

IDAHO
DEPARTMENT OF
ENVIRONMENTAL
QUALITY

1410 North Hilton Boise, ID 83706 208/373-0502

www.deq.state.id.us

## **School Laboratories-Practicing Pollution Prevention**



Practice good housekeeping. Make sure chemical containers are well labeled, closed and in good condition.



Segregate all chemicals and waste containers based on chemical incompatibilities. Be careful of incompatibilities in the same unwashed glassware.



Avoid stacking chemicals on top of each other to reduce the risk of spill and breakage.



Employ secondary containment measures around hazardous chemicals to minimize clean-up area and contamination in case of a spill.



Know how to handle a spill. Have appropriate protection and clean up kits available in locations that will not be affected by a spill.



Centralize inventory and purchasing for your school to use chemicals efficiently, minimize extra product accumulation, and facilitate sharing. Conduct periodic audits to monitor chemical use.



Substitute safer chemicals for hazardous chemicals.



Consider a centralized storage area for chemicals to facilitate inventory control.



Use chemicals on a first in, first out basis, using the oldest chemicals first. This will minimize the amount of expired products that need to be disposed.



Minimize chemical use. Consider using microscale chemistry or video simulations.



Keep wastes segregated. Mixing waste products may cause non-hazardous materials to become hazardous, thereby increasing disposal costs and the risk of exposure.



Budget and plan for chemical disposal. Educate your administrators about lab safety and pollution prevention.



Always take appropriate safety precautions. Wear proper protective equipment. Never smell, touch, or taste a chemical. Always use properly treated glassware and equipment to conduct your experiments (never use mason jars for beakers or pencils for stirs).



Teach students about the environmental impact of chemicals and environmental responsibility as they conduct experiments.



## Safety Tips for School Laboratories

School laboratories may contain dangerous chemicals that can be reactive when exposed to air, water, light or movement. Explosive chemicals have also been found in school laboratories. If your lab contains old, unused chemicals or waste, careful handling is essential.

When in doubt as to the nature of the product, do not touch or move the chemical.
Chemicals with crystal build-up, those that contain ether, disulfides, peroxides, dioxanes, or reactive metals may be particularly dangerous and require special handling.
Chemicals in brown or dark colored bottles may be reactive with light and if exposed to light may become explosive.
Just because two chemicals have similar names or share common elements, doesn't mean they are the same.
Find information about a particular chemical's properties, the Material Data Safety Sheet (MSDS). These sheets are available on the web or by contacting your chemical supplier.
If you find a material that you believe may be explosive, contact the State

## What to do with your waste?

Contact your local Department of Environmental Quality Office. Specialists are available to offer assistance and information on different chemicals, handling and disposal options. Visit our web site at www.state.id.us/deq.

Waste management companies offer testing and disposal services. Look in the yellow pages under waste disposal or waste disposal-hazardous to find companies in your area.

Some cities have hazardous waste disposal options for small businesses and schools.

Communication Center at 1-800-632-8000. Do not move the material.

Contact a waste exchange to get rid of unused or unwanted chemicals. Waste exchanges facilitate trading or selling unused chemicals among businesses.

I MEX: I ndustrial Materials Exchange (206) 296-4899. CALMAX: California Waste Exchange (916) 255-2369. COMEX: Colorado Materials Exchange (303) 492-4330.