Hazardous Waste Management for Scrap Metal Recyclers

California’s Hazardous Waste Control Law (HWCL) and its implementing regulations. Recycling can be viewed as a means of managing hazardous wastes that, when conducted properly, can mitigate or eliminate environmental hazards, protect limited natural resources, and reduce dependence on raw materials and energy. Guidance on the regulatory status of scrap metal that is accepted, accumulated, stored, and processed, including when it may be regulated as hazardous waste, is provided below.

What is scrap metal?
Under California law, scrap metal means any one or more of the following:¹

- manufactured, solid metal objects and products;
- metal workings, including cuttings, trimmings, stampings, grindings, shavings, and sandings;
- solid metal residues of metal production; or
- printed circuit boards, excluding those removed from universal waste electronic devices, that are recycled.

Scrap metal originates from end-of-life products (for example, radiators, automobiles, major appliances, and railroad box cars), structures, and manufacturing scrap that can be recycled when discarded. Industry and common usage of the term “scrap metal” may differ from the above definition.

¹ California Code of Regulations, title 22, division 4.5, section 66260.10.
Are all metal-containing wastes considered scrap metal?
No. Some metal-containing wastes are not included in the definition of scrap metal and are subject to hazardous waste management requirements.

Examples of metals excluded from the definition of scrap metal include:
- lead-acid storage batteries; waste elemental mercury; and water-reactive metals such as sodium, potassium, and lithium;
- magnesium borings, trimmings, grindings, shavings, sandings, and any other forms capable of producing independent combustion;
- beryllium borings, trimmings, grindings, shavings, sandings, and any other forms capable of producing adverse health effects or environmental harm;
- any metal contaminated with a hazardous waste, such that the contaminated metal exhibits any characteristic of a hazardous waste under article 3 of chapter 11 of division 4.5 of title 22 of the California Code of Regulations (i.e., ignitability, corrosivity, reactivity, and toxicity);
- any metal contaminated with an oil that is a hazardous waste and that is free-flowing;
- sludges, fine powders, semi-solids, and liquid solutions that are hazardous wastes; and
- printed circuit boards that have been removed from a universal waste electronic device by a universal waste handler.

Is scrap metal regulated as hazardous waste in California?
Scrap metal is not subject to hazardous waste management requirements, including generator, transporter, or facility requirements, if it is being recycled. Scrap metal, as defined in section 66260.10, is subject to hazardous waste requirements if it is determined by the generator to be hazardous. Regardless of whether it is being recycled, scrap metal should be managed in a way that does not cause a release of its hazardous constituents to air, soil, or surface water.

Can a scrap metal recycler accept hazardous waste?
A scrap metal recycler may only accept hazardous wastes (including metal-containing wastes that do not meet the legal definition of scrap metal) if authorized by DTSC to treat, store, or dispose of hazardous waste via a hazardous waste facility permit or other grant of authorization.

If scrap metal is contaminated with a hazardous waste, then it does not meet the definition of scrap metal and is subject to hazardous waste regulation. Examples of potential hazardous waste contaminants are polychlorinated biphenyls (PCBs), refrigerants, and used oils which can come from lubricants, capacitors, ballasts, compressors, and pumps in appliances. Other items like lawnmowers,
vehicle parts, appliance switches, or other equipment can contain hazardous wastes including but not limited to used oils, refrigerants, and mercury.

For additional information about hazardous waste determination, please see the Defining Hazardous Waste webpage.

Can a scrap metal recycler generate hazardous waste?
Yes. Some of the scrap metal items accepted at recycling facilities, such as appliances, vehicles, and electronic waste contain components that if handled or managed improperly can be a source of contamination to air, soil, or surface water. A scrap metal recycler becomes a generator when they remove any hazardous materials from scrap metal-containing items that are then discarded. It is the responsibility of the generator to determine if the waste it generates is hazardous so that it can be properly managed. Hazardous wastes likely to be generated at scrap recycling facilities include used oil from compressors, automobile engines, and other parts, diesel or antifreeze from vehicles, fine metals from wire stripping, and compressed gas cylinders holding hazardous waste.

Are there specific wastes that must be removed from scrap metal?
Yes. The Metallic Discards Act requires that Materials that Require Special Handling (MRSH) be removed from major appliances and vehicles before crushing for transport or sending to a baler or shredder for recycling. A “major appliance” is “any domestic or commercial device, including, but not limited to, a washing machine, clothes dryer, hot water heater, dehumidifier, conventional oven, microwave oven, stove, refrigerator, freezer, air-conditioner, trash compactor, and residential furnace.”

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5 California Public Resources Code section 42160 et seq.
6 California Public Resources Code section 42175.
7 California Public Resources Code section 42166.
MRSH must be managed as hazardous wastes and may not be disposed of in the garbage or at a solid waste facility.\(^8\) MRSH includes the following:\(^9\)

- Sodium azide canisters in unspent airbags that are determined to be hazardous by federal and state law or regulation.
- Encapsulated polychlorinated biphenyls (PCBs), Di(2-Ethylhexylphthalate) (DEHP), and metal-encased capacitors in major appliances.
- Chlorofluorocarbons (CFCs), hydrochlorofluorocarbons (HCFCs), and other non-CFC replacement refrigerants injected in air-conditioning/refrigeration units.
- Used oil, as defined in Health and Safety Code section 25250.1, in major appliances.
- Mercury found in switches and temperature control devices in major appliances.
- Any other material that, when removed from a major appliance, is a hazardous waste regulated pursuant to the HWCL.

**Who can remove MRSH from major appliances?**

Individuals and businesses must be approved under DTSC’s Certified Appliance Recycler (CAR) program to remove MRSH from major appliances, with the exception of federally certified appliance service technicians who are only removing refrigerant.\(^{10}\)

**What are other sources of hazardous wastes generation in scrap metal recycling?**

It is the responsibility of the generator of a waste to determine if the waste is hazardous.\(^{11}\) Examples of some less obvious sources of hazardous waste generation in scrap metal recycling include the following:

- Fine metallic powders generated where preparation and processing activities take place, such as shearing, torch cutting, magnetic separation, baling, and moving scrap metal with heavy

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\(^8\) [California Health and Safety Code section 25212.](#)

\(^9\) [California Public Resources Code section 42167.](#)

\(^{10}\) [California Health and Safety Code section 25211.1(a).](#)

\(^{11}\) [California Code of Regulations, title 22, division 4.5, section 66262.11.](#)
machinery. These fine powders may result in a release, especially where there is exposed soil. Fine powders that have a diameter of less than 100 microns (0.004 inches, about the thickness of a human hair) cannot be disposed of in the trash and are presumed to be hazardous wastes unless tested and shown otherwise by a state-certified analytical laboratory.¹²

- Yard sweepings can be a source of hazardous waste generation and contamination. Fine metallic powders can mix with the soil and reach or exceed hazardous waste threshold levels.
- Loads of scrap metal commingled with soil loads and other debris. Scrap metal recyclers handling such loads could be subject to enforcement action for violations of the HWCL and its implementing regulations including, but not limited to, failure to characterize their waste; accepting, storing, treating, or disposing of hazardous waste without a permit or grant of authorization from DTSC; failure to ship waste on a hazardous waste manifest; and shipping hazardous waste to an unauthorized treatment, storage, or disposal facility.
- Failing to properly containerize hazardous waste in closed, labeled receptacles and keep them under cover.
- Absence of proper secondary containment around storage tanks, such as berms, containment trenches, sumps, or other equivalent measures, and failing to make sure secondary containment areas are properly sized and adequately sealed as part of stormwater management.
- Spillage of hazardous waste entering floor drains, sewer connections, or storm drains.
- Failure to obtain or maintain land use approvals and environmental permits (e.g., storm water management permits, air quality permits).

Further information:

For additional information or questions regarding metal-containing wastes and scrap metal, you can contact your local Certified Unified Program Agency (CUPA). To find your local CUPA, follow this link and enter your ZIP code: CUPA Directory

You can also contact the DTSC Regulatory Assistance Office at:

Phone: 1-800-728-6942
Email: RAO@dtsc.ca.gov
Regulatory Assistance Webpage

¹² California Code of Regulations, title 22, division 4.5, chapter 11, appendix X.