



Sustainable Practices - Hazmat Inventory Reduction



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ENVIRONMENTAL HEALTH & SAFETY

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The adoption of waste reduction practices within the USC research and educational community not only underscores proper waste management, but also perpetuates sustainable practices at the university. Waste reduction lessens environmental impact, reduces liability, lowers worker exposure, and saves operating costs. Below are some suggestions for waste reduction in your laboratory.

Reduce Inventory

- Review all chemicals in stock for outdated and unnecessary items.
- Request pickups for chemicals that are outdated or no longer needed at: <http://capsnet.usc.edu/EHS/HazWastePickUpForm.cfm>.
- Update the lab's chemical inventory to reflect the changes.

Review Current Laboratory Procedures

- Use safer alternatives to highly hazardous materials.
- Adjust experimental set-ups to micro-scale wherever possible.
- Employ video presentations in teaching laboratories for experiments that generate hazardous chemical by-products.
- If an experiment leads to corrosive by-products, it may be advantageous to neutralize the solution as part of the experiment. Neutralized solutions must fall between pH 6 and 10.

Centralize Purchasing of Chemicals

- Assign one staff member to order chemicals to avoid duplications.
- Order only the quantity needed for the experiment. Avoid overstocking.

Plan for "Green" Experiments

- Eliminate or reduce the use of reactive chemicals where possible or deactivate their reactive characteristics as part of the experiment.
- Eliminate or reduce the use of halogenated solvents where possible because many are known or suspected carcinogens.
- Eliminate or reduce the use of arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver where possible.

Please contact EH&S at 213-740-6448 for more information.

EH&S Fact Sheets are intended to facilitate team discussions in your department. Post the monthly topic on your departmental bulletin board.