

Cal Poly Humboldt.

HAZARDOUS MATERIALS RESPONSE SPILL RESPONSE GUIDANCE

This document describes basic actions to be taken in case of a hazardous materials release. Personal judgment and the level of training and chemical handling experience should be used when determining the severity of a spill. The first priority is personal safety. Appropriate personal protective equipment should be worn when responding to a spill. The following definitions can be used for the assessment of a spill.

NON-EMERGENCY SPILL:

- ❖ A spill consistent with the chemical hazards and volumes usually encountered by an individual in the laboratory where the spill occurs (100ml of 1.0N HCl).
- ❖ Small volume spills (<250ml) of concentrated corrosives, flammable liquids or highly toxic compounds.
- ❖ Moderate volume spills (1 to 10L) of low toxicity, non-flammable, non-corrosive liquids.
- ❖ Min training to deal with ones own minor spill=Haz Com and review of SDS.
- ❖ Min training to deal with someone else's minor spill= 40 HR HAZWOPER.

EMERGENCY SPILL:

- ❖ A spill exceeding the chemical hazards and volumes usually encountered by an individual in the laboratory where the spill occurs (1L concentrated HCl spilled while preparing 100ml of 1.0N HCl).
- ❖ Larger volume spills (>250ml) of concentrated corrosives, flammable liquids or highly toxic compounds.
- ❖ Large volumes (>10L) of low toxicity, non-flammable, non-corrosive liquids.
- ❖ Release to the soil or water (i.e. sink, floor drain, or storm drain).
- ❖ Min training to respond to any major spill is a minimum of two 40 HR HAZWOPER Individuals.
- ❖ If there are not enough resources to contain a major spill, Humboldt County Haz Mat must be called.
- ❖ Only HAZWOPER trained individuals can assess when to address a spill internally or when outside agencies are needed.

FOLLOW THE SPILL RESPONSE ACTIONS AS INDICATED BY THE CHART ON THE BACK OF THIS FORM.

Examples of chemicals and their characters.

CHARACTER	SOLIDS	LIQUIDS
GENERAL	Sucrose, EDTA, sodium chloride	Glycerol
VOLATILE	Phenol, naphthalene	Xylenes, acetone
FLAMMABLE	Hydrogen sulfide, powdered metals	Xylenes, acetone, alcohol, formaldehyde
REACTIVE	Nitrates, Potassium dichromate	Sulfuric acid, hydrogen peroxide
TOXIC	Heavy metal compounds, arsenic,	Methylene chloride, chloroform, mercury
ACIDS	Ferric chloride, trichloroacetic	Hydrochloric, sulfuric, chromic, nitric
BASES	Potassium hydroxide, sodium hydroxide	Ammonium hydroxide

SPILL RESPONSE CHART

DUE TO THE MULTIPLE CHARACTERISTICS OF SOME CHEMICALS, BEST JUDGMENT SHOULD BE USED. IN CASE OF ANY DOUBT, TREAT THE SPILL AS A MAJOR SPILL OF A VOLATILE LIQUID.

CHARACTER	*EMERGENCY SPILL		*NON-EMERGENCY SPILL	
	SOLIDS	LIQUIDS	SOLIDS	LIQUIDS
GENERAL	1,2,3,12	1,4,2,3,12	1,2,3	1,4,2,3
VOLATILE	1,8,9,10,11,12	1,5,7,8,9,10,11,12	1,2,3,12	1,4,2,12
FLAMMABLE	1,7,9,12,	1,5,7,8,9,10,11,12,13	1,7,2,3,12	1,7,4,2,12,13
REACTIVE	1,6,9,12	1,5,7,8,9,10,11,12	1,2,3,12	1,4,2,12
TOXIC	1,11,12	1,5,7,8,9,10,11,12	1,2,3,12	1,4,2,12
ACIDS	1,6,11,12	1,5,7,8,9,10,11,12	1,2,3,12	1,4,2,12
BASES	1,6,11,12	1,5,7,8,9,10,11,12	1,2,3,12	1,4,2,12
UNKNOWN	1,7,11,12	1,8,9,10,11,12	1,7,11,12	1,10,11,12
MERCURY	N/A	1,8,9,11,12	N/A	1,11,12
BIOHAZARD	1,8,9,11,12	1,8,9,11,12	1,11,12	1,11,12

SPILL RESPONSE ACTIONS:

1. Isolate the spill and deny access to the spill.
2. Sweep up spilled materials and place in appropriate container.
3. Label container with appropriate hazardous waste tag.
4. Spread absorbent material around spill bringing into the center of the spill.
5. If possible, cover spill with absorbent material. Avoid splashing liquid.
6. If possible, remove incompatible materials from the vicinity of the spill.
7. If possible, extinguish sources of ignition.
8. Vacate room immediately. Lock the door and deny access to the room.
9. **Dial 911** and give the location, the nature of the spill, actions taken and request EH&S.
10. Stuff wet paper into the gap under the door.
11. Notify others in the vicinity of the spill.
12. Call Environmental Health and Safety (x3302).
13. If possible, open a window.

IF YOU ARE UNCERTAIN FOLLOW 8,9,10,11,12.

For all flammable and toxic gas releases follow 8,9,10,11,12.

*IN ALL CASES: Fill out a spill report and submit to EH&S within 24 hours.

THIS DOCUMENT IS PROVIDED AS A QUICK REFERENCE AND NOT A REPLACEMENT. THIS DOCUMENT DOES NOT FULFILL OR REPLACE ANY REQUIRED TRAINING IN CHEMICAL HANDLING OR SPILL RESPONSE

Spill Response Contact Information

If it gets into air, water or dirt and there is potential threat of release or a release, notify:

University Police Department:

911

(707) 826-5555

Cal OES (normally notifies other groups):

(800)-852-7550 (Statewide – 24 hours)

(707) 268-2500 (Eureka office – business hours)

(707) 445-7251 (Eureka office - afterhours)

CA Fish & Game/US Fish & Wildlife:

(707) 445-6493 (CA Fish & Game - Eureka)

(707) 822-7201 (Dept. of Fish & Wildlife – Arcata)

North Coast Unified (NCU) Air Quality Management Department (AQMD):

(707) 443-3093

Humboldt County Environmental Health (CUPA) / HazMat:

(707) 445-6215 (Eureka office)

(800) 963-9241 (Eureka office)

Humboldt County 24 Hour Behavioral Health Crisis Hot Line:

(707) 445-7715

Cal OSHA (Consultation):

(800) 963-9424

Cal OSHA (Regional Branch – Reporting & Enforcement) Redding:

(530) 224-4743

(530) 224-4747 (Fax)