



Hazardous Waste 411

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Many veterinary practices are unaware of their obligation to handle select items and chemicals

as hazardous waste. While relatively few items in veterinary practices are classified as hazardous waste, practices are still mandated to follow applicable laws and regulations regarding their management.

What is hazardous waste?

Hazardous waste is a waste with properties that make it potentially dangerous or harmful to human health or the environment. Hazardous wastes can be liquids, solids, or contained gases. It is important to note that from a legal standpoint, such items do not become waste until someone no longer has use for them, or until they are discarded.

What does “discarded” mean?

Discarded hazardous items refer to those which are disposed of, stored or accumulated, recycled under certain circumstances, or treated to be neutralized into an inert state. Additionally, any hazardous item that is mislabeled or inadequately labeled is considered to be discarded, unless the label is corrected within 10 days. If a container containing a hazardous item is deteriorated or damaged, it is considered discarded unless the hazardous item is repackaged within 96 hours.

How do I determine if a material is classified as hazardous?

Cal EPA offers a free online education module to help generators determine what constitutes hazardous waste. It can be found at: http://ccelearn.csus.edu/wasteclass/intro/intro_01.html.

Classification	Definition	Example	Legal Reference
Is it ignitable?	In liquid form has a flash point of less than 60 degrees centigrade; in solid form can ignite at room temperature through friction or absorption of moisture; or is an ignitable compressed gas.	Anesthetic gases	CCR Title 22 Section 66261.21
Is it corrosive?	In liquid form, will have a pH of less than 2 or greater than 12.5.	Strong acids or bases	CCR Title 22, Section 66261.22
Is it reactive?	Can explode, become unstable, release a toxic gas, or undergo violent reaction when mixed with water or when exposed to heat.	Ethylene Oxide Ether	CCR Title 22 Section 66261.23
Is it toxic?	Displays characteristics of toxicity in the environment or can be harmful to health at or above referenced levels.	Powdered copper, zinc, and selenium (used in oral boluses for livestock) Mercury Lead Silver Formalin Fluorescent light bulbs Batteries Diff-quick stain	CCR Title 22 Section 66261.24

In general, the following criteria can be applied to help determine if a waste is considered hazardous.

Who is responsible for the proper identification, handling, storage, and disposal of hazardous waste?

According to state law, you (the generator) of hazardous waste are responsible for determining whether a waste is hazardous [CCR 22, Section 66260.200(c)] and for managing hazardous waste in accordance with the laws and regulations set forth in the California Code of Regulations.

What agency has authority and oversight of hazardous waste management?

The California Environmental Protection Agency Department of Toxic Substances Control (Cal/EPA DTSC) has jurisdictional authority over hazardous waste. They may inspect the premises, subpoena records, interview staff, and file charges in both administrative and criminal court for those who are suspected of violating hazardous waste laws.

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In addition, local ordinances may impose additional rules on hazardous waste management. To search a library of local ordinances for your city and county of residence, visit www.municode.com and select "Browse Library."

How do I dispose of hazardous waste?

Hazardous waste must be transported and disposed of through registered EPA approved hazardous waste transporters. A list of Cal EPA approved hazardous waste haulers can be found here: <http://dtsc.ca.gov/database/transporters/index.cfm?CFID=8577132&CFTOKEN=60693087>.

What is the difference between hazardous waste and biohazardous waste?

Biohazardous waste includes animal specimen cultures, animal parts, tissues, fluids, or carcasses known or suspected by the attending veterinarian of being contaminated with infectious agents known to be contagious to humans. These include infectious tissues from surgery as well as culture samples or plates inoculated with infectious agents. Biohazardous waste also includes trace chemotherapeutic waste and pharmaceutical waste. Biohazardous waste is managed by the California Department of Public Health Medical Waste Management Division. For more information, visit: http://www.cvma.net/userfiles/uploads/MedicalWasteMgmtArticle_MJ2014.pdf.

Where can I find a list of hazardous substances?

California law (California Code of Regulations Title 22, Division 4.5, Chapter 11) includes Appendix X of Hazardous substances. While Appendix X does not contain all substances that could be hazardous, it contains those which are most likely to be found in veterinary practices. It can be accessed at: http://web.stanford.edu/dept/EHS/prod/enviro/waste/Extremely_Hazardous_Wastes.pdf.

In general, veterinary practices have the greatest chance of possessing the following hazardous substances:

- Anesthetic gases
- Batteries
- Computer monitors, old "tube" televisions
- Copper, selenium, or zinc boluses for livestock
- Ether
- Ethylene oxide
- Fluorescent light bulbs
- Formalin
- Lead
- Mercury
- Radiographic fix containing rare earth metals (e.g., silver)
- Strong acids or bases used in lab procedures

More extensive lists of hazardous wastes can be found at: https://dtsc.ca.gov/HazardousWaste/upload/HWMP_DefiningHW111.pdf.

Where can I get more information about hazardous waste?

The Cal/EPA DTSC publishes a user-friendly fact sheet for veterinary practices that answers several frequently asked questions. It is available at: http://www.regionalsan.com/sites/main/files/file-attachments/oad_docvet_fs.pdf.

If you cannot find the answer to your question in this fact sheet, please contact the Cal/EPA DTSC Regulatory Assistance Officer directly. You can call them at 800.728.6942, or contact them via the Department of Toxic Substances Control website at <http://www.dtsc.ca.gov/> then click on "Regulatory Assistance Officers" and you will go to a page with links to the Regulatory Assistance Officers' email.

