

Chemical Spill Procedures

When a chemical spill occurs, it is necessary to take prompt and appropriate action. The type of response to a spill will depend on the quantity of the chemical spilled and the severity of the hazards associated with the chemical. The first action to take is to alert others that a spill has occurred. Then you must determine if you can safely clean up the spill yourself.

Many chemical spills can be safely cleaned up without the help of Environmental Health and Safety (EHS). Only attempt to clean up incidental spills if you have the proper personal protective equipment (PPE), training, and spill cleanup materials available.

Be Prepared (supervisors/managers)

- Keep updated emergency response procedures for your area.
- Post a list of contacts in case of a spill.
- Make sure everyone knows the primary and secondary evacuation routes.
- Make sure everyone knows where spill response materials are located.
- Train employees in advance on when and how to properly use spill response materials.
- Assign a person to periodically inspect spill kits and maintain their inventory.
- See "[Developing a Spill Response Plan](#)" below for more information

Emergency Action

1. Immediately alert area occupants and supervisor, and evacuate the area, if necessary.
2. If there is a fire or serious injury associated with a spill, call Public Safety (610-436-3311) or 911 immediately for assistance.
3. All chemical spills of more than 1 gallon of liquid or 1 pound of solid must be reported to EHS immediately
 - Environmental Health and Safety (610-436-3333)
 - If EHS cant be reached, call Public Safety.
4. Attend to anyone who may have been contaminated. Contaminated clothing must be removed immediately and the skin flushed with water for no less than fifteen minutes. Clothing must be laundered before reuse.
5. If a volatile, flammable material is spilled, immediately warn everyone, control sources of ignition and ventilate the area.

Immediate Spill Response

- Don personal protective equipment, as appropriate to the hazards. Refer to the Material Safety Data Sheet or other references for information.
- Using the chart below, determine the extent and type of spill. If the spill is large, if there has been a release to the environment or if there is no one knowledgeable about spill clean-up available, contact EHS at x3333 from 7:00am-4:30pm. Outside those hours, contact Public Safety at x3311 and ask for EHS assistance.

Catagory	Size	Response	Treatment Materials
Small	up to 300mL	chemical treatment or absorption	neutrilation or absorption spill kit
Medium	300mL to 5L	absorption	absorption spill kit
Large	more than 5L	call Public Safety (x3311)	outside help

- Protect floor drains or other means for environmental release. Spill socks and absorbents should be placed around drains, as needed.
- Contain and clean-up the spill according to the table above. Loose spill control materials should be distributed over the entire spill area, working from the outside, circling to the inside. This reduces the chance of splash or spread of the spilled chemical.
 - Bulk absorbents and many spill pillows do not work with hydrofluoric acid. POWERSORB® (by 3M) products and their equivalent will handle hydrofluoric acid. Specialized hydrofluoric acid kits also are available for purchase from lab safety suppliers. Many neutralizers for acids or bases have a color change indicator to show when the spill is neutralized.
- When spilled materials have been absorbed, use brush and scoop to place materials in an appropriate container. Polyethylene bags may be used for small spills. Five gallon pails or 20 gallon drums with polyethylene liners may be appropriate for larger quantities.
- Hazardous Waste Tags can be found inside each spill kit on campus. Fill out the tag and identify the material as “Spill Debris involving XYZ Chemical,” then affix onto the container. Spill control materials will probably need to be disposed of as hazardous waste. Contact EHS for advice on storage and packaging for disposal.
- Decontaminate the surface where the spill occurred using a mild detergent and water, when appropriate.
- Report all spills to your supervisor.

Developing a Spill Response Plan

An effective spill response procedure should consider all of the items listed below. The complexity and detail of the plan will, of course depend upon the physical characteristics and volume of materials being handled, their potential toxicity, and the potential for releases to the environment.

- Review Safety Data Sheets (SDSs) or other references for recommended spill cleanup methods and materials, and the need for personal protective equipment (e.g., respirator*, gloves, protective clothing, etc.)
- Acquire sufficient quantities and types of appropriate spill control materials to contain any spills that can be reasonably anticipated. The need for equipment to disperse, collect and contain spill control materials (e.g., brushes, scoops, sealable containers, etc.) should also be reviewed. EHS maintains chemical spill control kits that can be used if no other materials are available. After use, please call EHS at x3333 to restock.
- Acquire recommended personal protective equipment and training in its proper use.
- Develop a spill response plan that includes: (for supervisors/managers)
 - Names and telephone numbers of individuals to be contacted in the event of a spill.
 - Evacuation plans for the room or building, as appropriate.
 - Instructions for containing the spilled material, including potential releases to the environment (e.g., protect floor drains).
 - Inventory of spill control materials and personal protective equipment.
 - Means for proper disposal of cleanup materials (in most cases, as hazardous waste) including contaminated tools and clothing.
 - Decontamination of the area following the cleanup.
- Discuss the spill response plans with all employees in the area.

Chemical Locations and Spill Kits

Spill kits are located in major hallways, stairwells and near elevators.

Building	Location	Type
201 Carter Drive	Suite 500 Loading Dock	PIG Spill Kit #KIT211
	Suite 500 Off-Shift Shop	PIG Truck Spill Kit (x2)
821 S. Matlack Street	Garage Bay	PIG Spill Kit #KIT211
	Fuel Pump	Absorbent Only
	Fuel Pump	Pig KIT4002 Spill Kit/station
	EHS Storage Room 104A	PIG Truck Spill Kit (x2)
Chemical Storage Bldg	By Rear Exit	PIG Spill Kit #KIT211
	By Rear Exit	PIG Mercury Spill Kit #KIT600
Main Hall	Mechanical Room B05	PIG Spill Kit #KIT211
South Campus Apts	Bldg 831, Room 014	PIG Spill Kit #KIT211
Sturzebecker HSC	Maintenance Room 004	PIG Spill Kit #KIT211
Sykes Student Union	Mechanical Room 013	PIG Spill Kit #KIT211
Tyson Hall	Room G11	PIG Spill Kit #KIT211