

DEFINITION OF CHEMICAL SPILLS - EMERGENCY & NON-EMERGENCY

The cleanup of chemical spills should only be accomplished by knowledgeable and experienced people. Spill kits with instructions, absorbents, reactants, and protective equipment should be available to clean up minor spills.

Three factors determine if a hazardous materials spill is a non-emergency or an emergency.

1. **How much was spilled** - if the amount of the material spilled is more than one liter, it is considered a major spill and you should contact the Safety Coordinator for assistance.
2. **What are the hazards of the material spilled** - if the spill is less than one liter, but presents an immediate danger to health, safety, the environment, or is an immediate fire hazard, it is considered a major spill and you should follow Emergency Response Procedures for Chemical Spills.
3. **Where is the Spill** - if the spill is outside of the laboratory or outside of the area where the material is normally used, and/or there is no trained person available to clean up the spill, you should contact the Chemical Safety Office for assistance.

Note: All workers or persons using hazardous materials must be trained in how to clean up the materials they are using. Spill Kits are required in all areas where chemicals are used or stored - employees who work in those areas must be trained in how to use the kits and in how to activate the Emergency Response Procedures for Major Spills.

NON-EMERGENCY - MINOR CHEMICAL SPILL

Small spills (< 1 Liter and does not present an immediate fire, safety, environmental or health hazard).

1. Alert people in immediate area of spill.
2. Wear protective equipment - including safety goggles, gloves, long-sleeve lab coat.
3. Avoid breathing vapors from the spill.
4. Confine spill to small area.
5. Use appropriate kit to neutralize and absorb inorganic acids and bases.
6. For other chemicals, use appropriate kit or absorb spill with vermiculite, dry sand, or diatomaceous earth. Collect residue, place in container and dispose as chemical waste.
7. Clean spill area with water.

SPILL KITS

Chemical Spill Kits shall be available in near proximity to hazardous chemicals. These kits shall include:

1. Neutralizing agents such as sodium carbonate or sodium bisulfate
2. Absorbents such as vermiculite. Paper towels, rags, and sponges may be used, but caution should be exercised because some chemicals may react upon contact with them.
3. Commercial spill kits are available that have instructions, absorbents,

EMERGENCY RESPONSE PROCEDURES - MAJOR SPILL

Large Spills (> 1 Liter or a material presents an immediate fire, safety, environmental, or health hazard regardless of quantity).

Examples: Spill of greater than 1 Liter of ethanol, methanol, strong acids or bases or any quantity of highly volatile organics, and mercury compounds.

- a. Stop work
- b. Turn off any ignition sources
- c. Report the spill the appropriate plant personnel
- d. Attend to any injured persons - if you can do so without personal risk.

REQUIRED POSTINGS FOR EMERGENCY RESPONSE

The following telephone numbers are to be posted in all laboratories and/or chemical storage facilities where all other safety information is displayed.

EMERGENCY TELEPHONE NUMBERS

If you are at a Climate Engineers or Climate River Valley location, contact your local fire department.

Climate Engineers . Cedar Rapids Fire Department **(319) 286-5200**

Climate River Valley . Eldridge Fire Department **(563) 285-9827**

If you are at a jobsite location, be sure to comply with that job site specific standards and procedures.