

IDR ENVIRONMENTAL SERVICES, INC.

HAZARDOUS WASTE MANAGEMENT

HANDLING HAZARDOUS WASTE

Learn how to properly identify and handle the storage of hazardous waste



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WHAT IS HAZARDOUS WASTE

Proper handling and storage of hazardous waste

The following information applies specifically to Califonia. Please check your own States requirements if you feel they may be different than those outlinned here.

Determining if your waste is hazardous or not can be a little frustrating, especially if it's not labeled. One of the first steps you can take to determine if your waste is hazardous is to answer the following questions:

- Is it toxic?
- Is it reactive?
- Is it ignitable
- Is it corrosive?



If the answer is yes to any of these questions, then your waste is considered hazardous.

If you are not sure then check the name of your waste material against the <u>CAL/EPA Appendix X Code of Regs list.</u>

By using the CAL/EPA list you will be able to identify the name of your waste material and determine if it meets any of the four characteristics noted above. Each chemical subastance is identified by an (X) toxic, (C) corrosive, (I) ignitable and (R) reactive.





HOW TO HANDLE

Knowing how to properly handle hazardous waste materials ensure your company complies with all State and Federal requirements.

Failure to adequately handle these dangerous materials can result in sever penalties!

Follow these simple steps ensure you are handling your waste appropriately:



- Waste should be stored in containers holding ignitable or reactive wastes at least 50 feet from the facility's property line. Containers, piles, open tanks or surfaces.
- Do not place incompatible waste streams into the same container.







- Separate containers holding a hazardous waste that is incompatible with any waste or other materials transferred or stored nearby in other containers, piles, open tanks, or surface impoundments the other materials or protecting them by means of a dike, berm, wall, or other device.
- Maintain all containers so that they are:
 - In good condition
 - Compatible with contents
 - Closed, except when adding or removing hazardous waste
 - Managed to avoid rupture or leaks
 - Inspected weekly
 - Labeled properly
 - The date upon which each period of accumulation begins must be clearly marked and visible for inspection on each accumulation unit.
 - While being accumulated on site, each generator tank or container must be labeled or clearly marked with the words, "Hazardous Waste."
 - Each container and portable tank in which hazardous waste is accumulated must be labeled with the following information:
 - Composition and physical state of the waste: statements that call attention to the particular hazardous properties of the waste (e.g. flammable, reactive); and name and address of the generator.



IDENTIFICATION NUMBER



This number identifies each handler on hazardous waste manifests and other paperwork. The identification number enables regulators to track the waste from origin to final disposal ("cradle to grave"). These numbers are site-specific and there must be only one number at a single address. If you have a business that generates waste at multiple addresses, each address needs a separate identification number.

All hazardous waste transporters and permitted treatment, storage and disposal facilities (TSDFs) must have an identification number. Hazardous waste generators must have an identification number unless you generate only silver waste less than or equal to 100 kg per month. Handlers of federally-regulated RCRA waste who need an identification number should contact the U.S. EPA at 415-495-8895. Handlers of State regulated hazardous waste who do not need the federal number should contact DTSC's Generator Information Services Section (GISS) at 800-618-6942. Outof-State callers should call 916-255-1136 to obtain an identification number. There is no fee to obtain an identification number. However, every generator number is subject to an annual verification, and for those with 50 or more employees a verification fee is assessed.





CONTAINERS 90-DAY PERIOD

initial accumulation and The day period" dates on the "collection" container/tank must be the oldest of the initial accumulation and "90-day period" dates from the various containers/tanks emptied into the "collection" container/ tank. This may require dates to be changed if wastes from "older" containers/tanks are added to the "collection" container/ tank.





In containers some cases, continuously reused are accumulation of the same waste stream; e.g. drums used initially accumulate waste which when full are emptied into "collection" containers. larger "Recurring use" labels may be used on such containers to revise the initial accumulation and "90day period" dates (without having to change the other labeling information). If the container is emptied at least once each day, the word "daily" may be used in the date area of the label.







ACCUMULATION

Hazardous waste may be accumulated onsite in generator accumulation units (containers, tanks, drip pads, or containment buildings) only in compliance with the applicable time limits specified in Health & Saf. Code, section 25123.3 (90 days, 180 days, 270 days or 365 days).

If hazardous waste is accumulated in containers, a generator must comply with Title 22, Cal. Code Regs., division 4.5, chapter 15, article 9 (Use and Management of Containers). These requirements include:

- Placing containers holding ignitable or reactive wastes at least 15 meters (50 feet) from the facility's property line.
- Not placing incompatible waste streams into the same container.
- Separating a container holding a hazardous waste that is incompatible with any waste or other materials transferred or stored nearby in other containers, piles, open tanks, or surface impoundments from the other materials or protecting them by means of a dike, berm, wall, or other device.







Maintaining all containers so that they are:

- in good condition
- compatible with contents
- closed, except when adding or removing
- hazardous waste
- managed to avoid rupture or leaks
- inspected weekly
- properly labeled

While DTSC does not require secondary containment for generator's a hazardous waste containers, local codes may require it.

If hazardous waste is accumulated in tanks, a generator must comply with Title 22, Cal. Code Regs., division 4.5, chapter 15, article 10 (Tank Systems Standards) Sections except for 66265.197(c) and 66265.200.

These requirements include maintaining all tanks so that the tanks are:

- inspected daily
- properly labeled
- designed to hold hazardous waste and not collapse or leak.

Most tanks and tank systems must secondary containment. have Secondary containment can include a liner, vault or double-walled tank.

Appurtenances also must be contained. Secondary containment needs to be certified by a professional engineer registered in California.









lf hazardous drip pads, the generator waste is placed on must comply with Title 22, Cal. Code Regs., division 4.5, chapter 15, article 17.5 (Drip Pads) and maintain the following records at the facility:

- adescription of procedures that will be followed to ensure that all wastes are removed from the drip pad and associated collection system at least once every 90 days
- documentation of each waste removal, including the quantity of waste removed, the sumpor collection system and the date and time of removal.

If hazardous waste is accumulated in containment buildings, the generator must comply with Title 22, Cal. Code Regs., division 4.5, chapter 15, article 29 (Containment Buildings), and obtain a professional engineer certification that the building complies with the design standards specified in Section 66265.1101. The engineer certification is required prior to operating the unit and must be placed in the facility's operating record.

The owner or operator of a containment building must maintain the following records at the facility:

• a written description of procedures to ensure that each waste volume remains in the unit for no more than 90 days, a written description of the waste generation and facility management practices showing that they are consistent with the 90 day limit, and documentation that the procedures are complied with (Section 66262.34 (a)(1)(C)(1)); or documentation that the unit is emptied at least once every 90 days

A generator accumulating in tanks or containers is exempt from articles 7 and 8 in Title 22, Cal. Code Regs., division 4.5, chapter 15, except Sections 66265.111 (Closure Performance Standards) and 66265.114









LABELING/MARKING



The date upon which each period of accumulation begins must be clearly marked and visible for inspection on each accumulation unit.

While being accumulated on site, each generator tank or container must be labeled or clearly marked with the words, "Hazardous Waste."

Each container and portable tank in which hazardous waste is accumulated must be labeled with the following information:

- composition and physical state of the waste;
- statement or statements that call attention
- to the particular hazardous properties of the waste (e.g. flammable, reactive); and
- name and address of the generator.









- Containers and tanks used by the generator to collect or consolidate wastes initially accumulated in other containers or tanks are subject to the same labeling requirements. The initial accumulation and "90-day period" dates on the "collection" container/tank must be the oldest of the initial accumulation and "90-day period" dates from the various containers/tanks emptied into the "collection" container/tank. This may require dates to be changed if wastes from "older" containers/tanks are added to the "collection" container/tank.
- In some cases, containers are continuously reused for accumulation of the same waste stream; e.g., drums used to initially accumulate waste which when full are emptied into larger "collection" containers. "Recurring use" labels may be used on such containers to revise the initial accumulation and "90-day period" dates (without having to change the other labeling information). If the container is emptied at least once each day, the word "daily" may be used in the date area of the label.









EMERGENCY PROCEDURES / CONTINGENCY PLANS

All generators must comply with these requirements regarding preparedness and prevention:

- All operations must minimize the possibility of a fire, explosion or any unplanned release of hazardous waste or hazardous waste constituents to air, soil, or surface water that could threaten human health or the environment.
- A generator's site must be equipped with the following, unless it can be demonstrated to DTSC that none of the hazards posed by waste could require a particular kind of equipment specified below:
 - Internal communication or alarm system to provide immediate instruction to personnel
 - A telephone, two-way radio, or similar device, capable of summoning emergency assistance from local police departments, fire departments, or state or local emergency response teams
 - Portable fire extinguishers, fire control equipment, spill containment equipment and decontamination equipment
 - Water at adequate volume and pressure to supply water hose streams or foam producing equipment or automatic sprinklers or water spray systems.



All communications and alarm systems, fire protection equipment, spill control equipment and decontamination equipment, where required, must be tested and maintained as necessary to ensure its proper operation in time of emergency.





Procedures and Guidelines

Emergency Procedures Plan For 2013

- Whenever hazardous waste is being handled, all personnel involved in the operation must have immediate access to an internal alarm or emergency communication device, either directly or through visual or voice contact with another employee, unless DTSC has determined that such a device is not required. If only one employee is on the premises while the facility is operating, he/she must have immediate access to a device, such as a telephone (immediately available at the scene of operation) or a hand-held twoway radio, capable of summoning external emergency assistance, unless DTSC has determined that such a device is not required under section 66265.32.
- The generator must maintain aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment and decontamination equipment to any area of operation in an emergency, unless it can be demonstrated to DTSC that aisle space is not needed for any of these purposes.
- The generator must attempt to make the following arrangements, as appropriate, for the types of waste handled at the site and the potential need for the services of these organizations:
- Arrangements to familiarize police and fire departments, emergency response teams and the local Office of Emergency Services with the layout of the facility, properties of the hazardous waste, associated hazards, places where personnel would normally be working, entrances to roads inside the facility and possible







- Where more than one police and fire department might respond to an emergency, agreements designating primary emergency authority to a specific police and a specific fire department, and agreements with any others to provide support to the primary emergency authority:
- Agreements with State emergency response teams, emergency response contractors and equipment suppliers;
- Arrangements to familiarize local hospitals with the properties of hazardous waste handled the types of injuries or illnesses result that could from fires, explosions or releases at the facility
- Where State or local authorities decline to enter into such arrangements, the generator must document the refusal in the operating record.





LESS THAN 1000 KG/MONTH Generators that generate less than 1000 kg/month of hazardous waste must comply with the following requirements

- At all times there must be at least one employee either on the premises or on call (i.e., available to respond to an emergency by reaching the facility within a short period of time) with the responsibility for coordinating all emergency response measures. This employee is the emergency coordinator.
- Post the following information the next to telephone:
 - The name and telephone number of the emergency coordinator
 - The location of fire extinguishers and spill control material, and, if present, fire alarm; and







- The telephone number of the fire department, unless the facility has a direct alarm.
- The emergency coordinator or his/her designee must respond to any emergencies that arise. In the event of a:
 - Fire, call the fire department or attempt to extinguish it using a fire extinguisher
 - Spill, contain the flow of hazardous waste to the extent possible, and as soon as is practicable, clean up the hazardous waste and any contaminated materials or soil
 - Fire, explosion, or other release that could threaten human health outside the facility or when the generator has knowledge that a spill has reached surface water, the generator must immediately notify the National Response Center (using their 24-hour toll free number 800/424-8802).
- 1000 KG/MONTH OR MORE Each generator that generates 1000 kg/month or more of hazardous waste per month must comply with the requirements of Title 22, Cal. Code Regs., division 4.5, chapter 15, article 4. These requirements include:
- The generator must prepare and retain a written contingency plan and emergency procedures for dealing with emergencies. The contingency plan shall be designed to minimize hazards to human health or the environment from fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water.



- The provisions of the plan must be carried out immediately whenever there is a fire, explosion, or release of hazardous waste or hazardous waste constituents that could threaten human health or the environment.
- At all times there must be at least one employee, either on the premises or on call (i.e., available to respond to an emergency by reaching the site within a short period of time), with the responsibility for coordinating all emergency response measures. In addition, this person must have the authority to commit resources needed to carry out the contingency plan.









TRAINING

- Generators that generate less than 1000 kg/month of hazardous waste must ensure that all employees are thoroughly familiar with proper waste handling and emergency procedures, relevant to their responsibilities during normal facility operations and emergencies.
- Generators that generate 1000 kg or more per month of hazardous waste must comply with the requirements of section 66265.16. These requirements include:
 - Personnel must successfully complete a program of classroom instruction or on-the-job training that teaches them to perform their duties in a way that ensures the generator's compliance with the regulatory requirements.
 - This program must be directed by a person trained in hazardous waste management procedures, and must include instruction that teaches personnel hazardous waste management procedures (including contingency plan implementation) relevant to the positions in which they are employed.



 At a minimum, the training program must be designed to ensure that personnel are able to respond effectively to emergencies by familiarizing them with emergency procedures, emergency equipment and emergency systems, including other applicable requirements.









- Personnel must successfully complete the program within six months after employment or assignment to the facility. Personnel must not work unsupervised positions until they have completed training requirements the referenced above. They must also take part in an annual review of the initial training.
- The following documents and records must be maintained at the facility:
 - The job title for each position related to hazardous waste management, and the name of the employee filling each job.
 - A written job description for each position related to hazardous waste management, including the requisite skill, education or other qualifications and duties of employees assigned to each position.
 - A written description of the type and amount of both introductory and continuing training that will be given to each person filling each of these positions.
 - Records that document that the training or job experience required has been given to, and completed by, facility personnel.
 - Training records on current personnel must be kept until closure of the site. Training records on former employees must be kept for at least three years from the date the employee last worked at the site. Personnel training records may accompany personnel transferred within the same company.





SHIPMENT

When shipping hazardous waste totaling more than 50 pounds/5 gallons off the premises a generator must:

- Use only transporters, and transfer, treatment, storage and disposal facilities that are registered or permitted by DTSC and have obtained an ID number
- Comply with Department of Transportation (DOT) requirements for packaging, labeling and marking and ensure that the transport vehicle iscorrectly placarded
- Use a California Hazardous Waste Manifest, DTSC Form 8022A, unless the receiving state requires otherwise. A manifest is the paperwork that accompanies hazardous waste from the point of generation to the point of ultimate treatment, storage or disposal. Manifests may be ordered from the Department of General Services, P. O. Box 1015, North Highlands, CA, 95660. For general manifest questions, call DTSC's GISS at 1-800- 618-6942. Out-of--State callers should call (916) 255-1136 for additional information regarding manifests











- Complete the generator and waste sections and sign the manifest certification according to the instructions included in the Appendix to Chapter 12 of Division 4.5, Title 22, Cal. Code Regs. (Section 66262.23);
- Obtain the handwritten signature of the initial transporter and date of acceptance on the manifest (Section 66262.23);
- Retain two copies of the manifest, in accordance with Section 66262.40(a) (Section 66262.23);
- Keep the generator copy of each manifest for three years or until the signed copy is returned by the designated facility (See (13) below). This signed copy must be retained for at least three years from the date the waste was accepted by the initial transporter



- Ensure that if shipping hazardous waste to an out of state non-permitted TSD, that the TSD signs and returns the final copy of the manifest to the generator, who is then responsible for sending the signed copy to DTSC (Section 66262.23);
- Submit the appropriate copy of each manifest used to DTSC, within thirty (30) days of each shipment If a manifest from another state is used to ship hazardous waste to that state, then submit a legible copy of the manifest used to DTSC within thirty (30) days of each shipment
- only to facilities authorized to accept the waste Ship waste type

- Contact the transporter and/or the owner or operator of the designated facility todeterminethestatusofthehazardouswasteifthegeneratorhasnotreceived a copy of the manifest signed by the operator of the designated facility within 35 days of the date the waste was accepted by the initial transporter; and
- Filean Exception Report with DTSC if a copy of the manifest signed by the facility operator is not received within 45 days of the date the waste was accepted by the initial transporter. The time to file an exception report is 60 days for generators of less than 1000 kilograms per month and who meet other specified requirements. These reports must be retained for a period of three years

NOTE:

For generators of less than 100 kilograms per month, there are certain transportation allowances. See Health & Saf. Code, section 25163(c).









IDR CAN HELP

THANK YOU FOR READING!

Visit IDR Environmental Services to learn more about handling your hazardous waste materials

> For more helpful Ebooks by IDR, visit: www.idrenvironmental.com/education.html

PS - PLEASE SHARE THIS USING THE LINKS BELOW







NEED HELP?

Request a FREE Assessment and learn how IDR can help your company.

IDR Environmental Services, Inc., is a Full-Service, Hazardous Waste Management firm. IDR maintains a clean, modern fleet of transportation equipment, incuding vans, stake trucks, vacuum tankers, and roll-off capability.

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