## University Health and Safety Fact Sheet

### Laboratory Housekeeping

Keeping your lab clean and well-organized is an important part of research safety. Clutter can lead to accidents and spills, and can help fires spread faster. Cleaning your lab regularly will help keep everything organized, well-labeled, and safe. The cleaner and more organized your lab is, the easier it is to keep safe and in compliance.



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#### **General Housekeeping and Clutter**

- Keep aisles, exits, and hallways clear. There should always be a clear pathway to get out of the area. Don't use hallways or aisles as storage areas.
- Don't block any safety equipment, including eyewashes, safety showers, fire extinguishers, electrical panels, first aid or spill kits, and exits. Be especially cautious about storing bikes, roller blades, skateboards, and other transportation gear these are often left by exits, blocking your way, and can cause trip hazards from water or dirt.
- No food or drink is allowed in the lab, including in laboratory refrigerators. Personal dishes should not be washed in the laboratory sink.
- Remove all slip or trip hazards when you identify them. This could include water or oil leaks/spills, extension cords, rugs, storage boxes, and other possible issues. Include safeguards against slipping in areas where water may be common, such as a non-slip rug placed by a sink.
- Keep all drawers and cabinets shut when not in use. You could potentially trip over an open drawer, or be struck by an open cabinet door.

#### **Cleaning and Maintenance**

- Defrost and clean out refrigerators and freezers regularly. This is also a good opportunity to review expiration dates and labeling on the materials stored inside. Storing materials in bins makes defrosting more efficient, and can help keep you organized. You can contact Facilities Management for a tray and additional absorbents to collect melted ice water.
- Make sure your PPE is cleaned regularly. Goggles, glasses, and lab coats should be washed regularly, according to manufacturer instructions.
- PPE must be stored properly in an area that will keep them clean while you are not using them.
- Cleaning inside fume hoods is the laboratory's responsibility. Wear appropriate PPE, use absorbent pads to prevent water spills, and clean carefully, being aware of potential interactions with your cleaning products, including water.
- Facilities Management cleans laboratory floors on a regular schedule. You can request additional cleanings if needed, or request they don't clean so you can do it yourself. Information on the custodial

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cleaning schedule, and what tasks they perform, can be found here: https://facm.umn.edu/aboutfm/custodial-program

- Clean and put away glassware regularly. Don't let the dishes pile up this creates clutter and a higher ٠ chance of unintentional breakage. Regular cleaning makes it easier to find things, and reduces the chance of cuts from broken glassware.
- Fill cup sinks and floor drains with water or antifreeze periodically to prevent sewer gas infiltration and • odors.
- "Clean areas" such as desks and office areas should not be used to store hazardous materials. This • helps prevent accidental contamination or injury.
- Your lab should be in good physical condition. Make sure all your doors, drawers, and cabinets • function. All surfaces, including floors, counters, shelves, and benches, should be in good condition. All your drains, floor tiles, lights, and ceiling tiles should be in good repair.
- Keep all materials at least 18 inches away from sprinkler heads to ensure they will work properly in ٠ case of fire.

#### **Chemical Housekeeping**

- Store chemicals away from the edges of shelves or benches to prevent containers falling and breaking. More information here: http://z.umn.edu/chemstorecontrolledmanner
- Chemicals in glass bottles should not be stored on the floor. Other types of containers can be stored on ٠ the floor, if necessary. Secondary containment must be used.
- Fume hoods should only be used for equipment/materials for the current • experiment, not for storage.
- Clean up all spills immediately, even if it is non-hazardous. To people who ٠ are unaware of the situation, a hazardous and a non-hazardous spill look the same.
- Dispose of old or unwanted chemicals. Getting them out of your lab will • give you more space to work and to store other materials, while also reducing the amount of hazardous materials in your area.
- Mark certain areas as "gloves" or "no gloves" these include phones, • computer stations/mice, and other common-use areas. Labeling areas or equipment is a good idea to remind people to take their gloves off. An example is to the right.

#### Waste

- Make sure your waste is emptied regularly. This includes regular trash, recycling, and glass waste. If needed, you can contact Facilities Management to request larger containers or more frequent pickups.
- Hazardous waste should be disposed of in a timely manner. Waste must have pick-up requested within 90 days, and then be picked up within 90 days of that request.

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- Choose a hazardous waste container that is small enough to fill and dispose of about once a semester, and that is large enough to not change more than once a day/week. Keep in mind that the larger the container, the larger the spill risk. Make sure your waste container is not large enough to cause a fire risk or code violation.
- Hazardous waste containers must be closed at all times, unless you are actively adding something to it.
- Be careful not to overfill glass waste bins, as it makes it dangerous for custodial staff to pick up. Try to keep the weight below approximately 40 pounds (about as much as a water-cooler jug). Keeping the boxes in a plastic tray is also useful to prevent water soaking into the cardboard bottom. Check with Facilities Management on how to arrange for pick-up. Some areas require that you place full boxes in the hallway to indicate they are ready for pick-up, while other areas have their own procedures.

#### Storage and Organization

- Make sure you have clear spaces to work, and clean up messes as they are made. Avoid clutter as much as possible. Try to keep your lab organized, with equipment and supplies stored in assigned places.
- Limit overhead storage. If you need to store equipment overhead, limit it to lightweight materials, smaller objects, non-hazardous chemicals, and infrequently used chemicals that are not in glass containers.
- Make sure shelves are properly supported and are not overloaded with weight. Too many books, chemical containers, or other equipment can make shelves bow in or break. Cabinets and shelves should be secured to the wall to prevent tipping.
- Try to store extra, unused, or spare equipment out of your main work area, if possible. If there is no available storage room, you could have an assigned storage area in less-used part of your lab.
- Store papers such as lab notebooks, files, and books away from heat sources such as ovens or hot
  plates and moisture sources such as sinks or the floor. This helps prevent the development of mold,
  and reduces fire hazards
- Large equipment should be stored at the back of the bench, and smaller equipment in front. Set up your work so you can avoid reaching over equipment, containers, and glassware, especially things that are easy to tip or that may spill, such as graduated cylinders or nitrogen dewars.

#### Administrative

- Don't just move your housekeeping problem around the lab. Resolve the issue by getting rid of unneeded supplies, finding a proper place to store it, or other solutions.
- Be realistic when ordering new equipment or chemicals. Think about how much you really need to have available and how much room you have to store things. Communicate with your lab about what is on order to avoid duplicate orders. This helps prevent unneeded equipment from piling up, reduces the amount of hazardous material you have in your lab space, and keeps costs down.
- Think about organizing clean-up sessions within your lab group. Your lab could spend 15-20 minutes cleaning the lab out before or after lab meetings, or do a larger-scale clean-out at the beginning or end of the year. Year-end clean-outs are especially useful, as it helps make sure that equipment and

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supplies from graduating students is discarded or redistributed. Lab clean-outs can be fun – especially if it's also a PI-sponsored pizza or ice-cream party.

• Even just 5 minutes a day spent organizing or cleaning your lab space can be useful. Cleaning a messy lab can be a big task, but working at it little by little can get you a long way!

#### Resources

• The University of Minnesota's ReUse center is a great resource. You can have them pick up old equipment to re-sell, and they often have shelving, cabinets, or other equipment you could use to help organize your lab. More information at <a href="http://facm.umn.edu/waste-recovery-services/reuse">http://facm.umn.edu/waste-recovery-services/reuse</a>



- Hazardous waste should be disposed of through the University. More information can be found at <a href="http://dehs.umn.edu/hazwaste.htm">http://dehs.umn.edu/hazwaste.htm</a>
- Facilities Management has a guide to waste disposal, organized by category. More information at <a href="http://facm.umn.edu/waste-disposal-options-category/waste-options-category-laboratory">http://facm.umn.edu/waste-disposal-options-category/waste-options-category-laboratory</a>
- A guide to what is able to be recycled and what cannot is available at <a href="http://facm.umn.edu/recycling/recycling-guide">http://facm.umn.edu/recycling/recycling-guide</a>
- To have repairs done to your lab, you may need to request a work order from Facilities Management. Information on this is found here: <u>https://facm.umn.edu/customers/requesting-services</u>

#### Questions

If you have any questions about housekeeping, storage, or safety, contact your Department Safety Officer, your DEHS Research Safety Professional, or call the DEHS office at (612) 626-6002. A safety professional will be able to provide guidance on ways to keep your lab clean, organized, and safe.