

# Emergency Response for Chemical Spills

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## MAJOR SPILL

A major spill is one which:

- involves the release of a toxic chemical that poses an immediate risk to health, **OR**
- involves fire or explosion.

## Take Action!

- Activate the fire alarm and evacuate the building immediately!
- Call:
  - 911 from campus phone **OR**
  - 934-3535 from a cell phone **OR**
  - 4-2487 (OH&S).
- Tell the person who answers the phone details of the accident:
  - the location – street address and building name,
  - types of hazardous materials involved,
  - your name, and
  - a phone number where you can be reached.

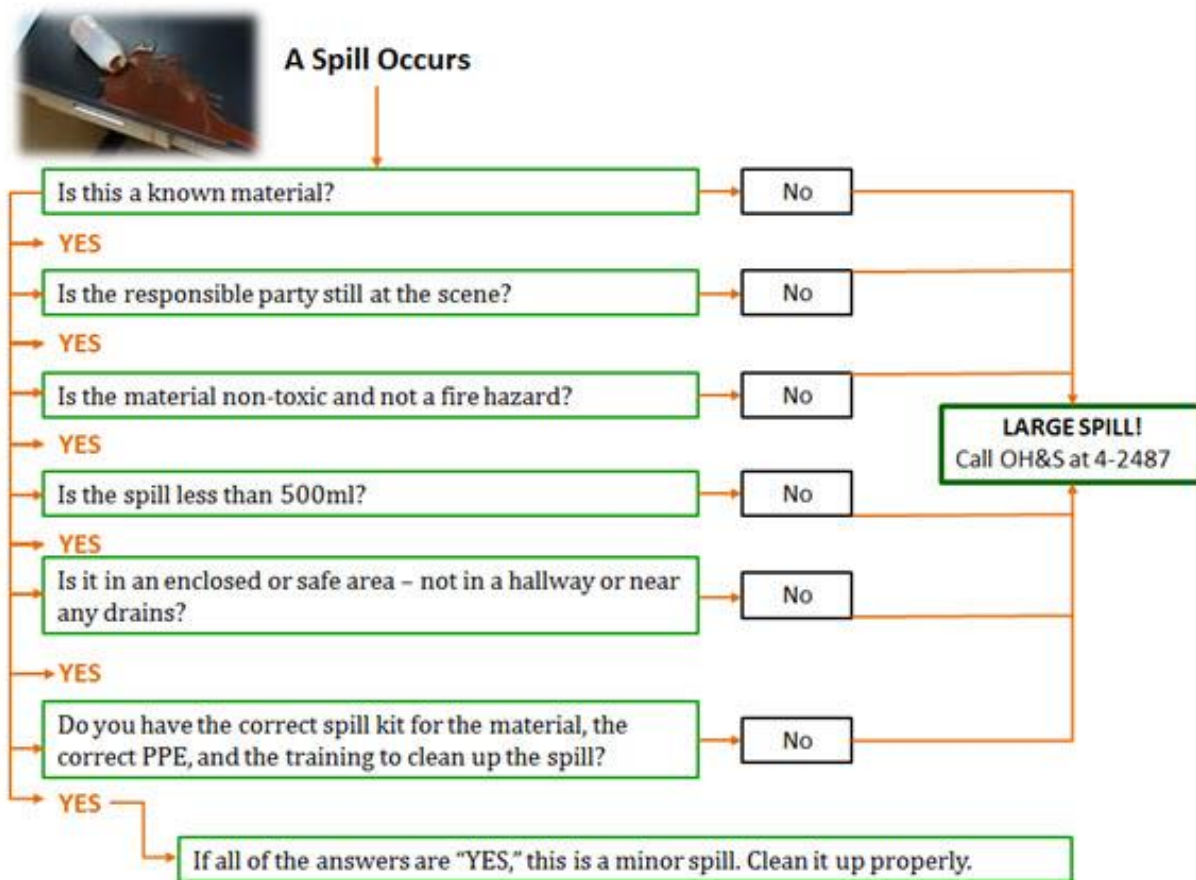
## Personal Injury or Chemical Contamination

If there is personal injury or chemical contamination, follow the above steps as appropriate and at the same time:

- Move the victim to safety (only if safe to do without further injuring the victim or you).
- Locate nearest emergency eyewash or safety shower if someone is contaminated.
- Remove any contaminated clothing.
- Flush all areas of the body contacted by chemicals with copious amounts of water for 15 minutes.

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## LARGE SPILL VS. SMALL SPILL



## LARGE SPILL (See chart above)

- Contain the spill, if you can do so without risk to yourself or others.
- Warn others in the immediate area.
- Notify the PI or the Supervisor.
- Evacuate the area if necessary.
- Contact OH&S Chemical Safety at 4-2487 immediately.
  - Provide the following information:
    - Your name and extension
    - Location of the spill
    - Quantity
    - Name of the chemical spilled

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OH&S Chemical Safety will contact the Emergency Spill Response Team. They are specially trained to handle hazardous chemical spills.

## **MINOR SPILL (See chart above)**

- Alert people in the immediate area of the spill and restrict access.
- Locate the correct spill kit.
- Don the appropriate PPE – consult the SDS for special precautions
  - Clean, buttoned, long sleeve lab coat
  - Nitrile gloves if appropriate
  - Disposable shoe covers
  - Safety goggles or a full-face shield

### *Chemical Spills*

- Use the appropriate spill kit to confine and contain the spill.
- Liquids:
  - Cover with the appropriate materials (vermiculate, absorbent pads, etc.) to absorb the liquid.
  - Dispose of as chemical waste.
- Powders:
  - If it is in powder form, carefully sweep into a dustpan.
  - Avoid generating respirable dust.
  - Dispose of as chemical waste.

### *Mercury Spills*

- Carefully collect the broken thermometer and loose mercury.
- Place it into a sealable container.
- Use an aspirator bulb or suction device (NOT A VACUUM CLEANER!) to collect loose mercury beads.
  - If you need a vacuum cleaner for mercury beads, please call OH&S at 4-2487. They have one available to remove spilled mercury effectively.

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## RECOMMENDED SPILL KIT

Commercial spill kits are available, but a basic spill kit for most spills up to 500 ml can be put together easily using inexpensive materials such as the ones listed below.

- Five (5) gallon bucket(s) with lid(s) – to store the kit
- 2 pairs of chemical splash goggles
- 2 pairs of gloves (nitrile)
- 2 pairs of shoe covers
- 2 disposable lab coats
- Absorbent material to contain the spill (paper towels, spill booms or pillows, vermiculite)
- Forceps/tongs to pick up contaminated debris or broken glass.
- Zipper seal type bags (1 gallon size)
- Waste disposal bag

### How to Pack a Spill Kit

Spill kits should be packaged in the order of when materials will be needed:

1. PPE should be stored on the top so that it is easily accessible and serves a reminder to don the PPE **prior to the cleanup**.
2. Absorbents and other equipment needed should be under the PPE.
3. Plastic bags and drums to contain the spill debris should be next.
4. The pan and broom should be located at the bottom of the kit.

