Hazardous Waste & Universal Waste Compliance Basic Training
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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 October 2015.

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, certified industrial hygienist, and registered environmental assessor 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 on hazardous waste and HAZWOPER training and other issues. He has written a dozen authoritative compliance manuals that address 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: dufourlawgroup@sbcglobal.net
HAZARDOUS AND 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
7. Off-Site Hazardous Waste Transportation Requirements
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.
  - 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).

  **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 § 25503 and 19 CCR § 2726].

  - 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.
1. Introduction

1.2 Enforcement of Hazardous Waste Violations

THE HAZARDOUS WASTE LAWS PROVIDE FOR THREE 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 $25,000 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 $25,000 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
EXAMPLES OF RECENT FEDERAL, STATE, AND LOCAL HAZARDOUS WASTE ENFORCEMENT CASES

California hazardous waste generators are subject to U.S. EPA, Cal/EPA Department of Toxic Substances Control (DTSC), and local CUPA inspections. CUPA inspections alone exceed 100,000 per year, and more than $20 million in penalties result from their routine inspections. The following are examples of a few recent actions:

U.S. EPA

- East Bay Municipal Utility District, Oakland; September 30, 2015—Receipt without a permit and improper labeling of hazardous waste ($99,000).
- Anaplex Corporation, Paramount; May 14, 2015—Violation of hazardous waste container labeling and closure rules, training violations, and exceedance of sewer discharge limitations ($142,000).
- Barkens Hard Chrome and Bowman Plating, Compton; Alumin-Art Plating, Ontario; and R.L. Anodizing and Plating, Inc., Sun Valley; May 14, 2015—All for containerization, labeling, and storage without permit violations ($81,500 combined penalties).
- Cooper Drum, South Gate; December 29, 2015—Cleanup settlement to remediate soil and ground water hazardous waste contamination ($22 million)
1. Introduction

1.2 Enforcement of Hazardous Waste Violations, cont.

State DTSC

- Pacific Steel, National City; January 12, 2016—Scrap metal recycler fined $138,000 for hazardous waste contamination of soils.

- Electro-Forming Co., Richmond; November 9, 2015—Violations of hazardous waste management requirements, including storage and treatment without a permit, and mismanagement of hazardous waste containers. Criminally prosecuted, resulting in a 5-year probation, $50,000 fine personally, $250,000 corporate penalties, and $228,000 DTSC restitution.

- Schafer Grinding Co, Santa Fe Springs and Montebello (2 plants); March 25, 2015—Illegal exportation of titanium and magnesium grindings to a facility in Mexico permitted to receive only solvent waste fined $160,000.

- Clearwater, Union City; July 29, 2015—Allegedly falsified hazardous waste services documentation and management for customers, including BART, Recology, and others. Criminal enforcement, including short jail terms, fines, 5 years probation, and a bar on employment in the hazardous waste industry.

- ECS Refinery, Santa Clara; April 9, 2015—Mismanagement of e-wastes and universal wastes fined $218,780.
## 1. Introduction

### 1.2 Enforcement of Hazardous Waste Violations, cont.

CUPAs—Most Notably, Dumpster Diving Cases

**Past cases:**
- Walgreens $33.2 million (December 13, 2012)
- Costco $2.6 million (June 1, 2012)
- CVS Pharmacy $13.8 million (April 16, 2012)
- Target $22.5 million (March 2, 2011)
- Walmart $24.7 million (April 6, 2010)
- Kmart $8.7 million (May 22, 2009)

**Recent cases:**
- 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)
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 13, 2011 | 12:00pm

A judge in Alameda Superior Court ordered the Walgreen Company to pay $10.57 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.

MORE NEWS

- Public Safety Realignment Update: County Plan Tracking Wall
- Dog Day - Marc
- Drug Deals at - Eild Online for Deals on Wheels
- 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.
1. Introduction

1.3 Applicable Laws and Regulations

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

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The hazardous waste regulations in California are codified under Social Security – Click on it.
Title 22. Social Security

Division 1, Employment Development Department
Division 1.8, California Department of Aging
Division 2, Department of Social Services - Department of Health Services
Division 2.1, Department of Rehabilitation
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 8, Prehospital Emergency Medical Services
Division 9, California Medical Assistance Commission
Division 10, Department of Community Services and Development
Division 11, Child Care Facility Licensing Regulations
Division 12, Department of Child Support Services
Division 13, California Office of Health Information Integrity
Division 4.5. Environmental Health Standards for the Management of Hazardous Waste

Chapter 10. Hazardous Waste Management System: General
Chapter 11. Identification and Listing of Hazardous Waste
Chapter 12. Standards Applicable to Generators of Hazardous Waste
Chapter 13. Standards Applicable to Transporters of Hazardous Waste
Chapter 14. Standards for Owners and Operators of Hazardous Waste Transfer, Treatment, Storage, and Disposal Facilities
Chapter 15. Interim Status Standards for Owners and Operators of Hazardous Waste Transfer, Treatment, Storage, and Disposal Facilities
Chapter 16. Recyclable Materials (Recyclable Hazardous Wastes)
Chapter 17. Military Munitions
Chapter 18. Land Disposal Restrictions
Chapter 19. Fees
Chapter 20. The Hazardous Waste Permit Program
Chapter 21. Procedures for Hazardous Waste Permit Decisions
Chapter 22. Enforcement, Inspections, and Informant Rewards
Chapter 23. Standards for Universal Waste Management
Chapter 24. Mercury Thermostat Collection and Performance Requirements
Chapter 25. Standards for the Management of Used Oil
Chapter 26. Waste Minimization
Chapter 27. Management of Tanks
Chapter 29. Alternative Management Standards for Treated Wood Waste
Chapter 30. Hazardous Waste Property and Land Use Restrictions
Chapter 31. Selection and Ranking Criteria for Hazardous Waste Sites Requiring Remedial Action
Chapter 32. Prohibited Chemical Toilet Additives
Chapter 33. Requirements for Management of Fluorescent Light Ballasts Which Contain Polychlorinated Biphenyls (PCBs)
Chapter 34. Additional Requirements for Management of Extremely Hazardous Wastes
Chapter 35. Hazardous Waste Testing Laboratory Certification [Repealed]
Chapter 36. Requirements for Units and Facilities Deemed to Have a Permit by Rule

HAZARDOUS WASTE IDENTIFICATION
ON-SITE MANAGEMENT
UNIVERSAL WASTE
1. Introduction

1.4 New Developments

SENATE BILL 612 [HEALTH AND SAFETY CODE § 25158.1] REQUIRES AFTER JANUARY 1, 2016 THAT ALL HAZARDOUS WASTES GENERATED BY A FACILITY BE INCLUDED IN ITS GENERATOR SIZE (SQG v. LQG) DETERMINATION [SEE 6.1]:

- LQGs have more onerous regulatory requirements and pay higher fees.
- Consolidated manifested wastes (used oil, antifreeze, paint wastes, and many others) are being ignored by generators.
- Treated hazardous wastes are not being counted.
1. Introduction

1.4 New Developments, cont.

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 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.

✓ Attorney General has brought a civil case against a wine bottle manufacturer for recycling air pollution scrubber material [People v. Gallo Glass, Contra Costa Superior Court].
1.4 New Developments, cont.

DTSC’s NEW ADVISORY COMMITTEE AND ITS COMMUNITY PROTECTION AND HAZARDOUS WASTE REDUCTION (CPHWR) INITIATIVE:

This committee is advising DTSC on matters like hazardous waste regulatory policies, environmental justice, and promoting transparency.
Committee membership includes the following stakeholder groups and their representatives:

- Communities affected by hazardous waste generation, disposal
  - Del Amo Action Committee
- Communities affected by hazardous waste generation, disposal
  - The People’s Senate
- Statewide environmental justice organization
  - Center on Race, Poverty & the Environment
- Local government
  - San Francisco Department of Public Health
- Academic with research in pollution prevention
  - UC Irvine, Program in Public Health
- Statewide business advocacy organization
  - CA Council for Environmental and Economic Balance
- Hazardous waste disposal facility
  - Solid Waste Association of North America, and California Wise Waste Association
- Large quantity hazardous waste generator
  - Southern California Edison

The first initiative, CPHWR is a study to select 3 large hazardous waste streams that are generated, treated, or disposed in communities that are disproportionately affected, and to reduce their volume.
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 THAT IS A LISTED HAZARDOUS WASTE OR EXHIBITS THE 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 that are 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 prohibition of sham recycling in federal RCRA regulations at 40 CFR § 261.2(g) may affect recycling practices both federally and in California.
Recyclable Materials Report: Submit to CUPA/CERS as part of Hazardous Materials Business Plan (HMBP)
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 A 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 THE CONDITIONS OR RULES ARE FOLLOWED:**
  - **Empty Containers:** If completely empty, small (5 gallons or less) containers may be disposed as non-hazardous; this includes empty aerosol cans. Otherwise, they are universal wastes. Larger empty containers must be reused or recycled within 1 year to be exempt, and labeled during this period. Containers that previously held extremely hazardous substances (see state list of chemicals with asterisks at 3.4) must be triple rinsed. [22 CCR § 66261.7]
  - **Empty Tanks (USTs or AGTs):** Closed and empty hazardous materials storage tanks are 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)(I)]
  - **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], as long as there is no free-flowing oil and is not powdered or contaminated with other hazardous waste, and is recycled.
  - **Universal Wastes:** Covered in Part V.
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.
### I. FACILITY IDENTIFICATION

**BUSINESS NAME** (Enter FACILITY NAME or DBA - Doing Business As)  
**FACILITY ID#**

**TANK OWNER NAME**

**TANK OWNER ADDRESS**

**TANK OWNER CITY**

### II. TANK CLOSURE INFORMATION

<table>
<thead>
<tr>
<th>TANK INTERIOR ATMOSPHERE READINGS</th>
<th>Concentration of Flammable Vapor</th>
<th>Concentration of Oxygen</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Top</td>
<td>Center</td>
</tr>
<tr>
<td>1</td>
<td>74%</td>
<td>74%</td>
</tr>
<tr>
<td>2</td>
<td>74%</td>
<td>74%</td>
</tr>
<tr>
<td>3</td>
<td>74%</td>
<td>74%</td>
</tr>
</tbody>
</table>

### III. CERTIFICATION

On examination of the tank, I certify the tank is visually free from product, sludge, scale (thin, flaky residue of tank contents), residue and debris. I further certify that the information provided herein is true and accurate to the best of my knowledge.

**SIGNATURE OF CERTIFIER**

**STATUS OR AFFILIATION OF CERTIFYING PERSON**
- [ ] Yes  
- [ ] No

**NAME OF CERTIFIER** (Print)

**TITLE OF CERTIFIER**

**ADDRESS**

**CITY**

**PHONE**

**DATE**  

**CERTIFICATION TIME**

**TANK PREVIOUSLY HELD FLAMMABLE OR COMBUSTIBLE MATERIALS**
- [ ] Yes  
- [ ] No

**CERTIFIER’S TANK MANAGEMENT INSTRUCTIONS FOR SCRAP DEALER, DISPOSAL FACILITY, ETC.**

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A copy of this certificate shall accompany the tank to the scraping/disposal facility and be provided to the agency monitoring tank closure (i.e. CUPA or other authorized local agency). The owner and operator of the tank system, and the tank removal contractor.
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
Drained Filters (Oil or Fuel) with Metal: Stored in labeled, covered drum for up to 1 year.

DRAINED USED OIL FILTERS

Accumulation Start Date:_______________
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 that 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

pH—Knowledge and/or testing for corrosivity

Does paint have lead (toxicity)—Knowledge and/or testing?
How Good Is Knowledge?
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) 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 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].

- **California Toxicity**:

**California Only (Non-RCRA)**

- 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].
3. Identification and Classification of Hazardous Waste
3.2 Hazardous Waste Determination Procedure—RCRA Listed Wastes, cont.

- There are 4 lists of RCRA hazardous wastes based on criteria, including toxicity to humans, persistence or bioaccumulation in the environment, 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** are wastes generated from general industrial and commercial processes. The list includes the waste’s EPA hazardous waste number beginning with “F” (“F wastes”) and the hazardous characteristic each waste exhibits.
  - **Hazardous Wastes From Specific Sources** are wastes resulting from certain types of industrial or commercial processing. The list includes the waste’s EPA hazardous waste number beginning with “K” (“K wastes”) and the 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.
3. Identification and Classification of Hazardous Waste

3.3 Hazardous Waste Determination Procedure—Characteristic RCRA Wastes

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]
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 that exhibits 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.
3. Identification and Classification of Hazardous Waste
3.4 Hazardous Waste Determination Procedure—California-Only Hazardous Wastes

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].

- **Used lubricating oil** must be considered and managed as a hazardous waste by a California generator [§ 66279].

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

- **California List** of presumed hazardous wastes [§ 66261, Appendix X].
<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>10.0</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 IV compounds</td>
<td>5.0</td>
<td>500</td>
</tr>
<tr>
<td>Chromium and/or chromium (III) compounds</td>
<td>5.0</td>
<td>2,500</td>
</tr>
<tr>
<td>Cobalt and/or cobalt compounds</td>
<td>80</td>
<td>8,000</td>
</tr>
<tr>
<td>Copper and/or copper compounds</td>
<td>25</td>
<td>2,500</td>
</tr>
<tr>
<td>Fluoride salts</td>
<td>180</td>
<td>18,000</td>
</tr>
<tr>
<td>Lead and/or lead compounds</td>
<td>5.0</td>
<td>1,000</td>
</tr>
<tr>
<td>Mercury and/or mercury compounds</td>
<td>0.2</td>
<td>20</td>
</tr>
<tr>
<td>Molybdenum and/or molybdenium 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**

| Aldrin                                      | 0.14           | 0.4                         |
| Chlordane                                   | 0.25           | 2.5                         |
| DDT, DDE, DDD                             | 0.1            | 1.0                         |
| 2,4-Dichlorophenoxyacetic acid             | 0.10           | 10.0                        |
| Dieldrin                                   | 0.8            | 8.0                         |
| Dioxin (2,3,7,8-TCDD)                      | 0.001          | 0.01                        |
| Endrin                                     | 0.02           | 0.2                         |
| Heptachlor                                 | 0.047          | 0.47                        |
| Hexachlorobenzene                          | 2.1            | 2.1                         |
| Hexachlorophene                            | 2.1            | 2.1                         |
| Lead compounds, organic                    |                |                             |
| Lindane                                    | 0.4            | 4.0                         |
| Methoxychlor                               | 0.1            | 10.0                        |
| Mirex                                      | 0.21           | 0.21                        |
| Pentachlorophenol                          | 0.17           | 0.17                        |
| Polychlorinated biphenyls (PCBs)           | 0.5            | 5.0                         |
| Toxaphene                                  | 0.5            | 5.0                         |
| Trichloroethylene                          | 204            | 2,040                       |
| 2,4,5-Trichlorophenoxypropanoic acid       | 1.0            | 10.0                        |

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, anthophylite, 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, anthophylite, 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, anthophylite, and actinolite.
cexcluding barium sulfate.
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 I of chapter 11, equals or exceeds 500 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

3.4 Hazardous Waste Determination Procedure—California-Only

Hazardous Wastes, cont.

- **PRESENCE OF CARCINOGENIC CONSTITUENTS:**

  THE 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-Nitrobiphenyl (4-NBP)  
  N-Nitrosodimethylamine (NDMA)  
  1,2-Dibromo-3-chloropropane (DBPC)  
  Vinyl Chloride (VCM)

- **BIOASSAY TOXICITY TEST (USED TO TEST NON-QUANTITATIVE TOXICITY CRITERIA AT A 1 TO 2000 DILUTION, USUALLY IN MINNOWS).**

- **USED LUBRICATING OIL (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 62262.11. The hazardous characteristics which serve as a basis for listing the chemicals are indicated in the list as follows: (T) 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 62261.110 and section 62261.113. Trademark chemical names are indicated by all capital letters.

1. Acetaldehyde (X,I)
2. Acetic acid (X,C,I)
3. Acetone, Propanone (I)
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, Aqualin (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-exodimethanonaphthalene (X)
15. * Alkyl aluminum chloride (C,I,R)
16. * Alkyl 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) (I)
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, PHOSTOXIN (X,I,R)
27. * 4-Aminodiphenyl, 4-ADP (X)
28. * 2-Aminopyridine (X)

Note: An asterisk means an extremely hazardous waste
Zirconium chloride, Zirconium tetrachloride (X.C.R)

(a) This subdivision sets forth a list of common names of wastes which are presumed to be hazardous unless it is determined that the waste is not a hazardous waste pursuant to the procedures set forth in section 06252.11. 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 and (R) reactive

Acetylene sludge (C)
Acid and water (C)
Acid sludge (C)
APU PBO (X)
Alkaline caustic liquids (C)
Alkaline cleaner (C)
Alkaline corrosive battery fluid (C)
Alkaline corrosive liquids (C)
Asbestos waste (X)
Ashes (X)
Bag house ashes (X)
Battery acid (C)
Beryllium waste (X)
Bleach water (X)
Bolier cleaning waste (X, C)
Bunker-Oil (X, C)
Catalyst (X, C)
Caucus sludge (C)
Caucus wastewater (C)
Cleaning solvents (I)
Corrosion inhibitor (X, C)
Data processing fluid (I)
Driking fluids (X, C)
Driking water (X)
Dyes (X)
Etching acid liquid or solvent (C, I)
Fly ash (X)
Fuel waste (X)
Insecticides (X)
Laboratory waste (X, C, R)
Lime and sulfur sludge (C)
Lime and water (C)
Lime sludge (C)
Lime wastewater (C)
Liquid oament (I)
Mine tailings (X, R)
Obdolate explosives (R)
Oil and water (X)
Oil Ash (X, C)
Paint (or varnish) remover or stripper (I)
Paint thinner (C)
Paint waste (or slugs) (I)
Pickling liquor (C)
Fingments (X)
Plateing waste (X, C)
Printing ink (X)
Regrade explosives (R)
Sludge acid (C)
Soda ash (C)
Solvents (I)
Spent acid (C)
Spent caustic (C)
Spent (or waste) cyanide solutions (X, C)

(b) This subdivision sets forth a list of electronic wastes that are presumed to be hazardous and that are "covered electronic device[s]" pursuant to chapter 3 of part 3 of division 2 of the Public Resources Code section 42460 et seq., if they have a viewable screen size as defined in sections 02303.01 to 02303.011, inclusive. The hazardous characteristics which serve 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 computer;
5. LCD-containing desktop monitors;
6. CRT-containing televisons;
7. LCD-containing televisons (excluding LCD projection televisons);
8. Plasma televisons (excluding plasma projection televisons);
9. Portable DVD players with LCDs.

NOTE: Authority cited: Sections 22140, 22154.9, and 22514.10.1, Health and Safety Code; and Section 42475, Public Resources Code. Reference: Sections 22117, 22140, 22514.9, 22514.10 and 22514.10.1, Health and Safety Code; Section 42403, Public Resources Code.

HISTORY
1. New section filed 5-24-91; effective 7-1-91 (Register 91, No. 22).
2. A 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 6-7-2004 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. 85). Pursuant to Public Resources Code section 42475.2, a Certificate of Compliance must be transmitted to OAL by 1-1-2005 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 5-5-2006 (Register 2006, No. 23). Pursuant to Health and Safety Code section 22514.10.2, this emergency regulation 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 22514.10.2, this emergency regulation 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 6-8-2008 as an emergency; operative 6-8-2008 (Register 2008, No. 19). Pursuant to Health and Safety Code section 22514.10.2, this emergency regulation 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 amendment of Note, transmitted to OAL 12-16-2009 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
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 62252.111. The hazardous characteristics which serve as a basis for listing the chemicals are indicated in the list as follows: (T) 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 62251.110 and section 62251.113. Trademark chemical names are indicated by all capital letters.

| 1.  | Acetaldehyde (X,I)                  | 654. | Silver nitrate (X)     |
| 2.  | Acetic acid (X,C,I)                | 655. | Silver stibnite, Silver stibinite (X) |
| 3.  | Acetone, Propanone (I)             | 656. | Silver tetrazene (I,R) |
| 4.  | Acetone cyanohydrin (X)            | 657. | * Sodium (C, I, R)     |
| 5.  | Acetonitrile (X, I)                | 658. | Sodium aluminate (C)   |
| 6.  | * 2-Acetylaminofluorene, 2-AAF (X)  | 659. | * Sodium aluminum hydride (C, I, R) |
| 7.  | Acetyl benzoyl peroxide (X, R)     | 660. | * Sodium amide, Sodaamide (C, I, R) |
| 8.  | * Acetyl chloride (X, C, R)        | 661. | * Sodium arsenate (X)  |
| 9.  | Acetyl peroxide (X, R)             | 662. | * Sodium arsenite (X)  |
| 10. | Acridine (X)                       | 663. | Sodium azide (I, R)    |
| 11. | * Acrolein, Aqaulin (X, I)         | 664. | * Sodium bifluoride, Sodium acid fluoride (X, C) |
| 12. | * Acrylonitrile (X, I)             | 665. | Sodium bromate (X, I)  |
| 13. | * Adiponitrile (X)                 | 666. | * Sodium cacetate, Sodium dimethylarsenate (X) |
| 14. | * Aldrin, 1,2,3,4,10,10-Hexachloro-1,4,4a,5,8,8a-hexahydropseudo-endo- exodimethanona (X) | 667. | Sodium carbonate peroxide (I) |
| 15. | * Allyl aluminum chloride (C, I, R) | 668. | Sodium carbonate (X, I) |
| 16. | * Allyl aluminum compounds (C, I, R) | 669. | Sodium chlorite (X, I)  |
| 17. | Allyl alcohol, 2-Propan-1-ol (X, I) | 670. | Sodium chromate (X, C) |
| 18. | Allyl bromide, 3-Bromopropene (X, I) | 671. | * Sodium cyanide (X)  |
| 19. | Allyl chloride, 3-Chloropropene (X, I) | 672. | Sodium dichloroisocyanurate (I) |
| 20. | Allyl chlorocarbonate, Allyl chloroformate (X, I) | 673. | Sodium dichromate, Sodium biocromate (I, C, I) |
| 21. | * Allyl trichlorosilane (X, C, I, R) | 674. | Sodium fluoride (X)    |
| 22. | Aluminum (powder) (I)              | 675. | * Sodium hydride (X, C, I, R) |
| 23A | Aluminum chloride (X, C)           | 676. | Sodium hydrosulfite, Sodium hyposulfite (I) |
| 23B | * Aluminum chloride (anhydrous) (X, C, R) | 677. | Sodium hydroxide, Caustic soda, Lye (X, C) |
| 24. | Aluminum fluoride (X, C)           | 678. | * Sodium hypoiodite (X, I, R) |
| 25. | Aluminum nitrate (X)               | 679. | * Sodium methylate, Sodium methoxide (C, I, R) |
| 26. | * Aluminum phosphate, PHOSSTOXIN (X, I, R) | 680. | Sodium molybdate (X)  |
| 27. | * 4-Aminodiphenyl, 4-ADP (X)       | 681. | Sodium nitrate, Soda niter (X, I, R) |
| 28. | * 2-Aminopyridine (X)              | 682. | Sodium hydroxide - Toxic & Corrosive |

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

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!
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.
4. Physical Management Requirements for Hazardous Waste

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
4. Physical Management Requirements for Hazardous Waste

4.1 Regulatory Framework for On-Site Management of Hazardous Wastes

THE HAZARDOUS WASTE REGULATIONS ARE ORGANIZED BASED ON THE 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 (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.)

✓ Storage Area (potentially large amount of hazardous waste) – essentially all requirements applicable to a hazardous waste treatment storage and disposal facility (TSDF).

*Note: 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.

Links: DTSC Managing Hazardous Waste Program Publications – Accumulating Hazardous Wastes at Generator Sites
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**

**Waste Description, Point of Generation, PWI #**

**Name & Address of Generator**

**Month/Day/Year**

**Enter Date or “Emptied Daily” for a Recurrent Use Container**

**Liquid (free) OR Solid (bone dry)**

**Mark One or More Hazards**

**Note:** Major differences from RCRA regulations, which do not require information beyond hazardous waste/type of waste and start date.
Typical Compliant Point of Generation Accumulation Container

(Can also be considered satellite accumulation)

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

4.3 Storage Time Limits as a Permit Exemption, cont.

- 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 location. 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, which allow an indefinite time to accumulate the 55 gallons.

✔ The accumulation must be in containers, not tanks.

✔ 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:** Subsection (e)(2) of this regulation is not clearly written, and suggests that there may be exceptions to the 55-gallon limit, which requires caution.

___

**Links:** State Satellite Rule Regulation 22 CCR §6262.34(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)

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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 THAT ASSURE 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
4. Physical Management Requirements For Hazardous Waste

4.5 Summary of Requirements for Hazardous Waste Storage Areas, cont.

VOC EMISSION CONTROLS: HAZARDOUS WASTES THAT CONTAIN 500 PARTS PER MILLION 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 include:

- Sufficiently large floor surface.
- Sloped flooring designated to collect spilled material.
- Bermed or curbed area.
- Drainage system that collects and holds or treats 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

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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 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.
4. Physical Management Requirements for Hazardous Waste

4.7 Containment Requirements for Hazardous Wastes in Tanks, cont.

- 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.
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 A 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 Title 22 CCR Preparedness and Prevention §§ 66265.30 - .37 referenced by generator standards at 22 CCR § 66262.34. A list of incompatible wastes is at 22 CCR Appendix V.
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.
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, like 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 22 CCR § 66265.195

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### MODEL INSPECTION LOG
(Weekly for Containers/Daily for Tanks)

<table>
<thead>
<tr>
<th>Date</th>
<th>Inspector’s Name</th>
<th>Signature</th>
<th>Areas Inspected</th>
<th>Deficiencies Noted (✓) and Additional Comments on Reverse</th>
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<td>General</td>
<td>Containers</td>
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Facility: ___________________________  Inclusive Dates: ___________________________
# 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.

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<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 reclamer. (August 3, 2001)
- 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).
- 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)
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)*

Notes: RCRA or federally regulated universal risks are indicated by *

Examples of Universal Wastes

- Mercury-Containing Gas Meter
- Cathode Ray Tube
- Lamps
- Electronic Devices
- Mercury Ampoule from Thermostat
- Sealed Lead-Acid Gel Batteries
- Rechargeable & Alkaline Batteries
- Mercury-Containing Thermostat
- Thermometer

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5. Universal Wastes
5.2 Requirements for On-Site Management of Universal Wastes

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](#)
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.]
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].

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Example of Compliant Universal Waste Battery Management

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

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; EPA Identification Number - § 66262.12; Biennial Generator Report - § 66262.41; On-Site Treatment Permitting – HSC §§ 25200 et seq., 22 CCR § 67450

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6. Administrative Requirements

6.1 Recordkeeping of the Types and Amounts of HazWaste Generated

- 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 the 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).
6. Administrative Requirements

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

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: Enactment of Senate Bill 612 [HSC § 25158.1] and eventual DTSC regulations 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: Title 22 CCR Accumulation Time § 66262.34
6. Administrative Requirements

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

![Model Hazardous Waste Generation Log]

<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 ACUTELY HAZARDOUS WASTE*</th>
<th>CALIFORNIA EXTREMELY HAZARDOUS WASTE*</th>
<th>SPILL CLEANUP MATERIAL CONTAMINATED WITH RCRA HAZARDOUS WASTE*</th>
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</table>

*Probably not applicable to most generators

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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 THAT REQUIRES 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 TELEPHONICALLY.
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 that generate 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, charging 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

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 30 days. Permanent ID numbers are issued to people or businesses who routinely generate hazardous wastes.

There is no fee to obtain an ID number.

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.

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. (Also known as "From Cradle to Grave"). State ID numbers are owner and site specific. EPA ID numbers are site specific. The ID number is placed on the manifest for each generator, transporter, and facility that handles the waste.

CATEGORIES OF HAZARDOUS WASTE ID NUMBERS

Temporary and Permanent ID numbers are also divided into two categories of ID numbers, called EPA ID numbers and State ID numbers. The category of ID number issued is dependent on the classification (RCRA hazardous waste or non-RCRA hazardous waste) and amount of hazardous waste generated/handled:

- EPA ID numbers are issued to handlers of RCRA hazardous waste. This includes generators of more than 100 kg of RCRA hazardous waste and/or more than one kg or more of acutely hazardous waste.
- All other handlers of hazardous waste are issued State ID numbers.

THERE ARE SOME EXEMPTIONS

Generators who produce, in each month, less than or equal to 100 kilograms of RCRA hazardous waste that is hazardous only due to silver, such as spent photo-processing solutions, do not need an ID Number. This exemption does not apply if the generator produces any other hazardous waste or is

Federal ID Numbers

Permanent Hazardous Waste ID Numbers

Permanent ID numbers are issued to people or businesses who routinely generate or handle hazardous wastes. There are two categories of ID numbers. These are EPA ID numbers, and State ID numbers.

I handle:

- Greater than 100 kg of RCRA hazardous waste per calendar month
- Greater than one kg of acutely hazardous waste per calendar month
- All Others

PERMANENT EPA ID NUMBERS

DTSC issues permanent EPA ID numbers to handlers of hazardous waste. If you or your business generates more than 100 kg of hazardous waste and/or more than one kg of acutely hazardous waste, then you will need an EPA ID number. To obtain an EPA ID number, you must fill out a US EPA Form 8700-12. The form includes instructions on each section of the form. Original signatures (also called "wet signatures") are required on the Form 8700-12. Photocopies are not accepted. Please mail the Form 8700-12 to:

California Department of Toxic Substances Control
Attn: RCRA Notifications
P.O. Box 806
Sacramento, CA 95812-0806

PERMANENT STATE ID NUMBERS

DTSC issues permanent State ID numbers to handlers for the purpose of tracking hazardous wastes. Permanent State ID numbers are issued to a person or business that routinely handle hazardous wastes, but do not need to obtain an EPA ID number. State ID numbers are site-specific and owner-specific.
Application Form for a U.S. EPA ID Number

United States Environmental Protection Agency
RCRA SUBTITLE C SITE IDENTIFICATION FORM

1. Reason for Submittal:
   - To provide an initial notification (first-time submitting site identification information will obtain an EPA ID number for this location).
   - To provide a subsequent notification (to update site identification information for this location).
   - As a component of a first RCRA Hazardous Waste Part A Permit Application.
   - As a component of a revised RCRA Hazardous Waste Part A Permit Application (Amendment A, B, C, or D).
   - As a component of the hazardous waste report (if marked, see sub-item below).
   - Site was a TSDF facility and/or generator greater than 1,000 kg of hazardous waste, 10 kg of acute hazardous waste, or greater than 100 kg of acute hazardous waste spill cleanup in one or more months of the report year (or State equivalent LQSS regulations).

2. Site EPA ID Number

3. Site Name

4. Site Location Information
   - Street Address:
   - City, Town, or Village:
   - State:
   - County:
   - Zip Code:

5. Site Land Use Type:
   - [ ] Private
   - [ ] County
   - [ ] District
   - [ ] Federal
   - [ ] Tribal
   - [ ] Municipal
   - [ ] State
   - [ ] Other

6. NAICS Code(s) for the Property (at least 5-digit codes):
   - [ ] A
   - [ ] B
   - [ ] C

7. Site Mailing Address
   - Street or P.O. Box:
   - City, Town, or Village:
   - State:
   - Country:
   - Zip Code:

8. Site Contact Person
   - First Name:
   - Last Name:
   - Title:
   - Street or P.O. Box:
   - City, Town, or Village:
   - State:
   - Country:
   - Zip Code:
   - Email:
   - Phone:
   - Fax:

9. Legal Owner and Operator of the Site
   - A. Name of Site’s Legal Owner:
     - Date Became Owner:
   - B. Name of Site’s Operator:
     - Date Became Operator:

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; Complete all parts 1-10.
   - [ ] Generator of Hazardous Waste
     - If “Yes,” mark only one of the following – a, b, or c.
     - a. LQG: Generates, in any calendar month, 1,000 kg/mo (2,200 lbs/mo) or more of hazardous waste; or
     - Generates, in any calendar month, accumulates at any time, more than 1 kg/mo (2.2 lbs/mo) of acute hazardous waste; or
     - Generates, in any calendar month, accumulates at any time, more than 100 kg/mo (220 lbs/mo) of acute hazardous waste spill cleanup material.
     - b. SQG: Generates 100 to 1,000 kg/mo (220 to 2,200 lbs/mo) of non-acute hazardous waste.
     - c. CESQG: Generates less than 100 kg/mo (220 lbs/mo) of non-acute hazardous waste.

   - If “Yes” above, indicate other generator activities in 2-10.

B. Universal Waste Activities; Complete all parts 1-2.
   - [ ] Large Quantity Handler of Universal Waste (you accumulate 5,000 kg or more) [refer to your State regulations to determine what is regulated]. Indicate types of universal waste managed at your site. If “Yes,” mark all that apply.
     - a. Batteries
     - b. Pesticides
     - c. Mercury containing equipment
     - d. Lamps
     - e. Other (specify) ______
     - f. Other (specify) ______
     - g. Other (specify) ______

   - [ ] Destination Facility for Universal Waste
     - Note: A hazardous waste permit may be required for this activity.

C. Used Oil Activities; Complete all parts 1-4.
   - [ ] Used Oil Transporter
     - If “Yes,” mark all that apply.
     - a. Transporter
     - b. Transfer Facility (at your site)

   - [ ] Used Oil Processor and/or Re-refiner
     - If “Yes,” mark all that apply.
     - a. Processor
     - b. Re-refiner

   - [ ] Off-Specification Used Oil Burner

   - [ ] Used Oil Fuel Marketer
     - If “Yes,” mark all that apply.
     - a. Marketer Who Directs Shipment of Off-Specification Used Oil to Off-Specification Used Oil Burner
     - b. Marketer Who First Claims the Used Oil Meets the Specifications

Link: Application Form
D. Eligible Academic Entities with Laboratories—Notification for opting into or withdrawing from managing laboratory hazardous wastes pursuant to 40 CFR Part 262 Subpart K

- You can ONLY Opt into Subpart K if:
  - you are at least one of the following: a college or university, a teaching hospital that is owned by or has a formal affiliation agreement with a college or university, or a non-profit research institute that is owned by or has a formal affiliation agreement with a college or university, and
  - you have checked with your State to determine if 40 CFR Part 262 Subpart K is effective in your state

Y ☐ ☑ 1. Opting into or currently operating under 40 CFR Part 262 Subpart K for the management of hazardous wastes in laboratories
   See the item-by-item instructions for definitions of types of eligible academic entities. Mark all that apply:
   a. College or University
   b. Teaching Hospital that is owned by or has a formal written affiliation agreement with a college or university
   c. Non-profit Institute that is owned by or has a formal written affiliation agreement with a college or university

Y ☐ ☑ 2. Withdrawing from 40 CFR Part 262 Subpart K for the management of hazardous wastes in laboratories

II. Description of Hazardous Waste

A. 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.

<table>
<thead>
<tr>
<th>Waste Code</th>
<th>Description</th>
<th>Quantity</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
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</tbody>
</table>

B. Waste Codes for State-Regulated (i.e., non-Federal) Hazardous Wastes. Please list the waste codes of the State-Regulated 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.

<table>
<thead>
<tr>
<th>Waste Code</th>
<th>Description</th>
<th>Quantity</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
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</table>

EPA Form 8700-12, 8700-13 A/B, 8700-23
### Application for State EPA ID Number

**New Number Request:**
- [ ] I am applying for a new permanent California ID number as a hazardous waste: 
  - Generator
  - Transporter
- Reason for new number: 
  - [ ] Never had a number
  - [ ] Business moved
  - [ ] Legal owner of business changed
- If your business generates more than 100 lb. of RCRA hazardous waste per month, call (415) 495-1895 for a federal ID number.

**Changes to Status or Information for an Existing ID Number:**
- [ ] A
- [ ] B
- [ ] C
- I am updating the mailing address and/or contact information only.
- I am inactivating this ID Number.
- I am reactivating this ID Number.
- I am changing the business name only, no ownership change.

**Site/Facility/Business Name (Include DBA):**

**Address:**
- Street
- City
- State
- Zip

**Federal Employer ID Number:**

**Board of Equalization Fee Account Number:**

**Mailing Address:**
- Street
- City
- State
- Zip

**Contact Person:**
- First Name
- Last Name
- Address:
- Street
- City
- State
- Zip
- Phone Number (Area Code) Phone Number (Area Code)
- Fax Number
- Preferred Primary Communication: [ ] Mail [ ] Email

**Legal Business Owner (not property owner):**
- Name
- Address:
- Street
- City
- State
- Zip
- Phone Number (Area Code) Phone Number (Area Code)
- Fax Number

**Standard Industrial Classification (SIC) Code for the Site:**

**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:**

**Name (print):**

**Title:**

**Date:**

**Phone:**

**Link:** [Application Form](#)
6. Administrative Requirements

6.3 Submission of Applicable CUPA Unified Program Forms
6. Administrative Requirements

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

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. This was 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 A 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.
**Biennial Reporting Documents**

United States Environmental Protection Agency  
RCRA SUBTITLE C SITE IDENTIFICATION FORM

1. **Reason for Submission:**  
   - To provide an initial notification (first time submitting site identification information) to obtain an EPA ID number for this location.
   - To provide a subsequent notification (to update the identification information for the location).
   - As a component of a first RCRA Hazardous Waste Permit Application.
   - As a component of the Revised RCRA Hazardous Waste Permit Application (Amendment #_________).
   - As a component of the hazardous Waste Report (if marked, see sub-bullet below)
   -Site was a TSDF facility and/or generator of >1,000 kg of hazardous waste, >1 kg of acute hazardous waste, or >100 kg of acute hazardous waste spill cleanup in one or more months of the report year (or State equivalent 4035 regulations).

2. **Site EPA ID Number:**  
   
3. **Site Name:**

4. **Site Location Information:**
   - Street Address:
   - City, Town, or Village:
   - State:  
   - Country:  
   - Zip Code:

5. **Site Land Type:**
   - Private
   - County
   - District
   - Federal
   - Tribal
   - Municipal
   - State
   - Other

6. **NAICS Code(s) for the Site (at least 5-digit code):**
   - A.
   - B.

7. **Site Mailing Address:**
   - Street or P.O. Box:
   - City, Town, or Village:
   - State:  
   - Country:  
   - Zip Code:

8. **Site Contact Person:**
   - First Name:
   - Middle Initial:
   - Last Name:
   - Title:
   - Street or P.O. Box:
   - City, Town or Village:
   - State:  
   - Country:  
   - Zip Code:
   - Email:
   - Phone:
   - Ext.:  
   - Fax:

9. **Legal Owner and Operator of the Site:**
   - A. Name of Site’s Legal Owner:
     - Date Became Owner:
   - Owner Type:
     - Private
     - County
     - District
     - Federal
     - Tribal
     - Municipal
     - State
     - Other
   - Street or P.O. Box:
   - City, Town, or Village:
   - State:  
   - Country:  
   - Zip Code:
   - B. Name of Site’s Operator:
     - Date Became Operator:
   - Operator Type:
     - Private
     - County
     - District
     - Federal
     - Tribal
     - Municipal
     - State
     - Other

**Note:** 1 GM form for each RCRA hazardous waste generated

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EPA settles with Bakersfield, Calif., steel company to ensure safe handling of hazardous waste

Release Date: 10/28/2014
Contact Information: Nahal Moghanabi, 213–244–1815, moghanabini@epa.gov

LOS ANGELES—The U.S. Environmental Protection Agency fined Kern Steel Fabrication, Inc. $37,100 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 on site 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, workstands, 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://www.epa.gov/astorcomer/waste-trasrcra-and-cleanup-andrecent/astwast
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.


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.
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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**SUMMARY PROGRESS REPORT**

**TABLE 1: GENERAL INFORMATION**

| DATE: ____________________ |

A hazardous waste generator subject to SB 14, is required to complete Tables 1 and 2 by September 1, (2015) The generator is to prepare only one Table 1. However, the generator may need to prepare more than one Table 2, one for each reportable waste stream.

See Summary Progress Report publication or SB 14 Guidance Manual Chapter 7, for assistance.

- **NAME OF GENERATOR, FACILITY, or BUSINESS**
- **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 “COMMENTS” below. Combine data for similar wastes from the multiple sites for the remainder of the Summary Progress Report).
- **EPA ID NO.**
- **SIC CODE**
- **NAICS CODE**
- **STREET ADDRESS**
- **CITY**
- **COUNTY**
- **MAILING ADDRESS**
- **CITY**
- **ZIP CODE**
- **CONTACT NAME**
- **CONTACT PHONE**
- **TYPE OF BUSINESS, OPERATION, or ACTIVITY:**
- **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 nonroutinely generated, exempted, or secondary wastes. Exempted and nonroutinely 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.**

**TABLE 2: SPECIFIC WASTE STREAM INFORMATION**

- **DATE: ____________________**

Complete and submit a separate Table 2 for each major hazardous waste stream.

- **NAME OF GENERATOR, FACILITY, or BUSINESS**
- **EPA ID NO.**
- **HAZARDOUS WASTE STREAM DESCRIPTION**
- **CALIFORNIA WASTE CODE**
- **THIS HAZARDOUS WASTE IS (please check one):**
  - Processed onsite in a wastewater pretreatment unit for discharge to POTW or NPDES permit (Category A)
  - Other SB 14 hazardous waste (Category B)
  - Extremely hazardous waste

**ACCOMPLISHMENTS**

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

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

**PROJECTIONS**

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

- **How much waste was generated in the 2014 Reporting Year?**
- **pounds**
- **Describe the source reduction measure selected to be implemented by (2015): (add page if needed):**
- **Month**
- **Year**

- **What is the annual projected source reduction quantity identified in the 2014 Plan?**
- **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.

DTSC 1262 (05/30/07)

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**Note:** 1 Summary Progress Report form for each hazardous waste stream generated
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]
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) [8 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].
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 business plan, if properly prepared and available to employees trained on it meets this requirement. Posting of the information is urged using the poster available from www.unidocs.org.
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**
- Try to control the emergency if you are trained to do so and can do it safely
- Report the emergency to the facility Emergency Coordinator (EC)

For Release Reporting see Emergency Contacts below

<table>
<thead>
<tr>
<th>Facility Emergency Coordinators</th>
<th>NAME</th>
<th>WORK PHONE</th>
<th>CELLULAR PHONE/PAGER</th>
<th>HOME PHONE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>John Jones</td>
<td>619-123-4567</td>
<td>619-123-4570</td>
<td>619-123-4573</td>
</tr>
<tr>
<td>Alternate #1</td>
<td>Charlie Smith</td>
<td>619-123-4568</td>
<td>619-123-4571</td>
<td>619-123-4574</td>
</tr>
<tr>
<td>Alternate #2</td>
<td>Gladys Johnson</td>
<td>619-123-4569</td>
<td>619-123-4572</td>
<td>619-123-4575</td>
</tr>
</tbody>
</table>

**EMERGENCY CONTACTS**

<table>
<thead>
<tr>
<th>AGENCY</th>
<th>Telephone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire Department, Ambulance, Police</td>
<td>911</td>
</tr>
<tr>
<td>San Diego County Hazardous Materials Division</td>
<td>(858) 505-6657</td>
</tr>
<tr>
<td>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>Local Non-emergency Police/Sheriff/Fire (Optional)</td>
<td>(619) 000-0000</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>

**EMERGENCY EQUIPMENT**

Locations of fire extinguishers, fire alarms (if any), and equipment for controlling chemical spills are shown on the facility site plan posted with this notice. Locations (optional) of electrical gas and water shut-offs, are also shown on the posted facility plan.

**NOTE:**
Ensure that employees are familiar with these emergency and evacuation procedures. An emergency coordinator must be available 24-hours to assist emergency response personnel.
Note: If facility is LQG, Emergency Contacts must have hazardous waste and emergency response training.
Consolidated Contingency Plan forms like this example can meet hazardous waste emergency planning requirements if properly implemented.
### G. EMERGENCY EQUIPMENT

Check all boxes that apply to list emergency response equipment available at the facility and identify the location(s) where the equipment is kept and the equipment’s capability, if applicable. *(e.g. ☐ CHEMICAL PROTECTIVE GLOVES / Spill response kit ) One line can. Oil & solvent resistant only

<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>☐ CHEMICAL PROTECTIVE SUITS, APRONS, OR VESTS</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td></td>
<td>☐ CHEMICAL PROTECTIVE GLOVES</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td></td>
<td>☐ CHEMICAL PROTECTIVE BOOTS</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td></td>
<td>☐ SAFETY GLASSES / GOGGLES / SHIELDS</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td></td>
<td>☐ HARD HATS</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td></td>
<td>☐ CARTRIDGE RESPIRATORS</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td></td>
<td>☐ SELF-CONTAINED BREATHING APPARATUS (SCBA)</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td></td>
<td>☐ FIRST AID KITS / STATIONS</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td></td>
<td>☐ PLUMBING EYEWASH FOUNTAIN / SHOWER</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td></td>
<td>☐ PORTABLE EYEWASH KITS</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td></td>
<td>☐ OTHER</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

| Fire Fighting | ☐ PORTABLE FIRE EXTINGUISHERS | ☐ | ☐ |
| Spill Control and Clean-Up | ☐ ALL-IN-ONE SPILL KIT | ☐ | ☐ |
|   | ☐ ABSORBENT MATERIAL | ☐ | ☐ |
|   | ☐ CONTAINER FOR USED ABSORBENT | ☐ | ☐ |
|   | ☐ BERMING / DISKING EQUIPMENT | ☐ | ☐ |
|   | ☐ DRENCH | ☐ | ☐ |
|   | ☐ SHOVEL | ☐ | ☐ |
|   | ☐ SHOP VAC | ☐ | ☐ |
|   | ☐ EXHAUST HOOD | ☐ | ☐ |
|   | ☐ EMERGENCY SUMP / HOLDING TANK | ☐ | ☐ |
|   | ☐ CHEMICAL NEUTRALIZERS | ☐ | ☐ |
|   | ☐ GAS CYLINDER LEAK REPAIR KIT | ☐ | ☐ |
|   | ☐ SPILL, OVERPACK DRUMS | ☐ | ☐ |
|   | ☐ OTHER | ☐ | ☐ |

| Communications and Alarm Systems | ☐ TELEPHONES (Includes cellular) | ☐ | ☐ |
|   | ☐ INTERCOM / PA SYSTEM | ☐ | ☐ |
|   | ☐ PORTABLE RADIOS | ☐ | ☐ |
|   | ☐ AUTOMATIC ALARM (CHEMICAL MONITORING) EQUIPMENT | ☐ | ☐ |
|   | ☐ OTHER | ☐ | ☐ |

### II. EARTHQUAKE VULNERABILITY

Identify areas of the facility that are vulnerable to hazardous materials releases / spills due to earthquake-related motion. These areas require immediate isolation and inspection.

<table>
<thead>
<tr>
<th>VULNERABLE AREAS (Check all that apply)</th>
<th>LOCATION(s) (e.g., shop, outdoor shed, forensic lab)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. HAZARDOUS MATERIALS / WASTE STORAGE AREA</td>
<td>☐</td>
</tr>
<tr>
<td>2. PROCESS LINES / PIPING</td>
<td>☐</td>
</tr>
<tr>
<td>3. LABORATORY</td>
<td>☐</td>
</tr>
<tr>
<td>4. WASTE TREATMENT AREA</td>
<td>☐</td>
</tr>
</tbody>
</table>

Identify mechanical systems vulnerable to releases / spills due to earthquake-related motion. These systems require immediate isolation and inspection.

<table>
<thead>
<tr>
<th>VULNERABLE SYSTEMS (Check all that apply)</th>
<th>LOCATION(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. SHELVES, CABINETS AND RACKS</td>
<td>☐</td>
</tr>
<tr>
<td>2. TANKS (EMERGENCY SHUTOFF)</td>
<td>☐</td>
</tr>
<tr>
<td>3. PORTABLE GAS CYLINDERS</td>
<td>☐</td>
</tr>
<tr>
<td>4. EMERGENCY SHUTOFF AND/OR UTILITY VALVES</td>
<td>☐</td>
</tr>
<tr>
<td>5. SPRINKLER SYSTEMS</td>
<td>☐</td>
</tr>
<tr>
<td>6. STATIONARY PRESSURIZED CONTAINERS (e.g., Propane dispensing tank)</td>
<td>☐</td>
</tr>
</tbody>
</table>

### I. EMPLOYEE TRAINING

Explanation of Requirement: Employee training is required for all employees handling hazardous materials and hazardous wastes in day-to-day or clean-up operations including volunteers and contractors. Training must be:

- Provided within 6 months for new hires;
- Amended as necessary prior to change in process or work assignment;
- Given upon modification to the Emergency Response / Contingency Plan, and updated/revised annually for all employees.

Required content includes all of the following:

- Material Safety Data Sheets;
- Hazard communication related to health and safety;
- Methods for safe handling of hazardous substances;
- Fire hazards and processes;
- Conditions likely to worsen emergencies;
- Coordination of emergency response;
- Notification procedures;
- Applicable laws and regulations;

Communication and alarm systems;

- Personal protective equipment;
- Use of emergency response equipment (e.g. Fire extinguishers, respirators, etc.);
- Decontamination procedures;
- Evacuation procedures;
- Control and containment procedures;
- USE monitoring system equipment and procedures (if applicable).

**INDICATE HOW EMPLOYEE TRAINING PROGRAM IS ADMINISTERED:**

- ☐ 1. FORMAL, CLASSROOM; ☐ 2. VIDEO; ☐ 3. SAFETY / TAILGATE MEETINGS;
- ☐ 4. STUDY GUIDES / MANUALS (Specify): ☐ 5. OTHER (Specify): ☐ 6. NOT APPLICABLE (BECAUSE FACILITY HAS NO EMPLOYEES)

**Large Quantity Generator (LQG) Training Records:** Large quantity hazardous waste generators (i.e., who generate more than 270 gallons/1,000 kilograms of hazardous waste per month) must retain written documentation of employee hazardous waste management training sessions which includes:

- A written outline/agenda of the type and amount of both introductory and continuing training that will be given to persons filling each job position having responsibility for the management of hazardous waste (e.g., labeling, manifesting, compliance with accumulation time limits, etc.);
- The name, job title, and date of training for each hazardous waste management training session given to an employee filling such a job position; and
- A written job description for each of the above job positions that describes job duties and the skills, education, or other qualifications required of personnel assigned to the position.

Current employee training records must be retained until closure of the facility. Former employee training records must be retained at least three years after termination of employment.

### J. LIST OF ATTACHMENTS

(Check one of the following)

- ☐ NO ATTACHMENTS ARE REQUIRED;
- ☐ THE FOLLOWING DOCUMENTS ARE ATTACHED:

### K. SIGNATURE / CERTIFICATION

Certificate: Based on my inquiry of those 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 SIGNED**

**NAME OF SIGNER**

**TITLE OF SIGNER**
6. Administrative Requirements

6.6 Training for Hazardous Waste Handlers & Requirements

- 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.
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 TRIENNIAgL 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.

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

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Links: www.unidocs.org
## 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>
</table>
Same label information. Accumulation start date. | Small amount can be absorbed after elimination of all sources of spark/ignition. |
Same label information. Accumulation start date. | Contain and containerize liquid, use absorbent material and cleaners to decon surfaces. |
| Waste lubricating oil      | Toxic, CWC 221     | 55-gallon closed top drum | Hazardous waste generator information. Waste oil. Liquid. Toxic. Accumulation start date.           | No – Container remains at point of generation for transfer to central storage area. | Contain and containerize liquid, use absorbent material and cleaners to decon surfaces. |

*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.*
6. Administrative Requirements

6.6 Training for Hazardous Waste Handlers & Requirements—Sample Training, Alternate Format

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:

Enter Date or “Emptied Daily”
6. Administrative Requirements

6.6 Training for Hazardous Waste Handlers & Requirements—Sample Training Formats, cont.

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 POTENTIAL 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)].

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]
6. Administrative Requirements

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

A FACILITY THAT IS NOT EXEMPT AND MAY BE SUBJECT TO TIERED PERMITTING MUST VERIFY THAT 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 now allows tiered permitting for cyanide treatment [22 CCR § 67450.11].

6. Administrative Requirements

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

11a
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

CESW
CESQT
PBR

11b
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 3677, Ch. 276)

NO volume limit

CESW

Treatment of Multi-component resins Mixed in accordance with manufacturer’s instructions

≤500 lbs/mo/facility

CESQT

>500 lbs/mo.

PBR

LensCrafters Case - $475,000 fine for not permitting hardening of waste resin with UV light
FOR IMMEDIATE RELEASE
November 8, 2008

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 to 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 2½ year period. According to EMD's Director Val Siebel, 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@saccounty.net
6. Administrative Requirements
6.7 Permit-Required On-Site Treatment of Hazardous Waste, cont.

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:

Hazardous Materials/Community Right-To-Know

Section I Facility Information
(A) Business Owner/Operator Identification
(B) Business Activities

Section II Hazardous Materials
(A) Hazardous Materials Inventory – Chemical Description (formerly OES Form 2731) and the NEW Matrix (6-Chemical or waste) format

Hazardous Waste Management

Section IV Hazardous Waste
(A) Recyclable materials report pages 1 and 2
(B) Onsite Hazardous Waste Treatment Notification – Facility Page (Formerly DTSC Form 1772)
(C) Onsite Hazardous Waste Treatment Notification – Unit Pages (Formerly DTSC Forms 1772A, B, C, D and E
(D) Certification of Financial Assurance for Permit by Rule and conditionally Authorized Onsite Treaters (Formerly DTSC Form 1232)
(E) Remote Waste Consolidation Site Annual Notification (Formerly DTSC Form 1169)
(F) Hazardous Waste Tank Closure Certification (Formerly DTSC Form 1249)

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).
7. Off-Site Hazardous Waste Transportation Requirements

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.
7. Off-Site Hazardous Waste Transportation Requirements

7.1 Summary of Off-Site Hazardous Waste Transportation Requirements, cont.

- 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.

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**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

7.2 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:* the 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.

This waste is DOT regulated because it is a Class 3 flammable liquid.

Waste Paint-Related Materials, 3, UN 1263, PG II (D001)
7. Off-Site Hazardous Waste Transportation Requirements

7.3 Hazardous Waste Manifesting

- Proper completion and management of the hazardous waste manifest is essential for compliance and liability avoidance. The manifest documents 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.

Links: 22 CCR § 66262.20 - .23
DTSC Hazardous Waste Tracking System
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)
Example of a completed manifest with key elements identified—employees who sign manifests should know about these items.
### California Waste Codes

<table>
<thead>
<tr>
<th>California Restricted Wastes – Use First, if applicable</th>
<th>Sludge</th>
</tr>
</thead>
<tbody>
<tr>
<td>411. Liquids with cadmium &gt; 500 mg/l</td>
<td>491. Alum and gypsum sludge</td>
</tr>
<tr>
<td>412. Liquids with copper &gt; 500 mg/l</td>
<td>492. Lime sludge</td>
</tr>
<tr>
<td>413. Liquids with zinc &gt; 500 mg/l</td>
<td>493. Phosphate sludge</td>
</tr>
<tr>
<td>414. Liquids with lead &gt; 500 mg/l</td>
<td>494. Sulfur sludge</td>
</tr>
<tr>
<td>415. Liquids with mercury &gt; 50 mg/l</td>
<td>495. Deslagging sludge</td>
</tr>
<tr>
<td>416. Liquids with nickel &gt; 150 mg/l</td>
<td>496. Paint sludge</td>
</tr>
<tr>
<td>417. Liquids with silver &gt; 100 mg/l</td>
<td>497. Paper sludge/pulp</td>
</tr>
<tr>
<td>418. Liquids with thallium &gt; 100 mg/l</td>
<td>498. Tetraethyl lead sludge</td>
</tr>
<tr>
<td>419. Liquids with polynuclear hydrocarbons &gt; 50 mg/l</td>
<td>499. Unspecified sludge waste</td>
</tr>
<tr>
<td>420. Liquids with halogenated organic compounds &gt; 1000 mg/l</td>
<td></td>
</tr>
<tr>
<td>421. Solids or sludge with halogenated organic comp. &gt; 1000 mg/kg</td>
<td></td>
</tr>
<tr>
<td>422. Liquids with pH 2 or 2</td>
<td></td>
</tr>
<tr>
<td>423. Waste potentially containing chlorine</td>
<td></td>
</tr>
</tbody>
</table>

**California Non-Restricted Wastes**

- **Inorganics**
  - 121. Alkaline solution (pH ≥ 12.5) with metals (antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium, and zinc)
  - 122. Alkaline solution without metals (pH ≥ 12.5)
  - 123. Unspecified alkaline solution
  - 133. Acidic solution (pH < 2) or total organic halides greater than 121 for a list of metals
  - 134. Acidic solution with 1% or more total organic halides
  - 135. Unspecified aqueous solution
  - 141. Off-specification, aged, or surplus inorganics
  - 151. Asbestos-containing waste
  - 161. Chlorinated solvents (PCE) waste
  - 162. Other spent catalysts
  - 171. Metal sludge (see 121)
  - 172. Metal dust (see 121) and machining waste
  - 181. Other inorganic solid waste

- **Organics**
  - 211. Halogenated solvents (chloroform, methyl chlorides, perchloroethylene, etc.)
  - 212. Oxygenated solvents (acetone, butanone, ethyl acetate, etc.)
  - 213. Hydrocarbon solvents (benzene, hexane, Stoddard, etc.)
  - 214. Unspecified solvent mixture
  - 221. Waste oil and mixed oil
  - 222. Oil/water separation sludge
  - 231. Unspecified oil-containing waste
  - 311. Pesticide rinse water
  - 321. Pesticides and other waste associated with pesticide production
  - 421. Tank bottom waste
  - 521. Still bottoms with halogenated organics
  - 522. Other still bottoms waste
  - 523. Polynuclear dioxins and materials containing PCB's
  - 524. Organomercury waste (includes unreacted mercuric)
  - 525. Polyvinyl chloride waste
  - 526. Adhesives
  - 527. Latex waste
  - 528. Pharmaceuticals waste
  - 529. Sewage sludge
  - 530. Biological waste other than sewage sludge
  - 531. Off-specification, aged, or surplus organics
  - 532. Organic liquids contaminated with halogenated organics
  - 533. Organic liquids with metals (see 121)
  - 534. Unspecified organic liquid mixture
  - 535. Organic solids with halogenated organics
  - 536. Other organic solids

### RWRC Report Management Method Codes

**New Codes & Descriptions**

- H010. Metals recovery including recycling, smelting, chemicals, etc.
- H020. Solvents recovery
- H039. Other recovery or reclamation for reuse including acid generation, organics recovery, etc.
- H050. Energy recovery at this site -- use as fuel (includes on-site fuel blending)
- H061. Fuel blending prior to energy recovery at another site
- H070. Indirect energy recovery other than use as a fuel
- H071. Chemical reduction with or without precipitation
- H073. Cyanide destruction with or without precipitation
- H075. Chemical oxidation
- H076. Water air oxidation
- H077. Other chemical precipitation with or without pre-treatment
- H081. Biological treatment with or without precipitation
- H082. Adsorption
- H083. Air or steam stripping
- H101. Sludge treatment and/or dewatering
- H103. Absorption
- H111. Stabilization or chemical fixation prior to disposal at another site
- H112. Macroencapsulation prior to disposal at another site
- H113. Neutralization only
- H122. Evaporation
- H123. Dewatering or dewatering
- H124. Pretreatment
- H129. Other treatment
- H131. Land treatment or application (to include on-site treatment and/or stabilization)
- H132. Landfill or surface impoundment that will be closed as landfill (to include on-site treatment and/or stabilization)
- H134. Deepwell or underground injection (with or without treatment)
- H135. Discharge to sewer/PSUTs or NPDES (with prior storage-with or without treatment)
- H141. Storage, bulking, and/or transfer off-site (no treatment/recovery; H164-H120), fuel blending (H081), or disposal (H131-H135) at this site
7. Off-Site Hazardous Waste Transportation Requirements
7.3 Hazardous Waste Manifesting, cont.

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.
Discrepancies and rejected loads are an area of significant change in the manifest form, which allows 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).

A review of the returned acknowledgement copy compared with the original should be performed to assure no discrepancies were noted and to double check that 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.
LAND DISPOSAL BANS HAVE BEEN IMPOSED BY FEDERAL AND CALIFORNIA LAW ON VIRTUALLY ALL RCRA AND 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.
7. Off-Site Hazardous Waste Transportation Requirements

7.4 Land Disposal Bans for Restricted Hazardous Wastes, cont.

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.

Links: LDR Regulations 22 CCR §§ 66268, et seq.
### Example LDR Form

**Service Firms Prepare Forms**

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**SIEMENS**

Siemens Water Technologies Corp.

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**LAND DISPOSAL RESTRICTION NOTIFICATION FORM**

Pursuant to CFR Title 22, Section 6285.12, I hereby certify that this waste shipment contains one or more of the following wastes restricted under the land disposal restrictions for which applicable treatment standards are set forth in CFR Title 22, Sections 6285.12 and 6285.45.

### ROSSA HAZARDOUS WASTE INFORMATION

<table>
<thead>
<tr>
<th>Manifest Number</th>
<th>Generator Name</th>
<th>EPA Number</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Additional Information for Code 001, 002, 003, 005, 009 Wastes

- **There are hazardous constituents (HOCs) present**
- **There are underlying hazardous constituents (UHOCs) present which do not meet treatment standards per CFR Title 22, Section 6285.45**

**Note:** Use the attached UTS Table and check the appropriate constituent(s) present in the waste stream.

#### Determination Based Upon (check one)

- Knowledge of the process generating the waste and the raw materials used and the reaction products
- Results from analytical testing

**Analysis results obtained:**

**Yes**

**No**

**Term Definitions:**

- **Wastewater** (WF): per CFR Title 22, Section 6285.45, WASTE WATER CONTAINING MORE THAN 1% BY WEIGHT TOTAL ORGANIC C02 AND 1% BY WEIGHT TOTAL SUSPENDED SOLIDS (TSS)
- **California List:** The following hazardous wastes are prohibited for land disposal, per CFR Title 22, Section 6285.45.
  - Liquid hazardous waste with a pH less than or equal to 2.0
  - Liquid hazardous waste containing, PCE at concentrations greater than or equal to 50 ppm
  - Liquid hazardous waste, containing heavy metals associated with any acidified monitoring media at concentrations greater than or equal to the following:
    - ARSENIC: 50 ppm
    - CERIUM: 150 ppm
    - CHROMIUM: 150 ppm
    - SODIUM: 150 ppm
    - SULFUR: 150 ppm
    - LITHIUM: 150 ppm
  - Liquid hazardous waste, containing HCN in final concentration greater than or equal to 1,000 ppm
  - Non-Hazardous ROSA hazardous waste containing 0.05% H2S in field concentration greater than or equal to 1,000 ppm

**Certification:**

I certify under penalty of law that I have personally examined and am familiar with the waste through analysis and testing, or through knowledge of the waste to support this certification. I believe that the information I have submitted is true, accurate, and complete. I am aware that there are consequences for submitting a false certification, including the possibility of a fine and imprisonment.

**Company Name**

**Authorized Signature**

**Date**
Thank you for your participation…

Do you have any questions?
James T. Dufour is an environmental and OSHA attorney, Certified Industrial Hygienist, and Registered Environmental Assessor 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 are 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.