Hazardous Spill Response

WAC 296-824

# Policy

PLU’s highest priority is to protect employee and student health and safety. On that basis, PLU employees or students will not attempt to clean up an “uncontrolled spill” according to the definition in WAC 296-824-100 (See 2.0 below). Uncontrolled spills shall be cleaned up only by people with Emergency Response Training (WAC 296-824-30005) and appropriate safety equipment. Some employees may be trained to respond defensively, such as applying spill adsorbent, or to evacuate buildings.

Spill response is an emergency response that will be guided by the PLU Emergency Management Plan For All Hazards & Incident Command System.

# Uncontrolled or Complex Spills

An uncontrolled release is one where significant safety and health risks could be created. The American Chemical Society uses the term “complex” spill.

## Examples of Conditions That Could Create a Significant Risk

* Large-quantity releases
* Small-releases that could be highly toxic or create a health risk
* Potentially contaminated individuals arriving at hospitals
* Airborne exposures that could exceed a permissible exposure limit (PEL) or published exposure limit AND employees are not adequately trained or equipped to control the release.

## Examples of Uncontrolled or Complex Spills

* One-liter of chloroform spilled on the floor
* One-gallon of acetone in the presence of boxes, chemicals, and an ignition source.
* ¼ liter of fuming nitric acid spilled on organic material
* One liter of tetrahydrofuran spilled on the floor
* A container of solvent is knocked over by a forklift driver who is untrained and doesn’t have the appropriate equipment to clean up the spill.

# Incidental or Simple Spills

PLU employees are permitted to clean up “incidental releases” as defined in WAC 296-824-100. An incidental release is one that can be safely controlled at the time of the release and doesn’t have the potential to become an “uncontrolled release”. The American Chemical Society uses the term “simple” spill. ***If there is an exposure or other health hazard to the employee responding to the spill, it is NOT an incidental or simple spill.***

# Spill Basics

Laboratory, Studio, or Shop employees are responsible for minor or incidental spills of chemicals they commonly use. Clean up of incidental or simple spills is part of managing lab, studio, or shop chemicals properly.

All labs, studios, shops, and other campus facilities where hazardous materials are used or stored must maintain spill kits for the type of materials in the space.

# Procedure for Responding To a Spill

## Occupant

*If you can answer “****Yes****” to* ***all*** *of the following questions, you may clean up the spill.*

Ask six questions:

1. Do you know what spilled?
2. Do you know the hazards of the spilled material? See MSDS.

Are you unsure whether the answer is “yes”? Then the answer is “no”.

1. Is the spill contained within the immediate area?
2. Is the danger to people or property controlled? Consider:
	* Injuries or health illness potential
	* Fire or explosion potential
	* Flammable vapors and ignition sources
	* Toxic vapors or dusts
	* Material is a strong oxidizer
	* Material is air, water, or otherwise highly reactive
3. Do you have the right spill clean-up kit?
4. Can you protect yourself and others from the hazards? For example, the spill does not pose a respiratory hazard, requiring the use of a respirator.

*If you answer “****NO****” to* ***any*** *of these questions, do NOT clean up the spill.*

Evacuate the area. If needed, activate the building alarm.

**Call x7911**. Stay on the line so that Campus Safety can collect information to facilitate an appropriate response.

*You may be asked to join the incident command center. Please stand by outside the affected area until released from the scene.*

**Hazardous Spill Response for Occupants**

6. Dispose of the wastes

7. Decontaminate the area & affected equipment

Are you unsure whether the answer is “yes”?

Then the answer is “no”.

4. Absorb the liquid

5. Collect & contain the clean up residue

2. Control the spread of liquid

3. Neutralize acids/bases if possible

1. Prevent the spread of dusts/vapors

NO

You may clean up the spill

YES

Can you protect yourself and others from hazards?

 - Do you have proper ventilation and personal protective equipment?

 - The spill does not pose a respiratory hazard, requiring the use of a respirator.

YES

Do you have the right spill clean up kit?

NO

NO

YES

Is the danger to people or property controlled?

 - Is there no potential for injuries or illness?

 - Is there no potential for fire or explosion?

 - Are there no flammable vapors and ignition sources present?

 - Are there no toxic vapors or dusts present?

 - Is the material not a strong oxidizer?

 - Is the material not air, water, or otherwise highly reactive?

YES

Is the spill contained within the immediate area?

YES

Do you know the hazards of the material?

See SDS.

YES

NO

NO

NO

3. Stand by outside affected area until released from the scene.

2. Call x7911. Stay on the line so Campus Safety can collect all relevant information.

1. Evacuate the area. If needed, activate the building alarm.

SPILL

Do you know what spilled?

## Campus Safety

Obtain the following information from the caller.

1. Is anyone injured, sick, or at risk of being injured from the spill?

Yes **/ I Don’t Know** – Call 911 No – Continue collecting information

2. Is the spill out of control? For example, is it still spilling from its container or on fire?

Yes **/ I Don’t Know** – Call 911 No - Continue collecting information

1. Who called in the report and what is the contact number for that person?
2. What is the substance that spilled? How much spilled?

Ask caller to look at container label, if safe to do so.

1. Evacuate personnel, if the caller has not already done so, and secure access to the spill area without entering spill area.
2. Call Director Environmental Health, Safety and Emergency Programs. Backups are: AVP - Facilities and then Vice President of Finance & Administration.
3. If safe to enter building, call the Facilities Management engineer to turn off central ventilation serving the spill area.
4. Call unit Chair, Dean, or Director to notify them of the incident.

CALL 911.

YES / UNSURE

Talk with original caller to gather more information. May also consult with unit Chair, Dean or Director.

Call unit Chair, Dean, or Director to notify them of the incident.

If safe to enter building, call the Facilities Management engineer to turn off central ventilation serving the spill area.

Call Joe Bell, Environmental Health & Safety Manager. Backups are Emergency Programs Manager, Director of Facilities and then VP of Finance and Operations.

Evacuate personnel, and secure access to the spill area without entering spill area.

What is the substance that spilled? How much spilled? (Ask caller to look at container label if it is safe to do so).

Is the spill out of control? (ex: still flowing, on fire)

Depending on co-assessment with caller and Central Pierce Fire and Rescue, call in contractor to clean up spill.

Is anyone injured, sick, or at risk from the spill?

Record name of caller and their contact information

**Hazardous Spill Response: Campus Safety & EHS**

#### CALL

Received

NO

NO

YES / UNSURE

Clean Harbors Environmental Services, Inc. 1-800-OIL-TANK for clean up.

If spill has entered the environment, report spill to:

Local Emergency Planning Committee: 1-253-591-5798

State Emergency Planning Commission: 1-800-258-5990

(Oil Spills) National Response Center: 1-800-424-8802

## Environmental Health & Safety

Talk with original caller to gather more information. May also consult with unit Chair, Dean, or Director.

Depending on co-assessment with caller and Central Pierce Fire and Rescue, call in contractor to clean up spill.

If spill has entered the environment, contact government agencies to report.

## Contractor Spill Response Hotline

Clean Harbors 1-800645-8265

NRC Environmental Services 1-800-337-7455 or 1-800-33-SPILL.

## Spill Reporting

EHS will report spills that enter the environment.

Call the following for EPCRA (list at <http://web-services.gov/lol/> ) or Extremely Hazardous Substances spills. If not sure, call anyway. We can’t get in trouble for over-reporting, but we can for not reporting.

State Emergency Response Commission (SERC) 800-258-5990

Local Emergency Planning Committee (LEPC) 591-5798

Call for Oil Spill.

National Response Center (NRC) 800-424-8802

# Incidental or Simple Spill Clean Up

The following steps should be taken during simple spill clean-up.

1. Prevent the spread of dusts and vapors.
2. Control the spread of liquid.
3. Neutralize acids and bases, if possible.
4. Absorb the liquid.
5. Collect and contain the clean up residue.
6. Dispose of the wastes.
7. Decontaminate the area and affected equipment.

# Post-Exposure Evaluation

After completing the spill response and clean up, EHS will evaluate the causes of the spill and effectiveness of the response actions to identify opportunities for improvement and revise policies, procedures, and training accordingly.

# Training (WAC 296-824 Table 1 & 3)

## First Responders at the Awareness Level

New employees and researchers working in a particular lab, studio, or shop must be trained as First Responders at the Awareness Level (WAC 296-824-30005) when:

* They are likely to witness or discover a hazardous substance release
* Are trained to initiate an emergency response by notifying the proper authorities of the release
* Take no further action beyond notifying the authorities

Training will include the following:

* PLU spill response policy and procedure
* Understanding what a hazardous material is and associated risks
* Recognizing presence of hazardous material during an emergency
* Identifying a hazardous material, when possible
* Understanding the potential consequences of a hazardous material in an emergency
* Using the U.S. Dept. of Transportation Emergency Response guidebook
* Recognizing the need for additional resources and the need to notify the incident’s communication center accordingly.

## First Responders at the Operations Level – 8 hour training

*Note: PLU will not support a respiratory protection program for emergency response purposes, so response at this level will include situations that do not pose a respiratory risk. Respirators are not permitted unless pre-approved by EHS&EP to comply with WAC 296-842.*

Employees who perform the following activities must be trained at this level

* Respond to actual or potential releases in order to protect nearby persons, property, and/or the environment from the effects of the release
* Are trained to respond defensively, without trying to stop the release
* May try to:
	+ Confine the release from a safe distance
	+ Keep it from spreading
	+ Protect others from hazardous exposures

Training will include the following:

* All training items listed for Awareness Level
* Know basic hazard and risk assessment techniques
* Can select and use personal protective equipment appropriate for first responder operations level.
* Understand basic hazardous materials terms
* Can perform basic control, containment, and/or confinement operations within the capabilities of the resources and PPE available
* Understand relevant standard operating and termination procedures

## Additional Training for Both Responder Levels

In addition, employees will receive training on the following.

* Evaluating whether a spill is “uncontrolled” (complex) or “incidental” (simple)
* Where spill kits are located
* How to clean up an incidental (simple) spill safely
* Procedure for responding to an uncontrolled spill
* Use of personal protective equipment for cleaning up spills
* Disposal of spill clean up materials

It is the supervisor or leader’s responsibility to ensure that employees are trained according to this program.