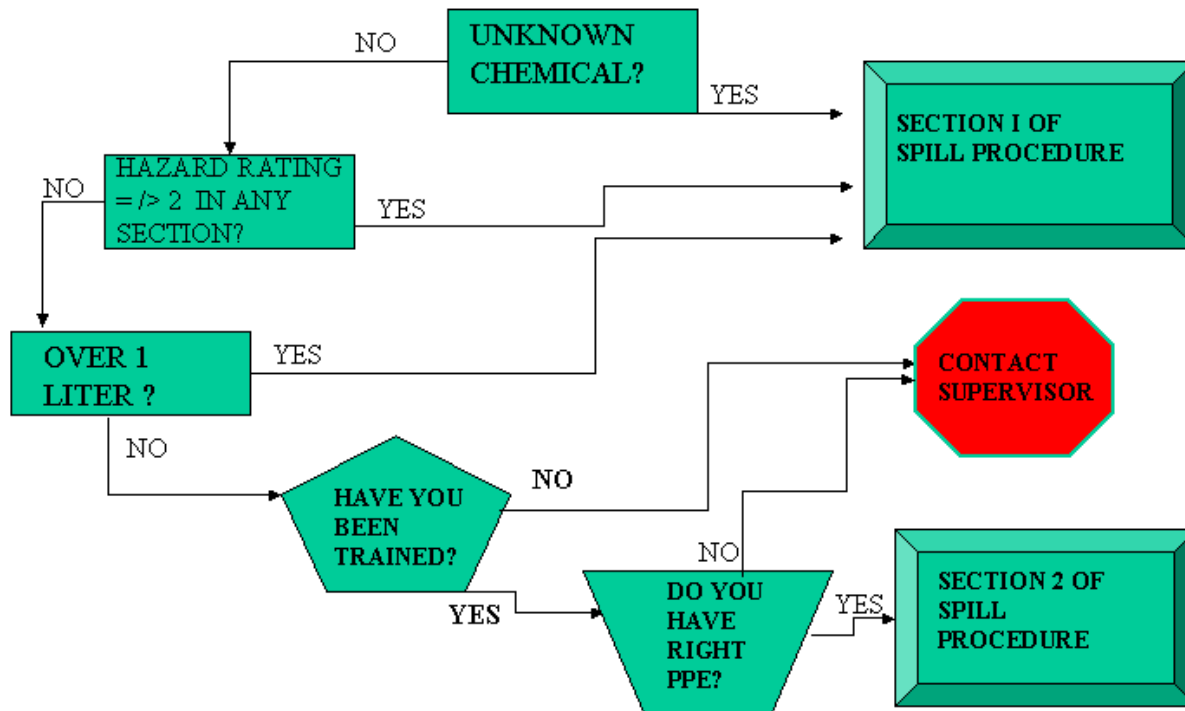


ACC Hazardous Materials Spill Procedures  
Draft 6/27/03

**CHEMICAL SPILLS**



**Section I:**

For hazardous material spills over **one liter**, or for chemicals **that have a hazard rating of 2 or above**, or for spills of an **unknown chemical**:

1. Evacuate the immediate area, closing doors to area where spill has occurred. Restrict access to area.
2. Contact Austin Community College Police Department at **512 223-7999 or 222** to report the spill. Provide information on :
  - the identity of the chemical spilled,
  - quantity spilled,
  - exact location and
  - Information on hazard ratings (look for NFPA / HMIS labels on containers or MSDS).
  - Report any injuries or chemical exposure
3. Campus Police will immediately contact Environmental Health Safety and Insurance Office at **223-1015**.
4. Environmental Health Safety and Insurance Office will make assessment and will contact appropriate Fire Department for HazMat Response if determined spill is of nature that would require their response.
5. Obtain an MSDS and provide a copy to the responding party and Environmental Health Safety and Insurance Office. If qualified, initiate recommended spill containment and other procedures which may be safely and reasonable done. (Campus Police will be receiving 1<sup>st</sup> Responder Training.)
6. If Environmental Health Safety and Insurance Office makes the determination that hazardous material can be cleaned up by ACC personnel, Environmental Health Safety and Insurance

Office will provide guidance on all aspects of clean up including personal protective equipment and proper disposal of any associated waste.

## Section 2: Handling Small Scale Chemical Spills:

If hazardous material spill is **less than one liter and has a hazard rating below 2 in all hazard categories, the following procedures should be followed.**

Instructional labs / work areas that contain any type of chemical should have a chemical spill kit available to deal with small spills. It is the laboratory supervisor responsibility to handle small-scale chemical spills in their lab. A small-scale spill of a known material is generally considered to be one liter or less and have a hazard rating of less than 2 in all categories.

When a small scale chemical spill occurs:

- Restrict access to area.
- Immediately notify the lab supervisor and others in the area of the spill.
- Mark the area to prevent others from coming in contact with the spilled material. Depending on what type of chemical is spilled, in may be necessary to evacuate the lab until the material is effectively cleaned up.
- During business hours, always immediately contact the ACC Environmental Health Safety and Insurance Office 223-1015 and notify them that a **small-scale spill** has occurred.
  - Name of chemical
  - Quantity spilled
  - Location of spill
- Obtain an MSDS for material. Refer to the chemical's MSDS for spill clean up instructions. It is required that a MSDS be kept available for each chemical used in the lab for this purpose. Generally, section six or seven of the MSDS will address spill clean up procedures, while section eight will indicate appropriate personal protective equipment (PPE) for dealing with a spill. (The MSDS section numbering may differ slightly depending on the manufacturer or distributor of each particular chemical.
  - MSDS Section on Precautions for safe handling and use
  - Use recommended Personal Protective Equipment
  - Follow other precautions listed in MSDS.
- After business hours, notify the Austin Community College Police Department Dispatch at **512 223-7999 or 222** on internal phones. They will contact Environmental Health Safety and Insurance Office by pager.

### General Procedures:

- Simple acid and base spills should be neutralized with an appropriate neutralizing agent.
  1. For acid spills (hydrochloric or sulfuric acid):
    - sodium bicarbonate, sodium sesquicarbonate or other derivatives are acceptable.
  2. For basic spills (sodium or potassium hydroxide)
    - citric acid would be a suitable neutralizing agent.
  3. Allow the spill time to neutralize (i.e., wait until the bubbling reaction stops.)
  4. When using a neutralizing spill kit, these kits are buffered and will not have a bubbling action. Be careful not to over-neutralize.
  5. Test the pH of the spill after the neutralization reaction has stopped with pH paper. Once a pH of between 6 and 9 has been achieved, the material can be transferred into an appropriate secondary container for disposal.
  6. The container will then be marked with the "Hazardous Waste" label identifying what material was cleaned up. Contact the Austin Community College Environmental Health Safety and Insurance Office for assistance with labeling and for chemical waste pick up.

**Note: Some acids cannot be neutralized and will require special procedures for spill clean up. Some examples are chromic acid and hydrofluoric acid. Immediately contact the ACC Environmental Health Safety and Insurance Office when a spill of this type occurs.**

- Solvent Spills (benzene, or methylene chloride etc):
  1. Use an absorbent medium such as sand or vermiculite to absorb the spill and prevent runoff.
  2. Transfer the spilled material into an appropriate secondary container.
  3. Mark the container with the "Hazardous Waste" label and contact the Environmental Health Safety and Insurance Office for a chemical waste pick up.
  
- Solids:
  1. Most solid chemical spills can be swept up and transferred directly to a secondary container after the spill occurs.
  2. Mark the container with a "Hazardous Waste" label and contact the Environmental Health Safety and Insurance Office.
  
- Mercury Spills:
  1. Mercury spills require special clean up procedures
  2. Utilize the special Mercury Spill Kit when dealing with mercury spills. Instructions for clean up are located on the Mercury Spill Kit container.
  3. For broken mercury thermometers, clean up spilled mercury as described above and collect mercury and broken thermometer in a sealable plastic bag for disposal. Contact Environmental Health Safety and Insurance Office.
  4. For mercury spills greater than 1 thermometer, contact Campus Police.
  
- **Biohazard Spills:**
  1. Biohazardous spills have the potential of containing disease carrying organisms which can infect persons exposed to the spilled material, therefore it is critically important to handle biohazard spills appropriately when they happen.
  2. Spills involving bodily fluids (i.e., blood, plasma, saliva, biological cultures, etc.) should immediately be decontaminated with a bleach or other disinfectant solution approved to kill pathogenic disease causing organisms including HIV and Hepatitis viruses.
    - If at all possible, have person generating fluids (their own) clean up any spill of bodily fluids.
    - Appropriate personal protective equipment should be worn during any biohazard spill clean up including: splash goggles, rubber or nitrile gloves and rubber apron or lab coat to protect the responder from self-contamination.
    - Apply the disinfectant to the spilled material and leave for five to ten minute to allow the disinfectant to work.
    - After the material has had time to be totally disinfected, use an absorbent medium to soak up liquids,
    - The material should then be swept up and placed into an approved biohazard waste bag (red or orange with universal biohazard symbol on it.
    - Placed in the appropriate biohazard waste container for disposal.
      - All biohazardous waste not containing a cut/puncture hazard is to be considered regular biohazardous wastes. This would include any type of blood or serum products, tissues, absorbent papers with biological contamination etc. These materials should be wrapped securely and then placed in an approved biohazard bag (orange or red with the official biohazard symbol on it). This bag is then placed into the cardboard boxes provided by the current vendor for this type of waste.
    - Contact Environmental Health Safety and Insurance Office with any questions on clean up or waste labeling/disposal.