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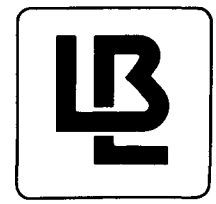
LAWRENCE BERKELEY LABORATORY

UNIVERSITY OF CALIFORNIA • BERKELEY, CALIFORNIA 94720

MASTER EMERGENCY PLAN

JANUARY, 1978

Revised SEPTEMBER, 1980



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PREFACE

This document describes the current Laboratory Master Emergency Plan. It has been revised and is the basis for response to emergencies at the Lawrence Berkeley Laboratory. It includes definitions and assignments of responsibilities, and outlines the coordination of building, facility, and Laboratory-wide actions, and community action, where appropriate. Policy on the level of action to be taken is established according to the nature and degree of the emergency. The safety and welfare of LBL employees are paramount. The plan is also designed to control and limit damage to Laboratory facilities and to ensure minimum interruption of Laboratory operations.

The master plan is primarily for use by emergency control organizations and Building Managers. Because LBL facilities are so diverse and are spread out over such a large area, each building has its own emergency plan. Guidance is provided so that these building plans, when updated, will be consistent with the Master Emergency Plan.

Every Laboratory employee is expected to be familiar with the plan for the area in which he or she works.

Supplements to this plan are the individual building and facility plans (provided separately), and the emergency plans of the Cafeteria, Construction and Maintenance, Environmental Health and Safety, Fire, Medical Services, Plant, Protective Services, and Supply Services Departments.

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I. INTRODUCTION

The objective of this Master Emergency Plan is to prepare the Laboratory and all Laboratory personnel for proper and adequate response to an emergency. Existing lines of responsibility, from the Director down to each individual employee, will be utilized. Relationships between Laboratory management, emergency organizations, and individuals on the scene are set forth.

This plan is based on the firm belief that proper response can only be attained if each individual reacts appropriately and knowledgeably. It is the intent of the plan, therefore, to use the talent and specialized knowledge that exist at the Laboratory, at all levels. While the normal lines of administrative and departmental authority and responsibility will form the basis for emergency action, immediate, knowledgeable response at the local level is considered to be the first line of defense. Prompt and proper action by those on the scene will limit the extent of danger to personnel and property, and may avert a disaster. The Director's Office Emergency Control Organization and other Laboratory emergency groups will become involved as outlined herein.

II. EMERGENCIES

A. *Definition*

An emergency is considered to be any abnormal situation that endangers the well-being of individuals or the Laboratory. Included are injuries to individuals; fires; potentially hazardous gas or fluid leaks; release of pollutants; radiological incidents; bomb or other threats to the Laboratory; natural disasters such as earthquake, flood, and landslide; power and other utility failures; impeded access to or egress from the Laboratory; civil disturbances; and civil alerts.

B. *Severity of Incidents*

1. Unusual Event

Examples of this level of emergency are injury, small fire, or other localized emergency requiring no off-site assistance. No potential exists for release of radioactive or toxic material affecting off-site areas.

2. Alert

This level of emergency is more severe than an "unusual event" and requires the notification of off-site emergency response groups and may require their assistance. Limited release of radioactive or toxic materials **may** affect off-site areas. DOE-SAN must be notified of an emergency of this level. (Refer to page 19 for additional information on reporting incidents to DOE.) Examples of this level of emergency are major or multiple fires, landslides, bomb threats, or large spill of toxic materials.

3. Site Emergency

This level of emergency is the most severe type. Examples are damaging earthquakes, multiple fires, or other major emergency where off-site assistance **will** be required. Releases of radioactive or toxic materials affecting off-site areas are likely or are occurring. DOE-SAN must be notified of an emergency of this nature. (Refer to page 19 for additional information on reporting incidents to DOE.)

LBL response procedures, according to the type and seriousness of the emergency, will be found in the body of this document.

III. LINES OF AUTHORITY AND RESPONSIBILITY

Figure 1 illustrates the basic Laboratory organizational structure for response to emergencies. It preserves and utilizes existing lines of administrative and departmental authority. It also preserves the normal lines of responsibility that extend from the Laboratory Director down through the Division and Department levels to the individual employee. Also illustrated are the functions and levels at which the various support and emergency organizations and their heads interact with the Director's Office and with the building emergency organization during an emergency.

The underlying philosophy of the master plan, however, is that **each and every employee has a vital role and a basic responsibility** for safety and emergency action, because at the onset the initial response will be at the individual level. Immediate and knowledgeable action is vital.

The emergency plans for individual buildings and facilities, therefore, set forth the response to be taken by employees following the Discovery of an emergency. Subsequent to these initial measures by individuals, responsibility for action will normally proceed upward through usual department lines of authority to the Building Manager and to Laboratory emergency groups. Involvement of those at a higher level of responsibility will depend on the particular situation.

To reiterate, responsibility proceeds downward from the director, but response actions proceed upward from the first person involved, and may ultimately involve the Director.

The only function shown in Figure 1 that does not exist under ordinary circumstances is that of the Emergency Control Coordinator, who is usually the head of the responding emergency unit. During a fire, for example, the Fire Chief (or his alternate) would be the Emergency Control Coordinator, assuming command, upon arrival, from the Building Manager. The interposition of this function in the normal line of responsibility is mandatory once an emergency situation is recognized. This special function is discussed in detail on page 7, Section C. The transfer of responsibility from local authority to the responding emergency unit is discussed on page 11, Section E.

IV. LABORATORY EMERGENCY ORGANIZATIONS AND PLANS

A. *Director's Office*

The Director's Office has the ultimate responsibility for emergency response and when manned is the emergency control center for major emergencies. In this context a major emergency may be one of the following: a potential major loss to a building or facility; an emergency that involves more than one building or facility; a potential hazard to the surrounding community; threats to the Laboratory; civil disturbances; civil alerts; natural disasters such as earthquakes, floods, and landslides; and power and other utility failures. **(See also Section II B.3, Site Emergency.)**

Figure 2 shows the emergency control assignments for the Director's Office staff and identifies the advisors from the Laboratory support and emergency organizations.

When the Director's Office becomes involved in an emergency, its prime function is to assure that the type and level of response is appropriate and adequate, and that it is implemented. In most cases, however, its involvement in local supervision and remedial action will not be necessary; adequate emergency response will be taken at the group and department levels, with support from Protective Services, Fire, Medical Services, and other support departments. However, if the Director's Office decides that the emergency or potential emergency is greater than can be adequately handled at the department or group level, it will intervene and take control of the situation. A decision may also be made at the department or group level to ask for assistance from the Director's Office.

As a practical matter, it must be recognized that Director's Office personnel are normally on-site 5 of the 21 shifts per week. Thus, there may be considerable delay before they can assume on-site direction of major emergencies. This again points up the importance of local initiative at the onset of emergencies.

(Please continue on page 5)

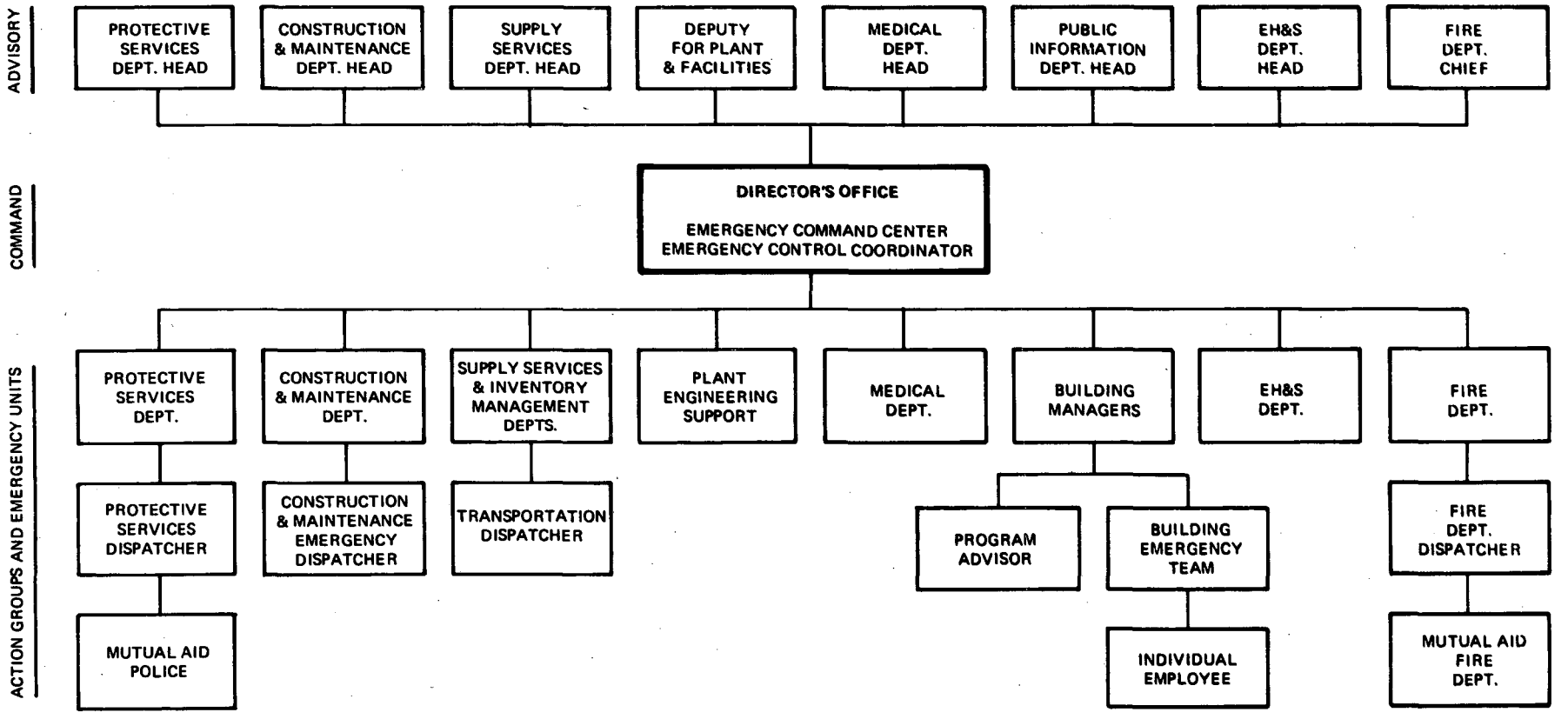


FIG. 1 EMERGENCY CONTROL ORGANIZATION

(Major Emergency — Director's Office operates as Emergency Command Center and as Emergency Control Coordinator.)

XBL 8010-2193

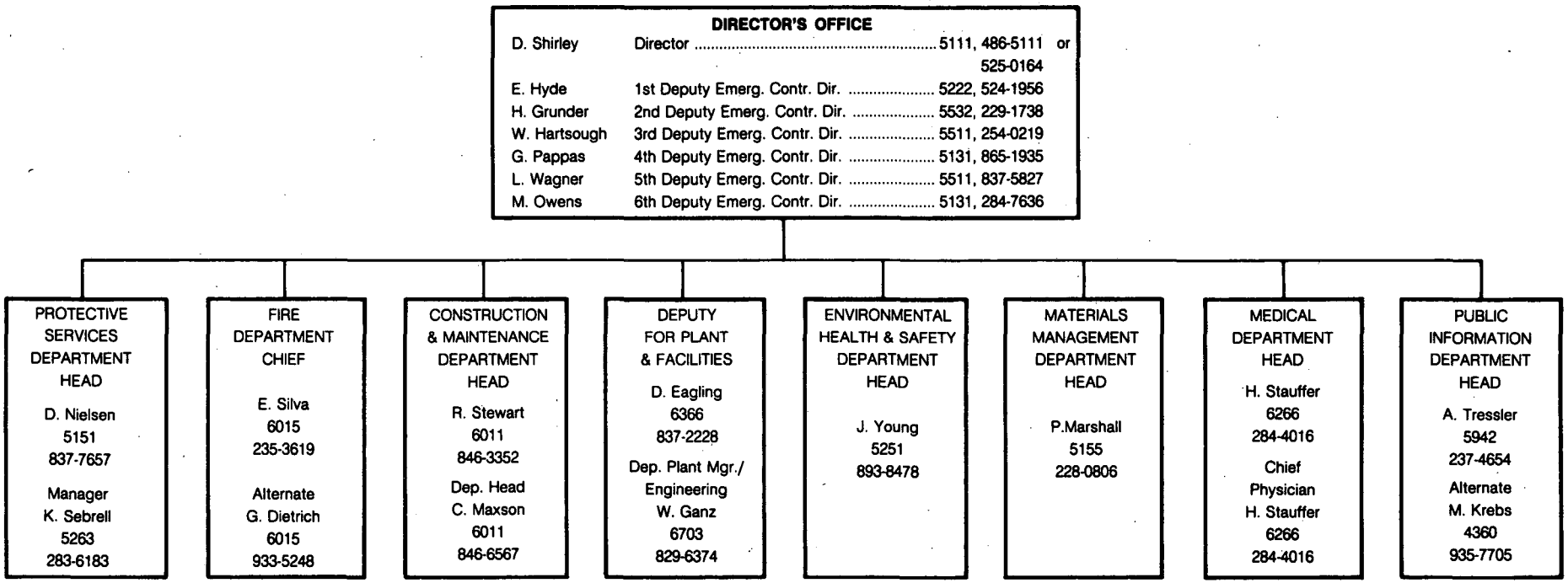


FIG. 2. DIRECTOR'S OFFICE EMERGENCY CONTROL ASSIGNMENTS

XBL 8010-2194A

Rev. 8/84

B. *Building or Facility Organization*

A specific emergency plan has been prepared for each building or building complex, such as the Bevalac. These plans were prepared under the direction of the Building Manager for the area in question.

1. Building Manager

The Building Manager is the person in charge of a building or complex. Appointed by the Associate Director for Engineering and Technical Services, he or she is responsible for preparing, updating, and implementing the emergency plan for his or her area. This building emergency plan must be consistent with the Laboratory Master Emergency Plan and must provide for any special situation that may be encountered, as outlined in Section B-3. The Building Manager is also responsible for arranging emergency drills and other training programs, as appropriate, for all employees of the facility.

Since the Building Manager may not always be available when an emergency occurs, alternates must be provided. In large or complex buildings, the Building Manager will also assign responsibility for some areas to Assistant Building Managers. This arrangement will vary for different buildings. Many shop and office buildings are occupied only Monday through Friday during the day shift. As they generally do not contain unique hazards, an on-site Building Manager is required only for the normal work week. For the accelerator and chemistry complexes, however, there may be a need for round-the-clock, on-site coverage by the Building Manager or his designate.

One of the most important premises of the Laboratory plan is that the Building Manager for a particular area is the person who has the highest level of responsibility for that area. Thus the alternate, in the absence of the Building Manager, is the person who can and will assume responsibility and will in fact be in charge of the building or facility.

Lists of the Building Managers and alternates — in alphabetical order and by building number — are given in Appendix A.

2. Building or Facility Emergency Organization

Each building or facility emergency plan has been prepared to center around existing organizations and personnel likely to be in the area, and to utilize their specialized knowledge. Every employee is responsible for being familiar with the plan for his/her building or area. He/she must know how to carry out his/her individual role, which includes alerting the appropriate Laboratory Emergency Units, and may include taking immediate remedial action or carrying out the evacuation of the area. It is vital that he/she alert others in the area to the emergency.

Immediate and knowledgeable response at the local level is the first line of defense. Prompt and proper actions by those on the scene will limit the extent of danger to personnel and property and may avert a disaster. Thus every member of the Laboratory has an important role.

3. Building or Facility Emergency Plans

Each building or facility emergency plan includes specific plans and instructions for emergencies that may arise in its area. These plans must be individualized because of the great diversity of activities and operations at the Laboratory.

Each building plan contains the following, as appropriate:

(1) The name of the Building Manager and his/her alternate(s).

(2) A list of persons who have specific duties during an emergency, and a description of their duties. For example, specific people should be assigned to supervise evacuation and to carry out a rapid search of the area (assuming this can be done safely).

(3) Floor plans showing evacuation routes, the location of shutoff switches and valves for the utility systems (water, gas, electricity), and the locations of emergency equipment and supplies (including medical).

(4) Indications in the floor plans of areas where specific hazards (i.e., toxic chemicals, flammable materials, radioisotopes) exist; location and description of special hazards or hazardous devices should be included in the text together with shutdown procedures if applicable.

(5) Designation of a primary assembly point for evacuees, well away from the building. An alternate site should also be designated in case the first choice cannot be used.

(6) A procedure for carrying out a head count at the assembly area to insure that no one is left behind.

(7) Reentry procedures. No one should reenter an evacuated building or area without specific instructions from the Building Manager or the person in charge.

(8) Description of emergency detection and warning systems.

(9) Provision for training and testing programs.

4. LBL Campus Groups

Campus groups — which include Donner, Donner Pavilion (in Cowell Hospital), Laboratory of Chemical Biodynamics, the Atomic Beam and MMRD groups in Birge and Le Conte Halls, and others — must inform BOTH the Campus Police and the relevant LBL department in all emergency situations. This includes serious personal injury of an LBL employee who requires an ambulance and/or hospital staff attention. LBL ambulance **(extension 5333)** will respond if Berkeley's two ambulances are not available.

It is the responsibility of the persons in charge of LBL campus groups to know

what the response of each Laboratory emergency unit will be for his or her facility, for each unit has specific, individualized plans for calls from different groups. Emergency units include the Protective Services, Fire, Environmental Health and Safety, and Medical Services Departments.

5. LBL Off-Site Buildings

   The 900 series buildings are to call their local fire, police or ambulance services in all emergency situations and then report the situation to LBL on LBL **extension 5333.**

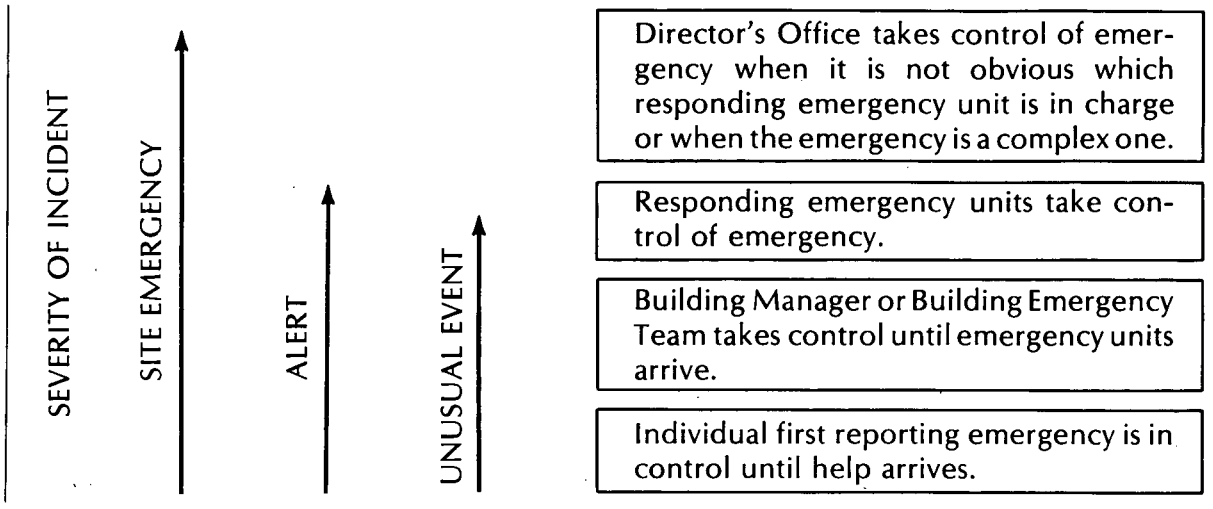
C. *Emergency Control Coordinator*

The position of Emergency Control Coordinator does not exist until an emergency develops. The chain of command will change as senior personnel arrive at the scene of the emergency. The first individual to report an emergency will be in control until arrival of the Building Emergency Team or the Building Manager or his representative. The Building Emergency Team or the Building Manager assumes control until a specialized Laboratory Emergency Unit arrives on the scene. An orderly transfer of responsibility is then made from the building or facility organization to the responding unit. Details of the transfer of responsibility are outlined in Section E. The examples listed below illustrate the person who would be the Emergency Control Coordinator for the following types of emergencies:

Injury	Physician
Fire	Fire Chief or alternate
Bomb Threat	Police Chief or alternate
Civil Disturbance	Police Chief or alternate
Radioactive Spills	EH&S Operations Group Leader or alternate
Power Outage	Plant Power Engineer
Mechanical Utility Failures	Construction and Maintenance Superintendent
Structural Failure	Plant Engineer or alternate
Landslide	Plant Engineer or alternate

In most emergency situations the person who is to assume the position of Emergency Control Coordinator is obvious. However, it is conceivable that an emergency might arise which entails the major involvement of more than one Emergency Unit. In such a case, the ultimate authority among those on the scene may not be obvious. In this event, the Director's Office is automatically called. The Director, or one of his staff designated in Figure 2, will assume command as soon as possible upon arrival at the scene of the emergency, or at the Director's Office Emergency Command Center.

The degree to which this transfer of authority proceeds up the Laboratory chain of command depends on the scale of the emergency, as outlined in the following diagram:



Emergency Control Coordinator transfer of responsibility.

D. *Laboratory Organizations Having Specialized Roles in an Emergency*

1. Protective Services Department

The Protective Services Department performs the following vital functions in dealing with emergencies:

a. Receives and processes emergency calls according to preplanned instructions.
b. Acts as the primary communication center for the Laboratory.
c. Meets and escorts emergency units.
d. Controls traffic.
e. Directs and controls crowds.
f. Advises on and deals with threats to the Laboratory.
g. Investigates bomb threats.
h. Assists in the evacuation of buildings, particularly during off-hours.
i. Investigates crimes and deaths on Laboratory property.

2. Fire Department

The Laboratory Fire Department responds to emergency calls as listed below. It is responsible for fighting fires, for administering first aid and transportation of the injured to an appropriate place for treatment, and for summoning assistance as required. Many areas and facilities at the Laboratory, including the accelerators and related experimental areas, the chemistry complex, and the Materials and Molecular Research Laboratory, present unique hazards and situations that must be considered in the plan of action. Individuals in charge of these facilities will work closely with the Fire

Department during an emergency. In areas of the Laboratory that present special hazards, the Fire Department must rely on information, advice, and help from those present who have specialized knowledge of the area and of the emergency situation.

In general, the Fire Department will respond to these types of calls:

a. Report of injury.
b. Report of fire.
c. Report of leaking gas or hazardous fluid.
d. Bomb threats.

The Fire Department, in conjunction with the Protective Services Department and other emergency personnel, will carry out evacuation procedures.

3. Environmental Health and Safety Department

The Environmental Health and Safety Department includes specialists in Industrial Hygiene, Occupational Safety, and Radiation Safety. They are called in upon the release or potential release of polluting, toxic or radioactive materials, or exposures to radiation. Individuals in the Department are also on call to respond to other emergencies when requested. In general, they support other departments when the special knowledge and instrumentation of the EH&S Department may be of value.

4. Medical Department

The Medical Department responds to all emergency medical situations. This service includes an emergency room in Building 26 for on-site treatment of patients. This Department can call upon community and hospital facilities when necessary. It maintains special expertise in personnel radiation exposure and contamination, diagnosis, and treatment. It cooperates with the Environmental Health and Safety Department.

In a major disaster or potential major emergency, the Medical Department advises the Director's Office on measures that must be taken to protect the health and well-being of Laboratory personnel.

5. Plant Departments

The Plant Departments are responsible for the design, construction, operation, and maintenance of all physical plant facilities for the Laboratory. They are comprised of two major groups, the Plant Engineering Department and the Construction and Maintenance Department.

(a) *Construction and Maintenance Department*

This Department is responsible for the operation and maintenance of physical plant facilities, including utilities. It also accomplishes minor construction projects and provides craft support for scientific activities. Personnel include Plant Mechanic, Electricians, Plumbers, Steamfitters,

Carpenters, Painters, Laborers, Plant Maintenance Technicians, and Custodians. The Plant Maintenance Technicians are resident operators of the physical plant 24 hours per day, 7 days per week. They are employed throughout the Laboratory in particular areas and are thoroughly familiar with local conditions and emergency procedures. Area maintenance foremen maintain up-to-date contact lists of persons to be called in specific types of emergencies.

(b) *Plant Engineering Department*

This Department is responsible for the design and construction management of physical plant facilities and utilities. Personnel include Architects and Civil, Mechanical, and Electrical Engineers, as well as Designers and Construction Inspectors. Since Plant Engineering has design knowledge of all physical plant facilities, it provides strong engineering backup to those responsible for operation and maintenance of the plant.

In emergencies involving the physical plant, the Plant Departments provide the craft skills and the equipment needed for recovery. Members of the Departments may be called upon for assistance in any emergency where their specialized knowledge is needed, i.e., power outages, utility disruptions, landslides, floods, or equipment breakdown. They would have a major role in an earthquake or a civil alert.

6. Supply Services and Inventory Management Departments

Supply Services (Transportation Section) is available during emergencies to provide assistance as required. Transportation has vehicles equipped with two-way radios and can be especially helpful. Supply Services will also cooperate with the Inventory Management Department in providing materials and supplies held in Laboratory stores, as needed.

7. Public Information Department

The Public Information Officer or some member of the Public Information Department will report to the Emergency Command Center to handle inquiries from the media. Procedures have been established within the PID regarding who is to respond.

8. Cafeteria

The Cafeteria has food on hand to feed persons who may be required to stay at the Laboratory. If building conditions permit, the Cafeteria would stay open during normal work hours, Monday through Friday. For emergency operations, see Cafeteria Emergency Plan in Appendix C.

E. *Transfer of Authority from Building or Facility Personnel to the Emergency Control Coordinator*

When a Laboratory Emergency Unit arrives at the scene of an emergency, the responsibility for emergency response transfers from the Building or Facility

Manager to the person in charge of the responding unit (Fire Chief, Physician, etc.).

It is the responsibility of the Building Manager, or his alternate, to meet the responding Emergency Unit and to give the Emergency Control Coordinator all pertinent information relating to the emergency and attendant hazards. He is to remain at the disposal of the Emergency Control Coordinator to provide any required specialized information.

F. *Mobilization Plan, Control Center, and Level of Response*

The specific mobilization plan and level of response for an emergency depends on the nature and degree of the emergency. Details are contained in the emergency plans prepared by the Cafeteria, Construction and Maintenance, Environmental Health and Safety, Fire, Medical Services, Plant, Protective Services, and Supply Services Departments. These plans are an integral part of this overall plan and are appended to this document. Emergency call lists and actions plans are maintained by these Departments. They include the normal in-house emergency call list.

In general, any emergency is to be reported to the Protective Services and Fire Departments by dialing **extension 5333.** The Protective Services Department acts as the primary control center for most emergencies. A backup control center is located at Fire Department Headquarters. Reports of emergencies are received at both locations. The Protective Services and Fire Department dispatchers alert the appropriate Laboratory Emergency Units. When Protective Services or the Fire Department arrives on the scene, an assessment is made of the situation. The level of response is then made in accordance with established instructions in the Protective Services and Fire Department Emergency Plans.

In most cases the required emergency response is clear-cut and will be handled by one or more of the Laboratory Emergency Units. Calling upon higher authority or outside assistance usually will not be required.

In the event of a major emergency, as defined on page 2, Section IV-A, higher authority will take command and direct the emergency effort.

V. GENERAL PROCEDURES IN AN EMERGENCY

A. *Personal Injury*

1. Take first aid measures immediately. If heavy bleeding is involved or if the victim's breathing or circulation has stopped, apply first aid at once, and do not delay by leaving the scene to report the injury — CALL FOR HELP. Bleeding must be stopped and breathing and circulation restored.

2. Instruct a bystander to **call extension 5333** to report the injury and to summon medical aid. Use fire pull-box only if no phone is available.

3. Continue first aid measures until professional help arrives.

B. *Fire, Explosion, Smoke Odor*

1. Anyone who sees a fire or explosion or detects a hazard that may suddenly develop into an actual fire or explosion should immediately turn in a fire alarm or **call 5333.** The Fire Department can also be called to determine the source of smoke odors of unknown origin.

2. Make sure someone meets the Fire Department when it arrives and explains the situation to them.

3. At an accelerator facility, either the Building Manager or the accelerator control room should be notified of any alarm turned in, if possible.

4. In the case of fire involving hazardous equipment or radioactivity, special emergency procedures will be put into effect. These procedures involve the response of specialists and are covered in individual building emergency plans for each area having unique hazards.

5. Fire-fighting action should be taken only if this can be done with reasonable safety.

C. *Release of Toxic or Flammable Material*

1. Anyone who detects a flammable-gas leak should turn in an alarm. **Call 5333** and report the gas leak to the responding party. Next, inform the person in charge of the building, if possible.

2. In some areas a flammable-gas leak will be detected automatically and an alarm sounded and transmitted to emergency units.

3. If informed of a flammable-gas leak, leave the area unless you have a specific function in the emergency plan.

4. In the event of a leak or a suspected leak of toxic material, the building or area MUST be evacuated immediately and the emergency reported. ONLY trained and properly equipped emergency personnel may enter the area until after it has been checked and cleared.

5. In many cases a leak of a hazardous substance will involve experimental equipment and laboratory facilities. Local emergency procedures developed for these situations are in the building emergency plans.

6. Significant releases of chemical pollutants to the environment must be reported to the Director's Office.

D. *Radiological Incident*

Personnel involved with the release of radioactive material shall promptly

evacuate and quarantine the area, remain at the boundary of the radioactive area, and avoid spreading contamination. For emergencies involving exposure to radiation, the Environmental Health and Safety Department must be notified immediately. Techniques used by the Medical Department to diagnose the level of hazardous radiation exposure, by bioassay tests and/or whole body counting, and those used by the Health Physics Group of the Environmental Health and Safety Department, to estimate radiation dose received from an accelerator beam, require prompt action. All accelerator crews should be familiar with procedures for action in such cases. **Call 5333.**

E. *Threat to the Laboratory*

1. A threat may be received by phone, letter, brief note, or in person by someone claiming to have knowledge.

2. The recipient should remain calm and listen carefully. Attempt to have another employee present or listening on an extension. By note or signal, alert a co-worker to call the Laboratory operator, **extension 6111,** to trace the call.

3. Attempt to determine the following:

   a. Exact location of threat—building, room, floor.
   b. Exact time threatened action will occur.
   c. If a bomb—is it disguised, concealed, in the open?
   d. Kind and size of bomb—fire, dynamite (how many sticks, etc.).
   e. How did it enter—mail, carried?
   f. Why was it placed in the Laboratory?
   g. Identity of caller or person reporting.
   h. The origin of the call.
   i. Characteristics of caller's voice (accent, speech defects), background noise, etc.

4. It is recognized that some of the above information probably cannot be obtained, but an attempt should be made. Notify the Police Desk **(5333)** and your supervisor immediately.

F. *Earthquake*

1. Stay calm. If you are indoors, stay indoors; if outside, stay outside. Try to keep others calm. Falling debris around the perimeter of buildings can cause many casualties.

2. If inside, avoid falling debris and breaking glass by moving away from, for example, tall bookcases, experimental setups, and glass windows. Stand in an inside doorway or the inside corner of a room, or crouch under a desk or bench.

3. If outside, move into open areas away from overhead power lines, towers, buildings, and other structures.

4. If in an automobile, stop in a safe, open area.

5. After the earthquake:
   a. DO NOT light matches, DO NOT smoke, and DO NOT operate electrical switches or appliances. If a gas leak exists, such actions could cause explosions. Report gas leaks by **calling 5333.**
   b. Check for fires, spills of hazardous or flammable materials, and ignition sources. Take action where practical.
   c. Persons in your area may be injured or trapped. Give assistance in accounting for others in your area; summon medical or rescue help if necessary.
   d. Be very careful to avoid downed wires, structural hazards, and other obstructions.
   e. Move into the open after the earthquake is over, but DO NOT USE ELEVATORS. Assemble at your building's specified area for a head count. Building Manager will then report to central control. Remember that aftershocks or subsequent earthquakes may be even more damaging than the initial shock.
   f. Do not try to leave the Laboratory by automobile. Roads will be blocked and automobiles will only add to the confusion, and prevent emergency vehicles from getting through. When roads are open, you will be notified as to the best way to get home.

G. *Landslide, Flood, or Water Damage*

1. Flooding is possible during a severe cloudburst or when a storm drainage channel becomes blocked during heavy runoff. A break in a water main can also cause flooding. Damaging flows of mud and debris may ensue.

2. Call Plant Maintenance, **extension 5481** (ask for CAM 10), or **5333** after hours; describe the situation, and request instructions. Inform the person in charge of the building or area. If electrical equipment may be affected by flooding, point this out.

3. Warn people in the immediate vicinity of hazards. Set up temporary barriers to prevent personnel or vehicle traffic from coming into hazardous areas.

4. Take any obvious measures that may protect equipment, such as providing temporary outlets for ponding water, or temporary dikes at door sills. Move parked vehicles that may be in the path of flood water.

5. DO NOT try to disconnect or shut down electrical equipment unless you know exactly what to do and there is no risk involved. Ask for help from the Plant Maintenance or Plant Engineering Departments.

6. Meet those who respond and guide them to the affected area.

H. *Impaired Access or Egress*

1. When for any reason normal access is impaired, the Protective Services Department will provide directions over the public address system and will station officers at locations to provide traffic control.

2. Under certain conditions the flow of traffic will be one way for all lanes. All employees and guests must obey signs and directions as given. Failure to do so will not only jeopardize the operation but may result in serious injury or death.

I. *Failure of Utilities: Electrical Power, Telephone Service, Gas or Water Supply*

1. Report power failures during normal working hours to Plant Maintenance, **extension 5481;** ask for CAM 10 (shift supervisor). During off-hours, **call extension 5333.**

2. In case of power failure in circuits supporting critical activities, the Plant Maintenance Technicians can provide portable emergency generators and notify personnel responsible for restoring normal power.

3. In the event of power failure at the Laboratory, the telephone system is designed to continue to operate. The Building 80A Telephone Services Office is provided with an emergency standby generator so that the CENTREX consoles can continue to receive and place calls for the entire Laboratory. Individual telephones will also operate during a power failure, but telephone lights and bells drawing on local power may fail to function.

4. The telephone system is highly vulnerable to damage from a major earthquake. The main trunks connecting the Laboratory with Pacific Telephone's Bancroft Avenue Building cross the Hayward earthquake fault near the end of Hearst Avenue. Rupture of these trunks would place the entire Laboratory CENTREX system out of service. However, the "Red" emergency telephone system, totally contained within the Laboratory, should remain operational.

5. In the event of an area-wide catastrophe, telephone facilities are subject to severe overload. The Laboratory's CENTREX system is designed to detect such overloading automatically and restrict outgoing calls. Approximately 250 of the Laboratory's lines have been designated priority-essential-service lines that will retain the ability to place outgoing calls. These lines have been assigned to personnel that have responsibilities and assignments to perform during emergencies. Telephones that do not have priority service will not be able to place outgoing calls (no dial tone) but will receive any incoming calls dialed to them.

6. Loss of flow or pressure in the water or gas supply should be reported to Plant Maintenance, **extension 5481** (ask for CAM 10) during normal working hours, and to **extension 5333** after hours. The local Plant Maintenance Technicians can also be of immediate assistance.

J. *Civil Disturbances*

In most instances, advance warning of disturbances will be given by the Protective Services Department. If the disturbance appears to be of a serious nature, a decision will be made by the Director's Office regarding evacuation of Laboratory personnel and other emergency action to be taken.

K. *Civil Alert*

1. The LBL Protective Services Department will be adivsed of impending disasters by the following means:
   a. NAWAS (National Warning System, through DOE)
   b. EBS (Emergency Broadcasting System, through commercial broadcasts)

   Such disasters may include enemy attack, dispersal of radioactive material, fire, storm, flood, and other events or natural phenomena that could endanger life or health, or threaten destruction of plant and community facilities.

2. Upon receipt of warnings from the above sources LBL Protective Services will broadcast pertinent information over the LBL public address system, and will also use portable broadcasting equipment to reach all sections of the Laboratory.

3. Depending upon the nature of the danger and the circumstances in the surrounding community, orders will be given for personnel to take shelter at the Laboratory or to evacuate the area.

4. Following notification of an alert, departments possessing broadcast receivers should tune to the Emergency Broadcasting System: 640 and 1240 kHz.

VI. EMERGENCY COMMUNICATION SYSTEM (see Figure 3)

1. The LBL Communications System fulfills four functions during an emergency. First, the proper authorities are notified that an emergency exists. Second, emergency units are alerted as to the nature and location of the emergency. Third, Laboratory employees may be informed of the emergency. Fourth, tactical communications are provided between units in the field and the Emergency Dispatch Centers.

2. The LBL Communications System includes two-way radio channels, a CENTREX telephone system, a separate emergency "Red" telephone system, manual and automatic alarm systems, the Hill public address system, and messengers.

A. *Emergency Alarms*

1. Emergency alarms reported by telephone through extension 5333 are handled by the Fire and Protective Services dispatchers who alert the

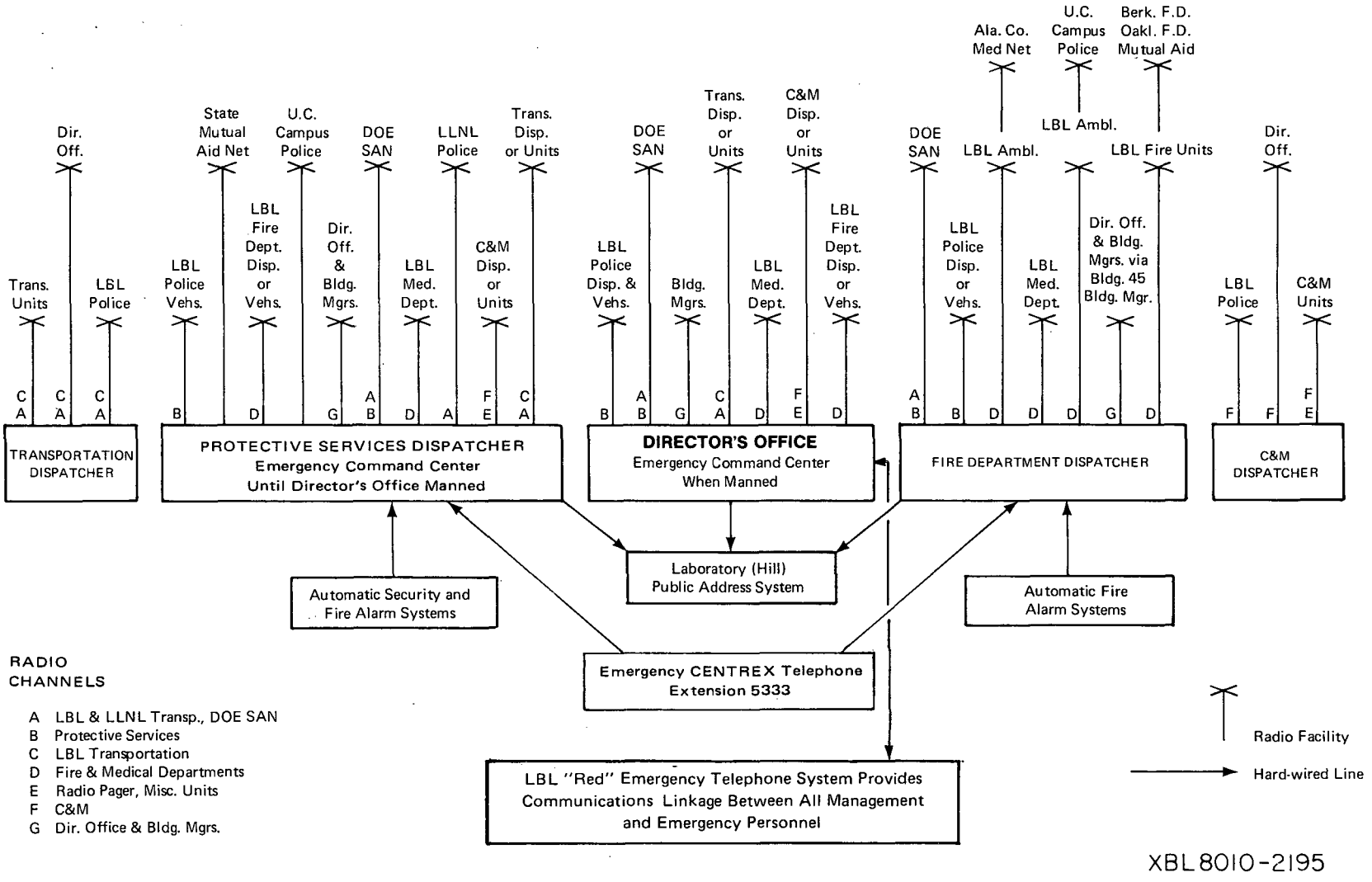


FIG. 3. LBL EMERGENCY TACTICAL COMMUNICATIONS NETWORK

appropriate responding unit. Automatic alarm systems are handled either by the Fire Department or Protective Services dispatchers.

B. *Tactical Communications* (see Figure 3)

1. All Laboratory emergency vehicles are equipped with radio transceivers containing channel "B," the Protective Services Department frequency. The Protective Services dispatcher also has available the channel "A" long-range inter-site radio, as well as five short-range channels normally used by other Laboratory services.

2. Fire-fighting vehicles are equipped with channels "B" and "D" radio transceivers, and some vehicles are outfitted with multiple channel equipment for communication with the Berkeley and Oakland fire departments, mutual aid, and others.

3. The Director's Office and Building Managers are equipped with radio transceivers containing channel "G."

4. Construction & Maintenance Department's radio communications system includes 29 hand-held portable transceivers, 2 mobile truck-mounted transceivers, and a two-point-operated base station. Additionally, the Department has the ability to operate its 43 telephone/radio pagers independently of the LBL telephone system. The Department's hand-held two-way units include Fire Department and Protective Services Department channels in addition to CAM & Delta operational channels.

VII. NOTIFICATION OF OUTSIDE AGENCIES

A. *Emergencies that Must be Reported to DOE-SAN Office*

In the event of suspected type A, B, alert, or site emergency occurrence (defined in Appendix B and on p. 1) appropriate authorities will take specific measures to assure that, except for necessary emergency actions, the scene of any occurrence is *not disturbed* until the designated level of management authorizes the initiation of recovery operations or resumption of normal operations.

The scene of the occurrence must be preserved until an official DOE investigation has been completed.

1. "Type A" occurrences must be reported immediately to the Director's Office (usually to the Associate Director for Engineering & Technical Services) and relayed from there to the DOE-SAN office.

During off-hours, if Director's Office personnel cannot be reached, "Type A, alert, or site emergency" occurrences should be reported directly to DOE-SAN, by LBL Protective Services.

All hours:

Notify DOE-SAN Guard
From LBL — phone 9 + 273-4237
From Off-site — phone (415) 273-4237

Identify yourself and say you are reporting an **alert** or a **site emergency** incident.

"Type A" occurrences are primarily:

a. Fatalities.
b. Disabling injuries to five or more individuals from one accident.
c. Property loss of $100,000 or more.
d. Significant release of pollutants.
e. Large loss or theft of radioactive or hazardous materials.
f. Excessive internal or external radiation exposure.
g. Hazardous release of radioactivity.
h. Any occurrence which might give rise to inquiry by the public or press. (See DOE Manual excerpt in Appendix B for the complete list).

2. "Type B" occurrences should be reported to the Director's Office promptly, and in all cases soon enough to permit transmittal to DOE-SAN within 72 hours of the time of occurrence.

"Type B" occurrences are primarily:

a. Loss of or damage to property of $50,000 to $99,000.
b. Lost work day due to occupational illness.
c. Internal or external radiation exposure that exceeds allowable limits.
d. Accidents involving vehicles transporting radioactive material.
e. Arrival of shipments of radioactive material that have been damaged and are leaking or may have leaked.

B. *List of Outside Agencies that May be Called on for Assistance*

1. On-Site

a. Emergency assistance from the following agencies may be required. Any request for such assistance MUST be made through the LBL Protective Services Department.

Albany Police Department
Alameda County Sheriff's Department
Berkeley Police Department
Bomb Disposal — U.S. Army 87th Ord.
California Highway Patrol
Federal Bureau of Investigation
Oakland Police Department
Richmond Police Department

U.C. Berkeley Police Department
Contra Costa County Sheriff's Department
Coroner, Alameda County

b. Emergency assistance for the following outside agencies MUST be requested through the LBL Fire Department.

Ambulance Companies
Berkeley Fire Department
Civil Defense, Alameda County
East Bay Regional Park Fire Department
Oakland Fire Department
Mutual Aid, Alameda County

c. Emergency assistance from the following outside agencies MUST be requested through LBL Plant Maintenance, extension 5481, or the emergency **extension 5333:**

EBMUD
PG&E

2. Off-Site

Off-site (900-series) buildings should call their local fire, police, or ambulance services first, and then report to LBL on **extension 5333.**

APPENDIX A

Building Managers — August 1984

1. Listed in Alphabetical Order

Manager	Building(s)	Mail Stop	Ext.
Atchley, F. Marvin	50A, 50B	50B-2232	x5455
Beales, J. Tom	90	B90K	x4510
Bish, Lewis M., Jr.	88	88	x5088
Bregger, Ken	4, 5, 16, 43, 52	4-230	x5011
Castillo, Jennie M.	80A	80A-001	x4440
Clark, Sylvester	77, B77C, B77D	77-125	x5901
Constantian, Geo. A.	14, 40, 41	14-102	x5389
Davis, Victoria	54	B90F	x4123
Dietrich, Nancy A.	26	26-109	x6266
Eggers, Philip E.	3	3-130	x4327
Farson, Deborah A.	83	83-01	x4367
Fulton, Robert L.	42	90-2148	x4664
Gachis, Gary R.	81	81	x5676
Halonen, Eric	901, 935	69A-102	x4935
Hampton, George	6, 9A & B, 10	80-101	x5467
Iler, Jacquelyn	55	55-121	x6325
Kelley, Guy	B67A thru D	B67B	x4702
Kraemer, Mary Jo	934	934-47A	x6785
Long, Allan W.	1	1-213	x6033
Lundgren, Steven	60, 63, 64	64-121	x5831
Marshall, Pat	7, 12N, 78, 79	7-100	x5155
Meschi, David J.	62	62-203	x6077
Montello, Russell	65	65	x5585
Morrison, Michael E.	17, 27, 53	53-103	x6056
Perera, Rupert	80, 80C-D	80-223A	x5682
Robb, Alan W.	44	B44B	x7321
Robinson, Richard L.	50	50B-4206	x5621
Rondeau, Donald J.	46, 46A	46A-1123	x6411
Salz, Paul	29, 29A & C	29-100	x5051
Schmidt, Richard C.	73	73-001C	x5319
Shalimoff, Geo. V. (Acting)	70, 70A	70A-1115	x5141
Silva, Elmer J.	43A, 45, 48	48-102	x6015
Springsteen, Robert W.	74	74-157	x5108
Stevenson, Robert R.	71, 71A	71-259	x6471
Stewart, Robert L., Jr.	37, 61, 76	76-222A	x6011
Vanecek, David L.	47, 58, 58A	58-101	x7251
Westmacott, Kenneth H.	72	72-131	x5663
Worthington, Wm. L.	25, 25A	25-123	x5381
Yates, Eddie W.	69, 69A	69A-102	x5151
Young, Jensen	75	B75B-101	x5251
Zajec, Emery	51	51-208	x5575

2. Listed According to Building Number (Deputy in parentheses; Safety Coordinators in brackets)

1	Long, Allan W.	6033
	(Whaley, G. Baird)	6033
	[Kidd, Scott]	5251
3	Eggers, Philip E.	4327
	(Peconom, Bradley)	4348
	[Kidd, Scott]	5251
4	Bregger, Ken	5011
	(Williams, Don)	5314
	[Gregerson, Donald E.]	5251
5	Bregger, Ken	5011
	(Williams, Don)	5314
	[Gregerson, Donald E.]	5251
6	Hampton, George	5467
	(Yeater, Fred)	5467
	[Aune, Raymond G.]	5251
7	Marshall, Pat G.	5155
	(Goya, Ronald R.)	5157
	[Sheets, Richard G.]	5251
9	(Brown, Ian G.)	5815
	[Aune, Raymond G.]	5251
9A, 9B	Hampton, George	5467
	(Yeater, Fred)	5467
	[Aune, Raymond G.]	5251
10	Hampton, George	5467
	(Yeater, Fred)	5467
	[Aune, Raymond G.]	5251
12N	Marshall, Pat G.	5155
	(Goya, Ronald R.)	5157
	[Sheets, Richard G.]	5251
12S	(Brown, Ian G.)	5815
	[Aune, Raymond G.]	5251
14	Constantian, Geo. A.	5389
	(Dorsey, John)	5477
	[Sheets, Richard G.]	5251
16	Bregger, Ken	5011
	(Williams, Don)	5314
	[Gregerson, Donald E.]	5251
17	Morrison, Michael E.	6056
	(MacGill, Robert A.)	6139
	[Sheets, Richard G.]	5251
25, 25A	Worthington, Wm. L.	5381
	(Toutolmin, Walter)	5381
	[Sheets, Richard G.]	5251
26	Dietrich, Nancy A.	6266
	(Letchworth, Wm. P.)	5829
	[Sheets, Richard G.]	5251
27	Morrison, Michael	6056
	(MacGill, Robert A.)	6139
	[Sheets, Richard G.]	5251
29, 29A, 29C	Salz, Paul	5051
	(Sojourner, Clifford L.)	6645
	[Muhammed, Bette A.]	5641
37	Stewart, Robert L., Jr.	6011
	(Maxson, Chas. D.)	6011
	[Sheets, Richard G.]	5251
40	Constantian, Geo. A.	5389
41	(Dorsey, John)	5477
	[Sheets, Richard G.]	5251
42	Fulton, Robert L.	4664
	(Solbau, Ray)	6092
	[Sheets, Richard G.]	5251
43	Bregger, Ken	5011
	(Williams, Don)	5314
	[Gregerson, Donald E.]	5251
43A	Silva, Elmer J.	6015
	(Dietrich, George)	6015
	[Sheets, Richard G.]	5251
44	Robb, Allan W.	7321
	(Apte, Michael)	4669
	[Sheets, Richard G.]	5251

45	Silva, Elmer J.	6015
	(Dietrich, George)	6015
	[Sheets, Richard G.]	5251
46, 46A	Rondeau, Donald J.	6411
	(Pope, Leverett A.)	6411
	[Montoya, Victor J.]	5088
47	Vanecek, David L.	7251
	(Chavis, Clarence S.)	7252
	[Aune, Raymond G.]	5251
48	Silva, Elmer J.	6015
	(Dietrich, George R.)	6015
	[Sheets, Richard G.]	5251
50	Robinson, Richard L.	5621
	(Armstrong, Betty)	4724
	[Corgile, Pat]	5641
50A, 50B	Atchley, F. Marvin	5455
	(Johansen, Walter)	5144
	[Corgile, Pat]	5641
51	Zajec, Emery	5575
	(Oakley, Harvey J.)	5575
	[Biscay, Kenneth R.]	6471
52	Bregger, Ken	5011
	(Williams, Don)	5314
	[Gregerson, Donald E.]	5251
53	Morrison, Michael E.	6056
	(MacGill, Robert A.)	6139
	[Sheets, Richard G.]	5251
54	Davis, Victoria	4123
	(McBride, James)	5357
	[Muhammed, Bette A.]	5641
55	Iler, Jacquelyn	6325
	(Chen, George T.)	6712
	[Biscay, Kenneth R.]	6471
58, 58A	Vanecek, David L.	7251
	(Chavis, Clarence S.)	7252
	[Aune, Raymond G.]	5251
60	Lundgren, Steven	5831
	(Byrnes, Terrence)	5831
	[Biscay, Kenneth R.]	6471
62	Meschi, David J.	6077
	(Peterson, Conway V.)	6062
	[Hemphill, Wm. P.]	6258
63, 64	Lundgren, Steven	5831
	(Byrnes, Terrence)	5831
	[Biscay, Kenneth R.]	6471
65	Montello, Russell	5585
	(Johnston, Joyce)	7352
	[Montoya, Victor J.]	5088
B67A thru D	Kelley, Guy	4702
	(Yazdanian, Mahry)	4701
	[Montoya, Victor J.]	5088
69, 69A	Yates, Eddie W.	5151
	(Petersen, Ronald H.)	4617
	[Sheets, Richard G.]	5251
70, 70A	Shalimoff, Geo. V. (Acting)	5141
	( )	
	[Muhammed, Bette A.]	5641
71, 71A	Stevenson, Robert R.	6471
	(Hatch, Chester W., Jr.)	6471
	[Biscay, Kenneth R.]	6471
72	Westmacott, Kenneth H.	5663
	(Ackland, David)	5448
	[Hemphill, Wm. P.]	6258
73	Schmidt, Richard C.	5319
	(Gundel, Lara A.)	5319
	[Hemphill, Wm. P.]	6258
74	Springsteen, Robt. W.	5108
	(Fletcher, Brian)	5806
	[Hemphill, Wm. P.]	6258
75	Young, Jensen	5251
	(Haley, James T.)	5251
	[Jelonek, Harry J.]	5251
76	Stewart, Robert L. Jr.	6011
	(Maxson, Chas. D.)	6011
	(Harvey, Richard V.]	5251
77, B77C thru B77H	Clark, Sylvester	5901
	(Smith, Jack)	5901
	[Gregerson, Donald W.]	5251

78	Marshall, Pat G.	5155	83	Farson, Deborah A.	4367
	(Yerkes, Carroll)	5087		(Parry, Gordon)	4367
	[Harvey, Richard V.]	5251		[Hemphill, Wm. P.]	6258
79	Marshall, Pat G.	5155	88	Bish, Lewis M. Jr.	5088
	(Johnson, Marlin W.)	5497		(Burton, Roy F.)	5088
	[Gregerson, Donald E.]	5251		[Montoya, Victor J.]	5088
80	Perera, Rupert	5682	90	Beales, J. Thomas Jr.	4510
	(Seward, Chip)	4985		(McGrath, Harold T.)	4506
	[Aune, Raymond G.]	5251		[Montoya, Victor J.]	5088
80A	Castillo, Jennie M.	4440	901	Halonen, Eric	4935
	( )			(Ruiz, Gabriel G.)	4935
	[Aune, Raymond G.]	5251		[Gribben, Robert W.]	5251
80C, 80D	Perera, Rupert	5682	934	Kraemer, Mary Jo	6785
	(Seward, Chip)	4985		(Moise, Herbert)	4189
	[Aune, Raymond G.]	5251		[Gribben, Robert N.]	5251
81	Gachis, Gary A.	5676	935	Halonen, Eric	4935
	( )			(Ruiz, Gabriel G.)	4935
	[Biscay, Kenneth R.]	6471		[Gribben, Robert W.)	5251

APPENDIX B

Excerpts from DOE 0502, Notification, Investigation and Reporting of Occurrences. All references in this section are to DOE guidelines.

1. Categories

   a. Any fatal or imminently fatal injury or illness involving a DOE or DOE contractor employee or a member of the public due to an occurrence associated with a DOE or DOE contractor operation. (Type A investigation.)

   b. Any lost work day case due to occupational injury or illness of five or more persons as a result of one occurrence in a DOE or DOE contractor operation. (Type A investigation.)

   c. Estimated loss or damage to DOE or other property amounting to $100,000 or more or estimated costs of $100,000 or more required for cleaning (including decontamination), renovating, replacing, or rehabilitating structures, equipment or property. (Type A investigation if the costs exceed $250,000. See Part VII, "Criteria for Determining DOE Property Valuation and DOE Losses.")

   d. Any occurrence involving a nuclear weapon or device under DOE jurisdiction, which as the result of an explosion, fire, act of God, etc., causes the spread of radioactive material, personal injury, or damage to private property. (Type A investigation.)

   e. Any accidental releases of pollutants which result or could result in significant effect on the public or on the offsite environment, e.g., need to relocate people, substantial fish kill, requirements for corrective actions in the environment, requests that downstream water supply intakes be shut down, etc. (Type A investigation.)

   f. Any accidental releases of pollutants designated by the Environmental Protection Agency (EPA) as "hazardous" and requiring activation by the EPA or the U.S. Coast Guard of the National Contingency Plan for Oil and Hazardous Substances to effect removal or corrective measures. (Type A investigation.)

   g. Any apparent loss or theft of byproduct, other radioactive or nonradioactive material in such quantities and under such circumstances that it could constitute a hazard to the health and safety of individuals. Where this involves the possible theft of Government property, the FBI shall be notified by the Division of Safeguards and Security for a decision as to acceptance of investigation jurisdiction. (Type A investigation.)

   h. A single or annual accumulated whole-body exposure of an individual to 25 rem or more of radiation, a single exposure of the skin of the whole body of an individual to 75 rem or more of radiation, a single exposure of an individual to 150 rem or more of radiation, or a single exposure of the hands or feet of any individual to 375 rem or more of radiation. (Type A investigation.)

   i. Any internal uptake of radioactive material which on the basis of a small number of early assay data will result in a dose commitment in excess of 5

times the pertinent annual standard set forth in chapter 0524. (Type A investigation.)

j. Any nuclear criticality achieved in a system not intended to reach criticality. (Type A investigation.)

k. Any release of radioactive material to controlled or uncontrolled areas in concentrations which, if averaged over a period of 24 hours, would exceed 5,000 times the respective concentration guides specified for such materials in appendix 0524, annex A, Tables I and II. (Type B investigation.)

l. Any release of radioactive material offsite that could reasonably be expected to result in an annual dose or dose commitment to any member of the general population greater than the annual standards set forth in appendix 0524, part II, A. (Type B investigation.)

m. Any occurrence which is likely to give rise to an inquiry by members of the public or press, if the field organization head involved considers the inquiry to be of sufficient importance to notify Headquarters. (Investigation.)

n. Any occurrence where a press release is made or where information is provided to the news media, other federal agencies, or state and local authority, either by the field organization or a DOE contractor. (Investigation.)

o. Any radiological assistance occurrence. (Investigation.)

p. Any request to an offsite authority for emergency assistance involving a nuclear operation. (Investigation.)

q. Any discovery of significant radioactive or nonradioactive contamination in the onsite or offsite environment attributable to current or past DOE operations. (Investigation.)

NOTIFICATION WITHIN 72 HOURS

Notification to Headquarters of the following occurrences shall be made within 72 hours of the occurrence.

1. Categories

a. Estimated loss or damage to DOE or other property amounting to between $50,000 and $100,000 or estimated costs within these limits required for cleaning (including decontamination, renovating, replacing, or rehabilitating structures, equipment, or property.) (Type B investigation is required for loss or damage between $50,000 and $250,000. See Part VII, "Criteria for Determining DOE Property Valuation and DOE Losses.")

b. Any lost work day case due to occupational illness. (Type B investigation.)

c. Any radiation exposure to an individual which, in one calendar quarter, exceeds the following:

(Type B investigation):

1. 5 rem to the whole body
2. 15 rem to skin of whole body or thyroid
3. 30 rem to the forearms
4. 75 rem to the hands or feet

d. Any internal uptake of radioactive material which, on the basis of a small number of early assay data, will result in a dose or dose commitment in excess of the pertinent annual standard set forth in chapter 0524. (Type B investigation.)

e. Any unplanned nuclear excursion in a reactor, whether or not terminated by protective actions, which is clearly outside the routinely accepted and experienced bounds for that reactor. (Type B investigation.)

f. Any vehicle transporting radioactive material that is known by the shipper or the receiver to have been found on arrival at a DOE or DOE contractor facility to be contaminated in either the interior or exterior above the limits specified in section 173.397, "Contamination Control," Department of Transportation Regulations, 49 CFR 173. (Investigation.)

g. Any shipment of radioactive material that arrives at a DOE contractor facility (Investigation):

1. Damaged to the extent that there is substantial reduction in the effectiveness of the package.
2. From which radioactive contents are leaking or may have leaked.
3. In which one or more packages are contaminated above the limits specified in section 173.397, "Contamination Control," Department of Transportation Regulations, 49 CFR 173.

APPENDIX C. EMERGENCY PLANS
CAFETERIA EMERGENCY PLAN

Proposed Procedure During Normal Cafeteria Working Hours

If an emergency occurs between 6:30 a.m. and 3:00 p.m., Monday through Friday (the normal working hours for the Cafeteria staff), the Cafeteria Manager or Chief Cook — if the Cafeteria Manager is absent — shall assess the condition of the building and ascertain that the utility systems (water and electricity) are functioning. If the systems are not functioning, the emergency power and water supplies shall be activated.

Normally, the Cafeteria has enough food on hand to prepare 1,500 meals (see Attachment A). If they are able to continue with food preparation, they will report this to the Emergency Control Coordinator **(extension 5333)** and wait for instructions if they are to remain on site for food preparation. The Emergency Control Coordinator will assess the need to have the Cafeteria remain open (or possibly prepare an evening meal) if a major earthquake or other emergency occurred during a Monday through Friday workday.

At the direction of the Emergency Control Coordinator, employees would be assigned by shifts to eat at the Cafeteria (at Laboratory expense). Priority would be given to Medical Services, Environmental Health & Safety, C&M, Protective Services, Fire Department personnel, and to the injured who may be sent or taken to the Cafeteria by Medical Services.

Proposed Procedure Outside Normal Cafeteria Working Hours

If an emergency occurs outside normal Cafeteria working hours, the Laboratory needs to select from the manpower available — Accelerator crews or Computer Center staff (assuming C&M, Fire, Protective Services, Medical Services, and Environmental Health & Safety personnel are occupied) — those who would be designated to prepare meals for those remaining at the Laboratory.

This emergency crew should have a tour of the Cafeteria and access to copies of keys, know the location of supplies, know how to operate the equipment, and what equipment can be operated when the emergency power generator is activated. In addition, the crew should know how to access the alternate water supply to the Cafeteria. If it is determined food can be prepared, they will notify the Emergency Control Coordinator **(5333),** who will then advise the Cafeteria crew if meals are to be prepared, the number of meals, and when to serve them. In the interim before emergency power is available for the cafeteria, the Bevatron barbecue pits could be used if fuel were available.

ATTACHMENT A
Cafeteria Emergency Plan

The following is a list of items on hand in the cafeteria based on month end inventory figures. Those amounts fluctuate according to delivery schedules. The Cafeteria

Manager has tried to transpose most amounts to portions. The list does not include highly perishable items such as produce and some dairy goods.

CANNED GOODS

Vegetables	1050 portions
Juices	550 portions
Meat & Fish	275 portions
Soda	75 portions
Soup	200 portions
Fruit	150 portions

FROZEN GOODS

Vegetables	400 portions
Juices	325 portions
Prepared entrées	250 portions
Meat/Fish/Poultry	950 portions

STAPLES

Eggs	90 dozen	Bread	300 portions
Cheese	80 pounds	Bakery	200 portions
Dried Beans	70 pounds	Cookies	60 dozen
Flour/Rice	75 pounds	Chips & Crackers	950 pieces
Noodles	60 pounds	Cereal	200 portions
Pancake & Bisquick Mix	65 pounds	Coffee	1500 cups
Tea	450 portions	Coffee (instant)	100 cups

PAPER GOODS

Small plates	1000
Large plates	500
Utensils	3000

CONSTRUCTION AND MAINTENANCE DEPARTMENT EMERGENCY PLAN

This Department is responsible for the operation and maintenance of all the Laboratory's physical facilities; its personnel, therefore, will have important roles to play in an emergency.

This plan provides some broad guidelines for the response of Department personnel to an emergency. All members will of course be familiar with the emergency plan for their particular facility or area.

A. *Goal*

The goal of all response action is to preserve life and property; this is to be done without undue risk to one's own safety and in cooperation with Laboratory emergency units.

B. *Preparedness*

All personnel are expected to be thoroughly familiar with local conditions and emergency procedures. Area maintenance foremen shall maintain up-to-date contact lists of persons to be called in specific types of emergencies.

C. *General Response — Foremen and Headquarters*

The foremen and Department Head's Office shall perform the following functions in an emergency:

1. Receive and analyze reports on the situation.
2. Check condition of all communication systems.
3. Determine availability and safety of on-site personnel.
4. Issue orders according to previously defined procedures to control and contain the emergency.
5. Report assessment of emergency to appropriate authorities.
6. Report on availability of department resources, and on actions being taken or planned.
7. Receive and efficiently respond to directions.
8. Summon additional resources as appropriate.

D. *Individual Actions*

1. Minimize personal exposure to hazards — radiation, falling debris, etc.
2. Evaluate the situation and take action to provide emergency assistance to others and to minimize hazard to personnel and property. Actions may include the following:
   a. Provide emergency medical first aid.
   b. Evacuate where imminent hazards are obvious.

c. Pull fire alarms; use fire suppression control points or extinguishers, if appropriate.
d. Summon emergency medical support.
e. Shut down utilities and equipment.

3. Monitor local paging system, telephone/radio paging system, and two-way system for information or directions.
   a. Keep Department telephone lines free for incoming calls.
   b. Check tele/radio page receiver for proper operation.
   c. Check two-way radio transmitter/receiver for proper operation.
      i. Check channel selection, volume and squelch control.
      ii. Do not transmit in hazardous atmosphere.
      iii. Do not transmit until contacted by authorities or only to obtain emergency assistance.
4. Inspect and operate assigned utilities and equipment in accordance with established emergency procedures.
5. Keep authorities in charge of the emergency informed as to changing conditions.

E. *Department Sub-Group Responses*

Detailed C&M Department Sub-Group Emergency/Disaster Response Plans are included in a separate Department Emergency Plan. Generalities are: Plant Maintenance Technicians (P.M.T.) are responsible for the operation of the Department's two-way and tele-radio communications systems operations. Area P.M.T. Supervisors are responsible for determining, or assisting others in determining the nature extent, and impact of local incidents in their assigned areas. The P.M.T. Shift Supervisor in Building 76 is responsible for such assistance and determinations in site-wide and multiple-area incidents. The most qualified individual(s) available, considering the first apparent nature of the incident, will be assigned from the Crafts or P.M.T. groups to provide support. They are expected to follow pre-established operational procedures and the detailed emergency plan for the area, facilities, utilities, systems or equipment apparently involved in the incident. Sub-groups respond to site-wide emergencies by reporting to the closest P.M.T. Area Supervisor, making themselves available for support assignment.

The most qualified support personnel will be assigned to:

1. Operate and repair mechanical and electrical utility systems.
2. Operate and repair plant and research building systems and equipment.
3. Operate heavy equipment.
4. Provide and place personnel and traffic barricades to isolate areas defined as hazardous.
5. Provide and place blocks, sand bags, and earthen berms as containment measures.
6. Place and operate temporary pumps, power and lighting sources.
7. Provide and install temporary facilities and equipment covers and closures to restore protective envelope integrities.
8. Provide clean-up/mop-up activities.

It is expected that C&M Sub-group personnel may be assigned to assist in:

1. Search for downed, trapped or injured personnel.
2. Transportation of injured.
3. Traffic/crowd control.
4. Radioactive/toxic materials containment and clean-up.

ENVIRONMENTAL HEALTH AND SAFETY DEPARTMENT EMERGENCY PLAN

A. Department Head or Alternate — report to Emergency Command Center.

B. Area Coordinators

General

Survey assigned areas; coordinate efforts with Building Manager.

Report conditions of assigned facilities and personnel to Building Manager who in turn will contact the Emergency Command Center (ECC) through any available means.

Personal injury

Take immediate first aid measures to reduce suffering.

Fire, explosion, escaping gas

Activate fire alarms.

Evacuate and barricade area.

Use fire extinguishers to control small fires if feasible.

Falling objects, imminent collapse of buildings

Evacuate occupants to safe area and barricade entrances to building.

Release of toxic materials (chemicals and/or radioisotopes)

If safe to enter building, inspect for release of toxic materials. Inspect gloved boxes, Berkeley Box manifolds, storage areas.

Take action to mitigate release of toxic material if feasible.

Evacuate and quarantine contaminated area.

Monitor affected personnel, send to Medical Services.

Check air sampling devices to assure proper function.

C. EH&S Specialists (as necessary)

General

Check EH&S Department facilities with same details listed under Area Co-ordinators.

Industrial Hygiene

Check emergency equipment for function and availability: flammable gas detectors, respirators, toxic gas sampler. Obtain bleach to disinfect broken sewer mains.

Monitors/Health Physics/Electronic Support

Check radiation detectors and air samplers for function and availability.

Transportation

Check trucks and radios for function; get portable radio from firehouse for use in Building B75B area.

Decontamination, Waste Disposal

Check radiation detectors, decontamination supplies, and air samplers.

Occupational Safety, Engineering Services, and all others

Stand by at Building B75B for instructions to assist as required in specific areas.

Environmental Monitoring

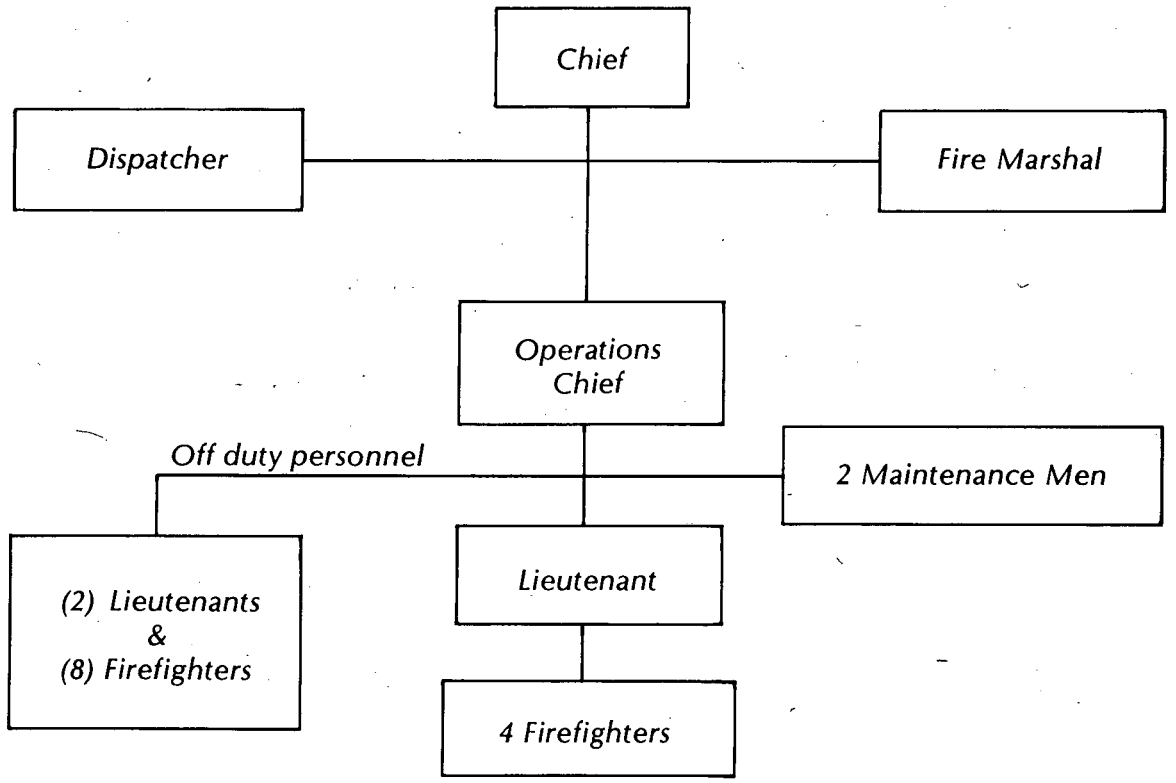
Check counting equipment for proper function. Prepare to count air and water samples.

FIRE DEPARTMENT EMERGENCY PLAN

The LBL Fire Department is manned 24 hours per day, 7 days a week. It is maintained in a constant state of readiness for immediate response to fires, injuries, bomb threats, hazardous or toxic spills and major disasters like earthquakes.

A. The objective of the Fire Department is to protect life and prevent property loss at LBL and surrounding areas. This is accomplished by several action levels within the Fire Department emergency response system.
   1. Quick reporting via emergency telephone, radio and a vast network of fire detection/protection systems.
   2. Rapid dispatching of emergency response personnel.
   3. Decisive initial remedial action taken by emergency response personnel to effect quick control.
   4. Thorough after-action investigation and corrective measures if needed.

B. The Fire Department is organized in the following way for daily operations:



This everyday organization, under the direction of the Fire Chief, is sufficient to respond to and control most emergencies. In the event of a major disaster, however, this unit would become part of the greater LBL disaster organization and report to the Emergency Control Coordinator.

C. In the major disaster role, the Fire Department will develop damage assessment data for the Director's Office:

1. Number of injured/dead
2. Number of fires and/or potential for fire
3. Status of water supply system and fire protection system
4. Status of communications systems
5. Status of Fire Department personnel and equipment
6. Condition reports on surrounding communities and availability of Mutual Aid assistance
7. Recommendations on best use of Fire Department manpower and equipment

D. Fire Department manpower and manning levels:

1. Daily manpower (8–5, M–F)
   (1) Chief, (1) Asst. Chief, (1) Fire Marshal;
   (1) Lieutenant, (1) Dispatcher, (4) Firefighters, (2) Maintenance men.
2. After hours and weekends:
   (1) Lieutenant, (4) Firefighters, with Chief Officer on call.
3. During major emergency/disaster situation off-duty personnel would be called in for additional strength.

E. Fire Department equipment (apparatus)

Designation	Description
1. Chief's car	Mobile command post
2. 1 Engine	1000 GPM pumper truck
3. 2 Engine	750 GPM pumper truck
4. 3 Engine	4x4 grass firefighting truck
5. Tanker 1	2000 gallon Tanker truck
6. Rescue 18	Intensive care ambulance
7. Utility unit	½ ton pickup truck

MEDICAL SERVICES DEPARTMENT EMERGENCY PLAN

A. First Aid Stations and Medical Supplies

1. Building 26 is the primary first aid station; but since it is at a higher elevation and at some distance from the largest population centers, it seems logical to use Building 55, housing several biomedical research groups, as a secondary first aid station.
2. In preparation for potential disasters the following items have been stored in Buildings 26 and 55 to supplement the medicines and supplies normally available: 2 small footlockers containing bandages and other material suitable for long-term storage, 4 stretchers, and 50 gallons of fresh water. An appropriate number of cots and blankets will be added to these stores.

B. Assessment of Usability of Building 26 and of Availability of Staff

1. If the building seems unsafe it will be abandoned in accordance with the evacuation plan and work will be resumed in the adjoining parking lot.

   The following equipment will be removed from the building:

Equipment	**Location**
Physician's Bag and Handitalkie — Med 1	Dispensary & Nurses' Station
Crash Cart & Oxygen Tank	Nurses' Station
First Aid Kit & Burn Kit	Dispensary
Footlockers	Decon Room
Stretchers	Decon Room
Handitalkie — Med 2	Room 118
Handitalkie — Med 3	Room 120

2. A census will be taken to determine who on the staff is there and able to help. During normal working hours, 7:30 a.m. to 6:00 p.m., the number of staff members in the building may vary considerably: administrative and clerical staff, 1–5 persons; technical and scientific, 0–5; nurses, 1–3; physicians, 0–2.

C. Communications

1. The Fire Department will be contacted by radio, using our portable units, for information regarding the number and location of casualties, the severity of the injuries, and the availability of the ambulance or other vehicles which could be used to transport the injured.
2. The Protective Services Department will be contacted by radio to obtain information on the condition of the roads and of the secondary first aid station in Building 55.
3. Information will be obtained by sending out runners from Building 26 if radio contact with the Fire and Protective Services Departments fails or is unsatisfactory.

D. Transportation

1. Those among the injured who are able to walk will be encouraged to walk to either Building 26 or 55, whichever seems easier to reach.
2. Transportation of the severely injured will be by ambulance, other suitable vehicles and, if necessary, by stretcher.
3. Some of the injured may require medical care beyond the first aid available in Building 26 and 55. These patients will be transported, by whatever means available, to Cowell Hospital on the Berkeley campus.
4. Evacuation of patients from Cowell to other Berkeley hospitals, to hospitals elsewhere in the Bay Area, or to more distant medical centers may become necessary and can be initiated with the help of local, state and federal authorities.

E. Treatment of Casualties

1. It may be necessary to set up a formal triage in Buildings 26 and 55 so that the priority of treatment can be determined in a rational manner.
2. The medical staff will probably have to be split between Buildings 26 and 55 since there usually are no nurses and often no physicians in 55.
3. It seems a realistic estimate that with the present staff and with the stores on hand in the two buildings, a maximum of about 100 patients can be given first aid effectively.
4. Cowell Hospital has agreed to accept LBL casualties in the event of an earthquake or other major disaster.
5. LBL has an agreement with Herrick Hospital in Berkeley to care for ill or injured patients who are contaminated with radioisotopes.
6. Physicians in the Biology and Medicine Division have expressed their willingness to help give first aid where needed and to offer their services to Cowell Hospital.
7. If the Laboratory should become isolated for more than a few hours, public health measures, such as purification of water supplies and the establishment of latrines, will have to be considered.

PLANT ENGINEERING DEPARTMENT EMERGENCY PLAN

This Emergency Plan has been prepared to assist the members of the Plant Engineering Department in improving their capability and overall readiness for response to an emergency in an effective and coordinated manner. An emergency is considered to be any abnormal situation that endangers the well-being of individuals or the Laboratory. Included are injuries to individuals; fires; potentially hazardous gas or fluid leaks; radioactive spills; threats to the Laboratory; natural disasters, such as earthquakes, flood, landslides; power and other utility failures; impeded access to or egress from the Laboratory; civil disturbances; and civil alerts. Reference: LBL Publication PUB-237, Master Emergency Plan, January, 1978. The Plant Engineering Department, with its design knowledge of all physical plant facilities, may be called upon for assistance in any emergency where its members' special knowledge is needed.

A. OBJECTIVES

1. Protect life and property.
2. Develop damage assessment data for the Director's Office and Emergency Control Coordinator.
   a. Assist in damage surveys of buildings, equipment, utilities and roads.
3. Provide engineering backup to those personnel responsible for life safety, protection, operation and maintenance of the plant.

B. PLANT ENGINEERING EMERGENCY TEAM ORGANIZATION

1. Personnel response is based on LBL weekend and holiday "Emergency List."
2. Plant Engineering Emergency Team consists of:
   a. Plant Manager (Deputy for Plant & Facilities)
   b. Plant Engineer (Plant Engineering Department Head)
   c. Plant Mechanical Engineer (Mechanical Section Leader)
   d. Deputy Plant Mechanical Engineer (Deputy Mechanical Section Leader)
   e. Plant Power Engineer (Electrical Section Leader)
   f. Deputy Plant Power Engineer (Deputy Electrical Section Leader)
   g. Plant Civil Engineer (Civil/Structural Section Leader)
   h. Deputy Plant Civil Engineer (Deputy Civil/Structural Section Leader)
   i. Chief Construction Inspector
   j. Deputy Chief Construction Inspector
3. Primary responsibility rests with members of Plant Engineering Emergency Team to respond to emergencies following existing lines of administrative and departmental authority.

C. GENERAL RESPONSE FOR PLANT ENGINEERING EMERGENCY TEAM — DURING OFF HOURS

1. Since the Plant Engineering Emergency Team is only on-site during 5 out of the 21 LBL work shifts per week, in the event of an emergency at the Laboratory outside of normal working hours, there may be considerable time delay before the Team can reach the site and assume its operations.
2. Immediately following an earthquake (or other emergency affecting the Bay Area) Team members' priorities will appropriately be:

a. Personal safety
b. Safety of family and friends
c. Personal property
d. Laboratory responsibility

3. If at home, for your personal safety, follow recommended procedures in front of Pacific Telephone home telephone book under "Survival Guide."
4. Find out what has happened.
   a. Listen to the radio broadcasts for damage reports and road conditions.
   b. Do not attempt to call LBL, phones will probably be out.
5. If the strong earthquake ground motion lasts longer than 10 seconds and/or there are radio reports of damage in Berkeley, or at the Laboratory, Team members should plan to return to the Laboratory after determining that their family and friends are safe and their personal property is not in danger.
6. Team members should plan to return to the Laboratory using personal transportation and avoiding radio-reported blocked roadways.
7. Upon arrival, Team members will report to Construction Inspectors' Trailer in front of Building 90, for an update of Laboratory conditions, and number and location of Team members at the Laboratory. In the absence of the Plant Manager or Plant Engineer, first Plant Engineering Section or Deputy Section Leader on-site will assume leadership of the Team until Plant Manager or Plant Engineer arrives.
8. As Team members arrive, Team will implement the following *General Response for on-site Plant Engineering Emergency Team* instructions, which are presented in the following section, using available on-site Plant Engineering personnel to fill vacancies in Team positions.
9. If possible, Plant Engineer or designee will start a call-back of needed Plant Engineering Department Architects, Engineers, Construction Inspectors, and key Administrative personnel.

D. GENERAL RESPONSE FOR PLANT ENGINEERING EMERGENCY TEAM — DURING REGULAR WORKING HOURS

1. Immediately following an emergency, Plant Engineering Emergency Team will verify condition of their personnel and work places..
2. If Plant Engineering Department office space is functional and telephones are in service, Plant Engineering personnel will return to or remain at their normal work places and wait for further instructions unless instructed to leave Building 90.

   If Plant Engineering office space is not functional, telephones are not in service or Plant Engineering personnel have been instructed to leave and/or not to enter Building 90, Plant Engineering personnel shall carry out the instructions that follow.
3. Team members will take previously prepared, up-to-date sets of utility comprehensive maps and detail sheets, safety hats and flashlights.
4. Plant Engineer and Plant Engineering Section and Deputy Section Leaders or designees will log in at Construction Inspectors' Trailer in front of Building 90. The Plant Engineer and Plant Engineering Section Leaders will report to Building

90 Basement, Emergency Command Center, or other designated Emergency Command Center in the event Building 90 Emergency Command Center is not in operation.

5. After logging in at Construction Inspectors' Trailer, Deputy Section Leaders or designees will then proceed and report to Building 76 Construction and Maintenance Department Control Center to gather damage information, provide engineering support to C&M, and keep in communication with Emergency Command Center.
6. Plant Engineer and Section Leaders remaining at Emergency Command Center will gather damage information and instructions from Emergency Coordinator, relay information instructions to Deputy Section Leaders and, as needed, to other available Plant Engineers, Construction Inspectors, and Architects.
7. All other Plant Engineering Department Architects, Engineers, and Construction Inspectors will report to the Construction Inspectors' Trailer in front of Building 90, and log in. Certain Plant Engineering personnel have preassigned responsibilities assigned by the Section Leaders and shall carry out these responsibilities after contacting the Section Leaders. Personnel without specific responsibilities will fill empty positions in the Team organization, provide technical backup, assist in building and utility damage surveys, and provide vehicle transportation and messenger service for Plant Department.
8. Plant Architects and Engineers with specific assignments, after logging in at Construction Inspectors' Trailer and contacting their Section Leader or designee, will carry out the specific assignments *and report information back to Emergency Command Center.*
9. Civil Engineers will check for damage to roads, the overpass, potential slide areas, exterior of buildings, and underground utilities.
10. Structural Engineers and Architects will check condition of buildings for evidence of structural and non-structural damage before personnel are allowed to continue to use buildings.
11. Mechanical Engineers will report to C&M Area Maintenance foremen to provide assistance in identification of life safety hazards related to equipment, piping, ductwork, flammable and compressed gas systems, high pressure water lines and fire sprinkler systems, fume hood exhaust systems, earthquake shut-off valves, and other mechanical systems.
12. Electrical Engineers, working with Electrical Maintenance Department, Electronics Maintenance Groups and Plant Maintenance Technicians, will check for damage to electrical lines, equipment and systems. Particular attention will be given to electrical lines in slide areas and to the Grizzly Peak Substation. They will work with Mechanical Engineers to check performance of emergency generators. Based on conditions, such as fire or explosive mixtures of gases or liquids, they will direct override of automatic start-up of emergency generators. In the event of power failure, Electrical Engineers will follow established Power Failure Procedures.

E. *Specific Buildings for Investigation*

Building 90	Emergency Command Center
Building 43, 43A	Fire Department

Building 45	Fire Department
Building 26	Medical Services
Building 55	Medical Services
Building 61	Propane Plant
Buildings 50, 50A, 50B	Director's Offices
Building 75	Environmental Health and Safety
Building 76	Construction and Maintenance
Building 90	Plant Engineering
Buildings 70, 70A	"Pit Room"
Building 46	Slide Damage and Bridge
Building 54	Ground Movement
Building 77	Ground Movement
Building 63A	Structural Damage
Building 25	"Stress-crete" Walls
Building 6	Shielding, Magnet and Crane
Building 51	"Trapped Columns"
Building 74	Isolated
Building 83	Isolated

F. *Specific Items for Investigations*

- On-site water tanks and emergency pumping stations
- Utility lines and earthquake shut-off valves at PG&E vault below Building 88
- Communication Systems
- Slide Areas and Utilities

  Building 46
  Building 51
  Building 54
  Building 64
  Building 69
  Building 75
  Building 77
  Building 78 (Rock fall)
  Building 90

- Overpass Structure
- Roads

  Below Building 71
  In front of Building 46
  Grizzly Gate exit
  Cyclotron Road below Building 77
  Centennial Drive at overpass
  West end of Building 90
  Cyclotron Road at Hayward Fault

PROTECTIVE SERVICES DEPARTMENT EMERGENCY PLAN

A. Earthquake

Following a major earthquake we can anticipate:

1. Numerous alarms in every area.
2. Widespread injuries or death.
3. Building structural failures.
4. Fires.
5. Electrical wires down.
6. Slides covering or destroying major roads on Hill.
   a. Such slides will make evacuations or rescue work difficult, if not impossible.
7. Poisonous gases.
   a. Buildings should not be entered without breathing apparatus if they contain chemicals that are spilled.

B. Initial Steps

1. Ascertain via radio:
   a. Location of all police vehicles, fire vehicles, transportation vehicles, and C&M vehicles.
      i. Plot on Hill Map Board.
2. Direct appropriate vehicle to search a specific building or area for fire or injuries, and report back. Assign next building in order.
   a. Buildings to be checked in order of predetermined priority.
3. Assign one vehicle to travel over all roads, reporting where impassable and determine alternate route(s).
4. Make contact with Emergency Control Coordinator for orders.
5. Senior Protective Service Officer:
   a. Determine immediately if communications office is safe for habitation.
   b. If possible, have opinion verified by a member of Plant Engineering.
   c. If engineer not available and opinion of officer is that Building 90 basement is not safe, order immediate evacuation of communications to Building 90 parking lot and set up temporary command post.
   d. Institute procedure to log all fires, emergencies, injuries, etc., and disposition of cases as taken care of.
   e. Request all gates to expedite admission of emergency vehicles and keep non-essential vehicles or persons from entering.
   f. Establish communications with outside via radio (if phone lines out).
      i. Campus.
      ii. Livermore.
      iii. Alameda County Office of Emergency Services (OES) — uses "CLEMAR" frequency.
      iv. DOE-SAN (Alpha).

v. Berkeley Police Department.

6. Emergency Coordination
   a. Dispatch appropriate personnel:
      i. Injury scene **(5333),** or radio.
      ii. Gas shutoff **(5481),** or radio.
      iii. Water shutoff **(5481),** or radio.
      iv. Electrical shutoff or repair **(5481),** or radio.
      v. Elevator trouble **(5481),** or radio.
   b. Off-hours, call appropriate personnel from emergency list if possible.
   c. Consider securing cafeteria for emergency food supplies.
   d. Announce over PA system safe routes to various residential areas.
7. Fires, Fire Alarms, Illness, Personal Injuries: General Order 4.2.
8. Support for Emergency Response Groups: General Order 4.3.
9. Radiological Assistance Team: General Order 4.4.
10. Preservation of Scene of Serious (Type "A") Accident: General Order 4.5.
11. Response to Alarmed Areas: General Order 4.8.
12. Bomb Threats or Explosions: General Order 4.6.
13. Civil Disorders: General Order 23.
14. Unusual or Suspicious Fires: General Order 4.7.
15. Security Alerts: General Order 21.

SUPPLY SERVICES, TRANSPORTATION OF MATERIALS SECTION, EMERGENCY PLAN

This plan is intended as a minimum guideline for Transportation of Materials personnel in the event of a major earthquake/disaster. The Transportation Section has two primary objectives in the event of a disaster:

1. Establish a two-way radio communication link to the Emergency Command Center.
   - — report road or other facility conditions in the immediate area
   - — transmit information from the Command Post to persons in the immediate area
2. Transport emergency supplies and materials or personnel as directed.

A. Response During Regular Work Hours

1. Immediate action at Transportation base location, Building 69
   a. Follow instructions of senior supervisor or Building Manager, including building evacuation if necessary.
   b. Transportation Dispatcher or alternate — checks operating condition of base station two-way radio
      i. If there is a power outage or the base station radio is not accessible, the assigned person should set up dispatch from an available vehicle equipped with a two-way radio.
   c. Radio operator begins checking location of all other Transportation personnel with two-way radios in operation.
   d. Record the location of all operating radios.
   e. Await further instructions from the Emergency Command Center.

2. Immediate action by drivers in vehicles equipped with two-way radios
   a. If not in vehicle at time of disaster, attempt to return to vehicle. Move vehicle away from danger of slides, etc. and out of the way of any emergency vehicle traffic.
   b. If in vehicle at time of disaster, stop and/or park vehicle out of immediate danger from slides, buildings, etc.
   c. Make radio contact with Transportation Dispatcher per instruction card in the vehicle.
   d. Await instructions via the Dispatcher or from Emergency Command Center.

B. Response During Off-Hours

(None unless specific request to come to the Laboratory is made by an authorized official.)