

# MULTI-HAZARD PREPAREDNESS PLAN

Part I: Basic Plan

Revised June 2015

# **Table of Contents**

# PART I: BASIC PLAN

LETTER OF PROMULGATION	6
APPROVAL AND IMPLEMENTATION	7
ANNUAL DISTRIBUTION LIST	8
SECTION I – INTRODUCTION	9
A. PURPOSE	9
B. OBJECTIVES	9
C. PRIORITIES1	0
D. PLAN JURISDICTION1	0
E. PLAN ORGANIZATION1	0
1. PART I – Basic Plan1	1
2. PART II – Hazard-Specific Annexes1	1
3. PART III - Support Materials1	1
F. PLAN COORDINATION1	2
SECTION II – AUTHORITIES AND REFERENCES1	3
A. AUTHORITIES1	3
1. Federal Authorities	3
2. State Authorities1	3
3. Local Authorities1	3
B. REFERENCES1	3
SECTION III - UNIVERSITY PROFILE1	5
SECTION IV - HAZARD OVERVIEW1	9
A. EARTHQUAKE1	9
B. FIRE	2
1. Wildland Fires	2
2. Structure Fire	:5
C. EXTREME WEATHER/EVENTS2	6
1. Historic Extreme Weather Events	27

2.	Flood/Dam Failure	28
3.	Related Hazards – Cascading Effects of Storms	30
D. HA	ZARDOUS MATERIALS	30
E. TE	RRORISM/CIVIL DISTURBANCE	32
F. TR	ANSPORTATION ACCIDENT/MULTI-CASUALTY	34
G. NU	ICLEAR POWER PLANT	35
SECTION V	- EMERGENCY MANAGEMENT	36
A. OR	GANIZATION	36
B. ST	ANDARDIZED EMERGENCY MANAGEMENT SYSTEM (SEMS)	
C. IN	CIDENT COMMAND SYSTEM	
D. RC	LES AND RESPONSIBILITIES	
1.	Emergency Policy Group	39
2.	Emergency Operations Group	
3.	Emergency Operations Center Director	
4.	Incident Commander	40
5.	Safety Officer	40
6.	Information Officer	40
7.	Liaison Officer	40
8.	Operations Section	41
9.	Planning Section	41
10.	Logistics Section	41
11.	Finance Section	41
E. RE	SPONSIBILITY AND CONTROL	42
SECTION V	I - CONCEPTS OF OPERATION	46
A. BA	SIC ELEMENTS OF EMERGENCY RESPONSE	46
B. PL	AN AND EMERGENCY OPERATION CENTER ACTIVATION	46
C. IN	TIAL ALERTING AND REPORTING	47
D. MU	JTUAL AID CONCEPTS	47
E. CC	NTINUITY OF OPERATIONS	48
SECTION V	II: EMERGENCY RESOURCES AND PROGRAM MAINTENANCE	50
A. EN	IERGENCY SERVICES PROGRAM	50

B.	EMERGENCY FACILITIES, EQUIPMENT AND SUPPLIES	50
C.	PLAN MAINTENANCE	50
D.	. DEPARTMENT OR SPECIAL TEAM PLANS	50
	1. Individuals with Access and Functional Needs	51
	2. International Students	51
E.	TRAINING AND EXERCISING	51
	1. Training Requirements	52
	2. Discussions-based Exercises	53
	3. Operations-based Exercises	54
	4. Evaluation and Improvement	55
F.	ADMINISTRATION, FINANCE AND LOGISTICS	55
	1. Administration	55
	2. Finance	56
	3. Logistics	56
G.	. INFORMATION COLLECTION, ANALYSIS AND DISSEMINATION	57
SECTI	ION VIII: FUNCTIONAL CONTENT SECTIONS	58
A.	. EVACUATION	58
B.	DENY ENTRY OR CLOSING (LOCKDOWN)	58
C.	SHELTER-IN-PLACE/SECURE-IN-PLACE	58
D.	. ACCOUNTING FOR ALL PERSONS	59
E.	COMMUNICATIONS AND NOTIFICATION	60
F.	RECOVERY	60
G.	. PUBLIC HEALTH, MEDICAL AND MENTAL HEALTH	61
H.	. SECURITY	61
I.	RAPID ASSESSMENT	62
SECTI	ION IX: ATTACHMENTS	63
A.	. CAL POLY ORGANIZATIONAL CHART	64
B.	EVACUATION POINTS	65
C.	OUTDOOR ASSEMBLY AREAS	66
D.	. EMERGENCY PHONES	67
E.	EVACUATION CHAIRS	68

F.	DISABILITY RESOURCE CENTER TRAM STOPS	69
G.	MOBILITY ACCESS MAP	70
REVISI	ON PAGE	71

# Letter of Promulgation-California Polytechnic State University, California

Approval Date: August 25, 2014

To: Faculty, Staff, and Students of Cal Poly, San Luis Obispo

Cal Poly has prepared this Multi-Hazard Preparedness Plan to ensure the most effective and economical allocation of resources for the maximum benefit and protection of the University and its faculty, staff, and students in response to a significant emergency event.

While no plan can completely prevent death and destruction, effective plans carried out by knowledgeable and well-trained personnel can and will minimize losses. This plan establishes the emergency organization, assigns tasks, specifies policies, and general procedures, and provides for coordination of planning efforts of the various emergency staff and service elements of the University utilizing the National Incident Management System (NIMS) and the Standardized Emergency Management System (SEMS).

The objective of this plan is to incorporate and coordinate all the facilities and personnel of the University into an efficient organization capable of responding to any emergency. The University gives its full support to this plan and urges the faculty, staff and students, individually and collectively, to do their share in the total emergency effort of Cal Poly, San Luis Obispo.

Concurrence of this promulgation letter reaffirms the earlier adoption of the Standardized Emergency Management System by Cal Poly. Upon adopting this plan, the University will concurrently be adopting the provisions of the National Incident Management System (NIMS).

Print Name Jeffrey D. Armstrong

Date 25 Aug (14

6

Signature

President California Polytechnic State University San Luis Obispo

# **APPROVAL AND IMPLEMENTATION**

This Cal Poly Emergency Management Multi-Hazard Preparedness Plan (CP EMP) was prepared by California Polytechnic State University, San Luis Obispo to develop, implement, and maintain a multi-hazard response capability and to establish a comprehensive approach to providing consistent, effective, and efficient coordination across a spectrum of activities.

This plan shall apply to all university personnel participating in mitigation, preparedness, response, and recovery efforts. Furthermore, the EMP may be applied to any University sponsored events, whether on or off-campus, and all public or private University sanctioned activities.

The University's Director of Administrative Compliance Services has been delegated the authority to serve as the Emergency Operations Director (EOD) and shall be responsible for plan oversight and coordination with applicable stakeholders. This EMP is based on the "all-hazards" concept and plans for natural and man-made disasters and incidents. The plan is flexible in that part of the plan or the entire plan may be activated based on the specific emergency and decision by University senior leadership.

This CP EMP and its supporting contents are hereby approved, supersedes all previous editions formerly referred to as the Emergency Operations Plan, and is effective immediately upon the signing of all signature authorities noted below.

Approved:	Karen Webb, Interim Vice President Administration and Finance	Date: _	3/20/15
Approved:	Jeffrey Amstrong Prosident	Date: _	3/27/15

\*\*\*Important\*\*\*

This EMP may not be modified in any way, by anyone without the approval of the Emergency Operations Director (EOD). All approved modifications must be implemented by the EOD, after which all modifications must be applied to all distributed and electronic copies of this EMP. Further, all modifications must be registered in the Record of Changes section of this EMP.

# **ANNUAL DISTRIBUTION LIST**

# CALIFORNIA POLYTECHNIC STATE UNIVERSITY MULTI-HAZARD PREPAREDNESS PLAN (CONFIDENTIAL DISTRIBUTION)

Location	Date Distributed	Number of Copies
Office of the President	6/15/2015	1
Office of the Provost	6/15/2015	1
Vice President for Administration and Finance	6/15/2015	1
Director, Administrative Compliance Services	6/15/2015	1
Director, Facilities Planning and Capital Projects	6/15/2015	1
Director, Environmental Health and Safety	6/15/2015	1
University Police Department	6/15/2015	1
CSU Systemwide Risk Management	6/15/2015	1

#### CALIFORNIA POLYTECHNIC STATE UNIVERSITY MULTI-HAZARD PREPAREDNESS PLAN

Location	Date Distributed	Number of Copies
County of San Luis Obispo	6/15/2015	1
City of San Luis Obispo	6/15/2015	1
VP, Deans, and Department Heads	6/15/2015	50 (1 per position)
Cal Poly Emergency Website for Public Viewing	6/15/2015	Emergency.calpoly.edu

# **SECTION I – INTRODUCTION**

# A. PURPOSE

This Campus Emergency Management Plan clearly delineates the University's policies and procedures when responding to a significant disaster or major emergency. This entails any event which could impact the health, safety, and/or property of the public within the operational area of the University. Emphasis is placed on saving lives, preserving property and minimizing the effects of the event. While emergency response and recovery activities are contingent upon the type and extent of the emergency, this plan is flexible enough to be used in all types of unusual events or emergencies. In specific annexes, greater detail for responding to the following types of emergencies is outlined:

- Extreme Weather Event
- Flood/Dam Failure
- Nuclear Power Plant Event
- Earthquake
- Hazardous Materials
- Transportation Accident / Multi-Casualty Incident
- Major Fire Wildland or Structure

# **B. OBJECTIVES**

The objectives of this plan are to:

- Protect the University community and property.
- Establish official policy for the University in response to emergencies utilizing the National Incident Management System (NIMS), the Standard Emergency Management System (SEMS), and the Incident Command System (ICS).
- Identify authorities and assign responsibilities for planning and response activities.
- Identify the scope of potential hazards that form a basis for planning.
- Identify other jurisdictions and organizations with which planning and emergency response activities should be coordinated.
- Determine the emergency organization structure that will manage emergency response for the University.
- Establish the University's policies for providing emergency information to the public.
- Outline preplanned response actions that will be taken by emergency personnel, faculty, and staff to mitigate the emergency's effects.
- Describe the resources available to support emergency response activities.
- Outline the actions necessary to return the University to normal operations as soon as it's practical.

- Guide faculty and staff through a successful recovery process.
- Establish responsibilities within the University for the maintenance of the overall emergency preparedness program.
- Outline the process for ordering and rendering mutual aid.
- Facilitate the continuity of governance.

# **C. PRIORITIES**

The following fundamental priorities, listed in order of importance, will guide the University's response to an emergency on campus:

- 1. Life safety
- 2. Preservation and security of facilities and infrastructure
- 3. Restoration of academic programs

While the characteristics of a particular emergency event (such as the time or day when an incident occurs) may require some adjustments, the following response priority categories will be utilized when determining how University personnel and equipment will be utilized.

- 1. Buildings used by dependent populations
  - Residences
  - Occupied classrooms and work areas
  - Occupied stadiums, special event venues
- 2. Buildings critical to health and safety
  - Student Health Center
  - Potential shelters, food supplies
  - Sites containing potential hazards
- 3. Facilities that sustain the emergency response
  - Energy systems
  - Information and communication systems
  - Transportation systems
  - Classrooms and academic space
  - Administrative buildings

# **D. PLAN JURISDICTION**

This Plan encompasses the Cal Poly, San Luis Obispo campus, its auxiliaries, and the private agencies and businesses within the jurisdictional limits of the University. Copies of this plan are shared with the City and County of San Luis Obispo, and with other local, state and federal agencies for informational and coordination purposes.

# E. PLAN ORGANIZATION

PART I:Basic PlanPART II:Hazard Specific AnnexesPART III:Support Materials

An abstract of each part is provided below.

### 1. PART I – Basic Plan

The Basic Plan serves as an overview for elements of response which are common to all types of emergencies. Policies and objectives for the University are set forth in this section. Approval by the President of the University is therefore required.

### 2. PART II - Hazard-Specific Annexes

The hazard-specific annexes are more tactical in nature. Changes to these documents require approval by the Vice President for Administration and Finance. The specific annexes contained in Part II are as follows:

- ➢ Annex A: Earthquake
- Annex B: Fire Wildland and Structure
- Annex C: Extreme Weather/Events
  - Flooding/Storms
  - Dam/Reservoir Failure
  - Utility Disruptions
- Annex D: Hazardous Materials
- Annex E: Terrorism/Civil Disturbance
- Annex F: Transportation Accident / Multi Casualty
- > Annex G: Nuclear Power Plant Emergencies
- Annex H: Special Plans and Policies

**Note:** The Earthquake Plan is specifically designed to deal with the multiple emergencies (including nuclear power plant accident, hazardous materials spill, etc.) that may be simultaneously triggered by an earthquake (cascading effects). As a result, this Plan should take precedence for such multiple events. Additionally, this plan could be used to manage non-earthquake related disasters that are not covered by other campus planning documents (i.e., utility system failure or building collapse)

# 3. PART III - Support Materials

The third segment of this plan consists of support materials and references which by themselves are stand-alone documents. These materials are maintained independent of Parts I and II. The materials are intended to provide emergency personnel with information and data to support the University's emergency response and recovery efforts. Changes and additions to these documents are the

responsibilities of the Director of Administrative Compliance Services. References that are appropriate to the support materials are provided in Parts I and II of the Plan.

The "Emergency Checklists" provide direction to emergency workers in the implementation of the concepts and policies applicable to each type of emergency and are found in this section. They provide guidance on how, when, and by whom emergency actions are performed and give information and references necessary to support emergency workers in their tasks.

Examples of the types of documents found in Part III, Support Materials includes:

- Key Contact Lists (Contains confidential numbers-limited distribution)
- University Resource Lists (vehicles and equipment)
- Family Support Plan
- Emergency Checklists
- Emergency Alerting System and Sample Messages

**Note:** Position specific plan holders may include additional reference materials, i.e., the Finance Section Chief may add pertinent budget documents.

# F. PLAN COORDINATION

All major emergencies result in response by more than one jurisdiction. Therefore, the University must assure that plan development is coordinated with surrounding jurisdictions so that response, in a large area-wide emergency is coordinated.

Plan development and response coordination is required with the following agencies/jurisdiction:

- SLO City and County first responder agencies
- State of California, Office of Emergency Services (State OES)
- County Office of Emergency Services (County OES)
- Federal Emergency Management Agency (FEMA)

# **SECTION II – AUTHORITIES AND REFERENCES**

# A. AUTHORITIES

# 1. Federal Authorities

- Homeland Security Presidential Policy Directive (PPD8): National Preparedness 2011
- Homeland Security PPD 8 National Preparedness Goal 2011
- Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1988 (Amended Public Law 93-288)
- Federal Disaster Relieve Act of 1974 (Public Law 93-288)
- Federal Civil Defense Act of 1950 (Amended Public Law 920)
- Public Law 84-99 of the Flood Control Act of 1944
- Code of Federal Regulations (44CFR201.6) Part 201.6, 204 (3-5) Disaster Mitigation Act
- National Council on Disability: Emergency Management

# 2. State Authorities

- California Code-Chapter 7: California Emergency Services Act (8550-8668)
- State of California Emergency Plan 2009
- California Disaster Assistance Act 2010
- State Natural Disaster Assistance Act Program 2010
- California Natural Disaster Assistance Act (Government Code Chapter 7.5 of Division 1 of Title 2)
- California Health and Safety Code, Division 20, Chapter 6.5, Sections 25115 and 25117, Chapter 6.95, Section 2550
- California Code of Regulations (Title 19, Division 2, Ch. 2) SEMS Regulations
- Government Code Section 8607 (a) SEMS Guidelines
- California Disaster and Civil Defense Master Mutual Aid Agreement 2010

# 3. Local Authorities

• San Luis Obispo County, Certified Unified Program Agency (CUPA)

# **B. REFERENCES**

The following is a listing of references used in the development of this emergency plan:

- California Emergency Plan, 1998
- California Emergency Resources Management Plan
- California Fire and Rescue Operations Plan
- California Disaster and Civil Defense Master Mutual Aid Agreement 2005
- California Emergency Medical Services Authority Multi-Causality Incident Guidelines

Campus Multi-Hazard Preparedness Plan for Cal Poly-San Luis Obispo – June 2015 13

- California State University Emergency Management Program Executive Order No. 1056
- University Campus Emergency Management Plan 2013
- SLO County Multi-Jurisdiction Hazard Mitigation Plan 2011
- Federal Response Plan 2003
- Fire Service Emergency Management Handbook, FEMA 1985.
- FIRESCOPE Field Operations Guide ICS 420-1
- FEMA Guide for Developing High-Quality Emergency Operations Plans for Institutions of Higher Education

# **SECTION III - UNIVERSITY PROFILE**

California Polytechnic State University is located in the City of San Luis Obispo on California's Central Coast, midway between Los Angeles and San Francisco. This nationally ranked, four-year public university was founded in 1901. It held its first class in 1903 with 20 students. It is a distinctive learning community offering academically focused students a hands-on educational experience that prepares them for today's scientific and technical world. The campus consists of 6,000 acres in a suburban setting.

According to U.S. News & World Report's 2014 America's Best Colleges report, Cal Poly is ranked first in the Western United States amongst regional public universities whose highest degree is a Master's for the 21st straight year. As a predominantly undergraduate university serving California, the mission of Cal Poly is to discover, integrate, articulate, and apply knowledge. Undergraduate students can choose from 64 majors, with Cal Poly's highly ranked engineering programs as the most popular choice. Graduate students at Cal Poly can pursue any of 30 degrees from the University's six colleges. There are more than 80 state-of-the-art laboratories and large number of clubs dedicated specifically to the Cal Poly College of Engineering. For student athletes, Cal Poly offers dozens of intramural and club sports, along with the nearly 20 Cal Poly Mustangs varsity teams, which compete in the NCAA Division I Big West and Great West conferences.

#### **Student Expansion**

The total undergraduate enrollment for 2014 is 17,680 students. In accordance with the Cal Poly Master Plan, student population is projected to increase to 20,000 students by the year 2020–2021. To maintain the university's "Learn by Doing" philosophy and smaller class sizes, the Master Plan calls for an increase in classrooms, laboratories, and faculty.

#### **Recent Construction**

The 189,000 square foot Warren J. Baker Center for Science and Mathematics was dedicated on November 1, 2013. The \$119 million Center is a six-story building containing new laboratories, classrooms, and offices for the physics, chemistry and soil science programs, as well as an open area and terraces for student study and meeting places. The top floor of the Center houses labs and offices for the school's Western Coatings Technologies Center and the Environmental Biotechnology Institute. It is the second largest and most technologically advanced structure on campus.

### **Future Construction**

In 2007, planning commenced for an expanded Library and Academic Center with the design phase beginning in 2013. A two-year construction phase is expected to start by 2015. The new Academic

Center will be a LEED-certified building of nearly 113,000 square feet, connected with the original Kennedy Library by a broad, above ground concourse. Formal and informal meeting spaces are intended to encourage interactions among students, faculty, and staff from across the entire campus and community.







Figure 2: Cal Poly Land Holdings

# **SECTION IV - HAZARD OVERVIEW**

# A. EARTHQUAKE

An earthquake is the result of a sudden release of energy in the earth's crust that creates seismic waves. Earthquakes manifest themselves by shaking oftentimes displacing the ground. If the earthquake's epicenter is located offshore, the seabed may become displaced engendering a tsunami. Earthquakes have been known to trigger landslides and in rare instances volcanic activity.

### **Historic Earthquakes**

Where earthquakes have struck before, they will strike again. The central California coast has a history of damaging earthquakes, primarily associated with the San Andreas Fault. However, there have been a number of magnitude 5.0 to 6.5 earthquakes on other faults which have affected large portions of the Central Coast. Recent events include the December 2003 - 6.5 magnitude San Simeon Earthquake and the September 2004 - 6.0 magnitude Parkfield Earthquake.

# **Hazard Potential**

The intensity of ground shaking at a particular site or structure is a function of many factors including: 1) earthquake magnitude, 2) distance from the epicenter, 3) duration of strong ground motion, 4) local geologic conditions (soil type and topography), and 5) the fundamental period of the structure.

A brief description of those factors is presented below:

*Earthquake Magnitude*: Earthquake magnitude, as generally measured by either the Richter or Moment Magnitude scale, is a measurement of energy released by the movement of a fault. As the amount of energy released by an earthquake increases, the potential for ground shaking impacts also increases.

*Distance from Epicenter*: Earthquake energy generally dissipates (or attenuates) with distance from a fault. Over long distances, this loss of energy can be significant, resulting in a significant decrease in ground shaking with increased distance from the epicenter.

*Duration of Strong Shaking*: The duration of the strong ground shaking constitutes a major role in determining the amount of structural damage and the potential for ground failure that can result from an earthquake. Larger magnitude earthquakes have longer durations than smaller earthquakes.

*Local Geologic Conditions*: The geologic and soil conditions at a particular site have the potential to substantially increase the effects of ground shaking. The thickness, density, and consistency of the soil, as well as shallow ground water levels, have the potential to amplify the effects of ground shaking depending on the characteristics of the earthquake. In general, the presence of

unconsolidated soils above the bedrock surface can amplify the ground shaking caused by an earthquake.

*Fundamental Periods*: Every structure has its own fundamental period or natural vibration. If the vibration of ground shaking coincides with the natural vibration period of a structure, damage to the structure can be greatly increased. The extent of damage suffered during an earthquake can also depend on non-geologic factors. The type of building and its structural integrity will influence the severity of the damage suffered. Generally, small, well-constructed, one- and two-story wood and steel frame buildings have performed well in earthquakes because of their light weight and flexibility. Reinforced concrete structures will also usually perform well. Buildings constructed from non-flexible materials, such as unreinforced brick and concrete, hollow concrete block, clay tile, or adobe, are more vulnerable to earthquake damage.

#### **Effects of Ground shaking**

The primary effect of ground shaking is the damage or destruction of buildings, infrastructure, and possible injury or loss of life. Building damage can range from minor cracking of plaster to total collapse. Disruption of infrastructure facilities can include damage to utilities, pipelines, roads, and bridges. Ruptured gas and water lines can result in fire and scour/inundation damage, respectively, to structures. Secondary effects can include geologic impacts such as co-seismic fault movement along nearby faults, seismically induced slope instability, liquefaction, lateral spreading, and other forms of ground failure and seismic response.

#### Major faults in San Luis Obispo County

The California Geological Survey (CGS) records and maps faults throughout California. The Alquist-Priolo Earthquake Fault Zoning (AP) Act was passed into law following the destructive February 9, 1971 Mw 6.6 San Fernando earthquake. The AP Act provides a mechanism for reducing losses from surface fault rupture on a statewide basis. The intent of the AP Act is to insure public safety by prohibiting the sitting of most structures for human occupancy across traces of active faults that constitute a potential hazard to structures from surface faulting or fault creep. Fault zoning is continually updated and reviewed by CSG and it is likely that other faults in addition to those currently listed by CSG will be added to the list in the future.

The primary active faults identified by the AP Act include the San Andreas, San Simeon-Hosgri, and Los Osos faults. Two recent studies by CSG have estimated potential ground acceleration that could be experienced in California. Studies have estimated the maximum credible ground acceleration that could be generated by active and potentially active faults. Deterministic peak horizontal ground accelerations from these studies range from a low of 0.4 g in the central portion of the County to a high of about 0.7 g along the San Andreas, Rinconada, Oceanic-West Huasna, and coastal fault zones.

The western portion of San Luis Obispo County has a high probability of experiencing ground accelerations in the range of 0.3 g to 0.4 g in the next 50 years. The eastern portion of the County adjacent to the San Andreas Fault has a high percent probability of experiencing a peak ground acceleration of 0.5 g to 0.7 g in the next 50 years. The statistical variance in estimated ground acceleration could easily be plus or minus 50 percent of the estimated ground motion.

In 2008, the Shoreline Fault was discovered off the coast in the area of the Diablo Canyon Power Plant which is owned and operated by Pacific Gas and Electric Company (PG&E). The initial study of the fault, using conservative assumptions about the total length of the fault zone, indicates that a potential magnitude 6.5 strike-slip earthquake is possible. Follow up investigations were performed by PG&E in 2009 and 2010 and more detailed studies are planned to more accurately refine the size and potential of the fault. (Report on the Analysis of the Shoreline Fault Zone, Central Coastal California, Report to the U.S. Nuclear Regulatory Commission, January 2011, PG&E)

Other faults that are near the borders of San Luis Obispo are the West Huasna, Oceanic, and Edna faults. These faults are considered to be potentially active and present a moderate fault rupture hazard to developments in their vicinity.

Problems that may occur as a result of light-to-heavy damaging earthquakes include:

- Building Collapse-particularly unreinforced masonry structures causing mass injuries and need for rescue and evacuation
- Liquefaction-the process by which saturated, unconsolidated soil or sand is converted into a quicksand like suspension during an earthquake.
- Landslides-the down-slope movement of soil and rock
- Major Fires
- Hazardous Materials Releases
- Utility Disruptions
- Communication Disruptions leading to command and coordination problems.
- Roadway and Transportation System Interruptions
- Overloaded Medical Services (Hospital and EMS)

Tsunamis are not a concern because of Cal Poly's significant distance to the Pacific Ocean.

Both direct and indirect consequences of a major earthquake will severely stress the resources of the University and will require a high level of self-help, coordination and cooperation. Outside assistance from other local, regional, state, federal and private agencies may be delayed by more than 72 hours, depending upon the regional severity of the earthquake.

#### **Assessment Conclusion**

The University is located in a geologically complex and seismically active region. There are numerous active and potentially active faults in the County. The County has a history of damaging

earthquakes, including those associated with the San Andreas Fault, but there have also been a number of magnitude 5.0 to 6.5 earthquakes which have affected large portions of the County. While it is impossible to accurately predict the next earthquake event, the probability for future damaging earthquakes in San Luis Obispo County impacting the University is high.

# **B.** FIRE

#### 1. Wildland Fires

Wildfire is an uncontrolled fire spreading through vegetative fuels, posing danger and destruction to property. Wildfires can occur in undeveloped areas and spread to urban areas where structures and other human development are more concentrated.

While some wildfires start by natural causes, humans are responsible for four out of every five which are usually the result of debris burns, arson or carelessness. As a natural hazard, a wildfire is often the direct result of a lightning strike that may destroy personal property and public land areas, especially on state and national forest lands. The predominant dangers from wildfires are:

- The destruction of vegetation, property, wildlife, and
- Injury or loss of life to people living in the affected area or using the area for recreational facilities.

#### Weather Influences

The climate in San Luis Obispo County is generally referred to as "Mediterranean" with warm dry summers and relatively cool, moderately wet winters. Rainfall throughout the County occurs primarily between November and April, and ranges between 20-25 inches per year in the coastal areas, to less than 10 inches per year in inland areas. Climatic conditions throughout the County range from the cool, damp coastal areas, to hot and dry inland areas. Because summers are generally warm and dry, the risk of wildfires is highest in late summer and early fall. Fog and cool weather that are common in the coastal regions help to maintain moisture levels in vegetation along the coast, which helps to minimize fire risk. The hot and dry conditions of the Santa Lucia Mountains, directly above the campus core and surrounding the outlying campus areas, can quickly dry out the vegetation resulting in an increased fire risk.

Other weather-related elements can have complex and important effects on wildfire intensity and behavior. Wind is of prime importance because as wind velocity increases, the rate of fire spread also increases. Gusty and erratic wind conditions are the norm in the Chorro Valley and the along the base of the hills and canyons directly behind the campus core. These winds can cause a fire to spread irregularly, making it difficult to predict its path and effectively deploy fire suppression forces. Relative humidity is also an important fire-related weather factor. As humidity levels drop, the dry air causes vegetation moisture levels to decrease, thereby increasing the likelihood that plant material will ignite and burn.

### **Fuels and Topography**

A large portion of the campus is surrounded by natural vegetation. This vegetation can be grouped into approximately 14 regimes, each of which contributes varying degrees to fire hazard severity. The table outlined below depicts general vegetation communities that are found throughout the County, and those specific to the campus, and their likely relative fire hazard severity rated by fuel conditions only. The likely fire hazard severity depicted in the table can be influenced by many factors, including the age of vegetation, accumulation of dead plant material, vegetation management programs that may have been implemented, period of time since a stand of vegetation was last burned, historic climate, and topography of the region. Chaparral plant communities, found to the north of the campus core present the most significant fire hazard severity, as this type of vegetation burns with intense heat. The amount of fuel available to burn can be very high if the area is not properly managed or has not been recently burned. Controlled burning is one method that can greatly reduce the fire hazard severity for a given area. A significant increase in dead material as the result of insect or disease infestations can lead to a much higher fire hazard. The pitch canker infestation in Cambria is an example of this problem.

Fuel loading in developed areas susceptible to wildfire becomes even more complex. The introduction of some ornamental plantings as landscaping and groundcover can dramatically increase the fire loading of a neighborhood. Gazebos, fencing, patios, decks and even the structures themselves add even more fuel. Once structures become involved in fire, the problem compounds as embers cast out thousands of feet onto combustible roofs well removed from the wildland area.

Steep terrain also plays a key role in the rate at which wildfires spread, as fires will normally burn much faster uphill. Generally, when the gradient of a slope doubles, the rate of spread of a fire will also double. Steep topography also channels air flow, thereby creating erratic wind patterns. Fire suppression in steep areas is also complicated by limited accessibility, and the effectiveness of firefighters and equipment are hampered by lack of access roads.

Very High	High	Moderate
*Chaparral	*North Coast Scrub	*Riparian Woodland
	*Foothill Woodland	*North Coast Grassland
	*Juniper Oak Woodland	Evergreen Forest
		Interior Herbaceous
		Desert Scrub
		Beach Dune
		Coastal Sand Plains
		Saline Plains
		Coastal Salt Marsh
		Freshwater Marsh
*D	enotes fuels found adjoining the car	mpus

### Likely Fire Hazard Severity Rated by Fuel Conditions Only

### **Historic Wildfires**

San Luis Obispo County has one of the worst fire environments in the State of California for large damaging wildfires. The Las Pilitas, Chispa, Highway 41, Highway 58 and the Logan, were all large damaging fires that combined, consumed approximately 300,000 acres, scores of homes and cost millions of dollars to suppress. The Logan fire that occurred in 1997 burned 50,000 acres and cost \$6 million to extinguish. No structures were lost in the Logan fire.

The Highway 41 and Highway 58 fires that occurred in 1994 and 1996 directly impacted both the main campus and outlying University properties causing widespread and substantial damage. The Highway 41 fire resulted in the destruction of 42 homes, 61 other structures, and 91 vehicles. It also cause massive power outages, shut down two major highways for over 24 hours and destroyed public radio and television transmissions. A total of 48,531 acres were burned and an estimated \$10,000,000 in property loss damages occurred. The Highway 58 fire burned 106,668 acres and resulted in the loss of homes and 14 other structures.

### **Relationship to Other Hazards – Cascading Effects**

Major wildfires can completely destroy ground cover. If heavy rains follow a major fire, flash floods, heavy erosion, landslides and mudflows can occur. After a wildfire passes through an area, the land is laid bare of its protective vegetation cover and is susceptible to excessive run-off and erosion from winter storms. The intense heat from the fire can also cause a chemical reaction in the soil that makes it less porous, and the fire can destroy the root systems of shrubs and grasses that aid in stabilizing slope material. These cascading effects can have ruinous impacts on people, structures, infrastructure, and agriculture.

- *Effects on people and housing:* In addition to damage to natural environments, wildfires result in a high risk for personal injury, loss of life to inhabitants of the fire area and firefighters, and losses of structures and personal property.
- *Effects on commercial and industrial structures:* As mentioned in the historic wildfires section above, the effects on commercial and industrial structures can be significant. Many of the fires resulted in damaged or destroyed structures.
- *Effects on infrastructure:* Public utilities are often strained by the impacts of wildfire, including depletion of water reserves, downed power lines, disrupted telephone service and blocked roads. Furthermore, flood control facilities may be inadequate to handle an increase in storm runoff, sediment, and debris that is likely to be generated from barren, burned over hillsides.
- *Effects on agriculture:* Effects on agriculture can be devastating. In addition to the obvious impacts on crops and animals, wildfire can have deleterious effects on soil and water that will impact agriculture for an extended period of time.

#### **Fire Hazard Reduction Efforts**

A number of steps have been taken by the University to reduce the potential for wildfires. Although these measures cannot eliminate the risk of wildfire related damages, they will help to substantially reduce the associated risk. Wildfire hazard reduction measures generally include implementation by the County of the following precautions:

- *Use fire resistant building materials and construction methods:* Standards have been adopted to reduce the use of combustible building materials in high fire hazard areas. Standards for fire resistive building materials and construction methods are provided by the California Building Code (Chapter 7A), The California Fire Code (Chapter 47) and the Public Resources Code.
- **Provide defensible space around structures:** Providing a defensible space area around a structure serves a dual function of limiting fuel for the fire to approach the structure, as well as providing a position from which fire fighters can combat the blaze. Wildfire risk reduction and management practices enforced in the County include the removal or thinning of highly combustible vegetation, the use and maintenance of fire resistant plantings, providing clearings around structures and other combustible materials, and the implementation of a variety of other fuel reduction and fire prevention/ suppression measures.
- *Provide adequate water supply:* Water that is used for fire suppression purposes, and the pressure under which it is delivered, is referred to as "fire flow." The fire flow that would be required for a specific development is dependent upon a variety of factors, including the type of construction, the use or occupancy of the structure, and the location of surrounding structures.
- *Provide adequate access:* Adequate access to structures includes providing roadways that are passable by large fire-fighting equipment. This requires roadways to have adequate widths, as well as gradients, bridges, and turn-around areas that accommodate fire trucks.

### 2. Structure Fire

A *structure fire* is a fire involving the structural components of a building. The University has a wide range of structures from high rise (Type 1) non-combustible to single story wood frame structures (Type 5) The occupancy classifications of these buildings range from large public assemblies (A-3) to small out structures with little if any life threat. Laboratories, dormitories, apartment complexes, large office buildings all combine to produce a considerable fire loss potential in both life and property values. All structures contain fire alarm/detection systems. All residence facilities are, or will be retrofitted, to be protected by automatic fire sprinkler systems.

The National Fire Protection Association (NFPA), rates structures into five construction types for the purposes of firefighting, and are listed from least combustible to most combustible:

### **Type I:** Fire Resistive

The material comprising the structure is either inherently able to withstand significant exposure to fire (concrete), or in which a fire resistive covering is applied to steel structural members.

#### **Type II: Non-Combustible**

Typically used in strip shopping center malls. These roofs are constructed out of steel rafters.

#### **Type III: Ordinary Construction**

Brick and mortar walls, wood frame floors. This type of construction is often found in city row houses.

#### **Type IV: Heavy Timber**

Often used in churches or other community-based buildings

#### **Type V: Wood Frame**

Typically used in recent construction of single-family dwellings, townhouses, and garden apartments with four floors.

#### **Existing Fire Protection Services**

Fire suppression services to the University are provided by the City of San Luis Obispo for the main campus and the California Department of Forestry and Fire Protection (CAL FIRE) for outlying areas.

#### Assessment Conclusion

The combination of available fuels, weather, and topography found in a large majority of the areas both surrounding and on the outlying areas of the campus results in the University being confronted with a considerable hazardous wildfire risk. However, the actions taken as outlined above have significantly mitigated this risk to University.

There is little to no threat of a major conflagration occurring to the structures on the campus. Wellconstructed, properly maintained, abundant fire detection and automatic fire suppression systems, a good water supply and adequate access and egress all combine to reduce the threat to a very minimal level.

# C. EXTREME WEATHER/EVENTS

The University is located in an area that has a generally mild climate and a very limited history of extreme weather. Types of extreme weather events include: extreme cold/freezing, large winter storms, wind storms, drought, and thunder storms. These events can have significant impacts on the health and safety of the population and cause major property and infrastructure damage. The

duration of these events, with the exception of drought, is typically short-term. Listed below are the primary dangers associated with these events:

- Flooding
- Dam/Reservoir Failures
- Threat to life and danger to public health
- Damage/loss of personal property or crops/livestock
- Utility failures
- Interruption of the transportation network
- Interruption of communication systems

# 1. Historic Extreme Weather Events

*January-February, 1969:* In January of 1969, a series of storms delivered rainfall totals that ranged from approximately 12 inches in various parts of SLO County over an eight-day period. In February, another series of storms delivered another 5 to 10 inches. The Army Corp of Engineers reported that: "...severe damages were sustained by streets, highways, and utilities throughout the County. The sewage-treatment plants at Morro Bay, Avila Beach, and Pismo Beach were inundated by both floods. The destruction and damage of sewer lines and sewage-treatment plants at many locations posed a threat to the lives and health of many residents. Debris and raw sewage piled up on the beaches and carried in the streams posed serious threats to health until emergency cleanup operations were completed."

*January, 1973:* Much like the floods of 1969, the 1973 storm produced a ten-hour period of unusually heavy rainfall. Many creeks and streams throughout the County overtopped their banks and inundated a number of areas.

*January and March, 1995:* A series of powerful and slow-moving storms brought heavy rain and strong winds to all of Central California. Serious flooding occurred in all coastal and many inland streams. San Luis Obispo Creek caused damage in the City of San Luis Obispo, and especially near the ocean, where the San Luis Bay Golf Course and other properties received extensive damage. Cambria was completely inundated, with water as deep as six feet on Main Street. In Morro Bay 12 inches of rain fell in a 24 hour period. The community was isolated as Highway 41 was closed due to rockslides and Highway 1 was impassable due to flooding at San Bernardo Creek to the south and at Morro Creek within the City.

*March, 2001:* Central and Southern California were significantly impacted by a powerful storm that delivered up to six inches of rain in some of the coastal areas of San Luis Obispo County. The mountain areas of the County received even more, with reports of up to 13 inches. The heavy rain produced numerous flooding incidents.

*December, 2004:* A quick moving and powerful storm brought flash flooding and heavy rain to the Central Coast of California. Rainfall amounts ranged from one to three inches on the coastal plains

to three to six inches in the more mountainous regions of the county. Flooding problems were reported throughout the county.

# 2. Flood/Dam Failure

Rainfall and inclement weather are primarily seasonal phenomena in the area which boasts a mild Mediterranean climate. Generally the rainy season is from November through March. Typical rainfall amounts range from 20 to 25 inches over most of the campus area, however higher amounts can be expected in the foothills to the north of the main campus. Flooding generally occurs in response to heavy rainfall events when streams, rivers, and drainage channels overflow their banks. Even during moderately sized storms, flooding can also occur in low-lying areas that have poor drainage.

Many factors can increase the severity of floods including; fires in watershed areas, the placement of structures or fill material in flood-prone areas, and tidal influence in low lying coastal areas. Additionally, the construction of impervious surfaces such as roadways and rooftops will result in increased runoff.

The 100-year flood, which is the standard used by most federal and state agencies, is used by the National Flood Insurance Program (NFIP) as the standard for floodplain management and to determine the need for flood insurance. Commonly misperceived, the following describes the Federal Emergency Management Agency's (FEMA) definition of "100-year flood": The term "100-year flood" is misleading. It is not a flood that will occur once every 100 years. Rather, it is the flood elevation that has a one percent chance of being equaled or exceeded each year. Thus, a 100-year flood could occur more than once in a relatively short period of time.

Flood Recurrence	Percent Chance of
Intervals	Occurrence
	Annually
10 years	10.0%
50 years	2.0%
100 years	1.0%
500 years	0.2%

Source: FEMA, August 2001.

# **Future Probability**

Flooding has not been problematic on the campus. The campus core is essentially located on a hillside. The Stenner and Brizzolara creek drainage systems, as seen in the 1995 Floods, can present varying hazards and may temporarily block access to and egress from the remote portions of the campus.

### **Dams and Reservoirs**

There are no dams located in an area outside the campus that would cause inundation into the campus due to dam failure or overflow. However, the campus is very dependent on water supplies from both Whale Rock Reservoir and Salinas Reservoir. If either of these dams fail, the campus could face an extreme hardship and potential threat to public health and safety due to limited water supplies for an unknown length of time.

There are eight reservoirs on campus, as follows:

Name of Reservoir	Area	Capacity
	(in acres)	(in acre feet)
Drumm	1.54	12.00
Shephers	4.8	33.95
Smith	.75	6.00
Indonesion	2.57	20.56
Middlecamp	1.37	10.96
Cheda	4.20	33.60
Chorro Creek#1	6.10	49.00
Chorro Creek #2	4.00	50.00

*Drumm Reservoir* - A complete failure would flood the Brizzolara Creek that could flood Parking Lot H-16, Farm Shop, close Via Carta and Highland Drive under the railroad bridge. Other than debris it would be open in less than an hour.

*Shephard Reservoir* - A complete failure would flood the new sports complex fields to the Brizzolara Creek. Highland Drive at the railroad overpass would be flooded. Opening of Highland Drive would take from two to eight hours depending on the amount of debris found under the overpass and how quickly the drains could be cleared.

*Smith Reservoir* - A complete failure would flood the sports complex to Brizzolara Creek. Highland Drive under the railroad overpass would flood for less than an hour depending on the debris under the overpass.

*Indonesion Reservoir* - A complete failure would flood Shephard Reservoir which in turn would fail, flooding the sports complex to Brizzolara Creek. Highland Drive underpass would flood. Total failure of both Indonesion and Shepard reservoirs would take 8 to 12 hours to restore if crew were available. Note- if all four reservoirs above failed, the resulting flood could take 24 to 48 hours to restore the underpass on Highland Drive if crews were available.

*Middlecamp Reservoir* - A complete failure of this reservoir would cause minimal damage to the campus; the resulting flood would go into Stenner Creek possibly flooding various agricultural fields along the creek. This reservoir was designed in 1995 and designed for earthquakes.

*Cheda Reservoir* - A complete failure would cause water to flow into Stenner Creek possibly flooding various fields adjacent to the creek.

*Chorro Reservoirs* - Both of these low at-surface reservoirs are designed to over flow into Chorro Creek.

# 3. Related Hazards - Cascading Effects of Storms

In addition to the threat of standing and running water, storms may pose other, more serious threats to the University. Because of the largely unconsolidated nature of the sedimentary soils found in the area, washout of the materials on which bridges and roads are built on may be a major problem. Both Stenner and Brizzolara Creek channel banks currently abut several roads. In addition, slumping of hillsides may result in sections of roads being blocked or carried away. High winds often accompany winter storms and may cause significant damage to the community. Other problems and hazards associated with flooding and inclement weather include; utility disruptions, broken power lines lying on the ground, trees damaged and blown down, and transportation route disruptions.

*Utility disruptions* can occur when extremely warm weather overloads the power supply grid causing forced roll brownouts or failures of the infrastructure. The cause of the disruption can be far removed geographically from the local area impacted.

A rolling blackout, also referred to as rotational load shedding or feeder rotation, is an intentionally engineered electrical power shutdown where electricity delivery is stopped for non-overlapping periods of time over different parts of the distribution region. Rolling blackouts are a last-resort measure used by an electric utility company to avoid a total blackout of the power system. They are a type of demand response for a situation where the demand for electricity exceeds the power supply capability of the network. Rolling blackouts may be localized to a specific part of the electricity network or may be more widespread and affect entire countries and continents. Rolling blackouts generally result from two causes: insufficient generation capacity or inadequate transmission infrastructure to deliver sufficient power to the area where it is needed.

Rolling blackouts are also used as a response strategy to cope with reduced output beyond reserve capacity from power stations taken offline unexpectedly such as through an extreme weather event.

#### **Assessment Conclusion**

While it is impossible to predict future long range weather patterns, it is certain that the location of the campus, in close proximity to the Pacific Ocean and surrounded by mountains to the north, will continue to have a significant exposure to major winter storms. However, the campus facilities are well constructed and the campus core is situated on high ground therefore the threat from flooding events is minimal.

# **D. HAZARDOUS MATERIALS**

A hazardous material is any substance, natural or man-made, that may be harmful to life or to the environment. Hazardous material incidents may occur at fixed facilities where as required by law, most likely, the occupants have filed site specific emergency response contingency and evacuation plans. Incidents may also occur along land, water or air transportation routes as a result of aircraft or other transportation accidents. Improper use of agricultural chemicals and illegal dumping will also pose a hazardous materials risk.

Hazardous material incidents differ from other emergency response situations because of the wide diversity of causative factors and the pervasiveness of the potential threat. Circumstances such as the prevailing wind and geographic features in the vicinity of emergency incidents are relevant factors that may greatly increase the danger.

The threat of a major hazardous material incident in the planning area would likely be derived from one of the following sources:

- Industrial/Agriculture
- Transportation
- Utilities-natural gas and propane
- Clandestine dumping

#### Industrial/Agriculture

The University currently has approximately 30 locations where hazardous materials are stored in quantities exceeding the reporting thresholds of Chapter 4, Division 2, Title 19, California Code of Regulations (Hazardous Materials Business Plan Regulations).

#### **Transportation Related Hazardous Materials:**

#### Transportation-Highway

Highways 1 and 101 are the major transportation routes through or near the University. Given that these State Routes are not Interstates, significant quantities of hazardous materials are not typically transported through the local area.

#### Transportation- Railroad

The main Union Pacific coast rail line crosses through a large portion of the University. The campus core is situated to the immediate north alongside the rail line as it transitions through the City onto the campus and then into the outlying campus areas where it crosses the large Stenner Creek trestle. It then climbs steeply through a series of switchbacks and tunnels through the mountains on its way to Santa Margarita. There is a significant potential for a hazardous materials release originating from a rail car accident.

#### Utilities-Natural Gas

Natural gas is a hydrocarbon gas mixture consisting primarily of methane, but commonly includes varying amounts of other higher alkanes and even a lesser percentage of carbon dioxide, nitrogen, and hydrogen sulfide. Natural gas is an energy source often used for heating, cooking, and electricity generation. It is also used as fuel for vehicles and as a chemical feedstock in the manufacture of plastics and other commercially important organic chemicals.

Natural gas service to the campus core is in place therefore the use of propane tanks and bottles are not common in this area. However propane is found in outlying areas of the campus.

#### **Utilities-Propane**

Propane is a colorless compressed gas with a faint odor at high concentrations. Fuel grades contain mercaptans which have a disagreeable odor. Propane is extremely flammable. The gas is heavier than air and may spread long distances. As a result, distant ignition and flashback are possible. It is also a simple asphyxiant which means the gas may reduce oxygen available for breathing. When there is rapid evaporation of liquid from cylinder, frostbite may occur.

#### **Clandestine Dumping**

Illegal dumping of hazardous waste (for example, clandestine methamphetamine lab solvents) can occur on both public and private property. Historically, this has not been a significant problem for the University. As the costs and restrictions increase for legitimate hazardous waste disposal sites, it can be anticipated that illegal dumping of hazardous materials will increase proportionately. Of special concern is the impact of illegal dumping into the municipal sewer systems and the associated impacts on the waste water treatment plants.

#### **Assessment Conclusion**

A hazardous spill or release could present a significant threat to both the environment and the public health of students, faculty, staff and visitors. The most serious threat, one involving a railroad incident, is difficult to mitigate. There is a very limited history of these types of events on the campus and current practices and handling procedures appear adequate.

### E. TERRORISM/CIVIL DISTURBANCE

For planning purposes, these two types of emergencies have been combined. Since these events are crime scenes, they are initially the primary responsibility of local law enforcement until it can be determined if federal laws have been violated. When the latter occurs, the Federal Bureau of Investigation (FBI) assumes responsibility. Given the variety of events that could unfold, it is difficult to predict the extent of the emergency and the impact on the local community.

#### **Civil Disturbance**

The spontaneous disruption of normal, orderly conduct and activities in urban areas, or an outbreak of rioting or violence that is of a large nature is referred to as civil disturbance or disorder. Civil disorder is a demonstration of popular unrest that may manifest itself in acts of violence and destruction against property and human life. Civil disorder can be spurred by specific events, such as large sporting events or criminal trials, or can be the result of long-term disfavor with authority. The threat to law enforcement and safety personnel can be severe and bold in nature. Securing of essential facilities and services is necessary. Looting and fires can take place as a result of perceived or actual non-intervention by University authorities.

#### Terrorism

Terrorism involves a struggle between competing principles and ideologies below the level of conventional war. Principal targets include military personnel and facilities, commercial establishments, university campuses, government buildings and property, and/or any location large numbers of people congregate.

The effects of terrorist activities can vary significantly, depending upon the type, severity, scope, and duration of the activity. Terrorist activities may result in disruption of utility services, property damage, injuries and the loss of lives.

The University, when compared with major metropolitan areas, is a low population area, with moderate population density which subsequently gives the University a lower terrorism risk. Terrorist actions may include biological, chemical, incendiary, explosive, nuclear/radiological, or electronic (such as software system) attacks.

#### **Biological Agents of Terrorism**

A bioterrorism attack is the deliberate release of viruses, bacteria, or other microorganisms used to cause illness or death in people, animals, or plants. These agents are typically found in nature, but it is possible that they could be altered in order to increase their ability to cause disease, become more resistant to current medicines, or spread more easily amongst animals or humans. Biological agents can be spread through the air, through water, or in food. Terrorists may use biological agents because they can be extremely difficult to detect and do not cause illness for several hours to several days. Some bioterrorism agents, like the smallpox virus, can be spread from person to person and some, like anthrax, cannot.

Local healthcare providers must be knowledgeable of and prepared to address various biological agents of terrorism, including pathogens that are rarely seen in the United States. High-priority disease/biological agents known as Category A Biological Agents include:

- Anthrax (Bacillus anthracis)
- Botulism (Clostridium botulinum toxin)
- Plague (Yersinia pestis)

- Smallpox (Variola major)
- Tularemia (Francisella tularensis)
- Viral Hemorrhagic Fever (filoviruses and arenaviruses)

These Category A microorganisms pose a risk to national security because they:

- Can in most cases be easily disseminated or transmitted from person to person
- Result in high mortality rates and have the potential for major public health impact
- Might cause public panic and social disruption, and
- Require special action for public health preparedness.

The University Police Department assumes the primary role in responding to such events until the event is confirmed to be terrorism related. At that point, the FBI assumes responsibility.

# F. TRANSPORTATION ACCIDENT/MULTI-CASUALTY

A multi-casualty incident (MCI) is one which involves a sufficient number of injured persons that overwhelm the first responding medical resources or an incident involving a significant medical hazard to a large population.

#### **Transportation - Highway**

While a very small portion of the campus is transected by Highway 1, responsibility for emergency medical service is covered by either the City or County Fire agencies depending on the exact location.

#### **Transportation - Railroad**

The main Union Pacific coast rail line transects through a large portion of the campus. The campus core is situated to the immediate north alongside the rail line as it transitions through the City into the campus and then into the outlying campus areas where it crosses a large trestle at Stenner Creek. It then climbs steeply through a series of switchbacks and tunnels through the mountains on its way to Santa Margarita. AMTRAK passenger trains utilize this line on a daily basis and present the possibility of a large scale MCI should an accident occur.

#### **Transportation - Air Traffic**

The University is not in either the takeoff or landing pattern of the SLO County regional airport which is located approximately 12 miles to the south-east.

#### **Structure Failure**

The collapse of structure due (i.e. stadium bleacher or viewing stand) to overloading or component failure is a remote possibility. The facilities on the campus are well constructed and properly managed and maintained.

# Responsibility

The responsibility for overall management of a transportation event will be contingent upon the type of event that has occurred and the location. The immediate priority for these types of events is for the recovery and the medical care of the injured which will be either a City or County Fire Department and Emergency Medical System responsibility depending on Location.

# G. NUCLEAR POWER PLANT

The **Diablo Canyon Power Plant** is an electricity-generating nuclear power plant near Avila Beach in San Luis Obispo County that resides on approximately 1,000 acres of the Pacific Coastline, approximately 13 air miles from the campus. Following the permanent shutdown of the southern California based, San Onofre Nuclear Generating Station, in 2013 Diablo Canyon is the only nuclear plant operational in the state. It has operated safely since 1985 with its two Westinghouse Pressurized Water Reactor (PWR) units that are licensed until 2024 and 2025 respectively. The two units produce a total of 18,000 gigawatt-hours of clean and reliable electricity annually, which is enough energy to meet the needs of more than three million Northern and Central Californians (nearly 10% of California's energy portfolio and 20% of the power that PG&E provides throughout its service area).

For more than 25 years, Diablo Canyon has continued to safely produce clean and reliable energy without greenhouse gases (GHG), avoiding 6 to 7 million tons per year of GHG's that would be emitted by conventional generation resources. Although the power plant was built directly over a geological fault line and is in close proximity to a second fault, it was constructed using state-of-the-art seismic supports to withstand extreme natural disasters, including earthquakes.

The plant is located in Nuclear Regulatory Commission Region IV. In November 2009, PG&E applied to the Nuclear Regulatory Commission (NRC) for 20-year license renewals for both reactors. The facility is continually inspected and assessed by Nuclear Regulatory Commission inspectors, to ensure that the facility's systems are operating safely and efficiently every day.

# **SECTION V - EMERGENCY MANAGEMENT**

# A. ORGANIZATION

An Emergency Management Team has been established and is comprised of the Emergency Policy Group and the Emergency Operations Group.

- 1. <u>Emergency Policy Group:</u> Reports to the Emergency Policy Executive (President) and is composed of the senior University executives and selected support staff listed below. The decisions of this group will be implemented by the Emergency Operations Group.
- 2. <u>Emergency Operations Group:</u> Reports to the Emergency Operations Center Director (EOD) and includes campus emergency operations representatives who will carry out the decisions of the Emergency Policy Group which consist of the tactical and operational aspects of the response.

### **EMERGENCY MANAGEMENT STRUCTURE**


#### **EMERGENCY RESPONSE ORGANIZATION**

#### EMERGENCY RESPONSE ORGANIZATION



### **B. STANDARDIZED EMERGENCY MANAGEMENT SYSTEM (SEMS)**

Any emergency event of major consequence will more than likely overwhelm local government resources, requiring assistance from a multitude of agencies. The Standardized Emergency Management System (SEMS), which has been adopted by the University, establishes a state-wide standard response structure and basic protocols to be used by all agencies in both emergency response and recovery to a major event. Its authority and structure can be found in Chapter 1 of Division 2 of Title 19 of the California Code of Regulations.

Fully activated, the SEMS consists of five levels: field response, local government, operational areas (countywide), OES Mutual Aid Regions, and state government.

#### C. INCIDENT COMMAND SYSTEM

ICS consists of several components. When applied together, the following provide the basis for effective emergency management:

- Common terminology
- Modular organization
- Integrated communications
- Unified command structure
- Consolidated action plans
- Manageable span of control
- Pre-designated incident facilities
- Comprehensive resource management

The modular aspect of ICS establishes a dynamic emergency organization based on the resources needed to support all phases of an emergency. The organization's staff will be integrated from the top down. If a situation escalates, additional resources can be brought into the organization, and likewise, when the situation deescalates, resources can be released when they are no longer needed.

**Initial Command Responsibility** - Depending upon the type of emergency as described in Section II – Hazard Specific Annexes, generally the highest ranking on-duty University Police or Fire Officer will act as the Incident Commander (IC) at the onset, working in the field. Upon activation of the Emergency Operations Center, the EOC Director (EOD) assumes overall command of the event and the field Incident Commander relinquishes command. (He or she may remain as a deputy EOD until command is stable and the arriving EOD has been briefed). When the Incident Management Organization is mobilized, the EOD is supported by six functional groups/sections.

The functional ICS groups/sections are:

- Emergency Policy Group
- Command Staff

- Operations Section
- Planning Section
- Logistics Section
- Finance Section

The Command staff includes the EOD and a support staff of the Liaison, Public Information, and Safety Officers. The Section Chiefs comprise the General Staff which is the management core under the EOD. The Section Chiefs may initiate functions as needed to support Section Operations.

**Note:** Large, complex incidents may require the use of one or more Incident Commanders, typically positioned on the scene of field events, to manage operations in the field. These field IC's will report to the EOD who, with advice and guidance from the Emergency Policy Group and the Emergency Operations Group, collectively known as the Emergency Management Team, will be responsible for establishing goals and objectives and prioritizing resources.

## **D. ROLES AND RESPONSIBILITIES**

This section outlines the general responsibilities of the functional Incident Management Organization groups/sections. (See attached ICS Organization Chart-last page)

#### 1. Emergency Policy Group

This group is headed by the President of the University (Emergency Policy Executive) and consists of senior University executives and selected staff members. Group members are delineated on Page 42, Responsibility Matrix. The group provides long term incident goals and objectives along with legal and long range policy to the EOD

#### 2. Emergency Operations Group

This group reports to the EOD and includes campus emergency operations representatives who will carry out the decisions of the Emergency Policy Group which consist of the tactical and operational aspects of the response.

Collectively, groups one and two are referred to as the Emergency Management Team

#### 3. Emergency Operations Center Director

The Emergency Operations Center Director is in charge of the Emergency Operations Center (EOC) and has responsibility for all emergency operations and is referred to as the EOD. Personnel authorized to act in the EOD capacity, should that person be unavailable, include:

- Director of Environmental Health and Safety
- Safety Manager, Environmental Health & Safety

The EOD's responsibilities include:

• Directing the Command Staff and General Staff

- Establishing the Incident Goals and Objectives
- Developing and implementing strategic decisions
- Approving the order and release of resources
- Activating ICS elements
- Ensuring planning meetings are conducted
- Approving and authorizing implementation of Incident Action Plans
- Determining information needs and conveying them to the Command Staff
- Reviewing and authorizing the release of information to the news media and public
- Ensuring the general welfare and safety of Incident Management organization personnel
- Approving the plan for demobilization and recovery.

#### 4. Incident Commander

At the onset of an emergency event, the Incident Commander assumes command, coordination and management of the overall incident operations. Responsibilities include development, implementation and review of tactics and strategic decisions and the development of initial Incident Action Plans. Large and complex incidents may require the use of more than one IC, typically positioned in the field. Upon activation of the EOC, the IC(s) reports to the EOD.

#### 5. Safety Officer

The Safety Officer is responsible for monitoring and assessing hazardous and unsafe situations, both in the field and in the EOC, and developing measures for assuring personnel safety. The Safety Officer will make recommendations to the Incident Commander to correct unsafe acts or conditions. The Safety Officer will provide input in the development of Incident Action Plans regarding safe operations conduct.

#### 6. Information Officer

The Information Officer is responsible for formulating and releasing information about the emergency to the news media and the general public. In large-scale emergency situations additional staff may be required in order for this function to operate effectively. The Information Officer's responsibilities include:

- Gathering and disseminating emergency information
- Obtaining Incident Commander approval for the release of information
- Coordinating the release of emergency information to the public and news media with other agencies
- Responding to special requests for information

#### 7. Liaison Officer

The Liaison Officer serves as the primary contact for outside agencies. In some situations, the Information Officer and the Liaison Function may be handled by one person. The Liaison functions include:

- Gathering and disseminating emergency information pertaining to other agencies and jurisdictions impacted by the event
- Identifying contacts and communication links with outside agencies and organizations
- Providing information to and responding to requests from interagency and intraagency contacts

#### 8. Operations Section

This section is headed by the Operations Section Chief who is a member of the General Staff. The section is responsible for the following operations:

- Providing and coordinating law enforcement services, including assisting other law enforcement agencies in traffic management
- Providing and coordinating public works services, including providing and placing barricades and signs for traffic management activities
- Providing and coordinating fire protection services
- Providing and coordinating emergency medical services for the University
- Establishing and managing staging areas.
- Ensuring the general welfare and safety of section personnel.
- Coordinating with the Red Cross to provide shelter and welfare for the general public.

## 9. Planning Section

This section is headed by the Planning Section Chief who is a member of the General Staff. The section is responsible for obtaining, evaluating, disseminating and using information concerning the developing status of the emergency. This information is needed by the Incident Management Organization to have an understanding of the current situation and develop appropriate courses of action to effectively manage the emergency response.

The Resources Unit, Situation Unit, Documentation Unit, and Technical Specialist are examples of functions which will operate under the direction of the Planning Section Chief.

#### **10.Logistics Section**

This section is headed by the Logistics Section Chief who is a member of the General Staff. The Section Chief, with assistance from several units, is responsible for providing the Incident Management Organization with logistical needs such as facilities, communications, equipment, and supplies. The Chief is also responsible for ensuring the general welfare and safety of section personnel.

The Equipment Unit, Communications Unit, Facilities Unit, Food Unit, and Supply Unit are examples of functions which will operate under the direction of the Logistics Section Chief.

#### **11. Finance Section**

Headed by the Finance Section Chief, who is a member of the General Staff, this Section is responsible for all financial and cost aspects associated with the emergency. The Chief manages and is assisted by four units; the Time Unit, Procurement Unit, Cost Unit, Compensation and Claims Unit.

## E. RESPONSIBILITY AND CONTROL

Executive Control for the Campus Emergency Management Plan and all activities conducted during its activation are the responsibility of the President (Emergency Policy Executive) or in his absence, his designee. Operational Direction of activities conducted under the plan is the responsibility of the Director of Administrative Compliance Services (Emergency Operations Center Director) or in his absence, his designee.

#### **RESPONSIBILITY MATRIX**

#### Primary Emergency Management Functions and Staff Positions

The staff positions listed below is for guidance purposes. Other qualified staff may fill these functional positions as deemed necessary by the Emergency Policy Group or the Emergency Operations Center Director.

FUNCTION	POSITION	RESPONSIBILITIES
<b>Emergency Policy Executive</b>	President	Provide consultation to the
		Emergency Policy Group
		Declarations as required
<b>Emergency Policy Group</b>	Vice President for	Provides policy consultation to the
	Administration and Finance	EOD, and sets long term goals and objectives (Strategic Planning) for
	Provost	the Incident.
	Vice President for Student Affairs	
	Vice President for University Advancement	
	Chief of Staff	
	Vice Provost/Chief	
	Information Officer	
	Other administrators/staff	
	as needed	
Emergency Operations	Director, Administrative	Serves as EOD and Directs the

Center Director (EOD)	Compliance Services	<ul> <li>Command Staff and General Staff:</li> <li>Establishes the goals and objectives for the Incident</li> <li>Develop/implement tactics and strategy</li> <li>Approve the order and release of resources</li> <li>Activate ICS elements</li> <li>Ensure planning meetings are conducted</li> <li>Approve/authorize implementation of Incident Action Plans</li> <li>Determine information needs and inform the Command Staff</li> <li>Review and authorize the release of information to the news media and public</li> <li>Ensuring the general welfare and safety of Incident Management Organization personnel</li> <li>Approve the plan for demobilization and recovery</li> </ul>	
Incident Commander	University Police Chief, University Police Commander, or designated Administrator or Staff as appointed by EOD For Fire or EMS: Fire Chief	Manage and coordinate incident tactical operations in the field consistent with the Incident Action Plan and applicable incident response guidelines.	
	or Battalion Chief		
Public Information Officer	Director of Media Relations	Gather and disseminate emergency information to the news media and general public upon approval by IC.	
Safety Officer	Safety Manager	<ul> <li>Asses and monitor hazardous and unsafe situations and:</li> <li>Develop measures for assuring personnel safety</li> <li>Make recommendations to the IC to correct unsafe acts or conditions</li> <li>Provide input in the</li> </ul>	

# California Polytechnic State University Multi-Hazard Preparedness Plan

		development of Incident Action Plans regarding safe operations conduct
Liaison Officer	Associate Director, University Police	<ul> <li>Gather and disseminate emergency information to impacted agencies and jurisdictions and:</li> <li>Identify contacts and communication links with outside agencies and serve as their primary contact</li> <li>Respond to special requests for information including interagency and intra- agency contacts.</li> </ul>
<b>Operations Section Chief</b>	Director, Facilities Planning and Capital Projects	Manage and coordinate incident tactical operations, from the EOC,
Branch Directors:		consistent with the Incident Action
• Law	Chief, University Police	Plan and applicable incident
• Fire, Search & Rescue	Fire Battalion Chief	response guidelines.
Medical/Counseling	Director, Health and Counseling Services	
Public Works	Director of Sustainability, Energy and Utilities	
Hazardous Materials	Environmental Health and Safety Director	
Planning Section Chief	Director, Budget and Finance	Responsible for collecting, evaluating and disseminating
Unit Leaders:	-	information about the incident and
• Documentation	Administrative Analyst/ Parking and Events	current status
Situation	Associate Vice Provost for Marketing and Enrollment Development	
Personnel and Volunteers	Director, Human Resources	]
Technical Specialists		
Damage/Building     Assessment	Project Manager, Facilities Planning Minor Cap	
Agriculture and Natural Resources	Director of Agricultural Operations	
• Utilities	Assistant Director of Sustainable Energy and Utilities	
Finance Section Chief	Assistant Director of Internal Control and GAAP	This section is responsible for all financial and cost aspects
Unit Leaders:		associated with the emergency.

# California Polytechnic State University Multi-Hazard Preparedness Plan

Procurement	Buyer III	
Cost Unit	Director Fiscal Services	
Logistics Section Chief	Director, Contracts, Procurement, Risk & Real Estate	Provides facilities, personnel, equipment, materials and services and ensures general welfare and
Unit Leaders:		safety of personnel
Food	Director, Campus Dining	
Shelter/Welfare	Associate Vice President	
	Student Affairs/Exec	
	Director Housing	
Communications	Director, ITS- Information	
	Technology and Computing	
	Services	
Transportation	Transportation Services	
-	Supervisor	

# **SECTION VI - CONCEPTS OF OPERATION**

This section outlines the concepts under which the University will respond to various emergencies events. Although the University's response is contingent upon the type and magnitude of the crisis, many elements of response are similar.

## A. BASIC ELEMENTS OF EMERGENCY RESPONSE

Some of the basic elements of emergency response common to all types of emergencies include the following:

- Event recognition
- Notification of response personnel
- Mobilization of response personnel
- Activation of emergency response facilities and resources
- Situation Reporting and Assessment
- Public alerting and information
- Protective action determination and implementation
- Re-entry and recovery

A response to a major emergency will involve all the above elements. The type and magnitude of the emergency will determine the level of response necessary.

Some emergencies are preceded by a build-up period lasting from hours to days, which if accurately recognized provides advanced warning to the population groups which might be affected. These slowly building events allow the emergency organizations and resources to be mobilized and prepare for emergency response. In other instances, emergencies can occur with little or no advance warning. This will require emergency organizations and resources to be mobilized just prior to or after the onset of the event.

Since emergency preparedness involves planning for worst-case events, the University must be prepared to respond promptly and effectively, and be able to access mutual aid resources if the response effort requires assistance beyond the University's capabilities.

The Hazard-Specific Annexes in Part II of this plan provide the detailed concepts of operations for each type of emergency identified.

## **B. PLAN AND EMERGENCY OPERATION CENTER ACTIVATION**

The President or his designee must authorize activation of the Campus Emergency Management Plan. Upon activation of the Plan, the Emergency Operations Center Director (EOD) or designee, will commence activation of the Emergency Operations Center (EOC).

#### **Presidential Designee (Priority Listing)**

- 1) President
- 2) Vice President for Administration and Finance
- 3) Provost
- 4) Vice President for Student Affairs
- 5) Vice President for University Advancement
- 6) Chief of Staff

The EOC is a central location where all members of the campus emergency management team gather to coordinate the response to a disaster. The EOC is located in Building 74.

# C. INITIAL ALERTING AND REPORTING

#### **EOC Member Notification and Recall**

For obvious emergencies, (e.g., major earthquake), employees pre-assigned to an EOC function should automatically report to their duty station. For all other emergency events:

- The EOD will immediately utilize the Cal Poly Emergency Notification System to notify the members of the Emergency Operations Policy and Operations Center groups of the activation and identify who should report.
- If the Cal Poly Emergency Notification System is NOT operational, the EOD will contact the members of the Emergency Policy Group and Emergency Operations Center Group by any means possible. Alternates of the team may be contacted and asked to report if the initial individual assigned cannot be contacted.

#### **University Employee Notification and Recall**

During an emergency all other employees must:

- Report to their supervisor
- Follow their respective department response plans
- Monitor radio stations 1610 AM or call 805-756-NEWS (6397) for University Information
- Monitor radio stations 920 AM, 1400 AM, and 98.1 FM for local information
- Report for their next scheduled shift if no emergency instructions are available

# D. MUTUAL AID CONCEPTS

It shall be the policy of the University to utilize mutual aid as the primary means to extend personnel and resources for the University Emergency Organization. Mutual aid procedures should be consistent with the California Master Mutual Aid Agreement, California Law Enforcement Mutual Aid Plan, and the California Fire and Rescue Mutual Aid System.

Mutual aid, like the Incident Command System, is provided under the broad direction of the requesting jurisdiction and under the direct control of the aiding jurisdiction/agency. All assisting

agencies that support this plan should work in cooperation with other local, state, federal and private agencies in an effort to maximize resources and minimize damages. It is further understood that an event having regional impacts may severely delay the receipt of mutual aid resources necessitating cooperation and sharing amongst neighboring jurisdictions.

If it is determined that local, state, or federal aid will be needed to respond to the emergency, a request will be made to the jurisdiction in which the campus is located to proclaim a "Local Emergency." Subsequently, a formal request will be sent to the State Office of Emergency Services (OES) requesting that the Governor proclaim a State of Emergency. Under SEMS, the OES manager for our Region coordinates mutual aid requests. All requests for mutual aid from OES must be coordinated with the Emergency Operations Center Director (EOD) and approved by the Emergency Policy Group.

The University also maintains mutual aid agreements with other California State University campuses and local agencies. Requests for these resources should be coordinated through the EOD (via the Operations Section Chief) and approved by the Emergency Policy Group.

## E. CONTINUITY OF OPERATIONS

A major disaster could result in a great loss of life and property, including the death or injury of key University officials. There could be partial or complete destruction of key branches of administration, and the destruction of public and private records essential to continued operations of the University. Maintaining the continuity of operations is essential to a timely and effective recovery. A Continuity of Operations Plan has been developed by the University and can be activated by the EOD as the need arises.

#### 1. Primary and Secondary EOC

The following locations are established as the Emergency Operation Centers for the University. (Note: These locations may be adjusted or changed depending on the specific circumstances of the event).

**Primary:** Building 74, located on N. Perimeter Rd. between Safety Way E. and Safety Way W., between University Dr. and Village Dr. This facility is immediately available and fully functional at all times.

**Secondary:** The secondary EOC is in Administration Building 001, Room 133. The EOC managers would set it up if the primary site is not available. This would occur by either moving the needed supplies and materials from the primary to the secondary using totes in building 74 or by bringing in alternate supplies and equipment if Building 74 is not accessible.

**Note:** A temporary EOC, using trailers and tents would be established at a location determined by the EOD if both these locations were unavailable.

#### 2. Official and Vital Records

Various Custodians of Records are responsible for the safekeeping of the University's official and vital records which include property related documents such as deeds, liens, and official maps. Copies of records are scanned and indexed into document management software systems. The electronic documents may also be backed up by the University's Information Technology Services (ITS) department. In addition, the images are regularly converted to microfilm by an outside vendor and the film is stored offsite by the vendor in a state-of-the-art climate control and fire sprinklers facility in order to maintain the integrity of historical University records. Entry is controlled and monitored by electronic security systems. Custodians of Records are responsible for maintaining software systems that tracks the location of departmental records.

#### 3. Lines of Succession

As used in this plan, "unavailable" means that a person is killed, missing, or so seriously injured as to be unable to attend meetings and otherwise perform his/her duties. The following standby individuals are designated should the primary be unavailable:

#### • Emergency Policy Executive:

- 1) President
- 2) Vice President for Administration and Finance
- 3) Provost
- 4) Vice President for Student Affairs
- 5) Vice President for University Advancement
- 6) Chief of Staff

#### • Emergency Operations Center Director (EOD):

- 1) Director of Administrative Compliance Services
- 2) Director, Risk Management Environmental Health and Safety
- 3) Safety Manager, Environmental Health and Safety

#### • University Department Heads:

University departments heads may delegate their succession authority to personnel within their department for emergency response purposes. Should this not occur, department head succession will fall to those directly in the line of authority beneath the department head's position. However, the Emergency Policy Executive or the EOD has the authority to appoint department head successors of their choice for emergency response purposes.

# SECTION VII: EMERGENCY RESOURCES AND PROGRAM MAINTENANCE

#### A. EMERGENCY SERVICES PROGRAM

The University's Emergency Policy Executive (President of the University) has directed that the Director of Administrative Compliance Services is responsible for the organization and administration of the University's emergency services program and that position shall be referred to as the Emergency Operations Center Director (EOD).

## **B. EMERGENCY FACILITIES, EQUIPMENT AND SUPPLIES**

The Emergency Policy Executive has directed that the University's EOD establish and maintain emergency equipment, supplies, facilities and communications systems for use in disaster or emergency situations. Emergency vehicles, equipment inventory and a listing of available supplies are found in Part III, Support Materials of this Plan.

## C. PLAN MAINTENANCE

The EOD is responsible for the preparation and maintenance of the University's Emergency Management Plan.

The Basic Plan (Part I) sets objectives and policy for the University and therefore changes require the approval of the University's Emergency Policy Executive (President of the University) or his or her designee. Parts II and III, Hazard Specific Annexes and Support Documents, are tactical and reference documents and contain information which changes frequently. The EOD is responsible for updating and revising the Hazard Specific Annexes and related Support Materials, without the need for the Emergency Policy Executive's approval.

## D. DEPARTMENT OR SPECIAL TEAM PLANS

Departments and designated special teams may have an active role in responding to a campus emergency and should develop Emergency Plans that describe the actions they will take. These plans should be specific to their department or team and consistent with the Campus Emergency Management Plan and submitted to the EOD. The emergency activities of these departments and special teams will be coordinated through the Emergency Operations Center (EOC) under the command of the Operations Section Chief or Branch Director.

All plans will have the following basic elements to ensure consistency with the Campus Emergency Management Plan:

• Roster of key personnel in department that includes work, home and cell phone numbers;

- List of emergency equipment, supplies and resources including any agreements with vendors for service or equipment. Location of equipment will also be indicated;
- Primary objectives for the department or special team during an emergency and how the department/special team will achieve those objectives;
- Organizational structure that will be used during an emergency;
- Method for assembling and communicating with emergency team; and
- Method for communicating with Emergency Operations Center (EOC).

Copies of these plans and subsequent revisions are to be forwarded to the EOD and shall be maintained for EOC purposes.

## 1. Individuals with Access and Functional Needs

Assisting those with diverse disabilities and older adults (hereinafter referred to as access and functional needs) should include the following elements:

- Accessible emergency notification systems;
- Accessible evacuation maps;
- Websites with emergency information that is accessible to screen readers used by people who are blind or have low vision; and
- Emergency communication in plain language that is accessible to people with intellectual or developmental disabilities and people with limited English proficiency.

## 2. International Students

Cal Poly had 306 International Students enrolled during the 2014 year (source Cal Poly International Center). Also on campus were 37 visiting scholars. As members of the campus community, international students are affected, as all students are, by crises. Cal Poly has considered their unique set of needs and has incorporated their needs into this plan as follows:

- Ensure proper reporting with Federal authorities through visa review through the U.S. Department of Homeland Security's database, SEVIS;
- Register and validate international students and scholars in the ICE Student and Exchange Visitor Information System (SEVIS);
- Appoint Designated School Officials and Responsible Officers on campus; and
- Advise international students and scholars regarding maintaining their immigration status and other options such as transfer, if they are unable to complete their studies at Cal Poly for any reason, including that of a crisis.

The Cal Poly International Center has established policies and procedures for international students to communicate to Cal Poly their location, safety concerns, and short- and long-term plans.

## E. TRAINING AND EXERCISING

It is the policy of the University to sponsor and coordinate disaster drills or exercises on a regular basis addressing a particular University Emergency Response Plan item. The EOD or designee will develop and administer the drills or exercises. The primary purpose of these activities will be to evaluate and improve the particular emergency response plan that the event is based on. The exercise or drill should also provide a beneficial training and learning experience to all its participants.

Actions during the exercise will be observed and recorded by a multi-department/jurisdictional evaluator group made up of the departments participating in the exercise or observers. A general "no fault" discussion and review will follow the exercise. This will afford department members and the evaluator group with an opportunity to jointly comment on perceived strengths, weaknesses and needed improvements on the particular emergency response plan exercised. An evaluator group meeting will follow the review for the purpose of developing an After Action Report. These recommendations should then be submitted to the EOD within 30 days after the actual exercise.

#### 1. Training Requirements

Every employee, whether faculty or staff, has a requirement for compliance and safety training they must complete. The Environmental Health and Safety department administers the program. This requirement is delivered online through the individual employee's portal through CSU systemwide software. "Emergency and Disaster Preparedness," a 30-minute online interactive course, is one of three requirements that every employee must complete. This course is designed and developed to provide instruction, in the event of a natural disaster, fire, hazardous substance spill, earthquake, bomb threat, or other emergency, in the following:

- emergency response plan purpose and scope;
- safety;
- reporting;
- emergency evacuation of campus facilities and work areas;
- bomb threat response; and
- workplace violence prevention plan purpose and scope

The content in this course is designed to comply with the intent of the applicable regulatory requirements. The course was developed with subject matter support provided by a global professional services company focusing on engineering, environment, health and safety, and information technology.

All individuals filling EOC positions and the Emergency Management Team (including backup) should take the online IS-100 and IS-700 courses series. The following is a brief overview:

**IS-100.HE:** Introduction to the Incident Command System for higher education. The Incident Command System (ICS) is a standardized, on-scene, all hazards incident management approach that:

- Enables integration of communication, equipment, facilities, personnel and procedures within a common organizational structure;
- Allows a coordinated response amongst the university and other agencies and jurisdictions; and
- Establishes a common process for planning and managing resources.

**IS-700.a**: National Incident Management System, an Introduction to the National Incident Management System (NIMS) offers a methodical, practical approach to guide agencies and departments to prevent, respond to and recover from incidents, regardless of incident cause, size or complexity in order to reduce the loss of life and property and harm to the environment.

In addition to the above courses, FEMA's Emergency Management Institute (EMI), offers self-paced courses in support of the nine mission areas identified by the National Preparedness Goal.

- Incident Management
- Operational Planning
- Disaster Logistics
- Emergency Communications
- Service to Disaster Victims
- Continuity Programs
- Public Disaster Communications
- Integrated Preparedness
- Hazard Mitigation

These courses will be recommended periodically to individuals filling EOC positions and the Emergency Management Team, including backups.

#### 2. Discussions-based Exercises

Discussion-based exercises familiarize participants with current plans, policies, agreements and procedures. They also may be used to develop new plans, policies, agreements, and procedures. Discussion-based exercises include the following four types:

**Seminar:** A seminar is an informal discussion, designed to orient participants to new or updated plans, policies, or procedures (e.g., to review a new Evacuation Standard Operating Procedure or the new emergency operations plan).

**Workshop:** A workshop resembles a seminar, but is employed to build specific products, such as a draft plan or policy (e.g., a Training and Exercise Plan Workshop could be used to develop a Multi-year Training and Exercise Plan.)

**Tabletop Exercise:** Annually, the University will conduct, or participate in an area wide tabletop exercise that simulates an emergency scenario impacting the University. The purpose of this exercise is to:

- Enable emergency managers, first responders and individuals filling EOC positions to practice their positions in a relaxed non-threatening environment;
- Enable participants to understand and work through the many phases of an unfolding disaster and its cascading events;
- Practice utilizing the University's Emergency Management Plans; and
- Identify areas for improvement in planning and training.

**Game:** A game is a simulation of operations that often involves two or more teams, usually in a competitive environment, using rules, data, and procedure designed to depict an actual or assumed real-life situation (e.g., used for individual units like the Law Branch or Food Unit or between two groups such as the Resource Unit and Procurement Unit).

## 3. Operations-based Exercises

Recommended at least annually, operations-based exercises validate plans, policies, agreements and procedures, clarify roles and responsibilities, and identify resource gaps in an operational environment. Testing should be done every other year per CSU Executive Order 1056.

Operations-based exercises include the following three types:

**Drill:** The University may coordinate a supervised activity usually employed to test a single, specific operation or function (e.g. fire drills, building evacuations). During a drill, all persons (Faculty, staff, and students in the particular area being drilled) participate. The purpose of the drills is to familiarize occupants with the drill procedures so that the procedure becomes routine. An actual event response counts as a drill.

• **Campus building evacuation drill** - Cal Poly contracts to conduct the annual building audio and visual fire alarm testing. Building evacuation drills should be conducted at least annually. These drills may be conducted more frequently as needed.

**Functional Exercise (FE):** A functional exercise examines and/or validates the coordination, command, and control between various EOC sections and units (e.g., emergency operations center, policy group, etc.). The FE should include the following criteria:

- Simulates realistic situation(s);
- Takes place in real time;
- Tests some or all emergency responses; and
- Activates the EOC

A functional exercise does not involve any first responders or emergency officials responding to an incident in real time.

**Full Scale Exercise (FSE):** A full-scale exercise is a multi-agency, multi-jurisdictional, multidiscipline exercise involving functional (e.g., joint field office, emergency operation centers, etc.) and mock response including the following criteria:

- Takes place in real time;
- Requires employees to treat mock victims;
- Uses emergency equipment in the field;
- Coordinates many agencies;
- Tests mutual aid and assistance agreements;
- Tests several emergency functions; and
- Activates the EOC, producing a high stress environment.

Testing should be done every five years; however activation of the EOC in response to an actual emergency or disaster will meet this testing requirement, per CSU EO 1056. Cal Poly will participate in any San Luis Obispo County FSE if invited to do so.

#### 4. Evaluation and Improvement

At the conclusion of all trainings the following should occur:

- Reiteration of the key lessons learned;
- Identify areas in need of improvement;
- Ascertain action steps to address areas needing improvement;
- Determine what existing plans and policies need to be revised or developed further;
- Identify any logistical needs that could facility preparedness;
- Determine additional trainings needed; and
- Complete the Post-Exercise Hot Wash form found in Part III, Support Materials.

#### Documentation

The Cal Poly EOD will maintain a training and exercise schedule and document all completed drills and coursework.

Note: See Chancellors Executive Order No. 1056 for more detailed information on this section.

# F. ADMINISTRATION, FINANCE AND LOGISTICS

## 1. Administration

This section describes administrative protocols used during an emergency operation.

*Documentation* is an administrative process used by the university to document the response to and recovery from a disaster. Note: This information is also discussed for each emergency response function and for the specific hazards.

- Describe the process and agencies used to document the actions taken during and after the emergency (e.g., incident and damage assessment, incident command logs, cost recovery);
- Describe/summarize the reasons for documenting the actions taken during both the response and recovery phases of the disaster (e.g., create historical records, recover costs, address insurance needs, and develop mitigation strategies);
- Include copies of the reports that are required (e.g., cost recovery, damage assessment, incident critique, historical record); and
- Describe the University's methods used to create a historical record of the incident (after action report) and include information identifying the actions taken, resources expended, economic and human impacts, and lessons learned as a result of the disaster.

The *after-action report (AAR)* results from an administrative process used by the university to review and discuss the response in order to identify strengths and weaknesses in the emergency management and response program. The AAR should:

- Describe the reasons and need to conduct an AAR (e.g., review actions taken, identify equipment shortcomings, improve operational readiness, highlight strengths/initiatives);
- Describe the methods and agencies used to organize and conduct a review of the disaster including how recommendations are documented to improve local readiness (e.g., change plans/procedures, acquire new or replace outdated resources, retrain personnel);
- Describe the links and connections between the processes used to critique the response to an emergency/disaster and the processes used to document recommendations for the university's exercise program; and
- Describe how the jurisdiction ensures that the deficiencies and recommendations identified in the AAR are corrected and/or completed.

#### 2. Finance

This section describes financial protocol used to recover the costs incurred during an emergency operation.

- Describe/identify the various programs that allow Cal Poly and its response/support agencies to recover their costs (e.g., California Office of Emergency Services (CAL OES), Small Business Administration, Public Assistance Program);
- Identify and describe the actions that will be taken to document the costs incurred during response and recovery operations (e.g., personnel overtime, equipment used/expended, contracts initiated);
- Describe the methods used to educate responders and local officials about the cost recovery process; and
- Describe the impact and role that insurance has in recovering costs (e.g., self-insured).

## 3. Logistics

Campus Multi-Hazard Preparedness Plan for Cal Poly-San Luis Obispo – June 2015 56

This section describes the logistics and resource management mechanisms used to identify and acquire resources in advance of and during emergency operations, especially to overcome gaps possibly identified in a capability assessment.

- Describe/identify the methods and agencies involved in using the existing risk analysis and capability assessment to identify what resources are needed for a response to a defined hazard, including using past incident critiques to identify/procure additional resources;
- Describe/identify the steps taken to overcome the jurisdiction's identified resource shortfalls, including identifying the resources that are only available outside the jurisdiction (e.g., HAZMAT, water rescue, search and rescue teams, and Chemical, Biological, Radiological, Nuclear Explosives (CBRNE) specialists and the process to request those resources;
- Provide a brief summary statement about specialized equipment, facilities, personnel, and emergency response organizations currently available to response to the defined hazards. Note: A tab to the plan or a separate source manual should be used to list the types of resources available, amounts on hand, locations maintained, and any restrictions on use;
- Provide information about specialized equipment, facilities, personnel, and emergency response organizations currently available to support children, individuals with disabilities, and others with access and functional needs; and
- Describe the process used to identify private agencies/contractors that will support resource management issues (E.g., waste haulers, spill contractors, landfill operators). Identify existing memorandums of agreement (MOA)/ memorandums of understanding (MOU) and contingency contracts with these organizations.

# G. INFORMATION COLLECTION, ANALYSIS AND DISSEMINATION

This section describes the required critical or essential information common to all operations identified during the planning process.

- Identify intelligence position (e.g., EOC liaison) requirements for the emergency operations center's (EOC) Planning Section;
- Describe plans for coordination between the Planning Section and the jurisdiction's EOC;
- Describe information dissemination methods (e.g., verbal, electronic, graphics) and protocols;
- Describe critical information needs and collection priorities;
- Describe long-term information collection, analysis, and dissemination strategies; and
- Describe collaboration with the campus constituents, to include sector-specific watch programs.

# SECTION VIII: FUNCTIONAL CONTENT SECTIONS

# A. EVACUATION

This section focuses on the courses of action that Cal Poly may execute to evacuate buildings, facilities, and grounds.

The EOC team considers the following courses of action:

- Account for students, faculty, staff, and visitors in various locations at different times of the day;
- Safely move students, faculty, staff, and visitors from unsafe areas to designated assembly areas such as classrooms, student housing facilities, campus grounds, dining establishments, stadiums, and other Cal Poly locations using standard operating procedures;
- Evacuate using alternate routes when primary evacuation route(s) are unusable; and
- Evacuate individuals with disabilities (along with their service animals and assistive devices, e.g., wheelchairs) and others with access and functional needs, including language, transportation, and medical needs) using standard operating procedures of the Disability Resource Center.

# **B. DENY ENTRY OR CLOSING (LOCKDOWN)**

This section focuses on the courses of action Cal Poly executes to secure buildings, facilities and grounds during incidents that pose an immediate threat of violence in or around the campus core. The primary objective of a lockdown is to quickly ensure all faculty, staff, students, and visitors are secured in rooms away from immediate danger.

The EOC team considers these courses of action:

- Account for students, staff, faculty, and visitors located in various locations at different times of the day;
- Secure exterior doors to campus buildings and facilities when it is safe to do so;
- Review how particular classroom and building characteristics (i.e., windows, doors) impact possible lockdown courses of action; and
- Use different variations of lockdown (when outside activities are curtailed, doors are locked, and visitors closely monitored but all other activities continue as normal).

# C. SHELTER-IN-PLACE/SECURE-IN-PLACE

This section focuses on course of action when students, faculty, and staff are required to remain indoors, potentially for an extended period of time, because it is safer inside a building or a room than outside. Depending on the threat of hazard, students, faculty, and staff may be required to move to rooms that can be sealed (such as in the event of a chemical or biological hazard).

58

The EOC team considers the following courses of action:

- Locate supplies that will be needed to seal the room and to provide for the needs of students, faculty, and staff (e.g., water);
- Basic necessities for individuals with disabilities and others with access and functional needs who may require durable medical equipment and personal assistance services;
- Move individuals when the primary route is unusable;
- Locate and shelter students, faculty, staff, and visitors; and
- Identify existing rooms that may serve as "safe rooms" for protection against extreme weather in order to provide immediate life-safety protection when evacuation is not an option.

How to lock-down and secure a room after an emergency notification is sent out to the campus:

- Lock the door, if possible.
- Cover any windows in the door if possible.
- Tie down the door, if possible, using belts, purse straps, shoe laces, zip ties, etc.
- Barricade the door with anything available (desks, chairs, etc.).
- Look for alternate escape routes (windows, other doors).
- Move away from doorways and windows.
- Silence cell phones.
- Once secured, do not open the door for anyone. Police will enter the room when the situation is over.
- Gather weapons (coffee cups, chairs, books, pens, etc.) and mentally prepare to defend yourself or others.
- Put yourself in position to surprise an active shooter should they enter the room.
- Take attendance of all people in the room and call University Police to report who is in the room with you, if safe to do so.
- If available, check email regularly for messages giving further instructions or cell phones for text messages from the Poly Alert System.
- Overloading will likely bring down all telephone services, including cellular phones. Avoid using any telephone services except for life safety and emergency calls.

# **D. ACCOUNTING FOR ALL PERSONS**

This section focuses on courses of action for accounting for the whereabouts and well-being of students, faculty, staff, and visitors, and identifying those who may be missing.

The team considers the following courses of action:

• Determine who should be in attendance at the assembly area, if possible;

- Identify students, faculty, staff members, or visitors that cannot be located to the best of your ability;
- All Cal Poly personnel report to assembly (or other) supervisor; and
- Announce when students, faculty, and staff will be permitted to resume their activities when possible.

# E. COMMUNICATIONS AND NOTIFICATION

This section include communication and coordination during emergencies and disasters (both internal communication and communication with external stakeholders), as well as the communication of emergency protocols before an emergency and communication after an emergency.

The EOC team considers the following courses of action:

- Cal Poly's communication system integration with the local disaster response communications network (e.g., fire department, law enforcement agency);
- Cal Poly's communication with community partners in accordance with pre-established agreements (e.g., memoranda of understanding);
- Staff members who operate communications equipment;
- Communicate with students, families, and the broader community before, during, and after an emergency by using alert and notification systems;
- Address language access barriers faced by students, faculty, and/or staff, if any;
- Communicate impacts to the broader community, including off-campus student activities or events on Cal Poly grounds not sponsored by Cal Poly (i.e., third party use of campus grounds, athletic events);
- Effectively communicate with individuals with disabilities and others with access and functional needs (e.g., coordinate with Cal Poly's Disability Resource Center (DRC) staff to provide sign language interpreters for use during press conferences, publishing accessible documents, ensuring information on websites is accessible, and if videos are used, ensuring they are captioned);
- Obtain emergency contact information for students, faculty, and staff;
- Track students, faculty, staff, or visitors transported to another location for care or shelter, including hospitals;
- Ensure that courses of action are consistent with requirements in the Clery Act, the Health Insurance Portability and Accountability Act (HIPAA), the Family Educational Rights and Privacy Act (FERPA), and civil rights laws; and
- Effectively communicate with students, staff, or members of the public who refuse to comply with safety instructions.

# F. RECOVERY

Recovery roles and responsibilities are addressed in Part I, Section V. Part D. of the Basic Plan. Associated protocols are available in Part III: Support Materials. Checklists, forms, and other documents are kept for EOC purposes.

## G. PUBLIC HEALTH, MEDICAL AND MENTAL HEALTH

This section describes the course of action that Cal Poly will implement to address emergency medical (e.g., first aid), public health, and mental health counseling issues. Cal Poly should coordinate these efforts with the appropriate emergency medical services, public health, mental health, law enforcement, fire department, and emergency management representatives.

The EOC team considers the following courses of action:

- Roles of staff members providing first aid during an emergency;
- Location of and responsibility for emergency medical supplies (first aid kits, AEDs, etc.);
- Staff with relevant training or experiences such as first aid or CPR;
- Cal Poly will secure a sufficient number of counselors and others trained in psychological first aid in the event of an emergency via Cal Poly Health & Well-being;
- Cal Poly will promptly share and report information about outbreaks or epidemics or other unusual medical situations to the local health department; and
- Cal Poly will support the needs of students, faculty, and staff identified by its Care Team.

## H. SECURITY

This section focuses on the courses of action that Cal Poly will implement to secure Cal Poly from criminal threats originating from either inside and outside Cal Poly. This includes efforts made in conjunction with law enforcement officers.

The EOC team considers the courses of action:

- Ensure agreements with law enforcement agencies address the daily role of law enforcement officers in and around campus;
- Help ensure the buildings and facilities are physically secure, including consideration of Crime Prevention Through Environmental Design (CPTED) as an acceptable component of Leadership in Energy & Environmental Design (LEED);
- Assist students, faculty, and staff in safely traveling to, from, and within the campus safely (including traffic control and pedestrian safety);
- Keep prohibited items or materials off campus;
- Respond to threats identified by the Care Team;
- Address issues related to cybersecurity and threats to Cal Poly's information technology systems;
- Ensure security is provided at stadiums, arenas, and other large-event facilities;

- When necessary, provide security for sensitive facilities including labs on campus;
- Account for students faculty, staff, and visitors in a variety of locations at different times of the day; and
- Share information with law enforcement officers or other responders, within the requirements or limitations of applicable privacy laws, including FERPA, HIPAA, and other civil rights laws.

# I. RAPID ASSESSMENT

This section focuses on the courses of action that Cal Poly will implement when it is notified of or becomes aware of an occurring or impending emergency situation that requires activation of the EOC.

The EOC team considers the following courses of action:

- Immediately gather information to determine the type and scale of the incident;
- Determine an appropriate response;
- Determine which annex(es) should be implemented; and
- Take immediate action to protect life and property.

Cal Poly's EOC team lead (usually the EOC Director or Incident Commander) has responsibility for the management of all emergency activities, including development, implementation, and review of strategic decisions. These actions and decisions are made in concert and in consultation with other community response partners and leaders as applicable.

# **SECTION IX: ATTACHMENTS**

Attached are several campus maps and charts for emergency situations:

- A. ICS Organizational Chart
- B. Evacuation Points
- C. Outdoor Assembly Areas
- D. Carless Collection Points
- E. Emergency Phones
- F. Evacuation Chairs
- G. Disability Resource Center Tram Stops
- H. Mobility Access Map

#### A. CAL POLY ORGANIZATIONAL CHART



## **B. EVACUATION POINTS**



#### C. OUTDOOR ASSEMBLY AREAS



## **D. EMERGENCY PHONES**



#### **E. EVACUATION CHAIRS**



#### F. DISABILITY RESOURCE CENTER TRAM STOPS



# G. MOBILITY ACCESS MAP

Representation of a larger 30 x 42, map available at maps.calpoly.edu/mobility.html



# **REVISION PAGE**

This section is for plan holders to record the posting of each official plan revision made by the University. Please enter the revision number, the pages, the date the revision was posted, and the initials of the person posting the revision.

Revision #	Pages Changed	Summary of Changes	<b>Date</b>	<u>Initials</u>
1	Cover sheet and	Date changed	8/25/14	MJR
	Footer	-		
1	6	Title for distribution to facilities changed	8/25/14	MJR
1	35-36	Added EOD acronym and changed what	8/25/14	MJR
		is under the Operations Section Chief		
1	39	Replaces Emergency Operations Center	8/25/14	MJR
_		Director with EOD acronym		
1	42-46	Updated Responsibility Matrix for	8/25/14	MJR
		grammatical corrections		
1	48	Added EOD acronym	8/25/14	MJR
1	51-52	Added EOD acronym	8/25/14	MJR
2	Cover sheet and	Date revised updated	4/10/15	MJR
_	Footer			
$\frac{2}{2}$	6	Signature included	4/10/15	MJR
2	7	Approval and Implementation Page	4/10/15	MJR
_		developed and inserted		
$\frac{2}{2}$	8	Summary of Changes column added	4/10/15	MJR
2	9	Added number of copies and date	4/10/15	MJR
		distributed, also web link to public copy		
2	52	Added section for those with functional	4/10/15	MJR
		and access needs		
2	53	International Students section added	4/10/15	MJR
$\frac{\frac{2}{2}}{2}$	53-57	Training and Exercise portion expanded	4/10/15	MJR
2	57-58	Administration, Finance, and Logistics	4/10/15	MJR
_		Added		
2	60-65	Functional Content Section added	4/10/15	MJR
$\begin{array}{c} 2 \\ \hline 2 \\ \hline 2 \\ \hline 2 \\ \hline 2 \end{array}$	69	Evacuation Points Map added	4/10/15	MJR
2	72	Evacuation Chairs Map added	4/10/15	MJR
2	73	Disability Resource Center Tram Stops	4/10/15	MJR
		Map added		
2	74	Mobility Access Map added	4/10/15	MJR
3	Cover Sheet and	Date revised updated	6/3/15	MJR
	Footer	-		
3	52-64	Editorial Changes	6/3/15	MJR
		÷		-