EHS Guidance Laboratory Housekeeping

Purpose

Good laboratory housekeeping helps to ensure a safe work environment which in turn improves moral, fosters successful lab work, helps protect the environment and improves compliance with state and federal regulations. Following the best practices listed below will help to make labs safer by reducing the risk of accidents and fires as well as to create a more efficient place to conduct research and teaching.

Chemicals

Keep bulk chemicals stored in cabinets or designated storage areas. Only dispense quantities from bulk containers to conduct your work for the day. This frees up bench space and minimizes the amount of chemical released if a spill occurs.

Keep chemical containers closed. This reduces the possibility of spills and minimizes chemical exposure to lab occupants. Waste containers must be closed unless adding or removing waste.

Maintain a chemical inventory. Label all secondary chemical containers according to standard guidelines to prevent the generation of unknowns. Update the lab's chemical inventory at least yearly and properly dispose chemicals that are expired or no longer used. This will aid in keeping track of chemical usage (minimizing costs) and may be useful to emergency responders when responding to an incident in the lab.

Cleaning the Laboratory

Things to remember:

- Do not move unwanted items into the hallway.
- Recycle paper and cardboard properly in an approved recycling location.
- Store equipment in designated storage areas; do not store chemicals and equipment in fume hoods.
- Follow EHS/Facilities written procedures to send unwanted lab equipment to Surplus.
- Store waste containers in appropriate secondary containment and segregated by chemical compatibility in the lab's designated Satellite Accumulation Area (SAA). The SAA is identified by a sign; if there is no SAA sign displayed in the lab, contact EHS to obtain one. See example below.
- Unused chemicals that are no longer needed should be offered to others in your or other departments before submitting them to EHS as waste for collection. Contact EHS to review options.
- Contact EHS to dispose of both unused and waste chemicals. Follow the waste collection protocol at https://www.uidaho.edu/dfa/division-operations/ehs/chemicalwasterequest.

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Remove Clutter

Keep lab benches and hoods as organized as possible. This may be difficult when conducting complicated experiments involving numerous samples and glassware but doing so will help minimize the potential for missteps in experiments as well as the risk of accidents.

Keep containers and equipment away from bench edges. Reaching over reagent bottles or lab equipment increases the chances of knocking something over, resulting in breakage or a spill.

Pay attention to the shelves above desks and lab benches. A general rule is to put heavy items on lower shelves and lighter items on upper shelves. Avoid overloading shelves with equipment, chemicals, and supplies. Ensure chemical shelves have earthquake lips.

Keep Pathways Clear

Always maintain a minimum 3-foot-wide path in all aisles throughout the lab. It is common for equipment and materials to be moved around a laboratory, so maintain designated storage spaces for these items when not in use. Ensure stored equipment does not impede access to safety equipment including showers and eye washes. Do not store flammables near exits.

Emergency Equipment

Keep emergency equipment stocked, maintained, visible and accessible. If this equipment is not in the lab, know specifically where the nearest is located. Emergency equipment includes but is not limited to the following:

- Telephone
- First aid kit
- Fire extinguisher
- Fire blanket

- Chemical spill kit
- Eyewash station and emergency shower
- Fire alarm pull station
- Gas shut-off valve

Hazardous Waste Satellite Accumulation Area

- 1. Label/mark all containers with the words "Hazardous Waste" and indicate the hazards. Remove conflicting labels.
- 2. Properly identify, list and quantify all constituents added to containers. Keep a log of waste additions.
- ${\it 3. \ Keep\ containers\ closed\ except\ when\ adding\ waste.\ Use\ tight-fitting,\ screw-cap\ lids.}$
- 4. Ensure containers are in good condition and compatible with waste. Do <u>NOT</u> combine incompatible wastes!
- Store full containers in the designated Satellite Accumulation Area at or near the point of generation. Keep quantities below 55 gallons of waste or 1 kg (2.2 lb) of acute hazardous waste; if exceeded, call EHS at once.
- 6. Store waste containers by chemical compatibility in separate trays or tubs.
- 7. Preparedness: All SAAs must have access to a: FIRE ALARM, FIRE EXTINGUISHER, SPILL KIT, COMMUNICATION DEVICE (Telephone or Two-Way Radio), EMERGENCY SHOWER/EYEWASH; and staff must maintain adequate AISLE SPACE. Post and know the location of EMERGENCY EXITS and the BUILDING EVACUATION ROUTE.

TABLE 1 - Emergency Procedures		
Chemical Spill - Minor (EHS Guidance:	Chemical Spill - Major	Fire, Explosion, or Spill threatening
Chemical Spill Clean-up Procedures)		life/health outside of building/lab:
1. Wear appropriate PPE. Protect/Cover	1. Evacuate area, isolate area and	1. Pull Fire Alarm and evacuate the
floor drains	prevent entry	building
2. Stop/Cover the spill to prevent spreading	2. Call 911	2. Call 911
3. Alert others of the spill	3. Call EHS at 208-885-6524	3. Call EHS at 208-885-6524
4. Decontaminate		
5. Dispose cleanup materials &		
contaminated debris as Hazardous Waste		



Environmental Health & Safety (EHS) Contact EHS at 208-885-6524; <u>www.uidaho.edu/ehs</u>

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