

GRAYS HARBOR COLLEGE
Administrative Procedure

Subject: Spill Response

Administrative Procedure Number: 525.02

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Spill Response

Each hazardous material user must be ready and equipped to handle a spill. Critical elements for a safe and effective response are: information and knowledge of materials used, adequate spill response supplies, adequate 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. Safety & Loss Prevention is available for guidance and training to facilitate your response planning.

To prepare:

1. Collect **MSDSs** for the hazardous materials you use. Keep them outside the potential spill area.
2. Understand the properties and hazards of the materials before beginning to use them.
3. Maintain a **call list** (daytime and after-hours) of individuals who should be notified in an emergency.
4. Collect and maintain **spill response supplies**.
5. Know the location of and how to use emergency equipment such as emergency showers and eye washes.
6. **Train and practice** for effective spill response.

Contact Safety and Security with questions regarding spill response planning.

Although most spills can be managed by trained personnel in the area of the spill, Safety and Security may be used as a resource to guide you through cleanup of your own simple spill. When calling for spill response guidance, it will be given in one of two ways:

- Guidance will be given on the phone or in person to help you safely manage and clean up a simple spill (one that is not endangering people or the environment and is not spreading rapidly) or;
- You may 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.

HOW TO RESPOND TO SPILLS

Attend to personal injuries

Clothing on fire

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

Splash in eyes

Immediately rinse eyes with water continuously for 15 minutes. Forcibly hold eye open to rinse behind eyelids. Obtain medical attention. [[Map](#) of eye wash and shower locations or [listing](#).]

Spill on body

Remove contaminated clothing and flood 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.

Assess the risk

Simple spills meet all these criteria:

- do not spread rapidly
- do 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:

- spread rapidly
- involve a personal injury or rescue
- endanger people or the environment

- present an inhalation hazard

- has created significant contamination for personnel (radioactive materials)

Initiate action**Simple spill**

- Keep the area clear
- Notify affected people
- Plan the cleanup
- Call Safety & Loss Prevention for advice, if needed

Major Spill

- Dial 911
- Activate alarm, evacuate, & assemble at a safe distance (upwind)
- Keep clear – DO NOT walk in, touch, or inhale the spilled material

- **For an outdoor spill:**
 - cover your mouth with a wet cloth
 - move inside or stay inside and turn off ventilation systems-recycle air only
 - close windows & doors

- seal the room -use plastic or cardboard and duct tape to cover all vents, windows and doors.
- **For inside spills:**
 - Evacuate the building.
 - Stay upwind and a safe distance away. Seal off or restrict the area until Public Safety arrives. Alert others in the vicinity. Public Safety officers will assist and are responsible for sealing the area.
 - **Look to see if anyone is injured.**
 - If you find an injured person and if safe to do so, get him/her to fresh air asap.
 - Keep victim warm and quiet. Get medical help immediately.
 - If the victim is not breathing—if trained, provide CPR (using a mask).
 - Remove contaminated clothing/shoes if you have proper gloves and PPE.
 - Immediately flush eyes, if necessary, for at least 15 minutes.
 - **Identify what you saw:**
 - Don't go back to find out what you saw or smelled—stop, remember, what was it?
 - Did you see a label on the container?
 - Was it foaming or fuming?
 - Was there a fire?
 - What did it smell like?
 - What color was it?
 - What was it doing?
- Turn off any ignition sources if it is safe to do so.
- Account for people & keep others from entering the scene
- Wait for and provide information to responders

Emergency Shower and Eyewash

Eyewash Instructions

1. Remove contact lenses,
2. Hold eye lids open,
3. Flush for 15 minutes (if chemical exposure),
4. Contact physician or call 9-1-1 (if chemical exposure).

Emergency Shower Instructions

1. Forget modesty,
2. Remove contaminated clothing,
3. Get in shower,
4. Flush body full 15 minutes,
5. Make sure 9-1-1 has been called.

Material Safety Data Sheets (MSDSs) are on file in all departments that use chemicals, in the Safety and Security office, as well as filed in each department.

Personal Protective Equipment (PPE) for use during Hazardous Materials Response or Incidental Release is available at the locations indicated on the Spill Clean-Up Kit list. Properly trained GHC staff may attempt to contain small spills of hazardous materials if it is safe to do so. For larger hazardous spills the Fire Department's HAZMAT response team must be notified.

Spill Clean-Up Materials or Kits are located in campus areas where hazardous materials or waste could be spilled and they include Personal Protective Equipment.

Spill Kit Types:

- Clay Absorbent (Universal) for petroleum products
- Universal Kit includes clay absorbents, pads, personal protective equipment, bucket, sponge, detergent, disposal bags, and warning signs
- Mercury clean up materials
- Acid Neutralizer
- Caustic Neutralizer
- Base Neutralizer
- Bucket with rolled absorbent (Universal)
- Absorbent pads, socks, pillows and booms: Blue are for Oils, Water, Coolants and Solvents; Pink are for Acids, Bases, Oxidizers or “unknowns;” and White are for Oils and Fuels only.
- Bloodborne Pathogen kit (BBP) for bodily fluid spills

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BIOLOGICAL SPILLS

General guide for biological spills

- wash hands/face before and after cleanup
- put on fresh pair of disposable gloves before starting cleanup
- a 10% household bleach solution is commonly used as a disinfectant; allow 20 minutes contact time (however, use the recommended disinfectant for the material you are handling)
- Dispose of cleanup materials as biohazard waste, autoclave before removal from area
- Report all spills to the supervisor

CHEMICAL SPILLS

General guide for chemical spills:

- isolate the spill area; alert others
- determine identity of spill material; consult MSDS to determine potential hazards
- avoid breathing vapors, get as much fresh air into area as you can safely
- establish ventilation to the outside if safe; prevent the contaminant from spreading through building
- absorbents and neutralizing agents must be compatible with chemical spilled
- prevent spilled chemicals from going down drains to avoid affecting the environment
- dispose of cleanup materials as chemical hazardous waste; small volumes of dilute acids and bases may be neutralized (pH 6-8) and sewered
- call EHS for hazardous waste pickup or for guidance on cleanup or air monitoring

Simple spills--liquid

- alert people in area
- wear protective equipment
- contain 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—use sodium bicarbonate or acid spill kit
- base—use 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
- keep dust generation down to prevent creating inhalation hazard

Compressed gas leak--simple

- presents no or only minimal inhalation or fire hazard
- remove ignition sources
- restrict access
- place in or next to fume hood if possible; tighten fittings
- locate leak with soapy water (at below freezing temperatures use 50% glycerine solution)
- if cylinder still leaks, contact supplier
- notify your supervisor

Compressed gas leak--major

Large or uncontrollable leak or fire hazard, involves acutely toxic gas, and/or more than minimal personal risk

- alert others to evacuate
- call 911
- turn off ignition sources
- leave fume hoods running; ventilate the affected area prior to leaving the area (only if it can be done safely and only to the outside)
- evacuate; assemble in a remote location; account for people
- provide information to emergency responders

Mercury

Large or heated spills can be an inhalation hazard

- isolate area to prevent tracking

- wear gloves and shoe covers (if on floor)
- consolidate and collect droplets using scraper, cardboard, wet paper towel, aspirator bulb, tape or special sponge from Biochemistry Stores
- place all waste in sealed container; contact EHS for a hazardous waste pickup

Major spills

Evacuate, call 911, and wait for responders.