

# Hazardous Materials Spill Response

## 911 EMERGENCY (Fire, Police, Ambulance)

### If there is a ...

- Fire
- Explosion
- Rescue needed
- Serious personal injury
- Life threatening situation

### Also notify:

- Campus Security (425-754-0154) 24-hour Cell Phone
- Facilities Office (425-640-1542)

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# Hazardous Materials Spill Response

## 911 EMERGENCY

If there is a ...

- Fire
- Explosion
- Rescue needed
- Serious personal injury
- Life threatening situation

### Call 911 *FIRST* and...

- Warn people to evacuate
- CONTACT SECURITY
- Turn off general ventilation if possible
- Leave fume-hoods on
- Close windows and doors
- Assemble at safe distance
- Account for people
- Secure area
- Collect spill info and MSDS <http://hq.msdsonline.com/edccedu/Search/Default.aspx>
- Wait for responders

In the event of an emergency or disaster, the College Safety, Security and Emergency Preparedness Department will help with assistance from Building and Floor Captains to secure and control the scene.

## HOW TO ASSESS A SPILL:

### 1. Assess PERSONAL RISK from a safe distance – be informed

#### COMPASS

*You will need to note the following:*

- Container shape (truck, storage tank, drum)
  - Occupancy/location (chemistry lab, grounds shop)
  - Markings/colors (EMERGENCY RESPONSE GUIDEBOOK) / NIOSH
  - Placards/labels
  - ALWAYS assume it is Hazardous Materials
  - SDS/Locate shipping papers and documents
- <http://hq.msdsonline.com/edccedu/Search/Default.aspx>
- Senses/ *USE COMMON SENSE*

## 2. Assess site area for hazards...

- Chemical Hazards
- Fire and explosion Hazards
- Radiological Hazards
- Biological Hazards
- Physical Hazards

## 3. Assess the risk to environment and people.

### *Simple spills meet all these criteria*

- Does not spread rapidly
- Does not endanger people or the environment except by direct contact
- Can be managed safely by people trained to use the material

### *Major spills meet any one of these criteria:*

- Does spread rapidly
- Involves a personal injury or could endanger people
- Presents an inhalation hazard
- Could endanger the environment
- Presents a potential high radiation dose

BE AWARE OF WHAT IS GOING ON AROUND YOU.

## HOW TO RESPOND TO SPILLS

### **Simple spill:**

- Obtain MSDS <http://hq.msdsonline.com/edccedu/Search/Default.aspx>
- Notify Security and Facilities Office
- Notify any affected people
- Use buddy system
- Plan your cleanup
- Use safe methods according to MSDS for personal protection/ cleanup procedures.
- Store all cleanup materials and products in safe containers in HazMat Storage area for proper disposal with Label and Date.
- Call Facilities Office for advice if needed

### **Major Spill:**

- **Dial 911**
- Contact Security
- Evacuate, and assemble at a safe distance
- Collect spill information (MSDS) if safe to do so.  
<http://hq.msdsonline.com/edccedu/Search/Default.aspx>

- Wait for responders
- **Attend to personal injuries, if safe to do so:**
  - Obtain MSDS for information.  
<http://hq.msdsonline.com/edccedu/Search/Default.aspx>
  - Person unconscious (Look around. Why?????)
  - If trained and if safe provide first aid (Has 911 been called?)

### **Clothing on fire**

- Roll person on floor to smother flame, drench with water if immediately available.

### **Chemical splash in eyes**

- Immediately rinse eyes with water at eyewash centers continuously for 15 minutes.
- Forcibly hold eye open to rinse behind eyelids.
- Obtain medical attention.

### **Chemical spill on body**

- Remove contaminated clothing and wash exposed area with running water from faucet or safety shower for 5 minutes.
- Make sure spill has not accumulated in shoes.
- For biological spills, wash with soap.
- Minor cuts and puncture wounds: Wash vigorously with soap and water.

\*\*\* Report all personal injuries to your supervisor and security and fill out an "Injury and Illness Incident Report. <http://www.edcc.edu/ehs/documents/Injury.IllnessForm.pdf>

Medical attention is available 24 hours at Swedish Edmonds Hospital (425-640-4000)

## **CHEMICAL SPILL PROCEDURE DETAILS:**

1. Determine identity of chemical
2. Consult MSDS
3. Avoid breathing vapors, get as much fresh air into area as you can safely
4. Absorbents and neutralizing agents must be compatible with chemical spilled
5. Prevent spilled chemicals from going down drains (public water supply)
6. Dispose of cleanup materials as chemical hazardous waste; small volumes of dilute acids and bases must be neutralized (pH 6-8) and can then go into sewer.
7. Call facilities office for hazardous waste pickup, guidance on cleanup or air monitoring

### **Simple spills--liquid**

- Alert people in area

- Wear protective equipment (Nitrile gloves, eye protection, pants and long sleeved shirt, closed toe shoes)
- Contain spill by diking with appropriate absorbent
- Flammable--remove ignition sources (burners, motors, anything that could cause a spark), use plastic or nonmetallic cleanup equipment
- Absorb or neutralize with appropriate agent working from outside edges inward; sorbents do not remove toxic or flammable hazards, neutralization can produce heat causing boiling and splattering
  - acid--sodium bicarbonate or acid spill kit
  - base--sodium bisulfate, citric acid, or base spill kit
  - formaldehyde--absorb or use polymerizer

### **Simple spills--dry**

- If *not* water reactive, dampen to prevent airborne dust
- Control water reactive dust with sweeping compound
- Carefully brush solids into a dust pan or container
- Ensure dust generation prevented to prevent creating inhalation hazard.

### **Compressed gas leak--simple**

- Presents no inhalation hazard
- Restrict access
- Place in fume-hood if possible, tighten fittings
- Locate leak with soapy water (at below freezing temperatures use 50% glycerin solution)
- If cylinder still leaks, contact supplier

### **Compressed gas leak--major**

- Large or uncontrollable leak or fire hazard
- Evacuate and secure area.
- Call 911
- Call Security Department
- Contact supplier

### **Bloodborne pathogens**

- Wear non-absorbent gloves:
- Wear safety glasses or goggles and mask if potential for splattering or contact with mucous membranes exists.
- Place all towels, gauze, pads, gloves, and blood- covered items into labeled RED biohazard disposal bags or double bagged into proper biohazard containers for disposal.
- Thoroughly clean all potentially contaminated surfaces and equipment with chlorine

bleach solution or disinfectant. (disinfectant must remain on the surface for product recommended dwell time.)

- Thoroughly wash your hands with non-abrasive soap and running water.
- Notify security, your supervisor and Facilities office immediately
- Clothing and towels may be laundered immediately with hot water and chlorine bleach. Gloves and other items need to be disposed of in red biohazard container. Notify Facilities office when container needs to be emptied.

## **SPILL RESPONSE PLANNING**

At Edmonds Community College each hazardous material user must be ready and equipped to handle a spill. These individuals are responsible for their own spills. Critical elements for a safe and effective response are: information and knowledge of materials used, adequate spill response supplies, proper training, and knowing when and who to call for assistance.

The Lab Standard and Right-to-Know Programs require emergency and spill response training. When preparing your response plan consider the location, existing ventilation, and nature of potential spills. The facilities office is available for guidance and training to facilitate your response planning.

### **To prepare:**

1. MSDS information sheets- Collect and keep current for *ALL* the hazardous materials you use. Keep them outside the potential spill area.  
<http://hq.msdsonline.com/edccedu/Search/Default.aspx>
2. Maintain a call list (daytime and after-hours) of individuals who should be notified in an emergency.
3. Collect and maintain spill response supplies. Sources include: lab safety suppliers, general, biochemistry, and chemistry stores.
4. Train and practice for effective spill response.

**\*\* When calling security or facilities office for spill response assistance, it will be given in one of two ways:**

- Guidance will be given on the phone or in person, so you can safely clean up a simple spill (one that is not endangering people or the environment and is not spreading rapidly) or;
- You will be advised to call 911, evacuate, and wait for emergency responders. Responders will contain the spill to control immediate health and environmental hazards. If additional cleanup or decontamination is required, the individual or department responsible for the spill would complete cleanup or, if unable, contract with specialized cleanup services.

## **SIMPLE SPILL RESPONSE PLAN**

Lab/ Building & Room Number: \_\_\_\_\_

Material Safety Data Sheets (MSDS) Access:

- Internet: <http://hq.msdsonline.com/edccedu/Search/Default.aspx>
- Location: \_\_\_\_\_

Spill Kit

- Location:
- Maintained by

Spills that require special handling:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Call Lists:

Name: \_\_\_\_\_

Daytime Number:(\_\_\_\_) \_\_\_\_\_

After-hours: \_\_\_\_\_

## REQUIRED NOTIFICATION OF DEPARTMENT OF ECOLOGY

**In the event of a fire, explosion or release of a substance that threatens human health and or the environment:**

- Notify Department of Ecology within (1 hour)

In the event of a fire, explosion or release of a substance that may not immediately threaten human health and or the environment.

- Notify Department of Ecology within (24 hours)

Contact Department of Ecology

- Northwest Regional Office (425) 649-7000
- National Response Center (800)424-8802

Report Name \_\_\_\_\_ Contact Phone # \_\_\_\_\_

Report Location - Edmonds Community College  
20000 68<sup>th</sup> Ave West  
Lynnwood, WA, 98036

RCRA ID # WAD982654873

MSDS Sheet for material that was spilled:

<http://hq.msdsonline.com/edccedu/Search/Default.aspx>

Report date, time, type incident, quantity, and type of hazardous waste released, extent of injuries, quantity and extent of recovered materials.

Contact Facilities Office, if this is done without their knowledge, for follow up records and information.