 Obtaining and Maintaining an EPA ID Number, cont.

➢ Permanent U.S. EPA ID Numbers are assigned by U.S. EPA and DTSC upon the mailing or electronic filing of a “Notification of Regulated Waste Activity” form (U.S. EPA only) or “California Hazardous Waste Permanent ID Number Application” (CA only).

✓ U.S. EPA assigns the number to generators of more than 100 kgs of RCRA hazardous waste (or more than 1 kg of acutely hazardous waste) in any month. These numbers begin with "CAD" or "CAR" for a California facility. Information on facility location, generator status, volume, and types of hazardous wastes generated must be provided and updated if the information changes. LQGs must resubmit this form with their biennial reports.

✓ DTSC assigns the number to generators of non-RCRA hazardous wastes and those generating less than 100 kgs in any month of RCRA waste. These numbers begin with "CAL" for permanent numbers and "CAC" for provisional and emergency numbers.

✓ The state annually updates its EPA ID number data through a fee assessment and verification form, which is an electronic report beginning July 2017. DTSC charges up to $250 per facility to a maximum corporate fee of $5,000. Other fees are assessed by the state Board of Equalization.

Links: 22 CCR § 66262.12 (ID Numbers), Electronic Verification Questionnaire (eVQ) registration at DTSC website
Hazardous Waste ID Numbers

DTSC issues ID numbers to generators, transporters and disposal facilities. This includes EPA ID numbers, and State ID numbers for non-RCRA hazardous waste. Temporary ID numbers are issued to people or businesses who do not typically generate hazardous waste. These ID numbers are valid for 90 days. Permanent ID numbers are issued to people or businesses who routinely generate hazardous waste.

There is no fee to obtain an ID number.

Please note: Processing times for both EPA ID and State ID numbers may take up to 15 working days from the date we verify your application is complete. Failure to provide a complete application may delay the issuance of your ID number.

The hours of our ID number information center have changed. They are:

Open: 10am-12pm M-F
Closed: 12pm-1pm (Lunch)
Open: 1pm-3pm M-F

If you need to reactivate an existing permanent ID number, please click here for guidance.

How do I obtain a hazardous waste ID number?

If you know which type (temporary or permanent) of number you need, click on one of the following buttons. Below these buttons, you will find some additional information on who needs a hazardous waste ID number. If you do not know which category of number you need, read the rest of this web page for more information.

Go to the temporary ID number page
Go to the permanent ID number page

Who needs a hazardous waste ID number?

Anyone who generates, transports, offers for transport, treats, stores, or disposes of hazardous waste (all are collectively called “handlers”) generally must have an ID number, which is used to identify the hazardous waste handler, and to track the hazardous waste from the point of origin to its final disposal.

California Department of Toxic Substances Control
Attn: RCRA Notifications
P.O. Box 808 Sacramento, CA 95812-0806

To inactivate a permanent EPA ID number:

To inactivate, cancel, or return an EPA ID number, you must first be an approved generator, transporter, or transporter-disposer of hazardous waste. You must then complete the following steps:

1. Fill out and submit the “Certificate of Inactivation” form online. If you do not have access to the internet, you may request a paper copy of the form by calling 1-800-850-1203.
2. If you are returning the EPA ID number, complete the “Certificate of Return” form online. If you do not have access to the internet, you may request a paper copy of the form by calling 1-800-850-1203.
3. Send the completed forms to the California Department of Toxic Substances Control, Attn: RCRA Notifications, P.O. Box 808, Sacramento, CA 95812-0806.

Permanent hazardous waste ID numbers are issued to people or businesses who handle RCRA hazardous waste. If you own or operate a facility that handles RCRA hazardous waste, you may need to obtain an EPA ID number. To obtain an EPA ID number, you must fill out an EPA Form 7000-12. Photocopies are not accepted. Please mail the Form 7000-12 to:

California Department of Toxic Substances Control
Attn: EPA ID Numbers
P.O. Box 808 Sacramento, CA 95812.
**NOTE**
Updated form due to Hazardous Waste Generator Improvements Rule in October 2016.
10. Type of Regulated Waste Activity (at your site)
Mark "Yes" or "No" for all current activities (as of the date submitting the form): complete any additional boxes as instructed.

A. Hazardous Waste Activities

- Generator of Hazardous Waste—If "Yes", mark only one of the following—a, b, c
  - a. LG - Generates, in any calendar month (includes quantities imported by importer site) 1,000 kg/mo (2,200 lb/mo) or more of non-acid hazardous waste; or
    - Generates, in any calendar month or accumulates at any time, more than 1 kg/mo (2.2 lb/mo) of acute hazardous waste; or
  - b. SQG - Generates, in any calendar month or accumulates at any time, more than 100 kg/mo (220 lb/mo) of acute hazardous spill cleanup material.
  - c. VSGQ - Less than or equal to 100 kg/mo (220 lb/mo) of non-acid hazardous waste.

If "Yes" above, indicate other generator activities in 2 and 3, as applicable.

- Short-Term Generator (generates from a short-term or one-time event and not from on-going processes). If "Yes", provide an explanation in the Comments section.

- Mixed Waste (hazardous and radioactive) Generator

- Generator, Storer or Disposer of Hazardous Waste—Note: A hazardous waste Part B permit is required for these activities.

- Recieves Hazardous Waste from Off-site

- Recycler of Hazardous Waste
  - a. Recycler who stores prior to recycling
  - b. Recycler who does not store prior to recycling

- Exempt Boiler and/or Industrial Furnace—If "Yes", mark all that apply.
  - a. Small Quantity On-site Burner Exemption
  - b. Smelting, Melting, and Refining Furnace Exemption

B. Waste Codes for Federally Regulated Hazardous Wastes. Please list the waste codes of the Federal hazardous wastes handled at your site. List them in the order they are presented in the regulations (e.g. D001, D003, F007, U112). Use an additional page if more spaces are needed.

C. Waste Codes for State Regulated (non-Federal) Hazardous Wastes. Please list the waste codes of the State hazardous wastes handled at your site. List them in the order they are presented in the regulations. Use an additional page if more spaces are needed.
12. Eligible Academic Entities with Laboratories—Notification for opting into or withdrawing from managing laboratory hazardous wastes pursuant to 40 CFR 262 Subpart K.

- Y N
  1. College or University
  2. Teaching Hospital that is owned by or has a formal written affiliation with a college or university
  3. Non-profit Institute that is owned by or has a formal written affiliation with a college or university

13. Episodic Generation

- Y N
  Are you an NGO or VSOG generating hazardous waste from a planned or unplanned episodic event, lasting no more than 60 days, that moves you to a higher generator category? If “Yes”, you must fill out the Addendum for Episodic Generator.

14. LOG Consolidation of VSOG Hazardous Waste

- Y N
  Are you a LOG notifying of consolidating VSOG Hazardous Waste under the control of the same person pursuant to 40 CFR 262.17(f)? If “Yes”, you must fill out the Addendum for LOG Consolidation of VSOGs hazardous waste.

15. Notification of LOG Site Closure for a Central Accumulation Area (CAA) (optional) OR Entire Facility (required)

- Y N
  A. Central Accumulation Area (CAA) Entire Facility
  B. Expected closure date: ____________ mm/dd/yyyy
  C. Requesting new closure date: ____________ mm/dd/yyyy
  D. Date closed: ____________ mm/dd/yyyy
  1. In compliance with the closure performance standards 40 CFR 262.17(a)(8)
  2. Not in compliance with the closure performance standards 40 CFR 262.17(a)(8)


- Y N
  A. You are notifying under 40 CFR 260.42 that you will begin managing, are managing, or will stop managing hazardous secondary material under 40 CFR 260.30, 40 CFR 261.4(a)(23), (24), or (27) if “Yes”, you must fill out the Addendum to the Site Identification Form for Managing Hazardous Secondary Material.
  B. You are notifying under 40 CFR 260.43(a)(4)(ii) that the product of your recycling process has levels of hazardous constituents that are not comparable to or unable to be compared to a legitimate product or intermediate but that the recycling is still legitimate? If “Yes”, you may provide explanation in Comments section. You must also document that your recycling is still legitimate and maintain that documentation on site.

17. Electronic Manifest Broker

- Y N
  Are you notifying as a person, as defined in 40 CFR 260.10, electing to use the EPA electronic manifest system to obtain, complete, and transmit an electronic manifest under a contractual relationship with a hazardous waste generator?
# ADDENDUM TO THE SITE IDENTIFICATION FORM:
## NOTIFICATION OF HAZARDOUS SECONDARY MATERIAL ACTIVITY

**ONLY fill this Form IF:**
- You are located in a state that allows you to manage excluded hazardous secondary material (HSM) under 40 CFR 261.2(a)(9)(1)(iv) or (v) or state equivalent; see https://www.epa.gov/exswaste/hazard/6sw/stateof.htm for a list of eligible states; AND
- You are or will be managing excluded HSM in compliance with 40 CFR 265.30; 261.4(a)(23), (24), or (27) (or state equivalent) or have stopped managing excluded HSM in compliance with the exclusion(s) and do not expect to manage any amounts of excluded HSM under the exclusion(s) for at least one year. Do not include any information regarding your hazardous waste activities in this section. Note: If your facility was granted a solid waste variance under 40 CFR 265.30 prior to July 13, 2015, your management of HSM under 40 CFR 265.30 is grandfathered under the previous regulations and you are not required to notify for the HSM management activity excluded under 40 CFR 265.30.

1. **Reason for Notification** (Include dates where requested):
   - Facility was managing excluded HSM as of __________ (mm/dd/yyyy).
   - Facility is still managing excluded HSM as of __________ (mm/dd/yyyy) and is notifying as required.

2. **Description of Excluded HSM Activity** Please list the appropriate codes (see Code List section of the instructions) and quantities, in short tons, to describe your excluded HSM activity. ONLY do not include any information regarding your hazardous waste. Include additional pages if space is needed.

<table>
<thead>
<tr>
<th>Facility Code</th>
<th>Waste Code(s) for HSM</th>
<th>C. Estimate Short Tons of excluded HSM to be managed annually</th>
<th>D. Actual Short Tons of excluded HSM that was managed during the most recent odd-numbered year</th>
<th>E. Land-based Unit Code</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

**ADDENDUM TO THE SITE IDENTIFICATION FORM:**
## EPISODIC GENERATOR

**ONLY fill this Form IF:**
- You are an SQG or SQG generating hazardous waste from a planned or unplanned episodic event, lasting no more than 60 days, that moves the generator to a higher generator category pursuant to 40 CFR 262.201. Note: Only one planned and one unplanned episodic event are allowed within one year; otherwise, you must follow the requirements of the higher generator category. Use additional pages if more space is needed.

### Episodic Event
1. Planned
   - Excess chemical inventory removal
   - Tank cleanouts
   - Short-term construction or demolition
   - Equipment maintenance during plant shutdowns
   - Other: __________

2. Unplanned
   - Accidental spills
   - Production process upsets
   - Product recalls
   - "Acts of nature" (Tornado, hurricane, flood, etc.)
   - Other: __________

5. **Emergency Contact Phone**

6. **Emergency Contact Name**

5. **Beginning Date** (mm/dd/yyyy)

6. **End Date** (mm/dd/yyyy)

### Waste 1
1. **Waste Description**

2. Federal and/or State Hazardous Waste Codes

3. **Estimated Quantity (in pounds)**

### Waste 2
1. **Waste Description**

2. Federal and/or State Hazardous Waste Codes

3. **Estimated Quantity (in pounds)**

### Waste 3
1. **Waste Description**

2. Federal and/or State Hazardous Waste Codes

3. **Estimated Quantity (in pounds)**

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ADDENDUM TO THE SITE IDENTIFICATION FORM:
LOG CONSOLIDATION OF VSQG HAZARDOUS WASTE

ONLY fill out this form if:
- You are an LQS receiving hazardous waste from VSQGs under the control of the same person. Use additional pages if more space is needed.

### VSQG 1
1. EPA ID Number (If assigned)  
2. Name  
3. Street Address  
4. City, Town, or Village  
5. State  
6. Zip Code  
7. Contact Phone Number  
8. Contact Name  
9. Email

### VSQG 2
1. EPA ID Number (If assigned)  
2. Name  
3. Street Address  
4. City, Town, or Village  
5. State  
6. Zip Code  
7. Contact Phone Number  
8. Contact Name  
9. Email

### VSQG 3
1. EPA ID Number (If assigned)  
2. Name  
3. Street Address  
4. City, Town, or Village  
5. State  
6. Zip Code  
7. Contact Phone Number  
8. Contact Name  
9. Email
PERMANENT STATE ID NUMBER APPLICATION

Please type or neatly print in ink. Please review the line-by-line instructions carefully.

To check on the status of your request, go to http://www.dtsc.ca.gov and click on Reports.

NEW NUMBER REQUESTS (See instructions.)

☐ 1. I am applying for a new permanent California ID number as a hazardous waste: □ Generator □ Transporter

Reason for new number: A. □ Never had a number B. □ Business moved C. □ Legal owner of business changed
If your business generates greater than 100 kg of RCRA hazardous waste other than those hazardous waste listed in 40 CFR 261.5
subparts (c) and (d), per month, complete Form 8700-12 for an EPA (federal) ID number.

CHANGES TO STATUS OR INFORMATION FOR AN EXISTING STATE ID NUMBER (See instructions.)

For existing ID number: C A

☐ 2. I am updating the mailing address and/or contact information only.

☐ 3. I am inactivating this ID Number.

☐ 4. I am reactivating this ID Number. Reason (please select one): A. □ Verification Questionnaire B. □ Other

☐ 5. I am changing the business name only, no ownership change.

6. Site/Facility/Business Name (Include DBA):

7. Site Location:

   Street

   City ___________________________ State ______ Zip __________ County

8. (a) Federal Employer ID Number ____________________________
   (b) Board of Equalization Fee Account Number ____________________________
   (b) is only required from generators of greater than 5 tons per calendar year.

9. Mailing Address:

   Street

   City ___________________________ State ______ Zip __________

10. Site Contact Person:

    First Name ___________________________ Last Name ___________________________

    Contact Person Address:

    Street

    City ___________________________ State ______ Zip __________

    Contact Person Phone Number: ___________ Phone Number: ___________ Fax Number: ___________

    Area Code: Area Code: Area Code:

    Contact Person Business Email Address: ___________________________

    Preferred Primary Communication: □ Mail □ Email

11. Legal Business Owner (not property owner):

    Name ___________________________

    Owner Address:

    Street

    City ___________________________ State ______ Zip __________

    Owner Phone Number: ___________ Phone Number: ___________ Fax Number: ___________

    Area Code: Area Code: Area Code:

12. Standard Industrial Classification (SIC) Code for the Site: ______ ______ ______ (4-Digit Number) (See instructions.)

13. Certification: I certify under penalty of law that the information on this document was prepared to the best of my knowledge and
belief to be, true, accurate and complete.

SIGNATURE ___________________________ DATE ___________

NAME (print) ___________________________ TITLE ___________________________ PHONE ___________________________

DTSC Form 1358 (01/17)

Link: Application Form
6. Administrative Requirements

6.3 Submission of Applicable CUPA Unified Program Forms

### Hazardous Material Inventory: Company X

**Business Activities**

<table>
<thead>
<tr>
<th>California Environmental Reporting System (CERS)</th>
<th>Business Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site Identification: Company X</td>
<td></td>
</tr>
<tr>
<td>SACRAMENTO, CA 95814</td>
<td></td>
</tr>
<tr>
<td><strong>Site Name:</strong> Sacramento</td>
<td></td>
</tr>
</tbody>
</table>

**Submitter Status:**
This was a Draft submittal as of 10/24/2016; Last updated by James T. Dufour on 6/15/2016 10:35 AM.

**Hazardous Materials:**
Does your facility have on site (for any purpose) at any one time, hazardous materials at or above 55 gallons for liquids, 500 pounds for solids, or 100 cubic feet for compressed gases (include liquids in ASTs and USTs)? or is regulated under more restrictive inventory local reporting requirements (shown below if present), or the applicable federal threshold quantity for an extremely hazardous substance specified in 40 CFR Part 355, Appendix A or B, or handle radiological materials in quantities for which an emergency plan is required pursuant to 10 CFR Parts 33, 40 or 70?

<table>
<thead>
<tr>
<th>Hazardous Waste</th>
<th>Yes/no</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>In your facility a Hazardous Waste Generator?</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Is your facility's treatment subject to financial assurance requirements (For Permit by Rule and Conditional Authorization)?</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Is your facility's consolidated hazardous waste generated at a remote site?</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Does your facility need to report the closure/removal of a tank that was classified as hazardous waste and cleaned-on-site?</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Does your facility generate in any single calendar month 1,900 kilograms (kg) (2,200 pounds) or more of federal RCRA hazardous waste, or generate in any single calendar month, or accumulate at any time, 1 kg (2.2 pounds) of RCRA acute hazardous waste, or generate or accumulate at any time more than 100 kg (220 pounds) of spill cleanup materials contaminated with RCRA acute hazardous waste?</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Is your facility a Household Hazardous Waste (HHW) Collection site?</td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>

**Excluded and/or Exempted Materials:**
Does your facility recycle more than 100 kg/month of excluded or exempted recyclable materials (per HSC 25143.2)?

<table>
<thead>
<tr>
<th>Additional Information</th>
<th>Yes/no</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>No additional comments provided.</td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>

[Image of California Environmental Reporting System (CERS) website interface]
A Biennial Generator Report is applicable to a RCRA LQG if the generator exceeds the following criteria in an odd-numbered year:

- Generated 1,000 kgs (2,200 pounds) or more of RCRA (federally defined) hazardous waste in any single month; or
- Generated in any single month, or accumulated at any time, 1 kg (2.2 pounds) of RCRA acute hazardous waste; or
- Generated or accumulated at any time more than 100 kgs (220 pounds) of spill clean up material contaminated with RCRA acute hazardous waste.

**Note:** In the past, the state has required non-RCRA hazardous wastes to be included, but eliminated by regulation from 1995 reports and extended by DTSC policy and reporting instructions (no regulatory change).

A Hazardous Waste Source Reduction Plan is required by Senate Bill 14 and DTSC Title 22 regulation if any generator produces more than 12,000 kgs of routinely generated hazardous waste (RCRA or Non-RCRA) in any year, and/or 12 kgs of an extremely hazardous waste.

**Links:** Biennial Reports: 22 CCR § 66262.41(b); HWSRP: 22 CCR §§ 67100, et seq.
Biennial reporting forms include waste generation and management (Form GM), RCRA Subtitle C Site ID form (Updated EPA ID Number Application Form), and specialized forms for certain on-site recycling activities, and receipt from off-site recycling.

**NOTE**
The current report is now located with all RCRA Subtitle C Reporting Instructions and Forms, which the U.S. EPA consolidated into a single document.
Note: 1 GM form for each RCRA hazardous waste generated
EPA settles with Bakersfield, Calif., steel company to ensure safe handling of hazardous waste

Release Date: 10/28/2014
Contact Information: Nahal Mogharabi, 213-244-1615, mogharabunahal@epa.gov

LOS ANGELES—The U.S. Environmental Protection Agency fined Kern Steel Fabrication, Inc. $57,100 for improper management of hazardous waste generated at its 627 Williams Street facility in Bakersfield, Calif.

During a 2012 investigation, EPA found that the facility failed to properly label about 30 of its containers holding hazardous wastes such as waste paint, fluorescent light lamps, used oil and batteries. EPA also found that many of the containers were not properly closed. Proper containment of hazardous waste is required to minimize the possibility of a fire or sudden release of hazardous materials.

The facility also failed to characterize some of the waste generated onsite as hazardous or not hazardous and did not have an adequate contingency plan designed to protect human health or the environment in the event of any fires, explosions or any unplanned release of hazards into the environment.

Finally, EPA found that the facility did not submit a timely Biennial Report for 2011 and 2013. These reports are required for facilities that generate a minimum of 2,200 lbs of hazardous waste per month.

The facility, located in a commercial-industrial area of Bakersfield, about three blocks from residential neighborhoods, is a structural steel fabricator that constructs aircraft ground support maintenance platforms, work stands, and docking stations, among other products.

Today’s settlement is part of the EPA Region 9’s efforts to work together with our federal, state, and local partners to reduce pollution from facilities that manage, store, or handle large volumes of hazardous waste. The Agency’s goal is to reduce the risk to human health and the environment for the four million residents living in the San Joaquin Valley by ensuring wastes from these types of facilities are properly managed.

The Resource Conservation and Recovery Act (RCRA) authorizes EPA to oversee the generation, transportation, treatment, storage, and disposal of hazardous waste. Under RCRA, hazardous waste must be stored, handled, and disposed of using measures that safeguard public health and the environment.

For more information on the Resource Conservation and Recovery Act, please visit: http://www2.epa.gov/enforcement/waste-chemical-and-cleanup-enforcement/waste
Hazardous wastes subject to HWSR are any hazardous wastes, including wastes containerized and shipped off-site for management and any waste water generated and/or treated on-site, except:

- Non-routine activities (demolitions, asbestos removals and non-recurring maintenance activities).
- Motor vehicle fluids and filters.
- Wastes from laboratory-scale research.
- Hazardous waste streams that are less than 600 kg per year, or 0.6 kg of extremely hazardous waste.
- Hazardous waste streams (non-wastewater) that are less than 5% of the non-wastewater hazardous wastes generated.

**Links:** Source reduction regulations 22 CCR §§ 67100, et seq. DTSC Guidance Manual available from DTSC Pollution Prevention Program at www.dtsc.ca.gov
6. Administrative Requirements


➢ A Hazardous Waste Source Reduction Plan for an over 12,000 kgs generator (or 12 kgs of EHW) includes an initial and quadrennial revised Source Reduction Evaluation and Plan, and a Performance Report and Progress Report Summary due initially on September 1, 1999, or the first year over the threshold, and each 4 years thereafter (regardless of the generator’s 4-year cycle), and the required certifications (2007, 2011, 2015, 2019...).

➢ The Source Reduction Plan includes specific information on the facility and waste stream data:
  ✓ Identification of hazardous wastewater streams and other than wastewater streams that exceed 600 kgs and are over 5% of the on-site generation, and a description of operations generating this waste.
  ✓ Evaluation of the feasibility of available source reduction measures and selection of viable actions and reduction targets.
  ✓ A schedule for implementation and measuring progress.
  ✓ Certification by an independent PE or an employee of the generator responsible for hazardous waste operations.
  ✓ The Quadrennial Progress Report is no longer required to be electronically submitted to DTSC, however, it must be retained on-site and available upon DTSC or CUPA request. The facility’s plan must also be revised.
**SUMMARY PROGRESS REPORT**

**TABLE 1: GENERAL INFORMATION**

<table>
<thead>
<tr>
<th>NO.</th>
<th>NAME OF GENERATOR, FACILITY, OR BUSINESS</th>
<th>EPA ID NO.</th>
<th>SIC CODE</th>
<th>NAICS CODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>(1a) MULTI-SITE? (if this is a multi-site business, please check this box and list the primary EPA ID number under box #2 and add the remaining EPA ID numbers under &quot;COMMENTS&quot; below. Combine data for similar wastes from the multiple sites for the remainder of the Summary Progress Report.)</td>
<td>(1b)</td>
<td>(1c)</td>
<td>(1d)</td>
</tr>
<tr>
<td>2</td>
<td>STREET ADDRESS</td>
<td>CITY</td>
<td>COUNTY</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>MAILING ADDRESS</td>
<td>CITY</td>
<td>ZIP CODE</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>CONTACT NAME</td>
<td>CONTACT PHONE</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note:** 1 Summary Progress Report form for each hazardous waste stream generated.

**TABLE 2: SPECIFIC WASTE STREAM INFORMATION**

<table>
<thead>
<tr>
<th>NO.</th>
<th>NAME OF GENERATOR, FACILITY, OR BUSINESS</th>
<th>EPA ID NO.</th>
<th>HAZARDOUS WASTE STREAM DESCRIPTION</th>
<th>CALIFORNIA WASTE CODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>19</td>
<td>SB 14 reportable total quantities of Hazardous Waste Generated at Site, for baseline and current Reporting Years. Reportable Total Quantities include all hazardous wastes subject to SB 14. Do not include nonroutine generated, exempted, or secondary wastes. Exempted and nonroutine generated wastes are listed in Section 67100.2(c). Title 22, California Code of Regulations. Secondary waste is hazardous waste generated as a result of onsite treatment of HAZARDOUS waste.</td>
<td>(20)</td>
<td>(21)</td>
<td>(22)</td>
</tr>
<tr>
<td>20</td>
<td>IDENTIFICATION</td>
<td>SB 14 Reporting Requirements and Forms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>HAZARDOUS WASTE STREAM DESCRIPTION</td>
<td>SB 14 Reporting Requirements and Forms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>CALIFORNIA WASTE CODE</td>
<td>SB 14 Reporting Requirements and Forms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>THIS HAZARDOUS WASTE IS (please check one):</td>
<td>SB 14 Reporting Requirements and Forms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>Processed onsite in a wastewater pretreatment unit for discharge to POTW or NPDES permit (Category A)</td>
<td>SB 14 Reporting Requirements and Forms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>Other SB 14 hazardous waste (Category B)</td>
<td>SB 14 Reporting Requirements and Forms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>Extremely hazardous waste</td>
<td>SB 14 Reporting Requirements and Forms</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**ACCOMPLISHMENTS**

Your 2010 SB 14 Plan, Performance Report, or Compliance Checklist, has this information.

(24) Provide the following information for this waste stream:

- How much waste was generated in the 2010 Reporting Year? [ ] pounds
- Describe the source reduction measure(s) implemented since 2010 (add page if needed):

**PROJECTIONS**

Your 2014 SB 14 Plan or Compliance Checklist has this information.

(25) Provide the following information for this waste stream:

- Estimate when this source reduction measure was implemented: [ ] Month [ ] Year
- For this measure, what source reduction quantity was projected in the 2010 Plan: [ ] pounds per year
- Estimate the quantity of waste reduced annually by this measure since implementation: [ ] pounds per year

* Since the information required for Table 2 is waste stream specific, a separate Table 2 must be completed for each major waste stream. Add additional waste streams by clicking on the "Table 2-1" through "Table 2-10" tabs at the bottom as necessary.
CUPAs are the Primary Enforcers of SB 14 Hazardous Waste Source Reduction Plans

Model CUPA SB 14 Checklist

Source: Los Angeles County Fire Department

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Emergency response capability, procedures and training are an essential element of hazardous waste good management practices and are highly regulated. Although there are different requirements for large versus small quantity generators in terms of documentation, each hazardous waste handling employee must know what to do in the event of a spill or release, and be trained in the appropriate response.

The following are minimum requirements for Large Quantity Generators based on interim permitted facility requirements, as referenced by generator requirements [22 CCR § 66262.34, referencing §§ 66265.30 - .56]

Links: 22 CCR § 66262.34
6. Administrative Requirements

6.5 Emergency Planning and Contingency Plans – LQGs, cont.

➢ A written contingency plan, including emergency procedures with the following elements at a minimum is required:

✓ Identification of emergency coordinators and off-site emergency responders.
✓ Emergency agency contacts.
✓ Inventory of hazardous waste activities and wastes present.
✓ Emergency equipment inventory.
✓ Evacuation plan for facility personnel.
✓ Written emergency procedures based on anticipated incidents.
✓ Documented attempt to coordinate with off-site emergency responders, including providing a copy of the facility’s plan.
✓ An annual review and amendment whenever plan information changes significantly.

**Note 1:** Compliance may be achieved with a fully documented business plan (CUPA Forms) that meets all of the above requirements.

**Note 2:** The Cal/OSHA Hazardous Waste Operations and Emergency Response Standard (HAZWOPER) CCR § 5192(p) and (q)] regulates emergency response actions by hazardous waste generators if an emergency, in fact, could occur and an aggressive response is authorized. In addition, if transportation is involved (shipping and receiving), U.S. DOT requires emergency response training initially and triennially thereafter [49 CFR 172.700].
6. Administrative Requirements
6.5 Emergency Planning and Contingency Plans – SQG Relief, cont.

Small Quantity Generators are afforded relief from extensive emergency planning and documentation requirements [22 CCR § 66262.34(d) referencing the federal regulation at 40 CFR § 262.34 (d)]. A SQG is required to meet the following criteria for emergency response preparedness:

✓ Have at least 1 employee present or on-call with the responsibility of coordinating an emergency response.

✓ The following information must be posted next to the telephone:
  (1) The name and telephone number of the emergency coordinator;
  (2) Location of fire extinguishers and spill control material, and, if present, fire alarm; and
  (3) The telephone number of the fire department, unless the facility has a direct alarm.
  (4) The telephone number of the local CUPA and the state OES.

✓ All employees must be thoroughly familiar with proper waste handling and emergency procedures relevant to their responsibilities during normal facility operations and emergencies, including off-site emergency notification procedures.

Note: The facility’s CUPA-required Hazardous Materials Business Plan, if properly prepared and available to employees that are trained on it meets this requirement. Posting of the information is urged using the poster available from www.unidocs.org. The new federal Hazardous Waste Generator Improvements Rule will change most of the above for SQGs nationally.


SAMPLE CONTINGENCY PLAN FOR SMALL QUANTITY GENERATORS

EMERGENCY PROCEDURES - POST NEAR TELEPHONE

In case of a fire, spill, or other emergency involving hazardous chemicals or waste, do the following:

**Major Emergency**
- Evacuate the affected areas per the facility Evacuation Plan
- Call 911 and report the emergency to DEH-HMD and OES
- Report the emergency to the facility Emergency Coordinator

**Minor Emergency**
- Attempt to control the emergency if you are trained to do so and can do it safely
- Report the emergency to the facility Emergency Coordinator

<table>
<thead>
<tr>
<th>EMERGENCY COORDINATORS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Emergency Coordinator</strong></td>
</tr>
<tr>
<td>Primary</td>
</tr>
<tr>
<td>Alternate</td>
</tr>
</tbody>
</table>

**EMERGENCY CONTACTS & RELEASE REPORTING**

<table>
<thead>
<tr>
<th>AGENCY</th>
<th>Telephone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire Department, Ambulance, Police</td>
<td>9 - 1 - 1</td>
</tr>
<tr>
<td>Local Fire Department Emergency Center (SDFD)</td>
<td>(858) 573-1300</td>
</tr>
<tr>
<td>County of San Diego Hazardous Materials Division (DEH-HMD)</td>
<td>(858) 505-6657</td>
</tr>
<tr>
<td>California Office Of Emergency Services</td>
<td>(800) 852-7550</td>
</tr>
<tr>
<td>California State Warning Center</td>
<td>(916) 845-8911</td>
</tr>
<tr>
<td>Hazardous Waste Clean-Up Contractor (optional)</td>
<td>(619) 111-1111</td>
</tr>
<tr>
<td>Medical Facility (optional - hospital, urgent care clinic, etc.)</td>
<td>(619) 222-2222</td>
</tr>
</tbody>
</table>

**Local CUPA**

**EMERGENCY EQUIPMENT**

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire Extinguishers</td>
<td>At exits, in kitchen, in welding area</td>
</tr>
<tr>
<td>Spill Control Material (e.g. spill kit)</td>
<td>Inside waste enclosure</td>
</tr>
</tbody>
</table>

Indicate Fire Alarm Type: [ ] Automatic  [ ] Manual Pull Stations Near Exits  [ ] None

Ensure that employees are familiar with these emergency and evacuation procedures.

An emergency coordinator must be available 24 hours to assist emergency response personnel.

CONTINGENCY PLAN FOR SMALL QUANTITY GENERATORS

County of San Diego CUPA
Department of Environmental Health Hazardous Materials Division.

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Note: If facility is LQG, Emergency Contacts must have hazardous waste and emergency response training.
CONSOLIDATED EMERGENCY RESPONSE / CONTINGENCY PLAN

Prior to completing this Plan, please refer to the INSTRUCTIONS FOR COMPLETING A CONSOLIDATED CONTINGENCY PLAN

A. FACILITY IDENTIFICATION AND OPERATIONS OVERVIEW

<table>
<thead>
<tr>
<th>BUSINESS NAME (Name to Facility Name or SRA - Doing Business As)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSINESS SITE ADDRESS (City)</td>
</tr>
<tr>
<td>BUSINESS SITE CITY</td>
</tr>
<tr>
<td>TYPE OF BUSINESS (e.g., Painting Contractor)</td>
</tr>
<tr>
<td>INCIDENTAL OPERATIONS (e.g., First Maintenance)</td>
</tr>
</tbody>
</table>

This plan covers chemicals, fires, and earthquakes involving (check all that apply):

- 1. Hazardous Materials
- 2. Hazardous Wastes

B. INTERNAL RESPONSE

INTERNAL FACILITY EMERGENCY RESPONSE WILL OCCUR VIA: (Check all that apply)

- 1. CALLING PUBLIC EMERGENCY RESPONDERS (e.g., 9-1-1)
- 2. CALLING PRIVATE EMERGENCY RESPONDERS
- 3. ACTIVATING IN-HOUSE EMERGENCY RESPONSE TEAM

C. EMERGENCY COMMUNICATIONS, PHONE NUMBERS AND NOTIFICATIONS

Whenever there is an imminent or actual emergency situation such as an explosion, fire, or release, the Emergency Coordinator (or designated when the Emergency Coordinator is on call) shall:

1. Activate internal facility alarm or communications systems, where applicable, to notify all facility personnel.
2. Notify appropriate local authorities (i.e., call 9-1-1).
3. Notify the California Environmental Agency at (800) 832-7550.

Before facility operations are resumed in areas of the facility affected by the incident, the emergency coordinator shall notify the California Department of Toxics Substance Control (TSCO), the local Unified Program Agency (UPA), and the local fire department’s hazardous materials program that the facility is in compliance with requirements to:

1. Provide for storage and disposal of recovered waste, contaminated soil or surface water, or any other material that results from an explosion, fire, or release at the facility.
2. Ensure that no material that is incompatible with the released material is transferred, stored, or disposed of in areas of the facility affected by the incident until cleanup procedures are completed.

INTERNAL FACILITY EMERGENCY COMMUNICATIONS OR ALARM NOTIFICATION WILL OCCUR VIA: (Check all that apply)

- 1. Visual Warning
- 2. Public Address or Intercom System
- 3. Telephone
- 4. Pager
- 5. Alarm System
- 6. Portable Radio

NOTIFICATIONS TO NEIGHBORING FACILITIES THAT MAY BE AFFECTED BY AN OFF-SITE RELEASE WILL OCCUR BY: (Check all that apply)

- 1. Visual Warning
- 2. Public Address or Intercom System
- 3. Telephone
- 4. Pager
- 5. Alarm System
- 6. Portable Radio

Emergency Response Phone Numbers:

- AMBULANCE, FIRE, POLICE AND EMS: 9-1-1
- CALIFORNIA ENRITENMENRT MANAGEMENT AGENCY (CAL/EMA): (800) 822-2222
- NATIONAL RESPONSE CENTER (NRC): (800) 822-2222
- POISON CENTER: (800) 222-2222
- LOCAL TOXIC PROGRAM AGENCY (TPOA)
- OTHER (Specify)

Nearest Medical Facility / Hospital Name:

- CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCES CONTROL (TSCO)
- CALIFORNIA DEPT OF HEALTH SERVICES (DHSS)
- U.S. ENVIRONMENTAL PROTECTION AGENCY (USEPA)
- U.S. DEPARTMENT OF ENERGY (DOE)
- U.S. COAST GUARD
- CALIFORNIA STATE POLICE
- OTHER (Specify)
- OTHER (Specify)

Agency Notification Phone Numbers:

- NEARBY WATER QUALITY CONTROL BOARD
- U.S. ENVIRONMENTAL PROTECTION AGENCY (USEPA)
- CALIFORNIA DEPT OF HEALTH SERVICES (DHSS)
- U.S. COAST GUARD
- CALIFORNIA STATE POLICE
- OTHER (Specify)
- OTHER (Specify)

D. EMERGENCY CONTAINMENT AND CLEANUP PROCEDURES

SPLILL PREVENTION, CONTAINMENT, AND CLEANUP PROCEDURES: (Check all boxes that apply)

- 1. MONITOR FOR LEAKS, RUPTURES, PRESSURE BUILD-UP, ETC.
- 2. PROVIDE STRUCUTRAL PHYSICAL BARRIERS (e.g., Portable spill containment walls)
- 3. PROVIDE AbsORBENT PHYSICAL BARRIERS (e.g., Pads, pigs, pillows)
- 4. COVER OR BLOCK FLOOR AND OR STORM DRAINS
- 5. BUILD IN HEMP IN WORK / STORAGE AREA
- 6. AUTOMATIC FIRE SUPPRESSION SYSTEM
- 7. ELIMINATE SOURCES OF IGNITION FOR FLAMMABLE HAZARDOUS (e.g., Flammable liquids, propane)
- 8. STOP PROCESSING AND/OR OPERATIONS
- 9. AUTOMATIC / ELECTRONIC EQUIPMENT SHUT-OFF SYSTEM
- 10. SHUT-OFF WATER, GAS, ELECTRICAL UTILITIES AS APPROPRIATE
- 11. CALL 9-1-1 FOR PUBLIC EMERGENCY RESCUE / MEDICAL ASSISTANCE
- 12. NOTIFY AND EvACUATE PERSONS IN ALL THREATENED AREAS
- 13. ACCOUNT FOR EVACUATED PERSONS IMMEDIATELY AFTER EVACUATION CALL
- 14. PROVIDE PROTECTIVE EQUIPMENT FOR ON-SITE RESPONSE TEAM
- 15. REMOVAL OR ISOLATE CONTAINERS / AREA AS APPROPRIATE
- 16. HERE LICENSED HAZARDOUS WASTE CONTRACTOR
- 17. USE ABSORBENT MATERIAL FOR SPILLS WITH SUBSEQUENT PROPER LABELING, STORAGE, AND HAZARDOUS WASTE DISPOSAL AS APPROPRIATE
- 18. SUCTION USING SHOOP VACUUM WITH SUBSEQUENT PROPER LABELING, STORAGE, AND HAZARDOUS WASTE DISPOSAL AS APPROPRIATE
- 19. WASH / DECONTAMINATE EQUIPMENT W/ CONTAINMENT AND DISPOSAL OF EFFLUENT / REBACK AS HAZARDOUS WASTE
- 20. PROVIDE SABLE, TEMPORARY STORAGE OF EMERGENCY-GENERATED WASTE
- 21. OTHER (Specify)

E. FACILITY EVACUATION

THE FOLLOWING ALARM SIGNALS WILL BE USED TO INFORM EVACUATION OF THE FACILITY: (CHECK ALL THAT APPLY)

- 1. BILLS
- 2. HORNS/BUHNS
- 3. BELLS / Bells
- 4. OTHER (Specify)

THE FOLLOWING LOCATION(S) ARE EVACUATION ASSEMBLY AREA(S): (i.e., Front parking lot, specific street corner, etc.)

Note: The Emergency Coordinator must account for all on-site employees and/or site visitors after evacuation.

F. ARRANGEMENTS FOR EMERGENCY SERVICES

Explanation of Requirement: Advance arrangements with local fire and police departments, hospitals, and/or emergency service contractors should be made as appropriate for your facility. You may determine that such arrangements are not necessary.

ADVANCE ARRANGEMENTS FOR LOCAL EMERGENCY SERVICES (Check one of the following)

- 1. HAVE BEEN DETERMINED NOT NECESSARY
- 2. THE FOLLOWING ARRANGEMENTS HAVE BEEN MADE (Specify)

Consolidated Contingency Plan forms like this example can meet hazardous waste emergency planning requirements if properly implemented

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### G. EMERGENCY EQUIPMENT

Check all issues that apply to list emergency equipment available at the facility and identify the location where the equipment is kept and the equipment’s capability (if applicable). "Yes" means one available at that location.

<table>
<thead>
<tr>
<th>TYPE</th>
<th>EQUIPMENT AVAILABLE</th>
<th>LOCATION</th>
<th>CAPABILITY (if applicable)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety and First Aid</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. CHEMICAL PROTECTIVE SUITS, APRONS, AND VESTS</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>2. CHEMICAL PROTECTIVE GLOVES</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>3. CHEMICAL PROTECTIVE BOOTS</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>4. SAFETY GLASSES / GOGGLES / SHIELDS</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>5. HARD HATS</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>6. CARTRIDGE RESPIRATORS</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>7. SELF-CONTAINED BREATHING APPARATUS (SCBA)</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>8. FIRST AID KITS / STATIONS</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>9. FLUSH EYEWASH FOUNTAIN / SHOWER</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>10. PORTABLE EYE WASH KITS</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>11. OTHER</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>12. OTHER</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
</tbody>
</table>

### Fire Fighting

<table>
<thead>
<tr>
<th>TYPE</th>
<th>EQUIPMENT AVAILABLE</th>
<th>LOCATION</th>
<th>CAPABILITY (if applicable)</th>
</tr>
</thead>
<tbody>
<tr>
<td>13. PORTABLE FIRE EXTINGUISHERS</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>14. FIXED FIRE SYSTEMS / SPRINKLERS / FIRE HOSES</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>15. FIRE ALARM BOXES OR STATIONS</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>16. OTHER</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
</tbody>
</table>

### Spill Control and Clean-Up

<table>
<thead>
<tr>
<th>TYPE</th>
<th>EQUIPMENT AVAILABLE</th>
<th>LOCATION</th>
<th>CAPABILITY (if applicable)</th>
</tr>
</thead>
<tbody>
<tr>
<td>17. ALL-IN-ONE SPILL KIT</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>18. ABSORBENT MATERIAL</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>19. CONTAINER FOR USED ABSORBENT</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>20. BERMING / DRINKING TANK</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>21. BROOM</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>22. SWEEPER</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>23. SHOP VAC</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>24. EXHAUST HOOD</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>25. EMERGENCY SUMP / HOLDING TANK</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>26. CHEMICAL NEUTRALIZERS</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>27. GAS CYLINDER LEAK REPAIR KIT</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>28. SPILL OVERPACK DRUMS</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>29. OTHER</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
</tbody>
</table>

### Communications and Alarm Systems

<table>
<thead>
<tr>
<th>TYPE</th>
<th>EQUIPMENT AVAILABLE</th>
<th>LOCATION</th>
<th>CAPABILITY (if applicable)</th>
</tr>
</thead>
<tbody>
<tr>
<td>30. TELEPHONES (includes cellular)</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>31. INTERCOM / PA SYSTEM</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>32. PORTABLE RADIO</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>33. AUTOMATIC ALARM CHEMICAL MONITORING EQUIPMENT</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>34. OTHER</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>35. OTHER</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
</tbody>
</table>

### K. SIGNATURE / CERTIFICATION

**Certification:** Based on my inquiry of these individuals responsible for obtaining the information, I certify under penalty of law that I have personally examined and am familiar with the information submitted and believe the information is true, accurate, and complete, and that a copy is available on site.

**SIGNATURE OF OWNER/OPERATOR:**

**DATE:**

**NAME OF SIGNER (print):**

**TITLE OF SIGNER:**
The hazardous waste regulations require that employees who handle hazardous wastes in any capacity must be trained at a level commensurate with their duties. The source of this requirement is the permitted facility training requirement referenced in the generator rules for LQGs OR the "thoroughly familiar" training for SQGs. [See citations at links.]

Training must be provided by a "qualified person" and may be classroom or on-the-job training. Annual refresher training is required. Minimum content of training:

- Identification and hazards of hazardous and universal wastes being handled, and proper procedures to comply with regulations.
- Implementation of the contingency plan and emergency procedures.
- Use of waste handling equipment and safety equipment.
6. Administrative Requirements
6.6 Training for Hazardous Waste Handlers & Requirements, cont.

➢ LQG training documentation must include:

✓ Employee name, job title, and position description stating hazardous waste-related duties.
✓ Description of the training requirement for the position and the employee’s satisfactory completion.
✓ Training records must be maintained for 3 years after closure of the facility, or for 3 years after termination of any employee.
✓ LQG training documentation must be at least as complete as the following form.

Note: SQG training can use a sign-in sheet.

➢ Employees engaged in shipping hazardous wastes must be triennially trained to meet dot training requirements for hazmat employees [49 CFR § 172.700]. Emergency responders training must meet the Cal/OSHA HAZWOPER Standard [8 CCR § 5192(q)]. Universal waste handlers are subject to SQG-type annual training [§ 66273.39].

Links: Hazardous waste training requirement: Generator Rules at 22 CCR § 66262.34 referencing 22 CCR § 66265.16 for LQG or 40 CFR § 262.34 for SQGs; Emergency response training may overlap OSHA HAZWOPER standard training [8 CCR § 5192(p)(8) and/or (q)].
6. Administrative Requirements

6.6 Training for Hazardous Waste Handlers & Requirements, cont.

Model LQG training documents (SQGs may comply with a sign-in sheet)

---

Training Sign-In Sheet

<table>
<thead>
<tr>
<th>Employer:</th>
<th>Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of Trainer:</td>
<td></td>
</tr>
<tr>
<td>Subject(s) Covered:</td>
<td></td>
</tr>
<tr>
<td>Training Aids Used:</td>
<td></td>
</tr>
<tr>
<td>Work Area(s), Employee Position(s) Included:</td>
<td></td>
</tr>
</tbody>
</table>

Attendees (use additional sheets as necessary). Please print and sign your name legibly.

<table>
<thead>
<tr>
<th>Printed Name</th>
<th>Signature</th>
</tr>
</thead>
</table>

---

Training Record

<table>
<thead>
<tr>
<th>Employee Name:</th>
<th>Start Date:</th>
<th>Transfer Date:</th>
<th>Termination Date:</th>
</tr>
</thead>
</table>

| Job Title: | |
|------------||

| Job Description (i.e., specific waste handling duties): | |
|--------------------------------------------------------| |

<table>
<thead>
<tr>
<th>Emergencies</th>
<th>Labels</th>
<th>Compatibility/Storage</th>
<th>Manifests/Receipts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facility Precaution Basics</td>
<td>Emergency Equipment Use</td>
<td>Emergency Procedures Review</td>
<td>Location of Emergency Equipment</td>
</tr>
<tr>
<td>Arrangements With Authorities</td>
<td>Post-Emergency Record Keeping</td>
<td>How to Handle Out-Of-Control Materials</td>
<td>Accumulation Start Date</td>
</tr>
<tr>
<td>Hazardous Properties of Waste</td>
<td>Unstable Incineration</td>
<td>Waste Container Requirements</td>
<td>Waste Disposal Receipts</td>
</tr>
<tr>
<td>Waste Disposal Regulations</td>
<td>Waste Containment</td>
<td>Records of Chemical Receipts</td>
<td>Waste Disposal Inventory</td>
</tr>
</tbody>
</table>

Employer - Place an "X" on the appropriate box(es) on this line to show annual training required for this employer's job duties.

Class Name/Description | Date | Employer - Place an "X" below the box corresponding to each subject covered by training class.
|-----------------------|------|--------------------------------------------------|

---

This form has been designed to assist hazardous waste generators in documenting the training of persons handling hazardous waste as required by 22 CCR, Sections 66262.34(i)(3) and 66262.34(i)(2). The reverse side of this form may be used to address other training (e.g., OSHA-mandated Right-to-Know training, etc.) laws or regulations requiring you to provide to facility personnel.
### General Procedure

All wastes generated by personnel must be properly managed according to this policy and training. Any waste listed below must be handled as indicated. Any other waste must be immediately containerized and labeled with its identity and Environmental Management at extension XXX contacted.

### Point of Generation Requirements

1. Immediately containerize any hazardous waste in a separate container from other wastes.
2. Close the container by affixing the lid, inserting the plug, etc. **Note:** only positive closing funnels may be left in drums of hazardous waste.
3. The container must be labeled (pre-labeled or affix a label). The label must be marked with all of the information under “label information” below, and the date when the waste was first put in the container entered.
4. Notify Environmental Management at Extension XXX that hazardous waste is being accumulated.

### Satellite Accumulation Area Rules

5. If a satellite accumulation area has been established for a waste in a department, personnel must strictly follow these rules.
6. No satellite wastes may remain at the point of generation at the end of a shift.
7. Carry wastes generated during the day and place them in the designated satellite container (verify the proper container by checking the label – it should be a completed label).
8. Fully close the container and briefly inspect the area.
9. Notify Environmental Manager at Extension XXX if the satellite container is nearly full or if multiple containers if 55-gallons is reached, or if 9 months have elapsed since the label was dated.
### 6. Administrative Requirements

#### 6.6 Training for Hazardous Waste Handlers & Requirements—Sample Training Formats

<table>
<thead>
<tr>
<th>Waste Description</th>
<th>Hazard, Waste Code</th>
<th>Accumulation Container</th>
<th>Hazardous Waste Label Information</th>
<th>Satellite Accumulation (?)</th>
<th>Emergency Response and Spill Control*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waste lubricating oil</td>
<td>Toxic, CWC 221</td>
<td>55-gallon closed top drum</td>
<td>Hazardous waste generator information. Waste oil. Liquid. Toxic. Accumulation start date.</td>
<td>No – Container remains at point of generation for transfer to central storage area.</td>
<td>Contain and containerize liquid, use absorbent material and cleaners to decon surfaces.</td>
</tr>
</tbody>
</table>

*Use of proper PPE and safe work practices covered in Hazard Communication and/or hazardous waste training is required.

[This format can be used for other work areas, as well as universal wastes.]
Used Lubricating Oil (California-Only Hazardous Waste)

Source of Waste: Oil changes, equipment maintenance, and wastewater treatment by gravity separation.

Reason Why Hazardous and Applicable Waste Code(s): State law and regulation determination. Hazardous property is toxicity. (California Waste Code, or CWC 221.)

Proper Container: Drum or other closed-top container for satellite (point of generation) and/or tank for on-site storage. Smaller labeled vessels for day containers.

Model Label:

[Image of a model label for Hazardous Waste, showing details such as the name of the generator, address, waste name, and disposal instructions.]
Company ABC
Hazardous Waste Functional Training For
Storage Area Employees

Employees assigned to the hazardous waste storage area are required to implement the following waste management rules on a continuing basis and to verify and document compliance during weekly inspections.

✓ Hazardous waste containers must be closed at all times except to add or remove wastes.
✓ All containers of hazardous waste must be fully labeled (see example), including the appropriate accumulation start dates. The date on each container must be inspected at least weekly to assure time limit compliance.
✓ Physical separation of incompatible wastes is mandatory.
✓ The hazardous waste sign and appropriate security must be in place.
✓ Any needed safety equipment and/or cleanup material must be available. Weekly inspections shall verify material inventory.
✓ A means of communication must be available to any personnel working in the storage area and formally tested during weekly inspections.
✓ Maintain an adequate clearance of 30 inches between rows of containers for inspections and emergency response.
✓ Conduct formal inspections on a weekly basis and document the inspection using Log Form A. Always check for: 1) leakers, 2) properly completed labels, 3) duration of storage time based on label’s date, 4) spacing/set back, 5) equipment and supplies, 6) security and signage.
✓ Document the inspection using a “Hazardous Waste Storage Area Inspection Sheet.” Be sure to complete all items and list deficiencies.
✓ Take appropriate action to assure correction of deficiencies and indicate it on the log sheet.
✓ Know what to do and who to notify in an emergency. Make sure the HMBP is available.
✓ Do not take any action in response to a significant spill or release until a coordinated response can be mounted.
✓ Do not attempt any waste handling procedure or practice (adding absorbent, combining wastes, etc.) unless instructed and trained to do so.
✓ Assure that storage area employee training is annually refreshed and documented.
In California, all treatment of hazardous waste is potentially subject to a statutory permitting requirement.

"Treatment" means any method, technique, or process, including neutralization, that is not otherwise excluded from the definition of treatment, designed to change the physical, chemical, or biological character or composition of any hazardous waste so as to neutralize such waste, or so as to recover energy or material resources from the waste or so as to render such waste non-hazardous or less hazardous; safer to transport, store or dispose of; or amendable to recovery, amendable for storage or reduction in volume.

Note: If a “recyclable” or “reusable material” is generated and treated prior to reuse on-site, it is not treatment of a hazardous waste.
6. Administrative Requirements

6.7 Permit-Required On-Site Treatment of Hazardous Waste, cont.

➢ The definition of treatment **excludes**:

✓ Sieving or filtering to remove solids from liquids without added heat, chemicals, or pressure (except for adsorption, reverse osmosis or ultra filtration).  [HSC § 25123.5(b)(2)(A)]

✓ Phase separation without addition or heat or chemicals, including separating used oil from water.  [HSC § 25123.5(b)(2)(B)]

✓ Combining 2 or more waste streams, if compatible, if the purpose is consolidation.  [HSC § 25123.5(b)(2)(c)]

✓ Cleaning out or removing residues from equipment to keep it running.  [HSC § 25143.14]

✓ Evaporation of water without the addition of pressure, chemicals or heat other than sunlight, or ambient lighting or heating.  [HSC § 25123.5(b)(2)(D)]

✓ Mixing medical disinfectants like glutaraldehyde with glycine as pretreatment for sewering.  [HSC § 25123.5(c)].

Links:  State permitting law HSC § 25200 et seq. State regulation 22 CCR § 67450; definition of treatment: HSC § 25123.5
6. Administrative Requirements

6.7 Permit-Required On-Site Treatment of Hazardous Waste, cont.

- **Certain industry-based exceptions have been adopted:**
  - Neutralization of corrosive regenerants from demineralizers. [HSC § 25201.13(b)]
  - Neutralization of corrosive wastewater from food processing. [HSC § 25201.13(c)]
  - Neutralization of corrosive wastewater from biotechnology facilities. [HSC § 25201.15]
  - Silver recovery from photographic wastewater treatment. [HSC § 25143.13]
  - Dry cleaning waste water treatment. [HSC § 25201.8]
  - Operation of air pollutant scrubbers. [HSC § 25201.12]
  - Pharmaceutical neutralization [HSC § 25201.17]
  - Laboratory treatment of up to 5 gallons per batch, subject to specified conditions [HSC § 25200.3.1]
A facility not exempt and may be subject to tiered permitting must verify whether it qualifies and the proper permit tier:

- The treatment activity must not be subject to hazardous waste permitting under federal RCRA regulations.
- The on-site treater must use an approved technology easiest to identify through the 25-page tiered-permit flow charts posted at the DTSC website or narrative descriptions of such technologies in DTSC Tiered Permit Fact Sheets at the link listed below.
- There are Tiered Permit Notification forms and instructions posted on CUPA websites once applicability and proper tier are determined.
- Reactive hazardous wastes and extremely hazardous wastes had been precluded from on-site treatment, but an August 6, 2008 regulation allows tiered permitting for cyanide treatment [22 CCR § 67450.11].

Links: HSC §§ 25200, et seq. State regulation 22 CCR § 67450 and DTSC guidance documents
Onsite Tiered Permitting - Flowchart

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

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

   - ≤ 55 gallons/mo./facility +
     CESQ

     Note – Automated addition of acid and reducing agents §67450.11(a)(1)(A)

   - <750 ppm
     CA *

   - >55 gallons/mo.
     - ≥ 750 ppm
       PBR

     Note – Automated addition of acid and reducing agents §67450.11(a)(1)(A)

On-Site Tiered Permitting Flowchart (See Appendix for full 25-page flowchart)

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

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

*Must be hazardous solely due to this characteristic
People v. LensCrafters, Inc. (statewide enforcement; 10/25/05) $475,000 penalty, including costs. Violation was failure to obtain a permit to treat hazardous waste by curing excess lens coating resin with UV light.

Defendant expressly denies the allegations in the Complaint and the Consent Judgment. The Consent Judgment is not an admission by Defendant regarding any issue of law or fact in the above-captioned matter or of any violation of any law. The Parties enter into this Consent Judgment pursuant to a compromise and settlement of disputed claims set forth in the Complaint for the purpose of furthering the public interest. Defendant waives its right to a hearing on any matter covered by the Complaint prior to the entry of this Consent Judgment.

5. PAYMENTS FOR PENALTIES, COST REIMBURSEMENT, ENVIRONMENTAL PROTECTION ENFORCEMENT AND OTHER PROJECTS

5.1 Amount of Payment:
Defendant will pay a total of $474,422.00 to be allocated as follows:

a. $109,000.00 in civil penalties under the Business and Professions Code § 17200 to be split as follows:
   1. $43,600.00 Monterey County District Attorney
   2. $21,800.00 San Joaquin County District Attorney
   3. $21,800.00 San Bernardino County District Attorney
   4. $21,800.00 Los Angeles County District Attorney

b. $109,000.00 in lieu of civil penalties to further environmental law enforcement in California to be split as follows:
   1. $25,000.00 to Westerns States Project to be used to pay for the Spring 2006 Environmental Law Enforcement Training Class produced in conjunction with FLET in San Luis Obispo.
   2. $25,000.00 to California Hazardous Materials Investigators Association
   3. $12,500.00 to the California District Attorney’s Association
6. Administrative Requirements

6.7 Permit-Required On-Site Treatment of Hazardous Waste, cont.

**LensCrafters Case**

- $475,000 fine for not permitting hardening of waste resin with UV light
FOR IMMEDIATE RELEASE
November 8, 2006

NEWS RELEASE

Georgia-Pacific Chemicals Agrees to Pay $2.4M Penalty to Sacramento County for Environmental Violations

One of the largest administrative settlements ever recorded by a city or county

Sacramento, CA -- The Sacramento County Environmental Management Department (EMD) has reached a settlement with Georgia-Pacific (GP) Chemicals for violations of the State Health and Safety Code relating the management and treatment of hazardous waste at the company’s Elk Grove plant. Terms of the agreement include the payment of $2.4M in penalties over a 2 ½ year period. According to EMD’s Director Val Siebal, the amount of the penalty is believed to be the largest ever paid to a city or county in the nation as a result of an environmental administrative enforcement action. In addition, GP Chemicals is required to complete several corrective actions to come into compliance with state law.

GP Chemicals is a global chemical manufacturer that realizes over a half billion dollars in annual sales. The company produces a variety of wood adhesives and industrial resins at its local plant located on E. Stockton Boulevard. The production processes generate large amounts of distillate waste and caustic waste. EMD issued an Administrative Enforcement Order (AEO) to GP Chemicals last July stating that the company illegally treated these hazardous wastes without obtaining the required authorizations from the County or the State of California. In addition, EMD documented that GP Chemicals then disposed of the resulting waste to the sewer system. GP Chemicals also failed to properly characterize its waste and did not complete required daily inspections and five year assessments of their multiple hazardous waste tank systems. GP Chemicals has already taken several steps to correct some of the violations listed in the Administrative Enforcement Order (AEO) and is working with EMD and the State to remedy all other noncompliant practices.

EMD is certified by the California Environmental Protection Agency (Cal-EPA) to provide regulatory oversight of hazardous generators within Sacramento County. This authority includes conducting tri-annual inspections, and in severe cases of noncompliance, initiating administrative enforcement action with stipulated fines and penalties.

For more information please contact Dennis Green, Chief, EMD Hazardous Materials Division at 875-8469 or email GreenD@sacounty.net
The following are the current UPCF reports relevant to hazardous waste management that must be submitted to the local CUPA, as explained throughout this program, and to CERS:

<table>
<thead>
<tr>
<th>Hazardous Materials/Community Right-To-Know</th>
<th>Section I Facility Information</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(A) Business Owner/Operator Identification</td>
</tr>
<tr>
<td></td>
<td>(B) Business Activities</td>
</tr>
<tr>
<td></td>
<td><strong>Section II Hazardous Materials</strong></td>
</tr>
<tr>
<td></td>
<td>(A) Hazardous Materials Inventory – Chemical Description (formerly OES Form 2731) and the <strong>NEW</strong> Matrix (6-Chemical or waste) format</td>
</tr>
<tr>
<td>Hazardous Waste Management</td>
<td><strong>Section IV Hazardous Waste</strong></td>
</tr>
<tr>
<td></td>
<td>(A) Recyclable materials report pages 1 and 2</td>
</tr>
<tr>
<td></td>
<td>(B) Onsite Hazardous Waste Treatment Notification – Facility Page (Formerly DTSC Form 1772)</td>
</tr>
<tr>
<td></td>
<td>(C) Onsite Hazardous Waste Treatment Notification – Unit Pages (Formerly DTSC Forms 1772A, B, C, D and E)</td>
</tr>
<tr>
<td></td>
<td>(D) Certification of Financial Assurance for Permit by Rule and conditionally Authorized Onsite Treaters (Formerly DTSC Form 1232)</td>
</tr>
<tr>
<td></td>
<td>(E) Remote Waste Consolidation Site Annual Notification (Formerly DTSC Form 1169)</td>
</tr>
<tr>
<td></td>
<td>(F) Hazardous Waste Tank Closure Certification (Formerly DTSC Form 1249)</td>
</tr>
</tbody>
</table>

**Note:** Generators need to check their local CUPA website (especially in Los Angeles County) for local variations of forms or new forms, and about integration of HMBP forms with CERS (California Environmental Reporting System).
THE FOLLOWING TOPICS COVER THE GENERATOR’S OBLIGATIONS WITH RESPECT TO OFF-SITE TRANSPORTATION:

7.1 Summary of Off-site Hazardous Waste Transportation Requirements
7.2 Hazardous Waste Labeling
7.3 Hazardous Waste Manifesting
7.4 Off-Site Hazardous Waste Management
7.5 Land Disposal Restrictions for Certain Hazardous Wastes
7. Off-Site Hazardous Waste Transportation Requirements

7.1 Summary of Off-Site Hazardous Waste Transportation Requirements

➢ Hazardous wastes must be transported off-site on public roads by DTSC-registered hazardous waste transporters. Self-transportation is allowed only on private access-controlled streets or to cross a public street at a right angle, or pursuant to certain exemptions.

➢ There are exemptions for small quantities (5 gallons/50 pounds, and up to 220 pounds if allowed under a community collection program) being self-transported to a TSDF or government collection center, used oil being transported in 55-gallon drums back to the generator's place of business, consolidation of Non-RCRA hazardous wastes from remote points of generation. [See CUPA form.]

➢ Rules to qualify for local community hazardous waste collection programs:
  ✓ Must have an EPA ID Number and register in advance with the local agency.
  ✓ Usually, the generator must be a CESQG, but not in all jurisdictions.
  ✓ Manifests are not required, and amounts and types of wastes received can be limited.
  ✓ There may be a reasonable charge for the service.
Form to be submitted annually to the CUPA if hazardous wastes are consolidated from remote sites of generation.
Otherwise, hazardous waste and federal DOT regulations with respect to transportation of hazardous materials apply, as follows:

- Determination of whether the hazardous waste being transported is DOT regulated (most non-RCRA hazardous wastes are not).
- Compliance with DOT/PHMSA regulations for hazardous material shipments. **Note:** For more information, see DOT regulations at 49 CFR §§ 172 and 173, or attend Dufour Seminars’ DOT Training for California Shippers.
- Labeling.
- Manifesting.
- Land disposal restriction compliance.
- Recordkeeping.

**Links:** State law small quantity transportation exemption [HSC § 25163(c)]; consolidation of non-RCRA hazardous waste HSC §§ 25110, 25121.3 and 25163.3; waste oil consolidation [HSC § 25250.12]; Exemption for delivery to government collection center [HSC § 25218.5(c)]; requirements for transporters - § 66263.10 - .46; requirements for manifests and shipping - § 66262.30 - .43; land disposal restriction - § 66268.41 - .43 [RCRA]; § 66268.105 - .118 [State]; consolidation of non-RCRA hazardous wastes from remote points of generation [HSC §§ 25110, 25121.3 and 25163.3] and UPCF Form [www.unidocs.org].
7. Off-Site Hazardous Waste Transportation Requirements
7.1 Summary of Off-Site Hazardous Waste Transportation Requirements, cont.

The principal DOT PHMSA requirements for hazardous material/waste shipments are:

✓ Correct identification of hazardous materials and their hazard class and requirements for packaging and shipment. Compliance with this and other obligations is simplified by the Hazardous Materials Table at 49 CFR 172.01.

✓ Determination of proper shipping name of the hazardous material or waste.

✓ Use and proper completion of a shipping paper for all hazardous material or hazardous waste shipments requiring use of a hazardous waste manifest.

✓ Compliance with hazardous material packaging requirements.

✓ Marking and labeling the package according to regulations for hazardous materials and hazardous wastes.

✓ Including emergency response information (manifest emergency information box).

✓ Assuring the transporting vehicle is properly placarded.

✓ The offeror/shipper must also have a Security Plan and provide security training to its hazardous material/waste employees, unless an exempt quantity or class is being transported.

✓ Employees engaged in hazardous material/waste shipping activities must receive documented triennial training.

✓ Periodic registration of the offeror/shipper unless no Class 1 through 9 shipments exceed 1,001 pounds.

7. Off-Site Hazardous Waste Transportation Requirements

7.2 Hazardous Waste Labeling

➢ Each container of 110-gallons or less must be labeled with the following information displayed to meet both hazardous waste and DOT regulatory requirements:

✓ Clear designation that the container holds hazardous waste, with the following words prominently displayed for a California label:

"HAZARDOUS WASTE - State and federal law 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 Substances Control."

✓ The name and address of the facility generating the waste.

✓ The Hazardous Waste Manifest tracking number.

✓ Proper DOT shipping name and U.N. or N.A. number [provided in the DOT table of hazardous materials/waste (49 CFR 172.101)], or “DOT Non-Regulated.”

✓ U.S. EPA and/or California (if state only waste) hazardous waste number.

✓ The generator facility's EPA ID number.

**Note:** Labels can be the same as used for on-site storage, but all information must be included during transportation.

**Links:** 22 CCR § 66262.31
7. Off-Site Hazardous Waste Transportation Requirements

7.2 Hazardous Waste Labeling, cont.

Note: All items must be accurately completed.
Proper completion and management of the hazardous waste manifest is essential for compliance and liability avoidance. Manifests document the cradle-to-grave tracking of hazardous waste shipments and meets DOT's shipping paper requirement for hazardous materials transportation.

The hazardous waste manifest is important to the facility's own records to protect itself from future liability. Once the shipment of hazardous waste arrives at its intended destination, an acknowledgement copy is returned to the generator. This document must be preserved for at least 3 years (along with any associated LDR certificate) for regulatory compliance, but longer is advisable for liability defense purposes.

Due to the importance of the hazardous waste manifest, proper completion and management is essential, as non-compliance may result in the inability to ship the wastes or deliver them to the destination facility and violations.

New federal regulations to establish electronic manifests go into effect on June 30, 2018, but California has not yet announced a policy, law or regulation. (See 1.4)

Links: 22 CCR § 66262.20 - .23; DTSC Hazardous Waste Tracking System
This DTSC site page has links to detailed manifest information and instructions.

Hazardous Waste Manifest Information

A hazardous waste manifest must accompany most hazardous waste that is shipped off site. The Uniform Hazardous Waste Manifest is the shipping document that travels with hazardous waste from the point of generation, through transportation, to the final treatment, storage, and disposal facility (TSDF). Each party in the chain of shipping, including the generator, 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.

In 2005, U.S. EPA published regulations that significantly change the manifest form and procedures. They mandate national use of a new Uniform Hazardous Waste Manifest that goes into effect on September 5, 2006.

This page contains information to help businesses understand and comply with these changes.

Click on one of the links below to go directly to a specific topic:

- State Manifest Regulations and Statutory Changes
- Buying Manifest Forms
- Manifest Forms and Federal and State Instructions
- Manifest Submission to DTSC
- Manifest Report Repository
- Manifest Exception Reports
- Significant Discrepancy Reports
- Unmanifested Waste Reports
- Exception Reports for Exporters
- Manifest Correction Letters
- Common Manifest Errors
- Manifest Regulation Training Materials
- Fact Sheets
- Search for Specific Manifests or Verify an EPA ID Number
- Federal Manifest Information and Links
- Special Cases
- Frequently Asked Questions

State Manifest Regulations and Statutory Changes

New Federal Manifest Regulations are effective on September 5, 2006. The Department of Toxic Substances Control’s state version of the Manifest Regulations was approved by the State Office of Administrative Law (OAL) on August 24, 2006. The state regulations are also effective on September 5, 2006.

DTSC is providing these final regulations as a service to hazardous waste handlers. The transmittal letter to OAL explains the package as a whole and reviews the changes to each section.

- Final Regulations adopted August 24, 2006
- Transmittal Letter OAL July 21, 2006
- 2006 Changes to State Manifest and Manifest Fee Statutes Assembly Bill 1803 (2006)
## Sample Manifest and Continuation Sheet

### UNIFORM HAZARDOUS WASTE MANIFEST

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generator’s Address</td>
<td>Generator’s Site Address (different from mailing address)</td>
</tr>
<tr>
<td>Transporter 1 Company Name</td>
<td>U.S. EPA 11 Number</td>
</tr>
<tr>
<td>Transporter 2 Company Name</td>
<td>U.S. EPA 11 Number</td>
</tr>
<tr>
<td>Designated facility Name and Info Address</td>
<td>U.S. EPA 11 Number</td>
</tr>
</tbody>
</table>

### Table: Hazardous Substance Information

<table>
<thead>
<tr>
<th>Substance</th>
<th>Quantity (lbs)</th>
<th>Type</th>
<th>Revision</th>
<th>Rejection</th>
<th>Remarks</th>
</tr>
</thead>
</table>

### Section: Discrepancy

<table>
<thead>
<tr>
<th>Discrepancy</th>
<th>Quantity</th>
<th>Remarks</th>
</tr>
</thead>
</table>

### Section: Alternate Facility (or Generator)

<table>
<thead>
<tr>
<th>Facility’s Phone</th>
<th>Alternate Facility’s Name</th>
<th>U.S. EPA 11 Number</th>
</tr>
</thead>
</table>

### Section: Designated Facility

<table>
<thead>
<tr>
<th>Facility Name</th>
<th>U.S. EPA 11 Number</th>
<th>Signature</th>
</tr>
</thead>
</table>

---

**EPA Form 8700-22 (Rev. 3-10)** Previous editions are obsolete.

---

**DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)**
Example of a completed manifest with key elements identified—employees who sign Manifests should Know About These Items.
**Supplemental California Manifest Instructions (page 2) from DTSC website provides California waste codes and management method codes**

---

### California Waste Codes

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>111</td>
<td>Liquids with cyanides &gt; 1000 mg/L</td>
</tr>
<tr>
<td>112</td>
<td>Liquids with arsenic &gt; 500 mg/L</td>
</tr>
<tr>
<td>113</td>
<td>Liquids with cadmium &gt; 100 mg/L</td>
</tr>
<tr>
<td>114</td>
<td>Liquids with chromium (VI) &gt; 50 mg/L</td>
</tr>
<tr>
<td>115</td>
<td>Liquids with lead &gt; 500 mg/L</td>
</tr>
<tr>
<td>116</td>
<td>Liquids with mercury &gt; 20 mg/L</td>
</tr>
<tr>
<td>117</td>
<td>Liquids with radionuclides &gt; 134 Bq/L</td>
</tr>
<tr>
<td>118</td>
<td>Liquids with selenium &gt; 100 mg/L</td>
</tr>
<tr>
<td>119</td>
<td>Liquids with thiocyanate &gt; 130 mg/L</td>
</tr>
<tr>
<td>120</td>
<td>Liquids with polybrominated biphenyls &gt; 50 mg/L</td>
</tr>
<tr>
<td>121</td>
<td>Liquids with halogenated organic compounds &gt; 1000 mg/L</td>
</tr>
<tr>
<td>122</td>
<td>Solids or sludge with halogenated organics &gt; 1000 mg/L</td>
</tr>
<tr>
<td>123</td>
<td>Liquids with pH &lt; 2 with metals</td>
</tr>
<tr>
<td>124</td>
<td>Waste potentially containing clorox</td>
</tr>
</tbody>
</table>

### California Non-Restricted Wastes

**Inorganic**

- Alkaline solution (pH 2 or 12.5) with metals (arbitrary, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium, and zinc)

- Alkaline solution without metals (pH 2 or 12.5)

- Unspecified alkaline solution

- Aqueous solution (2 < pH < 12.5) containing reactive anions (iodate, bromate, chlorate, cyanide, fluoride, hydroxyanion, nitrate, peroxide, and sulfite anion)

- Aqueous solution without metals (pH 2 or 12.5) containing reactive anions (iodate, bromate, chlorate, cyanide, fluoride, hydroxyanion, nitrate, peroxide, and sulfite anion)

- Aqueous solution with 10% or more total organic residues

- Aqueous solution with <10% total organic residues

- Unspecified aqueous solution

- Off-gasification, aged, or surplus inorganics

- Asbestos-containing waste

- Fluid-cracking catalyst (PC-6) waste

- Other spent catalyst

- Metal sludge (see 121)

- Metal dust (see 121) and machining waste

- Other inorganic solid waste

### Organic

- Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc.)

- Oxygenated solvents (acetone, butanol, ethylene acetate, etc.)

- Hydrocarbon solvents (benzene, heptane, heptane, Stoddard, etc.)

- Unspecified solvent mixture

- Waste oil and mixed oil

- Oily water separation sludge

- Unspecified oily-contaminated waste

- Petroleum (crude) water

- Petroleum and other waste associated with petroleum production

- Tank bottom waste

- Still bottoms with halogenated organics

- Other still bottom waste

- Polytetrafluoroethylene and material containing PTFE

- Organic monomer waste (includes unreacted resins)

- Polymeric resin waste

- Adhesives

- Latex waste

- Pharmaceutical waste

- Sewage sludge

- Biological waste other than sewage sludge

- Off-specification, aged, or surplus organics

- Organic liquids (monomers) with halogens

- Organic liquids with metals (see 121)

- Unspecified organic liquid mixture

- Organic solids with halogens

- Other organic solids

---

### Sludge

- Alum and gypsum sludge

- Lime sludge

- Phosphate sludge

- Cotton sludge

- Deposition sludge

- Paint sludge

- Paper sludge/pulp

- Tetraethyl lead sludge

- Unspecified sludge waste

### Miscellaneous

- Empty pesticide containers 30 gallons or more

- Other empty containers 30 gallons or more

- Empty containers less than 30 gallons

- Effluent fluid

- Chemical toilet waste

- Photochemicals / photo processing waste

- Laboratory waste chemicals

- Ultrasonic and soap

- Fly ash, bottom ash, and retort ash

-ius scrubber waste

- Baghouse sludge

- Contaminated soil from site clean-ups

- Household waste

- Arts, sheriner waste

- Treated wood waste (new in 2007)

### HW Report Management Method Codes

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<th>Code</th>
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<td>Solvent recovery</td>
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<td>H020</td>
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<td>Energy recovery at this site — use as fuel (includes on-site fuel blending)</td>
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</tr>
<tr>
<td>H075</td>
<td>H104-H120, Fuel blending (H081), or disposal (H131-H155) at this site</td>
</tr>
</tbody>
</table>

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Steps in manifest management:

✔ The manifest is a multi-part form that produces an original and 6 copies. The facility must complete items 1 through 15, and the transporter signs item 17 upon pickup and leaves the “generators initial” (bottom) copy.

✔ A legible copy (preferably off the top or original) must be sent to the DTSC within 30 days.

✔ Transporter delivers wastes to a disposal or treatment facility, which becomes the designated facility. The designated facility operator signs the manifest, adds the waste management code, and gives 1 copy to the transporter, retains 1 copy, and returns the “designated facility to generator” copy to the generator for its records.

✔ Generator facilities are responsible for their wastes from cradle to grave, therefore, it is essential that a facility investigate if it has not received an acknowledgement copy within 35 days. If an acknowledgement copy is not received within 45 days, a Large Quantity Generator must file an Exception Report with the DTSC; a Small Quantity Generator must report to DTSC within 60 days.

✔ In most cases, the designated facility sends a copy of the acknowledged manifest to CA DTSC, however, if the designated facility is outside of California and that state does not require sending a copy to CA DTSC, both the generator and transporter are required to copy DTSC on the acknowledged manifest.

✔ Manifests and related land disposal restriction paperwork and profiles must be maintained for 3 years.

**Links:** Manifest regulations 22 CCR § 66262.20 - .23; and DTSC instructions
7. Off-Site Hazardous Waste Transportation Requirements

7.3 Hazardous Waste Manifesting, cont.

➢ Discrepancies and rejected loads are an area of significant change in the manifest form, allowing tracking of these “mistakes”:

✓ Discrepancies and rejections of loads are specified by the designated facility in item 18(a).

✓ Rejected loads must be sent to an alternate facility or returned to the generator as set forth in item 18(b).

✓ If a rejected load is returned to the generator, the state regulation allows only 90 days of on-site storage (different from the ordinary LQG, SQG limits in the federal rule).

➢ Review of the returned acknowledgement copy compared with the original should be performed to assure no discrepancies were noted, and to double-check if the waste management code is correct.

Note: Consolidated manifesting is available for certain routinely generated hazardous wastes, like used oil, other vehicle fluids, oil/water separator wastes, paint-related wastes, solvents, spent photographic solutions. [See list at HSC § 25160.2(c)] Generators receive a receipt, which must be maintained for 3 years as if a manifest and counted towards generator’s monthly hazardous waste volume.
**7. Off-Site Hazardous Waste Transportation Requirements**

**7.4 Land Disposal Bans for Restricted Hazardous Wastes**

Land disposal bans have been imposed by federal and California law on virtually all RCRA and a few specified Non-RCRA hazardous wastes. Hazardous waste subject to a “land ban” is a restricted hazardous waste:

- Treatment standards establish the maximum concentration of a regulated constituent permitted in a restricted waste to be land disposed. The term refers to treatment necessary to qualify for land disposal.
- Pursuant to the hazardous and solid waste amendments to RCRA in 1984, U.S. EPA has published numerous rules establishing land disposal restrictions to the point where generators should assume that all RCRA hazardous wastes are restricted, unless a specific exemption can be identified by a vendor.
- California land-banned liquids containing non-RCRA metals (e.g., copper, zinc), certain solvents, PCBs, and asbestos unless wetted and wrapped in plastic.
- The point of determination of whether a hazardous waste is a restricted waste is at the point of generation, subsequent dilution to meet the treatment standard is not permitted.

**Links:** Universal Treatment Standards, 22 CCR § 66268.48 (same as federal for RCRA hazardous wastes); Non-RCRA Treatment Standards, § 66268.105-.114

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The generator must certify compliance with treatment standards for restricted wastes by attaching a federal or state “LDR Certificate" to the manifest for a restricted hazardous waste whenever a new vendor is involved in the transportation, treatment or disposal, and maintaining records of certificates and supporting data for 3 years.

Link: LDR Regulations 22 CCR §§ 66268, et seq.
**Example LDR Form**

- Service Firms
  - Prepare Forms
Thank you for your participation...

Do you have any questions?
James T. Dufour is an environmental and OSHA attorney and Certified Industrial Hygienist with three decades of experience in environmental and OSHA regulatory compliance, including: 22 years in private practice, as well as a decade of professional assignments in the public and private sectors throughout the nation. In addition to representing clients before regulatory agencies and state/federal courts, he has been a consultant to the U.S. EPA, Fed/OSHA, NIOSH, California Chamber of Commerce, and other industry groups and private firms. He has written numerous OSHA and environmental compliance manuals, many of which were published by the California Chamber of Commerce and used by thousands of employers; and has conducted hundreds of seminars for businesses and other organizations. He holds a law degree from the University of Tennessee, Knoxville, and B.S. and M.S. degrees from the University of Michigan in Ann Arbor. Dufour was admitted to practice in California in 1983.

James Dufour conducts training programs, including webinars through Dufour Seminars & Training.

Dufour Law and Dufour Seminars & Training welcomes new clients for high-quality and cost-effective representation, regulatory compliance services, and training.
Tiered Permitting Flowchart

Link: DTSC On-Site Tiered Permitting Flowchart
Onsite Tiered Permitting - Flowchart

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

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

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

   <750 ppm
   - CA*

   >55 gallons/mo.
   - ≥ 750 ppm
     - PBR
     - Note: Automated addition of acid and reducing agents §67450.11(a)(1)(A)

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

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

*Must be hazardous solely due to this characteristic

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Aqueous wastes with metals listed in T22 § 66261.24 (a)(2)

In tanks or containers, such as breathing and evaporation through vents and floating roofs, without the addition of pressure, chemicals, or heat other than sunlight or ambient room lighting or heating.

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

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

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

- Phase Separation

≤ 55 gallons/mo./facility+

CESQT

>55 gallons/mo.

≥1,400 ppm

PBR

NO authorization required

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

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

>55 gallons/mo. & <1,400 ppm → CA*

- Phase Separation

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

*Must be hazardous solely due to this characteristic
**Containers must be closed except when adding/removing hazardous wastes (T22, § 66265.173)
Aqueous waste with organic compounds not listed and containing less than 10% total organic carbon and less than 1% volatile organic compound.

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

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

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

*Must be hazardous solely due to this characteristic

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

- Adsorption

<750 ppm

CA*

- Phase Separation excluding super critical fluid extraction

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

NO authorization required

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

- Drying (to remove water)
  - Grinding
  - Shredding
  - Crushing
  - Compact
  - Separation (based on size, magnetism or density)
  - Chemical stabilization

- < 500 lbs/mo./facility+ → CESQT
- > 500 lbs/mo. → PBR

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

4b

Wastewater treatment sludges, solid metal objects, metal workings containing or contaminated with metals and Dusts containing ≤750 ppm metal (except asbestos) (§ 66261.24(a)(1)(B) or § 66261.24(a)(2)(A)

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

≤ 45,000 lbs/mo.

CA*

Sieving or filtering liquid hazardous waste to remove solid fractions, without added heat, chemicals, or pressure, as the waste is added to or removed from a storage or accumulation tank or container. For this activity, sieving or filtering does not include adsorption, reverse osmosis, or ultrafiltration. [HSC, § 25123.5 (b)(1)(A) and (b)(2)(B)]

*Must be hazardous solely due to this characteristic

NO authorization required
During storage or accumulation in tanks or containers only if, the separation is unaided by the addition of heat or chemical.** [HSC, § 25123.5 (b)(1)(A) and (b)(2)(B)]

- Phase Separation
  - Drying (to remove water)

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

- Chemical Stabilization

- CESQT
  - ≤ 500 lbs/mo./facility+
  - ≤ 45,000 lbs/mo./unit
  - >45,000 lbs/mo.

- CA*

- PBR

- NO authorization required

- CESQT
  - ≤ 500 lbs/mo./facility+
  - >500 lbs/mo.

- PBR

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

**Must be hazardous solely due to this characteristic**

*CA*®

≤ 500 lbs/mo./facility+
≤ 750 ppm and
≤ 45,000 lbs/mo./unit

>45,000 lbs/mo.

PBR

CESQT

Chemical Stabilization

≤ 500 lbs/mo./facility+

>500 lbs/mo.

PBR

CESQT

NO authorization required

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

Waste listed in § 66261.120, which meets the criteria and requirements for classification as special wastes in T22, § 66261.122 and § 66261.124

Drying (to remove water)

Screening to separate components (based on size)

Separation (based on size, magnetism or density)

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

- Phase Separation by filtration, centrifuge, or gravity separation
- Chemical Stabilization
- Drying to remove water

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

- Magnetic Separation
- Drying (by pressing or passive evaporation)

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

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

- NO authorization required

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

- pH Adjustment
- Neutralization

- ≤ 55 gallons/mo./facility+
  - CESQT

- >55 gal. or >500 lbs/mo.
  - <10% acid/base by wt.
    - CA*
  - ≤ 500 gal./batch
    - CA*
  - >10% acid/base
    - >500 gal./batch
    - PBR

**8 b**

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

- Neutralization

- <10% acid/base by wt.
  - NO authorization required

- >10% acid/base by wt.
  - Go to 8 a

**8 c**

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

- Neutralization

- <10% acid/base by wt.
  - NO authorization required

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

*Must be hazardous solely due to this characteristic.

North American Industry Classification System (NAICS) was adopted in 1997
to replace the Standard Industrial Classification (SIC) system.
8 d
Acid/alkaline wastes
Laboratory conducting treatment pursuant to HSC, § 25200.3.1
- Neutralization
  - NO authorization required

8 e
Acid/alkaline wastes
from Biotechnology manufacturing or process by SIC Code subgroups 283, 2833, 2834, 2836, 8731, 8732, 8733 HSC, § 25201.15
- Neutralization
  - NO authorization required if <10% acid/base by wt.
  - No authorization required if >10% acid/base by wt.
  - Go to 8 a

8 f
Acid/alkaline wastes
from Pharmaceutical manufacturing or process development by NAICS Code subgroups 325411 and 325412 HSC, § 25201.17
- Neutralization
  - NO authorization required if treatment complies with HSC § 25201.17 AB2155 (Stats., 2006, Ch. 741)
Soils contaminated with metals

9

- Screening
- Magnetic Separation

- Chemical Stabilization

- ≤ 500 lbs/mo./facility+
  - CESQT

- ≤ 45,000 lbs/mo./unit
  - CA*

- > 45,000 lbs/mo.
  - PBR

- ≤ 500 lbs/mo./facility+
  - CESQT

- > 500 lbs/mo.
  - PBR

*Must be hazardous solely due to this characteristic
Used oil, unrefined oil waste, mixed oil, oil mixed with water or oil/water separator defined in HSC, § 25250.1

- Distillation
- Neutralization
- Separation (based on size, magnetism or density)
- Reverse Osmosis
- Biological Processes

- Phase Separation (excluding supercritical fluid extraction)

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

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

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

Oil mixed with water OR oil-water separation sludge

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

- Phase Separation

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

- CA*

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

- CESW

- NO authorization required

18 c

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

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

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

- CEL

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

- 10 (a) or (b)

*Must be hazardous solely due to this characteristic

**Containers must be closed except when adding/removing hazardous wastes (T22, § 66265.173)
11 a
Containers ≤110 gallon capacity (no wood, paper, cardboard, fabric or other absorptive material)
- Rinsing
- Crushing
- Shredding
- Grinding
- Puncturing

If container is exempt per Title 22, 66261.7

NO authorization required

NO volume limit

≤ 500 lbs/mo./facility+

CESW

CESQT

>500 lbs/mo.

PBR

11 b
Aerosol Cans
HSC, § 25201.16

- Puncturing
- Draining
- Crushing

NO authorization required
if handler complies with HSC §25201.16 (h) requirements SB1158 (Stats. 2001, Ch. 450)

12
Resins

- Treatment of resins including multi-component and preimpregnated resins Mixed or Cured in accordance with manufacturer’s instructions (Stats. 1994, AB 3577, Ch 276)

NO volume limit

≤500 lbs/mo./facility+

CESW

CESQT

>500 lbs/mo.

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

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

Silver Recovery

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

<180 gal./mo.

NO authorization required
AB1772 (Stats. 1992, Ch. 1345); Amended
SB1191 (Stats. 1996, Ch. 639)

>180 gal./mo.

Go to 3a

Commercial laundry facility
HSC, § 25144.6

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

CECL

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16a Laboratory Waste
HSC § 25200.3.1

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

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

CESW

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

CESW

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Wastestream/Technology Combination Certified by DTSC
HSC § 25200.3.(a)(10), § 25201.5(c)(9))

17

Healthcare Facilities treating formaldehyde

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

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

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

18

CESW

PBR

CA*

*Must be hazardous solely due to this characteristic
Consolidation from remote sites (HSC, § 252110.10, § 25121.3)

Special authorization; Notification required. UPCF hwf1196

NO authorization required

Phase separation of hazardous waste during storage or accumulation in tanks or containers, if the separation is unaided by the addition of heat or chemicals.** [HSC, § 25123.5 (b)(1)(A) and (b)(2)(B)]

Sieving or filtering liquid hazardous waste to remove solid fractions, without added heat, chemicals, or pressure, as the waste is added to or removed from a storage or accumulation tank or container. For this activity, sieving or filtering does not include adsorptions, reverse osmosis, or ultrafiltration. [HSC, § 25123.5 (b)(1)(A) and (b)(2)(A)]

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

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

B. Aqueous wastes from reverse osmosis or the regeneration of
demineralizer (ion exchange) columns at
facilities with zero discharge
   T22, § 67450.11 (d)(2)(B)

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

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

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

Oxidation by addition of hypochlorite (bleach)
Oxidation by addition of peroxide or ozone, with
or without the use of ultraviolet light
Alkaline chlorination
Electrochemical oxidation
Ion exchange
Reverse osmosis
Cyanide Treatment (T22, § 67450.11 (d)(2))

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

Electrowinning (only for metal recovery)

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

PBR

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

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

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

PBR

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

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

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

WASTE STREAM & TREATMENT PROCESSES

-CE- HSC, §25201.5

AUTHORIZATION OPTIONS

TTU Owner/Operator is AUTHORIZED

NOTIFICATION FORMS

DTSC FORMS 1199 (unit) 1198 (site)

-PBR- Title 22, CCR § 67450.11

TTU May ONLY operate if TTU Owner / Operator is AUTHORIZED

DTSC FORMS 1199 (unit) 1197 (site)

ALL OTHERS

Standardized Permit, Variance, or RD&D

Contact DTSC Regional Staff

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PBR Collection Facilities

1. Temporary or Permanent Household Hazardous Waste Collection Facilities (TTHWCF and PHHWCF)

   Wastestreams accepted in:
   - TTHWCF T22, § 67450.4(a) or
   - PHHWCF -T22, § 67450.25(a)

   → PBR

2. School Hazardous Waste Collection, Consolidation, and Accumulation Facility

   Wastestreams in T22, § 67450.42

   → PBR