

RANCHO SECO PROCEDURE TRANSMITTAL

TO: Manual #15 - US Nuclear Regulatory Commission
(Washington, DC)

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SUBJECT: REVISION TO THE EMERGENCY PLAN MANUAL

Please make the following changes to your manual referenced above:

- 1) Table of Contents: replace with new page.
- 2) Emergency Plan (Change 5): remove entire procedure and replace with Emergency Plan (Change 6).
- 3) EPIP-01, Revision 5: remove entire procedure and replace with EPIP-01, Revision 6.
- 4) EPIP-02, Revision 0: remove entire procedure and replace with EPIP-02, Revision 1.
- 5) EPIP-03, Revision 1: remove entire procedure and replace with EPIP-03, Revision 2.

After manual has been updated, use the Table of Contents to review the revisions to the sections within the manual. If you find that any of the revisions do not match, contact Rancho Seco at 916-732-4829 for updated copies.

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DOCUMENT ID	REV	STATUS	CHANGE NO	EFF DATE	EXP DATE	TITLE
EP	0	A		03/22/2010		EMERGENCY PLAN CHANGE 6
EPIP-01	6	A		03/22/2010		EMERGENCY ACTIONS
EPIP-02	1	A		03/22/2010		EMERGENCY PREPAREDNESS TRAINING
EPIP-03	2	A		03/22/2010		EMERGENCY PREPAREDNESS SURVEILLANCE PROGRAM

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REVISION SUMMARY

1. Amended wording throughout to reflect "long-term storage" rather than in "decommissioning" mode.
2. Changed references to the California Office of Emergency Services to reflect the department's new name: "California Emergency Management Agency."
3. Amended Figure 4.1 to reflect the changed Emergency Planning Zone boundaries for 10CFR50 emergencies to the area just around the IOSB.
4. Changed Emergency Classification Levels in 3.0 to simplify activation. All necessary activities to activate and implement the plan can be done under "Unusual Event" 10CFR50 or "ISFSI Alert" 10CFR72. Removed references to 10CFR50 "Alert" Classification.
5. Adjusted definition of "Unusual Event" and "ISFSI Alert" to more clearly reference the support of offsite responders given the minimal staff and response resources maintained at the Rancho Seco site.
6. Added in Table 3-1 a new EAL to reference a security compromise to storage of radiological materials in the IOSB referring to sabotage or theft of nuclear materials.
7. Removed Table 3-2, EAL for 10CFR50 Alert.
8. Made the discretionary activation of an ISFSI Alert or Unusual Event definition clearer to reference the need for offsite support to mitigate an event.
9. In Section 4.0, changed the "TSC ERO" to "Augmented ERO." Reduced the ERO to four positions from five. Removed references to "Initial Incident Commander" simplifying references and consolidating duties under just the "Emergency Coordinator" position.
10. Given the minimal staffing at Rancho Seco to mitigate an incident, amended the emergency organization to four groups of response. Maintained On-shift Staffing and Augmented ERO, and added resources from the SMUD Emergency Operations Center and Offsite Agency Assistance as part of the overall response as illustrated in Figure 4-2, "Coordinated Emergency Response Structure."
11. Added subsections 4.3.2 and 4.3.3 for Delegation of Authority for the Emergency Coordinator and Security Coordinator positions.
12. Changed subsection 4.3.9 to more clearly reference the requirements for the Augmented ERO. Changed response times to within 30 minutes be able to carryout duties (regardless of location) and 2 hours to respond to Rancho Seco, Headquarters, or field Incident Command Post (ICP).
13. Added the On-Shift ISFSI Technician as a position in the Augmented ERO to reflect the role as technical expert for the site.
14. Added that Reentry and Recovery activities are completed in coordination with local responders.

15. Removed subsection 5.4.2.3 referencing the issuance of emergency respiratory equipment to onsite responders to protect against inhalation of radioactive materials.
16. Changed reference to radiological monitoring equipment being maintained at the TSC to a more generic reference on-site.
17. In Section 6.4 "Onsite Warning Systems" removed 6.4.1 and 6.4.2 which are no longer applicable with the decommissioning of the public address system.

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1.0 INTRODUCTION

This document describes Sacramento Municipal Utility District's (District's) plan for responding to emergencies that may occur at Rancho Seco while the site is in the long-term storage mode and the used fuel is in dry storage at the Independent Spent Fuel Storage Installation (ISFSI) and the greater than Class C waste (GTCC) is stored in the Rancho Seco Interim Onsite Storage Building (IOSB).

This Emergency Plan includes emergency response for the IOSB and ISFSI. The following indicates applicability.

- Sections of the Plan that are applicable to the IOSB only are indicated by **(10 CFR 50)** at the beginning of the section.
- Sections of the Plan that are applicable to the ISFSI are indicated by **(10 CFR 72)** at the beginning of the section.
- Sections with no indication of (10 CFR 50) or (10 CFR 72) are applicable to both the IOSB and the ISFSI.

1.1 SCOPE

This plan outlines response actions necessary to safeguard site personnel and equipment in the event an emergency involves, or potentially involves, the release of radioactive material or creates a site wide personnel safety hazard during activities and emergencies that may occur at Rancho Seco ISFSI or IOSB.

It is the District's policy to maintain all radiation exposure as low as reasonably achievable (ALARA). This concept applies to occupationally exposed personnel and to the general public. The Rancho Seco Emergency Plan has incorporated ALARA practices, and is written to deal with emergency conditions where ALARA concerns could be greater than normal.

Major topics of the plan include:

- Facility and near site description.
- Types and detection of accidents.
- Classification system for emergency events.
- Organizational response to emergencies.
- Assessment and mitigating actions.
- Notification procedures.
- Offsite response organization functions, notification and coordination.
- Emergency facilities and equipment.
- Training drills and exercises.
- Maintaining emergency preparedness.

1.2 REGULATORY REQUIREMENTS

This Plan meets the requirements established by, and describe in, the following parts and sections of the Code of Federal Regulations:

- 1.2.1 **(10 CFR 50)** Domestic Licensing of Production and Utilization Facilities, Section 47(b), Section 54(q), and Appendix E, as modified by exemptions granted by the NRC, to Rancho Seco Nuclear Generating Station. The exemptions were granted in USNRC letter dated February 22, 1991, to Mr. Dan Keuter, AGM, Nuclear, from Dennis M. Crutchfield, Director, Division of Advanced Reactors and Special Projects, Office of Nuclear Reactor Regulation.
- 1.2.2 **(10 CFR 72)** "Licensing Requirements for the Independent storage of Spent Nuclear Fuel and High-Level Radioactive Waste Storage", Section 32(a), "Emergency Planning".

1.3 STATE OF CALIFORNIA NUCLEAR EMERGENCY PLANNING REQUIREMENTS

California Health And Safety Code, Chapter 4, Part 9, Division 104, §114650-114685, The Radiation Protection Act of 1999, requires joint Utility, State and local government emergency planning for plume and ingestion pathways associated with nuclear power plants with a generating capacity of 50 megawatts or more.

Rancho Seco is in the long-term storage mode with spent fuel in dry storage at the ISFSI. The generating capacity of Rancho Seco does not meet the 50-megawatt criteria established by the State of California. Therefore, Rancho Seco is not required to meet the requirements of The Radiation Protection Act of 1999.

1.4 HAZARDOUS CHEMICALS – RIGHT TO KNOW

Rancho Seco submits a Business Plan to Sacramento County Environmental Management Department annually. The submittal includes hazardous material information specific to Rancho Seco. The Business Plan is available for use during emergency response activities. The Business Plan satisfies the requirements of the Emergency Planning and Community Right-to-Know Act of 1986, Title III, Pub. L. 99-949, with respect to hazardous materials.

1.5 SITE AND NEAR SITE DESCRIPTION

Rancho Seco is located in Sacramento County in the State of California, 25 miles southeast of the City of Sacramento, and 26 miles northeast of the City of Stockton.

The site occupies approximately 87 acres of the District owned 2480 acres, which is flat to rolling terrain. The Sierra Nevada Mountain Range is located to the east, with the Pacific Coast Range to the west. Rancho Seco is approximately 26 miles north-northeast of Stockton and 25 miles southeast of Sacramento, the two largest cities within a 50-mile radius of the site. The nearest population center of 25,000 or more is the city of Lodi, which is about 17 miles southwest of the site. State Route 104 runs north of the site in an east-west direction. Route 104 connects with U.S. Route 99 and Interstate 5 to the west, and

State Routes 88 and 12 to the east.

The area near the site is sparsely populated and is used primarily as grazing land and grape vineyards. SMUD also maintains the Cosumnes Power Plant, a gas fired, 500-megawatt facility immediately south of Rancho Seco. The only public use facility within a 5-mile radius of the site is the Rancho Seco Reservoir and Recreation Area, which is located approximately 1 mile to the southeast of the site, and is within the land owned by the District.

The climate near Rancho Seco is typical of the central valley of California. No indication of geological faulting is present at the site.

(10 CFR 50) The Emergency Planning Zone for Rancho Seco is the fenced around the Interim Onsite Storage Building. Any potential radiological releases are not expected to exceed the State of California Protective Action Guidelines, or the U.S. Environmental Protection Agency (EPA) protective action guide (PAG) exposures as detailed in EPA-400-R-92-001, "Manual of Protective Action Guides and Protective Actions for Nuclear Incidents".

Maps of the site and near site areas are shown in Figures 1-1 and 1-2.

1.6 (10 CFR 72) ISFSI DESCRIPTION

The Rancho Seco ISFSI design provides temporary dry storage for 100% of Rancho Seco's spent fuel. It is designed with safety features that eliminate the need for an operable spent fuel pool to recover from unlikely accident scenarios. The spent fuel will be stored in this manner until the Department of Energy accepts it.

The ISFSI consists of a concrete slab approximately 225 feet long, 170 feet wide, and 2 feet thick at the location of the Horizontal Storage Modules (HSM). There are 22 HSMs on the concrete slab. A security fence surrounds the slab.

The ISFSI Protected Area is the area bounded by the double fence surrounding the concrete slab. The ISFSI Emergency Planning Zone is the nuisance fencing surrounding the ISFSI at approximately 100 meters in all four directions.

1.7 RELATED PLANS, PROGRAMS AND PROCEDURES

1.8.1 The Rancho Seco Emergency Plan and Emergency Plan Implementing Procedures (EPIPs) have been coordinated with the ISFSI Physical Protection Plans to ensure site personnel safety during a security event.

1.8.2 Provisions for radiological control at Rancho Seco are described in the Radiation Control Manual.

1.8.3 Initial mitigating actions for most emergency situations are provided by departmental response procedures. Departmental response procedures work in conjunction with the Emergency Plan Implementing Procedures (EPIPs).

1.8.4 Response to control and cleanup of chemical and hazardous wastes are in accordance with Rancho Seco administrative and departmental procedures.

1.8 GOVERNMENTAL AGENCIES

The following governmental agencies interface with Rancho Seco in the emergency planning process:

1.8.1 Sacramento County Office of Emergency Operations (OEO)

The Sacramento County OEO is the lead emergency response agency within the County and has the role of coordinating emergency activities within Sacramento County as the Sacramento Operational Area.

For significant emergencies the Sacramento Operational Area Emergency Operations Center (EOC) may be activated. Emergency notifications to Sacramento County OEO are conducted as specified in Section 5 of this Plan.

1.8.2 California Emergency Management Agency (Cal-EMA)

Cal-EMA has authority and responsibility for planning and coordination of the State response to nuclear power plant emergencies.

Responsibilities of Cal-EMA include providing assistance to local governments by alerting state agencies, coordinating state resources, requesting and coordinating federal assistance identified in the Federal Radiological Emergency Response Plan, and coordinating state radiological monitoring.

Under the Standardized Emergency Management System (SEMS), an emergency may warrant activation of the Regional Emergency Operations Center (REOC) and/or the State Emergency Operations Center (SEOC). Emergency notifications to the State Operations Center are conducted as specified in Section 5 of this Plan.

1.8.3 California Department of Health Services

California Department of Health Services has overall responsibility for the state's technical assessment of accidents involving the release of radioactive material from nuclear power plants to the environment within the State. State OES coordinates the activities of California Department of Health Services.

1.8.4 United States Nuclear Regulatory Commission (NRC)

During a radiological emergency the NRC ensures that the public health and safety are protected and may provide technical assistance onsite and assessment information and recommendations to state and local officials. Emergency notifications to the NRC Operations Center are conducted as specified in Section 5 of this Plan.

1.8.5 Sacramento County Sheriff's Department (SCSD)

SCSD is the primary local law enforcement agency (LLEA) designated to respond and assist with security incidents at Rancho Seco and the ISFSI.

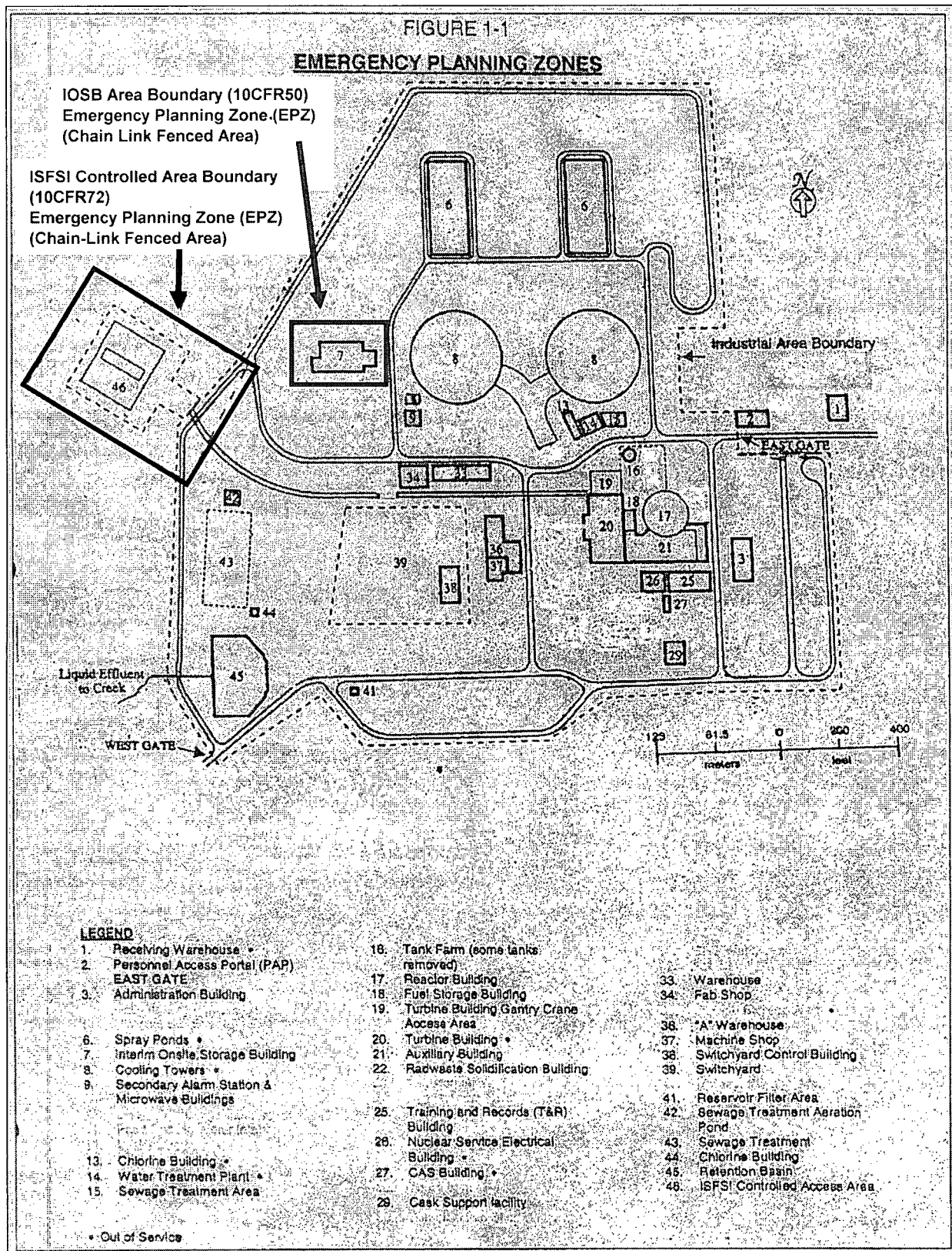
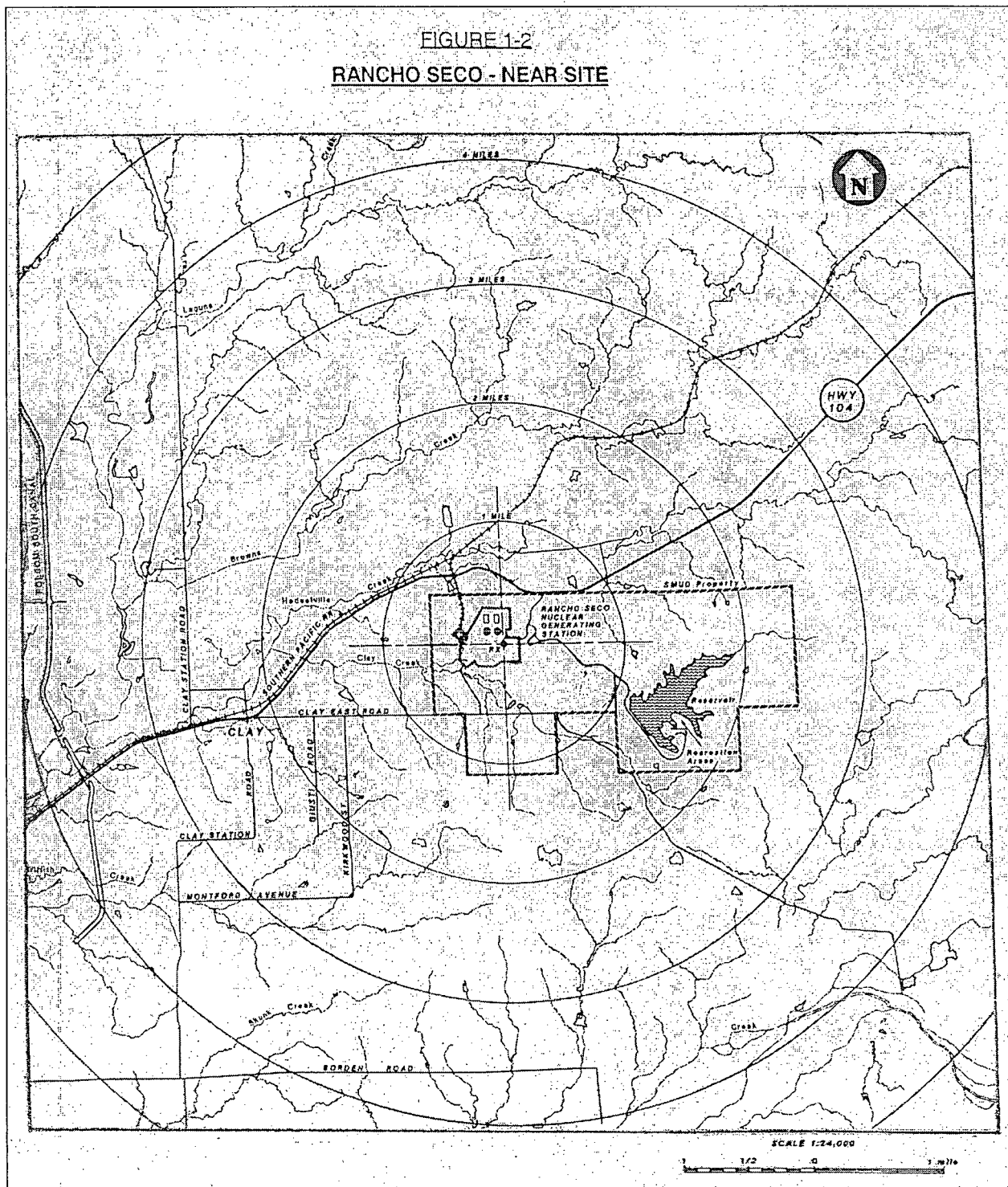


FIGURE 1-2
RANCHO SECO - NEAR SITE



2.0 TYPES OF ACCIDENTS

The consequences of potential accidents were considered in the development of the emergency preparedness program for the Rancho Seco. These potential accidents form the basis for the response described in this plan.

2.1 IOSB (10 CFR 50) ACCIDENTS

2.1.1 ANALYSIS OF POSTULATED ACCIDENTS

The accidents that might occur at Rancho Seco while the facility is in the long-term storage mode have been analyzed for their severity of consequences and probability of occurrence. The analysis of these accidents are contained in the Defueled Safety Analysis Report (DSAR)

2.1.2 ACCIDENTS CONSIDERED CREDIBLE DURING DECOMMISSIONING

Rancho Seco DSAR Section 14.2.2, Accidents During DECON, states, "The accidents discussed in NUREG/CR-0130, Technology, Safety and Costs of Decommissioning a Reference Pressurized Water Reactor Power Station, associated with immediate dismantlement would be applicable during Decon at Rancho Seco. However, the potential consequences of these accidents would be less because of a reduction in the Rancho Seco radionuclide inventory due to decontamination efforts made before Decon, prior radioactive waste shipments and radioactive decay. Therefore, the potential DECON accidents at Rancho Seco are bounded by the accident evaluation specified in NUREG/CR-0130".

2.1.2.1 DSAR, Section 14.2.2, Accidents During Decon

Operational accidents during DECON could result from equipment failure, human error, and service conditions. Operational accidents during Decon are categorized as:

2.1.2.2 Radioactive waste transportation accidents

Off-site Radioactive waste transportation is conducted in accordance with Department of Transportation (DOT) regulations and is beyond the scope of this Emergency Plan.

2.1.2.3 Explosions and/or fires associated with explosive/combustible materials

Responses to explosions and/or fires are included in District emergency procedures.

2.1.2.4 Loss of Contamination Control

As long-term storage progresses, fire loads and contaminated water will be reduced thereby reducing the potential for loss of contamination control.

Response to loss of contamination control is in accordance with the Rancho Seco Radiation Control Program and is not of the magnitude

that would require initiating the Emergency Plan.

2.1.2.5 Natural phenomena

Response to natural phenomena is included as an Emergency Action Level (EAL) for the ISFSI and is described in Section 3 of this Plan.

2.1.2.6 Human caused events external to Rancho Seco

If a human caused event external to Rancho Seco occurs and personnel or facilities within the Rancho Seco Industrial Area are affected, appropriate actions will be taken to protect personnel and facilities.

No emergency response is expected for human caused event external to Rancho Seco during long-term storage.

2.2 ISFSI (10 CFR 72) ACCIDENTS

2.2.1 ISFSI SAR Postulated Accidents

2.2.1.1 Dry Shielded Canister (DSC) Leakage

Vol. I, Section 8.2.2 DSC Leakage, analyzes a DSC leakage accident. The analysis concludes that no credible condition can breach the DCS shell or the double seal welds at each end of the DSC. Therefore, an EAL on DSC leakage is not needed.

2.2.1.2 Accident Pressurization of a DSC

Vol. I, Section 8.2.3, Accident Pressurization, analyzes an accident pressurization of the DSC. The analysis of the DSCs for the accident pressurization load shows that no significant deformations occur to the DSC which could prevent retrieval from the Horizontal Storage Module (HSM) or, inhibit normal transport or on-site transfer operation. In addition, the DSC pressure boundaries are analyzed to withstand the accident internal pressure to prevent release of any radioactive materials to the environment. Therefore, an EAL for Accident Pressurization is not necessary.

2.2.1.3 Earthquake

Vol. I, Section 8.2.4, Vol. II, Section 8.3.2 and Vol. III, Section 8.3.2, analyze an earthquake event and all three sections state that overturning due to the design basis seismic event will not occur. Therefore an Earthquake EAL specific to the ISFSI, HSM or DSC is not necessary.

2.2.1.4 Fire

Vol. I, Section 8.2.5 analyzes the effect of a fire involving 300 gallons of diesel fuel and states that direct engulfment of the HSM or DSC during storage in the HSM is not a credible event. Therefore, a Fire EAL for storage of spent fuel in the HSMs is not necessary.

2.2.1.5 Tornado winds and tornado generated missiles

Vol. II, Section 8.3.1 and Vol. III., Section 8.3.1 analyze tornado and tornado generated missiles and state that the cask is designed to withstand the tornado wind and tornado missile loads without damage to the containment structure. Therefore, an EAL specific to the ISFSI, HSM or DSC is not necessary.

2.2.1.6 Flood

Vol. II, Section 8.3.3 and Vol. III., Section 8.3.3 analyze design basis flood and state that no corrective actions are required in the event of a flood. Therefore, an EAL for a flood is not required.

2.2.1.7 Lightning effects

Vol. II., Section 8.3.4 and Vol. III., Section 8.3.5 analyze lightening events and states the likelihood of lightning striking the HSM and causing an off-normal condition is not considered to be a credible event. Also there are no radiological consequences. Therefore, an EAL specific to the ISFSI, HSM or DSC is not necessary.

2.2.1.8 Complete blockage of HSM Air inlet and outlet vents

Vol. II, Section 8.3.5, analyzes the consequences of complete blockage of HSM air inlet and outlet vents and causing an off-normal condition is not considered to be a credible event. Therefore, an EAL specific to the blockage of HSM air inlet and outlet vents is not necessary.

2.2.1.9 Reduced HSM Air Inlet and Outlet Shielding

Vol. II., Section 8.3.6, analyzes the consequences of Reduced HSM Air Inlet and Outlet Shielding. The analysis shows that there are no radiological or thermal consequences. An EAL for reduced HSM air inlet and outlet shielding is not needed

2.2.1.10 Snow and ice loads

Vol. II., Section 8.3.7, analyses the consequences of snow and ice loads. The SAR states that snow and ice loads are not required for Rancho Seco Site. Therefore, an EAL for snow and ice loads is not required.

2.2.1.11 Radiological Sabotage

The Rancho Seco ISFSI Technical Specifications, Section 5.5.8, Security, states: "Based on source term calculations for failure of all fuel rods within one DSC, as an act of sabotage could not cause a radiological release that would exceed the limits in 10 CFR 100. Therefore, radiological sabotage as defined in 10 CFR 73.2 is not a credible event".

2.2.1.12 Accidental Drop

Drop of the MP-187 Cask, containing a DSC, during transfer operations has been evaluated using a bounding 80 inch drop. (Ref. Volume I, Section 8.2.1, ISFSI SAR). DSC integrity is not compromised by the bounding drop. Therefore, an EAL specific to the ISFSI is not necessary. However, conservatively, an EAL for a severe man-made incident is included in the Alert EALs as described in Section 3 of the Plan.

2.3 DETECTING ACCIDENTS

- 2.3.1 Due to the relative passive status of the facility, detection of abnormal conditions or accidents occurs early by workers involved in and around the tasks being performed, based on visual, audible, and other sensory observations.

Site personnel notify telephone extension 4311 of abnormal or unsafe conditions. This phone is answered at the Secondary Alarm Station. All personnel who are granted unescorted access authorization within either Emergency Planning Zone receive General Employee Training, which stresses telephoning 4311 to report any emergency or abnormal conditions.

- 2.3.2 Fixed and portable instrumentation may be used to detect abnormal conditions.
- 2.3.3 On-shift personnel are made aware of abnormal conditions or of other dangers during long-term storage activities, by the Plant Information Computer System (PICS) indications and annunciators.
- 2.3.4 **(10 CFR 72)** The Rancho Seco ISFSI Technical specifications, Section 5.5.2, Radiological Monitoring Programs, states: "Operation of the Rancho Seco ISFSI will not create any radioactive materials or results in any credible liquid or gaseous effluent release. Accordingly, no (effluent) monitoring or alarms are required (at the ISFSI)". Monitoring Badges will be utilized for monitoring radiation at the ISFSI as part of the Radiological Environmental Monitoring Program (REMP).

3.0 EMERGENCY CLASSIFICATION OVERVIEW

The Emergency Plan and Emergency Plan Implementing Procedures (EPIPs) have been established to respond to emergencies at Rancho Seco. Actions for classifying emergencies and responding to the emergency conditions through pre-designated actions are conducted in accordance with EPIP-01, "Emergency Actions".

3.1 EMERGENCY CLASSIFICATION SYSTEM

3.1.1 Initiating Conditions

Generic abnormal site events or conditions, which form the basis for initiating specific Emergency Action Levels.

3.1.2 Emergency Action Levels (EALs)

Site specific system, effluent or personnel safety off-normal parameter values that, if exceeded, will initiate an emergency classification.

The accidents described in Section 2.0, "Types of Accidents", of this plan, are used as a basis for specific EALs.

3.1.3 (10 CFR 50) Long-term Storage Classification Level:

Unusual Event

An incident indicated by abnormal conditions where the safe storage and containment of radiobiological materials has been compromised. An Unusual Event may involve or potentially involve a low-level release of radioactive material to the environment that requires monitoring and/or assistance from external responders.

An Unusual Event could require cessation of normal activities and require greater than normal attention to protection of site personnel.

The primary purpose for declaration of an Unusual Event is to notify internal staff, emergency responders and regulatory agencies that an atypical situation exists. Declaration of an Unusual Event brings SMUD and external agencies to a state of readiness and provides a systematic handling of incident information and decision-making to mitigate the incident.

A summary of Unusual Events is listed in Table 3-1. The Summary of EALs is generic, with specific threshold values for the EALs listed in EPIP-01, "Emergency Actions", Attachment 2, "Classification of Emergencies".

3.1.4 - (10 CFR 72) ISFSI Classification Level:

ISFSI Alert

An incident indicated by abnormal or accident conditions associated with the Rancho Seco ISFSI.

An ISFSI Alert is an event that affects the integrity of ISFSI structures or creates a safety hazard to personnel, or a security event that has serious consequences.

The primary purpose for declaration of an ISFSI Alert is to notify internal staff, emergency responders and regulatory agencies that an atypical situation exists. Declaration of an ISFSI Alert brings SMUD and external agencies to a state of readiness and provides a systematic handling of incident information and decision-making to mitigate the incident.

The EALs for an ISFSI Alert are listed in Table 3-3.

TABLE 3-1
(10CFR 50 EVENTS)
EAL SUMMARY – UNUSUAL EVENT

1. Transportation of a radiologically contaminated injured individual from on-site to the hospital.
2. Communications with security supervision has confirmed the seriousness or credibility of any of the following events related to the storage of materials within the IOSB:
 - Actual or probable sabotage within the IOSB
 - Attempted theft of nuclear material from the IOSB
3. ISFSI Supervisor/Technician or Emergency Coordinator's discretion for other conditions within the IOSB that require the assistance of external emergency responders to evaluate and mitigate the incident to safeguard the public and environment.

TABLE 3-2
(10 CFR 72 EVENTS)
EAL – ISFSI ALERT

1. A severe man-made incident or natural phenomenon, which affects the integrity of ISFSI structures or creates a significant personnel safety hazard. (For example: explosions or aircraft crash.)
2. Communications with security supervision has confirmed the seriousness or credibility of any of the following events in accordance with the Rancho Seco ISFSI Physical Protection Plan:
 - Bomb, attack or terrorist threat made against Rancho Seco
 - Internal or external civil disturbance related to the storage of nuclear materials
 - Actual or probable sabotage
 - Attempted theft of special nuclear material
3. ISFSI Supervisor/Technician or Emergency Coordinator's discretion for other conditions within the ISFSI that require the assistance of external emergency responders to evaluate and mitigate the incident to safeguard the public and environment.

4.0 ORGANIZATIONAL CONTROL OF EMERGENCIES

4.1 SCOPE

This section describes the Emergency Response Organization (ERO), typical staffing, basic duties, responsibilities, and support services during response to an emergency.

4.2 NORMAL DISTRICT ORGANIZATION

The overall District organization is shown in the Defueled Safety Analysis Report (DSAR). The General Manager administers the affairs of the District under the policies of the elected Board of Directors. Upon request from the Emergency Coordinator, the General Manager directs District resources to provide support and outside assistance. The Site Superintendent, Rancho Seco Assets is responsible for the activities at Rancho Seco and provides policy oversight to the Emergency Coordinators.

4.2.1 Rancho Seco Shift Staffing

4.2.1.1 ISFSI Supervisor and/or ISFSI Technician

This position is the senior Rancho Seco line function person on-shift and their responsibilities include:

- ISFSI and site operations
- Confirm fire alarm
- First Aid Response

4.2.1.2 On-shift Security Officers

The on-shift Security Officers report to the Security Shift Supervisor and are responsible for maintaining onsite security in accordance with the Rancho Seco ISFSI Physical Protection Plan.

4.3 EMERGENCY ORGANIZATION

4.3.1 The Emergency Response Organization (ERO) consists of on-shift staff, augmented responders, District resources, and external emergency responders. This organizational structure is described below. The ERO is shown on Figure 4-1.

4.3.1.1 On-shift Emergency Response Organization

- On-shift ISFSI Technician or ISFSI Supervisor.
- On-shift Security Officer(s).
- Primary Alarm Station Dispatcher at Headquarters.
- Other onsite personnel may be enlisted to assist in responding to the event.

4.3.1.2 Augmented Emergency Response Organization

The augmented ERO staff is notified of the emergency to support and assist the on-shift staff in the response to the activation of the Rancho Seco Emergency Plan. This team is available on-shift or on-call to respond and coordinate the Rancho Seco response with the external agencies.

The augmented ERO is divided into four positions; additional personnel may be enlisted to augment these response activities:

- Emergency Coordinator - responsible for the overall direction and control of the emergency on behalf of the District as the Rancho Seco Incident Commander (IC).
- Offsite Agency Liaison- responsible for gathering and interpreting information related to the emergency, notification and communications with outside agencies.
- Security Coordinator- responsible for coordinating the security and law enforcement aspects of the emergency.
- On-shift ISFSI Technician- responsible for coordinating the site systems and technical operations related to Rancho Seco facilities and infrastructure.

4.3.1.3 District Emergency Operations Center (EOC):

The District Emergency Operations Center provides overall direction, support and coordination on-behalf of the SMUD General Manager.

The District EOC consists of staff from throughout the organization to evaluate, communicate, and mitigate events utilizing the California Standardized Emergency Management System (SEMS) and National Incident Management System (NIMS).

The District EOC is activated once an emergency has been declared, remaining activated until the emergency is closed out.

4.3.1.4 Local Offsite Agency Assistance:

The Sacramento County Sheriff's Department provides the primary local law enforcement response for the area, assuming the role of law enforcement incident commander for criminal events. Through their cooperative and mutual aid agreements, the Sheriff's office is supported by numerous other law enforcement agencies at the local, state, and federal level.

The Herald Fire Protection District provides the primary fire and rescue response for the area, assuming the role of fire incident commander for fire department related events. Through mutual aid agreements, the Herald Fire Protection District is supported by numerous other fire

agencies at the local, state, and federal level.

The Cosumnes Community Services District provides the primary medical and hazardous materials team response for the area, assuming a critical role in emergency medical and hazardous materials related events. Through mutual aid agreements, the Cosumnes Community Services District is supported by numerous other fire, ambulance and hazardous materials resources at the local, state, and federal level.

The University of California, Davis Medical Center provides the primary trauma center and radiological response hospital for the area, assuming the patient care duties.

4.3.2 Emergency Coordinator Delegation of Authority

The Superintendent, Rancho Seco Assets, as the senior Rancho Seco staff member, serves as the primary Emergency Coordinator for the implementation of the Rancho Seco Emergency Plan.

In the event the Superintendent, Rancho Seco Assets, is unavailable onsite the following delegation of authority determines who assumes the role of Emergency Coordinator from those staff available onsite:

1. On-call Emergency Coordinator,
2. Other trained Emergency Coordinator (See the Emergency Response Telephone Directory for delegation list),
3. On-Shift ISFSI Technician,
4. Other available ISFSI Technician (See the Emergency Response Telephone Directory for delegation list).

4.3.3 Security Coordinator Delegation of Authority

The on-shift Security Shift Supervisor nearest to Rancho Seco and available is designated as the Security Coordinator as part of the Augmented ERO>

4.3.4 Emergency Coordinator Duties

Until relieved by the Emergency Coordinator:

- 4.3.4.1 Assume overall control and direction of the incident
- 4.3.4.2 Classify the incident as an emergency.
- 4.3.4.3 Request activation of the Augmented ERO.
- 4.3.4.4 Conduct incident assessment.
- 4.3.4.5 Initiate mitigation and protective measures.
- 4.3.4.6 Request offsite emergency response assistance.
- 4.3.4.7 Direct action to mitigate the consequences of the incident.
- 4.3.4.8 Assume or delegate additional actions as necessary.

- 4.3.4.9 Authorize Emergency Exposure Limits and exemptions for emergency workers, as necessary.
- 4.3.4.10 Initiate Reentry and Recovery activities or Restoration activities, as appropriate.
- 4.3.4.11 Closeout the emergency

4.3.5 Security Officer(s) Duties

Under the direction of the Security Shift Supervisor:

- 4.3.5.1 Maintain physical security per the District and ISFSI Security Plans.
- 4.3.5.2 Perform response actions as directed by the Emergency Coordinator with the approval of the Security Shift Supervisor.

4.3.6 Offsite Agency Liaison

Under the direction of the Emergency Coordinator:

- 4.3.6.1 Acquire and maintain necessary equipment and supplies during the emergency.
- 4.3.6.2 Assume responsibilities for required notifications and communications to the State of California, Sacramento County and NRC.
- 4.3.6.3 Maintain a log and record of all emergency related communications.
- 4.3.6.4 Maintain and open telephone line with the NRC as requested by the NRC.
- 4.3.6.5 Coordinate and maintain liaison duties with offsite agencies.
- 4.3.6.6 Maintain and document key information related to the emergency response.
- 4.3.6.7 Post incident: gather and package all incident documentation and provide to the Superintendent, Ranch Seco Assets.

4.3.7 Security Coordinator

Under the direction of the Security Operations Supervisor and in coordination with the Emergency Coordinator:

- 4.3.7.1 Maintain physical security per the District and ISFSI Physical Protection Plan.
- 4.3.7.2 Perform response actions as directed by the Sacramento Sheriff's Department and Emergency Coordinator.
- 4.3.7.3 Coordinate the security response to the emergency.

4.3.8 On-shift ISFSI Technician

Under the direction of the Emergency Coordinator:

- 4.3.8.1 Provide the Emergency Coordinator with information related to the site systems and equipment.
- 4.3.8.2 Coordinate with offsite technical support for assessment and recommendations.

4.3.9 Augmented Emergency Response Organization On-call Requirements

In order to successfully implement the provisions of the Rancho Seco Emergency Plan, the augmented ERO must be available and fit for duty to conduct assigned activities under this plan. When serving on-call, the augment ERO must be reachable by the communications mechanism identified in the Emergency Response Telephone Directory, and respond to a declared emergency as follows:

- 4.3.9.1 Within 30 minutes acknowledge the activation and be capable of carrying duties identified in this plan.
- 4.3.9.2 Within 2 hours respond to the Rancho Seco site, District EOC in Sacramento, or a Command Post in the Herald area, as determined at the time of the incident.

4.4 (10 CFR 50) REENTRY AND RECOVERY FOR SITE ACTIVITIES

Reentry and recovery operations may be required after an emergency, depending on the severity of the emergency. Reentry and Recovery activities are to be conducted in coordination with local, state and federal responders and regulators.

The Emergency Coordinator is responsible for closeout of emergencies, which includes determining if reentry and recovery operations are required.

4.4.1 Reentry

Reentry activities are a coordinated and authorized entry into an area that was evacuated during a declared emergency due to personnel or radiological hazards. The purpose of reentry is to evaluate the conditions of the area. Reentry will be conducted in accordance with the EIPs.

4.4.2 Recovery

Recovery activities may be initiated after a declared emergency has been closed out, and it has been determined that a dedicated organization is necessary to recover from the hazards remaining from an emergency. Recovery operations will be conducted in accordance with EIPs.

4.5 (10 CFR 72) ISFSI CLOSEOUT AND RESTORATION ACTIVITIES

The Emergency Coordinator is responsible for closeout of emergencies, which includes determining if the incident is under control and the consequences have been mitigated.

After closeout, restoration activities are initiated, as required, to return the ISFSI to a safe condition.

ISFSI Closeout and Restoration activities are to be conducted in coordination with local, state and federal responders and regulators.

4.6 SUPPORT SERVICES

An emergency will likely warrant the utilization of offsite organizations and agencies. As a result, support service arrangements have been made with specific offsite organizations and agencies to provide aid in the event of an emergency at Rancho Seco.

4.6.1 Local Support services

Resources encompass the local, state and federal agencies located in the area. Under the California Master Mutual Aid Agreement, Rancho Seco has the ability to access these resources for assistance. Local emergency response agencies can be contacted via 9-1-1. Access to area State and federal resources are through the California Emergency Management Agency Warning Center.

The District is also a participant in the Sacramento County Operational Area Agreement as part of the Standardized Emergency Management System and National Incident Management System, providing additional resources as necessary.

4.6.2 Medical Support

- 4.6.2.1 Site personnel will call 9-1-1 when helicopter or ambulance and associated Emergency Medical Service assistance is required.
- 4.6.2.2 Consumnes Service District (formerly Galt Fire Protection District), located approximately 15 miles southwest of the site, is the primary responder to medical emergencies at Rancho Seco.
- 4.6.2.3 Site staff will provide radiological information, dosimetry, and escort services to offsite medical assistance personnel upon arrival on site as necessary.
- 4.6.2.4 Injuries that involve radioactive contamination will be directed to University of California Davis Medical Center (UCD). Although under their accreditation standards, all local hospitals providing basic emergency room care should be equipped to handle a contaminated patient if UCD is unavailable. Transportation may be by helicopter or ambulance.
- 4.6.2.5 Qualified hospital personnel will provide radiation protection coverage at the hospital whenever a contaminated patient is transported for treatment.

4.6.3 Fire Suppression Support

4.6.3.1 Site personnel will call 9-1-1 when fire suppression support is required.

4.6.3.2 Herald Fire Protection District, located approximately eight miles southwest of the site, is the primary responder to fires at Rancho Seco.

4.6.3.2 Site staff will provide radiological information, dosimetry, and escorts (as needed) to offsite fire suppression personnel upon arrival on site.

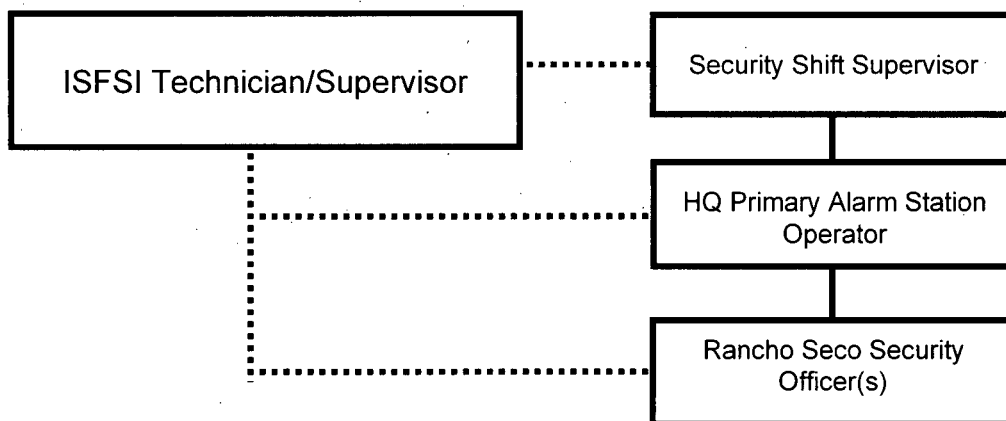
4.6.4 Law Enforcement Support

4.6.4.1 Sacramento County Sheriff's Department, FBI, and/or other law enforcement agencies, may be requested to assist Rancho Seco Security in accordance with the Rancho Seco ISFSI Physical Protection Plan.

FIGURE 4-1

RANCHO SECO ORGANIZATION

ON-SHIFT NORMAL OPERATIONS



RANCHO SECO EMERGENCY RESPONSE OPERATIONS ORGANIZATION

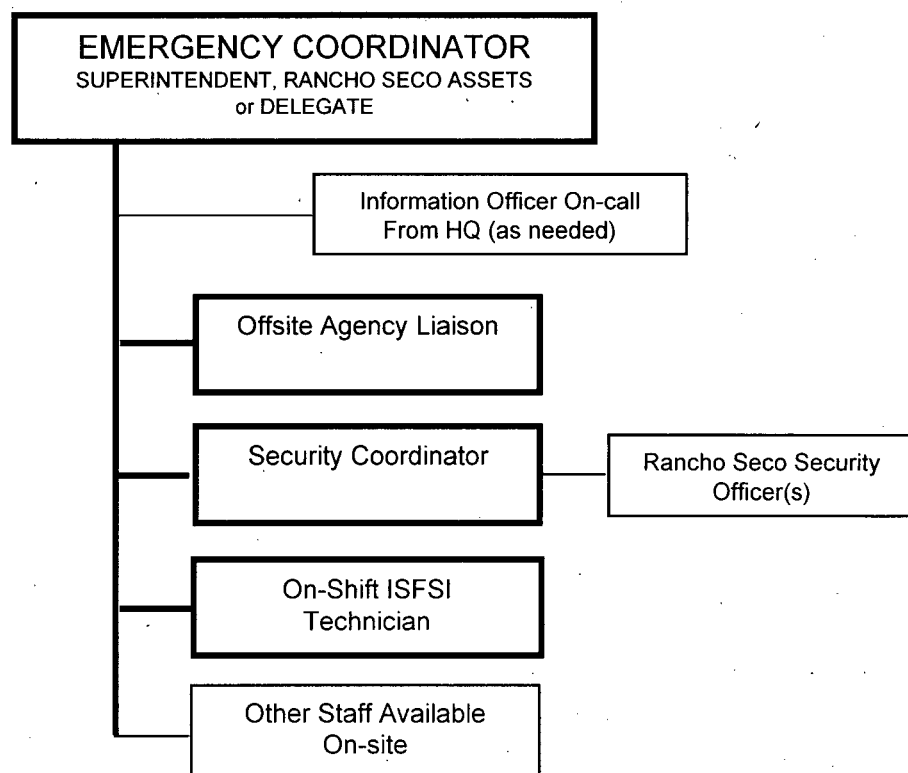
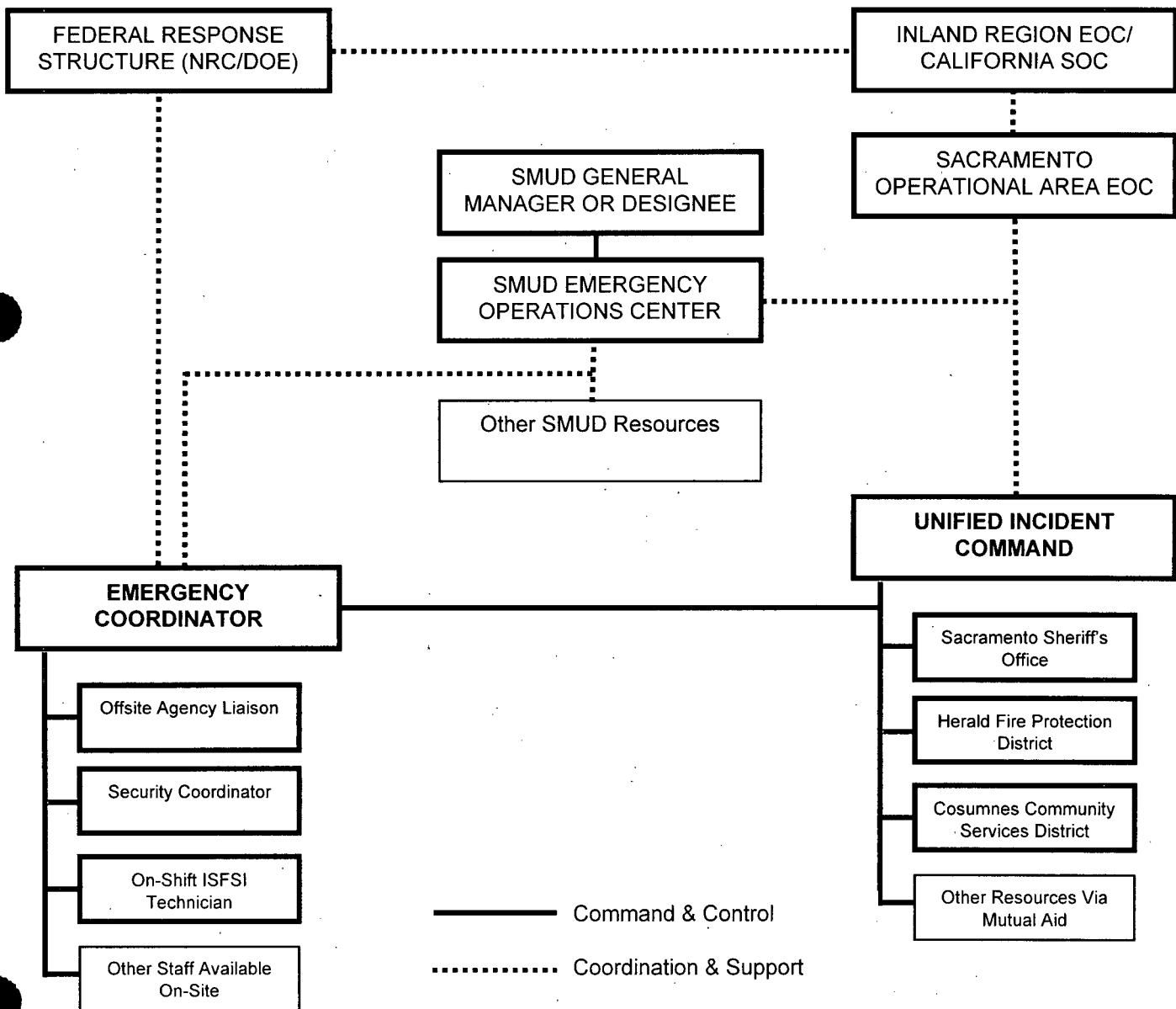


FIGURE 4-2

COORDINATED EMERGENCY RESPONSE STRUCTURE



5.0 EMERGENCY MEASURES

5.1 SCOPE

Emergency measures will be initiated upon classification of an emergency. Initial mitigating response to most events will be in accordance with departmental and District response procedures. The augmented ERO will be activated as described in Section 4.0.

This section identifies:

- 5.1.1 Methods and procedures for assessment actions.
- 5.1.2 Protective actions to minimize radiological exposure.

5.2 EMERGENCY NOTIFICATIONS

- 5.2.1 Initial, follow-up and closeout emergency notifications will be transmitted to Sacramento County OEO, State Warning Center, and NRC Operations Center.
- 5.2.2 Notifications must be completed within 60 minutes after the declaration of the emergency classification.
- 5.2.3 The NRC shall be notified immediately after local jurisdictions, and not later than 60 minutes after declaration of the emergency classification.
- 5.2.4 Notifications will inform the State, County and NRC of the status of the event, radiological releases and actions being taken. The notification process is described in EPIP-01, "Emergency Actions", Attachment 3, "Emergency Notifications".
- 5.2.5 Appropriate SMUD personnel will be contacted for all emergency notifications made to outside agencies. SMUD Management, the public information group, and SMUD Distribution Operations are notified to provide support from other SMUD groups.

5.3 RADIOLOGICAL MONITORING

During the initial phase of an emergency, on shift personnel will review and monitor radiological conditions as warranted. As needed, augmented personnel will accomplish continued radiological monitoring as they arrive.

5.4 PROTECTIVE ACTIONS

Protective actions are emergency measures taken for the purpose of notifying onsite personnel and initiating actions to minimize their exposure to radiological or general safety hazards. Implementation criteria for protective actions are listed in the EPIP-01, "Emergency Actions".

5.4.1 Onsite Protective Actions

5.4.1.1 Onsite notification of an emergency

At the declaration of an emergency, a radio system announcement will be broadcast to onsite personnel to notify them of the emergency and any

instructions necessary.

5.4.1.2 Site Dismissal during Emergencies

A Dismissal is the evacuation process of directing non-emergency response personnel to leave site when their safety is of concern. A Dismissal may be conducted at the discretion of the Emergency Coordinator as a protective or precautionary measure due to existing, or potential emergencies, including: radiological hazards, physical safety hazards, terrorism incident, or a hazardous material release resulting from an emergency event.

Personnel will be Dismissed out the East gate and remain in the parking area for further instructions.

5.4.1.3 Accountability during Emergencies

Accountability of onsite personnel must be performed when a Dismissal has been conducted. When accountability is complete, Search and Rescue Teams will be assembled and dispatched to locate any personnel who are identified as missing.

5.4.2 Radiation Exposure Control

Normal administrative radiation exposure limits established in RP.312.14, Occupational Radiation Exposure Limits and Extensions will be used for emergency response except as specified below:

5.4.2.1 Radiation Protection Exemptions during emergencies:

If a Radiological Assessment Coordinator is present, Radiation Protection Exemptions may be implemented with the approval of the Emergency Coordinator/Incident Commander for Emergency Response personnel.

These exemptions allow varying from certain aspects of established radiological controls procedures under the direction and control of the Radiological Assessment Coordinator. Radiation Protection Exemptions are implemented as specified in EPIP-01, "Emergency Actions", Attachment 7, "RP Exemptions".

5.4.2.2 Emergency Exposure Limits

The Emergency Coordinator may authorize emergency exposure limits for Emergency Response personnel, in accordance with the EPIP-01, "Emergency Actions", Attachment 8, "Emergency Exposures".

5.4.3 Decontamination

Skin decontamination supplies are maintained onsite and are readily available. Decontamination is conducted in accordance with Rancho Seco Radiation Control Manual.

5.4.4 Fire

Responses to fires will be performed as described in District procedures.

5.4.5 Security Contingency

Response to security contingencies is conducted in accordance with the Rancho Seco Emergency Plan, District Security Procedures, and the Rancho Seco ISFSI Physical Protection Plan. Security response and emergency response are coordinated to protect personnel during response activities.

5.4.6 Medical

Response to injuries to personnel onsite that require first aid will be conducted in accordance with departmental response procedures.

5.4.6.1 If the injury involves radioactive contamination, radiation monitoring personnel will be dispatched in accordance with EPIP-01, "Emergency Actions".

5.4.6.2 Emergency medical supplies are available at various locations throughout Rancho Seco for response to medical emergencies.

5.4.6.3 Medical support will be requested from offsite support agencies as specified in District procedures.

5.5 REPORTS

A written notification of emergency event closeout will be provided to the State of California and Sacramento County within five working days of emergency closeout.

A written follow-up report must be submitted to NRC within 30 days following an Initial Emergency Notification, as specified in RSAP-0903, External Plant Reports and Posting of Notices.

6.0 EMERGENCY FACILITIES AND EQUIPMENT

6.1 SCOPE

This section describes the onsite facilities, equipment and supplies that are maintained for use during response to an emergency.

6.2 ONSITE EMERGENCY RESPONSE FACILITIES AND EQUIPMENT

6.2.1 Secondary Alarm Station (SAS)

The Secondary Alarm Station (SAS) is located near the ISFSI, and contains communications equipment used for making emergency notifications.

6.2.1.1 Procedure manuals are accessible (as necessary) in the Secondary Alarm Station/Control Room.

Examples include:

- Emergency Plan and Implementing Procedures
- Operating Procedures Manuals

6.2.2 Technical Support Center

The Technical Support Center is available for use when an emergency is declared. The TSC is maintained by Emergency Preparedness staff.

6.2.3 Radiation Monitoring Instruments and supplies are located onsite. The equipment is reserved for emergency response use only.

6.2.4 Medical Supplies and Equipment:

6.2.4.1 Medical supplies and equipment for first aid are located throughout the facility and are clearly identified.

6.2.5 Skin Decontamination Supplies

6.2.5.1 Skin decontamination supplies are available and maintained on-site by the Radiation Protection group.

6.3 OFFSITE EMERGENCY RESPONSE FACILITIES

6.3.1 Primary Alarm Station

The District maintains a Primary Alarm Station for monitoring and communicating information in support of the Secondary Alarm Station at Rancho Seco.

6.3.2 Emergency Operations Center

The District maintains an Emergency Operations Center (EOC) for coordination of District-wide emergencies. This organization is tasked with overall direction and information management for major emergencies in accordance with the Standardized Emergency Management System (SEMS) used in California to direct and coordinate emergencies by participating agencies.

6.4 ONSITE WARNING SYSTEMS

6.4.1 Emergency Alert Notification

A number of other types of communications systems may be utilized to alert site workers. These systems include but are not limited to: portable radios, pagers, portable megaphones, building fire alarms, vehicle public address systems, and/or word-of-mouth notification.

6.5 MISCELLANEOUS MONITORING SYSTEMS

6.5.1 Plant Information Computer System

Plant Information Computer System (PICS) displays and annunciates site-monitoring data.

6.5.2 Fire Protection Devices

Fire protection at the Rancho Seco facility is provided in accordance with the Rancho Seco Decommissioning Fire Protection Plan.

6.5.3 Seismic Data

Seismic data is obtained from State or Federal agencies.

7.0 MAINTAINING EMERGENCY PREPAREDNESS

7.1 SCOPE

To assure the maintenance of emergency preparedness, an integrated program has been developed and includes:

- Training, drills and exercises
- Emergency Plan and EPIP reviews and revisions
- Routine Test program
- Biennial audits

Maintaining and updating the emergency preparedness program is the responsibility of the General Services Department.

7.2 TRAINING

The Emergency Preparedness Group is responsible for developing, scheduling and conducting emergency response training.

7.2.1 General Training

All personnel who are granted unescorted access authorization receive initial and annual emergency preparedness overview training in General Employee Training.

The District may also provide training to offsite agencies or support organizations that may be called upon to provide assistance during emergencies.

7.2.2 Emergency Response Organization (ERO) Training

Designated ERO personnel receive training specific to their assignments.

The objectives of the training program are:

- To familiarize personnel with the emergency preparedness program.
- To familiarize personnel with their assignments and responsibilities during an emergency.
- To familiarize personnel with the external emergency response process.

7.2.3 First Aid

Rancho Seco's First Aid responders are provided first aid and cardio-pulmonary resuscitation (CPR) training, and recertification in accordance with American Red Cross or equivalent requirements.

7.3 DRILLS AND EXERCISES

7.3.1 General

The Emergency Preparedness Group is responsible for developing, planning, scheduling and conducting drills and exercises.

Drills are conducted and evaluated in accordance with the EPIP-02, "Emergency Preparedness Training".

A critique must be conducted following all required drills. Deficiencies identified must be evaluated and corrected.

The **10 CFR 50** and **ISFSI (10 CFR 72)** drills and exercises may be conducted in conjunction with each other, if the scenario and objectives are sufficiently comprehensive to be appropriate for both 10 CFR 50 activities and the ISFSI.

7.3.2 Drill and Exercise Objectives.

7.3.2.1 To test the adequacy, effectiveness and content of the Emergency Plan and EPIPs.

7.3.2.2 To test emergency equipment, supplies, and facilities.

7.3.2.3 To test the readiness of emergency response organization personnel, thereby evaluating training effectiveness.

7.3.2.4 To familiarize personnel with their duties, assignments, and equipment under simulated emergency conditions.

7.3.3 Fire Drill (10CFR 50 and 10 CFR 72)

Annually, a fire drill shall be conducted with participation by off-site fire suppression assistance when possible, and shall be conducted in accordance with District procedures.

7.3.4 Medical Drill (10CFR 50 and 10 CFR 72)

Annually, a medical drill shall be conducted involving the simulated radioactive contamination of injured personnel. The Site's First Aid Responders and off-site ambulance service will participate in the drill. When possible, the University of California Davis Medical Center or other appropriate hospital shall participate in the drill. The medical drill includes health physics and radiological monitoring.

7.3.5 Biennial Site Drill (10 CFR 50)

Biennially, a site drill shall be conducted which simulates emergencies affecting some of the principal functional areas of the Rancho Seco's onsite emergency response capabilities. This drill may include health physics, radiological monitoring, Dismissal and Accountability, and may involve off-site agencies.

7.3.6 Biennial Exercise (10CFR 50 and 10 CFR 72)

Biennially, an exercise shall be conducted which simulates emergencies affecting the entire site. The Biennial Exercise will be conducted on alternating years with the 10 CFR 50 Biennial Site Drill.

This exercise may include health physics, radiological monitoring, security, site dismissal and accountability, and may involve offsite agencies. NRC and local response agencies shall be invited to observe the biennial exercise.

Both the 10 CFR 50 and ISFSI Biennial Exercise may be conducted as one exercise, if the exercise objectives are sufficiently comprehensive to include both routine Site activities and the ISFSI.

7.4 REVIEW AND REVISION OF PLANS AND PROCEDURES

The Emergency Plan and Emergency Plan Implementing Procedures shall be reviewed by the Rancho Seco staff and/or District Emergency Preparedness personnel every 2 years in accordance with RSAP-0506, "Procedure Review", and shall be updated as necessary. Changes to the Plan or EALs will be reviewed with the State OES and Sacramento County OEO, as necessary.

7.5 AUDITS

An independent audit of the Long-term storage Emergency Planning Program will be conducted biennially in accordance with the Rancho Seco Quality Manual. The Quality Audit will review the following:

- 7.5.1 Emergency Plan and Implementing Procedures
- 7.5.2 Emergency Preparedness Program organization and administration
- 7.5.3 Emergency Response Organization Training
- 7.5.4 Records of Surveillances on emergency facilities, equipment and supplies
- 7.5.5 Records associated with offsite agency response meetings, training and letters of agreement
- 7.5.6 Records for drills, communication system test and any associated corrective actions
- 7.5.7 Activation of the Emergency Plan since last audit.

7.6 EMERGENCY PREPAREDNESS ROUTINE TEST PROGRAM

7.6.1 Emergency Communication System Test

- **(10 CFR 50)** Quarterly, a test of the Emergency Communications System shall be conducted to test and verify the operability of communication equipment as specified in EPIP-03, "Emergency Preparedness Routine Test Program".
- **(10 CFR 72)** Semi-Annually, a test of the Emergency Communications System shall be conducted to test and verify the operability of communication equipment as specified in EPIP-03, "Emergency Preparedness Routine Test Program". The Semi-annual test requirement may be fulfilled by conducting the Quarterly (10 CFR 50) test.

7.6.2 Emergency Equipment and Supplies

7.6.2.1 Equipment and supplies that are used in the site on a routine basis, and may be used during an emergency, are maintained by site procedures.

7.6.2.2 Dedicated emergency equipment and supplies (held in reserve only for use in emergencies) will be periodically checked and calibrated. Inspection intervals shall be in accordance with the EPIP-03, Emergency Preparedness Routine Test Program".

Instruments and equipment shall be calibrated in accordance with station procedures.

7.6.2.3 Any equipment or supplies found to be defective or inoperable during inventories and checks are repaired or replaced as soon as possible.

7.7 UPDATES OF TELEPHONE LISTS, EMERGENCY ASSIGNMENTS AND SUPPORT AGREEMENTS

7.7.1 Telephone Lists and Emergency Assignments

Emergency telephone numbers are located in the Emergency Response Telephone Directory, which is verified and updated semiannually. The Emergency Response Telephone Directory contains the list of qualified ERO personnel and their emergency assignments.

7.7.2 Support Group Agreements

As necessary, Rancho Seco enters into agreements with off-site individuals, groups, and agencies that support Rancho Seco during emergency conditions. These agreements may be established and maintained via contracts, Letters of Agreement or Memoranda of Understanding. All such agreements are to be reviewed annually and the results documented. All Letters of Agreement and contracts should be renewed every four years.

8.0 REFERENCES, DEFINITIONS AND ACRONYMS

8.1 SCOPE

This section provides the references, definitions of terms and acronyms that are used throughout the Emergency Plan and Emergency Plan Implementing Procedures (EPIPs).

8.2 REFERENCES

Regulatory guidance on emergency planning is intended to address planning for accidents with potential for public exposure to radioactive releases exceeding Environmental Protection Agency recommended limits. Some references are not specifically applicable to Rancho Seco and are listed because they provided useful insights into the purpose and intent of emergency plans.

- 8.2.1 10 CFR 20 - "Standards for Protection Against Radiation."
- 8.2.2 10 CFR 50.47 - "Emergency Plans"
- 8.2.3 10 CFR 50.54 - "Conditions of Licenses"
- 8.2.4 10 CFR 50 Appendix E - "Emergency Planning and Preparedness for Production and Utilization Facilities".
- 8.2.5 10 CFR 30, Rules of General Applicability to Domestic Licensing of Byproduct Material.
- 8.2.6 10 CFR 72 - Licensing Requirements for the Independent Storage of Spent Nuclear Fuel and High Level Radioactive Waste".
- 8.2.7 Regulatory Guide 3.67 - Standard Format and Contents for Emergency Plans for Fuel Cycle and Materials Facilities
- 8.2.8 EPA-400-R-92-001 - Manual of Protective Action Guides and Protective Actions for Nuclear Incidents
- 8.2.9 NUREG-0654 - "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants, Rev. 1, November 1980."
- 8.2.10 NUREG/CR-0130, Technology, Safety and Costs of Decommissioning a Reference Pressurized Water Reactor Power Station
- 8.2.11 Rancho Seco Defueled Safety Analysis Report.
- 8.2.12 Rancho Seco Post Shutdown Decommissioning Activities Report.
- 8.2.13 Rancho Seco Independent Spent Fuel Storage Installation Safety Analysis Report.
- 8.2.14 Rancho Seco Independent Spent Fuel Storage Installation Technical Specifications..
- 8.2.15 Rancho Seco Radiation Control Manual
- 8.2.16 Rancho Seco Dosimetry Manual

- 8.2.17 Rancho Seco Quality Manual
- 8.2.18 Rancho Seco Administrative Procedures.
- 8.2.19 Rancho Seco ISFSI Physical Protection Plan
- 8.2.20 Rancho Seco Decommissioning Fire Protection Plan.
- 8.2.21 California Code of Regulations, Title 19, Division 2

8.3 DEFINITIONS

- 8.3.1 Accountability - The process of identifying missing on-site personnel after a Dismissal has been conducted.
- 8.3.2 **(10 CFR 50) Alert** - An event, which results in significant hazards due to radiological conditions, safety hazards that warrants a Dismissal, or Security events that have serious consequences.
- 8.3.3 Close out - The process of verifying that the circumstances, which initiated an emergency declaration, have been terminated and the effected system, components and/or area have been restored to a safe condition.
- 8.3.4 **(10 CFR 50) DECON** - A decommissioning alternative, which consists of either removing contaminated equipment, components, systems and structures for disposal at a site authorized to receive such contamination or reducing the radioactive contamination to a level that permits unrestricted use.
- 8.3.5 Dismissal - The process of releasing non-emergency response personnel when safety of the general site population is of concern due to general safety hazards, radiological hazards or hazardous material releases during a declared emergency.
- 8.3.6 District - Sacramento Municipal Utility District (SMUD).
- 8.3.7 Emergency Action Level - Specific values related to off-normal conditions, which, if exceeded, will initiate an emergency classification.
- 8.3.8 Emergency Planning Zone (EPZ) - The geographic area within which provisions are established for responding to postulated emergencies.
- 8.3.9 First Aid Team - A team of personnel trained in first aid that are dispatched to

provide response to personnel injuries.

- 8.3.10 Incident - An undesirable or unexpected event that may result in radiological exposure to personnel, physical injury to personnel, physical damage to property, or a potential for an uncontrolled release of radioactive material to the environment.
- 8.3.11 Independent Spent Fuel Storage Installation (ISFSI) - The facility for dry storage of spent reactor fuel.
- 8.3.12 Industrial Area - The area of Rancho Seco that is enclosed by security fences and contains the Reactor Building, Auxiliary Building, Turbine Building, Nuclear Service Electric Building, Training and Records Building, and other facilities.
- 8.3.13 **(10 CFR 50)** Notification of Unusual Event - Events indicated by abnormal site conditions that, by themselves, do not constitute a site wide hazard to personnel. An Unusual Event is minor in nature and may involve a low-level release of radioactive material to the environment that requires monitoring. An Unusual Event could require cessation of normal activities and require greater than normal attention to protection of site personnel or equipment. Normally referred to as an "Unusual Event".
- 8.3.14 Nuclear Regulatory Commission (NRC) - The agency of the Federal government with primary responsibility to coordinate emergency response with the District.
- 8.3.15 Offsite - The area outside of the Industrial Area or Protected Area.
- 8.3.16 Protected Area - As defined in the ISFSI Physical Security Protection Plan, the ISFSI area enclosed by a double chain link fence.
- 8.3.17 Protective Actions - Emergency measures taken to prevent or minimize radiological exposure or physical harm to individuals.
- 8.3.18 Rancho Seco Administrative Exposure Limits - Exposure limits established by the District for Rancho Seco radiation workers during routine operations.
- 8.3.19 Recovery - Actions and activities that occur after a declared emergency has been closed out and damage resulting from the emergency is being corrected.

8.3.20 Reentry - Coordinated and authorized entry into an area which was previously evacuated or isolated during an emergency due to radiation or safety hazards.

8.4 ACRONYMS

ALARA -As Low As Reasonably Achievable
Aux Bldg - Auxiliary Building
Cal-EMA – California Emergency Management Agency
CFR - Code of Federal Regulations
EAL - Emergency Action Level
EOC – Emergency Operations Center
EPA - Environmental Protection Agency
EPIP – Emergency Plan Implementing Procedure
EPZ - Emergency Planning Zone
ERO – Emergency Response Organization
IC – Incident Commander
ICS – Incident Command System
IOSB – Interim Onsite Storage Building
ISFSI - Independent Spent Fuel Storage Installation
NIMS – National Incident Management System
NRC - Nuclear Regulatory Commission
PAS- Primary Alarm Station
RWP - Radiation Work Permit
SAR - Safety Analysis Report
SAS – Secondary Alarm Station
SEMS – Standardized Emergency Management System
SMUD - Sacramento Municipal Utility District
Tech Specs - Technical Specifications
TSC – Technical Support Center

MANUAL: EMERGENCY PLAN IMPLEMENTING PROCEDURES

NUMBER: EPIP-01

TITLE: EMERGENCY ACTIONS

REVISION 6

PAGE 1 of 48

LEAD DEPARTMENT:

RP/ CHEMISTRY

EFFECTIVE DATE:

3/22/2010

REVISION SUMMARY:

The revision reflects the changes made to the Rancho Seco Emergency Plan, Change 6 Revision 0.

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1.0 PURPOSE

Identify the emergency actions and responsibilities of the Emergency Response Organization personnel upon declaration of an emergency.

2.0 SCOPE

2.1 This Emergency Plan Implementing Procedure (EPIP) includes emergency actions for the Rancho Seco IOS Building and ISFSI. The following indicates applicability:

- Sections of the EPIP that are applicable to the IOS Building only are indicated by **(10 CFR 50)** at the beginning of the section.
- Sections of the EPIP that are applicable to the ISFSI are indicated by **(10 CFR 72)** at the beginning of the section.
- Sections with no indication of 10 CFR 50 or 10 CFR 72 is applicable to both the IOS Building and the ISFSI.

2.2 The Superintendent, Rancho Seco Assets or other person designated as the Emergency Coordinator, may declare an emergency. At the declaration of an emergency, the senior person listed in the Emergency Response Telephone Directory assumes and/or relieves the leadership functions, and is responsible for initiating/continuing emergency actions. This procedure directs the Emergency Coordinator to accomplish actions to respond to the incident and provides a checklist of those actions.

3.0 REFERENCES/COMMITMENT DOCUMENT

3.1 References

- 3.1.1 10 CFR 20, Sections 2202 and 2203
- 3.1.2 NUREG-0654, Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants.
- 3.1.3 EPA 400-R-92-1 10, Manual of Protective Actions Guides.
- 3.1.4 Rancho Seco Independent Spent Fuel Storage Installation Safety Analysis Report.
- 3.1.5 Rancho Seco Radiation Control Manual
- 3.1.6 Rancho Seco Dosimetry Manual

- 3.1.7 Rancho Seco ISFSI Physical Protection Plan
- 3.1.8 Emergency Response Telephone Directory
- 3.1.9 Rancho Seco Administrative Procedures
- 3.1.10 Rancho Seco Fire Protection Plan
- 3.1.11 California Standardized Emergency Management System

3.2 (10 CFR 50) Decommissioning References

- 3.2.1 10 CFR 50.54, Conditions of Licenses
- 3.2.2 10 CFR 50 Appendix E, Emergency Planning and Preparedness for Production and Utilization Facilities
- 3.2.3 Rancho Seco Defueled Safety Analysis Report.
- 3.2.4 Rancho Seco Post-Shutdown Decommissioning Activities Report

3.3 (10 CFR 72) ISFSI References

- 3.3.1 10 CFR 72 - Licensing Requirements for the Independent Storage of Spent Nuclear Fuel and High Level Radioactive Waste".
- 3.3.2 Rancho Seco Independent Spent Fuel Storage Installation Technical Specifications.

3.4 Commitment Documents

None

4.0 PROCEDURE

4.1 Emergency Coordinator:

- 4.1.1 Perform actions specified on the Emergency Coordinator Emergency Actions Checklist, (ERO-01).
- 4.1.2 Document actions using the ERO Position Log Sheet, (ERO-02).
- 4.1.3 Review incoming information for possible reclassification of the event.
- 4.1.4 Closeout the incident in accordance with the Closeout Checklist, (ERO-3).
- 4.1.5 Perform restoration activities, as required to restore the facility to a safe condition.

4.2 Security Officer/Dispatcher(s) Duties

Under the direction of the Security Shift Supervisor:

- 4.2.1 Maintain physical security per the District and ISFSI Security Plans.
- 4.2.2 Perform response actions as directed by the Emergency Coordinator with the approval of the Security Shift Supervisor.

4.3 Offsite Agency Liaison

Under the direction of the Emergency Coordinator:

- 4.3.1 Acquire and maintain necessary equipment and supplies during the emergency.
- 4.3.2 Assume responsibilities for required notifications and communications to the State of California, Sacramento County and NRC.
- 4.3.3 Maintain a log and record of all emergency related communications.
- 4.3.4 Maintain and open telephone line with the NRC as requested by the NRC.
- 4.3.5 Coordinate and maintain liaison duties with offsite agencies.
- 4.3.6 Maintain and document key information related to the emergency response.
- 4.3.7 Post incident: gather and package all incident documentation and provide to the Superintendent, Rancho Seco Assets.

4.4 Security Coordinator

Under the direction of the Emergency Coordinator:

- 4.4.1 Maintain physical security per the District and ISFSI Physical Protection Plan.
- 4.4.2 Perform response actions as directed by the Sacramento Sheriff's Department and Emergency Coordinator.
- 4.4.3 Coordinate the security response to the emergency.

4.5 On-shift ISFSI Technician

Under the direction of the Emergency Coordinator:

- 4.5.1 Provide the Emergency Coordinator with information related to the site systems and equipment.
- 4.5.2 Coordinate with offsite technical support for assessment and recommendations.

4.6 On-shift Personnel, Contractors, and Visitors

Follow the instructions of the Emergency Coordinator.

4.7 Onsite Emergency Response Organization Personnel

Report to the Emergency Coordinator for assignment or release.

5.0 RECORDS


All individual/ packaged documents and related correspondence completed as a result of this procedure are records. They shall be transmitted to Records Management in accordance with RSAP-0601.

6.0 ENCLOSURES

- 6.1 Emergency Coordinator (EC) Emergency Action Checklist, (ERO-01)
- 6.2 ERO Position Log Sheet, (ERO-02)
- 6.3 Closeout Checklist, (ERO-03)
- 6.4 Security Coordinator Checklist, (ERO-4)
- 6.5 Security Officer Checklist, (ERO-5)
- 6.6 On-Shift ISFSI Technician Checklist, (ERO-6)
- 6.7 Offsite Agency Liaison (OAL) Checklist, (ERO-7)
- 6.8 Personnel Accountability Log-out Form, (ERO-8)
- 6.9 Rancho Seco Incident Notification Form, (ERO-09)
- 6.10 Emergency Exposure Authorization Form, (ERO-10)

SMUD	Emergency Coordinator Emergency Action Checklist	ERO-01 Page 1 of 2
Enter Time Complete or N/A	<i>As necessary, request law, fire, or medical emergency assistance via the SAS at x4311 or directly (9-) 9-1-1</i>	
DISCRETIONARY ACTIONS		
	<p>If the Initiating Conditions for the classification are no longer met prior to performing all the required actions in accordance with this checklist, the Emergency Coordinator may decide <u>not</u> to perform some steps on this checklist.</p> <p><u>BUT</u>, Emergency Notifications must be performed (Attachment 5). <u>AND</u>, Closeout must be conducted (Attachment 1)</p>	
RESPONSE ACTIONS		
	<p>CREATE AND MAINTAIN AN ERO POSITION LOG</p> <ul style="list-style-type: none"> ➤ Use the ERO Position Log, ERO-02, to document relevant information and actions during the emergency. 	
	<p>CLASSIFY AND DECLARE THE EVENT</p> <ul style="list-style-type: none"> ➤ Classify the incident in accordance with Attachment 2, "Classification of Emergencies". 	
	<p>NOTIFICATIONS</p> <ul style="list-style-type: none"> ➤ Notify the Offsite Agency Liaison to perform notifications (Attachment 5). 	
	<p>DISMISSAL AND ACCOUNTABILITY: Conduct a Dismissal and Accountability (Attachment 4) as a protective or precautionary action, if the safety of site personnel is of concern due to:</p> <ul style="list-style-type: none"> • General safety hazards • Radiological hazards <ul style="list-style-type: none"> ➤ Notify the SAS if Dismissal and Accountability are going to be conducted and whether to release employees to go home or remain in the parking lot for further instructions. ➤ Notify the SAS to contact other workgroups that may be working on-site. 	
	<p>EMERGENCY ANNOUNCEMENT:</p> <ul style="list-style-type: none"> ➤ Direct the SAS to conduct an Emergency Announcement in accordance with Attachment 3. 	
	<p>DETERMINE OPERATIONS LOCATION: Determine location where to conduct operations. This may be at the TSC, District EOC, Field Incident Command post, etc. Advise Security Operations of selected location to notify the Augmented ERO and other responders.</p> <ul style="list-style-type: none"> ➤ Verify that Security has notified the Augmented ERO members via pager and/or telephone. ➤ Brief ERO responders on the incident, actions taken, and provide them with direction. 	
	<p>FOR A TERRORISM INCIDENT:</p> <ul style="list-style-type: none"> ➤ Refer to the Terrorism Response Guidance for additional response information and consideration. 	
	<p>INCIDENT COORDINATION: Given the reduced level of on-site expertise, greater communication and coordination will be needed with outside agencies and emergency responders.</p> <ul style="list-style-type: none"> ➤ Determine who is the Incident Commander with the offsite emergency responders. When possible, establish a Unified Command to coordinate activities. ➤ As requested, provide a liaison and technical support for the offsite responders. ➤ Jointly determine with offsite responders the incident objectives and priorities. ➤ Provide technical expertise to off-site responders on site conditions and hazards. ➤ If activated, establish and maintain communication and coordination with the District EOC. 	
OVER		


Updated 2/29/2010

 Emergency Coordinator (EC) Emergency Action Checklist		ERO-01 Page 2 of 2
Enter Time Complete or N/A	(continued)	
	<u>TRANSPORTATION OF CONTAMINATED INJURED PERSONNEL:</u> > Take action in accordance with Attachment 6.	
	<u>MITIGATING ACTIONS:</u> > In coordination with offsite responders, take actions in accordance with: <ul style="list-style-type: none"> • Departmental response procedures • Radiation Control Manual • Other applicable procedures 	
	<u>RADIOLOGICAL AND HAZARDOUS MATERIALS RELEASES:</u> > As appropriate, take actions in coordination with offsite responders to reduce and contain and the spread of radiological and hazardous materials contamination into the environment.	
	<u>MONITOR INCIDENT STATUS:</u> > Upgrade or downgrade the incident classification as appropriate in accordance with Attachment 2.	
	<u>RADIOLOGICAL PROTECTION (RP) EXEMPTIONS:</u> > If the Radiation Protection Coordinator is present, RP Exemptions may be implemented (Attachment 7).	
	<u>DISPATCH RESPONSE TEAMS:</u> > As necessary, assemble teams of personnel to mitigate the emergency in coordination with offsite responders. <ul style="list-style-type: none"> • Response teams should consist of at least 2 members each. • For Search and Rescue, at least one member must be qualified in first aid. • When possible, assign a Radio Tech responder to offsite agencies response teams. 	
	<u>TURNOVER OF EMERGENCY COORDINATOR DUTIES:</u> > Use this checklist and EC's ERO Position Log to provided a turnover briefing to the relieving Emergency Coordinator, on the following information: <ul style="list-style-type: none"> • Event initiating conditions, • Site conditions and status, • Procedures implemented, • Response actions taken, • Any additional relevant information. 	
	<u>CLOSEOUT:</u> > When the emergency has been mitigated, complete the Emergency Closeout Checklist (ERO-03).	
<div style="display: flex; justify-content: space-between;"> <div> Name _____ Relieved by _____ </div> <div> Date/Time Assuming EC Duties _____ Date/Time Relieved or Incident Closed Out _____ </div> </div>		

[illegible]


AT THE END OF YOUR SHIFT RETURN ERO POSITION LOG SHEETS TO THE OFFSITE AGENCY LIAISON

Updated 2/26/2010

		Closeout Checklist (Completed by the Emergency Coordinator)	ERO-03 Page 1 of 1
Criteria Met?	Criteria		
YES	N/A		
		Initiating Condition is known <u>AND</u> : a. Under control (Stabilized), <u>OR</u> b. Corrected, <u>OR</u> c. No longer an EAL	
		Radiation levels and airborne concentration in all areas are determined to be stable or decreasing.	
		Fires are extinguished, flooding conditions are under control, and/or any site damage is stabilized.	
		Contaminated injured personnel have been transported to the hospital and a report from the RP Technician at the hospital has been received, and all contamination has been contained, in accordance with EPIP-01, "Transportation of Contaminated Injured Personnel", Attachment 6.	
		Other (specify):	
		Evaluate the need for Reentry and/or Recovery, as specified in EPIP-01, Attachment 9, "Reentry/Recovery".	
		Notification of Closeout made in accordance with EPIP-01, Attachment 5, "Emergency Notification". Date _____ Time _____ By OAC _____	
		Closeout PA Announcement made in accordance with EPIP-01, Attachment 3, "Emergency Announcements". Date _____ Time _____ By SAS _____	
All items above have been completed, "YES" or marked not applicable, "N/A" prior to signing below:			
Emergency Coordinator _____		Date/Time _____	


AT THE END OF THE EMERGENCY RETURN ALL PAPERWORK TO THE OFFSITE AGENCY LIAISON

Updated 2/26/2010


 Security Coordinator (SC) Checklist		ERO-04 Page 1 of 1
Enter Time Complete or N/A	<i>Under the direction of the Emergency Coordinator:</i>	
RESPONSE ACTIONS		
	CREATE AND MAINTAIN AN ERO POSITION LOG ➤ Use the ERO Position Log, ERO-02, to document relevant information and actions during the emergency.	
	OBTAIN BRIEFING FROM THE EMERGENCY COORDINATOR ➤ Obtain a briefing from the Emergency Coordinator on the situation and actions to take.	
	DETERMINE THE SECURITY HAZARDS ASSOCIATED WITH THE INCIDENT ➤ Determine the Security hazards associated with the emergency. ➤ Take actions as per the District and ISFSI Security Plans	
	LAW ENFORCEMENT COORDINATION: ➤ If the incident involves a law enforcement response, contact law enforcement responders and coordinate the Security response with offsite agency efforts ➤ Serve as the law enforcement liaison for Rancho Seco.	
	DISMISSAL AND ACCOUNTABILITY: ➤ If Dismissal and Accountability is called to protect personnel onsite, when possible, assign a Security Officer to assist with the evaluation efforts at the EPZ boundaries.	
	EMERGENCY REQUIRING OFFSITE EMERGENCY ASSISTANCE: ➤ As necessary, when possible, have a Security Officer issue visitor badges and escort offsite emergency responders to the incident scene.	
	TRANSPORTATION OF CONTAMINATED/INJURED PERSONNEL: ➤ Support actions in accordance with Attachment 6.	
	TURNOVER OF SECURITY COORDINATOR DUTIES: ➤ Use this checklist and SC's ERO Position Log to provide a turnover briefing to the relieving Security Coordinator, on the following information: <ul style="list-style-type: none"> • Event initiating conditions, • Site conditions and status, • Procedures implemented, • Response actions taken, • Any additional relevant information. 	
<div> <div>Name _____</div> <div>Date/Time Assuming SC Duties _____</div> <div>Relieved by _____</div> <div>Date/Time Relieved or Incident Closed Out _____</div> </div>		

AT THE END OF THE EMERGENCY RETURN ALL PAPERWORK TO THE OFFSITE AGENCY LIAISON


Updated 2/26/2010

		Security Officer/Dispatcher Checklist		ERO-05 Page 1 of 1	
Enter Time Complete or N/A		Under the direction of the Security Coordinator (Security Shift Supervisor):			
RESPONSE ACTIONS					
CREATE AND MAINTAIN AN ERO POSITION LOG					
➤ Use the ERO Position Log, ERO-02, to document relevant information and actions during the emergency.					
OBTAIN BRIEFING					
➤ Obtain a briefing from the Emergency Coordinator and/or Security Coordinator (Security Shift Supervisor) on the situation and actions to take.					
DETERMINE THE SECURITY HAZARDS ASSOCIATED WITH THE INCIDENT					
➤ Observe and report security hazards associated with the emergency. ➤ Take actions as per the District and ISFSI Security Plans.					
NOTIFICATION OF ERO RESPONDERS AND DISTRICT PERSONNEL:					
➤ As directed by the Emergency Coordinator, make appropriate notifications utilizing the Emergency Response Telephone Directory (ERTD).					
LAW ENFORCEMENT COORDINATION:					
➤ If the incident involves a law enforcement response, contact law enforcement responders and coordinate the Security response with offsite agency efforts until relieved by the Security Coordinator. ➤ Support law enforcement activities of the responding agencies.					
DISMISSAL AND ACCOUNTABILITY:					
➤ If Dismissal and Accountability is called to protect personnel onsite, when possible, assist with the evacuation efforts at the EPZ boundaries.					
EMERGENCY REQUIRING OFFSITE EMERGENCY ASSISTANCE:					
➤ As necessary, when possible, issue visitor badges and escort offsite emergency responders to the incident scene.					
TRANSPORTATION OF CONTAMINATED INJURED PERSONNEL:					
➤ Support actions in accordance with Attachment 6.					
TURNOVER OF OFFSITE AGENCY LIAISON DUTIES:					
➤ Use this checklist and this ERO Position Log to provide a turnover briefing to the relieving Offsite Agency Communicator, on the following information: <ul style="list-style-type: none"> • Event initiating conditions, • Site conditions and status, • Procedures implemented, • Response actions taken, • Any additional relevant information. 					
Name _____			Date/Time Assuming Security Officer Duties _____		
Relieved by _____			Date/Time Relieved or Incident Closed Out _____		

Updated 2/26/2010

		On-shift ISFSI Technician Checklist		ERO-06 Page 1 of 1	
Enter Time Complete or N/A		Under the direction of the Emergency Coordinator:			
RESPONSE ACTIONS					
		If the Superintendent, Rancho Seco Assets or designee is unavailable on-site, assume the Emergency Coordinator duties per the delegation of authority criteria listed in the Emergency Response Telephone Directory. Once relieved of the Emergency Coordinator duties, participate in the Augmented ERO, providing expertise on the site and site technical systems.			
		CREATE AND MAINTAIN AN ERO POSITION LOG ➤ Use the ERO Position Log, ERO-02, to document relevant information and actions during the emergency.			
		OBTAIN BRIEFING FROM THE EMERGENCY COORDINATOR ➤ Obtain a briefing from the Emergency Coordinator on the situation and actions to take.			
		PROVIDE TECHNICAL EXPERTISE TO THE EMERGENCY COORDINATOR ➤ Provide information on the systems and designs associated with the site.			
		RESPONSE TEAMS: ➤ As necessary, assemble response teams to respond, assess, and mitigate damage. <ul style="list-style-type: none"> • Response teams should consist of at least 2 members each. • Monitor and direct response teams as necessary. • For Search and Rescue, at least one member must be qualified in first aid. • When offsite agencies are conducting response activities, when possible, provide a Rancho Seco responder as a guide and site resource. 			
		TURNOVER OF ENGINEERING/MAINTENANCE COORDINATOR DUTIES: ➤ Use this checklist and E/MC's ERO Position Log to provide a turnover briefing to the relieving Engineering/Maintenance Coordinator, on the following information: <ul style="list-style-type: none"> • Event initiating conditions, • Site conditions and status, • Procedures implemented, • Response actions taken, • Any additional relevant information. 			
Name _____		Date/Time Assuming E/MC Duties _____			
Relieved by _____		Date/Time Relieved or Incident Closed Out _____			

Updated 2/26/2010

		Offsite Agency Liaison Checklist		ERO-07 Page 1 of 1	
Enter Time Complete or N/A		<i>Under the direction of the Emergency Coordinator:</i>			
RESPONSE ACTIONS					
CREATE AND MAINTAIN AN ERO POSITION LOG					
➤ Use the ERO Position Log, ERO-02, to document relevant information and actions during the emergency.					
OBTAIN BRIEFING FROM THE COORDINATOR					
➤ Obtain a briefing from the Emergency Coordinator on the situation and actions to take.					
NOTIFICATIONS					
➤ Make notifications as specified in (Attachment 5). ➤ When possible, have the Emergency Coordinator review and sign the notification form(s). ➤ Report back when notifications are complete.					
LIAISON DUTIES:					
➤ Contact and coordinate activities with the District's EOC when activated. ➤ As necessary, liaison with offsite agencies. ➤ Contact and coordinate communications with the SMUD Public Information Officer.					
DOCUMENTATION TRACKING:					
➤ As necessary, assist in the tracking of incident information for the Emergency Coordinator. ➤ As necessary, collect and maintain documentation during the incident.					
TURNOVER OF OFFSITE AGENCY LIAISON DUTIES:					
➤ Use this checklist and the ERO Position Log to provide a turnover briefing to the relieving Offsite Agency Liaison, on the following information: <ul style="list-style-type: none"> • Event initiating conditions, • Site conditions and status, • Procedures implemented, • Response actions taken, • Notification and communications made, • Points of contact with outside agencies, • Any additional relevant information. 					
Name _____		Date/Time Assuming OAL Duties _____			
Relieved by _____		Date/Time Relieved or Incident Closed Out _____			

AT THE END OF THE EMERGENCY RETURN ALL PAPERWORK TO THE OFFSITE AGENCY LIAISON

Updated 2/28/2010

[illegible]


Personnel Not Accounted For (Immediately report any missing personnel to the SAS x4311):

When the Dismissal is complete notify the Emergency Coordinator. Give this form to the Offsite Agency Liaison.

Updated 2/28/2010

SMUD		RANCHO SECO INCIDENT NOTIFICATION FORM		Sacramento Municipal Utility Dist. Rancho Seco Nuclear Generating Station 14440 Twin Cities Road Herald, CA 95638-9799	
ERO-09 Rev: 2/10					
EMERGENCY CLASSIFICATION					
Emergency Classification	<input type="checkbox"/> THIS IS AN ACTUAL EMERGENCY				<input type="checkbox"/> THIS IS A DRILL
Notification Type	10 CFR 50 Emergencies ¹ : <input type="checkbox"/> UNUSUAL EVENT <small>¹ Former Rancho Seco Nuclear Plant</small>		10 CFR 72 Emergencies ² : <input type="checkbox"/> ISFSI ALERT <small>² Independent Spent Fuel Storage Installation</small>		
Emergency Declared	Emergency Declared at _____ on _____ by _____ <div style="display: flex; justify-content: space-around;"> 24-Hour Time Date Emergency Coordinator </div>				
EAL TAB No.'s (Cause/Reason)					
RADIOLOGICAL RELEASE/CONTAMINATION INFORMATION					
Radiological Release?	<input type="checkbox"/> YES <input type="checkbox"/> NO	Release Type	<input type="checkbox"/> AIR <input type="checkbox"/> WATER <input type="checkbox"/> GROUND <input type="checkbox"/> CONTAMINATED PERSON		
Release Info					
OFFSITE AGENCIES REQUESTED					
Agencies Requested to Provide Assistance					
SMUD INCIDENT FACILITIES ACTIVATED					
<input type="checkbox"/> Technical Support Center Rancho Seco	<input checked="" type="checkbox"/> SMUD EOC <small>EO Building, 620 "S" Street, Sacramento</small>		<input type="checkbox"/> OTHER _____		
Status of the Response	<input type="checkbox"/> UNCONTROLLED <input type="checkbox"/> STABILIZING <input type="checkbox"/> UNDER CONTROL <input type="checkbox"/> TERMINATED				
INCIDENT SUMMARY					
_____ ADDITIONAL ATTACHEE					
REPORTING PARTY CONTACT INFORMATION					
Incident Liaison (Offsite Agency Communicator)			Callback Cellular Phone Number		
Callback Telephone Number			FAX Number		
Pager Number			After Incident Office Phone Number		
Incident Commander			Emergency Coordinator Approval		
RANCHO SECO USE					
Report By	Update Number	Report Date	Report Time	State OES	Sac City Comm
					Sac City OEM

EMERGENCY CONTACT: Rancho Seco Security (24 hr): (209) 732-4872, SMUD HQ Security (24 hr): (916) 732-5900

 Emergency Exposure Authorization Form		ERO-10 Page 1 of 1
Under the direction and approval of the Emergency Coordinator:		
Name of Individual		
Sex		
Age		
Social Security Number		
Employee Number		
Present Accumulated Dose (TEDE)		Rem
Expected Dose During this Emergency Operation		Rem
Respiratory Protection Needed?	YES <input type="checkbox"/> NO <input type="checkbox"/> List:	
Dosimetry Required?	YES <input type="checkbox"/> NO <input type="checkbox"/> List:	
Description of Duties		
Limitations		
I volunteer to perform the duties described above during this emergency knowing that I may receive the doses stated. I am familiar with the possible consequences of this exposure.		
Print Volunteer Name	Signature	Date
Witness:		
Print Name	Signature	Date
Approved by:		
Print Emergency Coordinator Name	Signature	Date

Updated 2/26/2010

7.0 ATTACHMENTS

- 7.1 Classification of Emergencies
- 7.2 Emergency Radio Announcements
- 7.3 Dismissal and Accountability
- 7.4 Emergency Notifications
- 7.5 Transportation of Contaminated Injured Personnel
- 7.6 Radiation Protection Exemptions
- 7.7 Emergency Exposures
- 7.8 Reentry/ Recovery
- 7.9 Callout of the Emergency Response Organization (ERO)

CLASSIFICATION OF EMERGENCIES

(10 CFR 50) CLASSIFICATION OF EMERGENCIES

1.0 PURPOSE

This attachment is to be used for:

- Initial classification of an incident.
- Upgrade or downgrade of an incident classification.

2.0 CLASSIFICATION PROCESS

Use the Primary method, Back-up method, or EC's discretion to classify an incident. If the event is not classifiable, exit this procedure.

2.1 Primary Method

2.1.1 Determine the type of incident from EAL Tab Index (Below).

2.1.2 Compare the incident conditions with the EAL criteria listed in the appropriate EAL Tab and determine if the incident meets the criteria for classification as an emergency.

2.1.3 If the incident does not meet the EAL criteria, but you think the incident may be warrant classification, use the "Back-up Method" to categorize the incident.

2.2 Back-up Method

2.2.1 Review the Definitions and Purposes of Emergency Classifications to determine if the incident warrants Emergency Plan activation.

10 CFR 50 TAB INDEX

Tab Number	Title
1	Transportation of Contaminated-Injured Individual
2	Security Compromise
3	Emergency Coordinator's discretion

(10 CFR 50) EAL TAB 1

TRANSPORT OF CONTAMINATED-INJURED INDIVIDUAL

DECLARE AN **UNUSUAL EVENT** IF:

Transportation of a contaminated-injured individual from on-site to the hospital is necessary.

(10 CFR 50) EAL TAB 2
SECURITY COMPROMISE

DECLARE AN UNUSUAL EVENT IF:

Communications with security supervision has confirmed the seriousness or credibility of any of the following events related to the storage of materials within the IOSB:

- Actual or probable sabotage within the IOSB
- Attempted theft of nuclear material from the IOSB

(10 CFR 50) EAL TAB 3

EMERGENCY COORDINATOR'S DISCRETION

DECLARE AN UNUSUAL EVENT IF:

The Emergency Coordinator determines, based on the situation and the rationale for implementing an Usual Event, a situation warrants the declaration of an emergency at the Unusual Event level.

3.0 (10 CFR 50) DEFINITIONS AND PURPOSES OF EMERGENCY CLASSIFICATIONS

3.1 UNUSUAL EVENT

Purpose and Definition

An incident indicated by abnormal conditions where the safe storage and containment of radiobiological materials has been compromised. An Unusual Event may involve or potentially involve a low-level release of radioactive material to the environment that requires monitoring and/or assistance from external responders.

An Unusual Event could require cessation of normal activities and require greater than normal attention to protection of site personnel.

The primary purpose for declaration of an Unusual Event is to notify internal staff, emergency responders and regulatory agencies that an atypical situation exists. Declaration of an Unusual Event brings SMUD and external agencies to a state of readiness and provides a systematic handling of incident information and decision-making to mitigate the incident.

(10 CFR 72) CLASSIFICATION OF ISFSI EMERGENCIES**4.0 PURPOSE**

This attachment is to be used for Initial classification of an incident.

5.0 CLASSIFICATION PROCESS

Use the Primary method, Back-up method, or EC's discretion to classify an incident. If the event is not classifiable, exit this procedure.

5.1 Primary Method

5.1.1 Determine the type of incident from EAL Tab Index (Below).

5.1.2 Compare the incident conditions with the EAL criteria listed in the appropriate EAL Tab and determine if the incident meets the criteria for classification as an emergency.

5.1.3 If the incident does not meet the EAL criteria, but you think the incident may be warrant classification, use the "Back-up Method" to categorize the incident.

5.2 Back-up Method

5.2.1 Review the Definitions and Purposes of Emergency Classifications to determine if the incident warrants Emergency Plan activation.

10CFR72 (ISFSI SPECIFIC) TAB INDEX

Tab Number	Title
4	Damage to the ISFSI
5	Security Compromise
6	Emergency Coordinator's discretion

(10 CFR 72) EAL TAB 4

DAMAGE TO THE ISFSI

DECLARE AN ISFSI ALERT IF:

A severe man-made incident or natural phenomenon, which compromises or affects the integrity of ISFSI structures or components containing radioactive material (For example: explosions or aircraft crash).

(10 CFR 72) EAL TAB 5
SECURITY COMPROMISE

DECLARE AN ISFSI ALERT IF:

Communications with security supervision has confirmed the seriousness or credibility of any of the following events in accordance with the Rancho Seco ISFSI Physical Protection Plan:

- Bomb or attack threat
- Internal or external civil disturbance
- Increased security effort
- Actual or attempted Sabotage
- Attempted theft of nuclear material

(10 CFR 72) EAL TAB 6

EMERGENCY COORDINATOR'S DISCRETION

DECLARE AN ISFSI ALERT IF:

The Emergency Coordinator determines, based on the situation and the rationale for implementing an ISFSI Alert, a situation warrants the declaration of an emergency at the ISFSI Alert level.

6.0 (10 CFR 72) DEFINITION AND PURPOSE OF ISFSI EMERGENCY CLASSIFICATION

6.1 ISFSI ALERT

Purpose and Definition

An incident indicated by abnormal or accident conditions associated with the Rancho Seco ISFSI.

An ISFSI Alert is an event that affects the integrity of ISFSI structures or creates a safety hazard to personnel, or a security event that has serious consequences.

The primary purpose for declaration of an ISFSI Alert is to notify internal staff, emergency responders and regulatory agencies that an atypical situation exists. Declaration of an ISFSI Alert brings SMUD and external agencies to a state of readiness and provides a systematic handling of incident information and decision-making to mitigate the incident.

EMERGENCY RADIO ANNOUNCEMENTS

ANNOUNCEMENT #1: UNUSUAL EVENT

1. Make the following radio announcement:

***ATTENTION ALL PERSONNEL, ATTENTION ALL PERSONNEL,
AN UNUSUAL EVENT HAS BEEN DECLARED FOR THE IOSB AREA.***

ALL PERSONNEL WITHIN THE IOSB BOUNDARY REPORT YOUR STATUS.

Include any appropriate personnel safety precautions.

***ALL PERSONNEL ACKNOWLEDGE YOU HAVE RECEIVED THE MESSAGE AND
STAND BY FOR UPDATES VIA THIS RADIO.***

2. Repeat message as necessary until all personnel confirm they have received the message.
3. Document each person's status and report to the Emergency Coordinator.

ANNOUNCEMENT #2: ISFSI ALERT

1. Make the following radio announcement:

***ATTENTION ALL PERSONNEL, ATTENTION ALL PERSONNEL,
AN ISFSI ALERT HAS BEEN DECLARED FOR THE ISFSI AREA.***

ALL PERSONNEL WITHIN THE ISFSI BOUNDARY REPORT YOUR STATUS.

Include any appropriate personnel safety precautions.

***ALL PERSONNEL ACKNOWLEDGE YOU HAVE RECEIVED THE MESSAGE AND
STAND BY FOR UPDATES VIA THIS RADIO.***

2. Repeat message as necessary until all personnel confirm they have received the message.
3. Document each person's status and report to the Emergency Coordinator.

ANNOUNCEMENT #3: CLOSEOUT OF THE EMERGENCY

1. Make the following radio announcement:

***ATTENTION ALL PERSONNEL, ATTENTION ALL PERSONNEL:
THE EMERGENCY HAS BEEN TERMINATED.***

Include any appropriate personnel safety precautions.

2. Repeat message as necessary until all personnel confirm they have received the message.
3. Document each person's status and report to the Emergency Coordinator.

DISMISSAL AND ACCOUNTABILITY

1.0 DISMISSAL AND ACCOUNTABILITY PROCESS- NORMAL WORKING HOURS

1.1 Emergency Coordinator

1.1.1 Initiate a Dismissal [Emergency Coordinator Emergency Actions Checklist (ERO-01)].

1.1.2 If any personnel are unaccounted for during Accountability, initiate search and rescue or notify emergency responders as appropriate.

1.2 Security Shift Supervisor (or designee) – Normal Working Hours

1.2.1 When possible, direct security personnel to perform the following:

- Assist in the evacuation of the Emergency Planning Zone.
- Control site access in accordance with "Site Access Controls During Emergencies Posted Procedure".

1.3 Site supervisors – Normal Working Hours


1.3.1 Verify employees leave the Emergency Planning Zone. Use the "Personnel Accountability Log-Out Form", (EP-26), or similar process to account for employees.

1.3.2 Conduct Accountability via radio or face-to-face.

1.3.3 When Accountability is complete, inform the Emergency Coordinator. Accountability must be complete within 30 minutes of initiation of the Dismissal.

1.4 Non-ERO Personnel

1.6.1 Upon notification a dismissal is in progress contact your supervisor or Emergency Coordinator for further instructions.

 SITE ACCESS CONTROLS DURING EMERGENCIES (Posted Procedure)	
1. NORMAL SITE ACCESS:	When an emergency has been declared and a dismissal has not been initiated.
2. RESTRICTED SITE ACCESS:	During Accountability, all personnel are restricted from EPZ access, unless Authorized by the Emergency Coordinator during Accountability.
3. LIMITED SITE ACCESS:	After Accountability is complete, EPZ access is limited to ERO personnel, Unless authorized by the Emergency Coordinator. Limited access may be terminated with Emergency Coordinator concurrence.
4. ERO PERSONNEL:	<ul style="list-style-type: none">• <u>Personnel listed in the Emergency Response Telephone Directory as:</u> ERO Personnel ISFSI Technicians• <u>Personnel whose Rancho Seco Badge position title is:</u> Security Shift Supervisor Security Officer• <u>Offsite Emergency Response Personnel:</u> Fire, medical, and law agencies• <u>Nuclear Regulatory Commission Personnel</u>

Updated 2/26/2010

EMERGENCY NOTIFICATIONS

1.0 PURPOSE

This procedure covers the required notifications to the Nuclear Regulatory Commission, the State of California, Sacramento County, and District personnel for an emergency incident.

2.0 NOTIFICATION PROCESS

2.1 Emergency Coordinator

2.1.1 If the duration of the incident is such that the incident is terminated prior to the initial notification, the initial and closeout notifications may be made on the same notification.

2.1.2 When possible review and sign the Incident Notification Worksheet, NRC Form 361 and the Rancho Seco Incident Notification Form, (ERO-09) before notifications are conducted.

2.2 Offsite Agency Liaison

NOTE: Emergency calls take priority over notifications.

2.2.1 Maintain a log of all actions using the ERO Position Log Sheet, (ERO-03).

2.2.2 Conduct State, County and NRC notifications in accordance with the Facsimile and Telephone Notification Posted Procedures.

2.2.2.1 For State and Country notifications fill out a Rancho Seco Incident Notification Form and obtain the Emergency Coordinator's review and approval.

2.2.2.2 For NRC notifications fill out an Incident Notification Worksheet, NRC Form 361, and have the form reviewed and obtain the Emergency Coordinator review and approval.

2.2.2.3 Make State, County and NRC notifications within 1 hour from the time the classification was formally declared for the following notifications:

10 CFR 50 Notifications

- Initial emergency declaration

10 CFR 72 Notifications

- Initial emergency declaration

- 2.2.2.4 When the incident conditions change and do not involve a classification change, conduct Update Notifications as soon as practical.
- 2.2.2.5 Conduct Closeout notifications when directed by the Emergency Coordinator.
- 2.2.3 Conduct notifications to District personnel as soon as practical after NRC notification is complete, in accordance with the "Notification Posted Procedure", for initial declaration and closeout only.
- 2.2.4 Inform the Emergency Coordinator when notifications are complete.


EMERGENCY NOTIFICATIONS EQUIPMENT


PRIMARY NOTIFICATIONS EQUIPMENT

1. General Office Telephones that are connected to the District's telephone switch, Area Code 916.
2. Facsimile connected to the Pacific Bell Telephone lines, Area Code 209.

BACKUP NOTIFICATIONS EQUIPMENT

1. Herald Tie Line, connected to Pacific Bell Telephone lines, Area Code 209
2. Cellular Telephone

	FACSIMILE NOTIFICATION PROCEDURE (Posted Procedure)
<ol style="list-style-type: none">1 Place the Rancho Seco Event Notification Form face down in the document tray on top of the facsimile machine.2 Fax the notification sheet to the State OES Warning Center, Sacramento County Communications Center, and Sacramento County OEM/EOC.3 Attach the "transmission reports" to the notification form.4 Conduct telephone notifications in accordance with the posted procedure "EMERGENCY TELEPHONE NOTIFICATIONS"	
<div><p style="text-align: center;"><u>Facsimile Failure/Unavailable</u></p><p>If the programmed buttons fail, transmit notifications using the fax numbers located in the Emergency Response Telephone Directory.</p><p>If the facsimile transmission fails, attempt to transmit again. If the second attempt is unsuccessful, call the agencies using the "Telephone Notifications (Posted Procedure)".</p><p>If a facsimile is unavailable, call the agencies using the "Telephone Notifications (Posted Procedure)".</p><ul style="list-style-type: none">• Inform the agencies of the facsimile unavailability.• Tell them to get a blank copy of the Rancho Seco Incident Notification Form, (ERO-09).• Read the approved Rancho Seco Event Notification Form to them.</div>	

 TELEPHONE NOTIFICATIONS (Posted Procedure)	
NOTES: <ol style="list-style-type: none">1. Use the numbers listed in the Emergency Response Telephone Directory (ERTD).2. If the general office telephones fail, use the Herald Tie Line telephone or a cellular phone.	
STATE/COUNTY TELEPHONE NOTIFICATION PROCEDURE	
<ol style="list-style-type: none">1. Call the State Warning Center. <u>Give/ask them the following:</u> if applicable, say, "THIS IS A DRILL".<ul style="list-style-type: none">• "This is (<u>your name and ERO Position</u>) at Rancho Seco, we have declared an emergency and are making Emergency Notifications".• "What is your Name?" (Enter their name and time at the bottom of the Notification Form).• "I faxed the Rancho Seco Event Notification form to you. Is the fax legible?"• "Do you have any questions?" (Answer their questions).• Provide callback telephone, cellular, pager, and/or fax number.2. Repeat step 1 for Sacramento County Communications Center and the Sacramento County OEM/EOC.	
NRC NOTIFICATION PROCEDURE	
Call NRC Headquarters using the button labeled "NRC HQ". Provide information from the NRC Worksheet, NRC Form 361.	
DISTRICT PERSONNEL NOTIFICATION PROCEDURE	
<ol style="list-style-type: none">1. Call the following District personnel/groups listed in the Emergency Response Telephone Directory (ERTD) in the order listed:<ol style="list-style-type: none">(1.) Superintendent, Rancho Seco Assets (unless made by the Emergency Coordinator)(2.) Manager, Power Generation (unless made by the Emergency Coordinator)(3.) Advertising & Media Services Representative(4.) Distribution System Operations x5955.2. Inform them that: "This is an actual incident/a drill. A (Classification level) was declared at (time)."3. Provide them with a brief description of the situation and answer any questions.4. Provide callback telephone, cellular, pager, and/or fax number.	

Updated: 2/26/2010

TRANSPORTATION OF CONTAMINATED INJURED PERSONNEL

1.0 PURPOSE

Provide guidance for radiological response to a medical emergency where injured person is contaminated and requires transportation to an off-site medical facility. Immediate first aid treatment of severe injuries is the highest priority. Radiological controls are to be secondary considerations.

2.0 RESPONSE**2.1 Emergency Coordinator**

2.1.1 If it is suspected that an injured person is contaminated, monitor for contamination, decontaminate if possible.

2.1.2 In the event no personnel are available to measure contamination, call 9-1-1 and request the nearest trained hazardous materials response team available.

2.1.2.1 Trained hazardous materials responders are available with the Cosumnes Community Services District Fire Department, Sacramento Metro Fire Department, and Sacramento City Fire Department.

2.1.3 Upon notification of the medical facility's acceptance of the individual, a report on the injured person's status and the contamination status of the transporting vehicle from the medical facility, the event may be closed out in accordance with the "Closeout Checklist", (ERO-03).

2.2 First Aid Trained Coworkers

2.2.1 Report to the scene, administer first aid, stabilize the injured person and prepare the person for transport to the hospital.

2.2.2 Coordinate radiological concerns with the Emergency Coordinator, as necessary, to ensure the following:

2.2.2.1 Contaminated clothing is removed, if it does not interfere with first-aid procedures.

2.2.2.1 The outer covering of the injured person is radiologically clean when transferring the person to the transporting vehicle.

2.2.3 Upon arrival of off-site medical and transport personnel, brief them on the cause of the accident, injuries, condition of the injured person, contamination levels and actions taken.

2.3 ISFSI Supervisor/Technician

2.3.1 Report to the incident staging area and provide radiological information and support to the off-site medical personnel.

2.3.2 Establish a Control point, if one does not exist at an appropriate location.

2.3.3 If time and medical conditions allow:

2.3.3.1 Decontaminate the injured person using the guidance contained in RP.305.09D, Personnel and Clothing Decontamination and Reports, or as directed by the Radiological Assessment Coordinator.

2.3.3.2 Complete Personnel and Clothing Decontamination Report, RAD 079, make a copy for the hospital.

2.3.4 Wrap contaminated areas of the body or clothing to prevent spreading contamination prior to transferring custody to transporting personnel.

2.3.5 When preparing to transport the injured person to the hospital ensure that all personnel handling the victim wear appropriate dosimetry and use proper contamination controls.

2.3.6 Remove the injured person's dosimetry, except for injuries where radiation exposure will continue.

2.3.7 After normal working hours provide access control and support to Emergency Vehicles in accordance with "Guidelines for Offsite Emergency Responder Site Access (Posted Procedure)".

2.4 Security Officers

2.4.1 As possible, provide access control and support to Emergency Vehicles.

2.5 Emergency Coordinator U.C. Davis Medical Center responsibilities.

2.5.1 Upon arrival at the hospital:

2.5.1.1 Retrieve any dosimetry issued.

2.5.1.2 Survey the emergency vehicle.

2.5.1.3 Remove any protective covering/lining from the transport vehicle, using normal radiological precautions.

- 2.6.1.5 If the vehicle is contaminated, decontaminate it, if possible, or dispatch the vehicle to Rancho Seco for decontamination.
- 2.6.1.6 When U.C. Davis Medical Center has assumed responsibility for the injured person, call the Emergency Coordinator and inform him/her of the injured individual's condition and the contamination status of the transport vehicle.

RADIATION PROTECTION EXEMPTIONS

NOTE:

Radiation Protection Exemptions may only be implemented when the Superintendent, Rancho Seco Assets has responded.

Radiation Protection Exemptions are terminated when the event is closed out.

Procedure	Exemption
RSAP-1101	Formal ALARA evaluations and documented exposure planning may be suspended. Emergency response activities will receive ALARA reviews/evaluations by the Emergency Coordinator.
RP.305.04	All Radiation Work Permits may be suspended, and replaced by continuous monitoring by personnel trained in RP practices OR as directed by the Emergency Coordinator.
RP.305.07	Normal posting requirements may be discontinued
RP.305.08A	Normal Routine Area Surveys may be discontinued.
RP.312.1.14	Exposure Limits may be extended to the Administrative Limits listed below: Whole Body = 3.0 Rem/Yr. Extremities = 30 Rem/Yr. Skin = 30 Rem/Yr.

EMERGENCY EXPOSURES

1.0 PURPOSE

Provide guidance on authorization and implementation of emergency exposure limits for emergency response personnel at Rancho Seco during a radiological emergency.

2.0 SCOPE

- 2.1 Emergency exposure limits as defined in this procedure may be used only during a declared emergency.
- 2.2 The Superintendent, Rancho Seco Assets has sole responsibility for authorizing personnel to receive emergency exposures when radiological conditions warrant.

3.0 PROCESS

3.1 Superintendent, Rancho Seco Assets

- 3.1.1 Prior to recommending personnel to perform activities requiring emergency exposures, evaluate the following criteria:
 - 3.1.1.1 Emergency Exposure above 5 Rem should not be authorized unless absolutely necessary.
 - 3.1.1.2 Persons assigned to emergency response activities that may involve a dose > 25 Rem must be volunteers who are familiar with the consequences of such exposures.
 - 3.1.1.3 Evaluate the radiological conditions resulting from the emergency incident and the need for emergency exposure, using ALARA principles, prior to authorization.
 - 3.1.1.4 Pregnant women must not be authorized emergency exposures.
- 3.1.2 Ensure an Emergency Exposure Authorization Form (ERO-10) is completed and signed by each individual and approved by the Emergency Coordinator, prior to their receiving the exposure.
- 3.1.3 Persons receiving emergency exposures above 5 Rem should be sent to the hospital for examination.
- 3.1.4 Refer to 10 CFR 20, Sections 2202 and 2203, for NRC reporting requirements.
- 3.1.5 Maintain original Emergency Exposure Authorization Forms for inclusion in the individual's Personnel Occupational Radiation Exposure History File.

- 3.1.6 Review the radiological conditions and the need for emergency exposure provided during the incident prior to authorization.
- 3.1.7 Authorize emergency exposures, as discretion dictates, by signing the Emergency Exposure Authorization Form.
- 3.2 Emergency Exposure Limits, as adapted from EPA 400-R-92-001.

Dose Limit (REM)*	Activity	Condition
5	All	
10	Take actions to prevent a radiological release that could jeopardize the health and safety of plant personnel or the general public	Lower is not practicable
25	Life saving or protection of large populations	Lower is not practicable
>25	Life saving or protection of large populations	Only on a voluntary basis to persons fully aware of the risks involved

* REM is the sum of external effective dose equivalent and committed effective equivalent to non-pregnant adults from exposure and intake during an emergency situation. In addition to the limits listed, dose to workers performing services during the emergency phase of the incident should be limited to the following:

1. Lens of the eye; three times the value listed.
2. Any other organ (including skin and extremities); ten times the value listed
3. The dose to workers performing emergency services may be treated as once-in-a-lifetime exposure, and not added to occupational exposure accumulated under non-emergency conditions.

3.0 RECORD

Forward all completed forms and documentation to Superintendent, Rancho Seco Assets for retention.

REENTRY/RECOVERY

1.0 PURPOSE

Provide guidance for Reentry and Recovery operations.

2.0 DEFINITIONS

- 2.1 REENTRY - Coordinated and authorized entry into an area with unknown but potentially severe hazards that was damaged during an emergency event. The purpose of reentry is to evaluate the extent of damage and hazards present.
- 2.2 RECOVERY - Actions and activities taken after an emergency has been closed out, with damage resulting from the event that requires long term and special actions to recover. Recovery allows the emergency phase to be closed out and resources applied to recovering from the resultant damage in a controlled evolution.

3.0 RESPONSE

3.1 Emergency Coordinator

- 3.1.1 When preparing for closeout of an emergency, consider the need for Reentry and Recovery.
- 3.1.2 Reentry may be performed prior to Closeout to evaluate conditions to determine if it is necessary to initiate Recovery operations.
- 3.1.3 Complete a Closeout Checklist, (ERO-3).
- 3.1.4 Conduct a critique of the event as described on page 3, Critique of Declared Emergencies.

3.2 Reentry Response

- 3.2.1 Personnel safety is the primary concern during reentry. The following procedures should use as guides to protect personnel during reentry:
- RP-305, Radiation Protection Manual
 - Rancho Seco Safety Manual
 - District Safety Manual

3.3 Recovery Response

- 3.3.1 Designate a Recovery Team Leader.
- 3.3.2 With input from appropriate SMUD workgroups and the incident critique:
- 3.3.2.1 Assess the recovery actions necessary.

3.3.2.2 Determine the organization needed to implement Recovery Operations.

- The Recovery organization should be established as a separate group within Energy Supply with authority and resources to conduct recovery operations.
- The Recovery organization may include personnel from the plant and District organizations, and technical experts from outside the District.

3.3.3 Develop a Recovery Operations Plan. A Recovery Plan Outline is described below.

3.3.4 Conduct Reentry and Recovery Operations in accordance with normal station procedures.

3.3.5 Maintain a log of Recovery Log operations.

3.3.6 Ensure that an ALARA review of the proposed recovery operations has been conducted and that RWPs for individual tasks are initiated.

3.3.7 Keep local jurisdictions and NRC informed of the status of Recovery.

4.0 RECOVERY/RESTORATION PLAN

RECOVERY/ RESTORATION PLAN OUTLINE

I. INTRODUCTION

A brief description of the incident, status of the incident consequences, and the goal of recovery operations.

II. OBJECTIVES

List of objectives for the recovery operation. Objectives should be performance based and relate directly to the goal of recovery operations.

III. RECOVERY ORGANIZATION

Describe the Recovery Organization. The positions, responsibilities and names of individuals should be identified.

IV. RECOVERY SCHEDULE AND COST ESTIMATES

As a management tool, schedules and cost estimates for the Recovery Operation should be developed.

V. RECOVERY ACTIONS

Identify the specific actions necessary to accomplish the objectives of Recovery.

CRITIQUE OF DECLARED EMERGENCIES

Reports of the incident must be submitted to the State, Sacramento County, and the NRC.

Each time the emergency plan is implemented for an emergency, (not a drill or exercise) the initiating event and emergency response should be thoroughly evaluated. Evaluation of an emergency should consist of critiques and a written report.

CRITIQUES

1. Critique of initiating event and initial response.

This critique will include the initiating event and initial response, until the emergency plan was implemented. Representatives of SMUD management, the person(s) directly involved in the initiating event and initial response, and their supervisor(s), should conduct the critique.

2. Critique of emergency response

This critique will include the emergency response actions. Representatives from SMUD management or designee, and ERO personnel that responded to the event should conduct the critique.

CRITIQUE GUIDELINES

A critique is a fact-finding meeting. The person(s) involved should be asked to describe what happened and what actions were taken. The critique should be held as soon as possible after the event. Conclusions should not be drawn at the critique, nor should individual criticism or discipline be discussed at the critique. If, after further evaluation, additional questions are raised, another critique should be held. Above all, a critique should be conducted fairly and impartially. All persons should be given the opportunity to discuss the event fully.

ROOT CAUSE, DEFICIENCIES AND CORRECTIVE ACTIONS

Based upon the data from the critiques, the following should be determined:

1. Event root cause
2. Strengths in equipment and personnel responses
3. Deficiencies and associated corrective actions

EVENT REPORT

1. The report should contain the following:
 - a. The facts associated with the initiating conditions and response actions.
 - b. A timeline of the event and response.
 - c. The root cause(s) of the initiating event.
 - d. Deficiencies identified and corrective actions.
2. SMUD management should review the report.
3. Identified deficiencies should be assigned to appropriate personnel.

CALLOUT OF THE EMERGENCY RESPONSE ORGANIZATION (ERO)

The Emergency Coordinator directs the SAS/ PAS personnel to conduct the following actions to activate the ERO:

1. Using the Emergency Response Telephone Directory (ERTD) notify appropriate personnel via telephone, pager or similar method.
2. At a minimum, notifications are to be made to the following:
 - Superintendent, Rancho Seco Assets or designee,
 - On-call Emergency Coordinator,
 - On-shift ISFSI Technician/Supervisor,
 - On-shift Security Shift Supervisor,
 - On-call Emergency Preparedness responder (Offsite Agency Liaison),
 - Distribution Services System Operations (DSO).
3. Notify other responders as requested or needed for the incident.
4. Advise the Emergency Coordinator after the on-call ERO responders confirm their response and/or any positions where a responder cannot be located to respond.
5. Notifications are to be immediately upon request of the Emergency Coordinator.

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LEAD DEPARTMENT: SITE SUPERINTENDENT

EFFECTIVE DATE:
3/22/2010

REVISION SUMMARY:

Revision to incorporate the Emergency Plan, Revision 6

- 1 Section 1.0 revised to reflect ERO changes
- 2 Section 4.1 revised to show title change from RP/ Chem Superintendent to Site Superintendent.
- 3 Section 4.2 revised to reflect ERO changes
- 4 Attachment 1 revised, deleted contaminated injured person and activation of TSC's from lesson plans.
- 5 Attachment 2 revised to reflect lesson plan changes and ERO positions that have been deleted.
- 6 Attachment 2, updated General Employee Training section.
- 7 Attachment 3, updated to show ERO changes.
- 8 Attachment 3, updated sections on drills and exercises.

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1.0 PURPOSE

- 1.1 Define the responsibilities for the administration of the Emergency Preparedness Training Program.
- 1.2 Describe the process of conducting Emergency Preparedness Training.
- 1.3 Specify the initial and requalification training requirements for Emergency Response Organization (ERO).
- 1.4 To ensure compliance with Rancho Seco Quality Manual Appendix A and procedural requirements for training records maintenance.
- 1.5 Describe maintenance of the ERO Training Database.
- 1.6 Provide guidance for conducting and documenting drills and exercises.

2.0 REFERENCES/COMMITMENT DOCUMENT

2.1 References

- 2.1.1 Rancho Seco Emergency Plan
- 2.1.2 RSQM, Appendix A

2.2 10 CFR 50 References

- 2.2.1 10 CFR 50, Appendix E, Emergency Planning and Preparedness for Production and Utilization Facilities

2.3 10 CFR 72 References

- 2.3.1 10 CFR 72 - Licensing Requirements for the Independent Storage of Spent Nuclear Fuel and High Level Radioactive Waste".

2.4 Commitment Documents

None

3.0 DEFINITIONS

- 3.1 Annual Training - 12 months (with a maximum of 15 months) since the last training.
- 3.2 Initial Training - Formally Documented Training that is required for initial qualification and assignment to an Emergency Response function.
- 3.3 Non-emergency Response Personnel - Personnel that are not assigned a specific Emergency Response function.
- 3.4 Requalification Training - Annual Training requirements for continued assignment to an ERO function. This training may be conducted as formally documented training, group briefings or reading assignments.

- 3.5 Revision Training - Training to familiarize ERO personnel with revisions or changes to the Emergency Plan, Emergency Plan Implementing Procedures or facilities. This training may be conducted as formally documented training, group briefings or reading assignments.

4.0 PROCEDURE

4.1 Superintendent, Rancho Seco Assets

- 4.1.1 Ensure the personnel conducting the Emergency Preparedness Training Program have the expertise consistent with the material being presented.
- 4.1.2 Direct the performance of drills and exercises as described in Attachment 3, "Drill and Exercise Guidelines".
- 4.1.3 Ensure that the Decommissioning Emergency Preparedness Training Program is conducted in accordance with this procedure.

4.2 Emergency Preparedness Personnel

- 4.2.1 Conduct Emergency Preparedness Training in accordance with this EPIP.
- 4.2.2 Document ERO training exemptions; based upon performance during a drill, actual emergency, individual training, or a job function, providing:
 - 4.2.2.1 Performance is satisfactory, and;
 - 4.2.2.2 If the exemption is based upon drill or actual emergency performance, the individual must have been a player or controller for their ERO function.
 - 4.2.2.3 Ensure that the ERO is not exempted from training more than two consecutive years.
- 4.2.3 Schedule training, drills and exercises.
- 4.2.4 Provide orientation tours and/or radiological emergency response training for fire department, Sheriff's department, medical and ambulance, California Emergency Management Agency and County Office of Emergency Services personnel as requested.
 - 4.3.4.1 Tour or training content will be based upon the service provided by the organization and their needs.
- 4.2.5 Ensure that only personnel who meet initial and requalification training requirements are assigned ERO functions.

4.2.6 Ensure the District maintains a database of ERO Training.

4.3.6.1 The database should indicate the following information:

- Name
- Employee Number
- ERO function
- Date Training completed

4.2.7 Ensure training records are submitted to RIC in accordance with RSAP-0601.

4.2.8 Develop drill and exercise scenarios. Obtain approval for drill or exercise scenarios from the RP Superintendent.

4.2.9 Schedule, conduct and evaluate drills and exercises as specified in Attachment 3, Drill and Exercise Guidelines.

4.2.10 Develop and revise training materials.

4.2.11 Conduct ERO training, as described in Attachment 2, Training Matrix.

4.2.12 Grade tests.

When tests are given:

- The minimum passing score is 70%.
- Administer remedial instruction to individuals who fail tests as soon as practical.
- Re-test individuals immediately after remedial instruction.
- Individuals who fail the re-test after remedial training must be disqualified from the ERO, until they pass initial training.

5.0 RECORDS

Individual/Packaged documents and related correspondence completed as a result of this procedure are records and are maintained in accordance with RSAP-0601, Nuclear Records Management.

6.0 ATTACHMENTS

- 1 Lesson Descriptions
- 2 Training Matrix
- 3 Drill and Exercise Guidelines

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ATTACHMENT 1

LESSON DESCRIPTIONS

ER 01 A 0100: EMERGENCY RESPONSE ORGANIZATION

Presents the Emergency Response Organization's (ERO) duties and responsibilities to all ERO Personnel and an overview of response actions.

ER 01 B 0 100 EMERGENCY ACTIONS

Provides instruction to Emergency Coordinators on EPIP-01 and all attachments.

ER 01 C 0100: EMERGENCY NOTIFICATIONS

Provides instruction, to all ERO personnel that may be assigned to perform notifications on EPIP-01, Attachment 4, Emergency Notifications.

ER 01 D 0100: RADIOLOGICAL RESPONSE TO EMERGENCIES

Provides instruction on the following portions of EPIP-01, Emergency Actions:

- **(10 CFR 50)** Fire in Radiologically Controlled Areas
- **(10 CFR 50)** Attachment 6, RP Exemptions
- Attachment 7, Emergency Exposures.

ER 01 E 0100: SECURITY DURING EMERGENCIES

Provides instruction to Security Operations on the security responsibilities of EPIP-01.

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ATTACHMENT 2

TRAINING MATRIX

	01A	01B	01C	01D	01E
ISFSI Supervisor/Technician	XO	XO	XO		
Emergency Coordinator	XO	XO	XO	XO	
Offsite Agency Liaison	XO	XO	XO		
Security Coordinator	XO				XO
Security Officer(s)	XO				XO

X = Initial Training

O = Qualification Training

FIRST AID RESPONSE TEAM TRAINING

- Training is conducted in accordance with District procedures.

GENERAL EMPLOYEE TRAINING

All ERO personnel and site workers who routinely access the Part 72 or Part 50 Restricted areas receive generic ERO training in the General Employee Training, ST01 A/G (Category I).

ERO personnel and site workers classified as Radiation Workers also have Controlled Area Training ST01 B/H (Category II).

ATTACHMENT 3

DRILL AND EXERCISE GUIDELINES

- 1.0 The Drill and Exercise Guidelines provide guidelines for drill and exercise documentation and describes the functions of personnel involved in conducting and evaluating drills or exercises. These guidelines are in accordance with the Rancho Seco Emergency Plan, Section 7, Maintaining Emergency Preparedness.
- 2.0 Purpose of drills and exercises are to:
 - 2.1 Test the adequacy, effectiveness and content of the Emergency Plan and EIPs.
 - 2.2 Test emergency equipment, supplies and facilities.
 - 2.3 Test the readiness of the augmented ERO.
 - 2.4 To familiarize personnel with their duties, assignments, and equipment under simulated emergency conditions.
- 3.0 Required drills and exercises.
 - 3.1 **Fire Drill (10 CFR 50 and 10 CFR 72)**

Annually, a fire drill is required for Decommissioning operations, and a fire drill is also required for ISFSI operations. When possible, off-site fire suppression assistance will participate in each of the drills. The Fire drills will be conducted in accordance with the Rancho Seco Decommissioning Fire Protection Plan.

The Annual Decommissioning and ISFSI Fire Drills may be conducted as one drill.
 - 3.2 **Medical Drill (10 CFR 50 and 10 CFR 72)**

Annually, a medical drill is required for Decommissioning operations, and a medical drill is also required for ISFSI operations. The drills will involve the simulated radioactive contamination of injured personnel. The site's First Aid Responders and when possible, off-site ambulance service will participate in the drill. The medical drill may include health physics and radiological monitoring. U.C. Davis Medical Center may participate in Rancho Seco's Annual Medical Drill, or conduct independent drill(s) in accordance with their regulatory requirements.

The Annual site exercise(s) and ISFSI Medical Drills may be conducted as one drill.

DRILL AND EXERCISE GUIDELINES (Continued)

3.3 Biennial Site Drill (10 CFR 50)

Biennially, a site drill shall be conducted which simulates emergencies affecting some of the principal functional areas of the Rancho Seco's onsite emergency response capabilities and may involve off-site agencies.

3.4 Biennial Exercise (10CFR 50 and 10 CFR 72)

Biennially, an exercise shall be conducted which simulates emergencies affecting the entire site. This exercise may include radiological monitoring and/or security, and may involve off site agencies.

The 10 CFR 50 Biennial Exercise must demonstrate the ability to conduct reentry/recovery planning.

NRC and local response agencies shall be invited to observe the biennial exercise.

The Biennial Exercise will be conducted on alternating years with the 10 CFR 50 Biennial Site Drill.

The Biennial Exercises for Decommissioning and ISFSI may be conducted as one exercise if the exercise objectives are sufficiently comprehensive to include both long-term storage and ISFSI activities.

5.0 Drill/Exercise Documentation

5.1 Scenario Package

NOTE: The Biennial Exercise scenario and objectives must be sent to NRC 60 days prior to the exercise.

5.1.1 Introduction and Scope

Describes the purpose, training and/or evaluation aspects of the drill/exercise, and organizations participating.

5.1.2 Drill/Exercise Objectives

A list of performance objectives that must be demonstrated during the drill or exercise.

5.1.3 Participant Instructions

Specific instructions and precautions for players and controller/evaluators involved in the drill/exercise.

DRILL AND EXERCISE GUIDELINES (Continued)

5.1.4 Event Scenario

An event scenario is a narration overview of the drill, including; initial conditions, initiating event, and expected actions by the players in response to the simulated emergency.

The scenario should be as realistic as possible, be of sufficient depth to accomplish all drill/exercise objectives and include well-defined criteria for drill/exercise termination.

5.1.5 Timeline

The timeline is the time-based framework of the drill or exercise. It provides the time for controlled drill/exercise events and messages to occur.

5.1.6 Drill/Exercise Messages

Messages are used to initiate events, convey data and control the progress of the drill/ exercise.

5.1.7 Evaluation Criteria

Evaluation Criteria are based upon drill/exercise objectives and are used by controller/evaluators in evaluating player performance and in determining if the drill/exercise objectives were met.

5.1.8 List of controller /evaluators and players.

5.2 Exercise report

5.2.1 A detailed report which provides a description of the performance during the exercise, including:

- An overview of the performance during the exercise, including overall performance, strengths and weaknesses.
- The Event Scenario
- Actual timeline as it occurred
- Evaluation of each objective and identified deficiencies.
- List of controller/evaluators and players.

5.2.2 A copy of the exercise report must be sent to the Superintendent, Rancho Seco Assets for assignment of actions to evaluate and, if necessary, correct deficiencies identified in the exercise.

DRILL AND EXERCISE GUIDELINES (Continued)

5.3 Drill Report

5.3.1 A summary of the performance during the drill, including:

- Overall performance, strengths and weaknesses
- Event Scenario overview
- Evaluation of each objective and identified deficiencies
- List of controller/evaluators and players

5.3.2 A copy of the drill report must be sent to the Com Track Coordinator for assignment of actions to evaluate and, if necessary, correct deficiencies identified in the drill.

6.0 Pre-drill/exercise briefings

6.1 All drill/exercise players, controllers and evaluators must be briefed prior to their participation in the drill or exercise. The briefing must include plant initial conditions and participant instructions, as specified in the drill/exercise scenario.

7.0 Drill/exercise critique

7.1 A post drill/exercise critique must be conducted after each drill or exercise with drill players, controllers and evaluators. Evaluation of drill/exercise objectives, including strengths and weaknesses should be discussed.

7.2 A person not having direct implementation responsibility for conducting the exercise must conduct the critique for the Biennial Exercise.

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REVISION SUMMARY:

1. Updated Section 6.0, Records
2. Revised Section 7.0, Attachments
3. Revised Attachment 1 to reflect deletion of the TSC's and RP Lockers
4. Revised Attachment 3 to show Emergency Plan instruments maintained in IOS Building
5. Revised Attachment 5 to show deletion of TSC's

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1.0 PURPOSE

Specify the requirements and responsibilities for the performance of routine surveillances within the Rancho Seco Emergency Preparedness program.

Provide guidance using NRC RIS 2005-02, when making Emergency Plan changes, to evaluate if the revision is a "Decrease of Effectiveness".

2.0 SCOPE

This procedure applies to the Rancho Seco Emergency Preparedness program equipment, emergency communication equipment, supplies, procedures, Emergency Response Telephone Directory, emergency support contracts, and Emergency Plan Revisions.

3.0 REFERENCES/COMMITMENT DOCUMENTS

3.1 References

3.1.1 Rancho Seco Decommissioning Emergency Plan

3.1.2 10 CFR 50 Reference

10 CFR 50, Appendix E, Emergency Planning and Preparedness for Production and Utilization Facilities

3.1.3 10CFR 72 Reference

10 CFR 72 - Licensing Requirements for the Independent Storage of Spent Nuclear Fuel and High Level Radioactive Waste".

3.2 Commitment Documents

3.2.1 NRC Regulatory Issue Summary (RIS) 2005-02: Clarifying the Process for Making Emergency Plan Changes

4.0 DEFINITIONS

None

5.0 PROCEDURE

5.1 Superintendent, Rancho Seco Assets

5.1.1 Review "Emergency Planning Surveillance and Review Requirements", Attachment 1, to ensure proper completion.

5.1.2 Maintain a record of performed surveillance, to ensure that the actions are completed in accordance with the specified time period.

5.1.3 Coordinate with other groups that perform surveillances in accordance with this procedure.

5.1.4 Conduct an evaluation, for Emergency Plan Revisions, using NRC RIS 2005-02 guidelines to determine if the revision is a "Decrease of Effectiveness" in the Emergency Plan program. Include Decrease in Effectiveness Determination with revision safety evaluation (50.59)

5.2 Surveillance Performer

5.2.1 Perform surveillance in accordance with the frequencies listed on Attachment 1, Emergency Planning Surveillance and Review Requirements.

5.2.1.1 Obtain copies of the most recent revision of the surveillance procedure.

5.2.1.2 Perform the Surveillance as indicated in the procedure.

5.2.1.3 Forward completed Surveillance form to RP Supervision for review and approval

5.2.2 Emergency Kit/Locker Entry Form, ERO-11, is required to be used any time that a locker has been entered.

6.0 **RECORDS**

Forward all completed forms and documentation to document control in accordance with RSAP-0601, Nuclear Records Management.

7.0 **ATTACHMENTS**

1. Emergency Planning Surveillance and Review Requirements
2. Emergency Locker/Kit Entry (ERO-11)
3. Facility Inspection – Primary/Secondary Alarm Station (ERO-12)
4. Portable Emergency Radiation Instrument Check (ERO-13)
5. Emergency Communications Test Guide (ERO-14)
6. Emergency Communications Test Record Form (ERO-15) & (ERO-16)
7. Decrease in Effectiveness Determination (ERO-17)

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7.0 **ATTACHMENTS (continued)**

7. Facsimile Test Sheet (ERO-16)
8. NRC RIS 2005-02, Attachment 1, 50.54(q) Flowchart
9. NRC RIS 2005-02, Attachment 1A, Decrease in Effectiveness Determination (EP-20)
10. NRC RIS 2005-02 , Attachment 2, Examples of Plan Changes that do not Constitute a Decrease in Effectiveness.
11. NRC RIS 2005-02 , Attachment 3, Examples of Plan Changes that Constitute a Decrease in Effectiveness.

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EMERGENCY PLANNING SURVEILLANCE AND REVIEW REQUIREMENTS

Surveillance Item	Monthly	Quarterly	Semi-annual	Annual	Biennial
FACILITY INSPECTION <ul style="list-style-type: none">Primary (PAS)/Secondary (SAS) Alarm Stations			X		
ONSITE INVENTORY <ul style="list-style-type: none">Portable Instrument CheckDosimeters	X(1)			X(1)	
EMERG. COMM. SYSTEM TESTS		X (10CFR50)	X (10CFR72)		
DOCUMENT REVIEW <ul style="list-style-type: none">Independent Review (QA Audit)Emergency Plan And EPIP ReviewContract/MOU Review (2)Emergency Response Telephone Directory Update			X	X	X

(1) Or when calibration is due

(2) Only as applicable, renew contracts every four years in accordance with Rancho Seco Emergency Plan Section 7, Maintaining Emergency Preparedness.

NOTE: Time periods may be extended a maximum of 25% of the specified interval to accommodate scheduling.

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EMERGENCY LOCKER/KIT ENTRY

NOTE: This form is to be used when entering an Emergency Locker or Kit for anything other than a routine scheduled surveillance.

Locker/Kit: _____

Performed by: _____ Date: ____/____/____

Reason for Entry: _____

As left seal number: _____

RECORD ALL ITEMS REMOVED FROM AND/OR INSERTED INTO THE LOCKER OR KIT:

(Record document name, instrument serial number, calibration due dates, number of items, etc.)

Comments: _____

Reviewed by: _____ Date: ____/____/____

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FACILITY INSPECTION – TECHNICAL SUPPORT CENTERS

ONSITE TSC

OTHER:

ITEM	QUANTITY	FOUND/ LEFT
MANUALS		
Emergency Response Telephone Directory	2	/
Emergency Plan and EPIP's	3	/
Forms Book (EP Forms)	1	/
OTHER		
Emergency Level Signs	1 set	1 set
TSC Position Guides	1 set	1 set

General Facility Condition (Circle)

Satisfactory

Unsatisfactory

As Found Seal Number: _____ As Left Seal Number: _____

Comments: _____

Completed By: _____ Date: ____/____/____

Reviewed by: _____ Date: ____/____/____

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PORTABLE EMERGENCY RADIATION INSTRUMENT CHECK

Performed by: _____ Date: ____/____/____

Location: ____ PAP Bldg. ____ Other: _____

QTY	INSTRUMENT MODEL (or equivalent)	INSTRUMENT SERIAL #	CALIBRATION DUE DATE	BATTERY CHECK (Circle)	SOURCE CHECK (Circle)
	Ludlum-12 or PRM-6			Sat / Unsat	Sat / Unsat
	Ludlum-12 or PRM-6			Sat / Unsat	Sat / Unsat
	RO-2			Sat / Unsat	Sat / Unsat
	RO-2			Sat / Unsat	Sat / Unsat
	H809V1 Air Sampler			N/A	N/A
	H809V1 Air Sampler			N/A	N/A
	(6) Electronic Dosimeters			N/A	N/A

As Found Seal Number: _____ As Left Seal Number: _____

***RECORD ALL OVERDUE INSTRUMENT CALIBRATION DATES,
UNSATISFACTORY BATTERY OR SOURCE CHECKS, AND CORRECTIVE ACTION
TAKEN:**

Reviewed by: _____ Date: ____/____/____

EMERGENCY COMMUNICATIONS TEST GUIDE

1.0 PURPOSE

To provides guidance for testing the Rancho Seco emergency communications equipment.

2.0 SCOPE

This Test Guide verifies the operability of the communication equipment listed in EPIP-01, Attachment 4, "Emergency Notifications"

2.1 The following communications equipment is tested by this guide:

- Notification telephone to Sacramento County and the California Emergency Management Agency
- Facsimile machine

2.2 The following communications equipment is verified operable by being used on a routine basis or is tested by another process:

- General office telephones - routine usage
- Plant radio - routine usage by onshift personnel

3.0 TEST RECORD RESULTS & RETESTING

Record all test results on Attachment 6, Emergency Communications Test Record Form. If any tests are unsatisfactory, repeat the test. If the test is still unsatisfactory, record all symptoms associated with the unsatisfactory test and initiate corrective action and retest as necessary.

4.0 PROCEDURE

Call Sacramento County Office of Emergency Management and California Emergency Management Agency prior to conducting this test. Request that Sacramento County staff the EOC for the test.

4.1 Facsimile Machine Test

4.1.1 Fax the Facsimile Test Sheet to the State Warning Center. Note the results of the test on the Emergency Communications Test Record Form

4.1.2 Verify that the transmission report has the correct information for the following:

- Location sent from
- Location sent to
- Results

4.1.3 Repeat steps 4.1.1 and 4.1.2 for Sacramento County Communication center.

EMERGENCY COMMUNICATIONS TEST GUIDE (Continued)

4.1.4 Repeat steps 4.1.1 and 4.1.2 for Sacramento County EOC.

4.2 Notification Telephone Test

4.2.1 Call the State Warning Center on the Notification Phone.

Tell them the following:

- "This is (your name) at Rancho Seco, I am conducting the Quarterly test of the Rancho Seco Emergency Notification System.
- "Testing the Notification Phone from the Control Room. How do you hear me?"
- Did you receive a Test Fax sheet, and is it legible?

4.2.2 Repeat step 4.2.1 for the Notification Phone test to Sacramento County Communications Center.

4.2.3 Repeat Step 4.2.1 for the Notification Phone test to Sacramento County EOC.

4.3 Herald Tie Line Test (Dial tone test)

4.4.1 Test the Herald Tie Line telephone by listening for a dial tone.

5.0 Test Completion Calls

5.1 Call Sacramento County Office of Emergency Management and California Emergency Management Agency. Inform them that the test is complete was satisfactory or anything that was unsatisfactory.

6.0 Test Completion Report

6.1 Prepare an Emergency Communications Test Completion letter in accordance with RSAP-0903, "External Plant Reports and Posting of Notices."

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**EMERGENCY COMMUNICATIONS
TEST RECORD FORM**

ITEMS TO CHECK	SAS		ONSITE TSC	
	Sat	Unsat	Sat	Unsat
NOTIFICATION FACSIMILE TEST (SECTION 4.1)				
State Warning Center				
Sacramento County Comm. Center				
Sacramento County EOC				
NOTIFICATION TELEPHONE TEST (SECTION 4.2)				
State Warning Center				
Sacramento County Comm. Center				
Sacramento County EOC				
CELL PHONE TEST (SECTION 4.3) (Note 1)				
State Warning Center				
Sacramento County Comm. Center				
Sacramento County EOC				
HERALD TIE LINE DIAL TONE TEST (SECTION 4.4)				
Dial Tone Test				

Note 1 - Cell phone can be District or ERO provided

COMMENTS: (required for any unsatisfactory test)

Test Completion Calls Conducted (Section 5.0): _____
Initials / Time

Test Performed by: _____
Name / Date

Reviewed by: _____
Name / Date

ERO-15, Revision 2

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RANCHO SECO

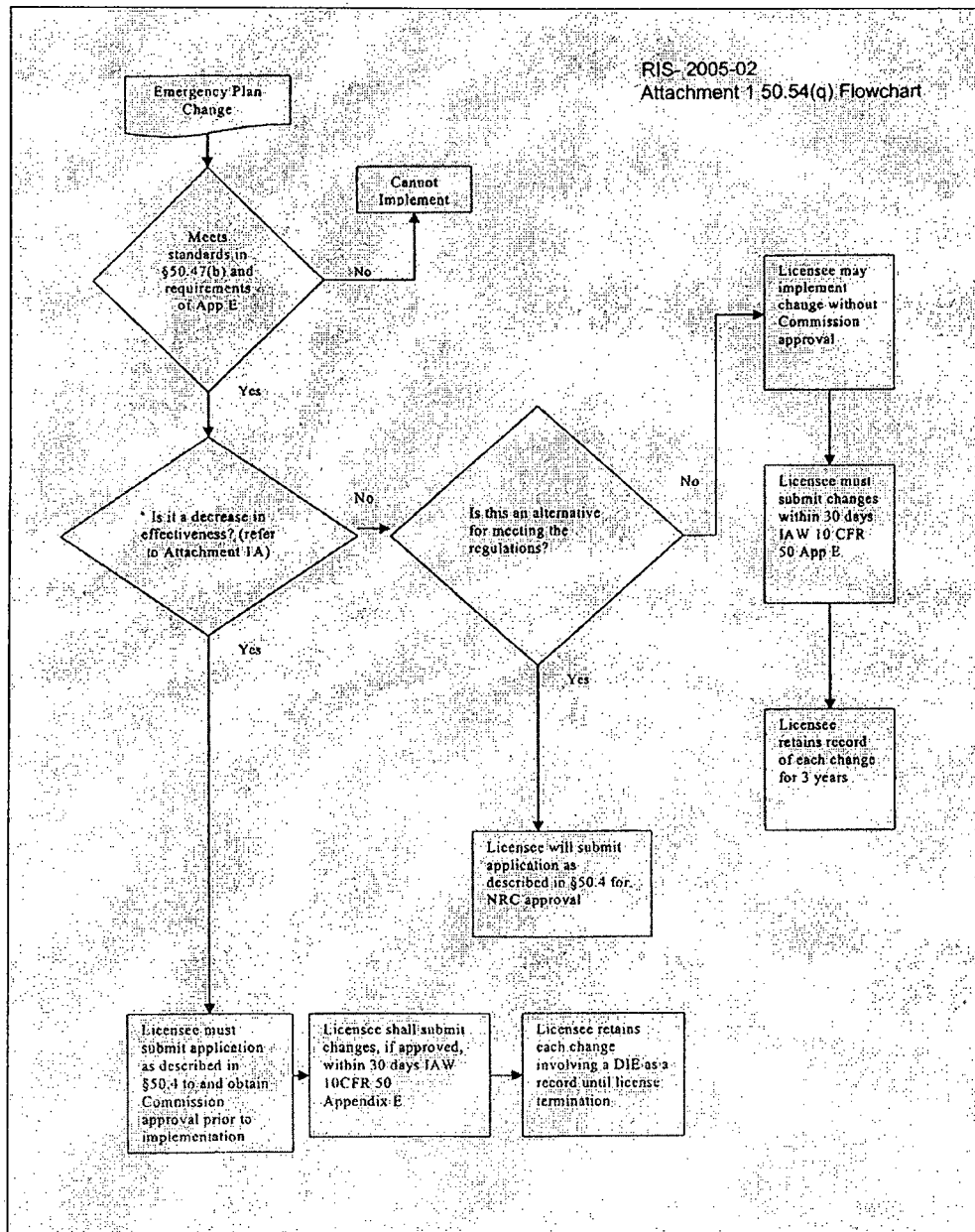
FACSIMILE

SAMPLE
NOTIFICATION

TEST SHEET

- ☐ Rancho Seco Technical Support Center
- ☐ Secondary Alarm Station

Decrease in Effectiveness Determination



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RIS 2005-02
Attachment 1A

Decrease in Effectiveness Determination

The purpose of this attachment is to determine if the proposed change would result in a decrease in effectiveness only. The determination does not replace a licensee's SO.S4(q) documentation/basis for a change.

1. Has the capability to perform the function(s) been degraded or lost as a result of the change?

_____ Yes _____ No (provide justification)

Justification:

2. Have the time requirements of all affected EP requirements been relaxed or lost as a result of the change?

_____ Yes _____ No (provide justification) - _____ N/A (provide justification)

Justification:

If "Yes" is checked for either question 1 or 2, the change is a decrease in effectiveness. If the answers to questions 1 and 2 are both "No," continue to follow the 50.54(q) flowchart. (Attachment 1)

RIS 2005-02
Attachment 2

Examples of Plan Changes that do not Constitute a Decrease in Effectiveness

Note

The examples in Attachment 2 are not intended to be representative of all changes that do not require prior NRC review and approval.

- ◇ Implementation of changes that are a result of revised regulations, guidance, standards, or other technical documents to which the licensee is committed.
- ◇ A change that results in an equivalent capability (e.g., the use of digital chart recorders versus paper recorder).
- ◇ Changes to Emergency Response Organization (ERO) augmentation processes are acceptable if they remain capable of ensuring augmentation of the initial response staff in accordance with facility activation requirements.
- ◇ Changes to offsite support arrangements are acceptable if the level of offsite assistance is maintained at the current level.
- ◇ Changes to a licensee's method for providing follow-up messages and/or changes to the content and/or frequency of the follow-up messages to offsite authorities may be acceptable. Such changes, however, are only acceptable if the messages are transmitted in an equivalent manner, contain information at a level of equal or greater specificity, and reach offsite authorities at an equal or greater frequency than before the changes were implemented.
- ◇ Changes to communications systems and a licensee's method for offsite notification are acceptable if the licensee maintains or enhances the capability to implement offsite notifications within 15 minutes.
- ◇ Changes that provide an alternate, equivalent means of notifying the public, consistent with FEMA or applicable guidance and approved by FEMA or the applicable offsite agency, are acceptable.

RIS 2005-02
Attachment 3

Examples of Plan Changes that Constitute a Decreases in Effectiveness

Note

The examples in Attachment 3 are not intended to be representative of all changes that require prior NRC review and approval.

- ◇ The licensee installed monitoring equipment that required local readout by a trained I&C technician using a computerlike device; however, the I&C technician was a 30-minute responder rather than an on-shift emergency response organization (ERO) member, thereby, delaying the classification of certain EALs.
- ◇ Following an Alert declaration for a carbon dioxide discharge into the facility, the licensee implemented a series of corrective actions including the revision of the EALs pertaining to toxic gas events at several stations. These changes were primarily based on the licensee's assessment that the conditions did not meet the definition of an Alert. The licensee's change to the EALs would reduce the number of declarable events because not only was the presence of gas required but the effect on plant operations needs to be considered. (With the revised EALs, no emergency classification would have been made.) The emphasis of the EAL shifted from personnel safety to the impact on plant conditions or operations.
- ◇ A significant deviation in the EAL scheme from the NRC-approved version. The deviation involved changes to eight EALs that decreased the effectiveness of the emergency plan in that emergency conditions that would have resulted in classification at the General Emergency, Alert, and Notification of Unusual Event levels under the prior NRC approved plan would now result in a lesser classification or no classification.
- ◇ A licensee proposed to reduce the number of personnel on-shift with emergency preparedness responsibilities as described in the emergency plan. As a result of difficulties associated with augmenting the on-shift staff during an actual emergency, the licensee determined it needed to increase its on-shift staffing in order to ensure adequate response capability. The proposed measures to compensate for the reduction in on-shift staffing were not sufficient to ensure that the planning standard would be met. In addition, the change would result in a decrease in the effectiveness of the emergency plan due to a lack of timeliness in response and a degraded capability to respond.
- ◇ Changes that reduce the coverage of or increase the activation time of Alert and Notification Systems without review and approval by offsite agencies and/or FEMA.
- ◇ Equipment is removed from the Emergency Response Facility (ERF) and the plan such that the capability to communicate among the ERFs or offsite agencies is reduced or no longer exists.
- ◇ Changes are made that reduce or eliminate the capability to notify ERO responders.
- ◇ Procedures are revised such that a range of offsite protective actions or adequate protective actions for onsite personnel who are not members of the ERO would not be recommended or implemented.

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- ◇ Procedures are revised such that follow-up notifications do not take into account previous Protective Action Recommendations.
- ◇ Changes are made such that personnel in the owner-controlled area are not informed of the need to evacuate or shelter.
- ◇ Increase in augmentation response times.
- ◇ Increase in facility activation time.
- ◇ Removal of current emergency responders or alterations of an NRC-approved alternative.