

Hazardous Waste Frequently Asked Questions

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What is a hazardous waste?

A hazardous waste is any waste, or combination of wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may either:

- Cause or significantly contribute to an increase in mortality or an increase in a serious irreversible, or incapacitating reversible illness, or
- Pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

Hazardous wastes can be liquids, solids, or contained gases. They can be the by-products of manufacturing processes, discarded used materials, or discarded unused commercial products, such as cleaning fluids (solvents) or pesticides. View the hazardous waste regulations and statutes for more information.

What is an extremely hazardous waste?

An extremely hazardous waste is any waste which, if human exposure should occur, may likely result in death, disabling personal injury or serious illness caused by the hazardous waste or mixture of hazardous wastes.

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How do I determine if a waste I generate is hazardous?

There are five ways that a waste may be identified as hazardous waste.

- I. **Listed Wastes**: By regulation, some specific wastes are hazardous wastes. These wastes are incorporated into four lists.
 - a. The F-list (non-specific source wastes): This list identifies wastes from many common manufacturing and industrial processes, such as solvents that have been used for cleaning or degreasing.
 - b. The K-list (source-specific wastes): This list includes certain wastes from specific industries, such as petroleum refining or pesticide manufacturing. Also, certain sludge and wastewaters from treatment and production processes in these specific industries are examples of source-specific wastes. The K-list appears in the hazardous waste regulations in section 66261.32.
 - c. The <u>P-list and the U-list (discarded commercial chemical products)</u>: These lists include specific commercial chemical products that have not been used, but that will be (or have

- been) discarded. Industrial chemicals, pesticides, and pharmaceuticals are example of commercial chemical products that appear on these lists and become hazardous waste when discarded. The P- and U-lists appear in the hazardous waste regulations in subsections 66261.33(e) and (f).
- d. M-listed Wastes (discarded mercury-containing products): This list includes certain wastes known to contain mercury, such as fluorescent lamps, mercury switches and the products that house these switches, and mercury-containing novelties.
- II. Characteristic Hazardous Wastes: Wastes may be hazardous wastes if they exhibit any of the four characteristics of a hazardous waste. These four characteristics are:
 - a. <u>Ignitability</u> Ignitable wastes can create fires under certain conditions, undergo spontaneous combustion, or have a flash point less than 60°C (140°F). Examples include waste oil and used solvents.
 - b. <u>Corrosivity</u> Corrosive wastes are materials, including solids, that are acids or bases, or that produce acidic or alkaline solutions. Aqueous wastes with a pH less than or equal to 2.0 or greater than or equal to 12.5 are corrosive. A liquid waste may also be corrosive if it is able to corrode metal containers, such as storage tanks, drums, and barrels. Spent battery acid is an example.
 - c. <u>Reactivity</u> Reactive wastes are unstable under normal conditions. They can cause explosions or release toxic fumes, gases, or vapors when heated, compressed, or mixed with water. Examples include lithium-sulfur batteries and unused explosives.
 - d. <u>Toxicity</u> Toxic wastes are harmful or fatal when ingested or absorbed (e.g., wastes containing mercury, lead, DDT, PCBs, etc.). When toxic wastes are disposed, the toxic constituents may leach from the waste and pollute ground water.
- III. **Used Oil:** In California, waste oil and materials that contain or are contaminated with waste oil are usually regulated as hazardous wastes if they meet the definition of "Used Oil" even if they do not exhibit any of the characteristics of hazardous waste. The term "used oil" is a legal term which means any oil that has been refined from crude oil, or any synthetic oil that has been used and, as a result of use, is contaminated with physical or chemical impurities. Other materials that contain or are contaminated with used oil may also be subject to regulation as "used oil" under Part 279 of Title 40 of the Code of Federal Regulations.
- IV. Mixture & Derived-From Rules: When evaluating materials that are mixtures or that are residuals resulting from processing other materials, you should check to see if the hazardous waste mixture-rule or derived-from rule applies. There are also additional mixture rules specifically for mining wastes and for used oil. These rules are intended to ensure that mixtures and residuals containing hazardous wastes are regulated in a manner that is protective of human health and the environment.
- V. Contained-In Policy: Environmental media (soil, groundwater and surface water) are not normally considered wastes. However, when environmental media are excavated (and stored or transported) for disposal at another location, the environmental media may be regulated as hazardous waste if it contains hazardous waste, including both listed and characteristic hazardous wastes. For example, soil contaminated with lead is often a hazardous waste because the lead "contained-in" the soil is a hazardous waste.

Hazardous Waste Determination: As described above, the hazardous waste regulations set forth criteria that identify wastes as hazardous wastes. Although they may meet the definition of hazardous waste, some wastes are specifically excluded or exempted from regulation as hazardous waste (e.g., chlorofluorocarbon refrigerants that are reclaimed for reuse). The process of determining if a waste is a hazardous waste is called the "hazardous waste determination".

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How long can I accumulate waste in tanks or containers?

The answer depends in part on the total amount of hazardous waste that you generate each month. There are specific requirements for storing and accumulating hazardous waste on site as summarized in the following table:

Name of storage	Quantifying conditions for rule	Maximum	When storage
rule		storage time	"clock" begins
Conditionally	Generate <27 gallons of hazardous	180 days or 270	On the date
exempt Small	waste per month (or 1 kg of	days if waste	you accumulate
Quantity	extremely hazardous waste)	must be	27 gallons (1/2
Generators		transported	drum)
(CESQG)		more than 200	
		miles for disposal	
Small Quantity	Generate between 27 and 270	180 days, or 270	First day of
Generators (SQG)	gallons of hazardous waste per	days if waste	accumulation
	month	must be	
		transported	
		more than 200	
		miles for disposal	
Large Quantity	Generate >270 gallons of	90 days	First day of
Generators	hazardous waste per month		accumulation
Satellite storage	Waste must be accumulated at	Whichever of the	On the date
rule	or near the point of generation.	following comes	that you
	Waste container must be under	first:	accumulate 55
	the control of the operator	Within 90	gallons
	generating the waste.	days from	
	Container must be properly	the date that	
	labeled including an	55 gallons is	
	accumulation start date.	accumulated,	
	Container must be kept in good	or	
	condition, kept closed and	No more	
	compatible with stored waste.	than one	
	Maximum accumulation	year from	
	amount is 55 gallons per	the initial	
	process or group of compatible	date of	
	processes	accumulation	

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What are some examples of common hazardous wastes produced in businesses?

Here are some common examples of hazardous wastes (this is not an exhaustive list):

- Acid Solutions: battery acid, metal plating waste, etching residue, pickling liquor
- Alkaline Solutions: metal plating and cleaning waste, soda ash, sodium or calcium hydroxide
- Asbestos: friable and/or crumbling forms of asbestos from insulation products, old pipe lagging, asbestos pipe waste.

- Ashes: oil ash, kiln and oven residue
- Miscellaneous: Drilling mud, explosives, chemical toilet waste, printing ink, bag house wastes, fly ash, waste chemicals, dyes, out dated stock, and mine tailings.
- Monomer Waste/Polymeric Resin: Incompletely reacted resin, resin rinse water.
- Organic Liquids/Solids: Fuel, paint thinner, paint remover, paint, dry cleaning fluids and filters.
- Pesticides: Unusable portion of active pesticides, unrinsed empty containers, rinse water.
- Photo Processing Waste: Developer, fixer, hypo solutions.
- Polychlorinated Biphenyls: contaminated electric capacitors, ballasts, transformer fluids.
- Sludges: Paint, degreasing, caustic, paper, metal pickling, acetylene, lime, metal machine coolant, tanning sludges.
- Solids & Solutions: Cyanide, azide, hypochlorite, sulfide, fluoride, anti-corrosion fluids, antifreeze, metal and equipment cleaning solutions, heavy metals in powdered or solution form including antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium and zinc.
- Solvents: Acetone, methylene chloride, methyl ethyl ketone, benzene, Stoddard, perchloroethylene, dry cleaning fluids, trichloroethylene, styrene, xylene, unspecified solvent mixtures.
- Waste oil / mixed oil: Motor oil, cutting oil, lube oil, bunker oil, sulfonation oil, oil and water, hydraulic fluid, transmission fluid mixtures.

These wastes are often incorrectly disposed of as non-hazardous:

- Metal dusts/grindings
 - Finely divided metal grindings may be toxic because they can contain heavy metals (like barium, cadmium, chromium, copper, lead, nickel, zinc, etc).
 - Cannot be disposed of to the trash.
 - Are presumed to be hazardous wastes unless proven otherwise by state certified lab analysis.
 - Metal sludge, dusts, fine powders with a diameter of less than 100 microns (about the diameter of a human hair), or semi-solids are potentially hazardous waste.
 - Metal workings, cuttings, shavings or grindings with a diameter of more than 100 microns (about the diameter of a human hair) are considered to be scrap metal and are not hazardous waste.
- Paint booth filters
 - May be toxic because they can contain heavy metals (like barium, cadmium, chromium, copper, lead, nickel, zinc, etc).
 - Cannot be disposed of to the trash.
 - Are presumed to be hazardous wastes unless proven otherwise by state certified lab analysis.
- Paint sanding dusts
 - May be toxic because they can contain heavy metals (like barium, cadmium, chromium, copper, lead, nickel, zinc, etc).
 - Cannot be disposed of to the trash.
 - o Is presumed to be hazardous wastes unless proven otherwise by state certified lab analysis.
- Used absorbents
 - o Spent absorbents used to soak up hazardous materials or hazardous wastes:
 - Cannot be disposed of to the trash.

- Are presumed to be hazardous wastes unless proven otherwise by state certified lab analysis.
- Used fabric rags
 - Are not hazardous waste as long as they are not overly saturated and are picked up regularly by an industrial laundry.

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What are the requirements for containers storing hazardous waste?

All containers storing hazardous waste must be:

- In good condition (i.e., no rusting, bulging, and structurally sound)
- Compatible with the stored waste
- Properly labeled
- Located at least 50 feet from property lines for ignitable or reactive wastes
- Kept closed unless you are adding or removing wastes, and.
- Inspected weekly for leaks and deterioration

Flammable wastes:

- Flammable wastes must be stored in containers that are electrically grounded. Bonding connections must be made when transferring flammable liquids between metallic containers.
- You should contact your local Fire district for more information on grounding and storage requirements for flammable wastes.

Reactive/incompatible wastes:

 Reactive wastes must be stored separately, or be separated by a dike, berm, wall, or other barrier to prevent any reactions with other wastes.

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What are the labeling requirements for hazardous waste containers?

Hazardous waste containers less than 119 gallons must be labeled with:

- The words "Hazardous Waste."
- The following statement: "Federal law prohibits improper disposal. If found, contact the nearest Police or Public Safety authority or the U.S. Environmental Protection Agency, or the California Department of Toxic Substances Control."
- The initial date of accumulation.
- The composition (name of the waste) and physical state (gas, liquid, solid, sludge).
- A description of the hazardous properties of the waste (i.e. flammable, reactive, .etc.).
- The name, address and EPA ID number of the generator.

Labeling Exceptions:

- Used oil: May be labeled "Used Oil" rather than "Hazardous Waste;" all other requirements still apply.
- Used oil and fuel filters: Labeled as "Drained Used Oil Filters" with an accumulation start date.

Recent Changes, Record Keeping and Labeling (March 8, 2007)

As of August 23, 2004, drained used fuel filters can now be stored with drained used oil and diesel filters. Note that filters and filter components that are not recycled as scrap metal (e.g., plastic and paper waste fuel filters) are not covered by this provision. Any absorbent filter material contaminated

with fuel cannot be accumulated with the drained used oil or diesel filters. All filters must be properly drained of its contents. Containers must be labeled as "Drained Used Oil and Gasoline Filters" with the accumulation start date. The labeling requirements change when gasoline filters are mixed in with the used oil or diesel filters.

If you are a conditionally exempt small quantity generator, a small quantity generator or are following the satellite storage rule, you must record on your hazardous waste label both the initial date of accumulation and the date that triggers your final 90/180/270 day storage period. (back to top)

Where do I send the copy of my hazardous waste manifest?

The **top** copy is to be signed by the generator certifying the completeness and correctness of the manifest. The transporters sign upon taking custody of the hazardous waste. When the hazardous waste is received by the treatment, storage or disposal facility (TSDF), the TSDF signs the manifest certifying receipt of the hazardous waste.

The Designated Facility to State (formerly *white*) copy is then sent to DTSC by the TSDF within 30 days of receipt. The new federal manifest has **two** Designated Facility pages:

Page 1 - Designated Facility to Destination State is used if the TSDF is located in California.

Page 2 - Designated Facility to Generator State is used if the TSDF is located out of state but the Generator is in California. Address: DTSC Facility Manifests, P. O. Box 3000, Sacramento, CA 95812-3000.

The Generator to State (formerly *blue*) copy **no longer exists** in the manifest. However, the generator is required to send DTSC a copy within 30 days of shipping the waste. Generators must provide a legible copy and photocopies are accepted. Address: **DTSC Generator Manifests**, **P. O. Box 400**, **Sacramento**, **CA 95812-0400**.

It is important to send this copy to DTSC, even if it is late. Do not send a letter of explanation. Never send a cover letter or any other attachment with a copy of a manifest, other than a continuation sheet.

Page 3 - the Designated Facility to Generator (formerly *yellow*) copy is to be sent to the generator by the facility to which the waste has been manifested within 30 days of receipt. The generator must retain this copy for three years, though many recommend that manifest copies be kept as part of your permanent records.

If the waste has been sent out of state, upon receipt of this copy, the generator must make a photocopy of the copy signed by the out-of- state TSDF and send it to DTSC within 30 days, retaining the original. Address: **DTSC Facility Manifests**, **P. O. Box 3000**, **Sacramento**, **CA 95812-3000**.

When a generator does not receive a TSDF signed manifest back within 35 days, the generator must investigate by calling the transporter(s) and TSDF. If a shipment and manifest are not located, the generator must file an exception report with DTSC per 22 CCR 66262.42 and mail that report to DTSC. Generators of greater than 1000 kg per month must submit this report in 45 days. Smaller

generators have 60 days. For shipments by water, time periods are extended. Address: **Report Repository**, **GISS**, **P.O.** Box 806, Sacramento, CA 95812-0806.

Page 4 - The **Designated Facility's Copy** (formerly *white*) is to be retained for three years by the facility to which the waste has been sent.

Page 5 - The Transporter's Copy (formerly *green*) is to be retained for three years by the first transporter. Subsequent transporters must retain photocopies with the signature of the entity to which they turned over custody of the shipment.

Page 6 - The Generator's Initial Copy (formerly *yellow*) is to be retained for three years by the generator or until the generator receives the signed copy from the TSDF.

The procedure described above is designed to allow tracking of the waste from the generator to its ultimate destination (cradle to grave). Additional information can be found at HSC 25160 and 22 CCR 66262.23.

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What are the Consolidated Manifest Requirements?

Consolidated manifesting, formerly known as modified manifesting or milkrunning, allows certain registered hazardous waste transporters to combine specified wastes from multiple eligible generators on a single manifest, rather than using a separate manifest from each generator. The generators using the consolidated manifesting procedure are exempt from filling out a hazardous waste manifest. The consolidated transporter completes both the generator and the transporter section of the manifest. Consolidated manifesting does not authorize a hazardous waste transporter to commingle different types of hazardous wastes into the same tank or container. The consolidated manifest regulation requires all generators participating in this procedure to obtain identification numbers regardless of their size, except for generators of less than 100 kilograms (kgs) per month of "silver-only" hazardous wastes.

Requirements

Generators are responsible for their wastes "from cradle to grave". The consolidated manifesting procedure does not exempt generators from the requirements to properly characterize, handle, label, manage, and accumulate hazardous wastes. All generators using the consolidated manifesting procedure must have an identification number unless exempted from manifesting requirements as generators of less than 100 kgs per month of "silver only" hazardous wastes.

Eligible Waste Streams

The consolidated manifesting procedure may be used only for the following waste streams:

- Used oil
- Contents of an oil/water separator
- Solids contaminated with used oil
- Brake fluid
- Antifreeze
- Antifreeze sludge
- Parts cleaning solvents, including aqueous cleaning solvents
- Hydroxide sludge contaminated solely with metals from a wastewater treatment process

- Paint-related wastes, including paints, thinners, filters and sludge
- Spent photographic solution
- Dry cleaning solvents including perchloroethylene, naphtha, and silicone-based solvents
- Filters, lint and sludge contaminated with dry cleaning solvent
- Asbestos and asbestos-containing materials
- Inks from the printing industry
- Chemicals and laboratory packs collected from K-12 schools
- Absorbents contaminated with wastes on this list
- Filters from dispensing pumps for diesel and gasoline fuels

For further information regarding consolidated manifesting and eligibility requirements view the <u>DTSC</u> Consolidated Manifest fact sheet.

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