



SEMPER SAFE



"Hazardous Materials Awareness"

Hazardous Materials can be found anywhere and everywhere. Many products containing hazardous chemicals are stored under your kitchen sink. They range from antifreeze to radioactive waste, and they can purify drinking water, increase crop production, and make field day at the barracks much easier. But these chemicals can also be hazardous to humans or the environment if used or released improperly. Hazards can occur during production, storage, transportation, use, or disposal. You and your Marines are at risk if a chemical is used unsafely or released in harmful amounts into the environment. Chemical wastes that can contaminate the soil, seep into groundwater, or run into rivers and streams are a threat to public health and the environment. These products are shipped daily on the nation's highways, railroads, waterways, and pipelines. They are most often released as a result of transportation accidents or because of chemical accidents.

Hazardous materials in various forms can cause:

- **Death**
- **Serious injury**
- **Long-lasting health effects**
- **Damage to buildings**
- **Damage to homes or other property**

Characteristic hazardous wastes are defined as wastes that exhibit the following characteristics:

Ignitability

Ignitable wastes can create fires under certain conditions, are spontaneously combustible, or have a flash point less than 140 °F. Examples include waste oils and used solvents. (Gasoline has a flash point of -40°F)

Corrosive

Corrosive wastes are acids or bases (pH less than or equal to 2, or greater than or equal to 12.5) that are capable of corroding metal containers, such as storage tanks, drums, and barrels. Battery acid is an example.

Reactivity

Reactive wastes are unstable under "normal" conditions. They can cause explosions, toxic fumes, gases, or vapors when heated, compressed, or mixed with water. Examples include lithium-sulfur batteries and explosives.

Toxicity

Toxic wastes are those containing concentrations of certain substances in excess of regulatory thresholds which are expected to cause injury or illness to human health or the environment.

As Marines, Sailors and Civil Servants we live by our core values. So think before you jeopardize the safety of yourself, your fellow Marines, Sailors, civilian employees or family members, and remember SEMPER SAFE



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Household Hazardous Waste (HHW) is waste that is generated from residential households. HHW only applies to wastes that are the result of the use of materials that are labeled for and sold for “home use”. The following list includes categories often applied to HHW. It is important to note that many of these household wastes can fall into multiple categories.

- Paints and solvents
- Automotive wastes (used motor oil, antifreeze, etc.)
- Pesticides (insecticides, herbicides, fungicides, etc.)
- Mercury-containing wastes (thermometers, switches, fluorescent lighting, etc)
- Electronics (computers, televisions, cell phones)
- Aerosols / Propane cylinders
- Caustics / Cleaning agents
- Refrigerant-containing appliances
- Some specialty Batteries (e.g. lithium, nickel cadmium, or button cell batteries)
- Radioactive waste (some home smoke detectors are classified as radioactive waste because they contain very small amounts of a radioactive isotope of americium.

Mixing chemicals can be deadly. Cleaning products such as bleach and ammonia can create a chlorine gas. Chlorine gas is so powerful it was used as a chemical warfare agent in World War I. It can attack your eyes and mucous membranes but if inhaled, could cause death. If it doesn't kill you, it could cause pneumonia and make you extremely sick.

When purchasing any HAZMAT, employees must check the EMD website http://www.lejeune.usmc.mil/emd1/Portals/0/Forms/Revised_AHML_020911.pdf to make sure the product desired is on the Authorized Hazardous Material List (AHML).

For more information on handling and storage of hazardous materials contact your Environmental Compliance Officer (ECO) or see the references listed below.

MCO P5090.2A, BO 5041.2T, NAVMC DIR 5100.8

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