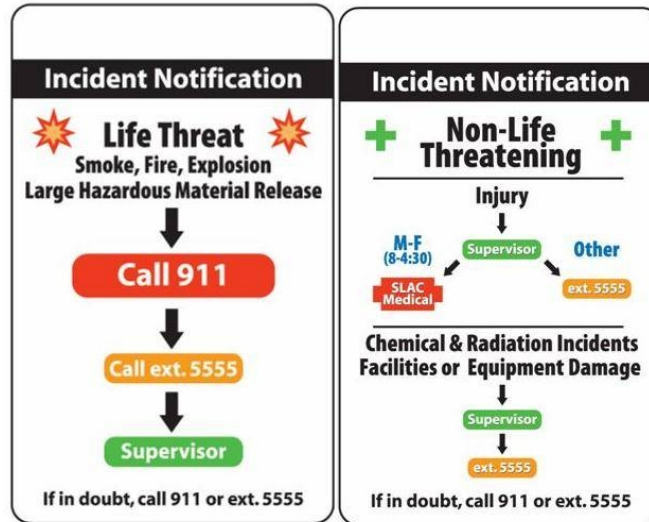




## FACILITY EMERGENCY PLAN

### BUILDINGS 120, 130 ,131



#### Other SLAC Resources

SLAC Site Security Main Gate	2551
On-site Palo Alto Fire Station Business Phone	2776
Facilities Department Service Request	8901
<b>Normal working hours only</b>	
SLAC Medical Department	2281
Waste Management	2399

Building manager

Brian Choi

Assistant building manager

Larry Cadapan

Publication dates

September 24, 2010

Prepared by  
Approved by

Behzad Bozorg-Chami

This facility emergency plan (FEP) contains building-specific emergency information for building occupants.

See the accompanying Emergency Management: Situational Guidelines, for information on what to do in the event of specific emergency types.<sup>1</sup>

Building managers:

- Make this set of information available to all building occupants by distributing it to department managers, posting it on building bulletin boards, and placing a copy into the life safety box of buildings that are required to have one.
- In an emergency, provide a copy of this FEP to professional responders.

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<b>Building Manager Contact Information</b> .....	<b>3</b>
<b>Emergency Assembly Point</b> .....	<b>3</b>
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1 Emergency Management: Situational Guidelines (SLAC-I-730-0A14T-001), <http://www-group.slac.stanford.edu/esh/eshmanual/references/emergencyGuideSituation.pdf>

### ***Building Description***

Include a complete description, including building number, name, location (grid), building directorate, and any other available identifying details.<sup>2</sup>

Building 120, 130 and 131 are the main SSL experimental area. They consist of 13 beam lines in a basic circular (horseshoe shape) design.

### ***Building Manager Contact Information***

Building Manager	Brain Choi
Building	120, 130, 131
Office	202
Extension	2672
Pager	650-849-9528
Assistant Building Manager	Larry Cadapan
Building	120, 130, 131
Office	302
Extension	4821
Pager	650-846-0246

### ***Emergency Assembly Point***

Assembly area is outside the building 120 in the front parking lot.

### ***Designated Emergency Personnel***

	Name	Extension
Emergency Assembly Point leader	Brian Choi	2672
Sweeper	Duty Operator	4040
Sweeper	Staff Scientist	Varies
SLAC ERT members	Behzad Bozorg-Chami	3872
SLAC ERT members	Cindy Patty	3925
SLAC ERT members	Michelle Steger	3011
SLAC ERT members	Alex Garachtchenko	3440

2 "Building Managers", <http://www.slac.stanford.edu/cgi-wrap/pep2qry?cmd=bdgsmgr>

## **Hazards**

### **Material Safety Data Sheet**

Material safety data sheet (MSDS) location: Majority of all MSDSs are online, in the CMS computers. There are some MSDS sheet inside the wet labs and at the DO area.

### **Hazard Locations and Contact Person**

List all equipment, devices, storage areas, chemicals, and other items that may present unusual chemical and/or physical hazards under emergency conditions.

Examples include underground storage tanks/piping, toxic gas cabinets, liquid nitrogen tanks, continuous chemical reaction processes, significant quantities of hazardous materials, equipment or processes requiring emergency shutdown procedures, or areas in the building that may be difficult to navigate through.

Hazard	Location	Department	Contact person	Room	Extension
Liquid nitrogen tank 13000 gallon	outside	SSRL	Brian Choi	202	2672
Radioactive material	Building 130 room 114	SSRL and RP	M. Padilla/C.Moris		3872/

## System Shutoff Locations

### **Alarms**

Alarm	Shutoff Location
Fire Alarm Panel	Main panel in building 131 near LN2 fill station
Security	none
Machine or device	

### **Utilities**

Utility	Shutoff Location
Electrical	Main substation is in building 507
Gas	None
Water	Main line in center of bld120 parking lot
Heating, ventilating and air conditioning (HVAC)	Roof of each building plus in front of building 120.

### **Other Systems**

System	Shutoff Location
Chiller unit	Behind building 140
LCW system	Behind building 130

## Emergency Equipment

*Note 22 CCR, Section 66265.52(e) [ as referenced by Section 66262.34(a)(3)] and the Hazardous Materials Storage Ordinance] requires that any buildings containing hazardous material list all spill equipment in the facility. Completion of the following table meets this requirement.*

Describe emergency equipment and its capabilities. If applicable, specify testing or maintenance procedures and intervals between required procedures.

### Emergency Equipment Inventory

Equipment Category	Equipment Type	Location(s)	Description	
Personal protective equipment,	Cartridge respirators	Individual	varies	
Safety equipment and first aid	Chemical monitoring equipment ( <i>describe</i> ) Oxygen Deficiency Monitors=ODM	Throughout buildings 120, 130, 131	ODM	
Equipment	Chemical protective aprons/coats	Throughout buildings 120, 130, 131		
	Chemical protective gloves	Throughout buildings 120, 130, 131		
	Face shields	Throughout buildings 120, 130, 131		
	First aid kits/stations ( <i>describe</i> )	Throughout buildings 120, 130, 131		
	Hard hats	At all fixed ladders	To climb above beamlines	
	Plumbed eye wash stations			
	Portable eye wash kits ( <i>i.e. bottle type</i> )	Building 120 rm257	Wall eyewash	
	Respirator cartridges ( <i>describe</i> )	individual	Qualified people have respirators	
	Safety glasses/splash goggles	Throughout buildings 120, 130, 131		
	Safety showers	Bluiding130 and 131 labs		



























Emergency Management: Facility Emergency Plan Template

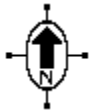
Fire extinguishing systems	Automatic fire sprinkler systems	Throughout buildings 120, 130, 131	Fire sprinklers
	Fire alarm boxes/stations	At every exit	
	Other installed fire extinguisher systems (describe) VESDA	Throughout the SPEAR Ring	
	? Other (describe)		
Spill control and decontamination equipment	Absorbents (describe)	Spill kits throughout building 120/130/131	
	Berms/dikes (describe)	Spill kits throughout building 120/130/131	
	Exhaust hoods	Building 120 rm 257/258 Building 131 rm 113 and 209 Building 131 rm 201	
	Neutralizers (describe)	Spill kits throughout building 120/130/131	
Communications and alarm Systems	x Chemical alarms (describe) ODM only	Throughout building 120, 130, 131	
	x Intercoms/ PA systems	Throughout building 120, 130, 131	
	x Portable radios	Available at DO area in building 120	
	x Telephones	Throughout building 120, 130, 131	
Additional equipment (Use additional pages as needed.)	Waste storage unit	Behind building 140	Main waste storage area

## Building Diagram Guidelines

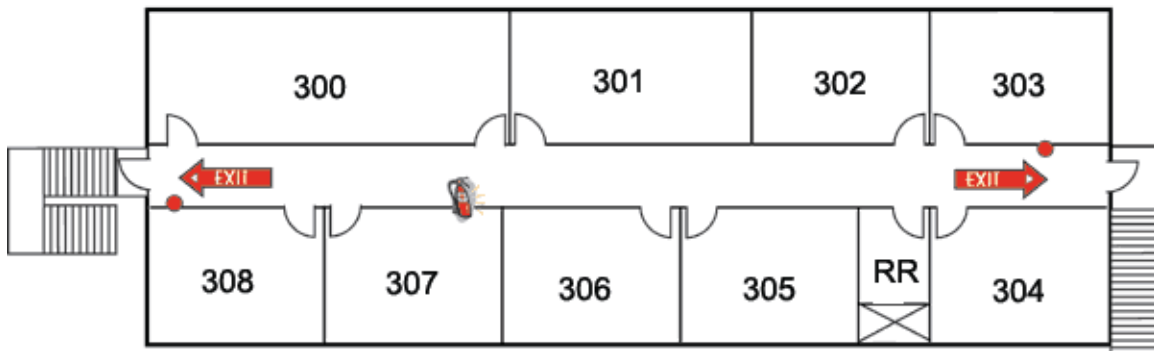
Include exit routes and locations for the items listed in the FEP. The following icon collection is not all inclusive, but symbols such as these can be used to call out important information.

*Note* These icons and the diagram example on the next page were created using MS Paint.

Water shutoff		Exit routes	
Electric shutoff		Hazardous materials placard	
Gas shutoff		Hazardous spill kit	
HVAC shutoff		MSDS location	
Emergency assembly point		Flammable storage	
Sprinkler connection		Life Safety Box	
Sprinkler riser		Radiation area	
PIV valve (for sprinklers)		Eyewash	
Fire alarm Panel		Shower	
Fire alarm pull station		Compressed gas cylinders	
Fire extinguisher		Roof access	
First aid kit		Men/women	
Fire hydrant		North indicator	
Roof Access			







### Bldg 120 3rd Floor

EVACUATION MEETING POINT: BUILDING 120 PARKING LOT

LEGEND:



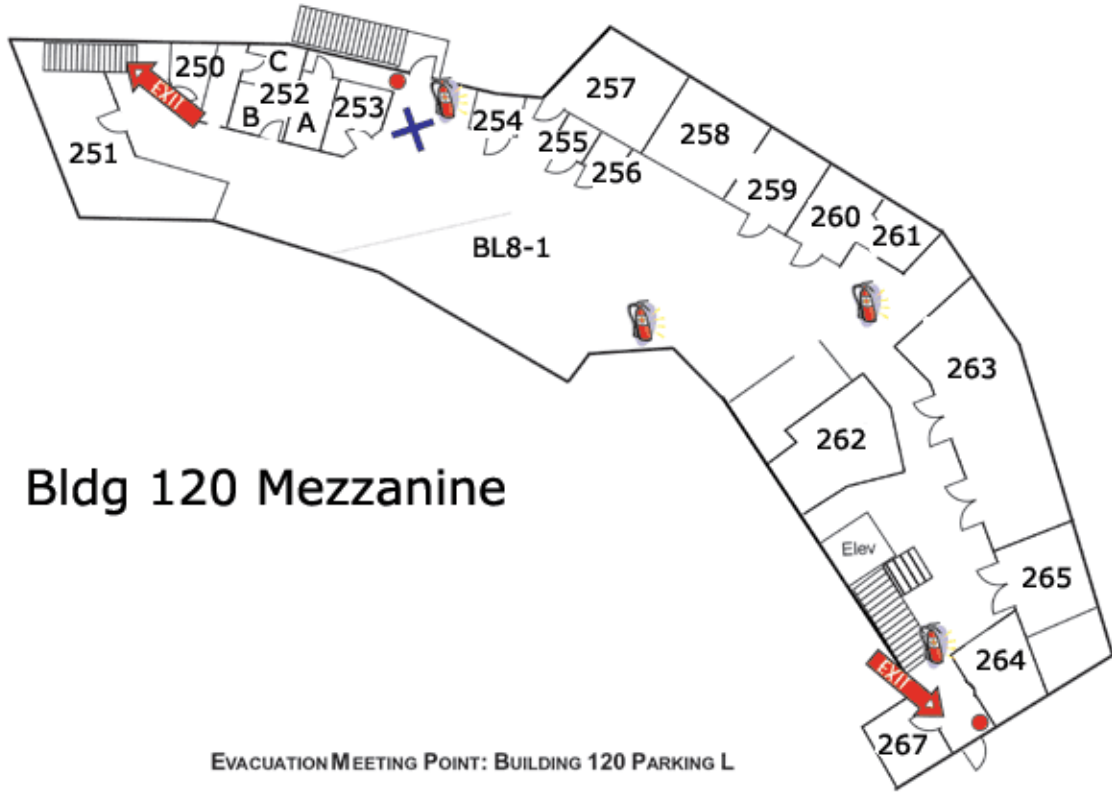


### BLDG 120 2nd Floor

EVACUATION MEETING POINT: BUILDING 120 PARKING LOT

LEGEND:

 FIRE EXTINGUISHER	 EXIT	EXIT
		PULL STATION

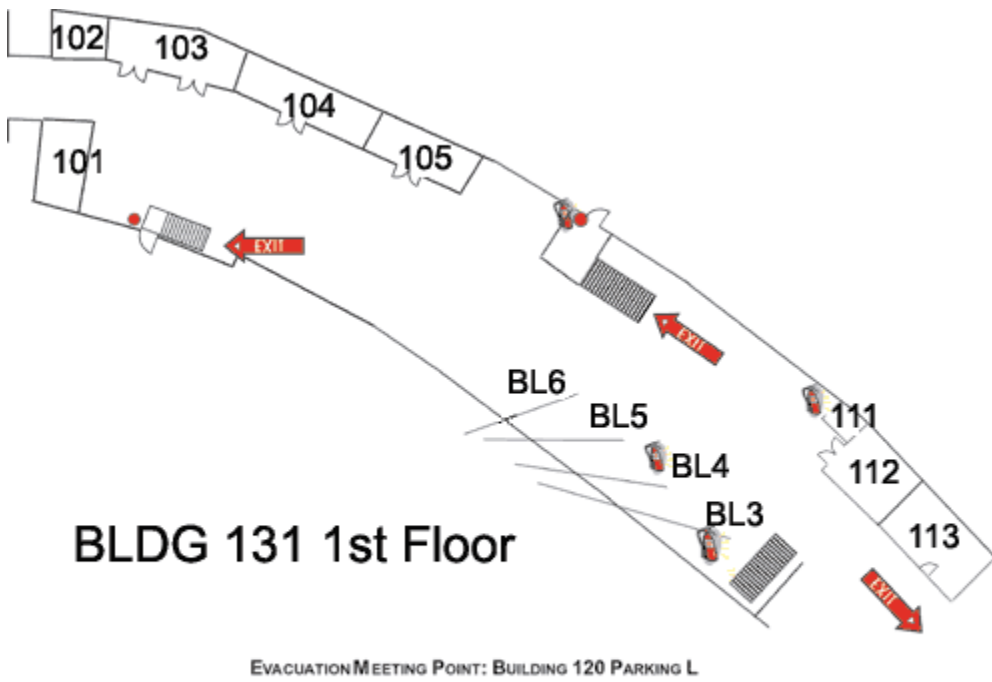
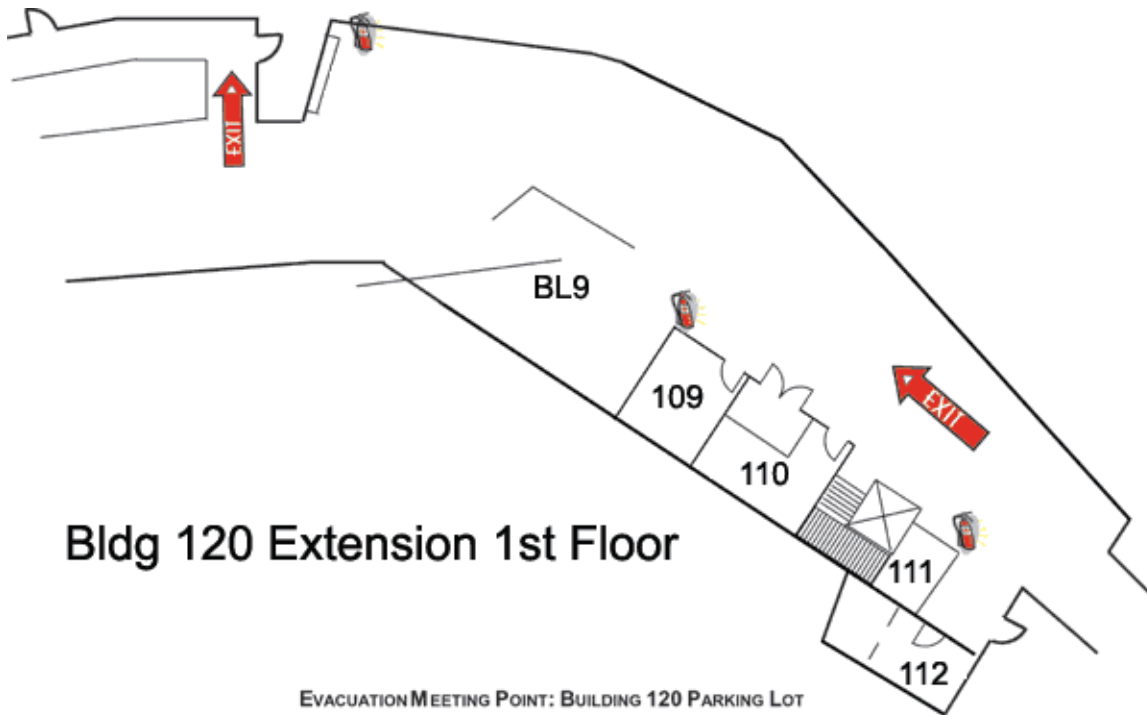


# Bldg 120 Mezzanine

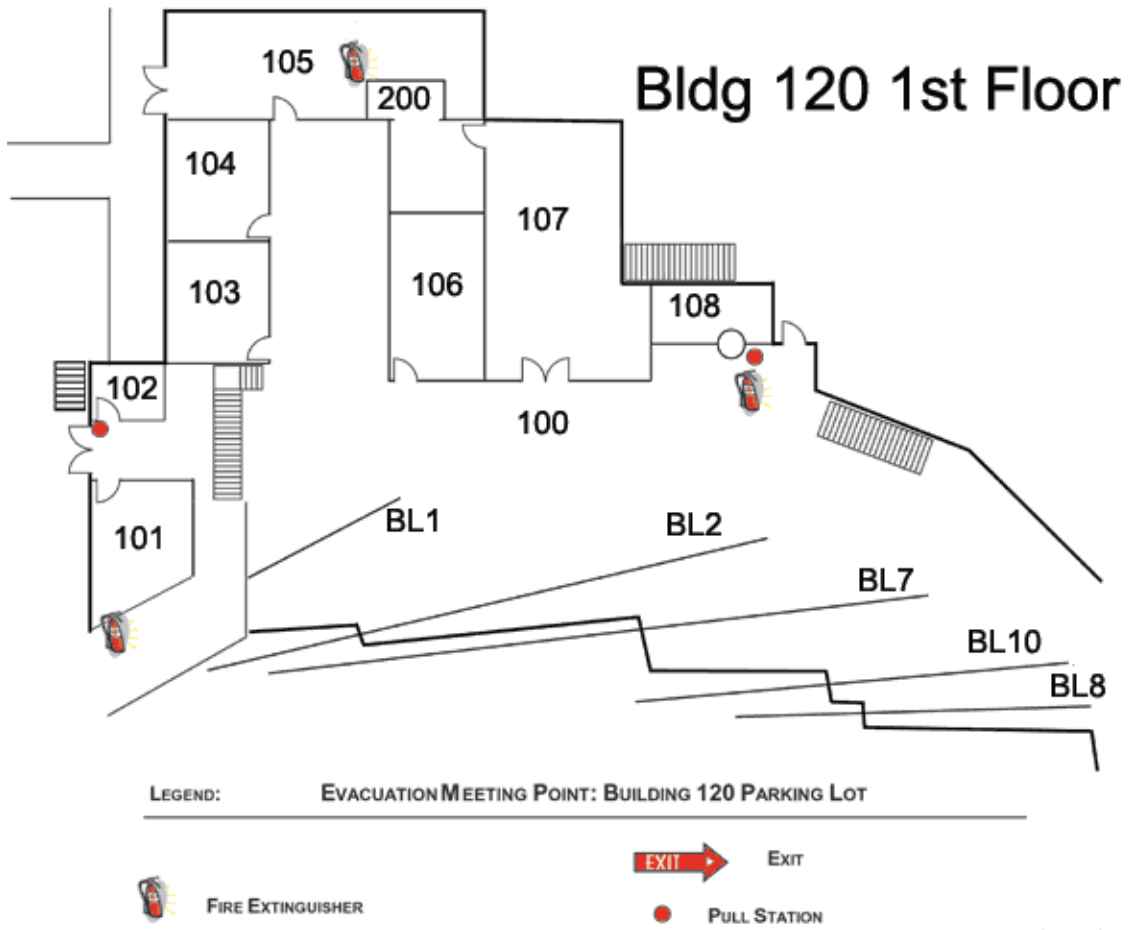
EVACUATION MEETING POINT: BUILDING 120 PARKING L

LEGEND:









## Situational Guides

Attach Emergency Management: Situational Guidelines to FEP.<sup>3</sup>

### What to do in an Emergency

#### Calling for Help

**From a SLAC phone call 911**

**From a commercial phone call 911**

Calling 9-911/911 should always be your first action. Getting the professional responders on the way is a time critical function.

Note: Calling 911 on a cell phone will connect you to the CHP dispatch center in Vallejo.

The 911 operator is trained to try and control the conversation. The operator will ask the following questions:

- What is the emergency?
- Where is the emergency?
- Who is injured?
- Are there any hazards in the area?
- Your name and phone number you're calling from.

Do not hang up until the 911 operator tells you to.

Then call SLAC Security at 2551 let them know of the situation. They will also respond to the scene.

Have someone meet the responders and direct them to the exact location.

Do not move injured persons unless it is absolutely necessary for their safety.

Do not interfere with the emergency responders. If you do not have information or skills they need, then stay out of their way.

**No plan, training or checklist can possibly foresee every situation. Ultimately, if you remember only one thing, let it be this:**

#### Evacuating

**When evacuating your building or work area:**

- You are required by law to evacuate the building when the fire alarm sounds
- Stay calm, evaluate the situation carefully
- Safely stop your work
- Gather your personal belongings only if it is safe to do so
- Close doors and windows to prevent spread of smoke and fire
- Keep in mind you may have to use an exit that you don't normally use.
- Do not use elevators

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3 Emergency Management: Situational Guidelines (SLAC-I-730-0A14T-001), <http://www-group.slac.stanford.edu/esh/eshmanual/references/emergencyGuideSituation.pdf>

## Emergency Management: Facility Emergency Plan Template

- Some exits could be blocked in an emergency, always know an alternate way out.
- Touch closed doors, do not open them if they are hot
- As you exit inform others who may not be aware of the situation
- Proceed to the building's designated Emergency Assembly Point (EAP).
- The Assembly Point Leader or Roll Taker will take roll call to account for everyone as best as possible.
- When the emergency responders arrive they will need someone to provide them the exact nature of the emergency

**Emergency/Disaster situations are inherently chaotic...  
Improvisation is a necessary virtue**



## Emergency Management: Facility Emergency Plan Template

- Stay upwind of the building/area if hazardous materials are involved
- Wait for instructions from emergency responders
- Do not re-enter the building or work area until the emergency responders declare the scene safe

### Medical Emergency

- After you have called 911, there are several things you can do until Emergency Responders arrive. These simple procedures will greatly aid the Emergency Responders and the patient they will treat.
- Provide first aid to the best of your ability.
- Use precautions to prevent exposure to bodily fluids.
- If you determine that the patient is pulseless and non-breathing, begin cardiopulmonary resuscitation (CPR), but only if you have been trained in this life saving technique.
- Stay calm; do not get excited. This will reassure the patient that help is on the way.
- Refrain from moving the patient unless it is absolutely necessary for safety reasons
- Make the patient as comfortable as possible.
- Gather all the medication that the patient may be taking. This will help Emergency Responders better determine the medical history of the patient.
- Remember the time, this is very important. When was the last time you talked to the patient? How long has this medical condition existed? How long has the person been unconscious?
- Meet the fire department and direct/lead them to the patient
- Inform the patient's supervisor
- Inform the SLAC Medical Department

### Fire

- Sound the alarm.
- Evacuate the building
- Use a fire extinguisher only if you are trained in its proper use
- Meet the fire department and tell them exactly where the fire is
- Provide the fire department with a copy of this Facility Emergency Plan
- If the fire is in a Radiological Control Area ensure that RP responds to provide monitoring

## Emergency Management: Facility Emergency Plan Template

### Hazardous Materials Spill

#### **If you spill or release hazardous materials:**

Call 9-911 for any spill or release that threatens life safety or environmental damage

- Leave the area of the spill first and proceed to a safe location nearby. Then assess if you have the proper training and protective gear to stop or clean up the spill.
- If you cannot stop the spill call 9-911
- If you are able to clean up the spill, follow proper cleanup procedures and use proper personal protection. Manage the generated waste as appropriate. Consult the Waste management Department if you are not sure what to do with the waste product.
- Isolate the spill area to keep everyone away
- Confine the spill with material such as absorbent pads if possible.
- The fire department will need to know what substance has been spilled and how much has been spilled
- Provide the fire department with a copy of the Facility Emergency Plan

### Earthquake

- Duck cover and hold until the shaking stops
- Evacuate the building after the shaking has stopped
- Avoid objects and structural components that could fall
- Be ready to assist injured persons (the fire department will be overwhelmed in a major earthquake)
- Do not re-enter the building until it has been determined that the building is safe
- Telephones will be overloaded, only make necessary calls and be brief
- Call 9-911 only for life threatening emergencies

### Radiological Incident

- Notify Radiation Protection: Field Ops (RPFO) Ext. 4299
- After hours MCC or Security can notify the on-call RP Technician
- Isolate the area of suspected contamination
- For injured persons ensure the fire department is aware of the possible radiological contamination

## 4.8 Bomb Threat

If you receive a telephone bomb threat

- Try to stay calm. Listen carefully to get information from the caller, such as:
  - The caller's age, gender, unique speech attributes and any background noises that might be clues to the caller's location.
  - Clues about where the device is, when it is set to go off, what it looks like, why it was placed.

If the threat was delivered by mail or note:

Describe any

## Workplace Violence

All urgent and/or potentially dangerous threats or acts of violence must immediately be reported to Security and your supervisor. Let security and the sheriff's department handle the situation.

**When confronted with a potentially violent person use these guidelines:**

- Project calmness: move and speak slowly, quietly and confidently.
- Focus your attention on the other person to let them know you are interested in what they have to say.
- Maintain a relaxed yet attentive posture and position yourself at a right angle rather than directly in front of the other person.
- Accept criticism in a positive way. When a complaint might be true, use statements like "You are probably right" or "It was my fault." If the criticism seems unwarranted, ask clarifying questions.
- Acknowledge the feelings of the other person. Indicate that you can see he or she is upset.
- Do not use styles of communication which generate hostility such as apathy, brush off, coldness, going strictly by the rules, or giving the run-around.
- Don't reject all of the person's demands from the start.
- Don't make sudden movements which can be seen as threatening. Notice the tone, volume and rate of your speech.
- Don't challenge, threaten, or dare the person. Never belittle the person or make him or her feel foolish.
- Don't try to make the situation seem less serious than it is.
- Don't invade their personal space. Make sure there is a space of 3' to 6' between you and the other person.

## Shelter-in-Place

What is Shelter-in-Place? Some kinds of chemical accidents or terrorist attacks may make going outdoors dangerous. Leaving the area might take too long or put you in harm's way. In such a case it may be safer for you to stay indoors than to go outside.

## Emergency Management: Facility Emergency Plan Template

“Shelter in place” means to make a shelter out of the place you are in. It is a way for you to make the building as safe as possible to protect yourself until help arrives. You should not try to shelter in a vehicle unless you have no other choice. Vehicles are not airtight enough to give you adequate protection from chemicals.

**What should we do during a Shelter-in-Place emergency?** If emergency officials recommend that people in your area Shelter-in-Place, you should stay inside and encourage others to do the same. Allow people from outside to Shelter-in-Place in your facility. Begin implementing your building’s emergency plan. For a Shelter-in-Place emergency, you will need to stay inside until the hazard has been abated and winds have dissipated any vapors in the vicinity.

**Here are the recommended steps to Shelter-in-Place:**

1. Advise everyone to stay inside. Announce to everyone in the building that a Shelter-in-Place advisory has been issued. Recommend that people not leave the building during this time unless specifically ordered to do so by police or fire personnel. Leaving the building could result in exposure to toxic vapors.
2. Close all doors, windows and other sources of outside air. Close and lock windows for a tighter seal. Control access doors (locking will provide a tighter seal). Post a “Shelter-in-Place in Effect – Controlled Access” sign in the window so that people outside will know you are closed and Sheltering-In-Place. If additional people want to enter to Shelter-in-Place, minimize the time the door is held open. Move others away from any door that is opened. People who insist on leaving the building should be allowed to leave, but advise them it is at their own risk since emergency officials have issued a Shelter-in-Place advisory.
3. Turn off all air conditioning or heating systems. Your building’s air-handling cutoff switches should be labeled, and employees should be trained where they are located and how they work.
4. Use masking tape and plastic sheeting to seal any openings in the building.
5. Officials will be providing the news media with updated information on the locations that should continue to Shelter-in-Place. Monitor local radio stations for information.
6. Call security and let them know you are sheltering in place. Give them the names of who is there and your exact location. Call 9-1-1 if you need immediate assistance with a life-threatening emergency. Overloaded telephone circuits (including cellular phone calls) can prevent actual emergency calls from getting through.

# Terrorism

## Terrorism Overview

### What you can do

Gain an understanding of what will be required to accomplish response actions in each type of terrorist attack: learn to recognize attack characteristics; understand response actions.

## Chemical Attack

Chemical attacks entail the intentional dispersal of chemical vapors, liquids, or solids and individuals being affected by inhaling these or being exposed through their eyes and skin. Numerous industrial chemicals are readily available that could cause great loss of life if used for illegal purposes. Chemical agents can act very quickly so the warning time may be very limited. Individuals will have to act quickly and on their own to minimize their exposure.

**Chemical Attack response:** The goal is to avoid the contaminated air or substance.

### If chemical attack is outdoors:

#### Shelter –in-Place

- Take shelter indoors and shut all windows and doors.
- Shut off the heating/air-conditioning unit (HVAC)
- Seal any gaps in windows and doors with duct tape and/or plastic sheeting. (trash bags work)
- Guard doors to prevent contaminated persons from entering
- Await instructions from fire department or law enforcement

### If chemical attack is indoors:

- IMMEDIATELY Evacuate the building using an uncontaminated route.
- Avoid puddles of liquid or vapor clouds
- Remain upwind of the building
- Await instructions from fire department or law enforcement

### If you were directly exposed to chemicals:

- IMMEDIATELY Remove and isolate your clothing (place in a plastic bag if possible)
- Avoid touching your eyes, nose and mouth
- Decontaminate any exposed clothing or skin. Thoroughly flush with water
- Seek fresh air, go upwind of incident
- Avoid contaminating others
- Isolate contaminated persons
- Seek medical attention

## Emergency Management: Facility Emergency Plan Template

- Do not enter medical facility without first being decontaminated

### **Biological Attack**

Biological attacks can involve either contagious or non-contagious agents. Unlike other weapons of mass destruction, biological attacks may take days or weeks to be recognized. Each agent has its own incubation period which can be up to two weeks.

**Biological Attack Response:** The goal is to get medical aid and minimize further exposure

- If symptomatic, go to a medical provider for treatment
- If informed of potential exposure by public officials, follow their guidance.
- For contagious diseases, expect to receive medical evaluation, surveillance, vaccination or quarantine
- If in contact with persons with smallpox obtain vaccination.
- For non-contagious diseases, expect to receive medical evaluation
- For all others, monitor for symptoms and, for contagious diseases, minimize contact with others.
- Leave anthrax-affected areas once on anti-biotics if advised to do so by public health officials.

### **Radiological Attack**

**Radiological Attack Response:** The goal is to avoid inhaling dust that could be radioactive

**If radiological attack is outdoors:**

#### Shelter –in-Place

- Take shelter indoors and shut all windows and doors.
- Shut off the heating/air-conditioning unit (HVAC)
- Seal any gaps in windows and doors with duct tape and/or plastic sheeting. (trash bags work)
- Guard doors to prevent contaminated persons from entering
- Await instructions from fire department or law enforcement

**If radiological attack in indoors:**

- IMMEDIATELY Evacuate the building using an uncontaminated route.
- Avoid vapor clouds
- Remain upwind of the building
- Await instructions from fire department or law enforcement

**If you were directly exposed to contamination:**

- IMMEDIATELY Remove and isolate your clothing (place in a plastic bag if possible)
- Avoid touching your eyes, nose and mouth
- Decontaminate any exposed clothing or skin. Thoroughly flush with water

## Emergency Management: Facility Emergency Plan Template

- Seek fresh air, go upwind of incident
- Avoid contaminating others
- Isolate contaminated persons
- Seek medical attention
- Do not enter medical facility without first being decontaminated

### Nuclear Attack

**Nuclear Attack Response:** The goal is to avoid radioactive fallout

**If a nuclear attack occurs:**

- Move out of path of radioactive fallout as quickly as possible.
- If it is not possible to move out of the path of the radioactive fallout cloud, take shelter as far underground as possible.
- Find ways to cover skin, nose and mouth.
- Decontaminate as soon as possible, once protected from the fallout.
- If outside the radioactive fallout area, still take shelter inside to avoid any residual radiation.

### Appendix A Acronyms

These are some acronyms that may be used during an emergency.

Emergency assembly Point EAP

Emergency Operations Center EOC

Environment Safety & Health ESH

Facility Emergency Plan FEP

Incident Commander IC

Incident Command Post ICP

Material Safety Data Sheet MSDS

Palo Alto Fire Department PAFD

SLAC Emergency Response Team SERT

Conventional & Experimental Facilities CEF

Waste Management WM