

Environmental Health and Safety

CHEMICAL SPILL RESPONSE PROCEDURES

Chemical spills may occur during the course of normal laboratory activity. Below are standard procedures to follow when such a spill occurs. In all cases, common sense should be your guide. If a spill occurs which is beyond your capacity to deal with effectively, immediately contact the Environmental Health and Safety (EHS) office at 372-3227, or University Police at 372-3234, or 911.

I. Chemical Spill Response

- a. Spills of chemicals must be recognized as being potentially hazardous to all persons involved. The range and quantity of hazardous substances used in laboratories and the work site requires preplanning to prevent accidental spills and to respond safely to a spill, should it occur. The cleanup of a chemical spill should only be done by knowledgeable and experienced personnel.
- b. Employees are qualified to clean up spills that are "incidental and/or minor", since they are expected to be familiar with the hazards of the materials they normally work with. The employee's supervisor must ensure that the proper training occurs, and that training is documented. All employees and students must be familiar with the properties and hazards of the materials in the laboratory and work site. This involves reviewing the Safety Data Sheet (SDS) and being familiar with the SDS location.
- c. Standard Operating Procedures (SOP) should be written for work with all hazardous chemicals. The SOP should include written spill response procedures.
- d. Spill kits that include absorbents, neutralizing agent and personal protective equipment are required for work with hazardous materials. Ensure that sufficient quantities and appropriate types of spill control materials, as prescribed in the SDS, are available to contain and clean up a minor spill. Call EHS at x3227 for advice and recommendations.

II. Minor Chemical Spills

- a. An "incidental and/or minor" spill is defined as a spill that does not pose a significant safety or health hazard to employees or students in the immediate vicinity, does not pose a significant threat to the environment and does not have the potential to become an emergency within a short time frame. If the spill exceeds the scope of the employee's experience, training, equipment or willingness to respond, the employee must follow the appropriate procedures to obtain assistance.
- b. All other chemical spills are considered major chemical spills.
- c. Report ALL spills requiring use of spill kits to the Environmental Health and Safety office at x3227.

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III. Procedures for Minor Chemical Spill

Do not attempt to clean up a spill of any hazardous chemical larger than 500 ml or a spill involving chemicals that are highly toxic by yourself. You should know the hazards associated with any chemicals used in your laboratory or classroom by consulting the Safety Data Sheet (SDS) before using them, and you should know how to respond to a chemical spill.

- a. Alert people in the immediate area of the spill.
- b. Don personal protective equipment including, at a minimum, safety goggles, gloves and long-sleeve lab coat.
- c. Avoid breathing vapors from spill.
- d. Confine spill to small area.
- e. Use appropriate spill kit materials to neutralize, absorb and clean up the spilled chemical.
- f. Collect the residue and place in a compatible container. Label the container with a hazardous waste label completed to identify the contents and manage as hazardous waste until a proper hazardous waste determination can be made. Refer to the Hazardous Waste and Satellite Accumulation Area Guide.
- g. Notify the Supervisor and EHS at x3227 if a spill kit was used to respond to the spill.

IV. Procedures for Major Chemical Spill

- a. In the event of a major chemical spill: Immediately attend to injured/exposed personnel, evacuate the area, close the door, notify any persons in adjacent areas and call University Police at x3234 or 911 to provide the following information:
 - i. Your name and phone number.
 - ii. Name(s) of personnel injured/exposed.
 - iii. What spilled and how much?
 - iv. Where did spill occur?
- b. Remain calm. Leave the spill area but stay in a safe area near the spill. Provide the University Police, EHS or other emergency response personnel with information on what was spilled, the amount spilled, the SDS, if available, any injuries or exposures and how incident occurred.
- c. If you or other lab personnel have suffered from a chemical exposure or are feeling any symptoms as described on the SDS, notify your supervisor and call University Police at x3234 or 911.
- d. If seeking medical treatment, take the SDS with you (if possible). The Registry of Toxic Effects of Chemical Substances (RTECS) and Chemical Abstract Service (CAS) numbers can assist the physicians in obtaining treatment information.
- e. If someone is exposed to a spill and is unconscious, move them if you can do so at no risk to yourself and call University Police at x3234 or 911 immediately.

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