Fire Doors

Research buildings contain critical fire doors as part of the building design. As an important element of the building fire containment system, these doors shall remain closed unless they are held open by an electromagnetic releasing system integrated with the building fire detection system. Never use door stops to hold fire doors open.

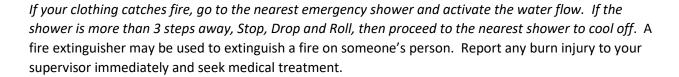
Fire-Related Emergencies

If you encounter a fire, or a fire-related emergency (e.g. abno0rmal heating, smoke, burning odor), immediately follow these instructions:

- Pull the closest fire alarm pull station and call 911 to notify the Fire Department.
- Evacuate and isolate the area. Close all doors. Shut off equipment if feasible.
- Remain safely outside the affected area to provide details to emergency responders (do not leave).

If you hear a fire alarm sound, evacuate the building. *It is against state law to remain in the building when the alarm is sounding*, even if it is a false alarm or drill.

Do not reenter the building until the alarm stops and you are cleared to reenter by Fire Department personnel.



Chemical Spills

For all spill releases occurring during regular work hours (8:00am-5:00pm), notify EH&S at (805)893-3194 immediately, regardless of whether you require clean-up assistance. After hours, if the spill is not easily contained, or if you are concerned about the health and safety of yourself and others, call 911. Otherwise notify EH&S at (805)893-3194 as described above.

Chemical spills can result in chemical exposures and contaminations. Chemical spills become emergencies when:

PULL DOWN

SSimplex

- The spill results in injury and/or a release to the environment (e.g. via a sink or floor drain).
- The material or its hazards are unknown.
- Laboratory personnel cannot safely manage the situation due to high hazard or volumes greater than one liter.

Effective response to chemical spills is necessary to minimize adverse outcomes such as injury, illness, or environmental damage. After emergency procedures are completed, all personnel involved in the incident should follow UCSB chemical exposure procedures as appropriate (see Chemical Exposures: Limits, Assessments, and Medical Evaluations in Chapter 3 of this document). Some key factors to consider before initiating a spill clean-up include:

- Location
- Volume/size of spill area
- Toxicity
- Volatility
- Flammability and presence of ignition sources
- Availability of spill cleanup materials, including proper PPE
- Training of responders

NOTE: HIGHLY HAZARDOUS CHEMICAL SPILLS

Do not clean up spills of any size of the following chemicals:

- Aromatic amines
- Carbon disulfide
- Cyanides
- Ethers
- Mercury

- Hydrazine
- Hydrofluoric acid
- Nitriles
- Nitro compounds
- Organic halides

Spills of these chemicals require emergency response.

Evacuate, isolate the area and contact EH&S.

Small Chemical Spill Procedure (< 1 Liter)

If a spill is up to 1 liter in size and of limited toxicity, flammability and volatility, laboratory members may choose to effect clean-up if trained to do. EH&S may be called for spills of < 1 liter. If laboratory personnel choose to clean the spill, the following procedure should be followed:

- Evacuate all non-essential persons from the spill area.
- If needed, call for medical assistance by calling 911.
- Help anyone who may have been contaminated. Assist with shower/eyewash as needed.

- Post someone just outside of the spill area to keep people from entering.
- Turn off all ignitions sources, and close valves on compressed gas cylinders of flammable gas.
- Don proper PPE: Safety goggles, laboratory coat, shoe covers and appropriate gloves at minimum. Check the SDS for spill clean-up procedures including necessary PPE or call EH&S.
- Avoid breathing vapors from the spill. If the spill is in a non-ventilated area, do not attempt the clean-up. Evacuate, isolate the area and call EH&S.
- Confine the spill to as small an area as possible by treating it from the outside edges in.
- Do not clean up the spill alone. Use the buddy system.
- Do not add water to the spill.
- To clean up a spill of weak inorganic acid or base, neutralized the spilled liquid to pH = 5-8 us in a neutralizing agent such as sodium bicarbonate, sodium bisulfate, or soda ash for spilled acids, or citric acid for spilled bases. For solvent spills skip to the next step.
- Absorb the neutralized liquid or solvent with an absorbent such as sorbent pads, sponges, paper towels, dry sand or diatomaceous earth.
- Collect the absorbents and place in a clear plastic bag. Double bag the waste and attach a completed hazardous waste label to the bag. Transport to the waste pickup area and schedule a pickup.

Large Chemical Spill Procedure (> 1 Liter)

If the spill presents a situation that is immediately dangerous to life or health or presents a significant fire risk, activate a fire alarm, evacuate the area, call 911 and wait for emergency response to arrive. Otherwise

- Remove any injured and/or contaminated person(s) and provide first aid.
- Call for emergency medical response if needed.
- As you evacuate the laboratory, close the door behind you, and:
 - Post someone safely outside and away from the spill area to keep people from entering.
 - Confine the spill area if possible and safe to do so.
 - Leave on or establish exhaust ventilation

- o If possible, if the material is flammable, turn off or remove all ignition sources.
- Avoid walking through contaminated areas or breathing vapors of the spilled materials.
- Any employee with known contact with a particularly hazardous chemical must shower, including washing of hair, as soon as possible unless contraindicated by physical injuries.

Chemical Exposure to Personnel

In the event of a significant chemical exposure:

- immediately try to remove or isolate the chemical if safe to do so.
- When skin or eye exposures occur, remove contaminated clothing and flush the affected area using an eyewash/shower unit *for at least 15 minutes*.
- Remember to wear appropriate PPE when helping others.
- For a non-emergency chemical ingestion, inhalation or dermal exposure contact the <u>California</u> Poison Control System at 1-800-222-1222 for assistance, and seek medical care as instructed.

Pls/Laboratory Supervisors must review all exposure situations, make sure affected employees receive appropriate medical treatment and/or assessment, and arrange for containment and clean-up of the chemical as appropriate (either by laboratory personnel or by contacting EH&S).

Earthquake

In the event of an earthquake, please take the following precautions:

- Prepare in advance: be familiar with your department's Emergency Action Plan.
- Take cover under a desk or strong doorframe during the shaking.
- Remain under cover indoors until the shaking subsides. Evacuate the building only once the shaking has ceased. Proceed to your building's emergency assembly point.
- Report any injuries or broken utility services to 911.
- Assist any injured individuals with receiving medical attention.