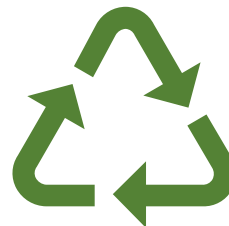


WASTE MINIMIZATION

The disposal of hazardous waste is regulated by the U.S. Environmental Protection Agency (EPA) under the Resource Conservation and Recovery Act (RCRA), which makes it illegal to mismanage hazardous waste. RCRA focuses on waste reduction and recycling. You can help reduce CSN's spending on waste disposal and material procurement by implementing the following waste minimization practices:



1. Maintain a Current Chemical Inventory

The first step in effectively minimizing hazardous waste is to keep an up-to-date inventory of all chemicals used and stored in labs and work areas. Before ordering new chemicals, check your current inventory. You may also be able to borrow small quantities from other labs or work areas. Please take a moment to consult with your colleagues.

2. Minimize Chemical Purchases

When ordering new chemicals, only purchase the amount you need. Avoid buying larger containers for short-term needs or possible future use. While buying in bulk may seem cheaper, the costs of storage, disposal, and potential waste often outweigh the savings. Large containers of chemicals that aren't used often can become contaminated or degrade over time, making them unusable. It's best to order only the minimum quantity required.

3. Chemical Substitution

Many nonhazardous alternatives exist for hazardous chemicals. Whenever possible, hazardous chemicals—especially those that are highly toxic, reactive, contain heavy metals, or are known or suspected to be carcinogens, mutagens, or teratogens—should be replaced with safer substitutes.

4. Follow Appropriate Storage Practices

Proper chemical storage enhances safety and health in the workplace while extending the lifespan of the chemicals. By following these guidelines, you can also minimize hazardous waste generation:

- Clearly label all containers to prevent unnecessary disposal of unidentified substances.
- Use secondary containment trays to catch spills or leaks.
- Store incompatible chemicals separately (e.g., acids away from bases, flammables away from oxidizers).
- Store chemicals away from heat sources, the elements, or direct sunlight.
- Regularly check and rotate stock to use older chemicals first.
- Keep chemicals in locked cabinets or rooms, especially hazardous ones.
- Ensure easy access to safety data sheets (SDS) and spill kits.

5. Disposal of Nonhazardous Laboratory Waste Chemicals

Certain chemicals can be safely and legally disposed of in regular trash or down the sanitary sewer. For details on disposing of nonhazardous laboratory waste in regular trash, refer to the Nonhazardous Solid Waste Fact Sheet and the Nonhazardous Aqueous Waste Fact Sheet.

Please contact EH&S at 702-651-7445 or ehs@csn.edu if you have any questions.