HAZARDOUS MATERIALS RESPONSE
SPILL RESPONSE

HUMBOLDT STATE UNIVERSITY

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.

MINOR 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

MAJOR 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,
- 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, Eureka 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	*MAJOR SPILL		*MINOR 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 in to 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)
    *IN ALL CASES: Fill out A spill report and submit to EH&S within 3 business days
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