Preparing for Emergency Chemical Spills

Plan your work around the possibility of an emergency. Don’t let them take you by surprise. Remember, if it can happen, it will happen.

1. Look around your laboratory. Consider what emergencies are possible. Fire? Spill? Chemical exposure? Gaseous release?
2. Plan how to prevent and respond to those emergencies.
3. Make sure you are prepared to respond to an emergency. Have spill control materials, personal protective clothing and other emergency response equipment nearby. Get training in first aid and fire extinguisher use. Practice emergency communications, evacuation procedures and spill response. Post hazard information and contact names on the door to your lab to help emergency responders.

The Department of Environment, Health & Safety can help you with all these things. Minor spills do not necessarily need the assistance of EH&S. Laboratory workers who have had the proper training and possess the appropriate equipment can safely and effectively handle the majority of chemical spills that occur in the laboratory.

Here's an example procedure for cleaning up a spill:

1. **Controlling the spread of the liquid:** Make a dike around the liquid by adding absorbent material to the spill working from the outer edges toward the center. Absorption pads may also be used to soak up any remaining liquid or residue. This will work great for the cleanup of most solvent spills on campus.

   Treatment is optional, but preferable, for acids and bases. A neutralizing chemical such as citric acid (for bases), or sodium bicarbonate (for acids) greatly simplifies cleanup or disposal. Spills of most acids or bases, once neutralized can be mopped up and rinsed down the drain.
2. **Recovery and Containment for Disposal:** The remaining spill residue with the absorbent can be scooped or swept up into a 5 gallon plastic bucket. For dry powders or liquids absorbed to dryness, you can place the residue into a black plastic bag and close it with duct tape. Ventilation may be necessary. Open windows or use a fan.

3. **Disposal:** After containing the spill, please fill out a [Surplus Chemical Form](#) online and schedule a pickup from Chemical Safety to remove the unwanted material from your lab.