



**SANTA**

**BARBARA  
OPERATIONAL AREA**

**SEMS MULTI-HAZARD  
FUNCTIONAL PLAN**

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June 2003

## **LETTER OF PROMULGATION**

TO: The Citizens of Santa Barbara County

The preservation of life, property and environment is an inherent responsibility of local, state, and federal government. Santa Barbara County has prepared this multiple volume plan to ensure the most effective and economical allocation of resources for the maximum benefit and protection of the civilian population in time of emergency.

While no plan can prevent death and destruction, good 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.

The objective of this plan is to incorporate and coordinate all the facilities and personnel of the County into an efficient organization capable of responding in the event of any emergency.

This emergency management plan is an extension of the California Emergency Plan. It will be reviewed and tested periodically and revised as necessary to meet changing conditions.

I give my full support to this plan and urge all officials, employees, and citizens, individually and collectively, to do their share in the total emergency effort of Santa Barbara County.

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Michael F. Brown, County Administrator  
Director of Emergency Services

Date  
**(LEPG-3)**

## **THE FOREWORD (*LEPG-2*)**

This SEMS Multi-Hazard Functional Plan (MHFP) addresses the Santa Barbara Operational Areas planned response to extraordinary emergency situations associated with natural disasters, technological incidents, and national security emergencies. The plan does not address normal day-to-day emergencies or the well-established and routine procedures used in coping with such emergencies. Instead, the operational concepts reflected in this plan focus on potential large-scale disasters, which can generate unique situations requiring unusual emergency responses.

This plan is a preparedness document designed to be read, understood, and exercised prior to an emergency. It is designed to include the Santa Barbara Operational Area as part of the California Standardized Emergency Management System (SEMS).

Each element of the emergency management organization is responsible for assuring the preparation and maintenance of appropriate and current *standard operating procedures (SOPs)/emergency operating procedures (EOPs)*, resource lists, and checklists that detail how assigned responsibilities are performed to support SEMS MHFP implementation and to ensure successful response during a major disaster. Such *SOPs/EOPs* should include the specific emergency authorities that designated officials and their successors can assume during emergency situations. (*LEPG-8*)

### ***ASSUMPTIONS:***

- The Santa Barbara Operational Area is primarily responsible for emergency actions and will commit all available resources to save lives, minimize injury to persons and minimize damage to property.
- The Santa Barbara Operational Area will utilize SEMS in emergency response operations.
- The Director of Emergency Services will coordinate the Santa Barbara Operational Area disaster response in conformance with its Emergency Services Ordinance.
- The resources of the Santa Barbara Operational Area will be made available to cities, unincorporated area, local agencies and citizens to cope with disasters affecting this area.
- The Santa Barbara Operational Area will commit its resources to a reasonable degree before requesting mutual aid assistance.
- The Operational Area will request mutual aid assistance to the State, when disaster relief requirements exceed resources available in Santa Barbara County.

***EMERGENCY MANAGEMENT GOALS:***

- Provide effective life safety measures, reduce property loss, and protect the environment.
- Provide for the rapid resumption of impacted businesses and community services.
- Provide accurate documentation and records required for cost recovery efforts.

***ORGANIZATION OF THE SEMS MHFP:***

- **Part One - Basic Plan.** Overall organizational and operational concepts relative to response and recovery, as well as an overview of potential hazards. Intended audience— Emergency Operations Center (EOC) Management Team.
- **Part Two - Emergency Organization Functions.** Description of the emergency response organization and emergency action checklists. Intended audience—EOC staff.
- **Part Three -** Supporting and legal documents to the Standardized Emergency Management System (SEMS) Multi-Hazard Functional Plan (MHFP). Intended audience—all elements of the SEMS staff.

***ACTIVATION OF THE SEMS MHFP:***

- On the order of the official designated by local ordinance, provided that the existence or threatened existence of a LOCAL EMERGENCY has been proclaimed in accordance with the appropriate emergency ordinance.
- When the Governor has proclaimed a STATE OF EMERGENCY in an area which includes Santa Barbara County.
- Automatically on the proclamation of a STATE OF WAR EMERGENCY as defined in California Emergency Services Act (Chapter 7, Division 1, Title 2, California Government Code).
- A Presidential declaration of a NATIONAL EMERGENCY.
- Automatically on receipt of an ATTACK WARNING or the observation of a nuclear detonation.

***TRAINING, EXERCISING, AND MAINTENANCE OF SEMS MHFP: (LEPG-15 & 17)***

The Santa Barbara County Office of Emergency Services (OES) is responsible for coordination and scheduling of training and exercising of this plan. Santa Barbara County OES will conduct regular exercises of this plan to train all appropriate County staff in the proper response to disaster situations.

An exercise is a simulation of a series of emergencies for identified hazards affecting the County of Santa Barbara. During these exercises, emergency response organizations are required to

respond as though a real emergency had occurred. The public will be made aware of these exercises through normal media communications.

Each responsible organization or agency will review and upgrade its portion of the SEMS MHFP and/or modify its *Standard Operating Procedures/Emergency Operation Procedure* as required based on identified deficiencies experienced in drills, exercises or actual occurrences. Changes in government structure and emergency response organizations will also be considered in the SEMS MHFP revisions. Each County Department will receive a binder with the SEMS MHFP from County OES. Each city and identified special district will receive a copy of the SEMS MHFP on CD. Training will be set up with each jurisdiction to help with creation of their plan.

*The Santa Barbara County OES is responsible for revising the SEMS MHFP that will enhance the conduct of response and recovery operations. The Santa Barbara County OES will prepare, coordinate, publish and distribute any necessary changes to the plan to all County departments, cities and other agencies as shown on the distribution list in this section on pagevii of this SEMS MHFP.*

## **RECORD OF REVISIONS (LEPG-15)**

Date	Section	Page Numbers	Entered By

**DISTRIBUTION LIST (LEPG-15)**

<b>DEPARTMENTS/AGENCIES RECEIVING COPIES OF THE SEMS MHFP:</b>	<b>NO. OF COPIES</b>
<i>Governor's OES, Southern Region</i>	<i>1</i>
<i>Auditor-Controller</i>	<i>1</i>
<i>Clerk Board of Supervisors</i>	<i>1</i>
<i>County Administrator</i>	<i>1</i>
<i>County Counsel</i>	<i>1</i>
<i>Fire Department</i>	<i>1</i>
<i>Fire Department - Office of Emergency Services</i>	<i>3</i>
<i>General Services</i>	<i>1</i>
<i>Health Care Services</i>	<i>1</i>
<i>Environmental Health Services</i>	<i>1</i>
<i>Mental Health Services</i>	<i>1</i>
<i>Planning and Development</i>	<i>1</i>
<i>Public Works</i>	<i>1</i>
<i>Flood Control</i>	<i>1</i>
<i>Sheriff-Coroner</i>	<i>2</i>
<i>Social Services</i>	<i>1</i>
<i>Extra</i>	<i>1</i>
<b>Cities and Special Districts</b>	
<i>Buellton</i>	<i>1</i>
<i>Carpinteria / Summerland</i>	<i>1</i>
<i>Goleta</i>	<i>1</i>
<i>Guadalupe</i>	<i>1</i>
<i>Lompoc</i>	<i>1</i>
<i>Santa Barbara City</i>	<i>1</i>
<i>Santa Maria</i>	<i>1</i>
<i>Solvang</i>	<i>1</i>
<i>Cottage Hospital</i>	<i>1</i>
<i>St. Francis Hospital</i>	<i>1</i>
<i>Marium Hospital</i>	<i>1</i>
<i>Allen Hancock College</i>	<i>1</i>
<i>Vandenberg AFB</i>	<i>1</i>
<i>Montecito Fire Protection</i>	<i>1</i>

**SIGNED CONCURRENCE BY PRINCIPAL  
COUNTY DEPARTMENTS (LEPG-18)**

The \_\_\_\_\_ (dept./agency) concurs with the Santa Barbara Operational Area's SEMS Multi-Hazard Functional Plan. As needed, revisions will be submitted to the Office of Emergency Services.

Signed \_\_\_\_\_  
(Name) (Title)

\_\_\_\_\_  
(Department/Agency)

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The \_\_\_\_\_ (dept./agency) concurs with the Santa Barbara Operational Area's SEMS Multi-Hazard Functional Plan. As needed, revisions will be submitted to the Emergency Services Coordinator.

Signed \_\_\_\_\_  
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Signed \_\_\_\_\_  
(Name) (Title)

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(Department/Agency)

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## **PART ONE, SECTION ONE**

### **BASIC PLAN**

#### **PURPOSE**

The Basic Plan addresses the Santa Barbara Operational Area's planned response to emergencies associated with natural disasters and technological incidents—including both peacetime and wartime nuclear defense operations. It provides an overview of operational concepts, identifies components of the County's emergency management organization within the Standardized Emergency Management System (SEMS), and describes the overall responsibilities of the federal, state and county entities for protecting life and property and assuring the overall well-being of the population.

#### **AUTHORITIES AND REFERENCES**

Disaster response and recovery operations will be conducted as outlined in Concept of Operations, and in accordance with the enabling legislation, plans, and agreements listed in **Part One, Section Two—Authorities and References**, page 18.

#### **PREPAREDNESS ELEMENTS**

In view of the County's susceptibility and vulnerability to natural disasters and technological incidents, continuing emphasis will be placed on: emergency planning; training of full-time, auxiliary and reserve personnel; public awareness and education; and assuring the adequacy and availability of sufficient resources to cope with such emergencies. Emphasis will also be placed on mitigation measures to reduce losses from disasters, including the development and enforcement of appropriate land use, design and construction regulations (see **Part One, Section Three—Hazard Mitigation**, page 20).

#### **CONCEPT OF OPERATIONS**

Operations during peacetime and national security emergencies involve a full spectrum of activities from a minor incident, to a major earthquake, to a nuclear detonation. There are a number of similarities in operational concepts for peacetime and national security emergencies. Some emergencies will be preceded by a build-up or warning period, providing sufficient time to warn the population and implement mitigation measures designed to reduce loss of life and property damage. Other emergencies occur with little or no advance warning, thus requiring immediate activation of the emergency operations plan and commitment of resources. All agencies must be prepared to respond promptly and effectively to any foreseeable emergency, including the provision and utilization of mutual aid (see **Part One, Section Four—Mutual Aid**, page 24).

Emergency management activities during peacetime and national security emergencies are often associated with the four emergency management phases indicated below. However, not every disaster necessarily includes all indicated phases.

### **Preparedness Phase**

The preparedness phase involves activities taken in advance of an emergency. These activities develop operational capabilities and effective responses to a disaster. These actions might include mitigation activities, emergency/disaster planning, training and exercises and public education. Those identified in this plan as having either a primary or support mission relative to response and recovery should prepare department Standard Operating Procedures (SOPs) / Emergency Operating Procedures (EOPs) and checklists detailing personnel assignments, policies, notification rosters, and resource lists. Department personnel should be acquainted with these SOPs and checklists through periodic training in the activation and execution procedures.

#### **Increased Readiness**

The receipt of a warning or the observation that an emergency situation is imminent or likely to occur soon will initiate increased readiness actions. Actions to be accomplished include, but are not necessarily limited to:

- Review and update of emergency plans, *SOPs/EOPs*
- Dissemination of accurate and timely emergency public information
- Accelerated training of permanent and auxiliary staff
- Inspection of critical facilities
- Recruitment of additional staff and Disaster Services Workers
- Mobilization of resources
- Testing warning and communications systems

### **Response Phase**

#### **Pre-Emergency**

When a disaster is inevitable, actions are precautionary and emphasize protection of life. Typical responses might be:

- Slow-rise flood
- Nuclear power plant incident
- Tsunami watch / warning
- Hazardous materials incident
- Possible dam failure
- Approaching wildland fire

Actions accomplished during this phase may be concentrated on the movement of people from identified hazard areas to safer, lower risk areas and on providing food, lodging, and shelter for the people in the reception areas. The following would be applicable:

- Warning threatened elements of the population and initiating movement operations as necessary.
- Advising agencies to activate resources; advising the State OES Mutual Aid Region of emergencies; and preparing for the receipt and application of mutual aid.
- If it is determined that state and possible federal aid will be needed, a LOCAL EMERGENCY will be proclaimed as prescribed by local ordinance and a formal request will be submitted through State OES requesting that the Governor proclaim a STATE OF EMERGENCY or GOVERNOR'S CONCURRENCE.
- Should the possible or expected emergency not develop, all alerted agencies would be promptly notified.
- As provided in the California Emergency Plan, state agencies will provide assistance to threatened or stricken areas. State agency representatives will establish liaison with their local counterparts to relay information and mutual aid requests. The State OES Regional Manager will coordinate intra-regional mutual aid and state assistance as necessary.

### **Emergency Response**

During this phase, emphasis is placed on saving lives and property, control of the situation and minimizing effects of the disaster. Immediate response is accomplished within the affected area by local government agencies and segments of the private sector.

One of the following conditions will apply to the Operational Area during this phase:

- The situation can be controlled without mutual aid assistance from outside the Operational Area
- Evacuation of portions of Santa Barbara County is required due to uncontrollable, immediate and ensuing threats
- Mutual aid from outside the Operational Area is required
- The Operational Area is either minimally impacted, or not impacted at all, and is requested to provide mutual aid to other jurisdictions

The emergency management organization will give priority to the following operations:

- Dissemination of accurate and timely emergency public information and warning to the public
- Situation analysis
- Resource allocation and control
- Evacuation and rescue operations
- Medical care operations
- Coroner operations

- Care and shelter operations
- Access and perimeter control
- Public health operations
- Restoration of vital services and utilities

When local resources are committed to the maximum and additional resources are required, requests for mutual aid will be initiated through the State's Regional Emergency Operating Center (REOC). Fire and law enforcement agencies will request or render mutual aid directly through established channels. The appropriate local official must authorize any action, which involves financial outlay by the jurisdiction, or a request for military assistance. If required, State OES may coordinate the establishment of one or more Disaster Support Areas (DSAs) where resources and supplies can be received, stockpiled, allocated, and dispatched to support operations in the affected area(s).

Depending on the severity of the emergency, a Local Emergency may be proclaimed and the State OES Director may request a gubernatorial proclamation of a State of Emergency. Should a State of Emergency be proclaimed, state agencies will, to the extent possible, respond to requests for assistance. These activities will be coordinated with the State OES Director.

State OES will activate the State Operations Center (SOC) in Sacramento to support State OES Regions, state agencies and other entities in the affected areas and to ensure the effectiveness of the state's SEMS. The State REOC in Los Alamitos, or an alternate location, will support the Santa Barbara Operational Area.

If the Governor requests and receives a Presidential declaration of an Emergency or a Major Disaster under Public Law 93-288, he will appoint a State Coordinating Officer (SCO). The SCO and an appointed Federal Coordinating Officer (FCO) will coordinate and control state and federal recovery efforts in supporting local operations. All emergency response efforts and initial recovery support will be coordinated by the REOC.

### **Sustained Emergency**

As early lifesaving and property-protecting actions continue, attention can be given to other priority activities. Emphasis should be on actions to help displaced persons and the securing of dangerous areas. Activity during this phase includes: more definitive medical treatment, operation of mass care facilities, registration of displaced persons, reuniting of family members and detailed damage assessment.

### **Recovery Phase**

As soon as possible, the State OES Director, operating through the designated SCO, will bring together representatives of federal, state, county, and city agencies, as well as representatives of the American Red Cross, to coordinate the implementation of assistance programs and

establishment of support priorities. Details, policies and procedures for rehabilitation and recovery activities are provided in the State Disaster Assistance Procedural Manual (published and issued separately). Disaster Application Centers (DACs) may also be established, providing a "one-stop" service to initiate the process of receiving federal, state and local recovery assistance.

The recovery period has major objectives that may overlap, including:

- Reinstatement of family autonomy
- Provision of essential public services
- Permanent restoration of private and public property
- Identification of residual hazards
- Plans to mitigate future hazards
- Recovery of costs associated with response and recovery efforts
- Improvement of future emergency operations

### **Mitigation Phase**

Mitigation efforts occur both before and following disaster events. Post-disaster mitigation is part of the recovery process. Eliminating or reducing the impact of hazards that exist within the Operational Area and are a threat to life and property are part of the mitigation efforts. Mitigation tools include:

- Local ordinances and statutes (zoning ordinance, building codes and enforcement, etc.)
- Structural measures
- Tax levee or abatements
- Public information and community relations
- Land use planning
- Professional training

### **Peacetime Emergencies**

The type and magnitude of the emergency will dictate the County's partial or total response to natural disasters or technological incidents. Generally, response to a major peacetime emergency situation will progress from local, to county, to state, to federal involvement.

For planning purposes, State OES has established three levels of emergency response to peacetime emergencies, which are based on the severity of the situation and the availability of local resources. (Note: These levels do not directly correlate with the four classifications of nuclear power emergencies.)

#### **Level One—Decentralized Coordination and Direction**

A minor to moderate incident wherein local resources are adequate and available a Local Emergency may or may not be proclaimed. The Operational Area EOC may or may not be activated. Off-duty personnel may be recalled.

**Level Two—Centralized Coordination and Decentralized Direction**

A moderate to severe emergency wherein local resources are not adequate and mutual aid may be required on a regional or even statewide basis. Key management level personnel from the principal involved agencies will co-locate in a central location to provide jurisdictional or multi-jurisdictional coordination. The EOC should be activated. Off-duty personnel may be recalled. A Local Emergency will be proclaimed and a State of Emergency may be proclaimed.

**Level Three—Centralized Coordination and Direction**

A major local or regional disaster wherein resources in or near the impacted area are overwhelmed and extensive state and/or federal resources are required. A Local Emergency and a State of Emergency will be proclaimed and a Presidential Declaration of an Emergency or Major Disaster will be requested. All response and early recovery activities will be directed from the EOC. All off-duty personnel will be recalled.

Specific operational concepts, to include the emergency response actions of the various elements of SEMS, are reflected in Part Two of this Plan.

**National Security Emergencies**

National security emergencies may range from minor inconveniences such as food and petroleum shortages to a worst-case scenario involving an attack on the United States utilizing nuclear, chemical or biological weapons. Protective measures to be employed in the event of a threatened or actual attack on the United States include:

- In-place protection
- Spontaneous evacuation by an informed citizenry may be considered a viable option within the context of this plan

**HAZARD IDENTIFICATION AND ANALYSIS**

A hazard analysis has indicated that Santa Barbara County may be at risk to certain incidents and to national security emergencies. These hazards are identified in Part One, Section Five – Threat Assessment, page 31, which also provides general and specific information on their possible impact on the jurisdiction.

**STANDARDIZED EMERGENCY MANAGEMENT SYSTEM (SEMS)  
(LEPG-6)**

In an emergency, governmental response is an extraordinary extension of responsibility and action, coupled with normal day-to-day activity. Normal governmental duties will be maintained, with emergency operations carried out by those agencies assigned specific emergency functions. SEMS has been adopted by the Santa Barbara Operational Area for managing response to multi-agency and multi-jurisdiction emergencies and to facilitate communications and coordination between all levels of the system and among all responding

agencies. Chapter 1 of Division 2 of Title 19 of the California Code of Regulations establishes the standard response structure and basic protocols to be used in emergency response and recovery.

SEMS incorporates the use of the Incident Command System (ICS), the Master Mutual Aid Agreement and existing mutual aid systems, the Operational Area Concept, the Operational Area Satellite Information System (OASIS), the State's Response Information Management System (RIMS) and multi-agency or inter-agency coordination. Local governments must use SEMS to be eligible for funding of their personnel-related costs under state disaster assistance programs.

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

### **Field Response Level**

The field response level is where emergency response personnel and resources, under the command of an appropriate authority, carry out tactical decisions and activities in direct response to an incident or threat site. SEMS regulations require the use of ICS at the field response level of an incident. The ICS field functions to be used for emergency management are: command, operations, planning/intelligence, logistics, and finance/administration.

### **Local Government Level**

Local governments include cities, counties, school and special districts. Special districts under SEMS are units of local government (other than a city, county, or city and county) with authority or responsibility to own, operate or maintain a project (as defined in California Code of Regulations 2900(s) for purposes of natural disaster assistance). This may include a joint power authority established under Section 6500 et seq. of the Code.

Cities manage and coordinate the overall emergency response and recovery activities within their jurisdiction. Local governments are required to use SEMS when their EOC is activated or a local emergency is proclaimed in order to be eligible for state funding of response-related personnel costs. In SEMS, the local government emergency management organization and its relationship to the field response level may vary depending upon factors related to geographical size, population, function and complexity. Local governmental levels shall provide the following functions: management, operations, planning/intelligence, logistics, and finance/administration. Local jurisdictions are responsible for overall direction of personnel and equipment provided for emergency operations through mutual aid (Government Code Section 8618). Additional details relative to the organization and responsibilities of the SEMS elements at each of the levels are provided in Part Two, Management System.

### **Operational Area**

Under SEMS, the operational area is defined in the Emergency Services Act as an intermediate level of the state's emergency services organization consisting of a county and all political subdivisions within the county area. Political subdivisions include cities, a city and county,



counties, district or other local governmental agency, or public agency as authorized by law. The operational area is responsible for:

- Coordinating information, resources and priorities among local governments within the operational area,
- Coordinating information, resources and priorities between the regional level and the local government level, and
- Using multi-agency or inter-agency coordination to facilitate decisions for overall operational area level emergency response activities.

SEMS regulations specify that all local governments within a county geographic area be organized into a single operational area and that the county board of supervisors is responsible for its establishment. The County of Santa Barbara is the lead agency for the operational area composed of the cities of Buellton, Carpinteria, Goleta, Guadalupe, Lompoc, Santa Barbara City, Santa Maria and Solvang. All local governments should cooperate in organizing an effective operational area, but the operational area authority and responsibility is not affected by the nonparticipation of any local government.

Special districts are primarily responsible in emergencies for restoration of services that they normally provide. They may also be responsible for safety of people at their facilities or on their property and for warning of hazards from their facilities or operations. Some special districts may assist other local governments in the emergency response.

In compliance with SEMS, on September 19, 1995, the Santa Barbara County Board of Supervisors reaffirmed its commitment to assume responsibility for operational area coordination through a formal resolution establishing the Santa Barbara County Operational Area. (*LEPG-6*)

Activation of the Operational Area during a State of Emergency or a Local Emergency is required by SEMS regulations under the following conditions:

- A city within the operational area has activated its EOC and requested activation of the operational area EOC to support their emergency operations.
- Two or more cities within the operational area have proclaimed a local emergency.
- The county and one or more cities have proclaimed a local emergency.
- A city, city and county, or county has requested a governor's proclamation of a state of emergency, as defined in the Government Code Section 8558(b).
- A state of emergency is proclaimed by the governor for the county or two or more cities within the operational area.
- The operational area is requesting resources from outside its boundaries. This does not include resources used in normal day-to-day operations, which are obtained through existing mutual aid agreements.

- The operational area has received resource requests from outside its boundaries. This does not include resources used in normal day-to-day operations that are obtained through existing mutual aid agreements.

Coordination and communications should be established between activated local government EOCs and the Operational Area. Santa Barbara Operational Area will establish communication with impacted cities in order to coordinate response activities with the Operational Area EOC.

Santa Barbara Operational Area will use Multi-agency Command (MACS) concept when developing response and recovery operations. When possible, the Operational Area will include jurisdictional representatives in planning for jurisdictional support. *(LEPG-6)*

### **Regional**

Because of its size and geography, the state has been divided into six mutual aid regions. The purpose of a mutual aid region is to provide for the more effective application and coordination of mutual aid and other emergency related activities.

State OES has also established three Administrative Regions (Coastal, Inland and Southern). These Administrative Regions are the means by which State OES maintains day-to-day contact with emergency services organizations at local, county and private sector organizations. Santa Barbara Operational Area is located in the Southern Region and coordinates with the State OES office in Los Alamitos.

In SEMS, the regional level manages and coordinates information and resources among operational areas within the mutual aid region and also between the operational areas and the state level. The regional level also coordinates overall state agency support for emergency response activities within the region.

### **State**

The state level of SEMS manages state resources in response to the emergency needs of the other levels and coordinates mutual aid among the mutual aid regions and between the regional level and state level. The state level also serves as the coordination and communication link between the state and the federal disaster response system.

## **FEDERAL EMERGENCY MANAGEMENT**

The Federal Emergency Management Agency (FEMA) serves as the main federal government contact during emergencies, major disasters and national security emergencies.

## **CONTINUITY OF GOVERNMENT**

A major disaster or national security emergency could result in the death or injury of key government officials and/or the partial or complete destruction of established seats of government, and public and private records essential to continued operations of government. Government at all levels is responsible for providing continuity of effective leadership, authority

and adequate direction of emergency and recovery operations. The California Government Code Section 8643(b) and the Constitution of California provide the authority for state and local government to reconstitute itself in the event incumbents are unable to serve. **Part Two, Management Section** provides complete details on the Continuity of Government Program in California.

### **PUBLIC AWARENESS AND EDUCATION**

The public's response to any emergency is based on an understanding of the nature of the emergency, the potential hazards, the likely response of emergency services and knowledge of what individuals and groups should do to increase their chances of survival and recovery.

Public awareness and education prior to any emergency are crucial to successful public information efforts during and after the emergency. The pre-disaster awareness and education programs must be viewed as equal in importance to all other preparations for emergencies and receive an adequate level of planning. These programs must be coordinated among local, state and federal officials to ensure their contribution to emergency preparedness and response operations. Emergency Public Information procedures are addressed in **Part Two, Management Section**.

### **TRAINING AND EXERCISES**

Training and exercises are essential at all levels of government to make emergency operations personnel operationally ready. All emergency plans should include provision for training.

The objective is to train and educate public officials, emergency response personnel and the public. The best method for training staff to manage emergency operations is through exercises.

Exercises are conducted on a regular basis to maintain the readiness of operational procedures. Exercises provide personnel with an opportunity to become thoroughly familiar with the procedures, facilities and systems which will actually be used in emergency situations. There are several forms of exercises:

- Tabletop exercises provide a convenient and low-cost method designed to evaluate policy, plans and procedures and resolve coordination and responsibilities. Such exercises are a good way to see if policies and procedures exist to handle certain issues.
- Functional exercises are designed to test and evaluate the capability of an individual function such as evacuation, medical, communications or public information.
- Full-scale exercises simulate an actual emergency. They typically involve complete emergency management staff and are designed to evaluate the operational capability of the emergency management system.

### **FEDERAL ALERTING AND WARNING SYSTEMS**

**EAS - Emergency Alert System (previously the Emergency Broadcast System):** The Emergency Alert System (EAS) is designed for the broadcast media to disseminate

emergency public information. This system enables the President, and federal, state and local governments to communicate with the general public through commercial broadcast stations.

This system uses the facilities and personnel of the broadcast industry on a volunteer basis. EAS is operated by the broadcast industry according to established and approved EAS plans, standard operating procedures and within the rules and regulations of the Federal Communications Commission (FCC). FCC rules and regulations require all participating stations with an EAS operating area to broadcast a common program. Each broadcast station volunteers to participate in EAS and agrees to comply with established rules and regulations of the FCC.

EAS can be accessed at federal, state, and local levels to transmit essential information to the public. Message priorities under Part 73.922(a) of the FCC's rules are as follows:

- Priority One                      Presidential Messages (carried live)
- Priority Two                      EAS Operational (Local) Area Programming
- Priority Three                    State Programming
- Priority Four                      National Programming and News

Presidential messages, national programming and news will be routed over established network facilities of the broadcast industry. State programming will originate from the state operations center and will be transmitted through the state using the California Law Enforcement Radio System (CLERS) VHF/UHF radio relay stations.

Emergency information is broadcast directly from the Santa Barbara County Operational Area. A decoder is available to alert that an emergency broadcast is about to be transmitted to eliminate the need for constant monitoring of the Sheriff's frequency or broadcast stations.

Examples of emergencies identified by Santa Barbara Operational Area which may warrant either immediate or delayed response under EAS by the broadcast industry are earthquake, serious fires, heavy rains and flooding, widespread power failures, severe industrial accidents and hazardous material accidents. The context of any emergency broadcast transmitted on EAS should be of concern to a significant segment of the population of Santa Barbara County.

**EAS activation can be authorized by any one of the following parties:**

- The County's Director of Emergency Services or his designee
- County OES Manager or designee
- Authorized public official of the incorporated cities of Santa Barbara County
- Authorized representative of the National Oceanic and Atmosphere Administration (NOAA)

The Director of Emergency Services in Santa Barbara County, while not the originator of the EAS material, is responsible for the content and authenticity of the information broadcast over the local EAS. Local broadcast stations have the right to edit or use any or all of an EAS broadcast. Any jurisdiction may make separate programming arrangements with any broadcast station independent of the EAS.

**NAWAS - National Warning System:** NAWAS is a dedicated wire-line system that provides two-way voice communications between federal warning center, state warning points and local warning points. If the situation ever presents itself, NAWAS is a nationwide system developed to send warnings of impending attack throughout the nation. The system may be activated from two federal facilities that are staffed 24 hours daily: the National Warning Center (North American Air Defense Command, Colorado Springs) and the Alternate National Warning Center (Olney, Maryland).

- **Tests**

NAWAS is tested three times daily at unscheduled times. The state warning point, OES, acknowledges the test for California. If OES does not respond, the alternate, California Highway Patrol (CHP), will acknowledge the test. Immediately following the national test, the state NAWAS test is conducted.

## **STATE ALERTING AND WARNING SYSTEMS**

**CALWAS - California Warning System:**

CALWAS is the State portion of NAWAS that extends to communications and dispatch centers throughout the state. The State OES headquarters ties into the federal system through the Warning Center in Sacramento. Circuits then extend to county warning points. The CHP headquarters in Sacramento is the state's alternate warning point. Both state and federal circuits are monitored 24 hours a day at the Warning Center, the alternate point and each of the local warning points. Counties not on this system will receive warning through other means (normally over the California Law Enforcement Telecommunications System [CLETS]).

**CESFRS - California Emergency Services Fire Radio System:**

CESFRS is the statewide communications network, available to all fire agencies. The three available channels have been designated Fire White #1, #2 and #3. White #1 is authorized for base station and mobile operations. White #2 and White #3 are for mobile and portable use only. All three white channels are designated by the FCC as "Intersystem" channels and are intended solely for inter-agency fire operations, i.e. mutual aid. White #2 and White #3 are intended for on-scene use only.

**CESRS - California Emergency Services Radio System:**

CESRS serves as an emergency communications system for OES and county emergency services organizations. The system assists in the dissemination of warning information and to support disaster and emergency operations. The system may be used on a day-to-day basis for administrative emergency services business. Statewide communications are provided through a number of microwave interconnected mountain top relays. It operates

under appropriate FCC rules and regulations and is administered by the State of California through the OES. See the "California Emergency Services Radio System, Plan and Licensing Guide," July 1990, written by OES Telecommunications Division for more information.

**CLEMARS - California Law Enforcement Mutual Aid Radio System:**

CLEMARS was established to provide common police radio frequencies for use statewide by state and local law enforcement agencies during periods of man-made or natural disasters or other emergencies where inter-agency coordination is required. It operates under appropriate FCC rules and regulations and is administered by the State of California through the OES.

**CLETS - California Law Enforcement Telecommunications System:**

CLETS is a high-speed message switching system, which became operational in 1970. CLETS provides law enforcement and criminal justice agency access to various data bases and the ability to transmit and receive point-to-point administrative messages to other agencies within California or via the National Law Enforcement Telecommunications System (NLETS) to other states and Canada. Broadcast messages can be transmitted intrastate to participating agencies in the Group Bulletin Network and to regions nationwide via NLETS. CLETS has direct interface with the FBI-NCIC, NLETS, DMV, Oregon and Nevada. The State provides the computer hardware, switching center personnel, administrative personnel, and the circuitry to one point in each county. The local agencies provide the circuitry and equipment, which link them to their county termination point. A number of agencies have Message Switching Computer (MSC) systems and Computer Aided Dispatch (CAD) systems, which directly connect to CLETS. Many of these systems have Mobile Data Terminals (MDTs), which allow an officer in the field to inquire directly into various systems. The CLETS terminal in Santa Barbara County is located at the Sheriff's Department, 4434 Calle Real, Santa Barbara, CA.

**OASIS - Operational Area Satellite Information System:**

The OASIS project, funded under the Earthquake Hazards Reduction Act of 1986, was established to create the most robust communications system possible using leased transponder space from commercial satellite operators. The result is the establishment of a system that allows virtually uninterrupted communication between state, regional and operational area level EOCs.

OASIS is a system that consists of a communications satellite, multiple remote sites and a hub.

The satellite is in a stationary or geo-synchronous orbit above the earth's equator. A High Frequency (HF) radio system and a satellite communications network were constructed to link all 58 counties with State OES and other state agencies for disaster communications as well as day-to-day traffic. The system, which uses technology

similar to cellular telephones, has 60 channels. When a user picks up the line, the system automatically searches for the best available channel.

**RIMS – Response Information Management System:**

California's Response Information Management System (RIMS) is an internet-based system used to coordinate and manage the State's response to disasters and emergencies. RIMS automates the State's Standardized Emergency Management System (SEMS). RIMS was developed by OES in 1995 and now over 2,000 internal and external clients access RIMS via the Internet.

RIMS is available to all cities, special districts and state agencies within California that have a computer with access to the Internet. Web access to RIMS is controlled by user id's and passwords. Web browser clients and Internet access are standard and supported in nearly every government agency, and those agencies which don't have access now soon will. RIMS user base has expanded from 137 agencies to 2500 by developing the internet-based system.

The RIMS applications have been converted to Web accessible format and new, more powerful Lotus Domino Web servers have been installed at each of OES' Regional Emergency Operations Centers. In addition, high-speed Internet access has been added at each OES Region to handle the increased RIMS user traffic.

Clients will still be able to dial in directly to their OES Region using regular phone lines or OASIS (only Operational Areas (OA's) for backup access. Instead of dialing directly into a Notes server, users will dial into OES just like accessing an Internet Provider. Clients will be able to simultaneously access both RIMS and other OES Lotus Notes applications if they have a notes client. Even though they will be using Web browsers directly to OES for RIMS, they will not be able to get beyond RIMS with their Web browsers.

The Standardized Emergency Management System (SEMS) hierarchy protocol will be maintained. RIMS will ensure that city and special district reports and resource requests are visible to their OA's. The OA's will forward these local reports and requests to OES Region or State levels as needed. City and special district reports will also be sorted and grouped by OA to facilitate access, prioritization and processing. OES will continue to see OA summary reports, as done previously.

OA's will also control access by their cities and special districts to RIMS. Any city or special district wishing to use RIMS will need to request access through their OA. The cities and special districts will have to provide for this access at their own expense and have OA authority.

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## **PART ONE, SECTION TWO**

### **AUTHORITIES AND REFERENCES (LEPG-4)**

#### **GENERAL**

The California Emergency Services Act (Chapter 7 of Division 1 of Title 2 of the Government Code), hereafter referred to as the Act, provides the basic authorities for conducting emergency operations following a proclamation of Local Emergency, State of Emergency or State of War Emergency by the Governor and/or appropriate local authorities, consistent with the provisions of the Act.

The SEMS Regulations (Chapter 1 of Division 2 of Title 19 of the California Code of Regulations), hereafter referred to as SEMS, establishes the SEMS to provide an effective response to multi-agency and multi-jurisdiction emergencies in California. SEMS is based on the ICS adapted from the system originally developed by the Firefighting Resources of California Organized for Potential Emergencies (FIRESCOPE) program. SEMS incorporates the use of ICS, the Master Mutual Aid Agreement and existing mutual aid systems, the Operational Area concept, multi-agency or inter-agency coordination and OASIS.

The California Emergency Plan, which is promulgated by the Governor, is published in accordance with the Act and provides overall statewide authorities and responsibilities, and describes the functions and operations of government at all levels during extraordinary emergencies, including wartime. Section 8568 of the Act states, in part, that "the State Emergency Plan shall be in effect in each political subdivision of the state, and the governing body of each political subdivision shall take such action as may be necessary to carry out the provisions thereof." Local emergency plans are, therefore, considered to be extensions of the California Emergency Plan. The 1990 California Emergency Plan is generally compatible with SEMS but will be updated.

The California Civil and Government Codes contain several references to liability release (Good Samaritan Act) for those providing emergency services. These references are contained in Part Three—Legal Documents.

#### **EMERGENCY PROCLAMATIONS (LEPG-28) (See Part Three—Legal Documents)**

##### **Local Emergency**

A Local Emergency may be proclaimed by the Santa Barbara County Board of Supervisors as specified by Chapter 12, Section 6 of the Santa Barbara County Code adopted by the County Board of Supervisors. A Local Emergency proclaimed by the Emergency Services Director or designee must be ratified by the Board of Supervisors within seven days. The governing body shall review, at its regularly scheduled meetings until the Local Emergency is terminated. In no event shall a review take place more than 21 days after the previous review. However, if the governing body meets weekly, it shall review the need for continuing the Local Emergency at

least every fourteen days, until the Local Emergency is terminated. The Local Emergency must be terminated by resolution as soon as conditions warrant. Proclamations are normally made when there is an actual incident or threat of disaster or extreme peril to the safety of persons and property within the county, caused by natural or man-made situations.

The proclamation of a Local Emergency provides the governing body with the legal authority to:

- If necessary, request that the Governor proclaim a State of Emergency
- Promulgate or suspend orders and regulations necessary to provide for the protection of life and property, including issuing orders or regulations imposing a curfew within designated boundaries
- Exercise full power to provide mutual aid to any affected area in accordance with local ordinances, resolutions, emergency plans, or agreements
- Request state agencies and other jurisdictions to provide mutual aid
- Require the emergency services of any local official or employee
- Requisition necessary personnel and materials from any local department or agency
- Obtain vital supplies and equipment and, if required, immediately commandeer the same for public use
- Impose penalties for violation of lawful orders
- Conduct emergency operations without incurring legal liability for performance, or failure of performance. (Note: Article 17 of the Emergency Services Act provides for certain privileges and immunities.)

### **State of Emergency**

A State of Emergency may be proclaimed by the Governor when:

- Conditions of disaster or extreme peril exist which threaten the safety of persons and property within the state caused by natural or man-made incidents
- He is requested to do so by local authorities
- He finds that local authority is inadequate to cope with the emergency

Whenever the Governor proclaims a State of Emergency:

- Mutual aid shall be rendered in accordance with approved emergency plans when the need arises in any county, city and county, or city for outside assistance
- The Governor shall, to the extent he deems necessary, have the right to exercise all police power vested in the state by the Constitution and the laws of the State of California within the designated area
- Jurisdictions may command the aid of citizens as deemed necessary to cope with an emergency
- The Governor may suspend the provisions of orders, rules or regulations of any state agency; and any regulatory statute or statute prescribing the procedure for conducting state business
- The Governor may commandeer or make use of any private property or personnel (other than the media) in carrying out the responsibilities of his office

- The Governor may promulgate, issue and enforce orders and regulations deemed necessary

### **State of War Emergency**

Whenever the Governor proclaims a State of War Emergency, or if a State of War Emergency exists, all provisions associated with a State of Emergency apply, plus:

- All state agencies and political subdivisions are required to comply with the lawful orders and regulations of the Governor which are made or given within the limits of his authority as provided for in the Emergency Services Act

### **AUTHORITIES**

The following provides emergency authorities for conducting and/or supporting emergency operations:

#### **Federal**

- Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1988 (Public Law 93-288, as amended).
- Federal Disaster Relief Act of 1974 (Public Law 93-288)
- Federal Civil Defense Act of 1950 (Public Law 920), as amended.
- Public Law 84-99 (U.S. Army Corps of Engineers-Flood Fighting)
- NRT-1, Hazardous Materials Emergency Planning Guide and NRT-1A Plan Review Guide (Environmental Protection Agency's National Response Team).

#### **State**

- SEMS Regulations (Chapter 1 of Division 2 of Title 19 of the California Code of Regulations) and (Government Code Section 8607(a). SEMS Guidelines.
- California Emergency Services Act (Chapter 7 of Division 1 of Title 2 of the Government Code).
- “Good Samaritan” Liability (**see Part Three—Legal Documents**).
- California Emergency Plan
- California Natural Disaster Assistance Act (Chapter 7.5 of Division 1 of Title 2 of the Government Code).
- California Hazardous Materials Incident Contingency Plan, OES 1991
- California Health and Safety Code, Division 20, Chapter 6.5, Sections 25115 and 25117, Chapter 6.95, Sections 2550 et seq., Chapter 7, Sections 25600 through 25610, dealing with hazardous materials.
- Orders and Regulations which may be Selectively Promulgated by the Governor during a State of Emergency (**see Part Three—Legal Documents**).
- Orders and Regulations Promulgated by the Governor to Take Effect upon the Existence of a State of War Emergency (**see Part Three—Legal Documents**).
- California Master Mutual Aid Agreement (**see Part Three—Legal Documents**).

**Local**

Emergency Services Ordinance No. 3014, adopted February 21, 1978 by the County Board of Supervisors

The Master Mutual Aid Agreement adopted December 4, 1950

Resolution No. 95-429, September 19, 1995, adopting the SEMS Multi-Hazard Functional Plan

**REFERENCES (LEPG-41)**

See Part Three of this Plan.

## **PART ONE, SECTION THREE**

### **HAZARD MITIGATION**

#### **PURPOSE**

This section establishes actions, policies and procedures for implementing Section 409 (Minimum Standards for Public and Private Structures) of the Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1988 (Public Law 93-288, as amended), following a Presidentially declared Emergency or Major Disaster. It also assigns hazard mitigation responsibilities to various elements of federal, state, and local governments in California.

#### **AUTHORITIES AND REFERENCES**

Activities enumerated in this enclosure will be conducted in accordance with the enabling legislation, plans, and agreements listed in **Part One, Section Two Authorities and References**, page 16.

#### **GENERAL**

Hazard mitigation is defined as any action taken to reduce or eliminate the long-term risk to human life and property from natural hazards. Section 409 of Public Law 93-288 requires, as a condition to receiving federal disaster aid that repairs and reconstruction be done in accordance with applicable codes, specifications, and standards. It also requires that the state or local government recipients of federal aid evaluate the natural hazards of the area in which the aid is to be used, and take action to mitigate them, including safe land use and construction practices.

To be effective, hazard mitigation actions must be taken in advance of a disaster. After disaster strikes, mitigation opportunities exist only during recovery, and even those opportunities can be limited by the absence of advance planning. Nevertheless, the immediate post-disaster period does present special opportunities for mitigation. Section 409 deals with the opportunities presented in a current disaster to mitigate potential hardship and loss resulting from future disasters. Thus, hazard mitigation is a continuing year-round effort and activity in which all local communities and state agencies are encouraged to prepare hazard mitigation plans that identify ways to reduce damage caused by disasters. Hazard mitigation includes such activities as:

- Improving structures and facilities at risk
- Identifying hazard-prone areas and developing standards for prohibited or restricted use
- Recovery and relief from loss, including insurance
- Providing hazard warning and protecting the population

Following a presidential disaster declaration, the Hazard Mitigation Grant Program (HMGP) is activated. The HMGP is authorized by Section 404. The program's purpose is to fund projects which are cost-effective and which substantially reduce the risk of future damage, hardship, loss

or suffering resulting from a major natural disaster. Grants are available to eligible applicants in the declared areas only.

The HMGP fund is based upon a 15 percent share of the Federal Emergency Management Agency (FEMA) estimate of all Damage Survey Reports (DSRs) for public assistance work performed, and Individual Assistance costs. The federal contribution can be up to 75 percent of the cost of the hazard mitigation project approved for funding, with applicants providing match funding through a combination of either state, local or private sources. HMGP funds cannot be used as the sole match for other federally funded programs.

Section 404 funding may not be used to fund any mitigation project that might be eligible under Public Assistance or other federal programs, although it might be used to complement or enhance mitigation funded under Individual or Public Assistance. By regulation Section 404 funding is the funding of last resort.

### **IMPLEMENTATION**

Following each Presidentially declared Emergency or Major Disaster, the Regional Director of FEMA and the Governor execute a document called the Federal/State Agreement. This agreement includes appropriate provisions for hazard mitigation. Under the "typical paragraph" set out to serve this purpose, the State agrees to:

- Evaluate or have the applicant evaluate specific natural hazards in the disaster area, and make appropriate recommendations to mitigate them
- Follow up with applicants to ensure that the appropriate hazard mitigation actions are taken
- Follow up with applicants to ensure that the appropriate hazard mitigation plan or plans are developed and submitted to the FEMA Regional Director for concurrence
- Review and update as necessary disaster mitigation portions of emergency plans

A hazard mitigation officer is appointed for the state and local applicant. These individuals will constitute the hazard mitigation survey team, which will:

- Identify significant hazards in the affected areas, giving priority to disaster-related hazards; and
- Evaluate impacts of these hazards and recommend mitigation measures.

The hazard mitigation survey team uses information from DSRs and visits selected sites where significant damage has occurred. The state and local representatives on the hazard mitigation survey team are responsible for ensuring that there is adequate consultation among interested federal, state, and local parties.

The hazard mitigation survey team also prepares a hazard mitigation plan, which is submitted, to the FEMA Regional Director through the Governor's authorized representative within 180 days after a Presidential declaration. The objectives of the plan are to:

- Recommend hazard mitigation measures for local, state, and federal agencies; and
- Establish short and long-term planning frameworks for implementation of hazard mitigation efforts.

### **CONCEPT OF OPERATIONS**

Each applicant is expected to use its resources and capabilities as necessary to perform emergency work, such as debris removal or emergency measures to save lives, or to protect public health and safety, or to protect property, before requesting assistance from state or federal government. Local, state, and federal preliminary damage assessments are used to identify major hazards and opportunities for hazard mitigation activities prior to a declaration of Major Disaster or Emergency. Damage survey reports shall include identification of hazards and shall recommend mitigation measures to be incorporated into the repair work.

The federal/state hazard mitigation survey team shall review applicable land use regulations, construction standards, and other appropriate hazard mitigation measures. Utilizing information from preliminary damage assessments, DSRs, and all other pertinent information, the team shall visit the sites of significant damage and shall evaluate all hazards at those sites. For each identified significant hazard the team shall include appropriate hazard mitigation recommendations.

In cases where no plans for hazard mitigation exist or are inadequate, the team shall report its findings and make recommendations to develop, improve or maintain hazard mitigation plans. Existing local and state hazard mitigation plans shall be updated and new ones developed as deemed necessary. Technical advice and assistance will be sought from federal, state and local agencies in developing new plans or updating existing plans to mitigate hazards identified.

The hazard mitigation survey team shall make recommendations on any needs for new mapping or remapping of high hazard areas.

### **RESPONSIBILITIES**

A set procedure has been established for hazard mitigation following a disaster, to avoid similar disasters in the future. Hazard mitigation measures include avoidance, reduction and land use regulations.

The FEMA Regional Director is responsible for hazard mitigation actions under the terms of the Federal/State Agreement. The Regional Director shall provide overall leadership with respect to the general administration of Section 409 to ensure that the ultimate benefits to be gained through effective hazard mitigation programs are not diminished. The Regional Director also provides technical advice and assistance.



A representative of State OES will be appointed by the Governor and will be responsible for state performance of hazard mitigation activities under the Federal/State Agreement. The applicant's authorized representative, appointed locally, is responsible for local performance of hazard mitigation measures under the terms of the Federal/State Agreement. The applicant's authorized representative shall, to the extent of legal authority, implement and enforce land use regulations and safe construction practices which are agreed upon as conditions for FEMA grants or loans. Each city and county is charged with implementing and enforcing its own hazard mitigation measures.

### **Local Government Responsibilities**

The key responsibilities of local governments are to:

- **Participate** in the process of evaluating hazards and adoption of appropriate hazard mitigation measures, including land use and construction standards
- **Appoint** a Local Hazard Mitigation Officer, if appropriate
- **Participate** on Hazard Mitigation Survey Teams and Inter-Agency Hazard Mitigation Teams, as appropriate
- **Participate** in the development and implementation of Section 409 plans or plan updates, as appropriate
- **Coordinate and monitor** the implementation of local hazard mitigation measures

## **PART ONE, SECTION FOUR**

### **MUTUAL AID (LEPG-7)**

#### **INTRODUCTION**

The foundation of California's emergency planning and response is a statewide mutual aid system which is designed to ensure that adequate resources, facilities and other support is provided to jurisdictions whenever their own resources prove to be inadequate to cope with a given situation(s). The basis for the system is the California Disaster and Civil Defense Master Mutual Aid Agreement (**see Part Three—Legal Documents**), as provided for in the California Emergency Services Act. This Agreement was developed in 1950 and has been adopted by the state, all 58 counties and most incorporated cities in the State of California. The Master Mutual Aid Agreement creates a formal structure wherein each jurisdiction retains control of its own facilities, personnel and resources, but may also receive or render assistance to other jurisdictions within the state. State government is obligated to provide available resources to assist local jurisdictions in emergencies. It is the responsibility of the local jurisdiction to negotiate, coordinate and prepare mutual aid agreements. Mutual aid agreements exist in law enforcement, fire services, medical and public works and through the Emergency Management Mutual Aid (EMMA).

#### **MUTUAL AID SYSTEM**

A statewide mutual aid system, operating within the framework of the Master Mutual Aid Agreement, allows for the progressive mobilization of resources to and from emergency response agencies, local governments, operational areas, regions and state with the intent to provide requesting agencies with adequate resources. The general flow of mutual aid resource requests and resources within mutual aid systems are depicted in the diagram in **Chart 1, Mutual Aid System Flow Chart**, page 28.

The statewide mutual aid system includes several discipline-specific mutual aid systems, such as fire and rescue, law, medical and public works. The adoption of SEMS does not alter existing mutual aid systems. These systems work through local government, operational area, regional and state levels consistent with SEMS.

Mutual aid may also be obtained from other states. Interstate mutual aid may be obtained through direct state-to-state contacts, pursuant to interstate agreements and compacts, or may be coordinated through federal agencies.

#### **MUTUAL AID REGIONS**

The Governor establishes mutual aid regions under the Emergency Services Act. Six mutual aid regions numbered I-VI have been established within California. The County of Santa Barbara is within Region I that is divided into two Regions for Law Enforcement Mutual Aid—Regions I

and Region IA. Each mutual aid region consists of designated counties. Region I is in the OES Southern Administrative Region. See **Chart 3, State Mutual Aid Region Map**, page 30.

### **MUTUAL AID COORDINATORS**

To facilitate mutual aid, discipline-specific mutual aid systems work through designated mutual aid coordinators at the operational area, regional and state levels. The basic role of a mutual aid coordinator is to receive mutual aid requests, coordinate the provision of resources from within the coordinator's geographic area of responsibility and pass on unfilled requests to the next level.

Mutual aid requests that do not fall into one of the discipline-specific mutual aid systems are handled through the emergency services mutual aid system by emergency management staff at the local government, operational area, regional and state levels. The flow of resource requests and information among mutual aid coordinators is illustrated in **Chart 2, Mutual Aid Coordinators Flow Chart**, page 29.

Mutual aid coordinators may function from an EOC, their normal departmental location or other locations depending on the circumstances. Some incidents require mutual aid but do not necessitate activation of the affected local government or operational area EOCs because of the incident's limited impacts. In such cases, mutual aid coordinators typically handle requests from their normal work location. When EOCs are activated, all activated discipline-specific mutual aid systems should establish coordination and communications with the EOCs:

- When an operational area EOC is activated, operational area mutual aid system representatives should be at the operational area EOC to facilitate coordination and information flow.
- When an OES REOC is activated, regional mutual aid coordinators should have representatives in the REOC unless it is mutually agreed that effective coordination can be accomplished through telecommunications. State agencies may be requested to send representatives to the REOC to assist OES regional staff in handling mutual aid requests for disciplines or functions that do not have designated mutual aid coordinators.
- When the SOC is activated, state agencies with mutual aid coordination responsibilities will be requested to send representatives to the SOC.

Mutual aid system representatives at an EOC may be located in various functional elements (sections, branches, groups or units) or serve as an agency representative, depending on how the EOC is organized and the extent to which it is activated.

### **PARTICIPATION OF VOLUNTEER AND PRIVATE AGENCIES**

Volunteer agencies and private agencies may participate in the mutual aid system along with governmental agencies. For example, the disaster medical mutual aid system relies heavily on private sector involvement for medical/health resources. Some volunteer agencies such as the American Red Cross, Salvation Army and others are an essential element of the statewide emergency response to meet the needs of disaster victims. Volunteer agencies mobilize volunteers and other resources through their own systems. They also may identify resource needs that are not met within their own systems that would be requested through the mutual aid

system. Volunteer agencies with extensive involvement in the emergency response should be represented in EOCs.

Some private agencies have established mutual aid arrangements to assist other private agencies within their functional area. For example, electric and gas utilities have mutual aid agreements within their industry and established procedures for coordinating with governmental EOCs. In some functional areas, services are provided by a mix of special district, municipal and private agencies. Mutual aid arrangements may include both governmental and private agencies.

Liaison should be established between activated EOCs and private agencies involved in a response. Where there is a need for extensive coordination and information exchange, private agencies should be represented in activated EOCs at the appropriate SEMS level.

- Emergency Facilities used for Mutual Aid

Incoming mutual aid resources may be received and processed at several types of facilities including: marshaling areas, mobilization centers and incident facilities. Each type of facility is described briefly below.

**Marshaling Area:** Defined in the Federal Response Plan as an area used for the complete assemblage of personnel and other resources prior to their being sent directly to the disaster affected area. Marshaling areas may be established in other states for a catastrophic California earthquake.

**Mobilization Center:** Off-incident location at which emergency service personnel and equipment are temporarily located pending assignment, release or reassignment. For major area-wide disasters, mobilization centers may be located in or on the periphery of the disaster area.

**Incident Facilities/Staging Areas:** Incoming resources may be sent to staging areas, other incident facilities or directly to an incident, depending on the circumstances. Staging areas are temporary locations at an incident where personnel and equipment are kept while awaiting tactical assignments.

- Policies and Procedures

Mutual aid resources will be provided and utilized in accordance with the California Master Mutual Aid Agreement and supporting separate agreements.

During a proclaimed emergency, inter-jurisdictional mutual aid will be coordinated at the appropriate Operational Area or Mutual Aid Regional level whenever the available resources are:

- Subject to state or federal control
- Subject to military control
- Located outside the requesting jurisdiction
- Allocated on a priority basis

Due to the incompatibility of radio communications equipment between most agencies, local agencies should, where possible, provide incoming mutual aid forces with portable radios using local frequencies.

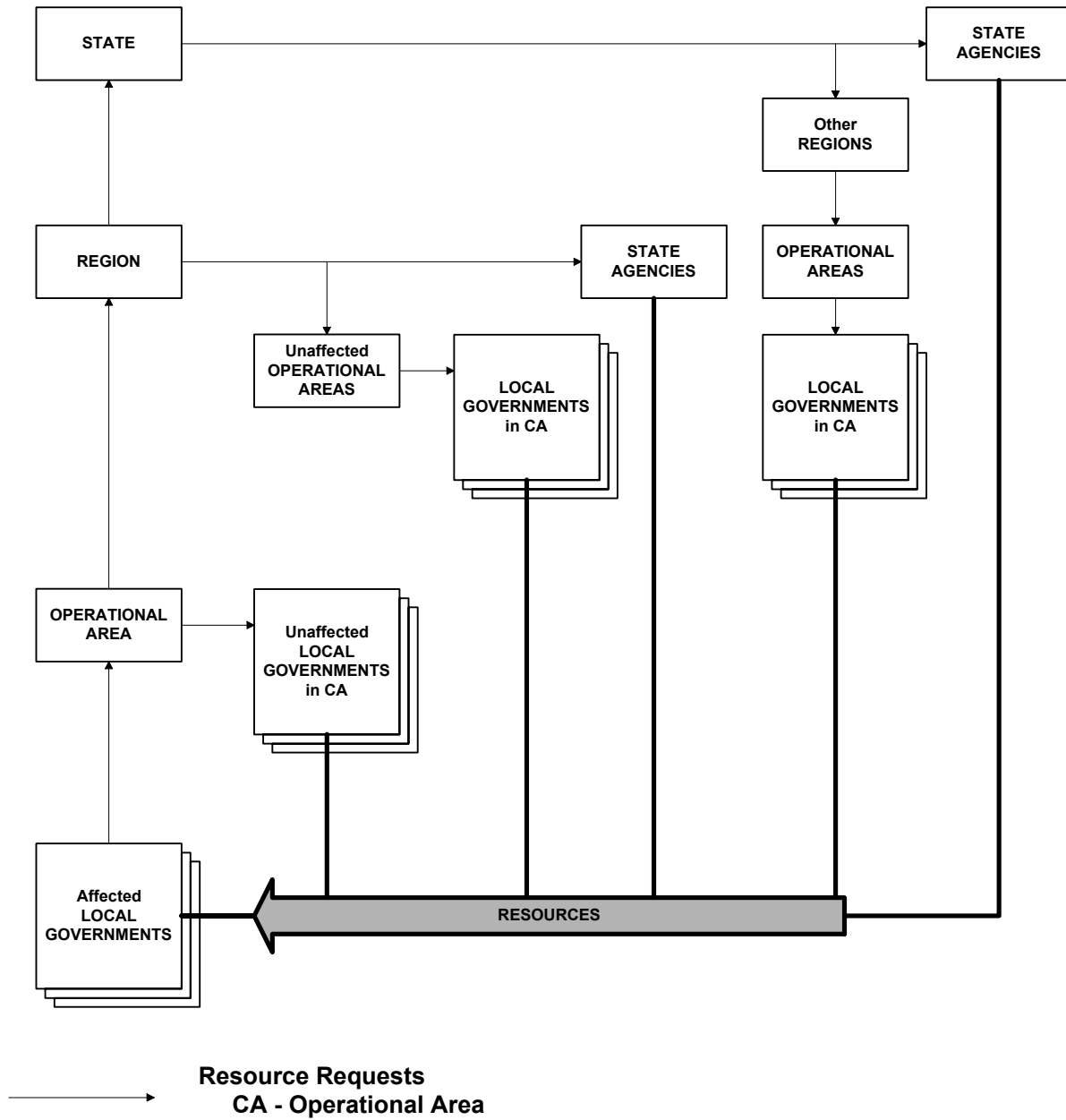
Requests for and coordination of mutual aid support will normally be accomplished through established channels (cities to Operational Areas, to Mutual Aid Regions, to State). Requests should include, as applicable:

- Number of personnel needed
  - Type and amount of equipment
  - Reporting time and location
  - Authority to whom they are to report
  - Access routes
  - Estimated duration of operations
- References
    - Mutual aid assistance may be provided under one or more of the following authorities:
      - California Fire and Rescue Emergency Plan
      - California Law Enforcement Mutual Aid Plan
      - Local Mutual Aid Agreement
      - Federal Disaster Relief Act of 1974 (Public Law 93-288) (Provides federal support to state and local disaster activities.)
  - Authorities and References
    - Mutual aid assistance may be provided under one or more of the following authorities:
      - California Master Mutual Aid Agreement
      - California Fire and Rescue Emergency Plan
      - California Law Enforcement Mutual Aid Plan
      - Robert T. Stafford Disaster Relief and Emergency Assistance Act (Public Law 93-288, as amended)—provides federal support to state and local disaster activities

# Chart 1

## MUTUAL AID SYSTEM FLOW CHART

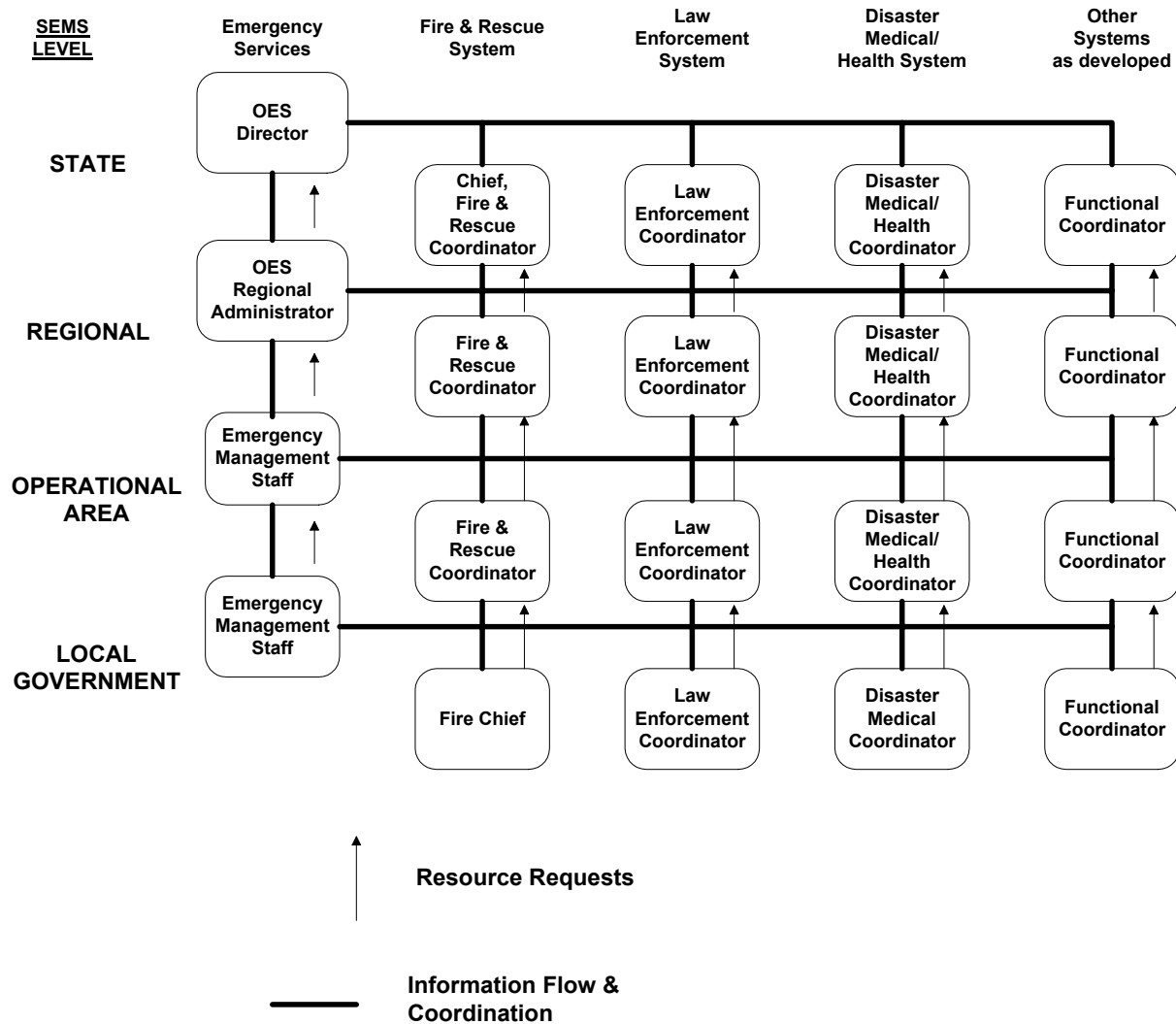
### Mutual Aid System Concept: General Flow of Requests and Resources



## Chart 2

# MUTUAL AID COORDINATORS FLOW CHART

### Discipline-specific Mutual Aid Systems



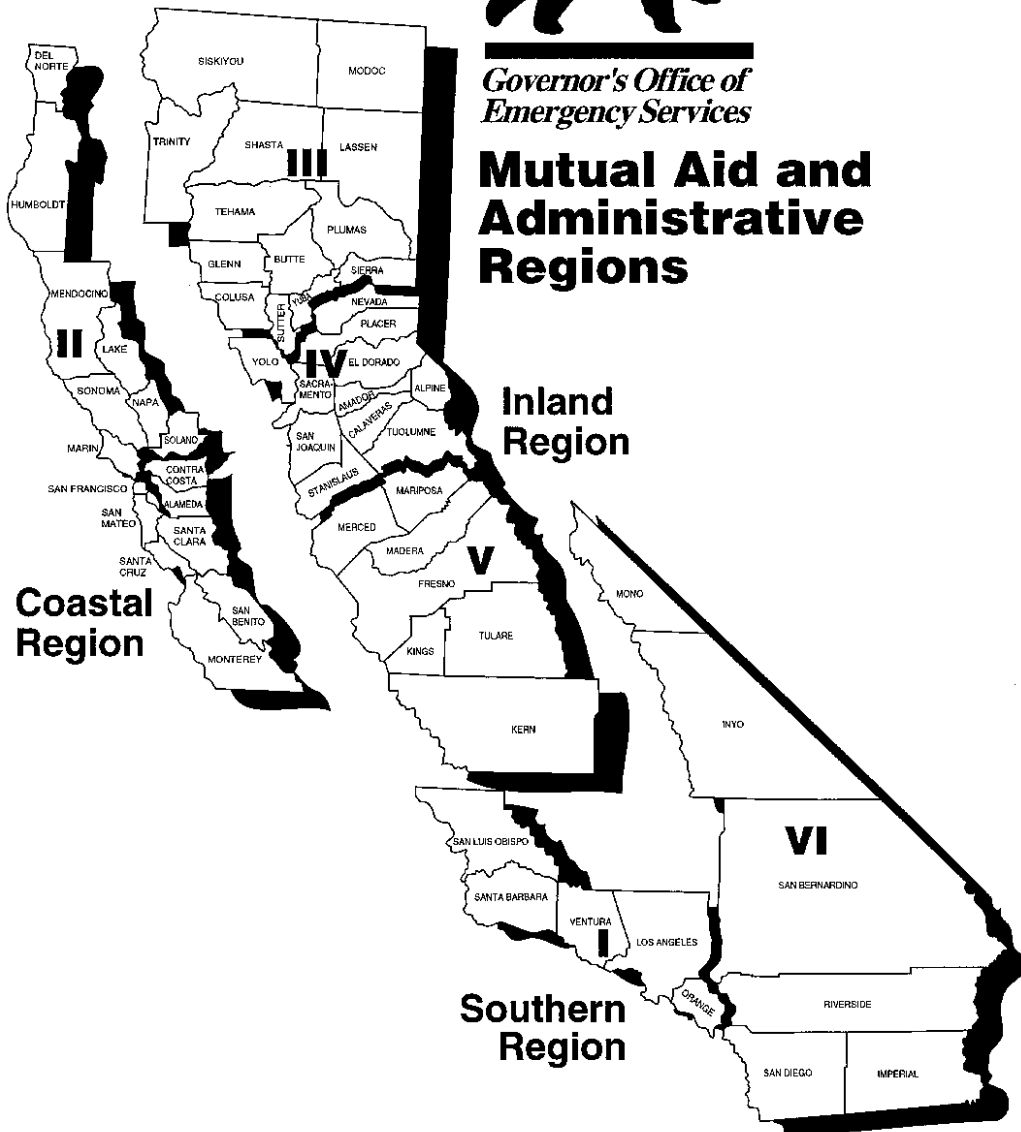
# CHART 3

## STATE MUTUAL AID REGION MAP



*Governor's Office of  
Emergency Services*

### Mutual Aid and Administrative Regions





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## **PART ONE, SECTION FIVE (LEPG-9 & 11)**

# **THREAT SUMMARY FOR THE SANTA BARBARA OPERATIONAL AREA**

The Santa Barbara Operational Area recognizes that the planning process must address each hazard that threatens Santa Barbara County. There are three broad categories of hazards: natural, technological or man-made and national security.

The Santa Barbara Operational Area is located within Region I, Southern Administrative Region of State Office of Emergency Services. It is located at 4671 Liberty Avenue, Los Alamitos, CA 90730-5158. Santa Barbara County has a residential population of 405,000 and is bordered on the South by Ventura County, the North by San Luis Obispo, and to the East by Kern County. The County consists of 2,774 square miles with one-third of the County located in the Los Padres National Forest.

The County has eight incorporated cities: Santa Barbara City, Santa Maria, Goleta, Lompoc, Carpinteria, Guadalupe, Solvang, and Buellton. The largest cities in the County and their respective populations are Santa Barbara City, the County Seat, at 91,200; Santa Maria at 70,800; Lompoc at 42,300; and Goleta at 69,000. The unincorporated area, with a population of 170,000, is comprised of several communities. The largest employment categories in the County include services wholesale and retail trades, public administration, education, and manufacturing. The mild climate, picturesque coastline, and numerous parks and beaches make the County a popular tourist and recreational area.

The City of Santa Barbara is widely known as a beautiful and prosperous community. The physical setting of the City has shaped its past and will have important implications for its future. Sheltered from severe weather by the Channel Islands, which lie parallel to the coast, the City has matured in a basin located at the approximate center of a narrow east-west trending coastal shelf, with the Santa Ynez Mountains to the north and sandy beaches and coastal bluffs to the south. Encompassing 10,741 acres, the predominant land use within the City is residential.

Santa Barbara County has had 11 disaster declarations, 10 for winter storm flooding and one for a wildfire. Flood insurance maps were last updated in June 1997. The County has a rating of 8 in the Community Rating System under the National Flood Insurance Program (NFIP), and the flood plain management staff and programs are considered to be excellent. There are 2,462 buildings in the special flood hazard area. Santa Barbara County is a Seismic Zone 4 earthquake area and has one of the highest earthquake risks in the State, equivalent to Oakland on the Hayward fault. The County has a significant urban/wildfire interface and forest fire hazard.

This Section of the Basic Plan (Part One) consists of a series of threat assessments, which describe the risks and the anticipated nature of the situation.

- An earthquake could impact either segments of or the total population.

- The County does have industry and is therefore affected by stationary hazardous materials users. However, many major highways and rail lines traverse or pass near the County and transportation incidents (including hazardous material incidents) as well as pipeline ruptures or illegal dumping could affect the County.
- The cities of Lompoc, Santa Barbara and Carpinteria are subject to dam failure, with portions of Santa Maria, Buellton, and Solvang also subject to dam failure.
- Portions of the County may be subject to flooding, due to flash flooding, urban flooding (storm drain failure/infrastructure breakdown), river channel overflow, downstream flooding, etc.) The County has historically been vulnerable to storm surge inundation associated with tropical storms.
- A transportation incident such as a major air crash, train derailment or trucking incident could impact areas within the County.
- A civil unrest incident could impact areas within a City or the entire County
- An act of terrorism could impact areas of the County

Any single incident or a combination of events could require evacuation and/or sheltering of the population. Depending on the event, there may be a requirement for sheltering in place or evacuating to a designated reception center or shelter within the jurisdiction or outside the jurisdiction's boundaries.

During the response phase, the Santa Barbara County Operational Area is the coordination and communication point. Access to the Santa Barbara County Operational Area EOC is the County Employee University, 267 Camino del Remedio, Santa Barbara, CA 93110. The alternate Operational Area EOC is the County Fire Department Headquarters at 4410 Cathedral Oaks Road, Santa Barbara, CA 93110. The Operational Area also has access to the County OES Mobile Command Unit, which can be placed in any location deemed accessible by the Safety Officer.

The following threat assessments identify and summarize the hazards that could impact Santa Barbara County.

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## **PART ONE, SECTION FIVE THREAT ASSESSMENT 1-A,**

### **MAJOR EARTHQUAKE**

#### **GENERAL**

The County of Santa Barbara has numerous faults that are located both on- and offshore. These faults have been relatively inactive in recent historic times, but potentially can produce a major earthquake greater than the one that caused considerable destruction throughout the County of Santa Barbara in 1812. Another source of earthquake damage in this area is the southern portion of the San Andrea's Fault (see Figures 1, Faults In California Northwest Region, page 40 ).

A large magnitude (Richter) earthquake will occur in the near future and could result in some areas of Santa Barbara County receiving a shaking intensity of approximately 10 on the Modified Mercalli Intensity Scale (See Attachment A, page 42). The intensity of this anticipated earthquake could cause devastation beyond anything recently experienced in this area and would require total integrated planning and response from both the public and private sectors in order to minimize deaths, injuries, and property destruction. Extensive search and rescue operations would be required to assist trapped or injured persons. Injured or displaced persons would require emergency medical care, food and temporary shelter. Identification and burial of many dead would pose difficult problems; public health would be a major concern. Mass evacuation may be essential to saving lives. Many families would be separated particularly if the earthquake should occur during working hours, and a personal inquiry or locator system could be essential to maintaining morale. Emergency operations could be seriously hampered by the loss of communications and damage to transportation routes within, to and from the disaster area and by the disruption of public utilities and services.

The economic impact on Santa Barbara County from a major earthquake would be considerable in terms of loss of employment and loss of tax base. Also, a major earthquake could cause serious damage and/or outage of computer facilities. The loss of such facilities could curtail or seriously disrupt the operations of banks, insurance companies and other elements of the financial community. In turn, this could affect the ability of local government, business and the population to make payments and purchases.

#### **SPECIAL SITUATION**

Horizontal movement will probably occur along a 240-mile segment of the San Andreas Fault. There would be extensive shock waves felt throughout Central and Southern California. Numerous aftershocks following the initial earthquake would compound the damage caused by the first event. Although the San Andreas fault is outside of Santa Barbara County, the effect of the shock would be felt throughout the area. Damage in these areas with a high water table could be compounded by soil liquefaction. (See Figure 2, Earthquake Hazard of the Santa Barbara Fold Belt, page 41)

In addition to the San Andreas Fault, local faults can and have been the source of major or severe earthquakes (see Figure 4, page X). The Mesa Fault was implicated in the 1925 Santa Barbara Earthquake (magnitude 6.3). The Arguello Fault is thought to have caused the 1812 earthquake (estimated magnitude 8.0). The moderate but locally damaging Goleta Earthquake (1978, magnitude 5.1) was caused by an unnamed offshore fault. The Santa Ynez Fault has not moved in historic times but can potentially produce a magnitude 7 to 8 earthquake. Unrecognized faults may exist that will be discovered after the event.

### **CASUALTIES**

Current studies predict the total number of deaths and hospitalized injuries only for the Los Angeles area. Extrapolation of these figures to Santa Barbara County would be scientifically unsound.

However, some generalities might apply. The number of casualties would vary with the time of day, the smallest number occurring when people are in their homes and the largest number occurring when people are at or in route to work or school.

The potential hazards that Santa Barbara County may face in an earthquake include the following:

### **LONG-TERM HOMELESS**

In the South Coast area, many homes would be uninhabitable because of structural damage and utility outage. This number includes 200-300 uninhabitable homes within Santa Barbara City. The immediate physical, emotional, social impact on the populace would be varied and complex. In the hardest hit areas, there could be numerous dead and injured. Many would have their homes destroyed; others would be driven from their homes through structural damage, lack of water, lack of power, leaking gas, etc. If the quake were to occur during the daytime, there would be considerable emotional stress caused by the separation of family members. Even in areas of moderate or minor damage, there would be shortages of electrical power and water. There is a high probability that phone service would be unavailable and that the initial lack of information to be disseminated by the news media would increase the confusion and feeling of panic.

### **DAMAGE TO VITAL PUBLIC SERVICES, SYSTEMS, AND FACILITIES**

#### Highways

##### U.S. 101

Highway 101 could be blocked by slides at the Rincon and Gaviota Pass areas. Considerable damage to road surfaces, overpasses and bridges would be expected in all areas of liquefaction.

##### Highway 154

San Marcos Pass could be blocked by slides at several locations.

##### Highway 150

Highway 150 to Ojai could be impassable because of numerous slides.

### Airports

#### Santa Barbara

The City of Santa Barbara operates the Santa Barbara Airport. It would be seriously affected due to its location in an area that is subject to liquefaction because of the deep soil and a high water table. It is questionable whether the airport would be used for any major logistical re-supply except by helicopter.

#### Santa Ynez Airport

The Santa Ynez Airport is county owned and operated by the Santa Ynez Airport Authority. They can handle small general aviation aircraft.

#### Lompoc Airport

The Lompoc Airport is city owned and operated. They can handle small general aviation aircraft. There is presently no fueling capability.

#### Santa Maria Airport

The Santa Maria Airport is city owned and operated. They can handle small general aviation aircraft.

### Railroad

Railroad service would be disrupted by surface ruptures, landslides, rockfalls, failures of overpasses, and slides at the end of tunnels. It is doubtful that rail service to Santa Barbara County could be restored in less than 8 to 10 days.

### Marine

The City of Santa Barbara operates the harbor facilities. Santa Barbara Harbor would suffer considerable damage to slips and vessels. Depending on the earthquake intensity, the Harbor or local ramp areas could be capable of receiving limited quantities of re-supply by ships.

### Communications

#### Telephone Systems

Any surviving telephone service would be overloaded by calls from both inside and outside the area.

#### Radio Systems

Public Safety (Fire, Police, Public Works, and Emergency Services) radio systems would survive to varying extents and function within the local area. Microwave channels would probably be disrupted.

## **COMMERCIAL BROADCASTERS**

Lack of emergency power would restrict the operation of television and radio stations. The scarcity of fuels, and the unavailability of re-supply would limit the operational time

of emergency generators. Necessary repair parts would be difficult to find and even more difficult to transport to the place of need.

### **WATER SUPPLY AND WASTE DISPOSAL**

An earthquake with a shaking intensity of 8.0 could seriously disrupt the water distribution system, if not shut down completely. Considerable difficulties would be expected in transporting water from any of the local dams to the Carpinteria area of distribution. The local wells might stop functioning and would be totally inadequate for the required water supply.

The wastewater treatment plants would probably suffer some damage and could be inoperative. Lack of electrical power would also cause plant shutdown. Collection lines throughout the area could be impaired causing significant contamination problems.

### **ELECTRICAL POWER**

A short term and a potentially long-term effect of an earthquake would be major outages and power reductions in most areas of the South Coast. Those lines that remain intact might be rendered temporarily out of service with each aftershock. The major long-term impact would be on distant power sources, both due to the reduction in transmission capacities and the probable shortage of generator fuel.

### **NATURAL GAS**

Damage to natural gas facilities will consist primarily of (a) some isolated breaks in major transmission lines, and (b) innumerable breaks in mains and individual service connections within the distribution systems, particularly in the areas of intense ground shaking. These many leaks in the distribution system will affect a major portion of the urban areas, resulting in a loss of service for extended periods. Fires are a probability and should be expected at the sites of a small percentage of ruptures both in the transmission lines and the distribution system. Transmission pipelines serving the general basin area are most vulnerable to damage.

### **PETROLEUM FUELS**

The availability of petroleum fuels in the processing plants in the area is unlikely. Oil and gas processing facilities in Santa Barbara County transport product offsite for refining into commercial products. Extremely serious consequences could result due to the inability to re-supply fuels by land transport.

### **LIQUEFACTION**

Many areas may have buildings destroyed or unusable due to the phenomenon of liquefaction. Liquefaction is a phenomenon involving the loss of shear strength of a soil. The shear strength loss results from the increase of pore water pressure caused by the rearrangement of soil particles induced by shaking or vibration. Liquefaction has been observed in many earthquakes, usually in soft, poorly graded granular materials (i.e., loose sands), with high water tables. Liquefaction usually occurs in the soil during or

shortly after a large earthquake. In effect, the liquefaction soil strata behave as a heavy fluid. Buried tanks may float to the surface and objects above the liquefaction strata may sink. Pipelines passing through liquefaction materials typically sustain a relatively large number of breaks in an earthquake.

Emergency response actions associated with the above situations are presented in the Standard Operating Procedures (SOP) at the County's Office of Emergency Services.



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## **ATTACHMENT A**

### **MODIFIED MERCALLI INTENSITY SCALE**

- I** Not felt. Marginal and long-period effects of large earthquakes.
- II** Felt by persons at rest, on upper floors, or favorably placed.
- III** Felt indoors. Hanging objects swing. Vibration like passing of light trucks. Duration estimated. May not be recognized as an earthquake.
- IV** Hanging objects swing. Vibration like passing of heavy trucks; or sensation of a jolt like a heavy ball striking the walls. Standing motor cars rock. Windows, dishes, doors rattle. Glasses clink. Crockery clashes. In the upper range of IV, wooden walls and frames creak.
- V** Felt outdoors; direction estimated. Sleepers wakened. Liquids disturbed, some spilled. Small unstable objects displaced or upset. Doors swing, close, open. Shutters, pictures move. Pendulum clocks stop, start, change rate.
- VI** Felt by all. Many frightened and run outdoors. Persons walk unsteadily. Windows, dishes, glassware broken. Knickknacks, books, etc., off shelves. Pictures off walls. Furniture moved or overturned. Weak plaster and masonry D cracked. Small bells ring (church, school). Trees, bushes shaken (visibly, or heard to rustle).
- VII** Difficult to stand. Noticed by drivers of motor cars. Hanging objects quiver. Furniture broken. Damage to masonry D, including cracks. Weak chimneys broken at roof line. Fall of plaster, loose bricks, stones, tiles, cornices (also unbraced parapets and architectural ornaments). Some cracks in masonry C. Waves on ponds; water turbid with mud. Small slides and caving in along sand or gravel banks. Large bells ring. Concrete irrigation ditches damaged.
- VIII** Steering of motor cars affected. Damage to masonry C; partial collapse. Some damage to masonry B; none to masonry A. Fall of stucco and some masonry walls. Twisting, fall of chimneys, factory stacks, monuments, towers, elevated tanks. Frame houses moved on foundations if not bolted down; loose panel walls thrown out. Decayed piling broken off. Branches broken from trees. Changes in flow or temperature of springs and wells. Cracks in wet ground and on steep slopes.
- IX** General panic. Masonry D destroyed; masonry C heavily damaged, sometimes with complete collapse; masonry B seriously damaged. (General damage to foundations.) Frame structures, if not bolted, shifted off foundations. Frames cracked. Serious damage to reservoirs. Underground pipes broken. Conspicuous

cracks in ground. In alluvial areas, sand and mud ejected, earthquake fountains, sand craters.

- X Most masonry and frame structures destroyed with their foundations. Some well-built wooden structures and bridges destroyed. Serious damage to dams, dikes, embankments. Large landslides. Water thrown on banks of canals, rivers, lakes, etc. Sand and mud shifted horizontally on beaches and flat land. Rails bent slightly.
- XI Rails bent greatly. Underground pipelines completely out of service.
- XII Damage nearly total. Large rock masses displaced. Lines of sight and level distorted. Objects thrown into the air.

### **Definition of Masonry A, B, C, D:**

**Masonry A:** Good workmanship, mortar, and design; reinforced, especially laterally, and bound together by using steel, concrete, etc.; designed to resist lateral forces.

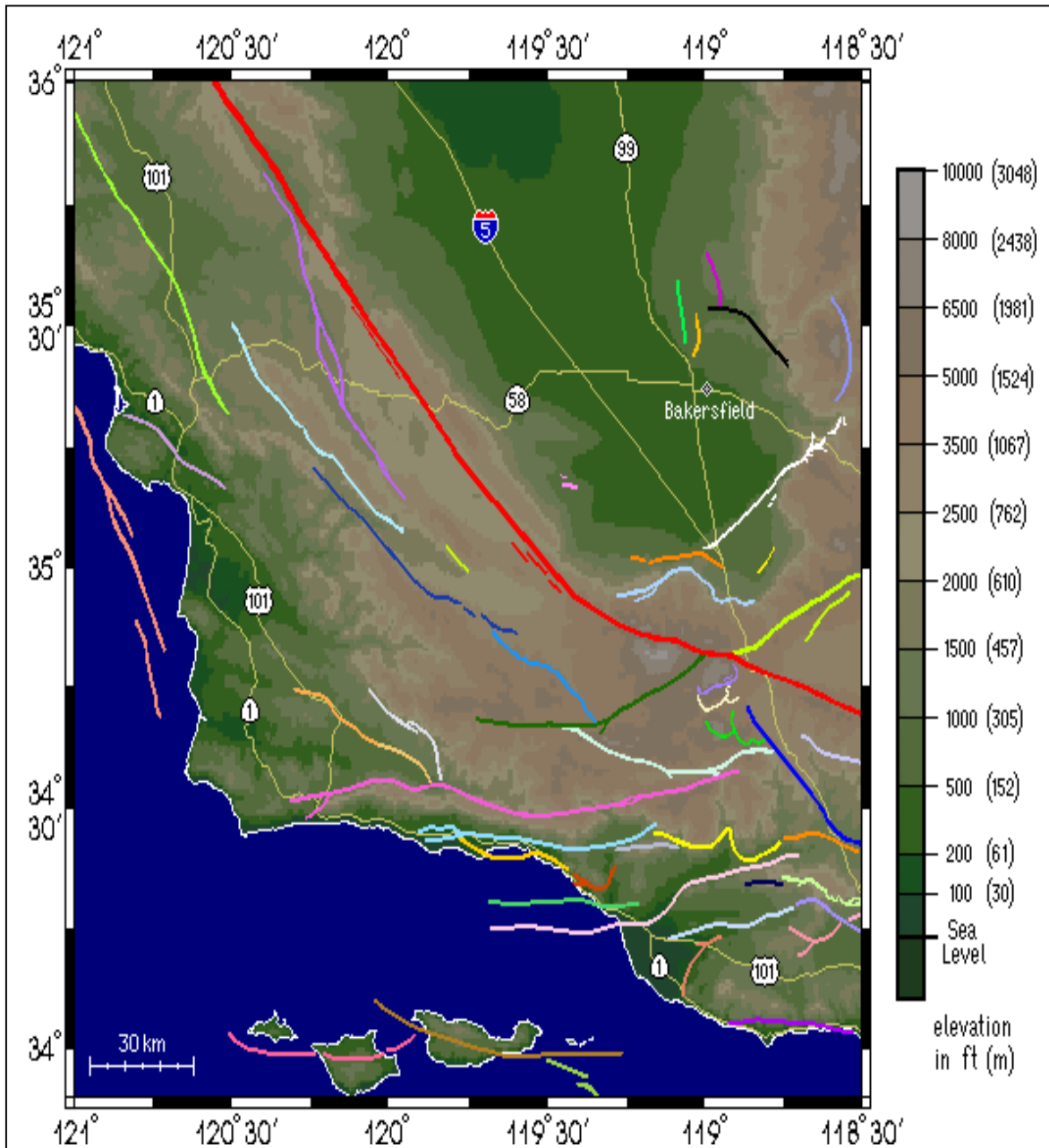
**Masonry B:** Good workmanship and mortar; reinforced, but not designed in detail to resist lateral forces.

**Masonry C:** Ordinary workmanship and mortar; no extreme weaknesses like failing to tie in at corners, but neither reinforced nor designed against horizontal forces.

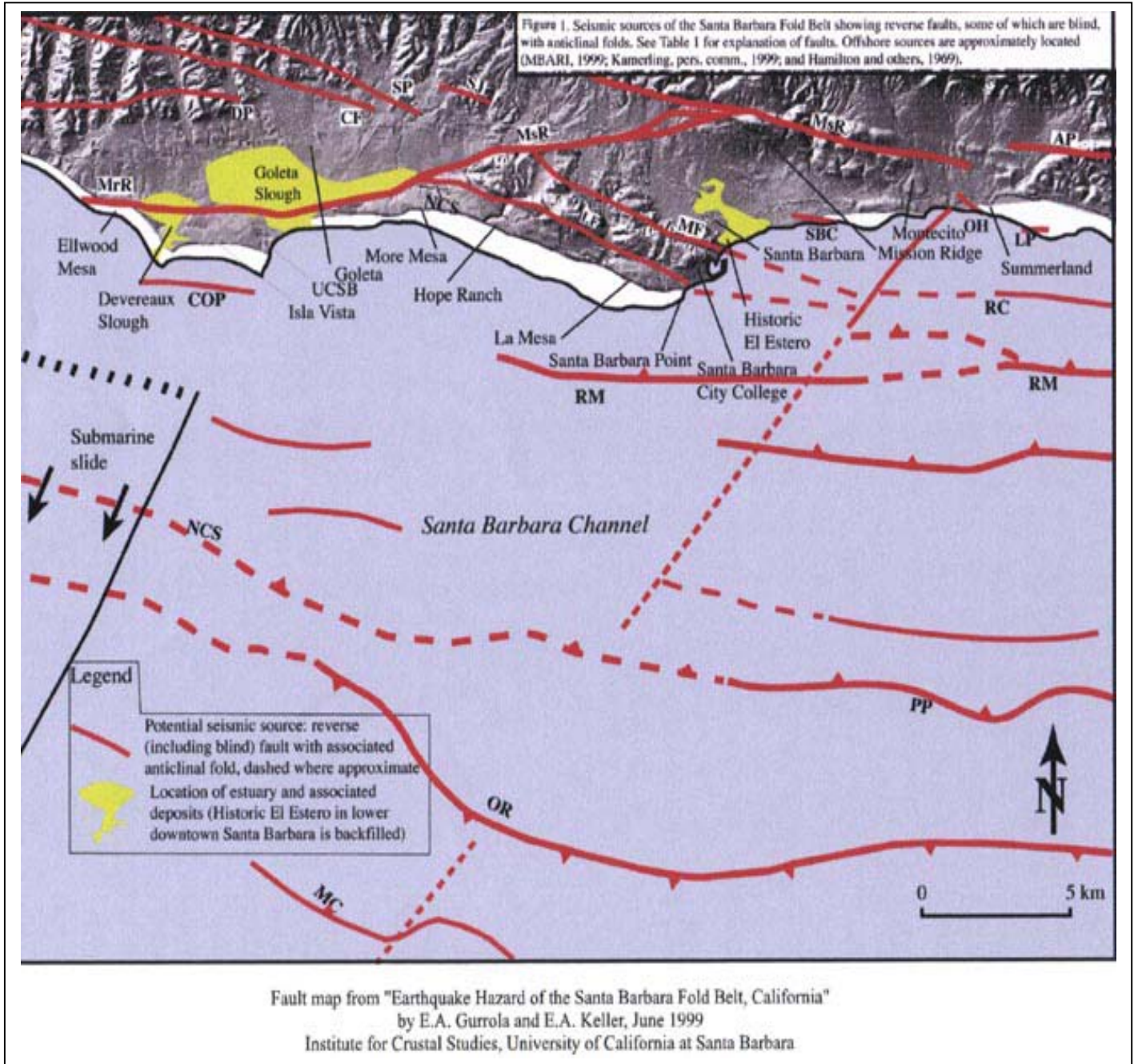
**Masonry D:** Weak materials, such as adobe; poor mortar; low standards of workmanship; weak horizontally

Figure 1

## FAULTS IN CALIFORNIA NORTHWEST REGION



## Figure 2 EARTHQUAKE HAZARDS OF THE SANTA BARBARA FOLD BELT



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## **PART ONE, SECTION FIVE THREAT ASSESSMENT 1-B**

### **MAJOR EARTHQUAKE: PREDICTION RESPONSE**

In California, the State OES is the designated recipient of earthquake assessments from the scientific community. The OES relies upon the California Earthquake Prediction Evaluation Council to advise it on the scientific credibility and validity of earthquake predictions and to assess the circumstances surrounding seismic activity that may be precursory to a damaging earthquake.

For operational purposes, a scientifically based earthquake prediction shall include the expected time, place, magnitude and probability of occurrence.

Conclusions and consequent advice to the State OES by the California Earthquake Prediction Evaluation Council may trigger massive complex, expensive, emotional and politically sensitive governmental, private and international measures to mitigate the expected effects of the predicted event.

All Santa Barbara Operational Area jurisdictions have specific emergency procedures documented in their SEMS Multi-Hazard Functional Plan and/or copy of the State's Short Term Earthquake Prediction Response Plan. Any additional activity within a jurisdiction based upon the prediction or other State action is to be undertaken at the discretion of the jurisdiction.

#### **GENERAL SITUATION**

The California Earthquake Prediction Evaluation Council (CEPEC) role grew out of a recognized need to deal with earthquake and volcanic predictions from a variety of sources that were given widespread attention. State OES needed an independent expert review group to evaluate these predictions in order to advise the Governor on what actions should be recommended or taken.

Established under provisions of the Government Code, operating guidelines are in existence to assist the California Earthquake Prediction Evaluation Council in fulfilling its responsibilities and are included as Section III of the State's Short Term Earthquake Prediction Response Plan.

#### **SPECIAL SITUATION**

The State's Short Term Earthquake Prediction Response Plan is one element of the State earthquake-planning program and has been developed to meet the following objectives:

- Procure and allocate essential resources (personnel and material) to support emergency operations.
- To describe an overall concept of operations for the State and to identify State agency internal readiness actions and State actions to support local jurisdictions.

- To incorporate responses associated with factors of probability, magnitude, time frame and risk.
- To identify actions that could realistically be accomplished within a few hours to a few days.
- To be consistent with other State emergency plans and current planning concepts.

The State plan is applicable to State agencies with emergency response assignments and to State agencies that maintain personnel and facilities within the area of risk. Of particular importance to the State plan are those departments and agencies of the state that:

- Have emergency public safety functions associated with their activities.
- Have personnel and equipment resources potentially at risk in the immediate area of the prediction.
- Maintain facilities, which if damaged could threaten the public safety (e.g., dams).
- Perform emergency public safety or other functions for local governments under contract within the affected area.
- Maintain field offices within cities and counties that are used by the general public and where State response actions will be observable.

Glossary of Prediction Terminology

Long Term Earthquake Potential

No specific time window. May refer to decades, centuries or millennia.

Long Term Prediction

A prediction of an earthquake that is expected to occur within a few years up to a few decades.

Intermediate Term Prediction

A prediction of an earthquake that is expected to occur within a period of a few weeks to a few years.

Short Term Prediction

A prediction of an earthquake that is expected to occur within a few hours to a few weeks. The short term prediction can be divided as follows:

- Imminent Alert           Up to three days.
- Alert                        Three days to a few weeks.

Probability

The following terms and percentages are suggested:

<u>General Predictions</u>		<u>Parkfield</u>	
Slight	10% or Less	Level C	2.8% to 11%
Moderate	11% to 49%	Level B	11% to 37%
High	50% to 100%	Level A	37% or more

### Earthquake Advisory

Advisories are not formal predictions, but are issued following earthquakes in which there is concern about subsequent damaging earthquakes. They are statements by State OES regarding scientific assessments that within a specified period, usually 3 - 5 days, there is an enhanced likelihood for damaging earthquakes to occur in areas designated in the advisory. The basis for advisories is existing knowledge of the seismic history and potential of the area under consideration.

### Concept of State Operations

Information about the earthquake prediction will be provided in a timely manner to the Director of State OES through the CEPEC. Upon receipt from CEPEC of a validated prediction of a damaging earthquake, the Director of State OES or designee will notify the Governor's office.

The Director of state OES has the authority for the implementation of the State Short Term Earthquake Prediction Response Plan. Timing decisions associated with the implementation and decisions regarding the level of implementation of the plan will be at the discretion of the Director or designee, unless otherwise determined by the Governor. The Director may decide not to implement the plan if the probability and consequence factors are so low that a response is not warranted.

For responding to a validated earthquake prediction, three conditions of readiness have been established and have been designated as follows:

- Earthquake Prediction Readiness Condition One.
- Earthquake Prediction Readiness Condition Two.
- Earthquake Prediction Readiness Condition Three.

Condition Three represents the highest level of readiness. For State agencies, a number of recommended actions are associated with each of the conditions.

The Director of State OES will determine the appropriate Readiness Condition to implement based on an evaluation of the probability of occurrence and the consequences to the State that might result if the earthquake should occur.

If the situation warrants, the Director of State OES may recommend the Governor issue a warning and proclaim a State of Emergency in the area at risk. If the Governor agrees, the Director of State OES will then assist the Governor in the direction and coordination of the response of State departments and agencies.

### State Notification Process

State OES will notify State departments and agencies and local governments of all validated earthquake predictions through a telephone and radio fan-out process. The method of contact will vary depending upon the availability of communications. Systems to be used may include,



but not be limited to the CALWAS, CLETS the State Relay Network and commercial telephone services.

Information on the prediction will be disseminated in the form of an earthquake advisory. Earthquake advisories will include information on the location, magnitude, time frame, probability of occurrence and other pertinent information. The Earthquake Prediction Readiness Condition will be given as a part of the advisory to indicate what actions should be taken.

### **State Agency Response**

Upon notification of plan implementation from State OES, State departments and agencies will take those actions associated with the readiness condition and implement any additional internal departmental plans and procedures, which are appropriate for the level of implementation, directed by state OES.

The response actions, which are described within this plan for State agencies, may be classified under the following categories:

- Dissemination of information and warnings.
- Acceleration of normal preparedness and mitigation measures.
- Increasing readiness to respond.
- Implementing emergency protective and mitigative actions.
- Initiating emergency response actions.

State agencies will support local government prediction response operations by providing personnel and equipment in support of aid requests as directed by the State OES Director.

### **State Public Information and Warning Dissemination**

The policy of State OES is to disclose available information on earthquake predictions to local governments and State agencies as rapidly as possible. State OES will provide earthquake prediction advisories to State agencies and the Santa Barbara Operational Area on a nearly simultaneous basis. It is the responsibility of state OES to provide information to members of the Santa Barbara Operational Area, other local agencies and to coordinate information released to the general public on actions to be taken.

State OES also will provide information about the prediction to the media. OES will provide advisories to the Santa Barbara Operational Area prior to any public announcements. OES also will coordinate with the Santa Barbara Operational Area and with the U.S. Geological Survey concerning State level public information activities.

### **Santa Barbara Operational Area**

When notified of a short term earthquake prediction or of possible precursory activity, the operational area has the responsibility to bring its resources to an appropriate readiness state; to inspect and prepare those facilities and systems which are essential to conduct emergency operations and to advise and provide guidance to the public on precautions and actions appropriate to the prediction.

Sometimes information may be received through the media or other sources about an earthquake prediction or precursory activity which may impact the operational area before receiving official notification from State OES. Each jurisdiction member within the operational area should be prepared to take appropriate actions they determine to be required in such circumstances.

### **Notification**

Under state plan conditions, the state Warning Center in Sacramento will notify Public Safety Dispatch, Santa Barbara County Sheriff's Department of validated earthquake predictions, including changes in the level of Parkfield Alert. This may be by the CALWAS, CLETS, State Relay Network or commercial telephone services.

Notification is to include information on the location, magnitude, time frame, probability of occurrence and other pertinent information and the earthquake prediction readiness condition in effect at the State level.

Dispatch in turn will notify the Office of Emergency Services Staff Duty Officer. Notification by telephone to the Office of Emergency Services also is given by Region I Headquarters.

The County Fire/OES Duty Officer will request Sheriff's Public Safety Dispatch notify all emergency service agencies, i.e., emergency medical, fire and law enforcement within the operational area of earthquake predictions Readiness Condition Two or Three or a change in Parkfield status from Level C to Level B or A.

Concurrently, County Fire/OES will notify Santa Barbara Operational Area Emergency Services Council members and Coordinators, as well as appropriate County staff designated in the County Emergency Directory, for earthquake predictions Readiness Conditions One, Two or Three or a change in Parkfield status from Level C to Level B or A. It also includes notification of other governmental or private organizations with whom the operational area has a working relationship or safety related responsibilities, i.e., schools via the County Superintendent of Schools, the Santa Barbara County Chapter of American Red Cross, hospitals via the Emergency Medical Services Agency, Amateur Radio Emergency Service, etc.

### **Notification Procedure**

- **Sheriff Dispatch**
  - County Fire / OES Staff Duty Officer
  - Advise that no further action is required, or to begin applicable notifications as determined by Director, County Fire / OES
- **Staff Duty Officer**
- **Director - Office of Emergency Services**

Determine:

  - Need to notify all emergency service agencies, i.e., fire, law, medical.

- Need to notify other county staff.
- Need to notify County Administrator.
- Extent of other notifications and means of notification.
- Whether EOC should be activated.
- **Sheriff Dispatch**  
Advise that no further action is required, or to begin applicable notifications as determined by Director, county Fire/OES
- **Public Information Officer**  
Provide briefing based upon discussions with Director.
- **OES Coordinator**  
Provide briefing request notification to Emergency Services Coordinators.
- **Other County Fire/OES Staff**  
Provide briefing and if necessary request county Fire/OES staff to report to work at designated locations.

Emergency response action associated with the above situations are presented in the Standard Operating Procedures (SOP).

# **PART ONE, SECTION THREAT ASSESSMENT 2, PART ONE HAZARDOUS MATERIAL INCIDENT**

## **GENERAL SITUATION**

Hazardous materials are any substance or combination of substances, which because of quantity, concentration, or characteristics may cause or significantly contribute to an increase in death or serious injury, or pose substantial hazards to humans and/or the environment. The production and use of these hazardous materials is a part of our society over which local governments have little control.

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 hazardous chemical dangers. Incidents may occur at fixed facilities where, most likely, the occupants have filed site specific emergency response contingency and evacuation plans. However incidents may also occur at any place along any land, water or air transportation routes, and (in event of vessel mishaps, aircraft accidents, misuse of agricultural chemicals and illegal dumping) may occur in unpredictable areas, relatively inaccessible by ground transportation.

The increasing volume and variety of hazardous materials that are generated, stored, or transported within Santa Barbara County is a problem of great concern to public officials and the community. A major hazmat accident and/or spill could endanger the health and safety of untold numbers of men, women and children who may be within a mile of the accident scene. A number of trains cross through the County hauling various types of hazardous and explosive materials. Several fixed site industrial firms require potentially hazardous materials to operate their businesses. In addition, there are numerous underground pipelines that carry flammable and hazardous liquids. Finally, commercial airliners fly over the County that significantly increases the potential disaster threat.

## **SPECIAL SITUATION**

The threat of a major hazardous material incident in Santa Barbara County exists from four different sources. These are commercial vehicle, rail and air transportation, pipeline, fixed facility, and clandestine dumping.

## **TRANSPORTATION**

### Highways:

#### U. S. 101

U. S. 101 is the primary truck route from Los Angeles to coastal central California. Materials shipped include rocket fuel, explosives, compressed and liquefied gasses, petroleum products, agricultural chemicals, industrial chemicals, and hazardous wastes.

#### Highway 154

Highway 154 is not a regular truck route but does carry traffic to the Santa Ynez Valley. Agricultural chemicals and liquefied petroleum gas are the primary problem. Hazardous wastes are banned on this road by state law but illegal operations are always possible.

### Railroad

The coast route of the Southern Pacific Railroad passes through the cities of Carpinteria and Santa Barbara. This line carries several northbound and southbound freight trains daily. Materials shipped include explosives, compressed and liquefied gasses, petroleum products, agricultural chemicals, industrial chemicals, military ordinance, radioactive materials, and hazardous wastes.

### Industrial Zones

The industries in the county are engaged in light manufacturing or assembly. Solvents, etching agents, and stored fuel are the primary problem. Some areas are constructed on a filled estero and are therefore subject to liquefaction during an earthquake. The City of Santa Barbara's Sewage Treatment plant is located in such an area.

### Airports

The Santa Barbara Airport area contains electronic component manufactures, aircraft repair shops, and specialized research facilities. Solvents, etching agents, stored fuel, and radioactive material may be encountered.

## **HAZARDOUS MATERIALS PLANNING AND COORDINATION**

### **Emergency Response Actions**

Emergency response coordination is mandated by the Health and Safety Code under Standards for Area Plans (6.95 HSC 25503). These Standards include provisions for pre-emergency planning and coordination among emergency responders within the jurisdiction of the administering agency. This authority is vested in OES which is the agency responsible for the development and implementation of the Santa Barbara County Hazardous Materials Emergency Response Plan (Area Plan). In addition, the cities within Santa Barbara County should have hazardous materials response information in their emergency plans, which include emergency response actions. In Santa Barbara County,

County Fire – OES has the responsibility for emergency planning for hazardous materials incidents and for the coordination among hazardous materials emergency response agencies. The County Fire - Protection Services Division is the administering agency for the Business Plan program.

Agriculture Commissioner, Emergency Medical Services, County Fire-Protection Services Division, Public Works, Sheriff-Coroner, Fire Service, CHP, CalTrans, Fish and Game, and the University of California, Santa Barbara. OES is responsible for implementation of the Area Plan through exercises (table top, functional and full scale) and training.

### **Clandestine Dumping**

Clandestine dumping is the criminal act of disposing of toxic materials and hazardous waste on public or private property. 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.

The Santa Barbara County Area Plan is composed of the following topics listed below:

#### **EMERGENCY RESPONSE INFORMATION**

<u>Chapter</u>	<u>Subject</u>
2.0	HAZARDOUS MATERIALS INCIDENT RESPONSE CHECK LISTS
3.0	INFORMATION DIRECTORY

#### **SUPPLEMENTAL INFORMATION**

<u>Chapter</u>	<u>Subject</u>
4.0	AGENCY RESPONSIBILITIES
5.0	INCIDENT COMMAND SYSTEM
6.0	CALIFORNIA HAZARDOUS MATERIALS INCIDENT REPORTING SYSTEM
7.0	CHEMTREC IDENTIFICATION
8.0	DECLARATION OF EMERGENCIES
9.0	PUBLIC INFORMATION
10.0	EVACUATION PROCEDURES
11.0	CLEANUP FUNDING
12.0	MUTUAL AID
13.0	EMERGENCY MEDICAL RESOURCES
14.0	INCIDENT DOCUMENTATION
15.0	TRAINING
16.0	SUPPLIES AND EQUIPMENT
17.0	COMMUNICATIONS
18.0	BUSINESS PLANS

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## **PART ONE, SECTION FIVE THREAT ASSESSMENT 3-A**

### **FLOODING IMMINENT / ACTUAL FLOODING**

#### **GENERAL SITUATION**

Flooding has been a major problem throughout the history of Santa Barbara County. The County has several hydrologic basins that have different types of problems. The South Coast area, east of Santa Barbara City, which includes Montecito and Carpinteria, has historically been subject to severe flash flooding with boulder-laden flows roaring out of the canyons and causing extensive damage. The flooding problem in Montecito has been reduced with the completion of the Carpinteria Valley Watershed Project, but some threat still exists in the Montecito area. Mission Creek poses the major flood threat to Santa Barbara City. It is viewed as the most serious remaining flood threat to an urban area in Santa Barbara County. Floods occur frequently in the lower portions of the Santa Barbara City. Flooding occurs in the upper portions less frequently, but with more severe action by boulders.

#### **SPECIAL SITUATION**

Goleta Valley is subject to flooding from overflow of streams, especially in the airport area, south of Hollister Avenue. Cachuma Dam is a major reservoir on the Santa Ynez River, but has no planned flood storage. It provides an incidental benefit on small floods, but little effect on large events. The river is well confined through the Santa Ynez Valley itself. The major damage in this area is bank erosion and farmland inundation.

In Lompoc Valley, there is an extensive flood plain of the Santa Ynez River. No urban areas are affected by this flood plain except for some facilities at south Vandenberg Air Force Base. The flood plain is extensive, and during flooding, people living in the flood plain need to be evacuated. The flood warning system is in effect on the Santa Ynez River.

The watershed to the north is the Los Alamos or San Antonio watershed. Santa Antonio Creek does overflow, and has a flood potential for the community of Los Alamos, as well as farmlands to the west.

The Santa Maria watershed includes the Sisquoc and Cuyama Rivers, which come together near the town of Gary to form the Santa Maria River. The Santa Maria Valley was formerly a flood plain, but is now protected by an Army Corps of Engineers levee. This area should be safe from major river flooding as long as the levee remains intact.

Relatively minor flooding from local runoff and sheet flow is a problem in parts of the Santa Maria Valley.



The Cuyama River flows through the Cuyama Valley in the northeastern portion of Santa Barbara County and may flood farmlands. However, no urban areas in that area are subject to flooding.

Emergency response actions associated with the above situations are presented in the Standard Operating Procedures (SOP).

### **FLOOD MAPS**

Maps that identify high hazard areas such as flood plains along with their respective evacuation routes and location of public shelters are on file with the Santa Barbara Operational Area Office of Emergency Services, County Flood Control and the Santa Barbara City Public Library.

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## **PART ONE, SECTION FIVE THREAT ASSESSMENT 3-B**

### **FLOODING: DAM FAILURE (LEPG-10)**

#### **GENERAL SITUATION**

Dam inundation is defined as the flooding, which occurs as the result of structural failure of a dam. Dam failure can result from a number of natural or manmade causes. Structural failure caused by seismic activity can cause inundation by the action of a seismically induced wave which overtops the dam without causing dam failure. This action is referred to as a seiche. Other sources of dam failure are erosion of the face or foundation, improper sitting, rapidly rising floodwaters, structural/design flaws, landslides flowing into a reservoir, or terrorist actions.

There are three general types of dams: earth and rockfill, concrete arch or hydraulic fill, and concrete gravity. Each type of dam has different failure characteristics. The earth-rockfill dam will fail gradually due to erosion of the beach; a flood wave will build gradually to a peak and then decline until the reservoir is empty. A concrete gravity dam will fail somewhere in between instantaneous and gradual, with a corresponding buildup of flood wave.

In addition to the above characteristics, warning ability is generally determined by the frequency of inspections for structural integrity, the flood wave arrival time (the time it takes the flood wave to reach specific points in its inundation), or the ability to notify persons downstream and their ability to evacuate. The existence and frequency of updating and exercising an evacuation plan that is site-specific assists in warning and evacuation functions.

A dam failure will cause loss of life, damage to property, and other ensuing hazards, as well as the displacement of persons residing in the inundation path. Damage to electric generating facilities and transmission lines could also impact life support systems in communities outside the immediate hazard areas.

A catastrophic dam failure, depending on the size of dam and population downstream, could exceed the response capability of local communities. Damage control and disaster relief support would be required from other local governmental and private organizations, and from the State and Federal governments.

Evacuation of the inundation areas would be essential to save lives, if warning time should permit. Extensive search and rescue operations may be required to assist trapped or injured

persons. Emergency medical care, food, and temporary shelter would be required for injured or displaced persons. Identification and burial of the deceased would pose difficult problems; public health would be a major concern. Many families would be separated, particularly if the dam failure should occur during working hours, and a personal injury or locator system would be essential. These and other emergency operations could be seriously hampered by the loss of communications, damage to transportation routes and the disruption of public utilities and other essential services. Governmental assistance could be required and may continue for an extended period. These efforts would be required to remove debris and clear roadways, demolish unsafe structures, assist in reestablishing public services and utilities, and provide continuing care and welfare for the affected population including, as required, temporary housing for displaced persons.

### **SPECIAL SITUATION**

There are nine major dams in Santa Barbara County with known populations in their respective inundation areas. They are Alisal Creek, Bradbury, Dos Pueblos, Gibraltar, Glen Anne, Juncal, Ortega, Rancho Del Ciervo, and Twitchell.

Of prime concern is the failure of Bradbury Dam, owned by the U.S. Bureau of Reclamation. The floodwaters from this dam would affect Cachuma Village, Solvang, Buellton, Lompoc City, Lompoc Valley and south Vandenberg Air Force Base. The remaining dams, if failures should occur, could inundate portions of populated cities, town, and communities, as well as forest and agricultural lands, roads, and highways.

General information, maps or potential inundation area, and proposed evacuation routes for dams are included in a separate publication, the Dam Plan for the County of Santa Barbara.

Emergency response actions associated with the above situations are presented in the Standard Operating Procedures (SOP).

## **PART ONE, SECTION FIVE THREAT ASSESSMENT 4-A**

### **TRANSPORTATION**

#### **GENERAL SITUATION**

Transportation incidents other than those involving hazardous materials can cause great loss of property or life. This section is concerned with all other aspects of transportation incidents.

The greatest loss of life can occur when commercial passenger carriers such as trains, airliners, or buses are involved. However multiple vehicle automobile accidents can also result in a large number of injuries and fatalities. Mass casualty incidents quickly exhaust local resources and require mutual aid in order to transport and give emergency care to the victims. In those incidents involving multiple fatalities, psychological stress among the responders either at the scene or after the event can impair operations.

Highway accidents can have an impact on the community beyond those problems caused by the immediate casualties. Commerce and personal business depends on functioning transportation routes. Restoration of traffic flow through bypassing the incident site should be accomplished as soon as it is feasible.

#### **SPECIAL SITUATION**

Santa Barbara County is located in a transportation corridor. The Southern Pacific Railroad and U.S. Highway 101 carry a large volume of through-traffic daily. In addition the highway carries local traffic with volume varying with the time of day. The Santa Barbara Airport can accommodate aircraft as large as a DC-10. Scheduled airlines, private airplanes, and helicopters use various airport facilities. More information on airports is in Threat Assessment 4-B, page 57.

##### Highways

U.S. 101 is the primary highway route from Los Angeles to coastal central California. It carries truck freight, private cars, and passenger buses.

Highway 154 is not a regular truck route but does carry automobile and tour-bus traffic to the Santa Ynez Valley.

##### Railroad

The coast route of the Southern Pacific Railroad passes through the county. This line carries several northbound and southbound freight trains every day. Passenger service is

currently limited to one northbound and one southbound train daily. However, several hundred people may occupy those trains. A derailment occurred during the 1978 earthquake. In 1991, a major hazardous materials incident resulted in Ventura County from the Seacliff Incident. This derailment had major impacts to Santa Barbara County. Grade crossings exist throughout the County and could be sites for accidents.

- Aircraft

In addition to flights in and out of the municipal airports, commercial and private air traffic passes over the County. Military aircraft utilizing Vandenberg and Edwards Air Force Bases can fly over the area.

Emergency response actions associated with the above situations may be found in each government entity's emergency plan.

## **PART ONE, SECTION FIVE THREAT ASSESSMENT 4-B**

### **TRANSPORTATION: MAJOR AIR CRASH**

#### **GENERAL SITUATION**

A major air crash that occurs in a heavily populated residential area can result in considerable loss of life and property. The impact of a disabled aircraft as it strikes the ground creates the likely potential for multiple explosions, resulting in intense fires. Regardless of where the crash occurs, the resulting explosions and fires have the potential to cause injuries, fatalities and the destruction of property at and adjacent to the impact point. The time of day when the crash occurs may have a profound affect on the number of dead and injured. Damage assessment and disaster relief efforts associated with an air crash incident will require support from other local governments, private organizations and in certain instances from the state and federal governments.

It can be expected that few, if any, airline passengers will survive a major air crash. The intense fires, until controlled, will limit search and rescue operations. Police barricades will be needed to block off the affected area. The crowds of onlookers and media personnel will have to be controlled. Emergency medical care, food and temporary shelter will be required by injured or displaced persons. Many families may be separated, particularly if the crash occurs during working hours; and a locator system should be established at a location convenient to the public. Investigators from the National Transportation and Safety Board and the Santa Barbara County Coroners Office will have short-term jurisdiction over the crash area and investigations will be completed before the area is released for clean up. The clean-up operation may consist of the removal of large debris, clearing of roadways, demolishing unsafe structures and towing of demolished vehicles.

It can be anticipated that the mental health needs of survivors and surrounding residents will greatly increase due to the trauma associated with such a catastrophe. A coordinated response team, comprised of mental health professionals, should take a proactive approach toward identifying and addressing mental health needs stemming from any traumatic disaster.

It is impossible to totally prepare, either physically or psychologically, for the aftermath of a major air crash. However, since Southern California has become one of the nation's most overcrowded airspace, air crash incidents are no longer a probability but a reality. Therefore, air crash incidents must be included among other potential disasters.

#### **SPECIFIC SITUATION**

Santa Barbara City handles the greatest amount of air traffic. Other airports in Santa Barbara County are the Santa Ynez Airport, Lompoc Airport, and Santa Maria Airport. Vandenberg Air Force Base also has some air traffic.

Emergency response actions associated with the above situations may be found in each government entity's emergency plan.

## **PART ONE, SECTION FIVE THREAT ASSESSMENT 5**

### **WILDFIRE**

#### **GENERAL SITUATION**

Santa Barbara County has several climatic zones. Carpinteria and the City of Santa Barbara are located in a Mediterranean zone characterized by cool winters and warm, dry summers. Hillsides are covered with chaparral, an easily ignited fuel. Once ignited, such a fire spreads rapidly and can destroy thousands of acres of watershed before being brought under control.

The Orcutt area and the cities of Guadalupe and Santa Maria are located in valleys surrounded by vast agriculture areas. There is no real threat.

The Santa Ynez Valley could experience some threat if grass and woodlands were ignited.

Annually, the County experiences fires that often burn "out of control" and can damage the watershed and structures.

Each government entity has developed emergency response actions associated with wildfire disasters.



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## **PART ONE, SECTION FIVE THREAT ASSESSMENT 6**

### **DIABLO CANYON NUCLEAR POWER PLANT EMERGENCY**

Emergency response action plans are not specifically required for Santa Barbara County for a nuclear power emergency at the Diablo Canyon Power Plant. Santa Barbara County is beyond the Diablo Canyon Emergency Planning Zone. However, the Santa Barbara Operational Area is committed to a support role in the event of an emergency in San Luis Obispo County involving Diablo Canyon since the Santa Barbara Operational Area may become a support/host area for evacuees. The presumption is based on the evacuation patterns following the north-south transportation grid within the areas involved.

#### **GENERAL SITUATION**

The Diablo Canyon Nuclear Power Plant, operated by the Pacific Gas and Electric Company (PG&E), is located on the San Luis Obispo County coast approximately twelve miles west of the City of San Luis Obispo and thirty miles northwest of the City of Santa Maria. (See Figure 1, Region Map for Diablo Canyon Power Plant, currently being updated by San Luis Obispo County, page 65). The plant consists of two nuclear power generating units. Both units are operational. Each unit is a pressurized water-type reactor having an electric power generating capacity in excess of 1,000 megawatts.

The plant is designed to use slightly enriched uranium dioxide (UO<sub>2</sub>) as a fuel. This fuel poses no major concern in its unirradiated form since it is of very low radioactivity. However, after being in the core during operation of the reactor (fission process), the fuel becomes extremely radioactive from the fission by-products. These highly radioactive by-products, if released to the environment, are the main concern in a nuclear power plant accident.

When any nuclear power plant is operated, the potential for a radiological accident exists. The principal deterrent to an accident is prevention through conservative design, construction and operation, which assures that the integrity of the reactor system is maintained. Protective systems are installed and are automatically activated to counteract the resulting effects when any part of the reactor system fails. Emergency planning is necessary to assure public safety in the unlikely event that reactor safety systems fail.

(Refer to the Final Safety Analysis Report for the Diablo Canyon Power Plant, Units 1 and 2, for technical aspects of the plant.)

The Santa Barbara Operational Area and Cities of Santa Maria and Guadalupe have a support role in the event of a nuclear power emergency at Diablo Canyon Power Plant.

## **PLANNING BASIS**

Emergency planning requirements for nuclear power plants are based on guidance from the Nuclear Regulatory Commission (NRC), Federal Emergency Management Agency (FEMA) and State Office of Emergency Services (OES).

## **EMERGENCY PLANNING ZONES**

The State OES has established a planning area for the Diablo Canyon Power Plant that is larger than that required by the NRC and FEMA. The Santa Barbara Operational Area has adopted the official state emergency planning zones. These emergency planning zones are described below.

- **Federal Emergency Planning Zones:** The NRC and FEMA define a 10 mile radius for the plume Exposure Planning Zone (EPZ) (Figure 2, NRC and FEMA Planning Zones for Diablo Canyon Power Plant, currently being updated by San Luis Obispo County, page 66) and a 50 mile radius limit for the Ingestion Pathway Zone (IPZ). Santa Barbara County is well beyond the 10 mile EPZ for plume exposure. However, the 50-mile IPZ does include portions of northern Santa Barbara County.
  
- **State Emergency Planning Zones:** The State has defined two planning zones to facilitate emergency planning. They are the Basic Emergency Planning Zone (BEPZ) and the Public Education Zone (PEZ). (See Figure 3, Basic Emergency Planning Zone and Public Education Zone for Diablo Canyon Plant, page 67) The State's zone is based on the Study of Postulated Accidents at California Nuclear Power Plants, State of California Office of Emergency Services, July 1980. The BEPZ covers an area approximately 15 miles to the north and east and 18 miles to the south and east of the Diablo Canyon Power Plant. The BEPZ lies entirely within San Luis Obispo County and is the area where protective actions are most likely to be necessary.

The PEZ extends across the San Luis Obispo County and borders into Santa Barbara County. It includes the cities of Santa Maria and Guadalupe, as well as the Orcutt area. Residents living in the PEZ receive public education materials. Protective actions for the public in the PEZ are not likely to be necessary.

## **EXPOSURE PATHWAYS**

There are two exposure pathways to consider in planning for radiological emergencies.

- **Plume Exposure Pathway:** The principal exposure pathways that must be considered are:
  - a. Whole body external exposure from gamma and beta radiation from the plume or deposited material
  - b. Internal exposure from inhalation of radioactive materials from the plume and deposited material.

In the Plume Exposure Pathway, sheltering and/or evacuation would be the protective actions most likely recommended by San Luis Obispo County authorities to limit or reduce radiation exposure to the public. Protective actions would be generally recommended for the BEPZ.

Federal guidance recommends the plume exposure pathway extends to a radius of 10 miles. The BEPZ for Diablo Canyon Power Plant extends beyond this 10-mile federal zone, extending to about 15 miles north and east and 18 miles south and east. The planning effort for this zone involves identification of major exposure pathways from contaminated food and water and the associated control and interdiction points and methods.

- Ingestion Exposure Pathway: The principal exposure pathway would be from the ingestion of contaminated foods and water. The State Department of Health Services has the lead role in IPZ planning and implementation. IPZ is detailed later in this section.

## **METEOROLOGY**

The predominant wind direction for Central California is off the Pacific Ocean from the northwest. (See Figure 4, Wind Rose Chart, currently being updated by San Luis Obispo County, page 68) Meteorological and dispersion data can be found in Volume II, Site Characteristics of the Final Safety Analysis Report for Diablo Canyon Nuclear Power Plant, Units I and II.

## **PROTECTIVE ACTIONS**

Protective actions are advised in the event that it is necessary to avoid or reduce a projected dose of radiation. A projected dose is an estimate of the potential radiation dose to affected individuals. Generally, protective actions will be either evacuation or sheltering in place. According to federal and state guidance, protective actions would most likely be recommended in the BEPZ that lies entirely within San Luis Obispo County

Protective actions for Santa Barbara County are not anticipated during the plume phase of an incident. However, Santa Barbara County could be directly affected by protective actions taken in San Luis Obispo County including evacuation, and ingestion pathway exposure, covering food supplies, interdiction and decontamination.

- Evacuation: Santa Barbara County could be affected by a directed evacuation of the public in San Luis Obispo County where evacuees are directed south along U.S. 101 or State Route 1. (See Figure 5, Evacuation Routes, maps currently being updated by San Luis Obispo County, page 69) Evacuees entering Santa Barbara County will affect traffic flow and will need lodging or congregate care and shelter. Contaminated individuals and automobiles could also affect Santa Barbara County. Santa Barbara County could also be directed by a non-directed (spontaneous) evacuation from both San Luis Obispo and Santa Barbara County.
- Covering stored feed supplies: As an ingestion pathway consideration, the State Department of Health Services (DHS) may recommend covering of stored livestock feed to avoid

contamination. A portion of northern Santa Barbara County could be affected since it lies within the IPZ.

- **Interdiction:** As an ingestion pathway consideration, the State DHS has the authority to prevent the sale, distribution or consumption of contaminated water and food items. Once confiscated, the food may be decontaminated or embargoes allowed to decay or be destroyed. A portion of northern Santa Barbara County could be affected since it lies within the IPZ.
- **Decontamination:** Decontamination is the reduction or removal of radioactive material from a structure, area, object or person. Decontamination may be accomplished by: 1) treating the surface to remove or decrease contamination, 2) letting the material stand so that radioactivity is decreased through decay, 3) covering the contamination to shield or attenuate the radiation emitted. Decontamination may be required for Santa Barbara County personnel responding to support sites in this county or for supplies or equipment transported into Santa Barbara County.

## **EVACUATION ROUTES**

The predetermined evacuation routes leading from San Luis Obispo County into Santa Barbara County are U.S. 101 and State Route 1. (See Figure 5, Evacuation Routes, maps currently being updated by San Luis Obispo County, page 69)

## **CLASSIFICATION OF EMERGENCIES**

Federal guidelines in NUREG 0654/FEMA REP-1 group emergency conditions at nuclear power plants into four categories. The categories from least to most severe are the following: Unusual Event, Alert, Site Area Emergency and General Emergency.

### **UNUSUAL EVENT**

This classification is abnormal events that have occurred or are occurring which indicate a potential degradation of the level of safety of the plant, or which attract a significant public interest. No release of radioactive materials is expected. Thus, no environmental monitoring or protective actions are necessary unless further degradation of facilities' safety occurs. These events do not constitute emergency conditions in themselves, but could escalate to more severe conditions if appropriate action at the plant is not taken.

The primary purpose of this notification is to notify a San Luis Obispo County official of abnormal conditions at the facility that may create significant public interest. Due to the fact that unusual events do not constitute emergency conditions themselves, Santa Barbara County will not be notified at this emergency classification.

### **ALERT**

This classification is characterized by events that are occurring or have occurred that involve actual or potential substantial degradation of the level of plant safety.

An alert classification constitutes the lowest level where offsite emergency response may be required (except medical, fire or law enforcement assistance at the site). An alert classification requires that plant and offsite emergency personnel be available to respond if the situation

becomes more serious. Offsite agencies, including Santa Barbara County will be notified of alert classifications.

Any releases of radioactivity would be limited to small fractions of the Environmental Protection Agency's (EPA) Protective Action Guidelines exposure levels. At the alert classification, confirmatory environmental monitoring will be performed. Any protective actions recommended to the public by San Luis Obispo County would be precautionary.

### **SITE AREA EMERGENCY**

This classification is characterized by events involving actual or likely major failures of plant safety systems.

Most events within the site area emergency classification constitute actual or probable releases of radioactive material to the environment. Any releases would not be expected to exceed EPA Protective Action Guidelines exposure levels except near the site boundary (within an 800-meter radius of the plant).

San Luis Obispo County may recommend precautionary protective actions at this classification (e.g., evacuation of the public within a 6 mile radius of the plant, closure of parks and beaches within the BEPZ).

A site area emergency notification ensures that response centers are activated and staffed; monitoring teams are dispatched and personnel are available for protective measures should they become necessary to disseminate public information. Offsite agencies including Santa Barbara County will be notified of site area emergency classifications.

### **GENERAL EMERGENCY**

This classification is characterized where events are occurring or have occurred which involve actual or imminent substantial core degradation or melting, with potential loss of containment integrity and subsequent release of substantial quantities of radioactive material to the environment. All events within this classification constitute actual or imminent release of radioactive materials to the environment.

Offsite doses are expected to exceed EPA Protective Action Guidelines. State and federal guidance require protective actions within the Low Population Zone (within a 6-mile radius of the plant). Other protective actions within the plume exposure pathway would be recommended as necessary.

A general emergency notification ensures that response centers are activated and staffed; monitoring teams are dispatched, predetermined protective measures are initiated, and public information is disseminated. Offsite agencies including Santa Barbara County will be notified of general emergency classifications.

Figure 1  
**Regional Map for Diablo  
Canyon Power Plant**

Maps currently being updated by San Luis Obispo County

Figure 2  
**NRC and FEMA Planning Zones for  
Diablo Canyon Power Plant**

Maps currently being updated by San Luis Obispo County

Figure 3



## **Basic Emergency Planning Zone and Public Education Zone for Diablo Canyon Plant**

Maps currently being updated by San Luis Obispo County

Figure 4  
**Wind Rose Chart**

Maps currently being updated by San Luis Obispo County

Figure 5  
**Evacuation Routes**

Maps currently being updated by San Luis Obispo County

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## **PART ONE, SECTION FIVE THREAT ASSESSMENT 7**

### **TERRORISM**

#### **GENERAL SITUATION**

Terrorism is defined as the use of fear for intimidation, usually for political goals. Terrorism is a crime where the threat of violence is often as effective as the commission of the violent act itself. Terrorism affects us through fear, physical injuries, economic losses, psychological trauma, and erosion of faith in government. Terrorism is not an ideology. Terrorism is a strategy used by individuals or groups to achieve their political goals.

Terrorists espouse a wide range of causes. They can be for or against almost any issue, religious belief, political position, or group of people of one national origin or another. Because of the tremendous variety of causes supported by terrorists and the wide variety of potential targets, there is no place that is truly safe from terrorism. Throughout California there is a nearly limitless number of potential targets, depending on the perspective of the terrorist. Some of these targets include: abortion clinics, religious facilities, government offices, public places (such as shopping centers), schools, power plants, refineries, utility infrastructures, water storage facilities, dams, private homes, prominent individuals, financial institutions and other businesses.

#### **SPECIFIC SITUATIONS**

To conduct a threat assessment for a particular City, the planner must consider a great variety of situations:

- What groups might exist or operate within the County:
  - Right wing groups
  - Ethnic groups with ties to international terrorists
  - Anti-abortion extremists
  
- What are the obvious structural targets:
  - government
  - religious
  - racial or of a specific national origin
  - business
  - public infrastructure
  
- What are the significant dates to a particular terrorist group:
  - September 11, 2001 (Trades Center / Pentagon Bombing)
  - April 19th (Waco, Oklahoma Bombing, etc.)
  - dates significant to religious or racial groups

- What are the potential personal targets:  
government officials  
religious or ethnic leaders  
business persons  
visiting dignitaries  
leaders of radical groups
- What special events are held that might be a terrorist target:  
conventions or meetings  
newsworthy trials  
religious or ethnic festivals

### **EMERGENCY READINESS STAGES**

Due to the fact that a terrorist attack is generally sudden and without any prior warning, there are no stages of Emergency Readiness. A copy of the Santa Barbara County Terrorism plan is in each County Department and in the Office of Emergency Services.

Emergency response actions associated with the above situations are presented in the Santa Barbara County Terrorism Plan (being developed).

## **PART ONE, SECTION FIVE THREAT ASSESSMENT 8**

### **LANDSLIDES**

#### **GENERAL SITUATION**

Landslides occur when masses of rock or soil detach from their base and move down a slope. The rate of movement can range from an imperceptible slow creep that continues for a period of years to a debris flow that can travel at speeds exceeding 100 miles per hour.

The probability of a slide is higher in areas where the bedding plane of the bedrock lies parallel to the slope of the land. Slides may occur when surfaces are lubricated with water and separated by hydrostatic pressure. Weakened or unstable slopes may move during an earthquake.

Slow creep is a nuisance that cracks pavements and disrupts utilities. Rapid movement of large masses of rock and soil is a life-threatening emergency.

#### **SPECIAL SITUATION**

In Santa Barbara County landslides have occurred most often on those slopes that are underlain by rocks of the Monterey and Rincon formations. These rocks weather to form clay soils that can slide when they are saturated with water. Rockslides have occurred in the Monterey Shale along the sea cliffs.

Emergency response actions associated with the above situations are presented in the emergency plans of each government entity.

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## **PART ONE, SECTION FIVE THREAT ASSESSMENT 9**

### **TSUNAMI**

#### **GENERAL SITUATION**

Tsunami is the internationally recognized word for great sea waves, commonly called tidal waves. The term tidal wave is misleading, as the giant waves are not related to the tides. They are generally generated by earthquakes of great magnitude and by volcanic eruptions.

The Tsunami is a series of ocean waves of extremely long length and period. In the deep ocean, their length from crest to crest may be a hundred (100) miles or more, and their height from trough to crest only a few feet. They cannot be felt aboard ships in deep water, and they cannot be seen from the air.

Tsunamis may reach speeds of 600 miles per hour in the deep ocean. As it enters the shoaling water of coastlines in its path, the velocity decreases and the wave height increases. For example, a Tsunami traveling 600 mph in 30,000 ft. of water may decrease in velocity to 30 mph in 60 ft. of water near shore, but the height of the wave may increase from 2 ft. to 30 ft. respectively.

The arrival of a Tsunami is often (but not always) preceded by a gradual recession of coastal waters, when the trough precedes the initial crest; or by a rise in water level of about one-half the amplitude of the subsequent recession.

This is frequently a warning that more severe Tsunami waves are approaching. It is a warning to be heeded, for tsunami waves can crest to heights of more than 100 feet, and strike with devastating force.

#### **SPECIAL SITUATIONS**

The Cities of Santa Barbara and Carpinteria are located on or near several offshore geological faults which have been active in the past, and can subject the entire area to seismic action at any time. The more prominent of these are the Mesa Fault, the Santa Ynez Fault in the mountains, and the Santa Rosa Fault and other unnamed faults in the offshore area of the Channel Islands.

These cities are open to Tsunami action from the Pacific Ocean area, particularly the vicinity of the Aleutian Islands, Kurile Islands, etc., which are normally very active. There is no recent Tsunami history in Santa Barbara generated from other areas of the Pacific Ocean, but there was substantial tidal action in Santa Monica, Port Hueneme, and Crescent City, California, from an earthquake off the coast of Chile on May 22, 1960. The maximum rise or fall in the 1960 Tsunami at the above cities was 9.1 ft., 8.8 ft. and 10.9 ft., respectively.



A Tsunami is reported to have occurred at Santa Barbara on December 21, 1812, but no accurate figures are available on the actual height of the wave. Probably the most accurate study available is that made by Marine Advisors, Inc., of La Jolla, California, for the Southern California Edison Company on the occasion of the building of the San Onofre Nuclear Generating Station. Their studies indicated that a quoted 35 foot wave in Santa Barbara on December 21, 1812, was probably no greater than 15 to 20 ft. at the most.

The Channel Islands lie approximately 30 miles offshore from the County of Santa Barbara, and run parallel to the coastline. The islands would most likely have insignificant shielding protection for coastal areas from Tsunamis most commonly generated in the Pacific Ocean, although this would depend on many variables. The majority of the seismic action is generally generated northwest of Santa Barbara in the Aleutian Islands and in the vicinity of Japan, or southwest of Santa Barbara in the vicinity of Mexico, and Central or South America.

The Santa Barbara region shares about the same degree of seismic hazard that characterizes most of California.

### **TSUNAMI WARNING SYSTEM**

Seismic waves traveling through the earth trigger alarms on instruments at Coast and Geodetic Survey observatories located at Guam, Mariana Islands; Tucson, Arizona; Fairbanks and Sitka, Alaska and Honolulu, Hawaii. Readings from the stations are forwarded to the center of the system at the Honolulu Observatory. United States Seismological stations participating in the program other than the Coast and Geodetic Survey stations listed above are the University of California at Berkeley and the California Institute of Technology at Pasadena.

The Honolulu Observatory contacts tide stations near the epicenter requesting information as to whether or not a tidal disturbance has been observed. At the same time, they normally issue an advisory message to the Pacific Coastal areas. In the event that the tide stations report that no Tsunami action registered on their gauges, the advisory message is canceled. If a disturbance is registered, a warning issued. The warning will include the time of occurrence of the earthquake, its location, the statement that a Tsunami has definitely been generated, and the expected arrival times at various points in the Pacific.

Advisory messages and warnings are transmitted to the City and County OES through GNAWS, the CELTS net, and through the emergency services microwave/computer communications net.

Emergency response actions associated with the above situations are presented in the Santa Barbara County Tsunami Plan (being developed).

## **PART ONE, SECTION SIX HAZARD SPECIFIC**

### **NUCLEAR**

#### **INTRODUCTION**

This Section replaces the Santa Barbara Operational Area's Support Plan for Nuclear Power Plant Emergencies (Annex N), which was adopted in 1989. Nuclear planning functions can now be found in:

- The Basic Plan, Part One Section Five of the SEMS Multi-Hazard Functional Plan (Hazard Assessment 6: Diablo Canyon Nuclear Power Plant Emergency); and
- The Santa Barbara County Standard Operating Procedures for Diablo Nuclear Power Plant (e.g., decontamination and monitoring, reception center, congregate care, American Red Cross, and ingestion pathway zone) on file at the County Office of Emergency Services, 4410 Cathedral Oaks Road, Santa Barbara, California.

This Section covers support operations within Santa Barbara County for response to an incident at the Diablo Canyon Power Plant. The planning emphasis within Santa Barbara County is based on assisting evacuees through radiological monitoring and decontamination, congregate care operations, ingestion pathway zone (IPZ) monitoring, traffic management and public information.

Santa Barbara County acts in a support role to San Luis Obispo County where the planning emphasis is placed on protective actions such as evacuation and sheltering of the public near the plant.

This plan is one of many plans developed in response to emergencies at the Diablo Canyon Power Plant. Efforts have been made to assure this plan is coordinated with the concepts and policies of other emergency plans.

Aspects of this coordination are provided below:

#### **San Luis Obispo County**

The San Luis Obispo County/Cities Nuclear Power Plant Emergency Response Plan identifies a basic emergency planning zone and a public education zone as a basis for planning. The potential health effects associated with plume exposure lie primarily within the Basic Emergency Planning Zone, which is, located entirely within San Luis Obispo County.

Emergency response activities performed in San Luis Obispo County can affect activities in Santa Barbara County, primarily in terms of hosting evacuees headed south into Santa Barbara County.

### **Cities**

The Cities of Santa Maria and Guadalupe are part of the Santa Barbara Operational Area. Both cities have emergency plans, which define their support role in emergencies at the Diablo Canyon Power Plant. The City plans are an integral part of the Santa Barbara Operational Area's Multi-Hazard Functional Plan.

### **State of California**

The State of California Nuclear Power Plant Emergency Response Plan defines federal, state and local agency roles in emergencies. In addition, state agencies such as the DHS, OES, CHP, and CalTrans have specific tasks to be accomplished in response to an emergency at the Diablo Canyon Power Plant.

### **Pacific Gas and Electric Company (PG&E)**

PG&E operates the Diablo Canyon Power Plant. PG&E is required by state and federal regulations to develop emergency plans as a condition of facility operating licenses. The PG&E Diablo Canon Power Plant Emergency Response Plan addresses emergency measures to contend within the full spectrum of postulated emergency accident, both industrial and radiological, which could occur. Such measures include advising local, state and federal governmental agencies of occurring or potential emergency conditions that could have offsite consequences.

### **Federal**

FEMA, the Department of Energy (DOE), EPA, and NRC will provide assistance to the Santa Barbara Operational Area if Federal support is needed. The Santa Barbara Operational Area will request state and federal assistance through State OES.

*Note: For the hazard analysis and emergency planning zone maps, see SEMS Multi-Hazard Functional Plan, Basic Plan, Section 5, Threat Assessment 6. (Currently being development by San Luis Obispo OES.)*

## **OBJECTIVES**

The overall objectives of the SEMS Multi-Hazard Functional Plan and in particular, this section are to:

- Preclude or minimize public health hazards to persons in Santa Barbara County.
- Define the role of the Santa Barbara Operational Area (SBOA) operations in support of San Luis Obispo County emergency response activities.
- Establish the official policy of the SBOA in an emergency.
- Identify the scope and characteristics of potential hazards, which form a basis for, support role planning.
- Define the SBOA emergency organization.
- Outline emergency coordination among other responding agencies.
- Provide a system for disseminating emergency information to the public.

- Describe emergency facilities and equipment, including communications systems.
- Provide a basis for County departments, local jurisdictions and others involved in emergency response to establish support plans, detailed SOPs and training programs.

## **CONCEPT OF OPERATIONS**

### **Emergency Notification**

Emergency notification procedures for Santa Barbara County's response to an incident at the Diablo Canyon Power Plant are broken down into three categories:

- Initial Emergency Notification.
- Alert and/or Site Area Emergency Notification.
- General Emergency.

### **Initial Emergency Notification**

Santa Barbara County Public Safety Dispatch will be notified of emergencies at Diablo Canyon Power Plant that are classified as *Alert* or higher. As required by NUREG 0654/FEMA-REP-1, control room operators at the plant will classify emergencies using the emergency classification system described in Basic Plan, Part One, Section Five, Threat Assessment 6, page 63:

- Unusual Event.
- Alert.
- Site Area Emergency.
- General Emergency.

Initial notification of an abnormal condition (*Unusual Event* or higher classification) at the power plant is provided by control room operators to the San Luis Obispo County Sheriff's Department. San Luis Obispo County will notify Santa Barbara County and other offsite agencies.

In addition, the State Warning Center in Sacramento could also notify San Luis Obispo County of abnormal conditions at the plant. The State Warning Center has the capability to monitor key plant safety parameters via a computer tie-in with the plant. If personnel in the State Warning Center determine it appropriate, notification of San Luis Obispo County may originate from the State Warning Center.

At the declaration of an *Alert* or higher emergency classification, the San Luis Obispo County Sheriff's Watch Commander will notify designated offsite agencies including the Santa Barbara County Sheriff's Department Public Safety Dispatch Center and CHP.

### **Notification of Alert and/or Site Area Emergency**

The Santa Barbara Operational Area notification process for an *Alert or Site Area Emergency* includes the following:

### County Public Safety Dispatch Center Notifications

Once notified by the San Luis Obispo County Watch Commander, the Santa Barbara County Sheriff's Department Public Safety Dispatch Center will notify the Santa Barbara County Fire Department PIO/Staff Duty Officer. The PIO/Staff Duty Officer will notify the appropriate personnel or staff according to the Standard Operating Procedures (SOP). NOTE: The Santa Barbara County Emergency Directory will be used to obtain 24-hour telephone numbers.

## **EMERGENCY MANAGEMENT**

### Alert

At the *Alert* level, the Santa Maria Emergency Operations Center (EOC) will be opened under a unified ICS structure with the Santa Barbara Operational Area. It will be referred to as the Santa Maria Unified EOC.

If San Luis Obispo schools are in session, immediate consideration will be given to staffing the relocation center for school children at Allan Hancock College and related traffic management.

Emergency public information will be prepared and issued concerning the relocation center for school children at Allan Hancock College and its impact upon the City of Santa Maria and surrounding areas.

Staff assigned to the Reception Center/Congregate Care Centers and Monitoring and Decontamination Centers in Santa Maria will be placed on standby.

An Operational Area Liaison will report to San Luis Obispo County EOC and Allen Hancock College, direction and control function should report to San Luis Obispo County EOC. An Operational Area Public Information Officer representative should report to the Joint Information/Media Center at Cuesta College.

### Site Area Emergency

At the *Site Area Emergency* level, the Reception Center at the Santa Maria Fair Park will be activated with congregate care facilities, as required.

### General Emergency

At the *General Emergency* level, the Santa Maria monitoring and decontamination operations will be activated at the Santa Maria Fairgrounds. The Guadalupe Monitoring and Decontamination Center will be activated if needed.

The Santa Barbara County Operational Area EOC may also need to be activated and staffed as required to coordinate traffic management throughout the county, issue press releases and to coordinate resources within the Operational Area. EOC Staff will be placed on standby.

## **Public Information**

The dissemination of timely and accurate information to the public is of vital importance during emergencies. This information will provide details on response actions taken in San Luis Obispo County, effects to Santa Barbara Operational Area residents and any recommended actions.

### General

At the *Alert* or higher emergency classification, in most cases, only the North County media center in Santa Maria will be activated during an emergency at the Diablo Canyon Power Plant. If needed, the south county media center in the County Administration Building will be activated.

Two media center locations provide flexibility in providing public information at a location nearest the potentially impacted area. Since the north county area will be most impacted in an emergency at the plant, the north county Media Center would be activated at the *Alert* level and the south county media center at the *General Emergency* level.

The unified Public Information function, under the direction of the Incident Commander is responsible for north county media center management and gathering and releasing local information concerning the emergency.

The SBOA will receive hard copies of all news releases and advisories issued by San Luis Obispo County.

### Media Centers

The SBOA Media Center will provide a central location where press briefings can be held for events specific to Santa Barbara County. The release of news will continue to be coordinated with San Luis Obispo County and other agencies involved in the emergency response. During an emergency, the Santa Barbara Operational Area Public Information Officer (PIO) or the Incident Commander will release all local news releases and public announcements. Other participating response organizations and agencies, including PG&E, state or federal agencies will be requested to coordinate the release information with the SBOA PIO.

### Emergency Public Information Function

The Emergency Public function will be conducted at the direction of the Santa Barbara Operational Area Public Information Officer or the Incident Commander. The function will include information lines for both public and news media.

The PIO will ensure that emergency public information is accurate and current. The PIO will coordinate the release of information with other agencies to ensure that information being released parallels the information released by other agencies.

*Note: Please see Part Two, Section M, Management Checklist for Public Information for more details.*

## **Traffic Management**

### General

Current and predicted wind conditions are factors involved in the evacuation of Protective Action Zones (PAZs). As more than one PAZ may be involved, they have been grouped into three basic sectors, North, San Luis Obispo, and South. Most likely, all PAZs within a sector will be evacuated at the same time.

The number of officers required to staff each PAZ during an evacuation has been determined. When it becomes apparent that an evacuation may be necessary, the number of CHP officers needed will be assembled at Camp San Luis Obispo.

## **SANTA BARBARA OPERATIONAL AREA (SBOA)**

SBOA will be informed by San Luis Obispo County of potential evacuations from San Luis Obispo County to ensure traffic management is coordinated. This coordination will allow for law enforcement agencies to alert and mobilize personnel should an evacuation occur.

The CHP and CalTrans have overall responsibility for traffic management and control in Santa Barbara County. The two agencies jointly will coordinate traffic management with Santa Barbara County and San Luis Obispo County and will ensure that all jurisdictional agencies are informed and, as necessary, involved in the process.

## **CHP AND CALTRANS**

The CHP and CalTrans will:

- Coordinate traffic management for freeways and roadways in unincorporated areas with Santa Barbara County and incorporated cities that could be affected by the influx of traffic.
- Identify and ensure that traffic management points are staffed. Agencies assigned to assist in staffing of the control points are:
  - CHP assisted by CalTrans.
  - City Police (city streets) assisted by Public Works Department.
  - CHP assisted by County Sheriff and Public Works Department.
- Ensure traffic management signs and barricades are erected, if appropriate. CHP involvement in traffic management includes:
  - CalTrans, as directed by CHP
  - City Public Works, as directed by City Police
  - County Public Works, as directed by the CHP
- Monitor the traffic control effort and request support if needed.
- Provide information concerning traffic management to other agencies.
- Coordinate with local law enforcement agencies and collect information.
- Mobilize wreckers to remove disabled vehicles as needed. (Pre-positioning of wreckers is desirable.)

## **TRAFFIC RESTRICTIONS - U.S. 101**

Through traffic will be diverted at several points north and south in anticipation of an evacuation. When the San Luis Obispo Direction and Control Group determines an evacuation is imminent, traffic will be diverted as follows:

### South of San Luis Obispo

Traffic will be diverted at State Highway 126 in Ventura County, State Highway 246 and 154 in Santa Barbara County and at State Highway 166 in San Luis Obispo County eastbound to Interstate 5. Traffic westbound on State Highway 246 and 154 will be restricted to residents of northern Santa Barbara and San Luis Obispo Counties.

### North of San Luis Obispo

Traffic will be diverted at State Highway 152 in Santa Clara County, State Highway 198 in Monterey County and State Highway 46 in San Luis Obispo County eastbound to Interstate 5. Traffic westbound on State Highway 41, 46 and 58 will be restricted to residents of San Luis Obispo County.

## **CONTAMINATED VEHICLES**

Evacuees entering the Santa Maria Fair Park will be directed to park their vehicles. Monitoring and decontamination facilities for persons will be available in the event of a release of radiological material. The primary concern is to assist evacuated persons. Every attempt will be made to establish monitoring and decontamination facilities for vehicles. (See Figure 1, Monitoring and Decontamination Center – Santa Maria Fair Park, page 86) This will largely be dependent on the number of evacuated persons, emergency staffing and resources. Vehicles potentially exposed to a release or radiological materials will be held for monitoring and decontamination. In the event that contamination is detected, a vehicle will be decontaminated and returned to the owner. If it is not possible to remove all contamination from a vehicle, it will be impounded and stored.

## **RELOCATION CENTER FOR SCHOOL CHILDREN**

### General

San Luis Obispo County officials will take precautionary actions to protect school children as soon as there is an emergency at the Diablo Canyon Power Plant that could potentially affect the health and safety of the public. Precautionary actions include the evacuation of school children to Allan Hancock College in Santa Maria. These actions are intended to provide parents with advance notice on the relocation of their children and potential of traffic congestion while moving students.

Actions prior to the need to issue a protective action to the public may include cancellation of school prior to normal school session, early dismissal of children to their homes or the precautionary movement of children to a school Reception Center such as Allan Hancock College.



### **Precautionary Movement South of San Luis Obispo Schools**

There are several scenarios that could lead to a precautionary evacuation of school children:

- San Luis Obispo County school districts elect to initiate precautionary movement of school children within Protective Action Zones 6, 7 and 10 at the *Alert* or *Site Area Emergency* level.
- The San Luis Obispo County Health Officer orders the precautionary movement of schools in Protective Action Zones 11, 12, and 13 at *Site Area Emergency*.

Students will be evacuated to Allan Hancock College located on Bradley Road in Santa Maria. San Luis Obispo County School District personnel, assisted by the American Red Cross will manage the relocation center. Busses will be dispatched from San Luis Obispo with school staff on board.

Parents will be notified of the location of their children through news releases issued by San Luis Obispo County. Parents will be instructed with details on how to pick up their children. Allan Hancock College Police Department will assist with traffic control and directions.

### **Evacuation South of San Luis Obispo Schools**

In the event of a rapidly escalating emergency at the Diablo Canyon Power Plant, or when San Luis Obispo County officials deem it necessary to quickly remove the children, an evacuation will be ordered for schools. Note: An evacuation will be ordered during any emergency classification. The same procedures discussed under Precautionary Movement will be followed with respect to Allan Hancock College.

#### Hosting Of Evacuees

It is anticipated that some persons who evacuate from areas in San Luis Obispo County will seek temporary lodging in Santa Barbara County. As observed in other emergencies or disaster situations, the majority of evacuees are likely to secure temporary lodging on their own. Typically, housing is found through friends, relatives, or commercial lodging is utilized.

Housing options in Santa Barbara County available to the evacuees are discussed below:

#### Friends and Relatives

Persons selecting to stay with friends and relatives will need general instructions only. Traffic control measures will assure smooth traffic flow on evacuation routes. This will be the most desirable option for most evacuees.

#### Hotel and Motel

Commercial lodging is available in Santa Barbara County. North and mid-county hotels and motels are available in the cities of Buellton, Lompoc, Solvang and Santa Maria. South county facilities are located in the cities of Santa Barbara, Goleta, and Carpinteria and the unincorporated areas of Summerland and Montecito.

Congregate Care Centers

For persons needing shelter, congregate care facilities will be open at locations discussed in the following section.

**RECEPTION CENTER/CONGREGATE CARE CENTERS**

General

Evacuee registration will take place within the Reception Center, (Figure 2, Reception Center – Santa Maria Fair Park, page 87) located at the Santa Barbara County Fair Park in the City of Santa Maria. Reception Center operations will be managed by the Department of Social Services in coordination with the Santa Barbara County Chapter of the American Red Cross.

At the request of the San Luis Obispo County or when the Incident Commander deems it appropriate, activation of the Reception Center and Congregate Care Centers will commence. The American Red Cross is responsible for the operation of mass lodging and feeding. Many agencies will be involved to provide needed services to support the Reception Center and Congregate Care Centers.

**SANTA BARBARA COUNTY DEPARTMENT OF SOCIAL SERVICES**

The Santa Barbara County Department of Social Services will:

- Serve as reception center manager and will register all persons arriving at the reception center.
- Assist the American Red Cross in recording adequate identification data on all persons needing assistance at congregate care centers.
- Assist the American Red Cross in locating friends and relatives in congregate care centers.
- Make all authorized personnel data accessible to the County Public Emergency Information Function.
- Provide general information and crisis counseling at congregate care centers to all that request or require it.

**American Red Cross**

For evacuees unable or unwilling to use other lodging, shelters will be made available in Santa Barbara County through the American Red Cross. Shelter services include the following:

- Registration.
- Information and assistance in family unification.
- Food and lodging.
- Public telephones.
- Medical aid and crisis counseling.

The American Red Cross, as the manager for congregate care centers (shelters) will provide the following:

- Register evacuees.
- Provide food, water, lodging, and sanitation facilities.
- Provide medical aid.

- Assist with disaster welfare inquiries (DWI).
- Provide public telephone services.

### **Santa Barbara County Animal Health and Regulation**

The Santa Barbara County Animal Health and Regulation Division will arrange for care for pets and animals brought to the congregate care centers. Assistance may also be provided through other organizations dedicated to the health and welfare of animals.

### **Allan Hancock College**

Allan Hancock College will provide campus facilities and traffic control within campus boundaries.

## **RADIOLOGICAL MONITORING AND DECONTAMINATION**

### **Activation and Coordination**

In emergencies where the public within San Luis Obispo County is contaminated, or has the potential for being contaminated, the San Luis Obispo County Health Officer will request activation of monitoring and decontamination centers in the vicinity of congregate care centers through the Santa Barbara Operational Area liaison.

The Santa Barbara County Health Officer will coordinate the activation of the monitoring and decontamination centers with other agencies such as affected cities, congregate care centers, San Luis Obispo County, CHP, American Red Cross and the State Office of Emergency Services.

### **Location**

The primary location for monitoring and decontamination center in the SBOA is in the City of Santa Maria at the Santa Maria Fair Park (Figure 1, Monitoring and Decontamination Center – Santa Maria Fair Park, page 86).

The monitoring and decontamination center will be staffed by personnel trained in vehicle and personnel monitoring and in personnel decontamination and supported by law enforcement and other agencies. Health Care Services staff will provide initiation of long-term medical follow-up.

Equipment and supplies necessary to operate the monitoring and decontamination centers are provided by PG&E and are stored at the Santa Maria Fire Department and the Santa Barbara County Chapter of the American Red Cross.

### **Operations**

Vehicles exiting San Luis Obispo County following a release will be encouraged to exit Highway 101 at the North Broadway off-ramp. It also is assumed that no contaminated vehicles will arrive at the reception center at the Santa Maria Fair Park (Figure 2, Reception Center – Santa Maria Park, page 87).

At the Santa Maria Fair Park, monitoring and decontamination facilities will be established for evacuees and, if necessary, vehicles. Records will be established on evacuees using this facility.

PG&E personnel will provide vehicle monitoring. Public Health Nurses will provide decontamination. All evacuees with contamination will be directed to shower to remove the contamination.

Record keeping will continue after persons have been decontaminated and throughout the long-term medical follow-up process, as needed.

Every effort will be made to monitor and decontaminate vehicles as quickly as possible. Further information is contained in the Santa Barbara County Nuclear Power Plant Standard Operating Procedures. .

Figure 1  
**Monitoring and Decontamination Center -  
Santa Maria Fair Park**

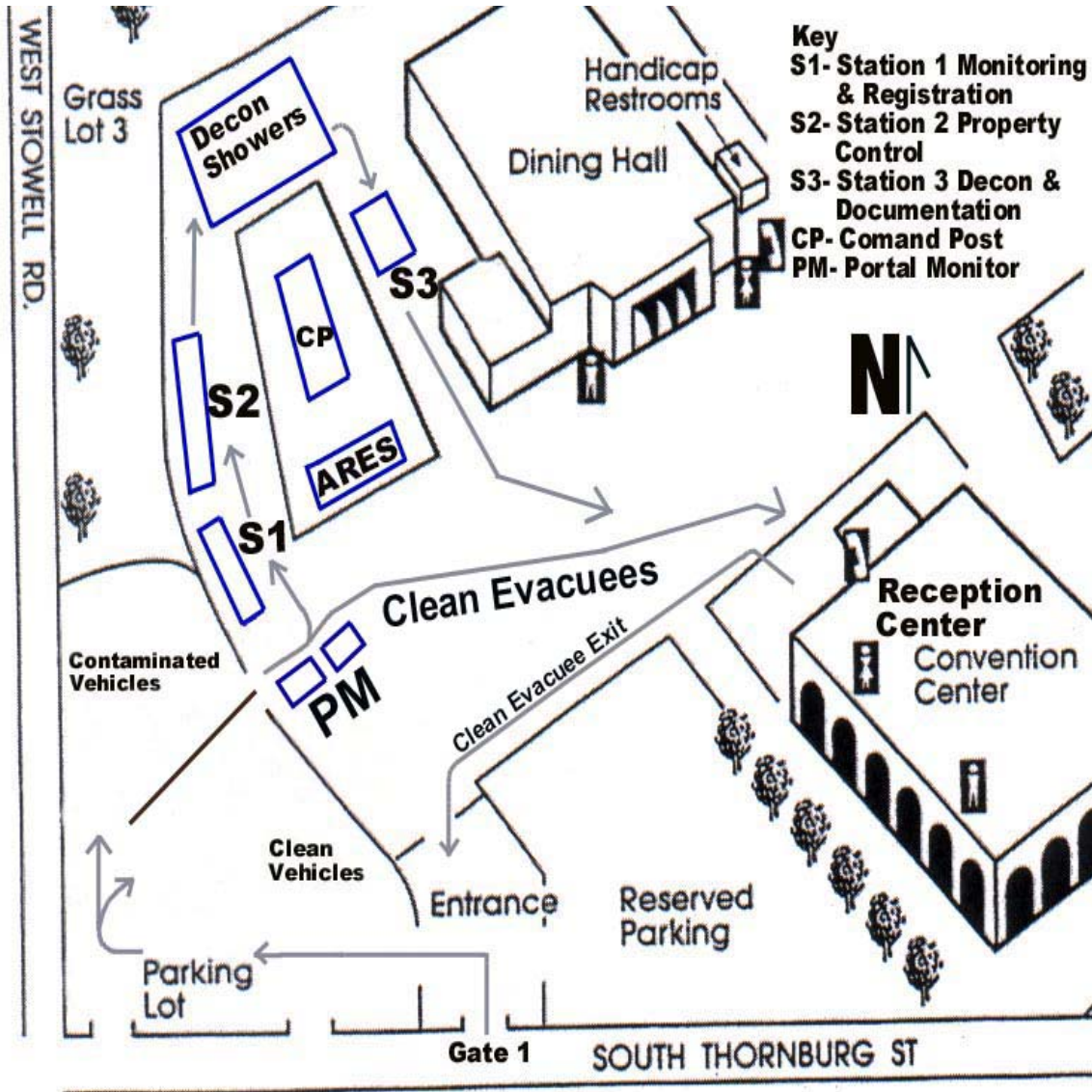
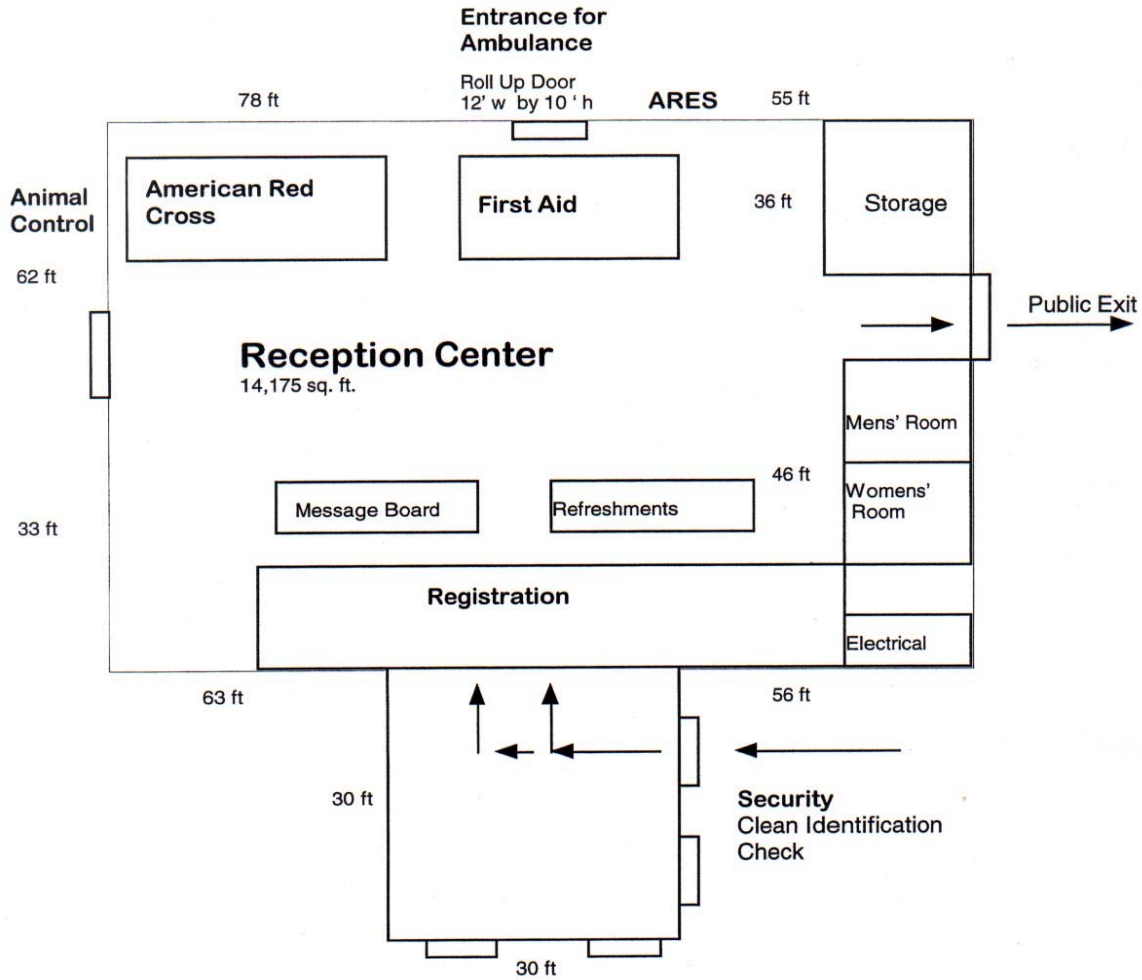


Figure 2  
**Reception Center - Santa Maria Fair Park**



### Exposure and Contamination Control

During the operation of a monitoring and decontamination center, every effort will be made to limit radiation exposure and to limit the spread of contamination in accordance with detailed guidance provided in procedures.

Contaminated clothing and personal items will be bagged and labeled. Those items, which can be decontaminated, will be returned to the owners immediately. Those items, which cannot be decontaminated, will be retained and handled by state and/or federal agency personnel.

### Medical Follow-Up

Along with monitoring and decontamination, one of the primary functions of the monitoring and decontamination center will be the initiation of long-term medical follow-up for decontaminated evacuees. Nasal swab samples will be taken from every person decontaminated at the center. Those samples will be analyzed by State DHS for indication of possible internal contamination.

### Emergency Worker Exposure Control

Exposure control will be established for emergency workers in the SBOA. Equipment such as protective clothing and dosimeters will be provided to emergency workers where there is a potential for becoming contaminated or receiving radiation exposure.

In Santa Barbara County, the only probable activity where emergency workers could be exposed is the monitoring and decontamination processes. Exposure from these activities will be from contamination.

The Santa Barbara County Health Officer is responsible for radiation exposure control in Santa Barbara County. The County Health Officer will recommend protective actions to emergency workers to keep exposures as low as reasonably achievable.

Emergency workers will track and maintain records of their exposure. At the end of their shift, emergency workers will turn over their records to the Exposure Control Supervisor. These records will be forwarded to the County Health Officer. The County Health Officer will evaluate the need for emergency workers to have long-term medical follow-up. Emergency workers will be advised to report for follow-up, as appropriate.

Emergency workers potentially exposed to airborne radioactive materials will have bioassay samples collected and in-vivo measurement performed in accordance with guidance from the State DHS. The analysis will determine the actual intake and deposition of radioactive materials in the body, if any.

### Exposure Limits

Exposure to large quantities of ionizing radiation over a relatively short period of time can cause disabling sickness and death. Exposure to lesser quantities, either externally or through inhalation and ingestion, may result in chronic impairment to health. Therefore, stringent guidelines have been established as follows:

The State Plan refers to a limit of 0.5 rem for maximum projected whole body dose in any one year, which is quoted from Section 30268 of the California Administrative Code, Title 17, Public Health. Based upon consideration of this statute and the EPA guidelines, the State Plan indicates protective actions should be initiated when projected doses exceed 0.5-5.0 rem, with 0.5 rem the preferred guide. The SBOA has adopted a guideline range of 0.5-5.0 rem, in accordance with state emergency planning guidance.

Any person engaged in operations required to mitigate the effects of an accident is an emergency worker for the purpose of the plan. This includes public employees (and others registered with a disaster council), who are classified as disaster service workers in Section 3211.9 of the California Labor Code. Emergency workers will have their exposures limited through the exposure control procedures.

Table 1, Exposure Criteria, provides an abstract of exposure criteria.

In Santa Barbara County, the probability is low for receiving contaminated/exposed and injured persons; however, Santa Barbara County must be prepared to handle such situations. Marian Medical Center in the City of Santa Maria has trained staff to handle these people. This hospital is also designated to provide emergency medical support for congregate care activities.

The County Health Officer is responsible for issuing advisories to the public should conditions exist that have a potential for affecting the public in Santa Barbara County. Advisories could include recommendations to the public concerning contaminated food and water supplies.



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# TABLE 1 EXPOSURE CRITERIA

## GENERAL POPULATION

Protective Action Guidelines<sup>1</sup> (PAGs)

Whole Body	0.5 - 5 rem
Thyroid	5- 25 rem

## EMERGENCY WORKERS

Initial Exposure Guideline	1.0 rem (without authorization)
Whole Body	1.0 - 5.0 rem (with authorization ) <sup>2</sup>

## EMERGENCY WORKERS

(Volunteers Only, Upon Authorization)<sup>2</sup>

Extraordinary Emergency Operations<sup>3</sup>

Whole Body	25	rem
Extremities	100	rem (in addition to 25 rem whole body)
Thyroid	125	rem

Lifesaving Actions<sup>3</sup>

Whole Body	75	rem
Extremities	200	rem (in addition to 75 rem whole body)
Thyroid	no limit	

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<sup>1</sup> U.S. EPA PAG's used except for whole body.  
<sup>2</sup> Volunteers to obtain approval from County Health Officer.  
<sup>3</sup> Source: U.S. EPA. (See text for definitions.)

The County Health Officer will receive radiological information concerning IPZ discussed below. Should recommendations from the Unified Dose Assessment Center (UDAC) apply to Santa Barbara County, the County Health Officer will issue advisories to the general public in Santa Barbara County concerning ingestion of food and water supplies in affected areas (using EAS and emergency public information).

## **Ingestion Pathway Response**

### General

If significant quantities of radiological material are released, it may be necessary to implement protective actions to prevent the intake of contaminated food and water supplies. Because of the potential for concentration of contamination by biological processes, the ingestion measures may need to be implemented over a much larger area than the plume exposure pathway zone. At the same time, though, there is more time to act. State law governs the interdiction of unfit food and water, and as such, the State is the lead response agency for ingestion pathway response.

If an accident develops which is classified as a *Site Area Emergency* or higher, the State DHS will dispatch situation assessment personnel to the California Specialized Training Institute (CSTI) to establish a State Field Emergency Operations Center (FEOC) near the San Luis Obispo County EOC.

Based upon early field monitoring data and projections made in the UDAC, the FEOC will direct the collection and analysis of samples by state field teams. Santa Barbara County staff from the Agricultural Commissioner's Office, Public and Environmental Health, and County Fire/OES will support the State effort by providing local crop data and input in the analysis and decision-making process.

Preliminary qualitative screening analysis will be performed in the field via radiation survey techniques and data will be communicated back to the FEOC via radio. Laboratories identified by the State will provide subsequent quantitative laboratory analysis. The Preventative Protective Action Guidelines (PPAG) and the Emergency Protective Action Guidelines (EPAG) have been developed by the Food and Drug Administration (FDA) and adopted by the State. These guidelines relate levels of radioactive contamination to projected 50-year dose commitments to specific organs and whole body for individual foodstuffs under various dietary scenarios. For the ingestion pathway, the dose commitments are designated as 0.5 rem whole body (1.5 rem thyroid) for the PPAG and 5 rem whole body (15 rem thyroid) for the EPAG.

The FEOC will gather and analyze the radiological data and make recommendations to the Ingestion Pathway and Recovery Advisory Committee (IPRAC). The Director of the State DHS chairs the IPRAC. Response actions, which may be taken by the IPRAC, include actual interdiction or embargoes of food items and crops, placing dairy animals on stored feed, decontamination, or replacement of food and water supplies, as appropriate.

State DHS has the responsibility for collecting laboratory analysis data, computing projected doses, and recommending protective actions based upon this information. The SBOA staff involved in the FEOC/IPRAC operation will include the Agricultural Commissioner and/or staff

as well as staff from County Fire/OES and Health Care Services (Public Health and Environmental Health programs). The coordinator of the county's support to the state's ingestion pathway effort is the Agricultural Commissioner.

Santa Barbara County Agriculture Commissioner

Upon activation of the State FEOC, the Agricultural Commissioner will:

- Notify and mobilize staff resources necessary to fulfill County responsibilities in the FEOC and IPRAC.
- Respond to CSTI in San Luis Obispo and, along with a representative of the Public Health Department, become a member of the IPRAC.
- As IPRAC members, provide local input into the decisions made regarding interdictions of local agricultural products and other response actions.
- Coordinate with the Office of Emergency Services, Environmental Health and Agricultural Commissioner's representatives in the FEOC to ensure adequate coordination and information flow to the EOC in Santa Barbara County.
- The FEOC representatives will coordinate with San Luis Obispo and Santa Barbara County's EOC and will assist in coordinating the release of Emergency Public Information with the SBOA PIO.

Recovery

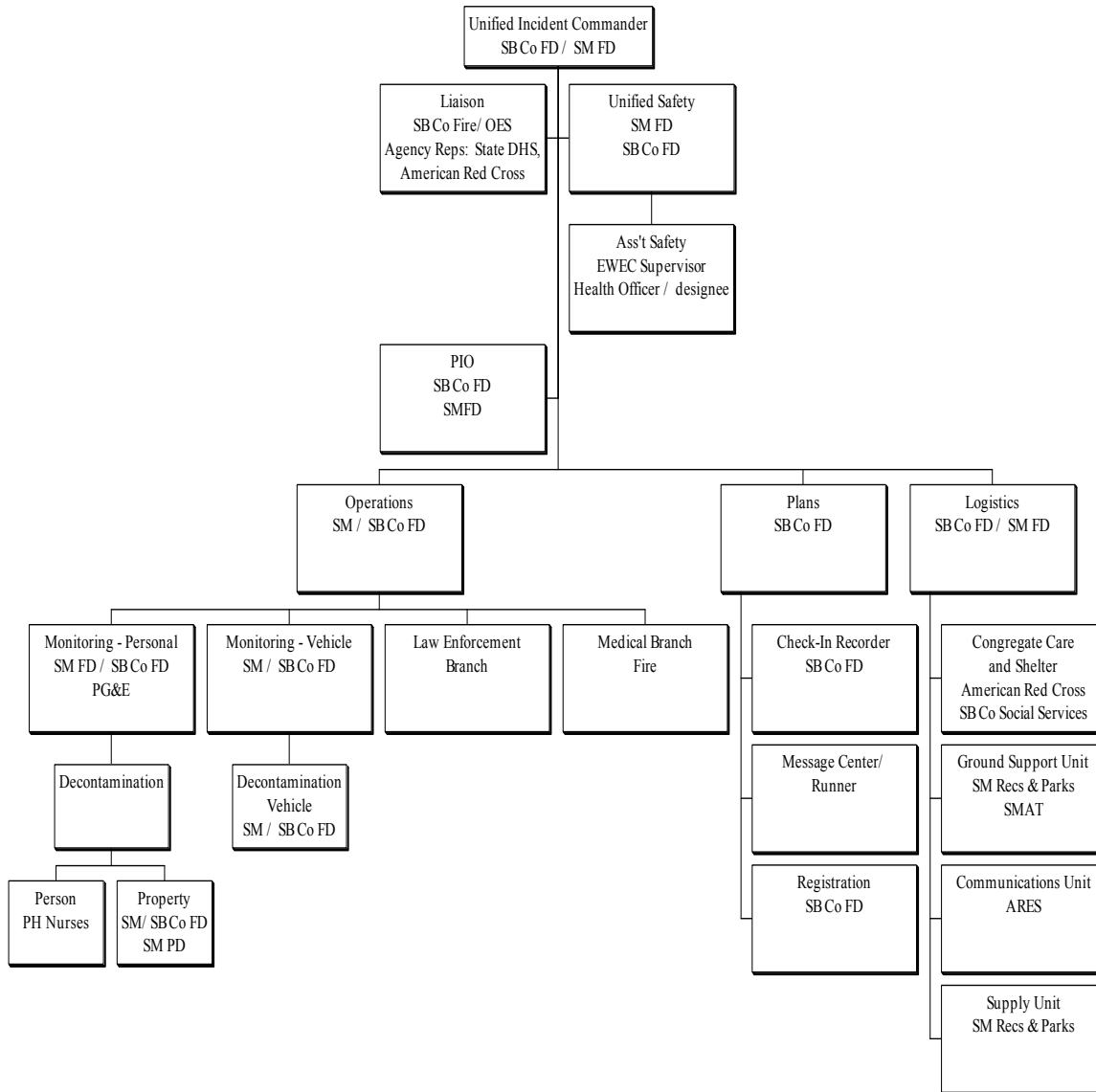
The recovery phase, along with the ingestion pathway phase, begins when the emergency classifications are terminated and the emergency condition at the plant is under control. As with the ingestion pathway operations, the State has the lead role and responsibility for directing recovery operations.

Specific operations to be carried out during the recovery phase are as follows:

- Emergency Public Information will continue to be an important operation. State representatives will join Santa Barbara County PIOs at the media center to ensure that the public receives adequate information about the status of the emergency.
- Traffic control will continue to be a coordinated effort involving Santa Barbara County, city and state law enforcement personnel as San Luis Obispo County residents return to their residences.
- Santa Barbara County staff will work with the utility to establish centers where the public can submit requests for financial assistance. The recovery process will involve efforts to provide post-emergency assistance to both the private and public sectors.
- Long-term medical follow-up will be provided to all emergency workers, where appropriate.
- The post-emergency recovery period provides emergency management personnel with an opportunity to assess emergency management systems and procedures. Emergency response plans and systems will be revised as necessary.

# ORGANIZATION AND RESPONSIBILITIES

**FIGURE 6 Emergency Management Organization Chart**



## **POLICIES AND PROCEDURES**

Standard Operating Procedures are maintained under separate cover:

- SOP 1            Decontamination and Monitoring: Santa Maria Fair Park
- SOP 2            Reception Center - Santa Maria Fair Park
- SOP 3            American Red Cross
- SOP 4            School Children Congregate Care - Allan Hancock College  
(To be developed)
- SOP 5            Ingestion Pathway Zone (IPZ) - SB County Agriculture Commissioner

## **SUPPORTING ORGANIZATIONS**

### **Santa Barbara Operational Area (SBOA)**

Health Care Services Department  
Santa Barbara County Fire Department  
Santa Barbara County Fire/OES \*  
Santa Barbara County Fire/Protection Services Division  
Sheriff's Department  
Social Services Department

### **City of Santa Maria**

Fire Department \*  
Police Department  
Public Works Department  
Recreation and Parks Department

### **City of Guadalupe**

Fire Department \*  
Police Department

### **State**

Allan Hancock College  
California Highway Patrol  
CalTrans  
State Department of Health Services  
State Office of Emergency Services \*  
University of California, Santa Barbara

**Federal**

FEMA \*

Nuclear Regulatory Commission

**Pacific Gas and Electric Co. \***

**County of San Luis Obispo \***

Private / Non-profit

American Red Cross \*

ARES

\* Note: Lead planning agencies/companies

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