Preface

This Integrated Emergency Response Plan (IERP) was developed by the Risk Management Division of the Orange County Sanitation District, California, to ensure its readiness to respond to all types of emergencies. The IERP reflects the District's policy to protect life, the environment, and property in an emergency. The District is committed to being ready to respond to all emergencies and disasters.

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Revision Log

Revision	Date	Description
Rev. 0	12/31/96	Initial issue
Rev. 1	01/01/00	General updates throughout both volumes such as OCSD personnel phone numbers and external contact names and phone numbers. Some major changes are the following: • Volume I, Chapter 3 expanded to include additional activation scenarios. • Volume II, Chapter 4, Communications Plan added. • Volume II, Chapter 5 (old 4), Hazmat Response Plan, revised to reflect the District's elimination of onsite Hazmat Response Teams. • Volume II, Chapter 6 (old 5), Utility Outage Plans, entirely revised to cover major electrical, natural gas, and water outages. • Volume II, Chapter 7 (old 6), High Flow Emergency Plan, is a revision and expansion of the Flood Plan. • Volume III, Site Safety Plans removed. Site Safety Plans replaced by Operational Response Procedures, which are now O&M documents and are not part of the IERP.
Rev. 2	01/01/04	The structure of the Incident Command System at the Section and Branch levels was changed to better meet OCSD's needs (Volume I, Chapter 2, ICS). Other changes include:
		• Chapter sequence and organization changed in both volumes. • Background information on SEMS moved to Appendix 2A (Volume I).
		• New chapters added: – Protection of Information Sources (Chapter 10 in Volume I; to be developed) – Biosolids Spills (Chapter 8 in Volume II) – Industrial Waste Spills (Chapter 9 in Volume II) – Fire (Chapter 10 in Volume II; includes content in former Chapter 5, Prevention Planning, of Volume I) – Flood (Chapter 12 in Volume II; to be developed) – SARI Line Rupture (Chapter 13 in Volume II)

		• Business Emergency Plan (Chapter 10 in Volume I) removed (to be maintained separately) • SPCC Plan (Chapter 11 in Volume I) removed (to be maintained separately) General updates have been made throughout both volumes such as OCSD personnel phone numbers and external contact names and phone numbers.
Rev. 3	02/07/2008	• Updated the training plan and removed all references to Search & Rescue Team
Rev. 4	12/28/2011	• Updated both volumes. • Added Atmospheric Hazards (Vol. II, Chapter 12) • Added Collection System Emergencies (Vol. II, Chapter 13) • Added Tsunami Plan (Volume II, Chapter 15)

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1. IERP Overview

Purpose

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The Orange County Sanitation District (OCSD) is responsible for safeguarding its employees and facilities, the public, and the environment in the event of disaster (natural or manmade) and other emergencies. Natural hazards include earthquakes, floods, and severe weather conditions such as high winds. Emergency situations could also develop from a major explosion or fire, uncontrolled hazardous material release, verified bomb threat, or civil disorder.

This Integrated Emergency Response Plan (IERP) is based on a realistic identification and assessment of hazards with which we may be confronted and using our resources and capabilities to deal effectively with these hazards. The IERP contains policies, plans, and procedures for preparing for and responding to emergencies. OCSD's emergency response organization, called the Incident Command System (ICS), will be activated when an emergency condition cannot be effectively responded to using the normal operating organization.

The IERP reflects OCSD's commitment to ensuring the safety and health of employees, the community, and the environment. In addition, the IERP was developed to ensure that we meet the legal and regulatory requirements to be prepared for and respond to a variety of emergencies.

The IERP is based on the following principles:

- Ensure the safety of personnel, the public, and equipment and systems.
- Keep the water flowing into and out of the plant so that it does not flood the streets.
- Comply with regulatory requirements.

The goals of the IERP are to:

- Protect human life.
- Protect the environment.
- Prevent or reduce property damage.
- Restore normal operations.

When emergencies exceed our capabilities, assistance from local resources (agencies and vendors) will be requested through prearranged agreements, contracts, and working relationships. When local resources are exhausted, assistance will be requested in accordance with the Operational Area Agreement.

Relationship to Other Plans and Procedures

The IERP contains plans to respond to the major types of emergencies OCSD may experience. It also references other plans and procedures that are more specialized or provide additional detail. Although these documents are owned and maintained by a variety of OCSD departments, they are all accessible (via the Intranet or in hard copy) to the ICS organization.

Figure 1-1 shows the relationship between the IERP and other OCSD documentation. The IERP always references the specific documents by number and title.

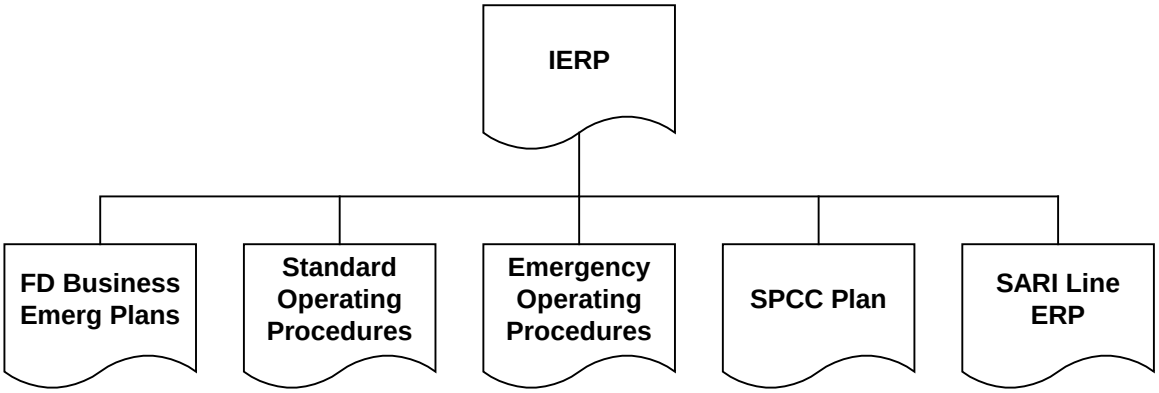

Figure 1-1. IERP's Relationship to Other Plans and Procedures

Emergency Operating Procedures	Emergency Operating Procedures (EOPs) for both plants and the Collection System are owned and maintained by Operations and Maintenance (O&M). The EOPs provide details on responding to such events as electrical, natural gas, or water outages. A series of chemical- and site-specific Chemical EOPs address response to chemical releases. In addition, other departments such as the Environmental and Ocean Monitoring Laboratory have site-specific EOPs.
Standard Operating Procedures	Various Standard Operating Procedures (SOPs) are owned and maintained by the appropriate departments. For example, Environmental Compliance and Regulatory Affairs (ECRA) maintains an SOP on biosolid response.
SPCC Plan	As required by federal law, OCSD maintains a Spill Prevention Control and Countermeasure (SPCC) Plan separately from the IERP. This plan is related to oil or other petroleum spills that may reach navigable waterways. Safety & Health maintains the SPCC Plan.
Fire Department Business Emergency Plans	The Fountain Valley and Huntington Beach Fire Departments require "Business Emergency Plans," which OCSD must submit and update annually. These plans deal with response to hazardous material releases at the plants and include the locations of all hazardous materials storage onsite. These plans are maintained by the Safety and Health Division.
SARI Line ERP	The Santa Ana River Interceptor (SARI) Line Emergency Response Plan (ERP) deals with potential or actual SARI line ruptures and provides detailed information on how OCSD should respond. Included are maps showing access to the manholes on the line and recommendations for bypass pumping.
Other Related Documents	The IERP complies with and supports OCSD policies and procedures. Where they specifically relate to emergency preparedness or response, they are referenced by number and title.

Organization of the IERP

The IERP is a two-volume plan intended to ensure that OCSD is prepared to respond to virtually any type of emergency. The IERP allows OCSD to coordinate personnel, resources, and efforts to ensure that OCSD can integrate personnel, resources, and procedures for responding to an emergency promptly and effectively.

The IERP contains two volumes closely linked to each other:

- Volume I, Emergency Preparedness and Plans, contains information for preparing for an emergency and plans that applies to all or most types of emergencies, for example, the Medical Plan and the Media Plan.

- Volume II, Emergency Response Procedures, contains immediate response information (such as callouts) and the specific plans and procedures we implement in response to specific types of emergencies.

An index is provided in each volume.

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Volume I, Emergency Preparedness and Plans

The chapters in Volume I are:

1. **IERP Overview.** This chapter contains the purpose of the IERP, an explanation of how the IERP is organized, and a procedure for suggesting plan revisions.

2. **Incident Command System.** The Incident Command System (ICS) is the emergency management system OCSD will use to respond to an emergency. The ICS is also used by Federal, State, and Local agencies. By using the same system, OCSD is better able to coordinate resources and communicate information if outside resources are needed to respond to an emergency.

3. **IERP Training Plan.** This chapter lists all the training requirements associated with emergency response.

4. **Emergency Communications.** This plan addresses priorities and protocols for communication during an ICS activation. Communication flows as well as equipment are included.

5. **Site Security Plan.** These procedures deal with security during an emergency response. They include instructions for ensuring the safety and security of our personnel and property.

6. **Medical Plan.** This plan contains procedures used by members of the Medical Team to provide medical treatment for employees and response personnel until outside resources can respond.

7. **Media Plan.** This plan provides guidance on media relations during an emergency. The Manager of Communications serves as the Public Information Officer when activated as part of the ICS.

8. **Finance Plan.** Since emergency response can be costly, this plan deals with financial matters such as labor, overtime, and expenses during an emergency and reimbursement of emergency costs afterward.

9. **Mutual Aid Plan.** This plan contains general guidelines on how to request mutual aid from other facilities and how to respond to a request for mutual aid.

10. **Plan Administration.** This chapter contains a Management of Change procedure, that is, a procedure to ensure that the IERP is kept up to date. Control and distribution of copies of the IERP are also addressed.

11. **Protection of Information Sources.** TO BE DEVELOPED.

12. **Post-Emergency Procedures.** These procedures cover actions required after an emergency, such as replenishment of emergency supplies, post-incident investigation, and evaluation of the IERP.

Volume II, Emergency Response Procedures

The chapters in Volume II are:

1. **Emergency Recognition and ICS Activation.** This procedure defines how every individual will respond when an emergency situation is observed. The procedure continues with Control Center and Operations Supervisor actions regarding ICS activation.

2. **ICS Position Callouts.** This chapter is a contact list of all members of the emergency response organization who may need to be called out to respond to an emergency.

3. **Evacuation.** All buildings have evacuation diagrams with evacuation routes and Assembly Areas shown. This chapter provides procedures for conducting an evacuation, accounting for personnel after the evacuation, and sheltering in place.

4. **Hazardous Materials Release.** Because we routinely use a number of hazardous materials, including petroleum products, this chapter

contains guidelines for dealing with their inadvertent release. Chemical Emergency Procedures have been developed by O&M to respond to hazardous material releases.

5. **Utility Outages.** This chapter contains plans for dealing with major utility outages: electrical, natural gas, and water. The plans cross-reference appropriate O&M Emergency Operating Procedures (EOPs).

6. **High Flow Emergency.** This chapter addresses preparations and actions during a high flow emergency, and recovery procedures.

7. **Earthquakes.** This chapter covers individual employee actions before, during, and after an earthquake; earthquake response guidelines, and damage assessment procedures.

8. **Biosolids Response & Recovery.** These procedures cover actions required after a biosolids spill. The procedure referencesTS-ECRA-SOP-005, which is part of the Environmental Management System.

9. **Industrial Waste Spills.** These procedures cover actions required after an industrial waste spill.

10. **Fire.** In addition to fire prevention guidelines, these procedures cover actions required to respond to a fire at OCSD facilities.

11. **Security Threats.** These procedures cover actions required after a threat to our security, such as a bomb or terrorism threat, is received.

12. **Flood.** These procedures cover actions required for a flood in the Service Area.

13. **Atmospheric Hazards** These procedures covers tornadoes, thunderstorms and lightening.

14. **Collection System Emergencies: These procedures covers actions for emergencies within the Collection System.**

15. **Tsunami.** These procedures covers actions required after an earthquake that affacts Plant No. 2 and a tsunami warning.

16. **SARI Line Rupture.** These procedures cover actions required after a rupture in the Santa Ana River Interceptor (SARI) line.

17. **External Notifications.** This procedure contains a matrix identifying outside agencies that need to be notified of an emergency and the OCSD personnel responsible for doing so.

The appendixes in Volume II are:

- Appendix A, ICS Position Checklists
- Appendix B, ICS Forms
- Appendix C, EOC Setup

How to Suggest Plan Revisions

It is anticipated that the IERP will need occasional revision to keep it up to date. As will be described in Chapter 10, Plan Administration, the IERP will be reviewed following every activation. In addition, if the plan is not activated for 1 year, the IERP Coordinator will conduct a plan audit to ensure that the IERP is current.

However, every employee is encouraged to suggest improvements and revisions to the IERP at any time. Suggested changes may come as a result of any of the following:

- Change in our facilities' design, construction, operation, or maintenance that may increase the potential for an emergency or that in any other way directly affects the plan
- Change in emergency equipment, supplies, storage locations, etc.
- Change in any personnel who have designated roles in the ICS
- Change in contact numbers for ICS personnel
- Change in applicable regulations
- Your experience in using the plan during an emergency

Appendix 10A following Chapter 10 of this volume contains a Management of Change form that may be used to suggest IERP revisions. You may indicate the change on the form, or you may attach marked-up photocopies of the appropriate plan pages if more convenient.

Forward the completed form to the IERP Coordinator in the Safety and

Health Division. The IERP Coordinator will process your suggestion in accordance with the Management of Change procedure in Chapter 9, Plan Administration.

Contents

2. Incident Command System

This chapter details the Incident Command System (ICS), which is the basic organizational structure that will be used by OCSD to respond to an emergency of any size. The ICS is a system used to ***manage*** personnel, information, supplies, and equipment during an emergency response.

The NIMS is the national standard for emergency response.

On February 28, 2003, President Bush issued Homeland Security Presidential Directive-5. HSPD-5 directed the Secretary of Homeland Security to develop and administer a National Incident Management System ("NIMS"). NIMS provides a consistent nationwide template to enable all government, private sector, and nongovernmental organizations to work together during domestic incidents.

NIMS is a comprehensive, national approach to incident management that is applicable at all jurisdictional levels and across functional disciplines.

The intent of NIMS is to:

• Be applicable across a full spectrum of potential incidents and hazard scenarios, regardless of size or complexity

• Improve coordination and cooperation between public and private entities in a variety of domestic incident management activities

The ICS was developed in the 1970s as part of the Firefighting Resources of California Organized for Potential Emergencies program (FIRESCOPE), a cooperative interagency group representing local, state, and federal fire services in California. The ICS is also used by the California Standardized Emergency Management System (SEMS) so that all levels—local, state, and federal—can coordinate and communicate effectively during an emergency response. As a result of lessons learned from the Loma Prieta Earthquake in 1989 and problems identified in operations at the Oakland Hills Fire in 1991, the State of California enacted the Standardized Emergency Management System or "SEMS" (California Government Code 8607). SEMS was designed to ensure that response agencies in California had a single, integrated emergency management system.

The components of SEMS include:

• Utilization of the Incident Command System (ICS)

• Use of the "Operational Area" concept

• Use of Mutual Aid

• Multiagency coordination

These components are similar and complimentary to the NIMS components.

NIMS has two basic compliance requirements that are already incorporated into the SEMS:

- Adoption (and use) of the Incident Command System – which defines the operating characteristics, management components, and the structure of incident management organizations throughout the life cycle of an incident

- Utilization of Multiagency Coordination Systems – which define the operating characteristics, management components, and organizational structure of supporting entities

All types of government agencies and corporate organizations use the ICS and SEMS as their emergency response model. Appendix 2A contains additional information about SEMS and the ICS.

This chapter describes OCSD's ICS structure that may be activated in response to an emergency event. The ICS structure is presented in terms of functional titles only. Callout lists of OCSD personnel assigned to fill ICS positions are located in Chapter 2 of Volume II, and checklists for each position are located in Appendix A of Volume II.

Only trained personnel assume ICS positions.

Only those OCSD personnel who have been trained to serve in an ICS position may assume the duties of that position. Although other OCSD personnel may be involved in the response, they will be doing so under the direction of an ICS member.

Benefits of Using the ICS

There are many benefits to using the ICS as our emergency response model. The ICS:

- Avoids the chaos that often results after an emergency event when people feel the need to take some sort of immediate action, which may not be the appropriate action, may duplicate the actions of others, may countermand the actions of others, or may make the situation worse.
- Allows OCSD to better focus on responding to an emergency event by using a unified approach.
- Allows for organizational flexibility in responding to the event; that is, only the number of people needed to respond to the event are activated.
- Establishes strict lines of communication related to the response because the ICS uses a chain-of-command approach to processing information.
- When multiple agencies are involved in a response (fire, health, city, state), allows us to coordinate and communicate with these agencies since they also use the ICS as a standard response organization.
- Establishes a state-approved process to apply for reimbursement of some cost when we respond to a state or federally declared disaster.

When to Use the ICS

Chapter 1 contains information on the definition of an emergency, the phases of an emergency, and how the IERP is organized.

According to SEMS Section 2402 guidelines, an emergency is defined as a condition of disaster or of extreme peril to the safety of persons and property caused by such conditions as air pollution, fire, flood, hazardous material incident, storm, epidemic, riot, drought, sudden and severe energy shortage, or an earthquake.

As stated in Volume I, Chapter 1, OCSD's emergency response organization, the ICS, will be activated whenever there is an emergency condition that cannot be effectively responded to using OCSD's normal operating organization.

Examples of when the ICS is activated at OCSD include such events as high flow, an earthquake, utility outages, a bomb threat, a fire that requires evacuation of personnel, and a medical emergency on site. The activation principles also apply to events in the Collection System. The ICS is also used when we need to coordinate our actions with another organization such as a local fire department.

Basic OCSD ICS Structure

The OCSD ICS organization incorporates the philosophy of SEMS and ICS, but we have modified some organizational structures and ICS positions to better reflect our needs.

This section describes the basic OCSD ICS organization. Then, the following sections demonstrate the ICS organization through practical scenarios to show how the ICS can work in practice.

Every emergency event, large or small, has certain major management activities and actions that must be performed. The basic ICS organization, as shown in Figure 2-1, is built around the following two major organizational elements:

- **Command.** The Command element provides overall direction and management. Command is headed by an Incident Commander. The Incident Commander may activate several positions called the Command staff.

- **Operations Section.** This section, led by a Section Chief, performs actions to respond to the event. The Operations Section ensures that all the necessary personnel, equipment, and supplies are available to respond to and recover from the event as quickly as possible.

  Note: The term "operations" does not necessarily mean the traditional Operations and Maintenance personnel. The most appropriate department, as determined by the Incident Commander, would activate personnel to serve in this organization. For example, for a hazardous material spill at the Lab, Lab personnel would be the most appropriate to fill the ICS positions.

These two major elements are the foundation from which the ICS organization develops.

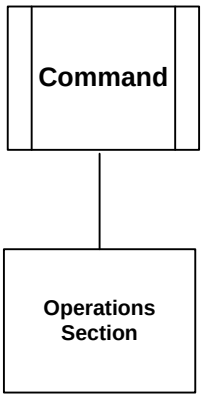


Figure 2-1. OCSD's Basic ICS Organization

The Incident Commander determines the organizational structure needed to respond to the incident.

The Incident Commander determines the organizational structure needed to respond to the incident. To demonstrate the organizational flexibility offered by the ICS, the next two sections present scenarios that require different ICS organizational structures to respond to the event.

The role of the Incident Commander is assumed by the first qualified (has received ICS training) person to arrive at the scene of the incident. That person remains in charge until formally relieved as described under Transfer of Command later in this chapter. At OCSD during unplanned events, the Operations Supervisor is the initial Incident Commander for events that take place in the plants.

Full-Scale ICS Activation

To better show the roles of each ICS position we are first going to look at a full-scale activation scenario so that we can show the entire ICS Organization. In this way, we can introduce all the sections, branches, groups, teams, and positions. Detailed checklists for these positions are in Appendix A of Volume II.

Scenario: Significant Earthquake

At 10:00 am on a Tuesday, a significant earthquake strikes Orange County. Serious damage occurs inside both plants and in the Collection

System. Building damage is apparent and several fires are noticed. There is an obvious need to activate the ICS to manage and coordinate all the actions that will be required to ensure the safety of OCSD personnel, contractors, and visitors and to determine the status of the process systems and Collection System.

Response: Full-Scale ICS Organization

Because the earthquake affected both plants and the Collection System, the Incident Commander orders a full-scale ICS activation.

The Operations Section Chief establishes geographical branches with groups and divisions. OCSD's ICS uses three branches: Plant No. 1, Plant No. 2, and the Collection System. The Collection System Branch is organized into functional groups that may be assigned to any geographical area in the Collection System.

Figure 2-2 shows the Command and Operations Section of a full-scale ICS organization that may be activated in response to heavy damage to the plants and Collection System caused by an earthquake. Table 2-1 lists the Command and Operations positions and their responsibilities.

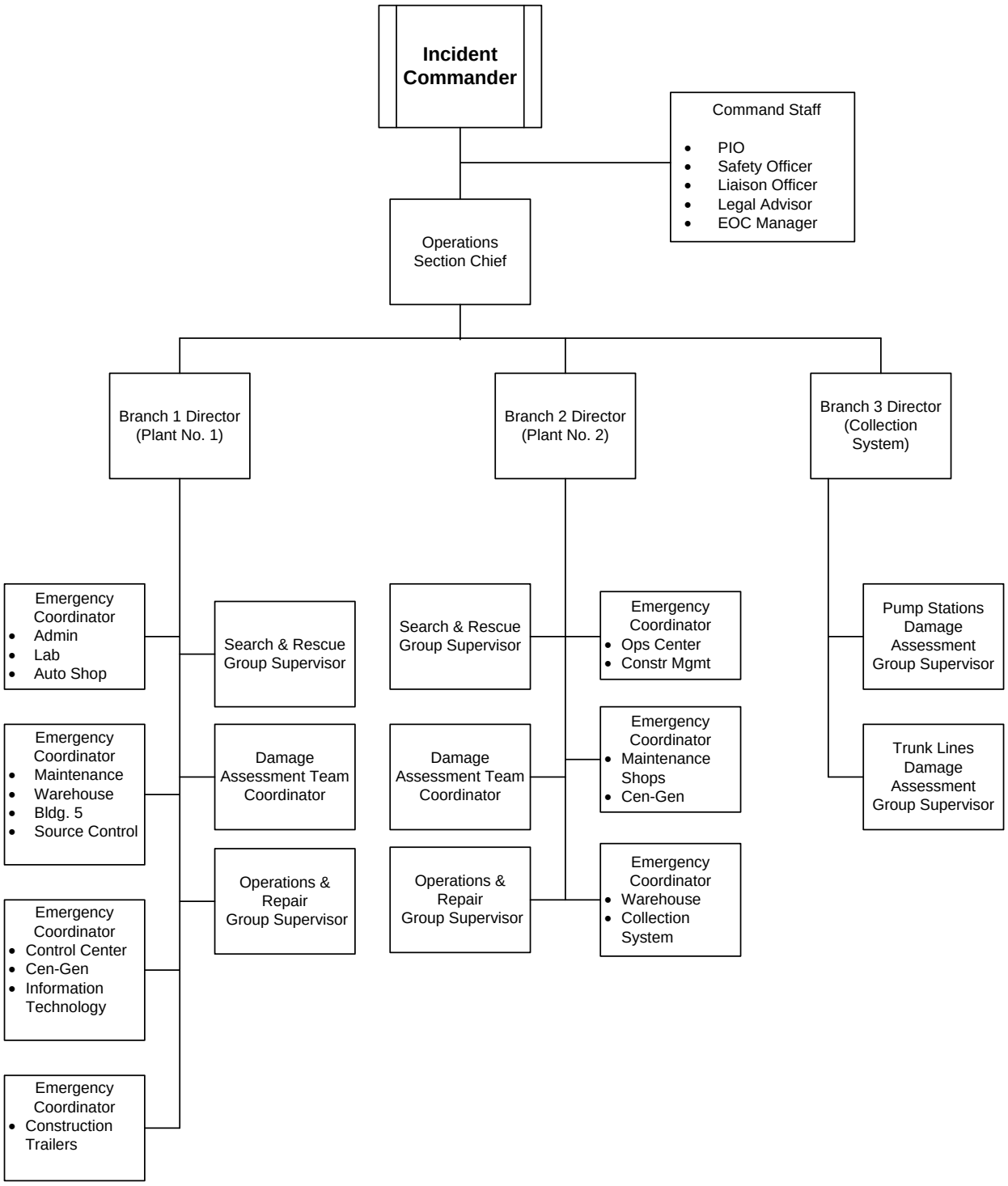


Figure 2-2. Full-Scale ICS Organization: Command and Operations

Table 2-1. Command and Operations Positions

Element	Title	Typical Duties
Command Staff	Incident Commander	• Provides overall direction and control of the response. • Assesses the situation, establishes an appropriate ICS organization, and approves and monitors response efforts. • The first person who calls for establishing an ICS organization, regardless of personnel title, is the Incident Commander until relieved. The Incident Commander may also appoint an On-Scene Manager.
	Safety Officer	• Monitors and assesses hazardous situations and develops measures for ensuring the personal safety of responders. • Has the authority to approve or disapprove of all personnel safety-related matters.
	Liaison Officer	• Notifies appropriate agencies and organizations and coordinates and communicates with outside agencies as needed. For example, if the Orange County EOC were activated, the Liaison Officer would be the only ICS position that communicated with that EOC.
	Public Information Officer	• Develops and disseminates accurate and complete information (e.g., cause, current situation, and resources committed) about the event and response to the public and news media.
	Legal Advisor	• Evaluates issues and potential liabilities and advises the Incident Commander on any legal aspects of these issues.
	EOC Manager	• Sets up the EOC and supports the ICS positions at the EOC as needed.
Operation Section	Operations Section Chief	• Manages all operations directly involved in the response and provides operational guidance to the Incident Commander. • Reviews, modifies as needed, and implements the existing emergency response plan and/or Incident Action Plan for the event. • Establishes the appropriate level of organization for the Response Operations Section and monitors the effectiveness of the organization. • Ensures that the response objectives are accomplished.
	Branch Directors (Pelt. 1, Pelt. 2, & Collection System)	• Manage response actions within their branch to meet the incident objectives. • Ensure the safety of all employees, contractors, and visitors within their branch.
	Group Supervisors	• Manage the functions of their specialized group. • Specific groups used at OCSD are Damage Assessment, and Operations and Repair. • The Pump Stations and Trunk Lines Group Supervisors of Branch 3 account for personnel working in the field and supervise inspection and repair in the Collection System.
	Evacuation Coordinators	• Ensure that all personnel have been evacuated, conduct roll call, and request needed assistance from the Branch Director. Evacuation Wardens report to the Evacuation Coordinators

Figure 2-3 shows the full-scale Operations Section.

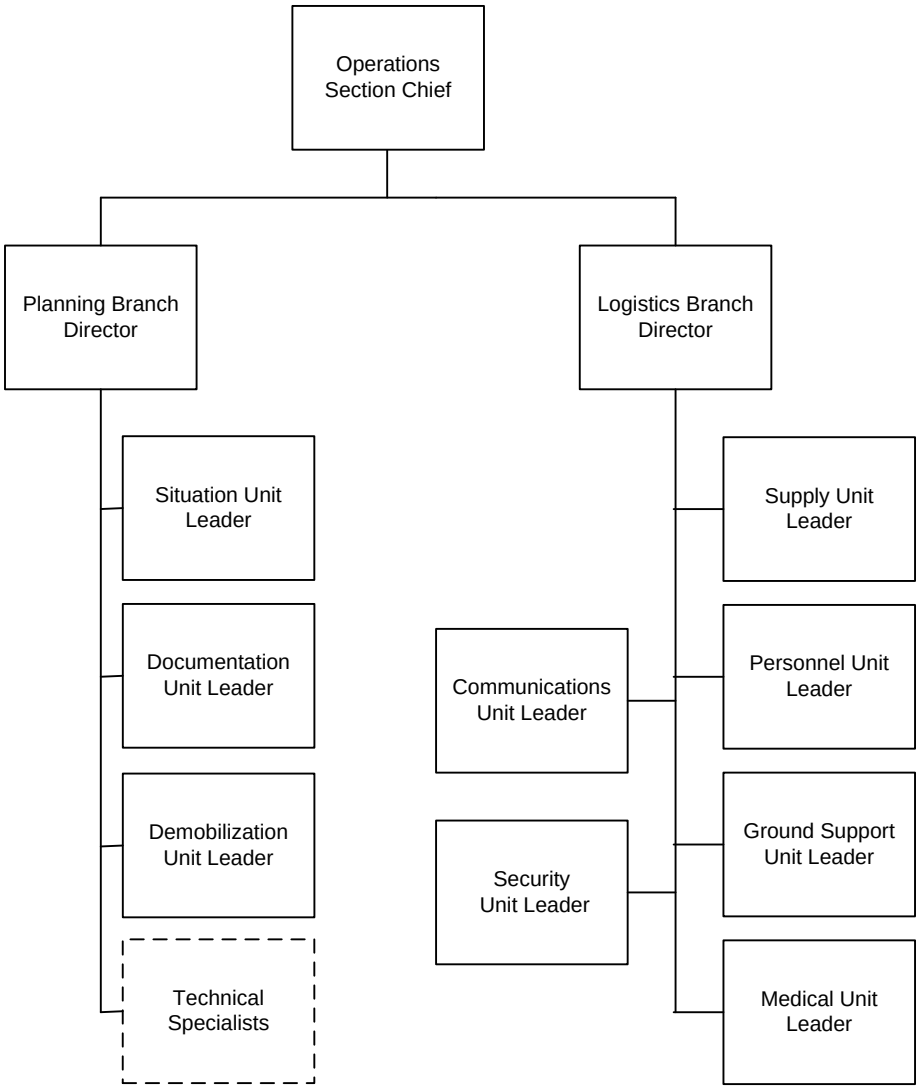


Figure 2-3. Full-Scale ICS Organization: Operations Section

As shown in Figure 2-3, all Operations elements are activated for this scenario. Table 2-2 lists the Operations positions and their responsibilities.

Table 2-2. ICS Positions

Element	Title	Typical Duties
Operations Section	Operations Section Chief	• Manages all support functions involved in the response and provides guidance to the Incident Commander. • Establishes the appropriate level of organization for the Operations Section and monitors the effectiveness of the organization. • Ensures that the response objectives are accomplished.
Planning Section	Planning Branch Director	• Ensures that the Section Chief is informed of all data regarding incident operations and assigned resources, conducts planning meetings, and prepares Incident Action Plans. Positions reporting to the Planning Branch Director are described below.
	Situation Unit Leader	• Maintains a detailed overview of the incident for the operational period. Uses appropriate forms and displays.
	Documentation Unit Leader	• Maintains control of all documentation developed in response to the incident and provides such services as duplicating, maps, and charts.
	Demobilization Unit Leader	• Develops an Incident Demobilization Plan, distributes the plan, and ensures that the plan is implemented.
	Technical Specialists	• Provide technical assistance to the Planning Section Chief. Various technical specialists (for example, Operations Engineers, ECM personnel, and Lab personnel) may be activated.
Logistics Section	Logistics Section Chief	• Manages and coordinates all support and supplies needed for the incident response. Positions reporting to the Logistics Branch Director are described below.
	Supply Unit Leader	• Responsible for ordering equipment and supplies; receiving, storing, and distributing all supplies for the incident; maintaining an inventory of supplies; and documenting receipt and disbursement of supplies. Ensures that meals are available for OCSD personnel activated.
	Personnel Unit Leader	• Ensures that all personnel have checked in and maintains a current status of all personnel involved in the response. Arranges for additional personnel as requested.
	Ground Support Unit Leader	• Provides transportation of personnel, supplies, and equipment and manages the fueling, maintenance, and repair of vehicles and equipment.
	Medical Unit Leader	• Establishes the Medical Plan for the response, establishes triage areas, ensures needed medical treatment of responders, and maintains records of injuries and illnesses related to the incident.
	Security Unit Leader	• Provides safeguards to protect personnel and property from loss or damage during the response. Also maintains safe distance boundaries.
	Communications Unit Leader	• Develops an event-specific Communications Plan to ensure effective use of incident communications equipment and facilities, installs and tests communications equipment, and distributes and maintains communications equipment.
Finance Section	Finance Section Chief	• Keeps records of incident costs and labor utilization; prepares estimates of incident cost; ensures that documentation for compensation-for-injury and property damage claims is maintained; keeps a record of all reported injuries and illnesses associated with the incident; investigates property damage claims; and implements follow-up requirements.

Other Examples of ICS Activations

This section contains examples of how different ICS organizations can be developed to respond to specific events. For discussion purposes, the activations have been designated as low, and medium, and high to reflect the number of ICS positions activated. An example of the high level of activation was discussed in the previous section.

The *organizational flexibility* afforded by the ICS is demonstrated here by showing how the ICS may evolve to respond to an event by adding specific ICS positions and different organizational structures.

Low Level Activation

Situation

A sensor fails at a pump station, causing sewage to spill from the pump station into the streets and back up into nearby homes. Residents notify OCSD. Plant No. 1 Control Center receives the first call.

Response

The Control Center Clerk on duty notifies the Operations Supervisor, who instructs the clerk to call the Collection Facilities person on call, who goes to the scene and assesses the situation. Due to the size of the spill, the Collection Facilities person at the scene notifies the Control Center Clerk, who notifies the Collections Facilities Manager. The Collection Facilities Manager arrives at the scene, assesses the situation, and decides to activate an ICS response. The Collection Facilities Manager is the Incident Commander.

Figure 2-4 shows the ICS elements activated. Note that the Finance Unit Leader is activated to handle damage claims by homeowners. The Operations Chiefs were not activated because the Incident Commander was able to manage the response within the "span of control" guidelines discussed in Appendix 2A.

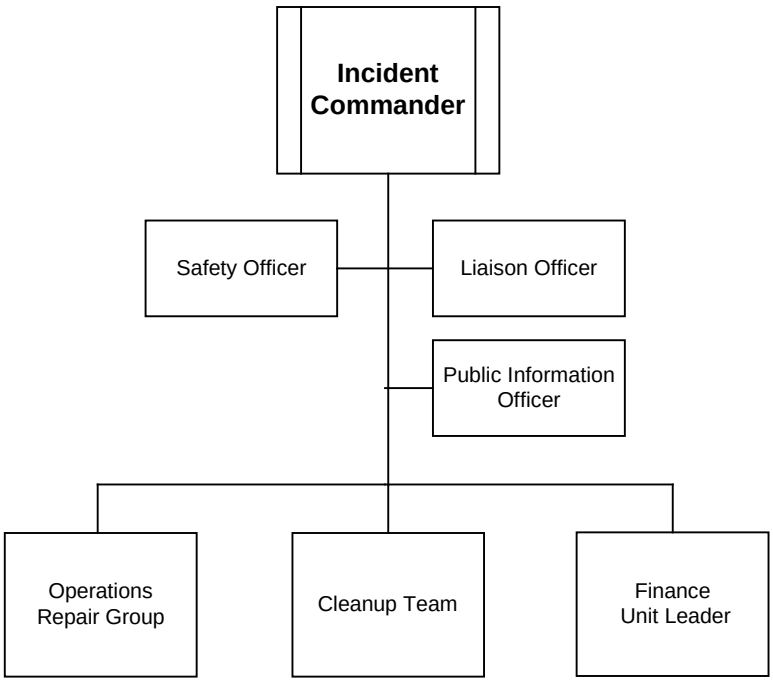


Figure 2-4. Low Level ICS Activation – Sewage Spill

Medium Level Activation, Example 1

Situation The receptionist at the Administration building receives a call at 11 am that a bomb has been placed at Plant No. 2 and will go off in 2 hours. The caller hangs up immediately and does not provide any other details.

Response The receptionist calls the Control Center. The Control Center calls 911 and the Operations Center at Plant No. 2. The Clerk at Plant No. 2 informs the Operations Manager. The Operations Manager or Operations Supervisor on duty becomes the Incident Commander. The Incident Commander:

- Orders an evacuation of Plant No. 2
- Establishes an Incident Command Post at another location outside the gates at Plant No. 2

Alerted that there is to be a plant-wide evacuation, Huntington Beach Police units arrive at Plant No. 2 to help with traffic control.
The Operations Center broadcasts a message over public address and emergency warning siren system ordering all personnel including contractors and visitors to evacuate outside the facility. Runners using electric carts or bicycles are also sent to buildings and sites.

Figure 2-5 shows the ICS organization that may be required to evacuate and account for personnel at Plant No. 2 due to a bomb threat.

The Incident Commander activates:

- Command Staff
- Security Team led by the Security Unit Leader
- Branch 2 Director
- Evacuation Coordinators and Evacuation Wardens
- The EOC at Plant No. 1
- Support Unit Leader

The Public Affairs Officer (PAO) is activated to work with the media. The PAO reports to the Plant No. 2 Command Post. The Safety Officer is activated to ensure the safety of personnel and provide support to the police and fire resources. The Safety Officer reports to the Plant No. 2 Command Post. The Liaison Officer is activated to make any regulatory notifications. The Liaison Officer remains at the Plant No. 1 EOC.

The Security Team is activated to work with the police and fire respondents, help get OCSD employees off the site, and set up a perimeter to keep people away from the site.

The Branch 2 Director and Evacuation Coordinators and Wardens are activated to help in the evacuation and account for personnel at the assembly areas. After taking the roll call at the assembly areas, the Evacuation wardens move the personnel outside the plant to await transportation to Plant No. 1.

A Deputy Incident Commander is activated to run the EOC at Plant No. 1. The Ground Support Unit Leader is activated at Plant No. 1 to coordinate transportation of Plant No. 2 personnel to Plant No. 1. The Ground Support Unit Leader:

- Immediately sends a van to Plant No. 2 to pick up key operations personnel for transport back to the Control Center to monitor and/or operate the plant remotely.

- Arranges for buses and vans to take OCSD Plant No. 2 personnel to Plant No. 1.

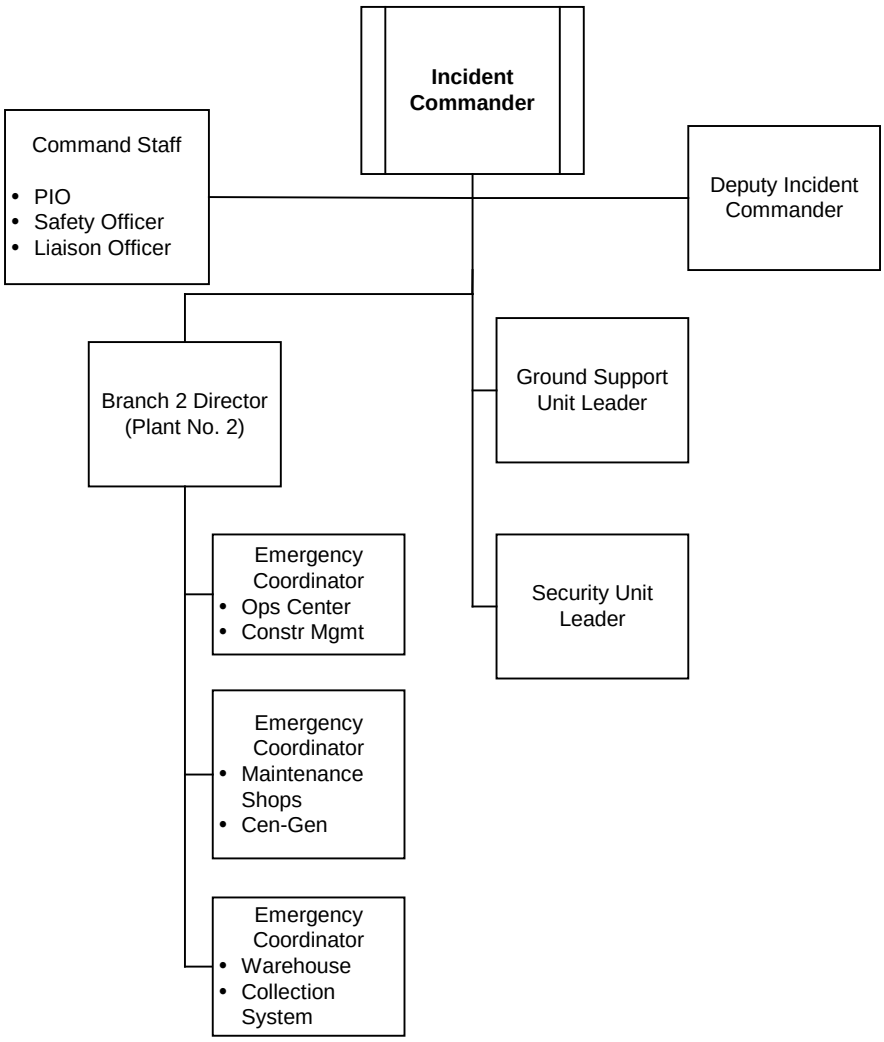


Figure 2-5. Example of ICS Organization for a Bomb Threat at Plant No. 2

Medium Level Activation, Example 2

The previous scenarios have shown the most common type of ICS organization used at OCSD, a Single Command ICS organization. In a single command organization, OCSD's Incident Commander manages the response. This example will illustrate a Unified Command, that is, a command where OCSD shares the overall management of the response with other entities such as the Fire Department.

Event

A biosolids hauler left the Plant No. 1 Truck Loading area and exited Plant No. 1 at the front gate, all the while leaking biosolids. The truck

leaked biosolids for 1/4 mile before the driver noticed the spill. He made a U-turn and returned to Plant No. 1's Truck Loading facility.

Response

An OCSD employee called 2222 to report the incident. The Operations Supervisor on duty went to the front gate to review the situation. He activated the ICS by informing the Control Center to call out additional personnel to help at the front gate. By this time, Fountain Valley Police and Fire departments had arrived at the scene. The Operations Supervisor served as the Incident Commander. When the Director of Operations & Maintenance assumed the role of the Incident Commander and established an Emergency Operations Center at the Control Center, the Operations Supervisor became the On-Scene Manager.

Since several entities were involved, a unified ICS Command structure was established to manage the response to the event by the various agencies. Figure 2-6 shows a unified ICS organizational structure that may be required to respond to this type of spill event. That is each entity show in the figure (Fire, Health, and OCSD) has its own command structure.

Unified Command

Unified Command is a team effort that allows all responding agencies with geographical, legal, or functional responsibility to establish a common set of incident objectives and a single Incident Action Plan. A Unified Command is used to ensure a coordinated multi-agency response while maintaining individual agency authority, responsibility, and accountability.

Unified Command can be used in small or large incidents. For example, a District Incident Commander and a local Fire Department Incident Commander may operate under the Unified Command concept for a sewage spill. For a large disaster such as an earthquake, multiple agencies will be involved in a Unified Command.

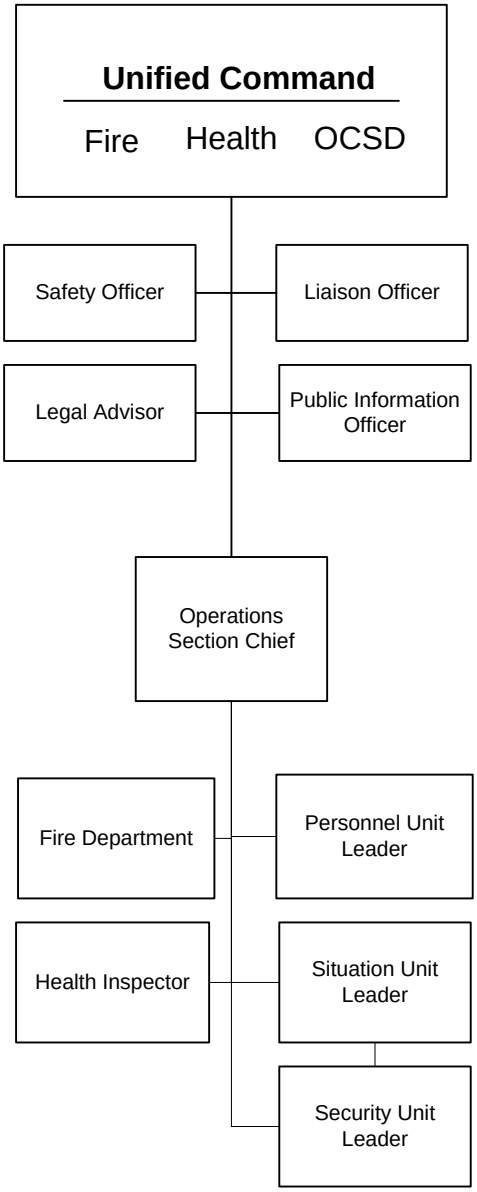


Figure 2-6. ICS Organization for Spill Event Example

Transfer of Command

Command at an incident is initially established by the first qualified and NIMS trained person on the scene. Transfer of command at an incident may then take place for any of the following reasons:

- A more qualified and trained person assumes control.
- An incident situation changes over time to where a jurisdictional or agency change in command makes good management sense.
- Normal turnover of personnel occurs at the end of an operational period.

Transfer of command is a formal process that takes place face to face if possible. After the transfer of command is completed, notifications are made to all incident personnel.

During a transfer of command, the emergency response plan in use and/or the Incident Action Plan for the event is reviewed with the incoming Incident Commander. If an Incident Action Plan has not been developed, the transfer of command should include a review of such topics as:

- Situation status
- Objectives and priorities
- Current organization
- Personnel assignments
- Personnel en route or ordered
- Facilities established
- Communications plan

Incident Action Plan

This IERP contains emergency response plans that have been developed as operational guidelines in response to a variety of events. These plans may serve as the basis for the Incident Action Plan for an event.

The Incident Action Plan contains objectives reflecting the overall incident strategy, specific tactical actions, and supporting information for the next operational period. ***The plan may be oral or written depending on the complexity of the response to the incident.*** If an emergency response plan is not available for the particular event, a written Incident Action Plan should be developed whenever any of the following conditions exists:

- Two or more jurisdictions (including OCSD) or contractors are involved.
- The incident response will overlap one operational period.
- There is a need to document injuries and/or fatalities.
- There will be personnel changes and shift changes.

The Incident Action Plan consists of three sections as follows:

- Section 1 contains identification information and preliminary status information about the event(s). Planning completes this section very early at the beginning of the response in preparation for the initial meeting of Command and Section Chiefs to set response strategies.

- Section 2 lists Overall Objectives, including responsibility and timeframe/deadline, which are developed during the initial meeting to set strategies.

- Section 3 lists specific actions to be taken to meet the objectives. Each major group, Command and Operations, develops this section and also assigns a responsibility and a timeframe/deadline for each.

Appendix B in Volume II contains the Incident Action Plan and other ICS forms.

ICS Activation Debrief

Following each ICS activation, it is important to debrief or have an "after action" to review the response and identify lessons learned, including suggestions for improving the response to the next emergency. This debrief should be led by a facilitator who was not active in the response to ensure objectivity. The IERP Administrator captures the points made and uses them to determine whether any changes need to be made to the IERP documents or future training exercises.

ICS Facilities

An ICS response to an incident may require that several facilities be established. The need to establish a facility depends on the needs of the incident. The Incident Commander decides which facilities will be activated. Commonly used facilities are:

- Incident Command Post
- Emergency Operations Center
- Staging Area

Incident Command Post

The Incident Command Post is located near the incident but not subject to immediate hazards. The Incident Commander is located at the Incident Command Post. There could also be a situation where the on-scene manager is at the Incident Command Post and the IC is in the EOC. The location of the Incident Command Post may be flexible. It may be located in a permanent structure, such as Plant No. 1's Control Center or Plant No. 2's Operations Center (see Emergency Operations Center below), or in a van or truck. Generally, there is only one Incident Command Post per incident, incident communications are located in or near the Incident Command Post, and the Incident Command Post location is permanent for the incident duration (as long as it remains a safe and viable location).

Emergency Operations Center

OCSD will use an Emergency Operations Center (EOC) for an incident that requires the use of many resources and full implementation of the ICS organization. EOCs that may be activated are located at Plant No. 1's Control Center and Plant No. 2's Operations Center. Appendix C of Volume II discusses EOC setup.

Staging Area

The staging area is a temporary location close to an incident where personnel and equipment resources are located while awaiting assignment. Whenever possible, staging areas are located within 5 minutes travel time to the area of expected need. In addition, staging areas have different routes for entering and exiting the area and are clearly marked and secured. An incident may have more than one staging area.

Personnel, equipment, and supplies in the staging area are always in the available status, which means that they are ready for assignment within 3 minutes. Each staging area has a Staging Area Manager, who reports to the ICS Operations Section Chief.

Common Responsibilities

Everyone assigned to an incident has certain common responsibilities to ensure that the ICS organization functions as efficiently as possible.

Key responsibilities are to:

1. Know your assignment.
2. Bring or know the location of any specialized tools or equipment related to the assignment.
3. If appropriate, bring adequate personal supplies.
4. Follow check-in procedures at the incident.
5. Ensure that you receive a briefing from your immediate supervisor and obtain necessary work materials.
6. Review your ICS Position Checklist and perform assignments as needed.
7. Refer all media questions to the Public Information Officer.

8. Organize and brief any subordinates assigned to you.
9. Brief your relief at the end of your shift or the operational period.
10. Complete required forms and reports.
11. Demobilize in accordance with the Demobilization Plan.

Appendix 2A
SEMS and ICS Information

Introduction

This appendix contains additional information about SEMS and the ICS. Described in detail are:

- Operational Levels of SEMS
- Components of SEMS
- SEMS Training
- ICS Philosophy
- ICS Features

The California SEMS was established in September 1994. The California Legislature passed Senate Bill 1841, effective January 1, 1993, which became Section 8607 of the Government Code. This law seeks to improve coordination of state and local emergency response.

The law directed the California Emergency Management Agency (CalEMA), in coordination with other state agencies and local emergency management agencies, to establish SEMS. By law, local governments and agencies (such as OCSD) are strongly encouraged to use SEMS for emergency response, and they must use SEMS to be eligible for state reimbursement of response-related personnel costs.

Operational Levels of SEMS

SEMS provides a five-level emergency response organization, activated as needed for multi-agency and multi-jurisdictional emergencies. The five organizational levels in SEMS are shown in Figure 2A-1 and defined below from lowest to highest:

1. **Field Response Level.** At this level emergency response personnel and resources carry out tactical decisions and activities under an Incident Commander in direct response to an incident or threat of an incident.

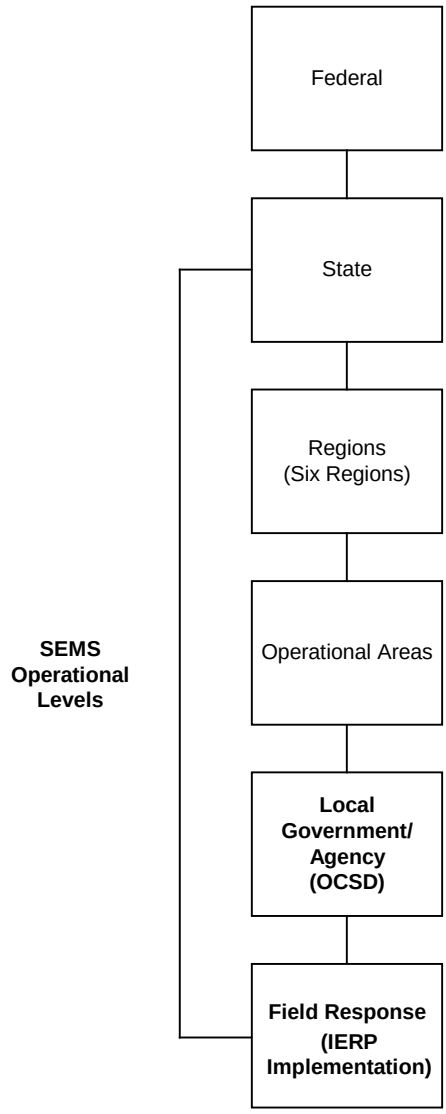


Figure 2A-1. SEMS Operational Levels

2. **Local Government Level.** Local governments include cities, counties, and special districts. They manage and coordinate overall emergency response and recovery activities within their jurisdiction. As a special district, the Orange County Sanitation District is considered to be at this level.

3. **Operational Area Level.** This level encompasses the county and all political subdivisions within the county. The operational area manages and coordinates information, resources, and priorities among local governments in the operational area and is the coordination and communication link between the local government level and the regional level. The Orange County Operational Area

Emergency Response Plan and the Emergency Operations Center (EOC) are activated to perform this coordination function.

4. **Regional Level.** California has been divided into six Mutual Aid Regions. The California Emergency Management Agency (CalEMA) provides oversight of the six regions through three regional offices. The regional level manages and coordinates information and resources among operational areas within the mutual aid region and between the operational areas and the state level.

5. **State Level.** This level manages state resources in response to the emergency needs of the other levels and coordinates mutual aid among the mutual aid regions and between the region and state levels. The state level is also the coordination and communication link between the state and federal disaster response system.

Components of SEMS

SEMS incorporates the following major components:

- **ICS,** the standardized system for managing an emergency response.

- **Multi-agency or inter-agency coordination,** that is, participation of agencies and disciplines involved at any level of the SEMS organization working together in a coordinated effort to facilitate overall emergency response decisions, including the sharing of critical resources and the prioritization of incidents.

- **The State Master Mutual Aid Agreement** and mutual aid systems that function within that agreement. Under the agreement, cities, counties, and the state have joined together in a comprehensive program to voluntarily provide resources to other jurisdictions whose resources are insufficient. Examples of mutual aid systems that implement the master agreement are fire and rescue, law enforcement, emergency medical, and coroner.

- **Operational area concept.** The operational area is used by the county and its political subdivisions to coordinate information and resources and to serve as a coordination and communication link with the regional level. The Orange County Operational Area, which includes OCSD as a member agency, also uses the ICS. The ICS described in Chapter 2 for use by OCSD matches the overall organizational structure in SEMS and in the Operational Area

Emergency Response Plan.

- **Operational Area Satellite Information System (OASIS).** This satellite-based communications system communicates a wide variety of information to OASIS user agencies. Each county operational area is linked by satellite to selected state, federal, and local agencies. OCSD provides information to the Orange County EOC in an emergency.

SEMS Training

The State has developed and conducts extensive training on the ICS and has provided guidelines for meeting training requirements. OCSD's Training Plan (Chapter 3 of this volume) uses SEMS courses as part of employee IERP training and complies with SEMS training requirements.

ICS Philosophy

The ICS was developed to standardize responses to emergencies and is a proven system that has been used for more than 20 years. The system is a flexible organizational structure that can be used to respond to any size or type of incident. The following section discusses key features of the ICS and standard organizational terminology.

Features of the ICS

Key features of the ICS that are common to all operational levels are:

- **Essential Management Functions.** At OCSD, the ICS has two primary functions applicable to any emergency:

  - Command
  - Operations

- **Management by Objectives.** This feature of ICS as applied to SEMS means that each SEMS level should identify measurable and attainable objectives to be achieved. The time frame necessary to accomplish these objectives is known as the "operational period."
- **Action Planning.** Action planning should be used at all SEMS levels. The use of action plans provides designated personnel with knowledge of the objectives to be achieved and the steps required for achievement. Once objectives are determined, the operational

period action plan provides a framework for establishing the necessary organization, making assignments, and allocating resources to accomplish the objectives. At the incident, action plans are known as Incident Action Plans.

- **Organizational Flexibility and Modular Organization.** At each SEMS level, only those parts of the ICS organization that are necessary to meet current objectives need to be activated, and the ICS organization can be arranged in various ways within or under the SEMS functions. The tasks that would normally be assigned to non-activated parts of the organization are the responsibility of the next highest level that is activated.

- **Organizational Unity and Chain of Command.** Organizational unity means that every individual within an organization has designated supervision. Chain of command means that within each activated SEMS level, all parts of the organization are linked together to form a single overall organization within appropriate span-of-control limits.

- **Span of Control.** Maintaining a reasonable span of control is the responsibility of every supervisor at all SEMS levels. Experience in using the ICS has established a one-to-seven ratio as the maximum span of control under emergency response conditions, but a one-to-five ratio is optimum. This means that in an emergency response organization, one person should have direct supervisory authority of no more than five positions if they are performing separate functions.

- **Resources Management.** At all SEMS levels, the ICS organization is responsible for managing resources. This responsibility varies from strategic planning and tactical direction to procurement, inventorying, and control of needed personnel, equipment, and materials.

- **Integrated Communications.** At the field response level, integrated communications is used in any emergency involving multiple agencies. Among all SEMS levels, there must be a dedicated effort to ensure that communication systems, planning, and information flow are being accomplished effectively.

- **Common Terminology.** Common terminology is applied to organizational elements, position titles, facility designations, and resources so that multi-agency and multi-jurisdictional organizations, disciplines, and resources can work together effectively.

Contents

3. IERP Training Plan

This plan identifies the training necessary to ensure effective implementation of the Integrated Emergency Response Plan (IERP). The plan covers the following topics:

- Responsibilities
- Requirements for initial and refresher training
- IERP briefings and their purpose
- Training development
- IERP exercises, including development, conduct, and evaluation
- Training documentation

Responsibilities

The IERP Coordinator:

- Identifies training requirements and monitors training activities and materials.
- Coordinates the scheduling, development, delivery, and documentation of all IERP training.

The Risk Management Division (approves all IERP training programs and directs the work of the IERP Coordinator.

Training Requirements

The required training courses for OCSD personnel are designed so that personnel will be able to:

- Perform their responsibilities in an emergency.

- Cooperate with those involved in implementation of the IERP.
- Integrate OCSD's emergency response organization with a multi-agency response.

Initial IERP Training

Effective December 1996, California agencies must use the Standardized Emergency Management System (SEMS) for emergency response to be eligible for State reimbursement of emergency response related costs. In addition, using SEMS allows OCSD to be integrated into a county-wide, multi-jurisdictional emergency response situation since SEMS standardizes the emergency response organization to be used at all levels—field response, local government, operational area, region, and state.

On October 26, 2005, the OCSD Board of Directors adopted Resolution OCSD 05-25, which directs the General Manager and staff to adopt the National Incident Management System (NIMS) as the Orange County Sanitation District's standard for incident management, and further more directs staff to implement the NIMS, including the delivery of an employee training program.
IERP training will be provided for OCSD personnel and the ICS Organization. Table 3-1 identifies the groups that will be trained, the courses, course length, and the regulations requiring the training. Acceptable delivery methods include classroom training, tabletop exercises, full-scale exercises, functional exercises, self-study modules, and computer-based training.

Table 3-1. OCSD IERP Training Requirements

Audience	Course	Length (Hours)
OCSD employees with a specific role in the EOC	FEMA National Incident Management System (NIMS) Courses: 1. IS-100: Introduction to the ICS for Public Works Personnel 2. IS-200: ICS for Single Resources 3. ICS-300: Intermediate ICS 4. ICS-400: Advanced ICS 5. IS-700: An Introduction to NIMS 6. IS-800.B: An Introduction to National Response Framework	24
All other OCSD personnel	The IERP Training (on-line)	1
Evacuation Coordinators and Evacuation Wardens	Evacuation Coordinators and Wardens Course	2
Potential first responders to a hazardous material release	Hazmat First Responder Operations	4
Medical Unit	Training commensurate with Responder Level (1 through 4) as specified in SAFETY-SP-112.2, Emergency Medical Program	Variable
Damage Assessment	Applied Technology Council (ATC) 20 Training	8

Note: OCSD's Emergency training has been developed based on guidelines issued by the California Specialized Training Institute (CSTI) and CAL-OSHA.

ICS Member Training

Employees with a specific role in the ICS organization will take this course. The material presented in Chapter 2 of Volume I of the IERP forms the basis for the course.

Topics covered are:

- ICS Activation Process
- ICS Organization and Staffing

- Lines of Communication
- Use of ICS Facilities: EOCs and Incident Command Posts
- Evacuation Procedures

The length of this course is 1 hours.

The IERP Training

As shown in Table 4-1, all other OCSD employees are required to complete this course, which consists of:

- Emergency Action Plan
- Action Plan and Emergencies
- Written Plan and Evacuation
- Emergency Alarms
- Emergency Supplies

The length of this course is 2 hours.

Evacuation Coordinators and Wardens Course

The Evacuation Coordinators and Emergency Wardens will complete a course covering the following topics:

- Roles and responsibilities
- Evacuation procedures
- Shelter-in-place guidelines

The length of this course is 2 hours.

Hazmat Training

OCSD does not have onsite Hazmat Response Teams. Based on agreements with the local fire departments, OCSD personnel may handle only routine spills. However, to ensure appropriate response to routine spills and recognition of emergency releases, designated OCSD personnel will complete First Responder Operations training.

Medical Unit

The Medical Unit training consists of two levels, Level 1 being the basic level and Level 2 being the advanced. Medical Unit volunteers may be trained to either of these levels. The amount of training increases between each level as described in SAFETY-SP-112.2, Emergency Medical Program.

Damage Assessment

Damage Assessment Team members attend the Applied Technology Council's course, Procedures for Earthquake Safety and Evaluations of Buildings. This course is funded by the California Emergency Management Agency (Cal EMA).

Topics include:

- General Procedures for Building Safety Evaluation
- Rapid Evaluation
- Detailed Evaluation Method
- Inspection of Wood Frame Structures
- Inspection of Masonry Structures
- Inspection of Tilt-Up Structures
- Inspection of Concrete Structures
- Special Issues for Essential Facilities
- Engineering Evaluation Method
- Human Behavior Following Earthquakes
- Field Safety for Engineers

The length of this course is 8 hours.

Refresher Training

The IERP Coordinator schedules and coordinates all refresher training. Refresher training may be in the form of classroom training, exercises, or both.

Recommended IERP Refresher Training

The following are recommended guidelines for IERP refresher training:

- The training should be conducted at least 30 days before conducting the annual exercise or drill.
- Evacuation training shall be conducted annually as required by OSHA.
- Refresher training should include a review of the IERP, the IERP Organization, IERP facilities, and specific position-related training.
- All Incident Commanders, Command Staff, and Section Chiefs should attend 4 hours of training at least once every 2 years.
- All other personnel who have a specific ICS role and all supervisors and above should receive a minimum of 2 hours of IERP training every year.

Medical Refresher Training

Refer to SAFETY-SP-112.2 for specific refresher training requirements for each level of responder in the Medical Unit.

IERP Briefings

Briefings providing an overview of the IERP may be offered for various purposes. IERP briefing sessions may be provided as requested for local governments and external organizations including representatives of the following:

- OCSD's Boards of Directors
- Executive Management Team
- State, county, and city governments
- The Operational Area
- The media
- Police and fire departments
- Other emergency response agencies

Contractors

All contractors working on OCSD facilities should be briefed on the IERP. The emphasis of this type of briefing should be on reporting of emergency situations while working on OCSD projects and on evacuation procedures.

OCSD Employees

Briefings may be used to cover any major changes introduced as a result of the following:

- An IERP Evaluation (performed after an activation), or
- An IERP Audit (performed every 4 years; see Chapter 10 of this volume, Plan Administration)

Training Development

The IERP Coordinator ensures the development of IERP training materials. The IERP Coordinator ensures the following task are completed:

- Schedules IERP training classes.
- Notifies all those who are expected to attend the training.
- Ensures that an instructor who has demonstrated competency and knowledge of the subject matter conducts the training classes.

IERP Exercises

Exercises are an essential mechanism for training OCSD employees and for evaluating IERP effectiveness. This section describes guidelines for planning exercises and developing materials, conducting IERP exercises, and evaluating their effectiveness.

A structured series of various types of emergency exercises will be developed and conducted to test the IERP and ensure employee competency. Exercises are of the following types:

- **Tabletop Exercise.** A small- or large-scale response is simulated in a classroom. An exercise scenario with triggering events is presented, and all notifications and response actions are "talked through" rather than role played.
- **Functional Exercise.** A specific function (such as a hazardous materials spill response) or aspect (such as the notification and activation process) of the IERP is exercised.
- **Full-Scale Exercise.** An emergency and response are fully simulated with personnel assuming their ICS positions. In such an exercise, the full ICS organization is activated. The exercise may take place in real time or accelerated time and may extend over more than one operational period (usually a 12-hour period of operation).

Frequency of Exercises

Exercises are required as follows:

- A functional exercise of the Evacuation Plan is required to be performed annually (OSHA Title 8, Section 3220).
- A full-scale IERP exercise should be conducted at least once every 2 years using such events as High Flow or Loss of Utilities,
- A tabletop exercise should be performed annually.

If an actual emergency has occurred within the last 2 years, a full-scale exercise is not necessary.

Exercises should not normally be conducted in the same year in which an IERP Audit is performed (see Chapter 10 of this volume, Plan Administration).

Scope of Exercises

Exercises will be planned so that:

- All major aspects of the IERP are exercised over a period of a few years.
- Different types and levels of emergencies are involved.
- All individuals in the ICS organization, including the primary and alternate persons assigned to each position, have the opportunity to participate in an exercise every few years.

Planning of Exercises

The IERP Coordinator is responsible for planning and scheduling IERP exercises. The date of each exercise should be scheduled several weeks in advance. The following OCSD personnel should be notified of the exercise:

- General Manager, Assistant General Manager, Department Directors, and Division Managers
- ICS organization members who will be involved in the exercise Detailed preparation for the exercise takes place in the weeks

immediately preceding the exercise and should include the following activities:

- Setting of exercise objectives
- Design of the exercise and development of scenarios
- Development of exercise materials
- Development of evaluation forms
- Briefing and training of participants

Scenario Design

The IERP Coordinator ensures the preparation of a basic scenario for the exercise that covers the following areas:

- Level of activation
- Type of emergency event and amount of warning received
- Geographical area(s) affected
- Level of damage sustained

The design should include:

- A detailed chronology of scenario events in both scenario and real time
- Damage and injury reports received and timing of these reports
- The expected times of initial activation and succeeding changes in levels (up or down), assuming the participants follow IERP guidelines

The exercise scenario is developed in consultation with operating personnel and other individuals who are knowledgeable in OCSD's operations or in exercise design.

Key exercise decisions made at the design stage include:

- Difference between scenario time and real time
- Which roles are simulated and which are played
- Amount of freedom the participants have to respond to events
- Method of presenting event information to participants
- Method of presenting other data to participants

Developing Exercise Materials

The IERP Coordinator ensures the development of exercise materials. OCSD employees who will not be participants in the exercise may participate in the development of materials, or the task of developing exercise materials may be assigned to a contractor.

The following materials should be developed for each exercise:

- Scenario script showing real time, scenario time, trigger events, instructions to exercise facilitators and controllers, and expected participant response
- Narrative messages and data in hard copy or electronic form to be issued to participants (e.g., scripts for staged phone calls, faxes, screen prints to simulate computer data)

The IERP Coordinator ensures that all exercise materials are kept in a secure place prior to the exercise.

Exercise Implementation

A briefing as described below should precede the exercise.

Preparatory Briefing

Within 30 days of the exercise, the IERP Coordinator or designated person should brief exercise participants on the following:

- The roles of the facilitator and exercise controller(s)
- Individuals who will participate in exercise evaluation
- Any logistical issues such as scenario time versus real time

- Extent of realism, e.g., whether individuals will physically report to the scene or will remain in a tabletop exercise environment
- Length of exercise (e.g., full day, half-day)

Conducting the Exercise

The following personnel conduct the exercise:

- A person designated as exercise facilitator runs the exercise, responding to unforeseen events or unacceptable participant responses as required to ensure that exercise objectives are achieved.
- An exercise controller ensures that messages and data are issued at the required times during the exercise.
- An additional controller assists the facilitator in ensuring that events occur in the proper sequence and at the appropriate times.
- An observer/recorder documents participant responses (several observers may be needed in a large-scale scenario, or a tabletop exercise may be videotaped).

More personnel may be needed to assist as controllers or observers depending on the geographic area involved in the exercise.

Exercise Evaluation

The purpose of exercise evaluation is to determine methods to improve emergency response in the following areas:

- Practicality and effectiveness of the IERP
- Training of participants
- Planning and conduct of the exercise

Immediately following the exercise, the facilitator conducts a critique session for key participants to discuss the exercise and collect feedback about the effectiveness of the IERP. Recommendations for improving the IERP are discussed. Key participants in the exercise then complete the standard training evaluation form.

The IERP Coordinator ensures that a report is prepared documenting the results of the exercise and specific recommendations for upgrading the IERP and associated training. The report is distributed to Executive Management and the Safety and Health Supervisor.

The IERP Coordinator ensures that changes are implemented and revision pages are distributed in accordance with Chapter 10, Plan Administration. Depending on the extent of the changes, briefings may need to be held with OCSD personnel to inform them of the changes.

Training Documentation

OCSD's Training Management System is used to maintain records of IERP training. In addition to standard data such as name, course taken, date of training, certification received, etc.

Contents

4. Emergency Communication

Purpose

This plan provides guidelines for communication and the use of communication equipment during an IERP Activation. The nature and extent of the event may require an incident-specific Communication Plan. In general, normal communication methods (equipment) should be used until they are not operable.

However, since the Incident Command System (ICS) has been activated, normal communication flows among personnel are not used. Instead, lines of communication follow ICS guidelines, as will be described in this plan.

This plan provides the following information:

- Responsibilities
- Communication flows
- Communication equipment
- Radio protocol for emergencies

Responsibilities

The following personnel have responsibilities for ensuring smooth communication during an IERP Activation:

- **Risk Management Division** ensures that the Emergency Operations Center (EOC) telephones at the appropriate plant are set up as follows:

    - If the EOC at Plant No. 1 is to be used for a District-wide emergency or a Plant No. 1-specific emergency, set up all Plant No. 1 EOC phones.

- If the EOC at Plant No. 2 is activated as an EOC for a Plant No 2-specific emergency, set up all Plant No. 2 EOC phones.

- If the EOC at Plant No. 2 is to be used as an Incident Command Post, set up Command phones and others as instructed by the Incident Commander.

- If the EOC at Plant No. 2 is to be used as an Operations Branch, set up Operations phones only.

- **Communication Unit Leader** of the Logistics Branch of the ICS, if activated, develops an Incident Communication Plan, ensures adequate communication equipment for ICS personnel, and arranges for repair of malfunctioning equipment. If this position is not activated, the next highest position activated (typically the Logistics Branch Director) takes this responsibility. When many groups and teams are activated, the Communication Unit Leader may develop a plan that includes some groups communicating on different channels while others use only cellular phones to report information. A list of radio call names assigned to OCSD employees is available on the NTGlobal network site under Radios file and paper copies are available in the Control Center at Plant No. 1 and the Operations Center at Plant No. 2.

- **Public Information Officer (PIO)** directs IERP public information dissemination during and immediately following an emergency, activates members of the Media Team as required and directs their efforts, ensures the development of news releases as required by the emergency, approves all news releases, and obtains the Incident Commander's approval of all news releases. The PIO also ensures that OCSD employees, including those not activated, receive accurate information about the activation at regular intervals.

- **The Incident Commander** approves the Incident Communication Plan and all news releases. If the PIO is not activated, the Incident Commander performs the duties and responsibilities of the PIO in accordance with the Media Plan (Volume I, Chapter 7).

- **Section Chiefs and Branch Directors**, if activated, are responsible for providing input to the Incident Communication Plan and ensuring that all members of their units know the communication flow and method of communication during activation.

- **All activated personnel** are responsible for following the Incident Communication Plan.

Communication Flows

The need for clear communication during an IERP activation is critical to the success of the response. In many cases the lines of communication may be different from the reporting and communication flow of a normal workday. This section shows suggested communication flows within OCSD, the ICS, and with external entities.

Within the Incident Command System

Effective communication within the ICS is essential. The information coming to the EOC is used to ensure that the Incident Commander has accurate information of the status of the event and can plan future actions. This section discusses the ICS communication protocol and ICS briefings.

Communication Protocol

For each event, the Incident Commander determines whether a specific communication protocol is needed. If a specific protocol (or flow) is needed, the Communication Unit Leader in consultation with the Incident Commander develops a communication protocol for the event as part of the Incident Communication Plan.

Figure 4-1 shows a specific protocol that was developed for the Y2K event. ICS personnel were not only informed of the general flow of information but also the specific mode (radio, cellular phone, etc.) to ensure that information flowed smoothly during the response. This preferred flow path was designed to ensure that those who needed the information received it as quickly and clearly as possible.

To ensure that the appropriate personnel received the information and that the amount of information received was controlled (did not overwhelm the radio), the plan called for teams to report to Unit or Group Leaders via radio or cell phone. The Unit or Group Leaders in turn reported to the Branch Directors who were located in the Control Center or Operations Center. Members of a team were issued cell phones and assigned specific phone numbers. They also were given the phone numbers they were to call to report information.

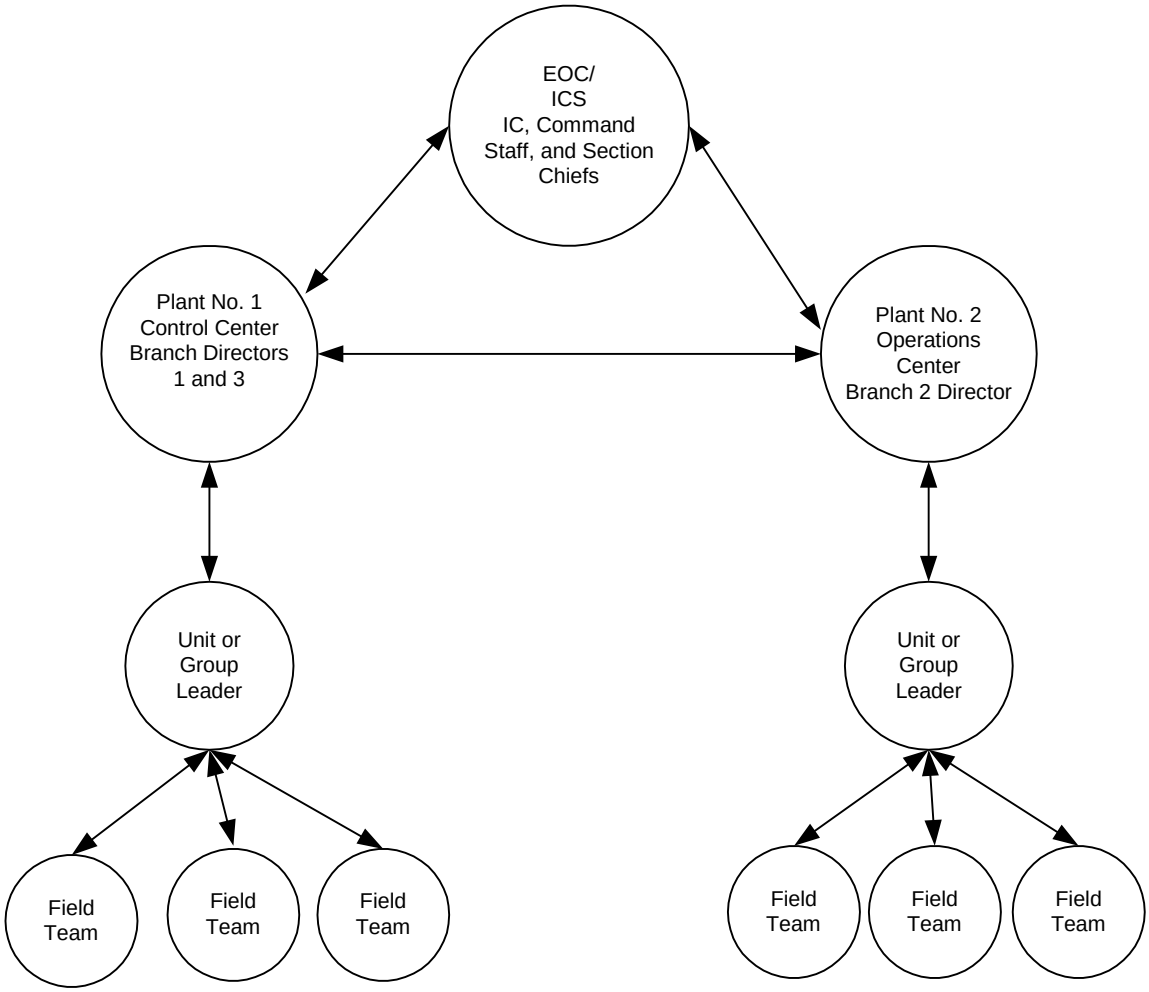


Figure 4-1. Example of a Specific Communication Protocol

Figure 4-2 shows the general flow of information to the Incident Commander. Although not shown, there can also be cross communication between individuals.

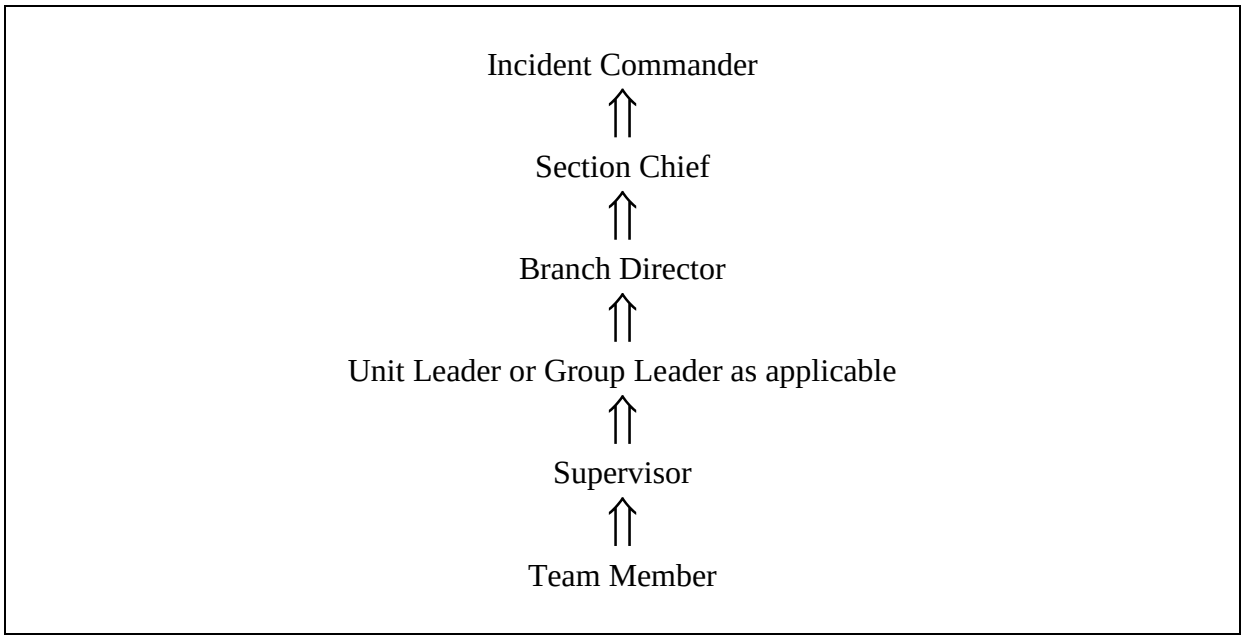


Figure 4-2. Flow of Emergency Information

Incident Briefings

Another method of communication during an event is the use of incident briefings, which are held periodically during a response to keep the Incident Commander, Command Staff, and Section Chiefs informed of the status of the response and the action plan for further response activities. Generally, these meetings are called and conducted by the Incident Commander. The PIO also uses this information to share with other OCSD employees and external sources as described in the next section. In addition, the Liaison Officer uses this information for notifications and updates to outside agencies as appropriate.

Other Internal Communication within OCSD

Every effort must be made to ensure that all employees are informed of OCSD's goals and actions throughout an IERP Activation. Generally, the PIO and Incident Commander determine the timing and method (emails, communication boards, etc.) for informing OCSD employees of the status of the event and response. In addition, the General Manager is responsible for informing the Board of Directors.

External Communications

External communication is handled as follows:

- The Liaison Officer communicates all information with external agencies as required or as requested.
- The Public Information Officer (PIO) coordinates all information being provided to the media in accordance with the Media Plan.
- All employees are to refrain from speaking to the media. Refer all requests for information to the Incident Commander.

The PIO and staff maintain the flow of information to the media and non-activated OCSD employees. Figure 4-3 shows how this information is collected and disseminated.

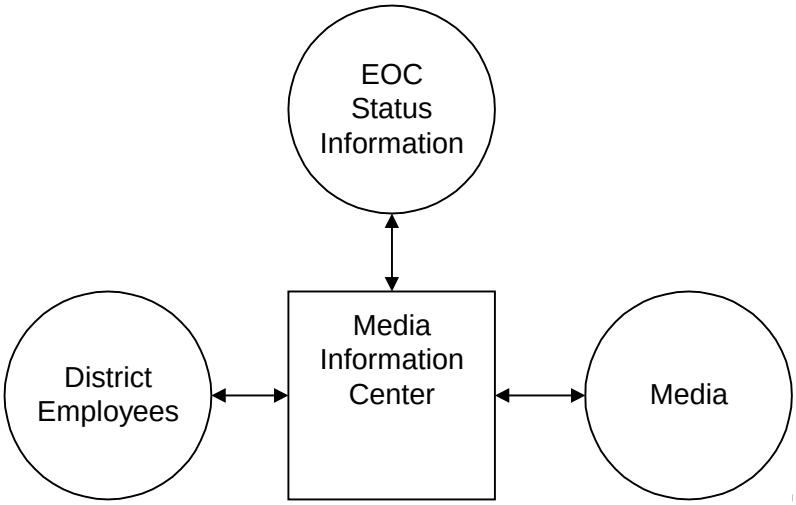


Figure 4-3. Emergency Information Dissemination

Communication Equipment

OCSD has a wide variety of communication equipment available to the ICS members. Depending on the nature and extent of the event and the communication protocol established, the specific modes or methods of communication may consist of the various types of equipment described in this section. The range of options is quite varied. For example, use of the OCSD Intranet might be the main method of communication. On the other hand, for an event such as a catastrophic earthquake where telephones, the network, and cellular phones cannot be used, OCSD may have only radios and runners to keep the information flowing.

The Incident Commander and Communication Unit Leader develop and communicate the specific communication protocol for the response. The equipment discussed in this section includes:

- Special EOC/ICS equipment
- Telephone system
- Cellular phones
- Radios, hand-held and truck-mounted
- Pagers
- Network and Internet
- Fax machines
- Bullhorns

Special EOC/ICS Equipment

The EOCs at Plant No. 1 and Plant No. 2 have been assigned the following special communication equipment to enhance communication during a response.

- **ICS Phones.** The EOC at Plant No. 1 has 8 IP- phones that are connected to the IP-PBX system. The EOC at Plant No. 2 (Training Room in the Operations Center) has 6 IP- phones.. These phones can be used during the response for two-way communication with ICS members assigned to the EOC.
- **Radios.** The EOC at Plant No. 1 has three multi-channel radios [these radios are used for communication with Control 1 (central dispatcher for Orange County emergency services) and direct communication with the Orange County EOC] and also has seven HT-1000 radios with headsets that can be used by ICS staff.

Telephone System

OCSD's telephone system is an IP- PBX system. The internal phone system can remain as the main mode of communication as long as power is available. This system is distributed by design, and therefore relies on the local building power to which it is connected. Each building communication closet UPS has a minimum 28 hour backup power supply. After that, the system relies on building UPS and/or generators. The Control and Operation Centers have regular conventional phones that do not rely upon the network to make phone calls in the event the network fails.
From these phones, a 4-digit extension is dialed to reach internal personnel, and personnel must dial 9 to get an outside line to make external calls.

A list of phone numbers assigned to OCSD employees is available in \\filer-1\ocsd\ntglobal\phone account listing. Outlook/Public Folders/All Public Folders/Districts General Information/Employee Directory. Paper copies are available in the Control Center at Plant No. 1 and the Operations Center at Plant No. 2. The OCSD telephone book may also be used.

Cellular Phones

In addition to the ICS cellular phones mentioned above, OCSD has many cell phones assigned to employees. If needed, these phones can be reassigned as needed to serve as the primary or backup form of communication within the ICS. A list of all cellular phone numbers assigned to OCSD employees is available in Outlook/Public Folders/All Public Folders/Districts General Information/Employee Directory. Paper copies are available in the Control Center at Plant No. 1 and the Operations Center at Plant No. 2.

Employees with cellular phones that have texting capability can also receive messages via email (PNA). During emergency where the cell towers are turned off, texting has continued to work in the past and may during future emergencies.

Radios

The radio is the most common mode of field communication, especially for O&M personnel who may be activated. In a large-scale activation, heavy use of the radio may cause a "traffic jam." Consequently, when many groups and teams are activated, the Communication Unit Leader may develop a plan that includes some groups communicating on different channels while others use only cellular phones to report information. If the land based radios are not functioning then "runners/messengers" can be used to relay messages between the EOC or ICP to field personnel. Runners or messengers are encourage to use an OCSD vehicle, electric cart or bicycle to deliver the message more

quickly.

A list of radio call names assigned to OCSD employees is available on the IT SharePoint website, and paper copies are available in the Control Center at Plant No. 1 and the Operations Center at Plant No. 2.

Satellite Phones

Disasters may cause a major disruption in communication networks. Communication modes such as e-mail, landline phone, IP phone, or cell phone services may be disrupted. The satellite phone, or sat phone is a type of mobile phone that connects to orbiting satellites instead of terrestrial cell sites. Also, terrestrial cell antennas and networks can be damaged by natural disasters. Satellite telephony can avoid this problem and be critical in natural disaster communication.

Each plant has one (1) satellite phone assigned to it. The satellite telephone is stored in the ~~Safety & Health office at Plant 1 & 2.~~Plant 1 Control Center and Plant 2 Operations Center. There's one (1) satellite phone stored in the Risk Management Office.

Pagers

OCSD has a variety of pagers assigned to employees. These pagers may be numeric only or have a text (alpha) capability. Employees with pagers that have alphanumeric capability can also receive messages via email (PNA).

A list of all pagers assigned to OCSD employees is available on the network, and paper copies are available in the Control Center at Plant No. 1 and the Operations Center at Plant No. 2. Pager numbers are also listed in OCSD's telephone book.

Network and Internet

With the network functioning, OCSD will be able to use the full capabilities of communication such as email and PNA pagers and will have access to information such as phone lists. In addition, the internet can be used to communicate with external sources such as the Orange County EOC and to access such information as weather forecasts.

Faxes

Faxes are located in various locations at OCSD and can be used to convey such information as status reports and forms.

A list of all fax numbers assigned is available on the network, and paper copies are available in the Control Center at Plant No. 1, the Operations Center at Plant No. 2, and OCSD's telephone book.

Bullhorns

The Emergency Provisions Trailers have bullhorns that may be used during building evacuations and emergencies requiring the use of Assembly Areas. In addition, some of the evacuation coordinators and wardens have been issued bullhorns.

Radio Protocol for Emergencies

The radio system consists of three channels as described in Table 4-1. Radio call names, if different from normal operations, will be assigned by the Communication Unit Leader.

Table 4-1. OCSD Radio System

Channel	Description	Use
1	The path of the message is from radios to the repeater tower where the signal receives a "boost" (changes the signal from Frequency 2 to Frequency 1 and increases the strength from 1 watt to 100 watts), to all radios on Channel 1 or 2.	Use this channel as the primary mode of communicating information up the chain of command. This channel should not be used for casual conversations or providing detailed instructions.
2	The message path is radio to radio. The signal does not go to the repeater tower. The signal is sent on Frequency 1, but without the "boost" in watts from the repeater tower.	This channel can be overridden by Channel 1. This channel may be used for team member to team member conversations. However, all Channel 1 communications can be heard on this channel as well.
3	The message path is radio to radio on Frequency 3 at 1 to 2 watts.	Use this channel for team member to team member conversations.

The general radio protocol to be followed while the Incident Command System is activated is described below.

Caller

1. Ensure that the radio is programmed and set for the proper channel.

2. Listen before talking. Do not interrupt radio traffic unless you have an emergency as defined below.

3. Start properly by stating the call number for the person you are calling, then state your call number.

4. State your message as clearly and concisely as possible using plain English. Use only the following 10 codes:

10-1 Receiving poorly
10-2 Receiving well
10-4 Acknowledgment
10-9 Repeat last message
10-20 What is your location?

5. Do not use profanity or nicknames.

6. If it is obvious that the conversation is finished, there is no need to formally end the conversation. After a more detailed or longer conversation, repeat call number and state "clear."

Receiver

1. Acknowledge the message.

2. Listen to the entire message.

3. Ask for clarification as needed.

4. If it is obvious that the conversation is finished, there is no need to formally end the conversation. After a more detailed or longer conversation, repeat call number and state "clear."

Use of the Term Emergency

For all staff other than the Incident Commander, use of the term "emergency" is reserved for a life-threatening event or injury only.

If the Incident Commander declares an emergency, stand down on your radio. Only those directly involved in responding to the emergency or those reporting a different emergency are to use the radio. Use another mode of communication.

Contents

5. Site Security Procedures

Purpose and Scope

This chapter contains procedures to be used to ensure the security of our facilities during ICS activation or other emergency.

Although contract security forces are used, it is assumed that these resources will need to be augmented during a major emergency. Therefore, during an emergency, OCSD will use contract security officers and security teams made up of trained District employees. Security training is addressed in Volume I, Chapter 3, Training Plan.

This chapter covers security procedures that will be used during an emergency.

Security Procedures during an Emergency

The procedures in this section provide the overall responsibilities of security personnel during ICS activation. The specific scope may vary due to the level of activation and will be dictated by the Incident Commander. The position of security teams and personnel within the ICS organization is shown in Figure 5-1.

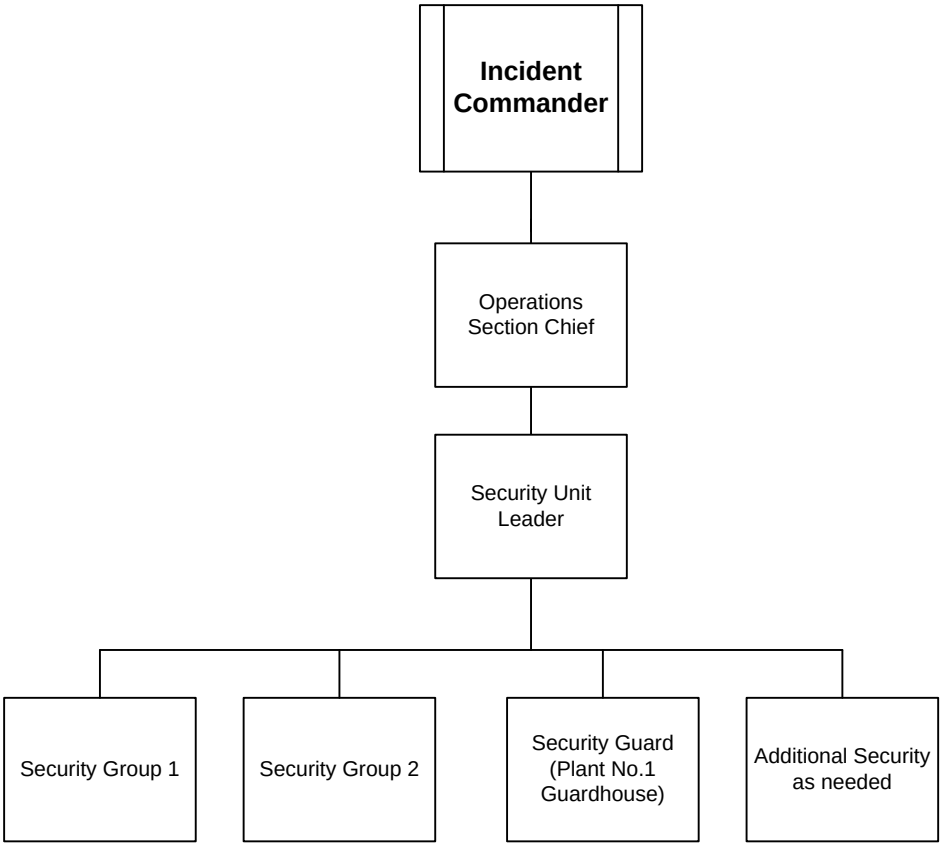


Figure 5-1. Security Personnel in the ICS

Selected OCSD personnel will be trained to carry out security duties, which can be categorized as follows:

- Security Booth (at gate of either or both plants).
- Security patrol and escort (to check perimeter or patrol any areas as required by the Incident Commander; to provide escort to media and responders).
- Collection System security (at pump stations and strategic points on the Collection System).
- Emergency site and ICS facilities security (Incident Command Post, EOC, Media Information Center, staging area). With the exception of the EOC, which will be at either or both plants, these facilities may be located at the plants or offsite.

Depending on the location of the emergency, these duty categories may not be applicable or they may overlap. For example, security escorts will be needed at the emergency site to escort interested media personnel.

In addition to the preparedness training received and the overview information provided here, an ICS Checklist for the Security Unit Leader is in Appendix A to this volume of the IERP.

Security Booth

Security personnel stationed at the Security Booth at either plant will have the following responsibilities during an ICS activation:

- Control site access.
- Check all identification cards.
- Ensure that only authorized personnel are admitted to the site.
- Contact an OCSD representative before allowing visitors access.
- Log in all visitors and provide passes to be worn and displayed in their cars.
- Issue temporary visitor badges and ensure that all personnel are briefed to display their badges prior to entering the plant facility.
- If visitor is a media representative, contact Public Information Officer or the Media Information Center before allowing the representative entry.
- Control access through the contractor gate.
- Establish log-in procedures for contractors and provide temporary visitor badges to be worn and displayed in their vehicles.
- Ensure that all deliveries are expected by OCSD personnel.
- Report any disturbances or other civil disorder to the Security Unit Leader.
- Maintain a log of activities including any unusual events or disturbances.

Security Patrol and Escort

Personnel assigned as security patrols and escorts will have the following duties during an ICS activation:

- Immediately report any significant incidents to the Control Center via radio or telephone.
- Maintain order throughout plants.
- Keep streets open for emergency vehicles.
- Patrol key areas as directed by the Security Unit Leader.
- Control traffic within the plants.
- Patrol perimeter at regular intervals; alert Maintenance regarding any fence repair needed.
- Assist in evacuating personnel as requested.
- Escort media representatives as requested by the Public Information Officer.
- Escort outside responders or other authorized non-OCSD equipment and personnel to the emergency site.

Collection System Security

In case of civil disorder, Collection System security personnel will patrol and/or protect OCSD facilities, including pump stations and pipelines, from damage. Immediately contact the Control Center and give them as much relevant information as possible. The Control Center shall contact the local law enforcement agency who has legal jurisdiction for the facility.

Emergency Site and ICS Facilities Security

Security team members assigned to the emergency site and ICS facilities will have the following responsibilities:

- Control access to the Incident Command Post and the Emergency Operations Center.
- Maintain order at the site of the emergency and at any ICS facilities that have been established.
- Protect personnel, equipment, and supplies at ICS staging areas.

Civil Demonstrations

- Civil demonstrations can range from mildly disruptive activities, such as

peaceful picketing, to violent and uncontrolled events, including civil unrest and looting.

- If a civil demonstration occurs in an area not immediately surrounding our plants, employees will be instructed to travel around the affected area. The best sources of information for determining the affected area and safe travel routes will be local television and radio broadcasts.
- If a peaceful demonstration occurs at OCSD facilities, employees will be advised to enter or leave the plant(s) through whatever access control point that provides the least exposure to demonstrators and to avoid any contact and communications with demonstrators.
- OCSD Risk Management staff and the Public Affairs Office, will monitor civil demonstrations and communicate with the local police agencies as required.

Employees should avoid any interactions or confrontations with demonstrators.

Bomb Threats

- If the suspicious device or bomb is at Plant No. 1 or 2, contact the Control or Operations Center by phone (2222) or radio. Control or Operations Center personnel on duty will use the PA system to order evacuation of the plant in accordance with the Evacuation Procedures (IERP, Volume II, and Chapter 3).
- Alert the security officer or station another person at the main gate of the plant (or other position at a safe distance) to meet any responding agencies and provide them access to the site.
- The Director of Operations & Maintenance shall be notified immediately including the Public Affairs Manager.
- If directed by management, notify appropriate Incident Command System (ICS) members of the ICS activation (Operations Supervisor on duty serves as the Incident Commander until relieved).

Terrorism

Terrorism is the use of force or violence against persons or property for

purposes of intimidation, coercion, or ransom. Terrorists often use threats to:

- Create fear among the public.
- Try to convince citizens that their government is powerless to prevent terrorism.
- Get immediate publicity for their causes.

Acts of terrorism include threats of terrorism; assassinations; kidnappings; hijackings; bomb scares and bombings; cyber-attacks (computer based); and the use of chemical, biological, nuclear and radiological weapons.

High-risk targets for acts of terrorism include military and civilian government facilities, international airports, large cities, and high-profile landmarks. Terrorism might also target large public gatherings, water and food supplies, utilities, and corporate centers. Further, terrorists are capable of spreading fear by sending explosives or chemicals and biological agents through the mail.

Terrorist Explosions

If there is an explosion, you should:

- Get under a sturdy table or desk if things are falling around you. When they stop falling, leave quickly, watching for obviously weakened floors and stairwells. As you exit from building, be especially watchful of falling debris.
- Leave the building as quickly as possible. Do not stop to retrieve personal possessions or make phone calls.
- Do use elevators.

Once you are out:

- Do not stand in front of windows, glass doors, or other potentially hazardous areas.
- Move away from sidewalks or streets to be used by emergency officials or others still exiting the building.
- Throughout the incident, first responders and evacuees should be alert to the possibility of further explosions.
- Check the evacuation assembly area for suspicious or secondary device. If found, move away as far as possible (ideally at least 1,000 feet) until emergency response personnel determine a safe distance.

If you are trapped in debris:

- If possible, use a flashlight to signal your location to rescuers.
- Avoid unnecessary movement so you don't kick up dust.
- Cover your nose and mouth with anything you have on hand.
- Tap on a pipe or wall so rescuers can hear where you are.
- If possible, use a whistle to signal rescuers.

Shout only as a last resort. Shouting can cause a person to inhale dangerous amounts of dust.

Biological Threats

Biological agents are organisms or toxins that can kill or incapacitate people, livestock, and crops. The three basic groups of biological agents that would likely be uses as weapons are bacteria, viruses, and toxins. Most biological agents are difficult to grow and maintain. Many break down quickly when exposed to sunlight and other environmental factors, while others, such as anthrax, spores, live for very long periods.

Delivery methods include:

- **Aerosols** – biological agents are dispersed into the air, forming a fine mist that may drift for miles. Inhaling the agent may cause disease in people or animals.

- **Animals –** some diseases are spread by insects and animals, such as fleas, mice, flies, mosquitoes, and livestock.

- **Food and water contamination** – some pathogenic organisms and toxins may persist in food and water supplies. Most microbes can be killed, and toxins deactivated, by cooking food and boiling water. Most microbes are killed by boiling water for one minute, but some require longer.

- **Persons-to-person** – spread of a few infectious agents is also possible. Humans have been the source of infection for smallpox, and plague.

During a Biological Attack

Specific information on biological agents is available at the Center for Disease Control and Prevention's Web Site, www.bt.cdc.gov.

In the event of a biological attack, public health officials may not immediately be able to provide information on what you should do. It will take time to determine what the illness is, how it should be treated, and who is in danger.

The first evidence of an attack may be when you notice symptoms of the disease caused by exposure to an agent. Be suspicious of any symptoms you notice, but do not assume that any illness is a result of the attack. Use common sense and practice good hygiene.

At any incident scene there is the likelihood of persons who are asymptomatic, who were not necessarily in the immediate danger area and who are concerned about their health and safety, sometimes referred to as the "worried well." Depending upon the circumstances, the number of worried well may exceed those who are actual ill or injured. It is important that these individuals are assessed rapidly, determined not to need immediate medical attention and reassured to avoid further hysteria or panic.

However, if days following the incident, individuals become concerned about their well being then they should seek immediate medical attention.

If you become aware of an unusual and suspicious substance nearby:

- Move away quickly.
- Wash with soap and water.
- Contact authorities.
- Seek medical attention if you become sick

If you are exposed to a biological agent:

- Remove and bag your clothes and personal items. Follow official instructions for disposal of contaminated items.
- Wash yourself with soap and water and put on clean clothes.
- Seek medical attention. You may be advised to stay away from others or even quarantined.

Contents

6. Medical Plan

This Emergency Medical Plan ensures that we are prepared to provide basic emergency medical assistance to OCSD staff.

In addition, SAFETY-SP-112.2, Emergency Medical Program, describes in detail the makeup of the Medical Team including the various levels of responders and their required training.

This plan discusses the following:

- Responsibilities
- Medical Team Training
- Treatment Areas
- Documentation
- Transportation
- Treatment Procedures

Responsibilities

The Incident Commander or Medical Team Leader is responsible for:

- Developing plans for managing large medical emergencies
- Activation of Medical Team to the Control Center or Operations Center.

- Respond to evacuation assembly areas and designate triage or treatment areas.

  Provide up to Level 2 medical aid.
- Providing treatment records in sufficient detail that injury-related claims may be processed.

The Medical Team Members are responsible for:

- Evacuate to assembly areas with their backpack and equipment and await further instructions.

- Keeping their backpacks stocked with medical supplies that have not

expired. Restocking supplies will be through the Finance Leader in the Incident Command System.

- Attend to injuries at the level they have been trained.

- Ensuring their training is current.

The Safety Officers will assist the Incident Commander to:

- Ensure that any Safety & Health requirements are planned for, discussed and understood through the Incident Command System.

Medical Team Training

As described in SAFETY-SP-112.2, the Medical Team has two levels of responders as follows:

- Level 1: Basic first aid and CPR
- Level 2: Advanced first aid and CPR

Members of the Medical Team receive training in accordance with the level for which they volunteer.

In addition, a number of OCSD personnel receive basic first aid and CPR training including all electrical and Instrumentation Division employees and excluding Power Plant Operators (PPO) and Process Control Integration (PCI).

Level 1 – Basic First Aid and CPR

Level 1 shall adhere to either the American Heart Association or the American Red Cross standards. The First Aid course instructs the participants in first aid and uses lecture, discussion and simulated medical emergency situations to deliver information on recognizing and caring for different types of medical emergencies. A second course, Adult CPR offers hands on skills-training for adult CPR and prepares participants to respond to breathing and cardiac emergencies.

Level 2 – Advance First Aid/CPR

The Level 2 class is more comprehensive than the basic First Aid/CPR

curriculum offered by the American Red Cross. Level 2 instructs the participants in advanced first aid and uses lecture, discussion and simulated medical emergency situations to deliver information on recognizing and caring for different types of medical emergencies.

Treatment Areas

In the event of a catastrophic event, such as earthquake or any other natural or manmade disaster, all Medical Team members are to report to their nearest Assembly Area to be accounted for and then, if needed, Medical Team members can use designated evacuation assembly areas as treatment areas if needed. The exact treatment areas will depend on the nature of the incident. General guidelines for establishing a treatment area are that the area be:

- Free of hazards
- Free of debris

Upwind and uphill of the hazard Located close to the hazard zone

Documentation

Documentation associated with the Medical Plan includes the following:

- Illness Assessment Check Sheet for each person treated
- Medical Team Log
- Medical Team Incident Debriefing Form

Transportation

When external emergency medical services are called to the scene, the Medical Team notifies Security of the area in which emergency medical services are needed. Security directs or escorts emergency medical services personnel to the proper facility area.

Emergency medical services are available through Fountain Valley Hospital for Plant No. 1 and the Hoag Hospital for Plant No. 2.

- Fountain Valley Hospital
  17100 Euclid (approximately 1 mile north of Plant No. 1)
  Fountain Valley, CA 92708

714-966-7200

Hoag Hospital
301 Newport Boulevard (2 miles south of Plant No. 2 at the intersection with Pacific Coast Highway)
Newport Beach, CA
949-764-4624
These facilities are aware of the types of hazardous materials used at OCSD.

Outside Medical Services

OCSD contracts with ProCare Medical Group for industrial injuries and medical care at the following locations:

- ProCare Work Injury Center
  18582 Beach Boulevard, Suite 23
  Huntington Beach, CA 92649
  (714) 964-4448

- ProCare Center
  17232 Red Hill Avenue
  Irvine, CA 92614
  (949) 752-1133

Emergency Medical Services provided by city paramedics and contracted ambulance services will transport the closest available hospital.

Emergency Medical Services provided by city paramedics and contracted ambulance services will transport to the closest available hospital.

Treatment Procedures

The Medical Team Leader, with the assistance of the Plant Medical Team Leader at each plant, is responsible for management, treatment, and coordination of all casualties.

The treatment procedures presented later in this section are at the most basic level. When Medical Team members respond to deal with casualties, they may be able to provide more advanced treatment in accordance with their level of medical training.

If the extent or number of injuries requires immediate professional attention, the Incident Commander or Medical Team Leader calls for an ambulance to transport personnel to nearby medical facilities as described above under Transportation. In this case, the goal of treatment is generally to stabilize a victim and prepare for transport to a hospital.

Health Hazards

Table 6-1 shows the hazardous materials used at OCSD facilities and the health hazards associated with each.

Table 6-1. Health Hazards Associated with Hazardous Materials Used at OCSD

Materials	DOT Hazard Class	Health Hazards
Anionic Polymer	N/A	• Liquid irritating to skin and eyes. • Harmful if swallowed. • Vapors irritating to eyes and respiratory system in high concentrations.
Biosolid, Sludge, and Compost	N/A	• Potential infection from biological hazards, particularly fungi. • Infection may occur through inhalation of composting dust. • Contact with eyes and skin, especially when open wounds are present, may cause irritation.
Cationic Polymer	N/A	• Contact may cause irritation and injury to skin and eyes. • Contains materials that can be absorbed through skin. • Inhalation of vapors and swallowing liquid harmful.
Ferric Chloride Solution	Corrosive	• Corrosive to tissue. • Contact causes burns to skin and eyes.

Materials	DOT Hazard Class	Health Hazards
		• Inhalation of gases may be harmful. • Poisonous gases may accumulate in tanks.
High LEL in Collection System	N/A	• Mixture of flammable and poisonous gases and vapors may be present. • May cause loss of consciousness or suffocation due to toxic gases or lack of oxygen.
Hydrochloric Acid	Corrosive	• Corrosive to tissue. • Contact causes burns to skin and eyes. • Fumes irritating to eyes and mucous membranes.
Hydrogen Peroxide Solution (40-52%)	Oxidizer	• Corrosive to tissue. • Vapors irritating to eyes and mucous membranes.
Methane	Flammable Gas	• Non-irritating to eyes, nose, or throat. • If inhaled, may cause loss of consciousness or suffocation due to lack of oxygen.
Oxygen, Refrigerated Liquid	Oxidizer	• Contact with liquid will cause frostbite.
Paints and Solvents	Flammable/ Combustible Liquid	• Vapors may be toxic. • High concentrations or prolonged exposure may cause respiratory irritation and injury. • Contact with skin and eyes may cause irritation. • Swallowing liquid may be harmful.
Petroleum Products	Flammable/ Combustible Liquid	• Vapors may be toxic. • High concentrations or prolonged exposure may cause respiratory irritation and injury. • Contact with skin and eyes may cause irritation. • Swallowing liquid may be harmful.
Sewage	N/A	• Potential infection from numerous biological hazards, particularly waterborne microorganisms. • Most common exposures occur orally and from inhalation of aerosols (mists). • Contact with eyes and skin, especially when open wounds are present, may cause irritation and infection.
Sodium Bisulfite	N/A	• May cause irritation of the respiratory tract. • Contact with acids will liberate sulfur dioxide gas. • Contact with eyes and skin may cause severe injury • May cause severe allergic reaction.
Sodium Hydroxide	Corrosive	• Corrosive to tissue. • Contact causes burns to skin and eyes. • Harmful if swallowed.
Sodium Hypochlorite	Corrosive	• Irritating to skin and eyes.

Materials	DOT Hazard Class	Health Hazards
		• May decompose if exposed to heat, generating chlorine gas. • Harmful if swallowed.

Basic Medical Treatment Procedures

At a minimum, Medical Team members should take the following actions:

- Conduct assessment of injuries.
- Check vital signs.
- Administer first aid.
- Decontaminate the victim as much as possible and prepare to transport.
- Call ambulance.
- Keep the injured person calm.
- If injuries are severe, administer shock prevention treatment or CPR.
- Immobilize as needed.
- Control bleeding.
- Administer oxygen if needed.
- Obtain information on the type and extent of injury and other data.
- Complete Illness Assessment Check Sheet; send one copy with the victim; retain one copy.

Specific Treatment Guidelines

The following are basic guidelines for Medical Team members concerning medical situations that may occur during a response.

This section provides emergency medical guidelines for:

- Decontamination of victim
- Chemical exposure
- Heat stroke, stress, and exhaustion

Decontamination

Any person who becomes ill or injured during a hazardous materials

of Victim

emergency response must be decontaminated. If the injury or illness is minor, full decontamination should be completed and first aid administered before transport. If the patient's condition is serious, at least partial decontamination should be completed (for example, complete disrobing of the victim and redressing in clean coveralls or wrapping in a blanket).

Administer first aid while waiting for an ambulance or other emergency personnel. If possible, applicable MSDSs should accompany personnel being transported to a clinic or hospital.

Chemical Exposure

Symptoms of chemical exposure can be complex and varied. If any behavior changes or illness complaints are observed (for example, dizziness, disorientation, breathing problems, nausea), remove the person from the area and assess the degree of illness. Specific procedures for different types of symptoms are described below.

Inhalation

First aid measures for inhalation exposure to chemicals include the following:

- Immediately remove the affected person from the area.
- Have the person lie down in fresh air and assess physical condition.
- Take vital signs.
- If severe symptoms develop (for example, victim vomits, victim is very dizzy or groggy), seek medical attention.

Eye Contact

Flush eyes immediately for 20 minutes with large amounts of water; repeat until the irritation is eliminated. If prolonged irritation occurs for more than 20 minutes, call for ambulance.

Skin Contact

If there is a powder contact, lightly brush as much powder as possible from the skin before adding water (reaction could occur). Wash exposed area with large amounts of water for 20 minutes. If dermatitis or severe reddening occurs, seek medical attention.

Ingestion

Do not induce vomiting; seek immediate medical attention.

Heat Stroke, Stress, and Exhaustion

Heat can cause physical discomfort, loss of efficiency, injury, and death. If the body's physiological processes fail to maintain a normal body temperature because of excessive heat exposure, a number of

physical reactions can occur ranging from mild heat exhaustion to heat stroke, which can be fatal. Any person having heat-related problems should be checked by a physician. Heat stroke is a life-threatening medical emergency.

A person overcome with heat stroke may have any of the following symptoms:

- Flushed, hot, dry skin
- High body temperature
- Dizziness
- Nausea
- Headache
- Rapid pulse
- Unconsciousness
- Dilated pupils of the eyes
- Convulsions
- Abdominal distress
- Delirium
- No perspiration

If a person may be suffering from a heat-related illness, take the following actions:

- Move the victim to an indoor air-conditioned area if possible or to a shaded outdoor area, or use fans.

- Observe the person to see if they are perspiring or not; if they are perspiring they either have heat stress or heat exhaustion and if they are not perspiring then they have heat stroke and need immediate medical attention

- If body temperature has reached 105^{o}F, immediately cool the body by removing clothing and sponging the body with alcohol or cool water; by placing the person in a tub of cold water until the body temperature is sufficiently lowered; or by applying cool compresses to the body, changing them as necessary.

- Periodically stop cooling and observe the victim. Cool again if temperature starts to rise. Take vital signs and protect from injury (convulsions may occur).

- If the victim is conscious, give water. Do not administer coffee,

tea, or warm beverages.

- Obtain specific information regarding the extent of heat exhaustion, physical condition of affected person, and any other pertinent information.

- Evacuate affected person to a hospital.

Amputation

Stop the bleeding. A complete amputation may not bleed very much. The cut blood vessels may spasm, pull back into the injured part, and shrink. This slows or stops the bleeding. If there is bleeding, do the following:

- If available, wash your hands with soap and water and put on latex gloves. If gloves are not available, use many layers of clean cloth, plastic bags, or the cleanest material available between your hands and the wound.
- Have the injured person lie down and elevate the site that is bleeding.
- Remove any visible objects in the wound that are easy to remove, and remove or cut clothing from around the wound.

Apply steady direct pressure for a full 15 minutes. If blood soaks through the cloth, apply another one without lifting the first. If there is an object in the wound, apply pressure around the object, not directly over it.

- You may apply direct pressure to the wound up to three times for 15 minutes each (45 minutes total).
- Check and treat for shock. The trauma of the accident or severe blood loss can cause the person to go into physiologic shock. Signs of physiologic shock include:
    - Passing out (losing consciousness).
    - Feeling very dizzy or lightheaded, like the person may pass out.
    - Feeling very weak or having trouble standing up.
    - Being less alert. The person may suddenly be unable to respond to questions, or he or she may be confused, restless, or fearful.
    - Emotional stress from the event may cause symptoms such as lightheadedness or fainting. This is sometimes called "emotional shock." Lightheadedness and fainting from emotional stress may be confused with physiologic shock.

Care for the completely amputated body part

Recover the amputated body part, if possible, and transport it to the hospital with the injured person. If the part cannot be found right away, transport the injured person to the hospital and bring the amputated part to the hospital when it is found.

- Gently rinse off dirt and debris with clean water, if possible. Do not scrub.
- Wrap the amputated part in a dry, sterile gauze or clean cloth.
- Put the wrapped part in a plastic bag or waterproof container.
- Place the plastic bag or waterproof container on ice. The goal is to keep the amputated part cool but not to cause more damage from the cold ice. Do not cover the part with ice or put it directly into ice water.

Care for the part of the body where the amputation happened

- Stop the bleeding.
- Elevate the injured area.
- Wrap or cover the injured area with a sterile dressing or clean cloth until medical treatment is received.

Care for a partially amputated body part

- Elevate the injured area.
- Wrap or cover the injured area with a sterile dressing or clean cloth. Apply pressure if the injured area is bleeding. This will slow the bleeding until the person receives medical care. You do not want to cut off the blood flow to the partially amputated part, so pressure needs to be light-just enough to slow blood loss.
- Gently splint the injured area to prevent movement or further damage.

Electric Shock

- Shocking sensations. Numbness or tingling. A change in vision, speech, or in any sensation.
- Burns or open wounds. These occur where the electricity enters and exits the body.
- Muscle spasms or contractions.
- Sudden immobility or fractures. A body part may look

deformed.

- Interrupted breathing. Irregular heartbeats or chest pain.
- Seizures.
- Unconsciousness.

Contents

7. Media Plan

This plan provides policy, guidelines, and procedures to ensure that timely, consistent, and accurate information about an emergency response is available to the media, the public, and OCSD employees during an ICS activation.

Purpose and Scope

This plan applies when the IERP has been activated. This plan does not apply to the regular work duties of the Public Affairs Office.

The purposes of this plan are to:

- Coordinate the public information effort through the issuance of timely, consistent, and accurate information during any of the three levels of IERP activation and to maintain an orderly flow of information during the post-activation period.
- Describe how to activate the IERP media facilities.
- Assign responsibilities and duty locations to the IERP Media Team.

Responsibilities

The following personnel have responsibilities regarding media relations during an ICS activation. This section covers the responsibilities of:

- Public Information Officer & Public Information Coordinator
- Incident Commander
- Security Officers and Security Team
- All OCSD employees

Public Information Officer

The Public Information Officer

- Directs IERP public information dissemination during and immediately following an emergency
- Activates the Public Information Coordinator as required and directs the efforts as needed
- Ensures the development of news releases as needed throughout the emergency, approves communications (press releases, text alert messages, Tweets etc.), and obtains the Incident Commander's approval of all communications.
- Is the designated media spokesperson
- Is responsible for correcting inaccurate information disseminated by the media
- Directs community and employee updates about the emergency
- Provides copies of communications and keeps the Incident Commander informed about media interest and community concerns.

Senior Public Affairs Specialist

Note: In the absence of the PIO, the Public Affairs Specialist may perform the duties of the PIO.

The Public Information Coordinator (PIC):

- Staffs the Media Information Center
- As directed by the PIO, develops news releases and communicates with the media, public, and employees.

Incident Commander

The Incident Commander:

- Determines a safe location for the PIO and PIC.
- Is responsible for ensuring that the PIO and/or the PIC receives regular updates about emergency response
- If the PIO position is not activated, performs that position's responsibilities in accordance with this plan.

Security Officers and Security Team

Contract Security Officers and members of the ICS Security Team if activated:

- Check media credentials.
- Provide escort to the media on site.
- Conduct and/or accompany media tours as requested by the PIO (ICS Security Teams only).
- Provide traffic control related to media sites.

All OCSD Employees

Whether involved with the response or not, all OCSD employees direct all media or public inquiries to the PIO or the PIC.

OCSD's Public Information Policy

OCSD's Public Information Policy provides the following guidance for an ICS activation due to an emergency:

- OCSD has a policy of full disclosure and will maintain honest and open communications with the public, elected officials, and employees at all times.

- OCSD will provide the public with timely, consistent, and accurate information through established news and information channels during a period of emergency.

- OCSD will provide timely, consistent, and accurate information to the appropriate local, state, and federal regulatory agencies during a period of emergency.

- Any public information statements concerning OCSD's actions during an ICS activation will be reviewed prior to release by the Incident Commander and approved by the PIO.

- OCSD has one official spokesperson during emergencies. The PIO or designee is the single source of communications between OCSD and the news media. OCSD will "speak with one voice."

Media Facilities

Several media facilities may need to be established depending on the nature of the incident. The two main facilities are a Media Information Center and a News Briefing Room.

During a lower level IERP Activation, the PIO is located in the Public Affairs Office's offices or at the Incident Command Post. A mobile Media Information Center, using an OCSD vehicle, may also be used as needed. For a higher level activation, the Media Information Center will be located in Conference Rooms A/B in the Administration Building at Plant No. 1.

Media Information Center

When a higher-level activation so requires, the IERP equipment and facilities for the PIO are provided in the Media Information Center. The Media Information Center also houses the Media Team and any other Public Affairs Office staff members needed at the direction of the Public Information Officer. When instructed, the Media Team sets up Conference Rooms A/B as the Media Information Center. Appendix 7A contains a Media Information Center equipment and supplies checklist.

News Briefing Room

The board room will be made available for meeting with the press. The Media Team prepares the room with the following items:

- Hard hats and safety glasses for media access to the emergency site
- Standard Media Kits
- Easel, easel paper, and pens

News Releases

Rapid dissemination of information is especially critical in the early stages of a developing event. The public should be advised of the potential hazard and the nature of the hazard, area involved, any evacuations, and impact on traffic control. Communications with the public is accomplished most easily through news releases to the mass media, media briefings, media interviews, Twitter and Face book

The two types of news releases are the initial news release and the update news release. The initial news release is issued as soon as possible after the incident. The update news release expands upon and updates the facts in the initial news release on a schedule designated by the PIO (for example, hourly, daily).

Initial News Release

When ICS activation is first declared, a news release may need to be issued rapidly, depending on the severity of the emergency. This type of news release is called an initial news release. The initial news release provides any detailed information available for the activation.

Content

The Media Team drafts an initial news release as soon as information is available and ensures that the release contains the following information:

- Name and telephone and cell numbers of PIO
- Description of the incident
- Impact to the community, member agencies, and sewer services (if

know)

- Damage to OCSD facilities(if know)
- Brief description of any injuries Description of any current danger to employees or the public (if known)
- Steps being taken to bring the situation under control
- Other agencies involved in the incident (if known)
- When more information will available

A number such as OCSD-(Date)-001 will be assigned to the initial news release. For IERP exercises, a notation such as "THIS IS A DRILL" should begin and end the initial news release.

The news release **does not** contain:

- Any speculation on the cause of the incident or issues surrounding the incident.
- Any unsubstantiated statement.
- Names of dead or injured. The local hospital is responsible for releasing these names.

Approval and Distribution

The PIO and the Incident Commander or their designees approve an initial news release.

The PIO or designee ensures that the initial news release is distributed to the following:

- Key members of the ICS Organization
- General Manager, Board Secretary, and department directors
- All major radio, television, and newspaper organizations within the area affected by the emergency (see Appendix 7B)
- The Operational Area (Orange County) Emergency Operations Center if activated

The initial news release should be posted on bulletin boards, the emergency Internet and Intranet site, Face book, and in other key locations so that employees, media, and public can easily access it.

Update News Release

An "update news release" updates the initial news release and is issued periodically. A regular schedule for issuing news releases should be established by the PIO.

Content

The PIO ensures that:

- Each news release describes important events that have occurred since the ICS activation was first announced.
- Each news release stands on its own without the need to refer to previous news releases to understand the content.
- Each news release contains an opening statement giving the source of information.
- When the OCSD's name is used in the news release, the standard description tagline is always given.
- Technical language that may confuse the audience is avoided, or necessary technical terms are defined.
- The last sentence of the news release indicates the schedule for when the next update will be released.
- Contact telephone, cellular telephone numbers, email and Twitter account for the PIO is provided.

Similar to the initial news release, each update news release will be assigned a number, for example, OCSD-(date)-002, and for IERP exercises, a notation such as "THIS IS A DRILL" should begin and end the release.

Approval and Distribution

The Incident Commander reviews the draft news release. The PIO or designee must approve all news releases after changes are received from the Incident Commander, Command Staff, and Section Chiefs.

The PIO handles distribution using the same protocol as for the initial news release.

Media Briefings and Press Conferences

The Board Room is the preferred location for the media briefings and press conferences. When prudent, these events may also be conducted near the incident scene. Briefings and press conferences should be conducted on a regular or as-needed basis. The PIO or PIC or person designated by PIO conducts news briefings.

In preparing for briefings and press conferences, the PIO:

- Arranges for an official spokesperson if unavailable to conduct the briefing
- Arranges for staff experts on related issues to be present and comment at the briefings
- Announces briefing times to all media.
- Arranges and conducts media tours if such action will not hinder response efforts
- When open access to the area is restricted, a media pool will determined by the media outlets, consisting of a single media representative or a select few.

A discussion of media tours and media pools is contained in the "Media on Site" section of this plan. The following are general guidelines for conducting a media briefing or press conference:

- Introduce yourself and OCSD representatives present.
- Present a prepared statement. (The initial news release and subsequent news releases may be reviewed.)
- Answer questions clearly and patiently with as little technical jargon as possible.
- Never discuss the exact cause of an accident or who may have been at fault unless the cause has been positively identified.

- If the cause is unknown at the time, explain that an investigation is/will be underway, and that it would be premature to speculate on the cause.

- Focus your remarks on the present. Avoid discussing what might be done later or what was done in the past.

- Do not answer hypothetical questions, which are those that usually begin with "what if." Do not guess or speculate. If you do not know the answer, get the answer and follow up with the reporter(s).

- Avoid colorful descriptions such as "huge explosion" and emotionally charged words such as "disaster" or "catastrophe." However, if lives have been lost, it is appropriate to say the incident was a "tragedy."

- Do not give out names or conditions of victims. Hospitals or law enforcement officers are responsible for providing the condition of victims.

- Do not repeat hearsay, even if the information comes from a newscast or some other reputable source.

- Assume that everything you say and do is being recorded. Do not try to go "off the record."

- Do not provide any personal opinions about anything. Since you are a representative of OCSD, anything you say will be taken as OCSD's official position.

If the time is known, announce the time for the next briefing.

Rumor and Misinformation Control

OCSD maintains a policy of open and candid communications with the news media and the public. OCSD will release all appropriate information as soon as possible in a clear way and make public announcements on a frequent and scheduled basis.

All media representatives will be directed to the PIO or the PIC. The PIO or the PIC will correct misinformation stated by the media. Every effort will be made to ensure that all employees are informed of the goals and actions throughout ICS activation.

The PIO and PIC:

- Monitor the news organization broadcasts, electronic media and printed matter to quickly pinpoint and correct misinformation.
    - Provide a report covering the news organization broadcasts, electronic media and printed matter.
    - If a story contains factual errors, contact the appropriate media to provide the correct information.
- Ensure that all employees are kept informed of the emergency status and the emergency response actions.

Figure 7-1 illustrates the proper channels for the flow of information related to ICS activation.

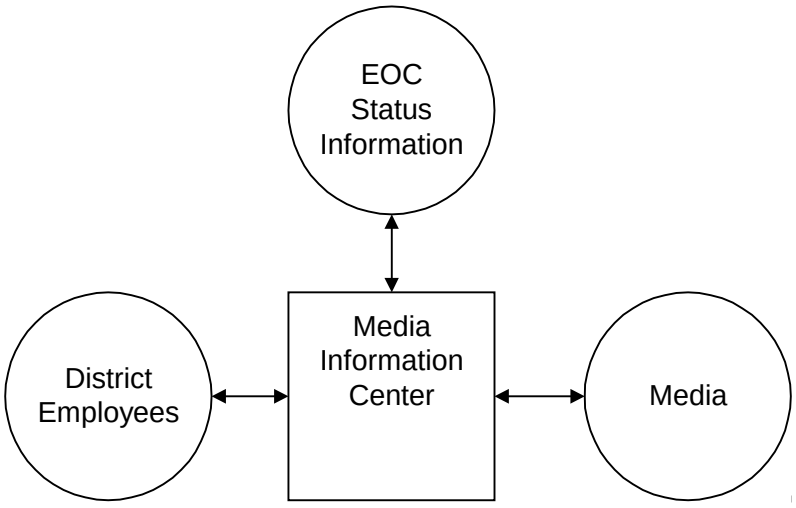


Figure 7-1. Public Information Flow during ICS Activation

Information Line

During the response to some events, media representatives, employees, and their families may call OCSD for information. To avoid overloading the switchboard, an Information Line may be established. The receptionist can connect the caller to the Media Center and/or roll over the request to a voicemail selection such as:

- If you are a member of the media, press 1.
- If you are an employee and require information on reporting to work, press 2.
- If you are a family member of an employee and are seeking information about that employee, press 3.

The PIO and PIC:

- Keep a record of the names and affiliations of the media representatives who have contacted the OCSD.

- Keep the Incident Commander and executive management briefed on who have called OCSD and the information requested.

Media on Site

During some incidents, the media will enter OCSD property. This section discusses:

- Legal requirements
- Media identification
- Accommodating the media

During emergencies, media representatives might gain unauthorized entry into OCSD plant facilities or property.

In those cases, the following procedure should be followed:

- The OCSD Public Information Officer (PIO) shall be contacted in order to escort the news media representative.
- In the event, the PIO is unavailable, the OCSD Public Affairs Specialist shall be contacted or the Risk Management staff member.
- The PIO or Public Affairs Specialist shall determine whether the

media representative is allowed to remain on OCSD property. If the media representative is not allow to remain on-site, then the PIO or Public Affairs Specialist shall escort the media representative (s) off-site.

- If the PIO or Public Affairs Specialist is not available and an imminent hazard condition exist then the new media representative(s) shall be escorted off-site for their own personal safety.

Legal Requirements

California State Law Penal Code Sections 409.5(d) and 409.6(d) give the media the right to enter any emergency scene that has not been declared a crime scene or investigation scene by a law enforcement agency. However, this legal requirement does not apply on OCSD private property. Table 7-1 is a decision chart to determine media access.

Table 7-1. Media Access Decision Chart
[Based on California Penal Code 409.5(D)]

Crime Scenes	Emergency/Disaster Scenes	Investigation Scenes
• Media may **not** enter immediate crime scene. • Media is allowed access inside police lines. • Media is allowed access to command post. • Media can be at outer perimeter of scene. • Media photo access site for still and video photographers may be designated. • Media may stay at an accommodating distance and position from the immediate scene.	• Media **may** enter disaster/emergency scenes within California. • Media is permitted free access inside police lines keeping public out. • Media may not interfere with public safety officers. • Safety of the media is not grounds to exclude media from emergency scenes. • Media is allowed access to command post location at incident.	• Media may **not** enter investigation scene. • Media can be at the outer perimeter. • Media photo access site may be designated for still and video photographers. • Media may stay at an accommodating distance and position from the immediate scene. • Media is permitted free access inside police and fire lines keeping public out. • Media is allowed access to command post.

Media Identification

The following procedure will ensure that members of the media are allowed access to OCSD property.

Security Officers

Note: As used here, Security Officer refers to either a contract security guard or a member of the ICS Security Team.

- Issue press parking passes. Maintain a media log of all media representatives admitted to the site.
- Contact PIO, PAO, PIC, or Media Information Center for instructions before allowing the representative onsite.
- As directed, escort media representatives to the Media Information Center.

Media Team

Media Team members:

- Brief media representatives upon their arrival.
- Assign press badges to be worn at all times while onsite.
- Distribute Media Kits if appropriate.
- Determine any special needs such as electrical hookups.
- Maintain a log of all media representatives.

Accommodating the Media

Media representatives must be reasonably accommodated at disaster scenes. This section covers:

- Media tours
- Media pools
- Media access photo sites

Media Tours

Media tours are the preferred method of accommodating the media's need for information and visual access to the incident scene providing the tour does not hamper emergency efforts. General guidelines for a media tour are to:

- Have a knowledgeable representative assigned by the Incident Commander accompany the media and be available to answer relevant questions.
- Ensure that there is visual access to the incident.
- Ensure that multi-vehicle tours are properly escorted.
- Ensure that unsafe work areas are restricted from access.

Media Pools

If restrictions or limitations are unavoidable, a "pool" system may be used to avoid congestion. Media pools should be considered only as a last resort. Consider the following guidelines in establishing a media pool:

When access by the media must be denied or severely restricted, a valid explanation must be provided.

- Journalists on scene should be permitted to select representatives from each medium (radio, television, newspaper, wire service, magazine, and video and still photographers).

- They should also consider selecting representatives from each level of coverage (local, regional, national and international). The representatives are then escorted into the area. These representatives will then share all information, photographs, and video/audiotape with other accredited journalists.

- Only journalists present when the pool is activated should be allowed access to pool material. A signup sheet may be used to record participants.

- Media representatives selected as pool members must be willing and able to meet deadlines and share video, audio, or still coverage in a timely manner to all entitled to material generated by the media pool.

- Journalists not assigned to the media pool must obey lawful orders of law enforcement officers. Once the media pool is formed, only authorized pool members may have access to the immediate scene while access is limited.

Media Access Photo Sites

Media access photo sites should be established for photojournalists to provide visual access. The site is a specific location designated for use by still and video photographers to provide visual access to emergency, crime, and hazardous materials scenes. These sites should be identified and established by the PIO.

Criteria considered in identifying locations for media access photo sites are:

- The site should be as close as possible to the incident yet not interfere with the operation of responders or public safety officers or compromise the safety of media representatives.

- The location should be chosen to give the best visual access to all areas of interest associated with the incident.

- The need to locate video trucks and support equipment as close as possible for technical reasons should be considered.

If needed, media representatives may be escorted to and from the site.

Keeping Employees Informed

The PIO and PIC areis responsible for communications with all employees who are not participating in the response effort. The majority of employees may not be members of the IERP Organization. However, these employees can perform a significant service by courteously directing inquiries appropriately.

As directed by the PIO, various communication tools will be used to ensure that all employees are kept informed of the emergency status. The PIO and/or PIC monitor and correct as necessary any rumors circulating among employees.

Post-Emergency Follow-Up

The PIO continues to have contact with media and employees after termination of the incident. This information, issued through news releases or briefings, may include:

- Information on restoration of services
- Extent of the damage
- Results of the Post-Incident Investigation

Appendix 7A
Media Information Center Checklist

Item	Check	Comments
Two phone lines with rollover capability from the first line to the second		
Additional phone jack for fax machine		
TV monitor with cable hookup and VCR		
2 Laptop computers with Internet, cellular fax/modem capabilities, extra battery, and network connection capability		
2 Desktop computer connected to the network		
Laser printer, scanner and copy machine		
Fax machine		
Radio with battery power backup to monitor press coverage		
Multiband radio		
Copy of the IERP		
Wall maps of the OCSD system and Orange County		
Thomas Guides		
4 Easel with two pads and markers		
Binders, 3-ring (5)		
Push pins (1 box)		
Tape dispenser (2) and tape (4)		
Stapler and staples		
Three-hole punch		
Masking tape		
Post-its		
File folders		
Paper for printer and fax		
Pens and pencils		
Legal pads (12)		
Hard hats for PIO and PIC		

Appendix 7B
Media Contacts

The following provides media contacts for Orange and Los Angeles Counties:

Contacts	Phone and Fax Numbers
City News Service (Los Angeles/OC)	714.834.5794 Fax 714.836.7526 citynews@pacbell.net
Media Page (to notify media)	800.677.4649 (24 hours) Office 310.838.1436
Associated Press (Los Angeles)	Reporters 231.626.1200 Photo Dept 231.626.2500 losangeles@ap.org
United Press International (Los Angeles)	310.577.1934 Fax 310.301.0087
News Services	
Newsreel Video	818.344.7107
Los Angeles New Service	310.399.6460 Fax 310.230.0817
Cable News Network (CNN)	323.993.5011 Fax 323.993.5081
Daily Newspapers - Orange County	
Los Angeles Times (Orange County)	714.966.5600 Fax 714.966.7711
Orange County Register	714.796.7000 Newsroom 714.796.7951 Fax 714.796.3681
Daily Pilot (Costa Mesa & Newport Beach)	949.642.4321 Fax 949.646.4170
Weekly Newspapers - Orange County	
North Orange County News	714.634.1567 Fax 714.704.3714
South Orange County News	714.704.3761 Fax 949.454.7354
Orange County News (Garden Grove)	714.894.2575 Fax 714.894.0809

Contacts	Phone and Fax Numbers
Anaheim Bulletin	714.634.1567 Evenings/Weekends: 714.704.3790 Fax 714.704.3714 anaheimbulletin@ocregister.com
Seal Beach Sun	562.430.7555 Fax 562.430.3469
News - Enterprise (Los Alamitos)	562.431.1397 Fax 562.493.2310
Irvine World News	949.224.0088 Fax 949.222.6132 irvineworldnews@ocregister.com
Westminster Herald	714.893.4501 Fax 714.893.4502
Fountain Valley View	714.445.6681 Fax 714.825.0434
Huntington Beach Wave	714.445.6680 Fax 714.825.0434
Huntington Beach Independent	714.965.3030 Fax 714.965.7174
Daily Newspapers - Los Angeles County	
Long Beach Press Telegram	562.436.3676 Fax 562.437.7892
Los Angeles Times	818.237.7000 Fax 213.237.7412
Radio Stations (OC/LA) (partial list)	
KFI - AM 640 (Talk)	213.385.0101 Fax 213.389.7640
KFWB NEWS AM 98 (News Radio)	323.871.4633 Fax 323.871.4670
KNX Radio 10.70 (OC Bureau)	714.979.1070 Fax 714.834.4361 knxnews@cbsreadio.com
Television Stations - OC Bureaus (see also Los Angeles County)	
KNBC - TV4	714.288.0444 Fax 714.288.9536
KABC - TV7	714.634.1847 Fax 714.978.3701
KDOC -TV56	949.442.9800 Fax 949.261.5956
KOCE - TV50	714.895.5623 Fax 714.895.0861
Television Stations - Los Angeles County	

Contacts	Phone and Fax Numbers
KCBS - TV2	415.474.5227 Fax 415.765.4080 kcbstvnew@cbs.com
KCAL - TV9	323.960.3800 Fax 323.464.2526
KNBC - TV4	818.840.4444 or 818.0840.3425 Fax 818.840.3535 Tips@NBCLA.com
KTTV -TV11 (Fox)	310.584.2369 Fax 310.584.2023 newsdesk@fox11.com
KTLA - TV5	323.460.5333 Fax 323.460.5333
KCOP - TV13	323.850.2222 Fax 323.580.1265
KABC - TV7	News desk 818.863.7600 Fax 818.863.7080 pr@myabc7.com
KCET -TV28 (PBS) (Life & Times Tonight)	323.953.5371 Fax 323.953.5645
KSCI TV18 (Vietnamese, Chinese, Korean, Filipino)	310.478.1818 Fax 310.479.8118 info@la18.tv
KMEX - TV34 (Spanish)	310.216.3434 Fax 310.348.3493
KVEA -TV52 (Vietnamese)	818.502.5710 Fax 818.543.0293
Networks - Los Angeles County	
CBS	323.460.3316 Fox 323.460.3733
ABC	818.560.1000 Fax 818.863.7080
NBC	818.840.3418 Fax 818.840.4275
Fox	310.584.2369 Fax 310.584.2023
Cable News Network (CNN)	323.993.5011 Fax 323.993.5081
Wire Services - Los Angeles County	
Associated Press (Los Angeles)	Reporters 213.626.1200 Photo Dept. 213.626.2500 Fax 213.748.9836

Contacts	Phone and Fax Numbers
Reuters North America	News Dept 213.380.2014

Contents

8. Finance Plan

Purpose

This Finance Plan ensures that the necessary policies and procedures are in place to accurately track the cost of responding to an incident or disaster. This plan provides guidance on financial issues and cost accounting during an activation of the IERP. Only those guidelines differing from normal accounting procedures are addressed. If no guidance is provided for a particular situation, normal accounting procedures apply.

Responsibilities

The following positions and organizations have responsibilities under this plan:

- Finance
- Warehouse and Purchasing Divisions
- IERP Coordinator

Finance

The Finance Department sets up all mechanisms and furnishes and trains personnel as needed to track costs, prepare cost estimates, and provide related assistance during ICS activation. Personnel from the Finance Department may be asked to staff the Finance Unit Leader position and appropriate Logistics Branch positions of the ICS.

Warehouse and Purchasing Divisions

The Warehouse and Purchasing Divisions of the Finance Department provide procurement assistance including making arrangements and setting up blanket purchase orders with vendors prior to an emergency and performing procurement activities during ICS activation.

IERP Coordinator

The IERP Coordinator ensures that applications for disaster aid and for reimbursement of emergency response related personnel costs are completed and filed promptly following ICS activation. The IERP Coordinator obtains assistance as needed from the Finance Department to assemble the financial data and complete the applications.

Preparedness

- Ensure that up-to-date policies and procedures are in place for the following situations. In cases where the emergency procedure is the same as the normal procedure, ensure that the normal procedure is up to date:

  - Time Reporting for OCSD Personnel Activated
  - Compensation for Overtime During an Activation
  - Expense Reporting for OCSD Personnel Activated
  - Time and Materials Charges for Contractors
  - Invoice Processing for Charges Related to IERP Activation
  - Post-Emergency Reporting

- Establish blanket purchase orders and other prior arrangements for emergency equipment, materials, supplies, and other assistance during ICS activation.

- Establish a notification list for such entities as insurance companies, bond holders, and securities analysts that should be notified of ICS activation.

Finance Unit Personnel Roles

The following summarizes the roles and responsibilities of the Finance Unit of the ICS during ICS activation. In accordance with ICS principles, if a specialist or unit is not activated, the next highest person in the chain of command assumes this responsibility.

Appendix A of Volume II of the IERP contains individual ICS position checklists for each member of the Finance Unit of the ICS.

Finance Unit Leader

The Finance Unit Leader is responsible for managing all financial aspects of an incident. When activated, the unit leader establishes a charge number to which all labor and other expenses will be charged during the activation.

Cost Specialist

The Cost Specialist is responsible for all incident-related cost analysis. Besides maintaining accurate records of all incident costs to ensure accurate payment and cost analysis, the unit also prepares cost estimates for various strategies to meet incident objectives as requested by the Planning Branch.

Time Specialist

The Time Specialist ensures that personnel timekeeping systems are in place and maintains records of labor utilization. A Personnel Time Recorder may be activated to oversee the recording of time for all personnel assigned to the incident.

Compensation and Claims Specialist

This position is responsible for two areas, compensation-for-injury claims and property damage claims. A separate specialist may be activated for each of these areas.

Compensation-for-Injury oversees the completion of all forms required by Workers Compensation regulations and local agencies. This function maintains a file of injuries and illnesses associated with the incident and obtains written witness statements. This function coordinates closely with the Medical Unit of the Logistics Branch.

The Claims function is responsible for investigating all claims involving property associated with the incident and maintaining appropriate documentation for later settlement.

Deactivation

The Finance Unit Leader is responsible for activating and deactivating units and/or specialists as required by the incident. When a unit or specialist is deactivated, these personnel are responsible for closing out records and logs, securing documentation for post-emergency analysis, and checking out.

Post-Emergency

The ICS Finance Unit plays a key role in post-emergency activities since cost is always a major consideration in any activation.

Computer Systems

As soon as possible following an emergency or disaster affecting OCSD's computer systems, the Finance Department ensures that a diagnostic assessment of the Finance computer system(s) is performed.

Members of the department evaluate their own workstations. If any problems are noted, a consolidated list is developed and submitted to the Information Technology Department for resolution.

If needed, backup records are obtained from offsite storage for restoration to the system.

Data Collection

During an activation, all ICS members are responsible for keeping logs of activities, including time and expenses. Following the activation, the Finance Unit Leader obtains all finance-related data from the Incident Commander, Command Staff, and Section Chiefs for analysis and compilation into summary reports.

Reporting

Members of the Finance Unit develop the following summary reports:

- Labor Costs
- Equipment, Materials, and Supplies Costs
- Compensation-for-Injury Claims
- Property Damage Claims
- Other cost analysis reports as requested by the Incident Commander

These reports are used for several purposes:

- To evaluate the efficiency of the response and determine areas that can be improved in future activations

- To ensure prompt payment of invoices from assisting organizations
- To evaluate compensation and claims issues for validity and provide for prompt settlement
- To ensure that sufficient detailed data is available to apply for disaster aid

After the reports are finalized, they are submitted to the Incident Commander.

Invoice Processing

As invoices are received, the Cost Specialist (or other designated person) ensures their accuracy by reviewing the collected financial data and reports, obtains the Incident Commander's approval for payment, and processes the invoices for payment in accordance with normal OCSD procedures.

Claims Processing

The Finance Unit Leader and Incident Commander ensure that all claims are followed up and settled as promptly as possible.

Applications for Disaster Aid

The Finance Unit Leader assists the IERP Coordinator in ensuring that applications for disaster aid and/or reimbursement of emergency response related personnel costs are completed and filed within the time frame required by regulations.

Chapter 12 concerning Post-Emergency Procedures contains more information on this process.

Contents

9. Mutual Aid Plan

This Mutual Aid Plan defines mutual aid and provides guidelines for providing and requesting mutual aid.

Definition

Mutual aid may be any form of resources or assistance, that is, personnel, equipment, or supplies that can be provided to another party. Typically, mutual aid agreements are made between like entities, for example, between sanitation districts, but since the OCSD has signed the Operational Area Agreement, we may be asked to provide assistance to other organizations in a local emergency. The "Operational Area" is defined as Orange County.

In addition, since the State has implemented the Standardized Emergency Management System (SEMS), we may be called upon to assist in an emergency anywhere in the State through the Operational Area.

Limitations of Mutual Aid

A key aspect of providing mutual aid is that the assisting party provides only the resources it can spare without jeopardizing the safety of its own personnel or service area, or its own emergency response efforts. No party receiving a mutual aid request is under any obligation to comply, nor will the party incur any liability for not complying.

How to Request Mutual Aid

A request for mutual aid should comply with the following.

Determining Need

When emergency response efforts exceed the capabilities of our employees, contractors, and other normal avenues of assistance during an ICS activation, mutual aid may be requested from other sanitation districts, water districts, or other public entities with which OCSD has a mutual aid agreement. When a local emergency has been declared, this request must be made through the Operational Area.

Using data collected by the Planning Branch of the ICS, the Incident Commander determines when and if it is necessary to request mutual aid. Before making the request, the Incident Commander determines the exact nature and duration of the need, for example:

- The specific tasks for which the aid is needed
- Type of skills needed (operations, maintenance, engineers, etc.)
- Any special training needed (although specialized needs may not be met, it is best to provide as much details as possible)
- Any special clothing or other personal needs
- Heavy equipment and/or vehicles needed
- Other equipment needed
- Consumable supplies needed
- Estimated length of time the aid will be needed (number of days, weeks, etc.)
- Where, when, and whom to report to

The OCSD Request Form shown in Appendix 9A may be used to document the request.

Making the Request

The Incident Commander or designee makes the request to the appropriate coordinator as stated in the mutual aid agreement, providing all the details listed above and a name and phone number for follow-up. It might be necessary to discuss such items as reimbursement or lodging and food for assisting personnel since these details may not have been prearranged in the Mutual Aid Agreement. Any mutual aid requests should be vetted with the OCSD General Manager prior to the request.

The completed OCSD Request Form (Appendix 9A) may be faxed as a follow-up to the telephoned request.

Responsibilities for Care of Assisting Resources

If the assisting organization is able to provide assistance, OCSD is responsible for the safekeeping of the assisting resources, including:

- Housing, feeding, and reasonable personal expenses of personnel
- Provision of personal protective equipment (PPE) where needed, unless assisting personnel have their own equipment
- Fueling and servicing of equipment

In addition, assisting personnel cannot be held liable for any claims of loss, damage, or injury while they are under the direction and control of OCSD.

When Aid Is No Longer Needed

If the assisting resources are no longer needed, the Incident Commander promptly informs the assisting coordinator and releases the resources.

On the other hand, if the assisting coordinator determines that the resources are needed and informs the Incident Commander, OCSD must promptly release the resources (as specified in the Mutual Aid Agreement).

Documentation and Follow-Up

Both OCSD and the assisting organization must keep detailed records of the utilization of personnel, equipment, and supplies for the purposes of post-emergency accounting and applications for disaster aid reimbursement.

Both the OCSD and the assisting organization must have access to each other's records for these purposes.

Within 60 days of receipt of an invoice, OCSD will pay for all direct, indirect, administrative, and contracted costs incurred by the assisting party as a result of providing assistance. The costs will be based on standard rates applicable to the assisting party's internal operations.

How to Respond to Mutual Aid Requests

When a request for mutual aid is received by OCSD, the request should be forwarded to the Incident Commander or the Executive Management Team (EMT).

Receiving the Request

When a request for mutual aid is received, the Incident Commander or EMT or designee ensures that as much detailed information as possible is received from the requester, including the requester's name and phone number or other contact number. If details on the type and duration of the assistance are not received, a follow-up call may be necessary. A Receipt of Request for Mutual Aid Form is provided in Appendix 9A as a guideline.

Reviewing the Request

Using data collected by the Planning Branch of the ICS concerning resource status, the Incident Commander determines whether it is possible to comply with the request for mutual aid. As stated earlier, OCSD is under no obligation to provide aid if its resources are needed within its own service area.

If aid can be provided, the Incident Commander obtains the authorization of the General Manager to provide aid.

In either case, the Incident Commander promptly informs the requester whether OCSD will be able to assist. As with receiving mutual aid, it is not necessary to discuss such items as reimbursement or lodging and food since these details have been prearranged in the Mutual Aid Agreement.

If Return of OCSD Resources Is Required

If the Incident Commander determines that our resources are needed, he or she immediately informs the requester, who must promptly release the resources (as specified in the Mutual Aid Agreement).

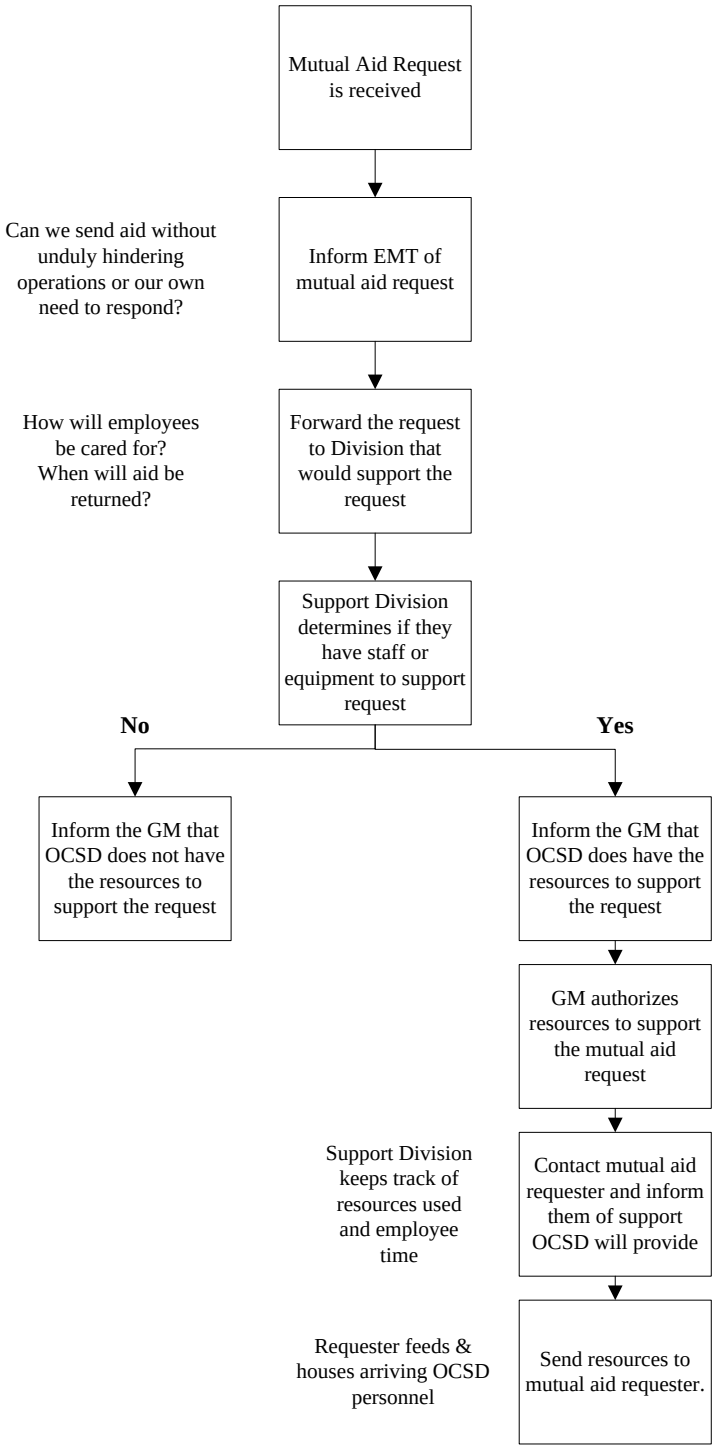
Documentation and Follow-Up

Both OCSD and the requesting organization must keep detailed records of the utilization of personnel, equipment, and supplies for the purposes of post-emergency accounting and applications for disaster aid reimbursement.

Both OCSD and the requesting organization must have access to each other's records for these purposes.

OCSD will invoice the requester for all direct, indirect, administrative, and contracted costs incurred as a result of providing assistance to the requester. The costs will be based on the standard rates used for internal operations.

Table 9-1. Mutual Aid Resources Flow Chart



Current Mutual Aid Agreements

The following list are the current mutual aid agreements in place:

- Wastewater Agency Response Network (WWARN) Agreement, a wastewater-agency-specific mutual aid agreement

Public Works Mutual Aid Agreement

- Water Emergency Response Organization of Orange County (WEROC) Mutual Aid Agreement

- California Water/Wastewater Agency Response Network (CalWARN) Mutual Aid Agreement

The Board Secretary maintains original agreements approved by the Boards of Directors. The IERP Coordinator retains copies of mutual aid agreements.

Appendix 9A
Mutual Aid Forms

The following pages contain two forms for use in mutual aid situations:

- OCSD Request for Mutual Aid
- OCSD Receipt of Request for Mutual Aid
- OCSD Disaster Response Daily Activity Report

OCSD Request for Mutual Aid			
Authorized by	Requested by		
Agency Contacted		Date	Time
Contact Name		Contact Phone	
Address or Location			
Description of Request			
Weather Conditions			
Task(s) to Be Performed			
Personnel Needed			
Describe number of personnel needed and any special skills or training needed			
Special Clothing Requirements (to be brought by assisting personnel)			
Equipment and Vehicles Needed			
Describe number and type			
Supplies (Consumables) Needed			
State quantity and type			
Estimated Duration of Need (specify number of hours, days, weeks, etc.)			
Reporting			
Assisting personnel report to:			
Name	ICS Title		
Location	By Date/Time		
Response			
Cannot provide assistance ❒ **Request can be filled** ❒ **Request can be partially filled (explain)** ❒ _____			
Estimated Date/Time of Arrival of Assistance:			
This form was completed by		Date	Time

OCSD Receipt of Request for Mutual Aid		
Agency Requesting Aid	Date	Time
Contact Name	Contact Phone	
Address or Location		
Description of Request		
Weather Conditions		
Task(s) to Be Performed		
Personnel Needed		
Number of personnel needed and any special skills or training needed		
Special Clothing Requirements (to be brought by assisting personnel)		
Equipment and Vehicles Needed		
Number and type needed		
Supplies (Consumables) Needed		
Quantity and type		
Estimated Duration of Need (specify number of hours, days, weeks, etc.)		
Reporting		
Assisting OCSD personnel should report to:		
Name	ICS Title	Phone
Location	By Date/Time	
OCSD's Response		
We cannot provide assistance ❒ **Request can be filled** ❒ **Request can be partially filled (explain)** ❒ _____		
Estimated Date/Time of		
Departure from OCSD	Arrival at Requesting Agency	
Authorized by		
This form was completed by	Date	Time

OCSD
DISASTER RESPONSE
DAILY ACTIVITY REPORT

DATE: ____________

NAME: ____________ DEPT/DIV: ____________

EMPLOYEE NO: ____________ JOB TITLE: ____________

OCSD//PVT VEH NO/LICENSE: ____________ MILEAGE:START ________ STOP ________

SUPVR. NAME: ____________

SUPVR. SIGNATURE: ____________ WORKED WITH: ____________

LABOR RECORD

TIME IN*	TIME OUT*	TOTAL HOURS WORKED	GROSS RATE	BENEFIT RATE	TOTAL LABOR COST
		REGULAR:			
		OT:			

* Military Time (24-hour basis)

LOCATION OF WORK: ____________

DESCRIPTION OF WORK: ____________

TIME START: ____________ TIME FINISHED: ____________

EQUIPMENT RECORD

EQUIPMENT USED (Size, horsepower, make, model, etc.)	EQUIPMENT REFERENCE NO.	TOTAL HOURS USED	RATE	TOTAL COST

MATERIALS RECORD

QUANTITY	UNIT	DESCRIPTION	INVOICE NUMBER	UNIT PRICE	TOTAL COST

LOCATION OF WORK: ____________

DESCRIPTION OF WORK: ____________

TIME START: ____________ TIME FINISHED: ____________

EQUIPMENT RECORD

EQUIPMENT USED (Size, horsepower, make, model, etc.)	EQUIPMENT REFERENCE NO.	TOTAL HOURS USED	RATE	TOTAL COST

MATERIALS RECORD

QUANTITY	UNIT	DESCRIPTION	INVOICE NUMBER	UNIT PRICE	TOTAL COST

LOCATION OF WORK: ____________

DESCRIPTION OF WORK: ____________

TIME START: ____________ TIME FINISHED: ____________

EQUIPMENT RECORD

EQUIPMENT USED (Size, horsepower, make, model, etc.)	EQUIPMENT REFERENCE NO.	TOTAL HOURS USED	RATE	TOTAL COST

MATERIALS RECORD

QUANTITY	UNIT	DESCRIPTION	INVOICE NUMBER	UNIT PRICE	TOTAL COST

LOCATION OF WORK: ____________

DESCRIPTION OF WORK: ____________

TIME START: ____________ TIME FINISHED: ____________

Contents

10. Plan Administration

This chapter discusses the administration of the IERP in terms of:

- Responsibilities
- IERP Maintenance
- IERP Distribution
- IERP Training
- IERP Documentation

Responsibilities

This section discusses the responsibilities of:

- The IERP Coordinator
- Controlled copyholders
- All employees

IERP Coordinator

The IERP Coordinator, a member of the Risk Management Division, is responsible for ensuring that all emergency preparedness activities are conducted. Responsibilities are to:

- Maintain the IERP master originals in electronic form.
- Receive and act upon all IERP revisions and updates.
- Post updates to the OCSD intranet site.
- Ensure that preparedness activities are conducted such as obtaining supplies to be stored for emergency use.
- Ensure that IERP exercises are conducted as required.
- Ensure that all OCSD employees have the appropriate level of IERP training for their emergency responsibilities.

All Employees

OCSD employees' responsibilities are to:

- Know their roles and responsibilities in an emergency.
- If errors in the IERP plans need to be corrected or other updates need to be made, submit a Management of Change form (Appendix 9A) to the IERP Coordinator.
- As requested, participate in IERP training and exercises.

IERP Maintenance

The IERP Coordinator ensures that the IERP remains technically accurate and up to date through the following procedures:

- Management of Change Procedure
- Biennial IERP Audit
- Post incident review of plan

Management of Change Procedure

Purpose

To ensure that the IERP is kept up to date as needed to reflect any of the following:

- Change in our facilities' design, construction, operation, or maintenance that may increase the potential for an emergency or that in any other way directly affects the plan
- Change in emergency equipment, supplies, storage locations, etc.
- Change in any personnel who have designated roles in the ICS
- Change in contact numbers for ICS personnel
- Change in applicable regulations
- Changes recommended as a result of IERP evaluation following its use during an emergency or during Biennial IERP audit
- Suggested improvements provided by employees

Management of Change Process

The Management of Change process is summarized in Figure 9-1. A Management of Change form (shown in Appendix 9A) is used to document the process.

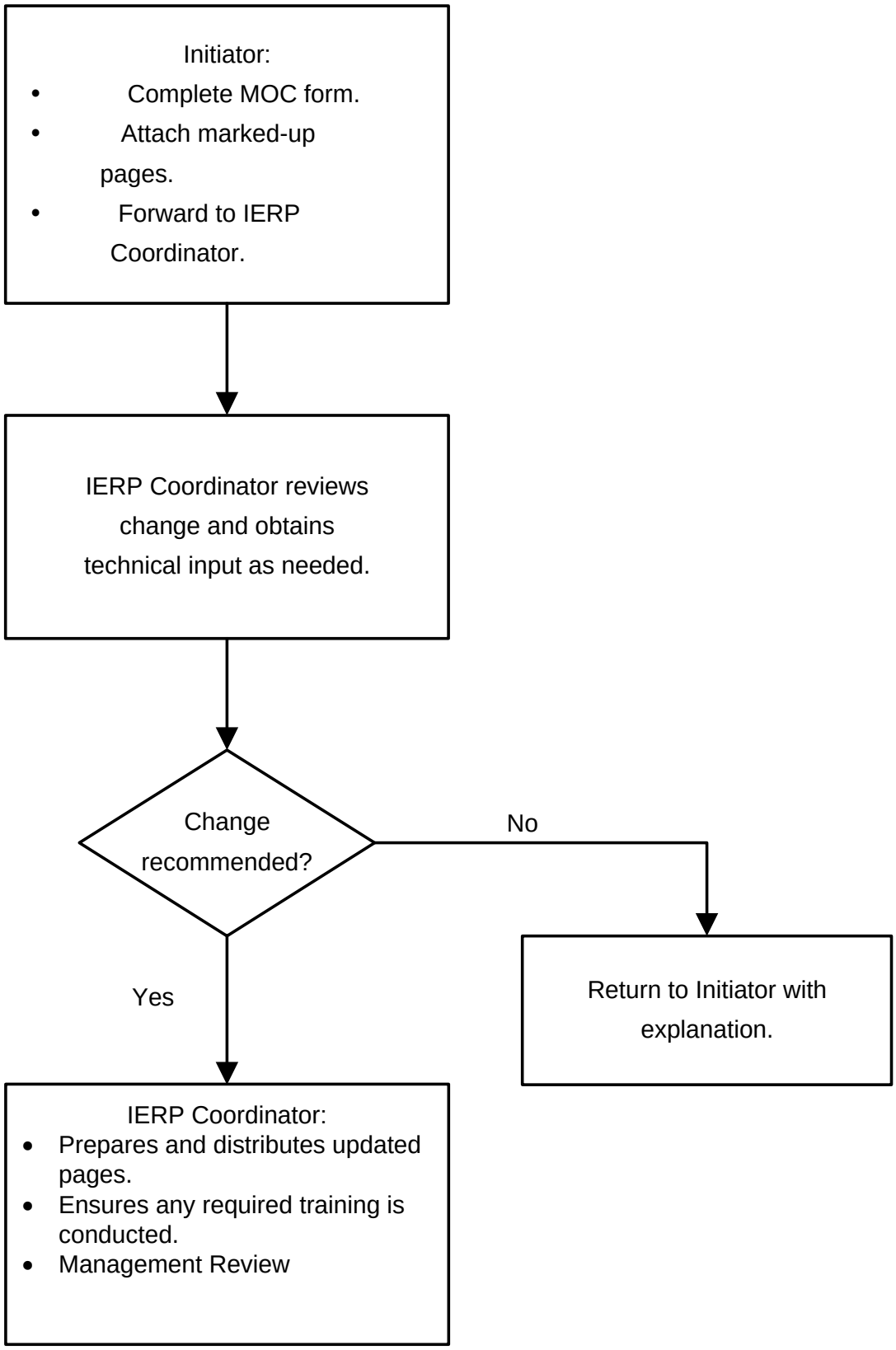

Initiator:
• Complete MOC form.
• Attach marked-up pages.
• Forward to IERP Coordinator.
IERP Coordinator reviews change and obtains technical input as needed.
Change recommended?
No
Return to Initiator with explanation.
Yes
IERP Coordinator:
• Prepares and distributes updated pages.
• Ensures any required training is conducted.
• Management Review

Figure 10-1. Management of Change Process

Biennial IERP Audit

If there is no IERP activation for two years, the IERP Coordinator ensures that an IERP audit is conducted on or before December 1 as follows:

- The IERP Coordinator convenes a committee consisting of at least one representative from each department.
- The review committee critiques the IERP and revises as needed.
- The IERP Coordinator updates the IERP in accordance with the approved revisions.

The IERP Coordinator also reviews and updates as necessary the ICS Position Callouts (Volume II, Appendix A).

IERP Training

Many employees will perform their normal duties during an emergency. However, everyone needs to be trained on the purpose and content of the IERP.

OCSD has an obligation to ensure that:

- All employees are informed or trained on major changes to the IERP.
- New employees are trained on the IERP.

The IERP Coordinator will ensure that all employees are generally familiar with the IERP content and are capable of responding efficiently in an emergency. The IERP Coordinator may prepare and conduct familiarization training sessions as needed with current and/or new employees.

In addition, Division Managers responsible for contractors working at OCSD facilities shall ensure that contractors are informed of our emergency procedures, for example, calling 2222 to report any emergency

Detailed requirements for IERP training are in Chapter 3, Training Plan, of this volume of the IERP.

IERP Documentation

Actions taken as part of an emergency response shall be adequately documented to aid in completing the Post-Incident Investigation Report and other post-emergency reports, notifications, applications for disaster aid, etc.

The IERP Coordinator collects and maintains this documentation so that the ICS response can be analyzed. This information should include at a minimum:

- The date and time the plan was put into effect and by whom
- A brief description of the initial incident
- The name of all individuals and government agencies contacted
- The exact time those contacts were made
- Arrival times of all personnel involved in the emergency response
- Recommendations for future activations

Appendix 10A
Management of Change Form

Management of Change Form
Integrated Emergency Response Plan

Submitted by: _____ Ext: _____ Date: _____

To suggest a change, complete Items 1 and 2:

1. Description of Change (additional sheets or markups of IERP pages may be attached):

   _____

   _____

   _____

2. Reason for Change

   _____

   _____

   _____

Forward to: IERP Coordinator (Risk Management Division)

---

3. Change Recommendation (IERP Coordinator):

   _____

   _____

4. Signature of IERP Coordinator: _____
5. Final Disposition of Change: _____

   _____

Contents

11. Protection of Information Sources

(to be developed)

To be developed.

Purpose

To be developed.

Responsibilities

To be developed.

Contents

12. Post-Emergency Procedures

Overview

The post-emergency period may be ongoing over a period of time. As described here, the period includes demobilization, recovery, and restoration to normal activities. One reason to clearly delineate phases of the emergency response as much as possible is disaster aid. Accurate records must be kept of time and expenses devoted to the emergency and recovery from the emergency, while resumption of normal operations is outside the scope of the emergency period.

Demobilization is performed in accordance with the ICS Demobilization Plan, developed by the ICS Planning Branch. Since sections and positions are demobilized when they are no longer needed, demobilization may be an ongoing process.

The Incident Commander determines when an IERP activation may be terminated, typically based on criteria such as the following:

- Critical facilities and processes are functioning.

- Restoration and repair remaining to be done can be accomplished by employees on "normal" work shifts with little or no overtime.

As ICS positions are demobilized, these personnel stop charging their time to the emergency charge number. When the activation is terminated by the Incident Commander, there should be no further charges to the emergency charge number without the Incident Commander's authorization. At the Incident Commander's direction, the Finance Unit Leader may set up a post-emergency charge number to keep track of such labor and expenses.

This chapter presents the following key procedures and processes that should be performed in the post-emergency period:

- Restoration of emergency equipment and supplies
- Post-emergency notifications
- Recovery operations
- Finance, accounting, and purchasing
- Incident investigation
- Disaster aid
- IERP evaluation and revision

Restoration of Emergency Equipment and Supplies

The emergency equipment used during the incident must be inspected, cleaned, repaired, decontaminated, restored, and/or replaced as needed. Emergency equipment inventories are the responsibilities of the groups shown in Table 12-1.

Table 12-1. Responsibility for Restoration of Emergency Equipment

Responsibility	Emergency Equipment
O&M	Maintenance and Operations Equipment
O&M	Vehicles, Transportation, and Equipment
Information Technology	Communications Equipment
O&M	Fire Extinguishers
Individual Departments Owning the Equipment	Personal Emergency Equipment

Any emergency supplies used during the incident must be replenished. The IERP Coordinator, with assistance from members of the Risk Management Division, is responsible for inventory and replenishment of these supplies.

The groups responsible for emergency equipment and supplies provide requisitions to Warehouse/Purchasing personnel so that inventories can be replenished.

Post-Emergency Notifications

Post-emergency notifications to regulatory agencies are generally the responsibility of personnel as follows:

- Sewage spill in the Collection System: Environmental Compliance and Monitoring Division
- Hazardous material spill at OCSD facilities: Risk Management Division
- Other emergency activation: Risk Management Division

Chapter 14 of Volume II, External Notifications, provides details on all post-emergency notifications.

Recovery Operations

The goal of recovery operations is to restore systems and services to normal operating condition. Activities are performed by departments and divisions in accordance with their normal responsibilities and areas of expertise.

- Any damage assessment that has not already been performed is completed at this time.
- Restoration, salvage, and repair of facilities and equipment, as well as debris removal, are performed, ensuring the following:
  - Associated costs continue to be tracked so that detailed records are available when applying for disaster aid.
  - Safe work practices are followed.
  - Contractor assistance is used as needed to ensure rapid restoration of service.
- Service is restored to normal operating levels. A priority list for restoration of facilities at the treatment plants and in the Collection System is provided in Volume II, Chapter 7, Earthquakes.

Finance, Accounting, and Purchasing

Critical aspects of post-emergency activities for Finance, Accounting, and Purchasing involve:

- Cost analysis to determine the costs of the response
- Purchasing to replenish materials, supplies, and consumables used

The Finance Plan (Volume I, Chapter 8) details post-emergency financial reporting. These reports are important inputs to the incident investigation and to applications for disaster aid.

Warehouse and Purchasing personnel process purchase orders based on the requisitions received from the groups responsible for maintaining emergency equipment and supplies.

Incident Investigation

Incident investigation is essential to gather lessons learned, improve the IERP, and perform more efficient emergency responses in the future. The investigation identifies strengths and weaknesses and generates recommendations for improving its effectiveness, particularly with regard to the following aspects:

- **Safety:** Was adequate provision made for the safety of responding personnel, contractors, and the general public?

- **Performance:** Was OCSD successful in restoring service promptly?

- **Cost:** Was the cost of emergency response properly controlled and was the overall cost of the response commensurate with the nature of the emergency and the extent of the damage that occurred?

- **IERP Procedures:** Did IERP procedures facilitate communication and coordination of the emergency response?

- **Preparedness:** Were members of the ICS Organization adequately trained and ready for their role in emergency response?

The investigation consists of the following steps:

- Debriefing
- Individual evaluations
- Team investigation and report

Debriefing

The goal of debriefing is to obtain feedback on the circumstances surrounding the incident and the effectiveness of the IERP.

1. The Incident Commander schedules a debriefing meeting for all personnel involved in the incident response and publishes an agenda in advance. The agenda may be structured around the chronology of the incident, the ICS organization activated, or other specific aspects of the response. Agenda items may include:

    - Appropriateness of decision to activate IERP; adequacy of data on which decision was based

    - Promptness with which ICS members reported for duty and assumed required responsibilities

    - Preparedness of ICS staff, training adequacy, and suggested improvements

    - Adequacy of ICS facilities, communications, clerical support, meals, and lodging

    - Adequacy of arrangements for field personnel including contractors

    - Coordination and promptness of damage assessment efforts

- Adequacy of media coverage and communication with public agencies

- Availability of needed materials and equipment and adequacy of arrangements with outside suppliers

2. A facilitator (preferably someone not involved in the response) conducts the meeting and solicits comments, opinions, suggestions, etc., from the personnel attending. The facilitator must control the meeting so that the agenda is covered and the discussion does not become unproductive.

3. A recorder captures the ideas presented on a self-copying whiteboard so that the list may be viewed during the meeting and printed afterward.

4. The facilitator concludes the meeting and explains to the attendees how the information they provided will be used in the investigation (as inputs to recommendations for improving response).

Individual IERP Evaluations

Individual written evaluations are also needed to provide inputs to the incident investigation.

1. Immediately following the incident, Section Chiefs and Command Staff request their ICS subordinates to:

   a. Organize and submit any incident documentation such as incident logs and other forms.

   b. Provide a written IERP evaluation in a memo format or using the Post-Incident Investigation Report form (Volume II, Appendix B, ICS Forms) that includes at least the following information:

      (1) Incident name

      (2) Employee name

(3) Date of report

(4) Employee's role in the response including ICS position and date and time activated

(5) Assessment of the response from the employee's perspective

(6) Specific suggestions for improvement

2. Each Section Chief and Command Staff member compiles the reports and documentation received and submits a summary report to the Incident Investigation Team (see below) within 10 days after the incident.

Team Investigation and Report

1. A member of the Executive Management appoints an Incident Investigation Team, headed by a qualified Incident Commander who was not in that position for this particular incident and including the IERP Coordinator.

2. The team investigates the incident by reviewing incident documentation, IERP evaluation reports, and financial reports, and interviewing personnel as needed. The team considers the following aspects of the response:

   a. **Performance:** Records of service interruption (pump stations out of service, sewage backups, reduced ability to manage flow, etc.)

   b. **Cost:** Records of all costs incurred during the activation, including costs of personnel, equipment, and supplies

   c. **Technology:** Reports and data on technical aspects of the IERP response, for example, the adequacy and performance of communications equipment

   d. **Safety:** Records of injuries and accidents during the activation

3. The team develops an Incident Investigation Report (Volume II, Appendix B, ICS Forms) covering the cause, description of incident, response, loss of life and property, direct and indirect costs, and recommendations for improvement such as additional personnel training, purchase of emergency equipment, and IERP revision.

4. Within 8 weeks of the termination of the activation, the team submits the report to the Executive Management with copies to ICS Command Staff, Section Chiefs, and the IERP Coordinator.

5. Executive Management meets with the IERP Coordinator to review the report.

6. Executive Management ensures that a summary of the report is published in the Pipeline newsletter.

Disaster Aid

The IERP Coordinator obtains needed financial data and other documentation and works with Finance to prepare applications for disaster aid for which OCSD may be eligible. Such aid includes:

- State/Local/Federal Disaster Aid
- State/Federal Hazard Mitigation Grants

IERP Evaluation and Revision

The IERP is evaluated and revised (as needed) as follows:

1. Considering the recommendations contained in the Incident Investigation Report, the IERP Coordinator:

   a. Reviews and evaluates the IERP.

   b. Prepares any needed IERP revisions.

c. Submits revisions to the IERP Coordinator for approval. These revisions may include major changes to the IERP manuals, recommendations for purchase of additional emergency equipment and supplies, and recommendations for additional personnel training.

Note: Editorial changes, telephone numbers, and other minor changes do not require IERP Coordinator approval.

2. The Risk Manager for the Risk Management Division:

a. Approves or rejects the suggested IERP revisions and recommendations.

b. As required, escalates recommendations for approval (such as capital purchases), along with a suggested priority.

3. Within 12 weeks of the termination of the IERP Activation, the IERP Coordinator implements changes to the IERP manuals in accordance with the Management of Change procedure in Plan Administration (Volume I, Chapter 10).

Index

Preface

This Integrated Emergency Response Plan (IERP) was developed by the Risk Management Division of the Orange County Sanitation District, California, to ensure its readiness to respond to all types of emergencies. The IERP reflects the District's policy to protect life, the environment, and property in an emergency. The District is committed to being ready to respond to all emergencies and disasters.

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Revision Log

Revision	Date	Description
Rev. 0	12/31/96	Initial issue
Rev. 1	01/01/00	General updates throughout both volumes such as OCSD personnel phone numbers and external contact names and phone numbers. Some major changes are the following: • Volume I, Chapter 3 expanded to include additional activation scenarios. • Volume II, Chapter 4, Communications Plan added. • Volume II, Chapter 5 (old 4), Hazmat Response Plan, revised to reflect the District's elimination of onsite Hazmat Response Teams. • Volume II, Chapter 6 (old 5), Utility Outage Plans, entirely revised to cover major electrical, natural gas, and water outages. • Volume II, Chapter 7 (old 6), High Flow Emergency Plan, is a revision and expansion of the Flood Plan. • Volume III, Site Safety Plans removed. Site Safety Plans replaced by Operational Response Procedures, which are now O&M documents and are not part of the IERP.
Rev. 2	01/01/04	The structure of the Incident Command System at the Section and Branch levels was changed to better meet OCSD's needs (Volume I, Chapter 2, ICS). Other changes include:
		• Chapter sequence and organization changed in both volumes. • Background information on SEMS moved to Appendix 2A (Volume I).
		• New chapters added: – Protection of Information Sources (Chapter 10 in Volume I; to be developed) – Biosolids Spills (Chapter 8 in Volume II) – Industrial Waste Spills (Chapter 9 in Volume II) – Fire (Chapter 10 in Volume II; includes content in former Chapter 5, Prevention Planning, of Volume I) – Flood (Chapter 12 in Volume II; to be developed) – SARI Line Rupture (Chapter 13 in Volume II)

		• Business Emergency Plan (Chapter 10 in Volume I) removed (to be maintained separately) • SPCC Plan (Chapter 11 in Volume I) removed (to be maintained separately) General updates have been made throughout both volumes such as OCSD personnel phone numbers and external contact names and phone numbers.
Rev. 3	02/07/2008	• Updated the training plan and removed all references to Search & Rescue Team
Rev. 4	12/28/2011	• Updated both volumes. • Added Atmospheric Hazards (Vol. II, Chapter 12) • Added Collection System Emergencies (Vol. II, Chapter 13) • Added Tsunami Plan (Volume II, Chapter 15)

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1. Emergency Recognition and ICS Activation

Chapter 1 in Volume I of the IERP contains the definition of an emergency.

Success in responding to an emergency event is often determined by how quickly the emergency is recognized and how quickly OCSD's ICS is activated to coordinate response. This chapter provides an overview of the emergency recognition and ICS activation process, general guidelines, immediate actions to take when you recognize an emergency, and ICS activation procedures.

Overview of Process

Figure 1-1 summarizes the process of emergency recognition and ICS activation.

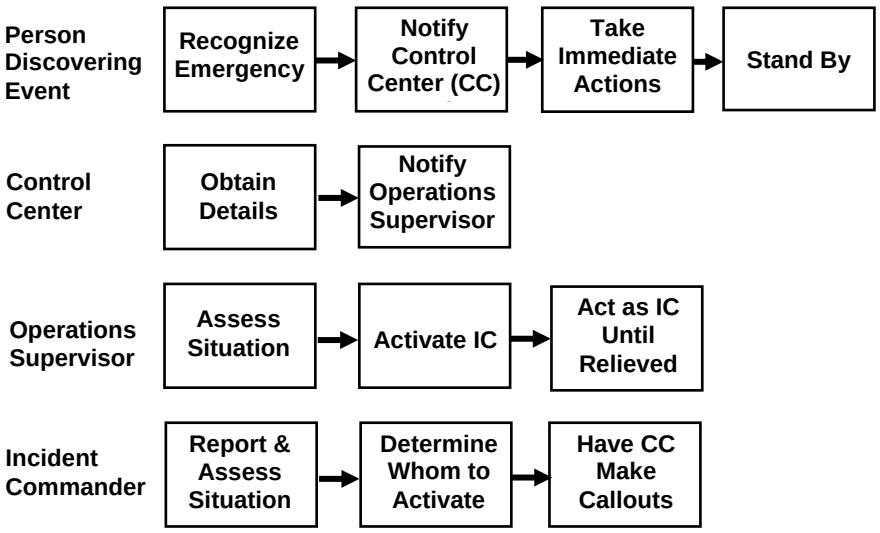

Figure 1-1. Emergency Recognition and ICS Activation Process

This process is described in more detail in the remaining sections of this chapter following the important general guidelines given below.

General Guidelines for Reporting an Emergency

- **ALWAYS call 2222. DO NOT call 911 from a phone or cell phone.**

  The Control Center is connected to the 911 system via the 2222 number. . If you call 911 from a cell phone, the call is routed to the Highway Patrol or the Orange County Sheriff's Department Emergency Center. Thus, calling 911 causes an unnecessary delay in getting the appropriate units to respond because the call has to be routed to Fountain Valley or Huntington Beach dispatch.

- **DO NOT use radios or cell phones when there is a bomb threat.** The use of a radio or a cell phone may trigger the device.

- **If you are in the Collection System:**

  – If an event occurs at an OCSD pump station that has a hard-wired telephone, call 911 and then the Control Center (714-593-7025) unless it is unsafe to do so. Only use a cell phone to call 911 as a last resort.

  – If you are at a pump station or other OCSD facility or location that does not have a hard-wired telephone, call 911 and then contact the Control Center via radio or call 714-593-7025.

Emergency Recognition and Immediate Actions

Purpose

Efficient emergency response begins with activation of the ICS and notification of response personnel. Most disasters develop from normal emergency response situations. These normal emergencies allow for some warning and notification. Wastewater only emergencies may be obvious, such as a hazardous materials incident, or a warning from the remote monitoring systems, field crews, or customers. Notice of external emergencies will usually be received by the Control Center or Operations Center. However, in situations like a major earthquake, the emergency is immediate and personnel should respond immediately, without waiting for notification. The following procedure outlines how to respond to an emergency and take immediate actions.

This procedure ensures appropriate immediate actions and

notifications in an emergency situation such as a hazardous material release, bomb threat, medical emergency, or fire.

Please note that all recommended actions in this procedure are based on responding within your abilities and training. Do not attempt to perform any actions unless you are qualified.

You will need to use your best judgment as to your immediate response. However, your key initial actions should always be to:

- Ensure your safety
- Notify the Control Center.
- Respond to the immediate problem
- Inform others in the vicinity if needed and stand by.

Person Discovering Emergency

1. Dial 2222 on the nearest phone (in safe area) to report the situation to the Control Center. (If you are in the Collection System, see the telephone instructions under General Guidelines above.) State the following:

    - Your name and the number of the telephone from which you are calling

    - Location and detailed description of the emergency

2. Take immediate actions at the scene to protect life and property, for example:

If	Then
If a person is injured	• Administer basic first aid if trained.
If a small fire is discovered	• Remove any injured from vicinity of fire. • Activate fire alarm (if any in vicinity). • Use the nearest fire extinguisher to attempt to extinguish the fire if trained. • Notify your supervisor.
If a large fire is discovered	• Remove any injured from vicinity of fire. • Activate fire alarm (if any in vicinity). • If needed, evacuate building or area, alerting others. • Notify your supervisor.

If	Then
If any solid, liquid, gas, or vapor is released that appears to be harmful	• Remain at a safe distance upwind from the release. • Isolate the area to prevent others from entering. • Notify others in the vicinity and evacuate. • **If possible from a safe distance turn off valves or provide containment to stop the release.** • Always keep a safe distance from the spill.
If you locate what appears to be a bomb or suspicious device	• Remain at a safe distance from the device. • Isolate the area to prevent others from entering. • Notify others in the vicinity and evacuate. • **Do not** attempt to investigate.

3. If needed, stand by or have someone else stand by to direct emergency vehicles or personnel.

ICS Activation Procedure

The process for ICS activation differs slightly depending on the time of day and location of the emergency. As shown in Figure 1-2, during normal hours, the process is the same no matter where the emergency is. During the off-hours, however, the process differs for plant versus offsite emergencies.

Although rare in occurrence, certain emergency events would automatically activate the ICS-Call Out. In the following conditions, staff are to evacuate and respond to their evacuation assembly areas immediately:

- Major earthquake
- Major fire or explosion
- State of War Emergency or Terrorist attack

In most events there is a build up or warning time which allows for the following activation procedures. The ICS may be activated by the the appropriate person(s), such as the Operations Supervisor, Operations Manager, O & M Director, or designee under several conditons;

- A threatened or actual event affects only OCSD facilities and operations (e.g., contaminated wasterwater or biosolids),

- A local area emergency has the potential or has affected all or part of the service area (e.g., fire) and/or
- A regional event (e.g., major earthquake) occurred. A major earthquake will cause book cases or file cabinets to tip over.

Once a disaster has occurred, personnel must be notified to respond. The purpose of this procedure is to facilitate the contact of employees to notify them of a declared emergency, to provide instrucions concerning reporting for work, and to ensure that they are notified uniformly. Each division should establish a mechnanism for contacting each employee (for example, a telephone tree).

The level of response to a disaster or incident affecting OCSD may be dictated by the overall impact, rather than the type of event. The scope of the disaster or incident, its associated hazards, and area(s) affected at the time the event occurs will determine the level of ICS activation and associated response activites.

It is also important that employees understand that in accordance with §3100 of the California Government Code, public employees are expected and required to work in emergency situations.

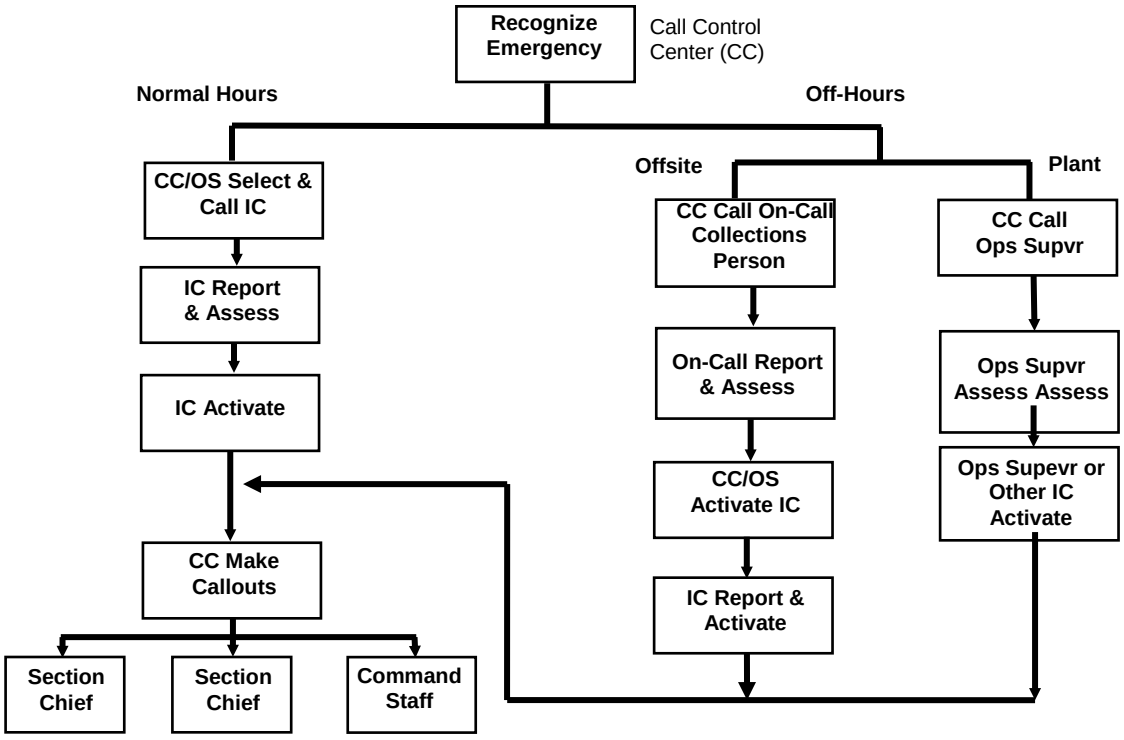

Figure 1-2. Overview of ICS Activation

The activation process begins when the Control Center receives a call reporting an emergency.

Control Center

1. When a caller alerts you to a potential emergency, ensure that you obtain the following information from the caller:

   - Name of person reporting the emergency and telephone number from which call was placed
   - Location and as detailed a description as possible of the emergency

2. Request the caller to stand by near the telephone until emergency vehicles or personnel arrive.

3. Considering the caller's description of the emergency, call 911 to

request appropriate fire, medical, rescue, hazardous materials, or police assistance if needed.

4. Considering the caller's description of the emergency, make appropriate notifications via the District Incident Notification list and any specialized units such as the Medical Team.

5. Notify Operations Supervisor.

6. If the emergency is offsite during off-hours, call out the on-call Collections, Maintenance, or Electrical personnel as needed to go to the scene and report back an assessment of the situation.

Operations Supervisor

1. Report to the scenewhether its in the plant or off-site and secure the scene.If an immediate evacuation is required, notify the Control Center to
make evacuation notifications via the plant wide public address system and two-radios.

2. If outside agencies will be responding, have someone stand by at the gate to escort the responders to the appropriate location.

3. Depending on the type of event, have Control Center notify the appropriate Department Director. For example, if the incident is in the Collection System, notify the Collections Manager (or the on-call Collections person if after hours) to assess the situation at the scene.

4. If needed based on the severity of the emergency, declare an ICS activation and activate the Incident Commander (or assume that role). If needed, consult with other management personnel to determine the appropriate Incident Commander to activate.

5. If not the designated Incident Commander, act as Incident Commander until relieved.

6. Brief responding ICS members and react as appropriate based on the incident.

7. Revise process operations as needed and inform appropriate Operations and Maintenance personnel.

Incident Commander

1. When activated, report to the scene and assess the situation.
2. If needed and not under way, order an evacuation by notifying the Control Center.
3. Determine the ICS Organization to be activated.
4. Notify the Control Center of the positions to be activated.

Control Center

1. As directed by the Operations Supervisor or the Incident Commander, perform the following:

   a. If site or area evacuation is needed, make evacuation notifications in accordance with the IERP Evacuation Procedures (Chapter 3 of this volume).

   b. Activate members of the ICS in accordance with ICS Position Callouts (Chapter 2 of this volume).

   Note: Make callouts through the Section Chief level. Make sure that Section Chiefs are aware that they are responsible for activating and calling out personnel in their sections.

2. If after hours, make necessary notifications to outside agencies in accordance with External Notifications (Chapter 14 of this volume).

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2. ICS Position Callouts

This chapter contains the key ICS positions, names of primaries and alternates, and telephone numbers for each.

The process for activating these personnel is in Chapter 1 of this volume, Emergency Recognition and ICS Activation, and shown in Figure 2-1. In summary, the process is as follows:

1. Once the Plant No. 1 Control Center is alerted to an emergency, the Operations Supervisor (at either plant) assesses the situation, determines whether to declare ICS activation, activates the appropriate Incident Commander, and acts as Incident Commander until relieved.

2. The Incident Commander determines whom to activate.

3. The Control Center staff activates personnel through the Section Chief level as directed.

4. Section Chiefs activate their personnel.

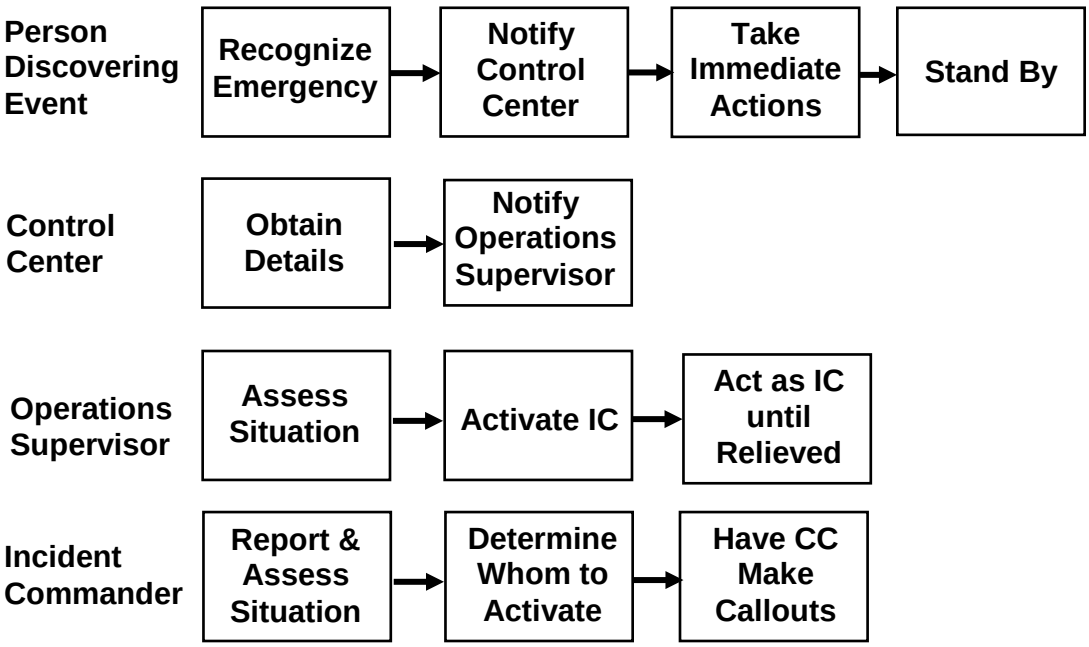

Figure 2-1. IERP Activation Process

ICS Positions

Table 2-1 provides primary and alternate personnel for each ICS position including office numbers, home numbers, and other contact information such as cellular and pager numbers. Unless noted otherwise, the area code is 714.

These numbers are strictly confidential and should be used only in an emergency.

Table 2-1. ICS Positions

Position	Primary/ Alternate	Office	PNA, Pager, Cellular
Note: The Incident Commander and other positions are chosen based on the nature of the incident. The first person to respond is the Incident Commander. If the listed Incident Commanders are not available, continue to call others who are knowledgeable in the specific areas.			
Command Section			
Incident Commander	**Primary:** Ed Torres	7080	714-312-0645 (H) 713-6150 (C)
	Alternate: Nick Arhontes	7210	749-8953 (C) 997-9219 (H)
	Alternate Jim Herberg	7300	949-348-0868 (H) 713-7765 (C)
Safety Officer	**Note:** During off hours first attempt to contact Safety personnel at their home numbers.		
	Primary: Rod Collins	7743	818-582-9993 (H) 227-4914 (C)
	Alternate: Wes Bauer	7155	263-5304 (C) 000-0000 (H)
	Alternate: VACANT	0000	000-0000 (H)
Regulatory Liaison Officer	**Primary:** Lisa Rothbart	7405	714-593-0639 (H) 714-227-9886 (C)
	Alternate: Dindo Carrillo	7476	None (H) 343-0333 (C)
Legal Advisor	**Primary:** Jim Colston	7450	949-766-0045 (H) 810-2821(PNA) 803-1397 (C)
	Alternate: Randy Klienman	7562	000-0000 (H) 805-252-5608 (C)
Public Information Officer	**Primary:** Kelly Newell	7102	000-0000 (H) 000-0000 (C)
	Alternate: Faviola Miranda	7350	000-0000 (H) 227-2349 (C)
	Alternate: Jennifer Cabral	7581	803-1905 (C) 590-2193 (H)
EOC Manager	**Note:** During off hours first attempt to contact EOC Manager at their home numbers.		
	Primary: George Rivera	7156	593-6114 (H) 423-6921 (C)
	Alternate: Wes Bauer	7155	263-5304 (C) 000-0000 (H)
	Alternate: Rod Collins	7743	227-4914 (C) 818-582-9993 (H)
Operations Section			

Position	Primary/ Alternate	Office	PNA, Pager, Cellular
Operations Chief	**Primary:** Jim Spears	7081	760-439-2208 (H) 478-3159 (C)
	Alternate: Rob Thompson	7240	000-0000 (H) 473-9569 (C)
Branch 1 Director (Plant No. 1)	**Primary:** John Kavoklis	7040	962-3173 (H) 473-9355 (C)
	Alternate: Marc Larson	7038	893-8458 (H) 271-4995 (C)
Branch 2 Director (Plant No. 2)	**Primary:** Tony Lee	7600	909-860-7279 (H) 454-6514 (C)
	Alternate: Jerry Amezcua	7620	673-9100 (C) 758-1214 (H)
Branch 3 Director (Collection System)	**Primary:** Mark Esquer	7030	965-0585 (H)) 473-9354 (C)
	Alternate: James Cabral	7648	590-2193 (H) 460-3115 (C)
	Alternate: John Gonzalez	7644	539-3308 (H) 305-5940 (C)
Planning Section			
Planning Chief	**Primary:** Dave Halverson	7049	529-9919 (H) 264-7799 (C)
	Alternate: Carla Dillon	7371	949-548-5126 (H) 713-3284 (C)
	Alternate: Mike Larkin	7832	None (H) 423-4012(C)
Laboratory	**Primary:** Canh Nguyen	7506	None (H) 949-351-7920 (C)
	Alternate: Ron Coss	7508	858-877-0291 (H) 330-8018 (C)
Compliance	**Primary:** Lisa Rothbart	7405	593-0639 (H) 227-9886 (C)
	Alternate: Dindo Carrilo	7476	None (H) 343-0333 (C)
Source Control	**Primary:** Roya Sohanaki	7437	949- 370-7662 (C) 949- 360-6727 (H)
	Alternate: Julian Sabri	7316	720-6966 (C) 949-448-0880 (H)
Logistics Section			
Logistics Chief	**Primary:** Anne Marie Feery	7584	949-548-8744 (H) 949-307-6659 (C)
	Alternate: Darius Ghazi	7586	951-273-1530 (H) 354-0847 (PNA)
	Alternate: Corri Voss	7549	904-742-9344 (C) 000-0000 (H)
	Alternate Greg Blakeley	7211	562-690-0578 (H) 319-4008 (C)
Finance Section			

Position	Primary/ Alternate	Office	PNA, Pager, Cellular
Finance Chief	**Primary:** Marian Alter	7558	669-9482 (H) 323-3866 (C)
	Alternate: Bob Geggie	7553	949-552-4369 (H) 949-903-0273 (C)

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3. Evacuation

The procedures in this chapter are used to ensure that a safe evacuation of OCSD's facilities can be conducted and that all OCSD personnel, contractors, and visitors are no longer in the buildings. Also discussed are safe haven/shelter-in-place guidelines and procedures. These guidelines and procedures are used when it has been determined that staying inside is safer than evacuation.

This chapter discusses:

- Evacuation Guidelines
- Safe Haven/Shelter-in-Place Guidelines

Evacuation Guidelines

This section covers general evacuation guidelines for all OCSD personnel when they are instructed to evacuate. Generally, evacuations are called by the Incident Commander; however, there may be instances such as an earthquake or a fire where others may call for an evacuation.

This section covers:

- Responsibilities of the Incident Commander, Evacuation Wardens, Evacuation Coordinators, and all employees, contractors, and visitors during an evacuation
- Evacuation notices
- Plant No. 1 Evacuation and Assembly Areas
- Plant No. 2 Evacuation and Assembly Areas

Responsibilities

An evacuation from a facility is a traumatic incident that is called for only when required. This chapter discusses the specific responsibilities of the:

- Evacuation Wardens
- Evacuation Coordinators
- IERP Coordinator
- All OCSD employees
- Contractors and visitors

Evacuation Wardens

Emergency preparedness responsibilities:

1. Maintain current Emergency Evacuation Rosters of personnel under your responsibility. Remind personnel to ensure that contractors and visitors sign in and out as well.

2. Keep up to date on temporary alterations in evacuation routes or Assembly Areas due to construction or other factors. The IERP Coordinator will provide such information to Evacuation Wardens.

During an emergency:
The process of accounting for personnel after an evacuation is conducted as follows by the Division Supervisor and reported to the Evacuation Wardens:

1. Bring to your assigned Assembly Area the current Emergency Evacuation Roster (if possible) and your division roster sheets to be used for roll call. Also, rosters are located in the Emergency Evacuation boxes outside of buildings. The rosters are updated quarterly and may not be the most current list.

2. Supervisors should account for personnel in their division using the roster sheet and report the results to the Evacuation Warden.

    a. If an employee is not present at roll call, record his or her last known location under Remarks. For example, you or others in the area may be aware that an employee has been activated and has already reported to the Incident Command Post or Emergency Operations Center (EOC) or may know the person is on vacation, sick, in training off site, etc.

b. If an employee is injured, record details under Remarks.

c. Evacuation Warden is responsible for ensuring their area of responsibility has been evacuated and nobody has been left behind. Supervisors are responsible for accounting for their division personnel in the assembly area and reporting it to the Evacuation Warden.

d. Record any emergency situation (such as a fire or structural damage) you observed or reported to you.

3. If necessary for safety reasons, move your group to another location.

4. Report the roll call results to your Evacuation Coordinator (as shown in Figure 3-1), emphasizing personnel who are unaccounted for and any other emergencies.

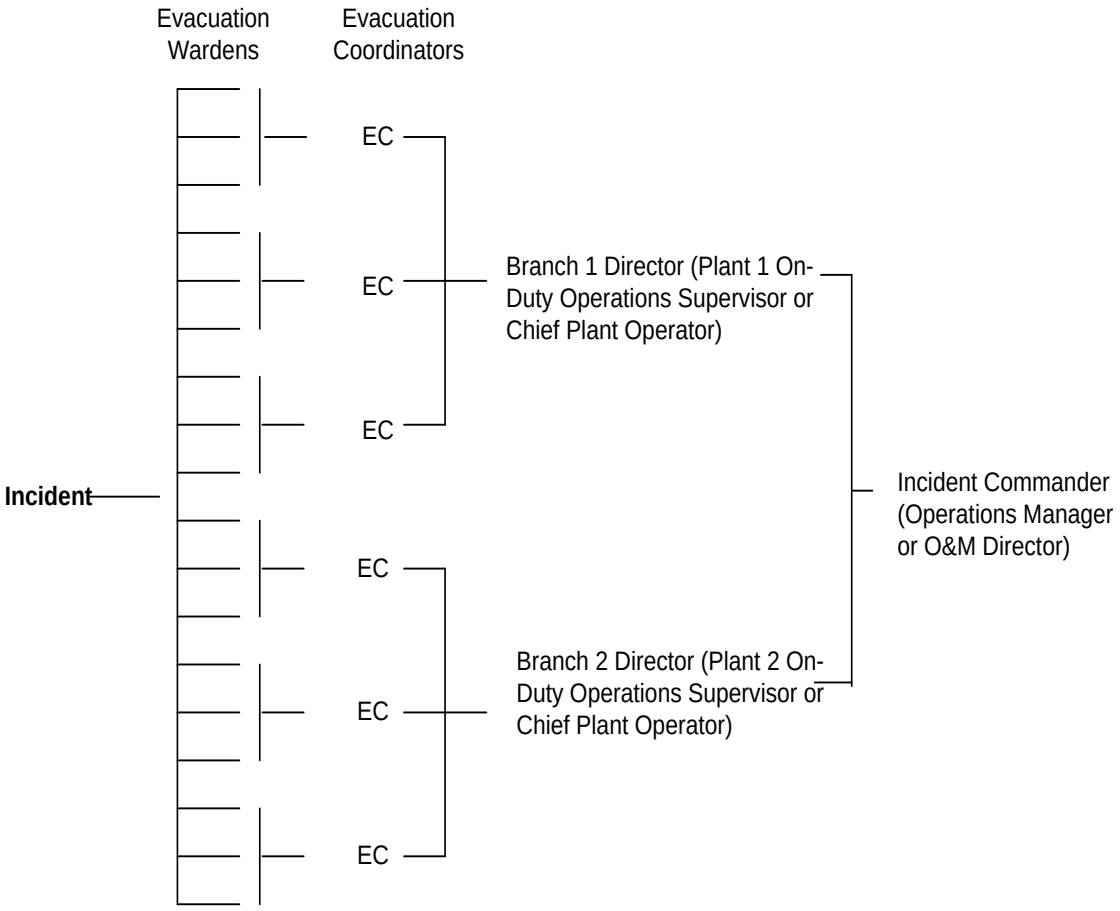

Figure 3-1. Evacuation Reporting Flow

Evacuation Coordinators

Evacuation Coordinators perform the following after an evacuation:

1. Gather data on roll calls within the division.

2. Contact all the Evacuation Wardens in your building and/or area of responsibility to ensure the building is completely evacuated. Notify the Control Center or appropriate Branch Director or Incident Commander (if activated) on the status of personnel in your division and/or building.

3. If there is an earthquake and your building is damage, notify the Control Center or appropriate Branch Director or Incident Commander (if activated).

IERP Coordinator

1. Keep track of Construction projects that may re-route evacuation routes.

2. Meet with Evacuation Wardens once a year to review routes.

3. Conduct evacuation drill at least twice per year.

All OCSD Employees

1. Become completely familiar with your work area—keeping in mind that the lighting may be poor if electricity is lost—by knowing the:

   a. Location of the nearest two exits that can be used to get out of the building

   b. Evacuation route(s) inside the building

   c. Location of your assigned Assembly Area

2. Location of hazardous materials that could pose a hazard during a disaster or evacuation

3. When you are instructed to evacuate or when you self-evacuate (as in a fire or earthquake), remain as calm as possible and proceed as follows:

   a. If time allows, shut down your computer.

   b. Take important personal items such as your car keys and prescription medicines. You should carry your car keys, wallet/purse and employee photo identification card at all

times.

c. Determine the safest route for evacuation and calmly proceed to evacuate along this route.

d. Assist disabled persons in exiting the building.

e. Take contractors/visitors with you.

f. Close, but do not lock the doors as you exit.

g. Walk at a steady pace.

h. Do not go against the flow of people exiting in another direction.

i. Do not use the elevator under any circumstances.

j. Stay low to avoid any possible smoke or toxic substances.

k. If smoke is present, cover your mouth and nose with a damp cloth or wet paper towels if possible.

l. When you are in a stairwell, proceed down and out the building; never go up to the roof unless all other exits are blocked.

4. Once outside a building, report to your assigned Assembly Area and your Evacuation Warden for roll call. Inform your Evacuation Warden of any visitors or contractors assigned to you.

5. If evacuating because of a bomb or other terrorist threat, **do not** use pagers or radios.

6. Report any emergency situation to your Division Evacuation Coordinator.

7. Help the injured. **Do not attempt to move anyone who is seriously injured unless he or she is in immediate danger of further injury.**

8. Keep the traffic lane closest to your area clear for emergency vehicles.

9. Refrain from smoking or lighting matches or cigarette lighters because of the possibility of escaping gas or spilled flammable or combustible liquids.

10. Report spills of hazardous materials or other potentially harmful material to the Evacuation Warden immediately.

11. Wait for instructions from your supervisor, Evacuation Warden, Risk Management Division representative, or ICS member.

12. Ensure that buildings have been inspected and determined to be safe (by posted inspection sign) before re-entering them.

13. Return to your normal workstation when your building has been determined to be safe. Wait for directions from your supervisor.

14. Do not leave the work site until you have checked out with your supervisor or Evacuation Warden.

Contractors and Visitors Follow the directions of OCSD staff during the evacuation. If no OCSD staff is present, follow your company's plan for evacuating the work site.

Evacuation Notices

Notices to evacuate may be given through such means as:

- Oral notification
- Internal and external public address system
- Two-way Mobile Radios
- Alarm Systems

If there is an immediate threat to your safety, such as an earthquake or fire, do not hesitate to evacuate with or without an evacuation notice! In most cases, the Control Center at Plant No. 1 and/or the Operations Center at Plant No. 2 will initiate evacuation signals at the direction of the Incident Commander. For localized instances, there may be only partial evacuation of a building or area. In such cases, the notice to evacuate may be given orally or through the public address systems in buildings. If a general evacuation is ordered, the notice to evacuate will be given through the internal and external public address system. In addition, employees can be contacted by radio. If there is an earthquake, you might not receive an evacuation notice from the Control Center or Operations Center.

Plant No. 1 Evacuation and Assembly Areas

Table 3-1 lists the Assembly Areas for personnel at Plant No. 1, including locations and the divisions assigned to each area. Figure 3-1 shows the physical location of these Assembly Areas. Personnel in the field should report to the nearest assembly area. As conditions allow, they would then report to their identified assembly area.

There are evacuation diagrams located in all buildings and process areas in the plant.

Table 3-1. Plant No. 1 Assembly Areas

Assembly Area	Location	Assignments
1	Parking lot east of Administration Building	• General Management • Engineering • Conference Rooms • Public Affairs • Board Services
2	Parking lot west of Administration Building	• Finance/Accounting • ECRA • Risk Management • Human Resources
3	Parking lot west of Laboratory	• Laboratory • Auto Shop
4	Parking lot south of Purchasing/Warehouse	• Maintenance • Purchasing/Warehouse • Collections • Equipment/Rebuild
5	Parking lot north of the Construction Trailers	• Engineering Construction • Asset Management • Contracts • Project Management Office
6	Parking lot south of Control Center	• Control Center 1st floor • Control Center 2nd floor • O&M Administration
7	Area south of Process Controls Trailers	• Central Generation • Process Controls • Facility Records Group • CMMS Group

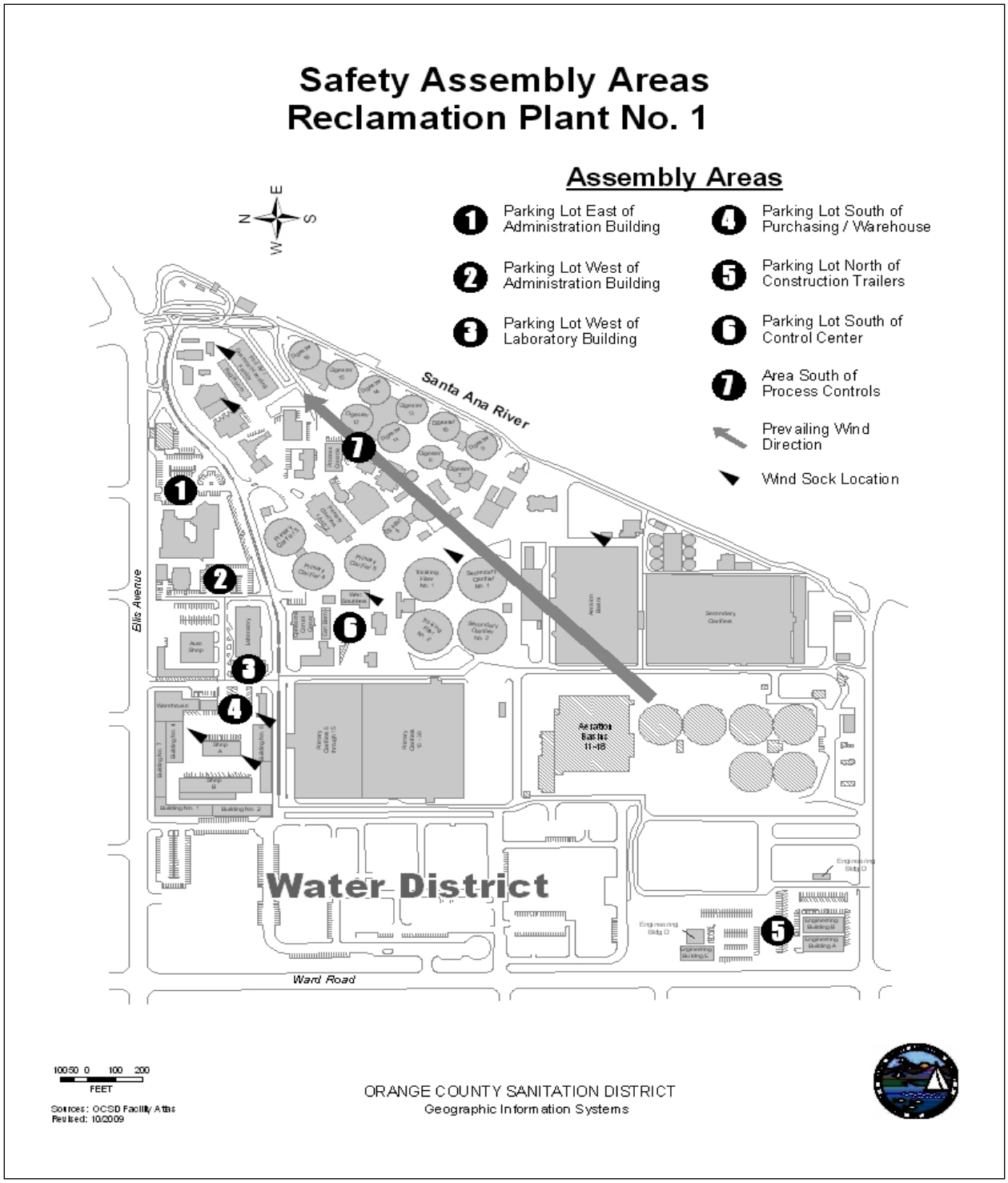

Figure 3-2. Plant No. 1 Assembly Areas

Plant No. 2 Evacuation and Assembly Areas

Table 3-2 lists the Assembly Areas for personnel at Plant No. 2, including locations and the divisions assigned to each area. Figure 3-2 shows the physical location of the Assembly Areas.

There are evacuation diagrams located in all buildings and process areas in the plant.

Table 3-2. Plant No. 2 Assembly Areas

Assembly Area	Location	Assignments
1	Parking lot east of Operations Center	• Construction Management • Operations Center
2	Parking lot south of Maintenance Building	• Maintenance Building • Warehouse
3	Parking lot south of the Central Power Generation Building	• Central Generation

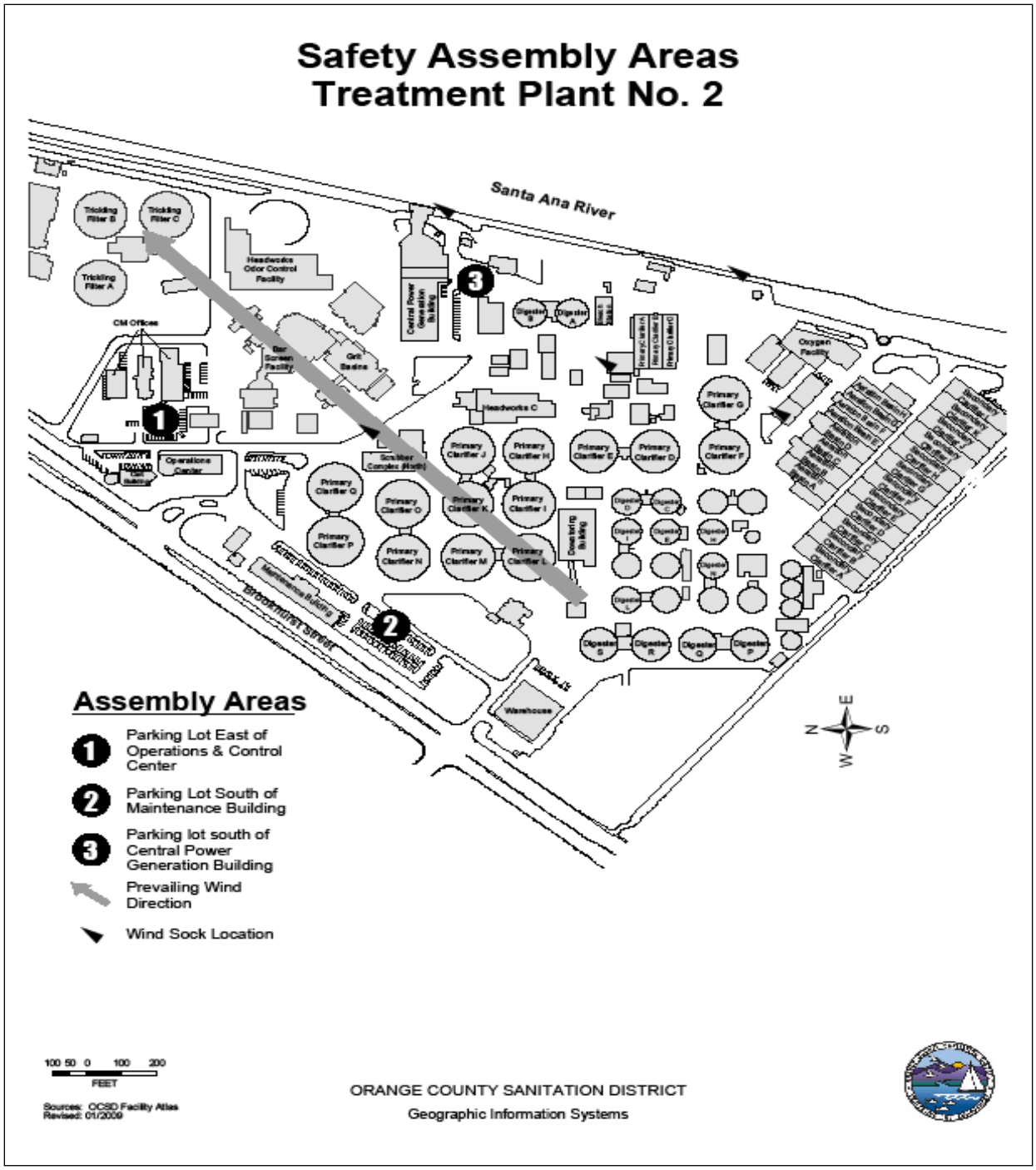

Figure 3-3. Plant No. 2 Assembly Areas

Safe Haven/Shelter-in-Place Guidelines

The Incident Commander may determine that staying in buildings is safer than evacuation. Examples are a tornado warning or a freeway accident with a hazmat spill and release of toxic fumes. The emergency announcement in this case will be, for example, to "shelter in place." This announcement indicates that personnel need to either stay inside or get inside the closest appropriate structure as soon as possible and to stay there until an "all clear" announcement is given.

Appropriate shelters include office buildings and vehicles that can be sealed from outside air reasonably well. For any type of shelter to provide the maximum amount of protection possible, use the guidelines presented in the following sections.

Sheltering inside Buildings

Follow these guidelines if you must remain inside a building:

- Close all outside doors and close and lock all windows (windows seal better when locked). Seal any gaps under doors and around windows with wet towels or duct tape, especially if there is no weather stripping.
  Set all ventilation systems to 100% recirculation to prevent outside air from being drawn into the building. Turn off ventilation systems that cannot be set for recirculation.
  Turn off all heating/cooling systems and air conditioners.
  Turn off and cover all exhaust fans with duct tape, plastic sheeting, or aluminum wrap.
  Shut off all pilot lights.
  Do not use electric appliances or light candles.
  Do not smoke.

- Close blinds, window shades, drapes, and curtains.
- Stay away from windows to prevent injury from flying glass in case of an explosion.
- Do **not** go outside or open doors or windows to assess the situation.
- Hold a wet cloth over your nose and mouth if you suspect that toxic gas or vapor has entered the building and/or you are having difficulty breathing.
- In event of a medical emergency during a shelter in place, dial 2222 and request local emergency medical services (EMS) response.

Tornado Warning (Shelter in Place)

- Stop classes or work.
- Share the notification with others in the building if possible, but do not leave the area - shelter-in-place.
- Close all windows, exterior doors, and any other openings to the outside.
- If you are in a laboratory equipped with a fume hood and/or a biosafety cabinet, close hoods and sashes.
- Gather essential disaster supplies if possible.
- Select interior room(s) below or at ground level next to a load bearing wall. The room(s) should have adequate space for everyone to be able to sit. Avoid overcrowding by selecting several rooms if necessary.
- It is ideal to have a hard-wired telephone in the room(s) you select. Keep the phone available if you need to report a life-threatening condition.
- Bring everyone into the room(s) and shut door(s).
- Keep listening to the radio or television until you are told all is safe.

If you are in Mobile Office Trailer

- During a tornado warning, personnel assigned to mobile office trailers should temporarily relocate into solid concrete structures.
- Evacuate and get inside a substantial shelter. If no shelter or time to evacuate is available, lie flat in the nearest low spot and cover your head with your hands.

Sheltering in Vehicles

Follow these guidelines if you must remain inside a vehicle:

- Close all doors and windows.
- Turn off the heater or air conditioner.
- Close all vents.
- Do **not** start the engine.
- Do **not** smoke.
- Stay inside the vehicle.

Outside, Away from Shelter

Follow these guidelines if you are outside and not close to any shelter.

- Move on foot as quickly as possible upwind away from the toxic gas release.
  If you know the exact location of the emergency and can determine the wind direction, move cross-wind away from the source of the gas release.

When "ALL CLEAR"

- Open doors and windows to ventilate the shelter in case any contaminated air entered the structure.
  Move outside to fresh air.

Contents

4. Hazardous Materials Release Response Plan

Purpose and Scope

This chapter describes the plan for responding to a release of hazardous materials at our facilities or in the Collection System. The plan is organized as follows:

- Hazardous Materials at OCSD Facilities
- Hazardous Materials Agreements with Fire Departments
- Hazmat Training
- Generic Response Procedure

We maintain procedures for responding to a hazardous material release as follows:

- O&M Chemical Emergency Procedures, which are site- and chemical-specific response procedures for the hazardous materials used at Plant No. 1 and Plant No. 2 (these procedures are maintained by O&M)

- Collection System Operational Response Procedures, which cover response to sewage spills, exceededence of the Lower Explosive Limit (LEL) of flammable gases, or hydrogen sulfide in the Collection System (these procedures are maintained by O&M)

- Environmental Sciences Laboratory (ESL) Operational Response Procedure, which contains the response procedure to be used by responders at the ESL (this procedure is maintained by the ESL)

- Offsite Spill Response Plan, maintained by the Source Control Division. This plan is used by Source Control Inspectors to identify spills coming into OCSD's facilities from various sources.

In addition, we have a Hazardous Materials Business Emergency Plan. This plan is updated and submitted annually to the Fountain Valley Fire Department for Plant No. 1 and the Huntington Beach Fire Department for Plant No. 2. The plan describes OCSD's plans for preventing and responding to releases of the hazardous materials that are stored onsite. The plans contain maps of our facilities with all storage locations shown and an inventory of hazardous materials over 55 gallons or 220 cubic feet for gases. The details of how we respond are provided later in this chapter under "Hazardous Materials Agreements with Fire Departments."

Hazardous Materials at OCSD Facilities

Tables 4-1 and 4-2 list the hazardous materials stored at Plant No. 1 and Plant No. 2 including their location and tank capacities. The tables also show the U.S. Department of Transportation (DOT) Hazard Class.

In addition to releases of the items listed in the tables, the following must also be considered hazardous:

- Sewage spill
- High gas readings in the Collection System (methane or hydrogen sulfide)

Table 4-1. Plant No. 1 Hazardous Materials Locations

Material	DOT Hazard Class	Location	No. of Tanks	Total Capacity (gallons)
• Anionic Polymer Solution	N/A	Physical-Chemical Primary Treatment Area	3	30,000
• Anionic Polymer Emulsion		(Not in use)	1	7,000
Cationic Polymer	N/A	• Waste Activated Sludge Thickening (DAF)	2	16,000
		• Dewatering	1	10,000
Ferric Chloride	Corrosive	• Headworks No. 2 Foul Air Scrubber Area • P137	5	70,000
Hydrochloric Acid (Muriatic Acid)	Corrosive	• Headworks No. 2 Foul Air Scrubber Area	1	8,000
		• Primary Scrubber Area	1	1,000
Hydrogen Peroxide	Oxidizer	• Headworks next to M&D Structure	1	8,000
		• Headworks No. 2 Foul Air Scrubber Area	1	1,336
Methane	Flammable Gas	• Gas Compressor Building • Flares • Tunnels	1	25,000 cf
Paints and Solvents	Flammable/ Combustible Liquid	• Warehouse • Paint Shop Area	N/A	Various amounts
Petroleum Products (Above Ground)	Flammable/ Combustible Liquid	• Warehouse • Oil Dock	N/A	Various amounts
		• Day Tank (Diesel) Power Building 7	1	125
		• Day Tank (Diesel) Blower Building	3	825
		• Day Tank (Diesel) South Side of Power Building 3A	1	100

(continued)

Material	DOT Hazard Class	Location	No. of Tanks	Total Capacity (gallons)
		• Day Tank (Diesel) East of Power Building 4	1	100
		• Day Tank (Diesel) North of Power Building 2	1	100
		• Day Tank (Diesel) West of Blower Building	1	100
		• Day Tank (Diesel) Blower Building	1	275
Petroleum Products (Underground Tanks)	Flammable/ Combustible Liquid	• Auto Shop Compound (Waste Oil)	1	2,000
		• South Side of Power Building 3A (Diesel)	1	12,000
		• East of Power Building 4 (Diesel)	1	12,000
		• Central Generation		
		- Lube Oil	1	6,000
		- Waste Oil	1	2,000
		• North of Power Building 2 (Diesel)	1	12,000
		• West of Blower Building		
		- Diesel	2	15,000
Sodium Hydroxide (Caustic Soda)	Corrosive	• Headworks No. 2 Foul Air Scrubber Area	1	9,000
		• Primary Basin Foul Air Scrubber Area	1	7,000
Sodium Hypochlorite	Corrosive	• Plant Water Bleach Station	2	12,000
Disinfectant Bleach		• Head works	2	36,000
Bleach			1	3,500

Table 4-2. Plant No. 2 Hazardous Materials Locations

Material	DOT Hazard Class	Location	No. of Tanks	Total Capacity (gallons)
Anionic Polymer	N/A	• Physical-Chemical Primary Treatment Area		
		- Bulk	3	22,600
		- Mix Tanks	2	6,670
Cationic Polymer	N/A	• Waste Activated Sludge Thickening (DAF)	2	16,000
		• Sludge Dewatering Bulk Storage	2	35,870
		• Sludge Thickener (Mix Tank)	2	
		• West Dewatering Building (East/West) (Mix Tank)	2	
		• South Dewatering Building (north/South) (Mix Tank)	2	
Ferric Chloride	Corrosive	• C Headworks	2	38,920
		• Digesters	2	29,610
Hydrochloric Acid	Corrosive	• North Scrubber Complex	1	4,000
		• South Scrubber Complex	1	2,000
Hydrogen Peroxide	Oxidizer	• Three-in-One Station	2	14,000
		• Districts 5&6	1	6,000
		• Interplant Trunkline	2	8,000
Methane	Flammable Gas	• Gas Compressor Building • Flares • Tunnels	1	25,000 cf
Liquid Oxygen Gaseous Oxygen	Oxidizer	• O_2 Plant • AS Plant Reactors	2	45,000 (each)
Paints and Solvents	Flammable/ Combustible Liquid	• Warehouse • Paint Shop Area	N/A	Various amounts
Petroleum Products (Above Ground)	Flammable/ Combustible Liquid	• Warehouse • Oil Dock • Maintenance Shops	N/A	Various amounts
		• Facilities Collections Yard (Diesel)	1	1,000
		• County of Orange Communications Tower (Diesel)	1	1,500

(continued)

Material	DOT Hazard Class	Location	No. of Tanks	Total Capacity (gallons)
		• Day Tank (Diesel) Emergency Power Building	2	100
		• Day Tank (Diesel) Power Building C	2	100
		• Day Tank (Diesel) Power Building D	1	50
		• Day Tank (Diesel) Generator Building	1	300
Petroleum Products (Underground Tanks)	Flammable/ Combustible Liquid	• Truck Wash Area		
		- Gasoline (out of service)	1	12,000
		- Diesel (out of service)	1	15,000
		• Central Generation		
		- Lube Oil	1	10,000
		- Waste Oil	1	3,000
		• Emergency Power Building (Diesel)	2	30,000
		• Raw Sewage B (Diesel)	1	12,000
		• Power Building C (Diesel)	1	15,000
		• Power Building D (Diesel)	1	12,000
		• Generator Building (Diesel)	2	24,000
Sodium Bisulfite	Corrosive	• Bisulfite Station	3	30,000
Sodium Hydroxide	Corrosive	• North Scrubber Complex	1	12,200
Sodium Hypochlorite	Corrosive	• North Scrubber Complex	1	10,000
		• Plant Water Station	1	12,500
		• Effluent Disinfection Station	6	12,500
		• South Scrubber Complex	1	1,500

Table 4-3. Pump Stations Hazardous Materials Locations

Material	DOT Hazard Class	Location	No. of Tanks	Total Capacity (gallons)
Ferric Chloride	Corrosive	Seal Beach Pump Station	1	7,800
Magnesium Hydroxide	N/A	Bay Bridge Pump Station	1	7,000

Hazardous Materials Agreements

OCSD has agreements with local fire departments and a private contractor for hazardous materials.

Agreements with Local Fire Departments

OCSD has an agreement with both the Fountain Valley Fire Department and the Huntington Beach Fire Department. This agreement explains the actions that responding OCSD personnel can perform in dealing with a hazardous material release in four categories:

- Incidental release
- Non incidental and uncontained release
- Contained release
- Threatened release

OCSD will respond in the following manner to spills and releases of hazardous materials:

1. OCSD personnel will clean up **incidental releases** of hazardous materials below a threshold of 5 gallons and an NFPA 704 rating below 3 in any category. A qualified person determines whether the spill or release constitutes an incidental release.

   Such releases may include spills caused by maintenance and operations activities involving paint and paint-related materials, lubricants, and small quantities of automotive servicing fluids. Incidental spills may also be caused during the offloading of bulk chemicals when hoses are removed from either the storage tank inlet or the portable tank outlet.

2. A **non-incidental, uncontained release** over a threshold of 5 gallons and an NFPA 704 rating of 3 or above in any category. OCSD will contact the Fountain Valley Fire Department or Huntington Beach Fire Department via 911. The Chemical Emergency Procedures may be used in this case.

   Such releases may include spills caused by maintenance, operations, or contractor activities involving paint and paint-related materials, lubricants, and small quantities of automotive servicing fluids above a threshold of 5 gallons with an NFPA 704 rating of 3 or above in

any category.

3. A **contained spill** of any material. OCSD personnel may remove the material from containment for use in the wastewater treatment process or related operations. OCSD will notify the Fountain Valley Fire Department or Huntington Beach Fire Department Hazardous Materials Specialist via facsimile and telephone. The Chemical Emergency Procedures may be used in this case.

   These releases will involve spills of hazardous materials used in the wastewater treatment process such as ferric chloride, hydrogen peroxide, and sodium hydroxide that, even if spilled into containment, can still be used to enhance the wastewater treatment process.

4. For a **threatened release** of hazardous materials, OCSD will implement a FRO response and notify the Fountain Valley Fire Department or Huntington Beach Fire Department Hazardous Materials Specialist via facsimile and telephone.

   This situation includes potential transportation accidents involving hazardous materials and damage to storage tanks or containment structures.

Agreements with Hazardous Materials Contractor

OCSD also has a contract with Clear Harbors Environmental Services Inc. (CHESI) of Los Angeles, CA. CHESI is the hazardous waste and emergency response contractor for hazardous material spills. CHESI can support OCSD efforts in product recovery, cleanup of a spill, or as part of an emergency response.

Hazmat Training

To meet the training requirements for emergency response operations, personnel receive a series of courses and annual refresher training:

- First Responder Awareness (all employees)
- First Responder Operations (designated employees)
- Hazard Communication (HAZCOM) Program (required by CCR, Title 8, Section 5194) (all employees)
- Respirator training, qualitative respirator fit test (for all types of respiratory protection that the employee may be required to use), and refresher training and a repeat fit test every 12 months (required by CCR, Title 8, Section 5144) (designated employees)
- First Aid/CPR training (offered to all employees)
- Confined Space Entry training (designated employees as required by job function)

Generic Response Procedure

The following generic response procedure applies to releases of any type of hazardous material. Specific measures to be taken will be determined by the responding Fire Department Hazmat Team.

Analyze

1. Size up the situation.
2. Gather Information on the spill chemical
3. Collect reference information

Plan	4.	Plan the response
Implement	5.	Evacuate if needed
	6.	Notify additional resources
	7.	Make emergency notification if needed
	8.	Set up containment zones
Cleanup	9.	Perform clean up actions .
Evaluate	10.	Evaluate the process

Contents

5. Utility Outages

Overview

This chapter contains contingency plans intended to provide for efficient response to events outside OCSD's control. These plans provide high-level guidelines to respond to ***major outages***. The operational details of response are provided in Emergency Operating Procedures (EOPs) in the Operating Manuals.

For most minor or short-duration outages, Operations and Maintenance personnel will respond using normal staffing and standard operating procedures. The EOPs may be used as well for response.

However, for a major outage or a combination of outages of different utilities, the plans provided here should be reviewed and invoked. This also generally means an official activation of the Incident Command System.

Recovery Goals

The recovery goals in order of priority are:

1. Ensure the safety of personnel, the public, and equipment and systems.

2. Keep the water flowing into and out of the plant so that it does not flood the streets.

3. Comply with regulatory requirements.

Recommended ICS Organization in a Major Outage

The positions that should be activated initially for a major outage are:

- Incident Commander
- Safety Officer
- Public Information Officer
- Operations Section Chief

Depending on the facilities involved, one or more Operations Branch Directors may be needed.

Resources Required

The personnel needed to implement the operational strategies are listed in the Emergency Operating Procedures (EOPs) referenced in each plan appendix. These resources are in addition to the ICS staffing discussed in the previous section.

Appendixes

Since the major utilities are critical to sustaining operations, the appendixes to this chapter address the following:

- Electrical outage at Plant No. 1, at Plant No. 2, and in the Collection System (Appendix 5A)
- Natural gas outage at either plant (Appendix 5B)
- Loss of city water, reclaimed water, and/or plant water at either plant (Appendix 5C)

The plans reference the EOPs as appropriate.

Electrical Outage Plan

Objective

The intent of this plan is to provide guidelines for response to a major or prolonged electrical outage. It is assumed that minor outages will be handled using Emergency Operating Procedures (EOPs).

The following definitions apply to this plan and are intended as guidelines only. It is not necessary to reach the "threshold" of these definitions if management feels the situation warrants Incident Command System (ICS) activation.

- "Major outage" refers to a widespread outage affecting the majority of processes at either or both plants, or to a widespread outage affecting numerous pump stations in one district or several pump stations considered "critical."

- "Prolonged outage" refers to an outage longer than 2 hours; however, the time of day Biochemical Oxygen Demand (BOD) Loading may extend or reduce this time.

Overview of Processes and Levels of Supply

All plant processes, administrative and business functions, and pump stations in the Collection System depend on electricity to operate. For this reason, we have multiple levels of supply.

Levels of Supply at the Plants

The three levels of electrical supply for the treatment plants are:

1. The second level of supply consists of our Central Generation (Cen-Gen) facilities, one at each plant. Plant 1 Cen-Gen has enough capacity to operate the secondary plants and miscellaneous loads assuming diesel generation is powering the critical loads. Plant 2 Cen-Gen can generate sufficient electricity to run the entire plant but is only allowed by the AQMD to do so during emergencies.

Cen-Gen burns a combination of digester gas (methane, a product of the treatment process) and natural gas (purchased from a natural gas utility) to generate electricity.

2. The primary level of supply is Southern California Edison (Edison), the local electric utility. The normal operating procedure is to run connected to Edison to supplement Cen-Gen and for enhanced reliability.

3. The third level of supply consists of generators, permanently installed and portable, that can be used in the event that the first two levels are lost. These generators are specifically connected to critical processes (water in – water out) and will start up and connect automatically.

Levels of Supply in the Collection System

The pump stations may have two levels of supply:

1. The first level is Edison.

2. The second level consists of generators, several of which are permanently installed at critical pump stations and automatically start up and connect upon the loss of Edison power. Some permanent generators must be started manually. In addition, trailer-mounted generators can be transported to pump stations by OCSD personnel.

Outage Scenarios

There are several possible scenarios of electrical outage of varying levels of likelihood and criticality. The length of the outage is a major factor as well. The longer the outage, the more critical the situation becomes.

This section discusses various outage scenarios to provide overall guidance as to the type of response that may be needed. Table 5A-1 shows the scenarios with recommendations for ICS activation.

Table 5A-1. Decision Matrix for Electrical Outage Scenarios

Scenario	ICS Activation Required?	Comments
Plant No. 1		
Loss of Edison only	No	Plant can run separated from Edison for at least 48 hours.
Loss of Cen-Gen only	No	Assuming Edison can supply needed power.
Loss of Edison plus Cen-Gen	Yes, depending on duration	
Loss of Edison plus Cen-Gen plus third-level generation	Yes	
Plant No. 2		
Loss of Edison only	No	Plant can run separated from Edison for at least 48 hours.
Loss of Cen-Gen only	No	Assuming Edison can supply needed power.
Loss of Edison plus Cen-Gen	Yes, depending on duration	
Loss of Edison plus Cen-Gen plus third-level generation	Yes	
Both Plants		
Loss of Edison only	Yes, depending on duration	
Loss of Cen-Gen only	No	Assuming Edison can supply needed power to both plants.
Loss of Edison plus Cen-Gen	Yes	
Loss of Edison plus Cen-Gen plus third-level generation	Yes	
Collection System		
Loss of Edison	Depends on extent of outage	

Plant No. 1

The following scenarios are possible at Plant No. 1:

- Loss of Edison only
- Loss of Cen-Gen only
- Loss of Edison plus Cen-Gen
- Loss of Edison plus Cen-Gen plus third-level generation

O&M-EOP-101, Electrical Outage at Plant No. 1, provides instructions for responding to each of these scenarios.

Loss of Edison Only

Generally, the loss of Edison power only, and for a short period, is not an emergency and does not warrant an ICS activation. Almost all Edison outages are very short duration.

However, the larger concern is how widespread the loss of Edison is. If the Orange County Water District (OCWD) is without power, it will shut down, thus depriving Plant No. 1 and Plant No. 2 of reclaimed water (used for Cen-Gen cooling) from April through October. (A power outage at OCWD from November through March will not affect the supply of reclaimed water because the reclaimed water is normally coming from IRWD and is gravity fed.) Plant water will be supplied automatically, with the only concern being the need for more personnel to keep filters clean. (Plant water has more solids, which will clog the filters.)

A prolonged Edison outage may require a limited ICS activation. Additional personnel will definitely be needed to assist with the Control Center phones.

Loss of Cen-Gen Only

The loss of Cen-Gen only will generally have no immediate adverse effect (except increased power costs) since the plant will simply draw more power from Edison. As a result, the loss of Cen-Gen only generally does not warrant an ICS activation.

The severity of the loss of Cen-Gen depends on the nature of the loss. If Cen-Gen trips off line, the procedure to restore Cen-Gen is for the Cen-Gen operator to reclose the Cen-Gen breaker. However, if there is a failure of Cen-Gen equipment, the Cen-Gen operator calls an electrician for troubleshooting and repair.

In a prolonged Cen-Gen outage (hours to days), the plant must depend on Edison for power, and third-level supply becomes the immediate

backup. The generators are tested monthly, but it may be advisable to test them again during this period if it is known that Cen-Gen will be down for a period of time.

Loss of Edison plus Cen-Gen

The loss of Edison and Cen-Gen will cause the standby generator system (third-level supply) to activate. This system will provide standby power only to critical systems in the plant. This type of outage is always serious, particularly as the duration increases.
The ICS should be activated, and the strategy is to restore Cen-Gen as quickly as possible.

Loss of Edison plus Cen-Gen plus Third-Level Supply

The loss of all supply is the most serious of all outages and is an emergency situation requiring an ICS activation. This is a rare occurrence due to the three levels of supply we have. It is more likely that only some of the standby generators will fail, not all of them at once.

In a loss of all levels of supply, particularly if it affects the headworks, the operational strategy is to divert flow to Plant No. 2. While diverting, the priority is to restore Cen-Gen or Edison or standby power.

Plant No. 2

The following scenarios are possible at Plant No. 2:

- Loss of Edison only
- Loss of Cen-Gen only
- Loss of Edison plus Cen-Gen
- Loss of Edison plus Cen-Gen plus third-level supply

O&M-EOP-201, Electrical Outage at Plant No. 2, provides instructions for responding to each of these scenarios.

Loss of Edison Only

As at Plant No. 1, generally, the loss of Edison power only, and for a short period, is not an emergency and does not warrant an ICS activation. Plant No. 2 has run successfully separated from Edison. It is important to note that operational adjustments will need to be made. Operations must be in close communication with Cen-Gen staff before staring significant loads.
However, the larger concern is how widespread the loss of Edison is. If the Orange County Water District (OCWD) is without power, it will shut down, thus depriving both Plant No. 1 and Plant No. 2 of reclaimed water (used for Cen-Gen cooling) from April through October. (A power outage at OCWD from November through March will not affect the supply of reclaimed water because the reclaimed water is normally

coming from IRWD and is gravity fed.) Plant water will be supplied automatically, with the only concern being the need for more personnel to keep filters clean. (Plant water has more solids, which will clog the filters.)

Loss of Cen-Gen Only

As at Plant No. 1, the loss of Cen-Gen only will generally have no immediate adverse effect (except increased power costs) since the plant will simply draw more power from Edison. As a result, the loss of Cen-Gen only generally does not warrant an ICS activation.

If Cen-Gen trips off line, the procedure for the Cen-Gen operator is to reclose a Cen-Gen breaker. However, if there is a failure of Cen-Gen equipment, the outage will be longer since the Cen-Gen operator must call an electrician for troubleshooting and repair.

In a prolonged Cen-Gen outage (hours to days), the plant must depend on Edison for power, and third-level supply becomes the immediate backup. At Plant No. 2, some generators are old and may not be reliable. Testing the older generators is advisable during this period if it is known that Cen-Gen will be down for a period of time.

Loss of Edison plus Cen-Gen

The loss of Edison and Cen-Gen will cause the standby generator system (third-level supply) to activate. This system will provide standby power only to critical systems in the plant. This type of outage is always serious, particularly as the duration increases.

At Plant No. 2, the ICS should be activated because third-level supply is not as reliable as at Plant No. 1.

Loss of Edison plus Cen-Gen plus Third-Level Supply

The loss of all supply at Plant No. 2 is the most serious of all outages and is an emergency situation requiring an ICS activation. This should be a rare occurrence due to the three levels of supply we have. However, at Plant No. 2, it is likely that some of the standby generators will fail, not all of them at once.
.

A loss of all levels of supply at Plant No. 2 is especially serious because it has no place to divert flow. The final effluent channel automatically diverts to the Santa Ana River.

Both Plants

The following scenarios may occur at both plants simultaneously:

- Loss of Edison only
- Loss of Cen-Gen only
- Loss of Edison plus Cen-Gen
- Loss of Edison plus Cen-Gen plus third-level supply

Loss of Edison Only

Generally, the loss of Edison power only at both plants, and for a short period, is not an emergency and does not warrant an ICS activation. However, if the Edison outage is expected to be 2 hours or more, the ICS should be activated to ensure sufficient resources while running on Cen-Gen only.

Loss of Cen-Gen Only

If both plants lose Cen-Gen, there will generally be no immediate adverse effect (except increased power costs) since the plants will simply draw more power from Edison. As a result, the loss of Cen-Gen only generally does not warrant an ICS activation assuming Edison can supply sufficient power.

If both plants expect that their Cen-Gen plants will be offline for a prolonged period, an ICS activation may be warranted to ensure sufficient resources should Edison fail and the plants go to third-level supply.

Loss of Edison plus Cen-Gen

The loss of Edison and Cen-Gen will cause the standby generator systems (third-level supply) to activate. These systems will provide standby power only to critical systems in the plants. This type of outage is always serious, particularly as the duration increases, and warrants an ICS activation.

Loss of Edison plus Cen-Gen plus Third-Level Supply

The loss of all supply at both plants is the most serious of all outages and is an emergency situation requiring an ICS activation. This should be a rare occurrence due to the three levels of supply we have. It is more likely that a partial loss of third-level supply will occur and will be only temporary until electricians can get the generators started.

Collection System

Response to a loss of Edison in the Collection System depends entirely on the extent of the outage. A total loss of power at all OCSD pump stations is highly unlikely except in a serious earthquake. The more likely scenario is loss of power at one station or at all stations in a certain geographical area. As described in GSA-EOP-001, Electrical

Outage in the Collection System, our response plan based on the criticality of the stations out of service. The plan involves starting up stationary generators at some stations and hooking up portable generators at others.

Operational Strategies

Operational strategies are presented here for the scenarios most likely requiring ICS activation. The strategies for individual plants are also included in the respective EOPs.

Plant No. 1

Table 5A-2 shows the critical plant systems and processes required to be supported by standby power based on the length of an electrical outage. This scenario is based on the loss of Edison and Cen-Gen with third-level supply available; however, it may serve as a guideline for other types of outages.

Table 5A-2. Plant No. 1: Critical Systems Needing Power by Length of Outage

< 1 Hour	< 6 Hours	6-24 Hours	24+ Hours
MSPs and Sunflower screw pump (at least one)	MSPs	MSPs	MSPs
Gas Comp (DiGas)	Gas Comp (DiGas)	Gas Comp (DiGas)	Gas Comp (DiGas)
Air Comp	Air Comp	Air Comp	Air Comp
Plant Water Pump Station	Plant Water Pump Station	Plant Water Pump Station	Plant Water Pump Station
City Water Pump Station	City Water Pump Station	City Water Pump Station	City Water Pump Station
Barscreen System	Barscreen System	Barscreen System	Barscreen System
Control Center	Control Center	Control Center	Control Center
Hot water loop circulation pumps for Cen-Gen cooling	A.S. Plant*****	A.S. Plant*****	A.S. Plant*****
Bacterial Reduction Station		Primary Basins	Primary Basins
		Digester Mixing and Heating*	Digester Mixing and Heating*

*** This system does not have standby electrical power generation.**

Loss of Edison plus Cen-Gen at Plant No. 1

The first priority will be to regain control of the influent wetwell and trunklines by diverting flow to Plant No. 2, starting main sewage pumps (MSPs) when possible, and starting a Sunflower screw pump when possible. OCSD will not be sending water to GWRS. Factors to consider are:

- Level of the influent wetwell and trunklines
- Rate at which the influent wetwell and trunklines are rising
- Available kW from generation
- Response time due to Influent flow rate flow

The approximate influent trunkline levels at which street and basement (for example, the Performing Arts Center) flooding could occur are estimated to be 19 feet. Historically, flooding has occurred on Airbase, Sunflower, and Euclid trunklines.

When restarting equipment, always load generators with large loads first, then peak with smaller loads.

Loss of All Supply at Plant No. 1

The loss of all electrical supply is the most serious of all outages and is an emergency situation. This is a rare occurrence due to the three levels of supply we have. It is more likely that only some of the standby generators will fail not all of them at once.

In a loss of all levels of electrical supply, particularly if it affects the headworks, the operational strategy is to divert flow to Plant No. 2. In a low-flow period, it is possible to divert 100%. In a high-flow period, some of the flow will eventually back up into the streets in front of the plant. While diverting, the priority is to restore Cen-Gen.

Plant No. 2

Table 5A-3 shows the critical plant systems and processes required to be supported by standby power based on the length of an electrical outage. This scenario is based on the loss of Edison and Cen-Gen with third-level supply available; however, it may serve as a guideline for other types of outages.

Table 5A-3. Plant No. 2: Critical Systems Needing Power by Length of Outage

< 1 Hour	< 6 Hours	6-24 Hours	24+ Hours
MSPs	MSPs	MSPs	MSPs
OOBS	**OOBS**	**OOBS**	**OOBS**
EPSA	ESPA	EPSA	EPSA
Gas Comp (DiGas)	Gas Comp (DiGas)	Gas Comp (DiGas)	Gas Comp (DiGas)
Air Compressors	Air Compressors	Air Compressors	Air Compressors
Plant Water Pump Station	Plant Water Pump Station	Plant Water Pump Station	Plant Water Pump Station
Operations Center	Operations Center	Operations Center	Operations Center
Disinfection System	Disinfection System	Disinfection System	Disinfection System
Bacterial Reduction Station	Barscreen System	Barscreen System	Barscreen System
	City Water Pump Station*	**City Water Pump Station***	**City Water Pump Station***
		A.S. Plant*	**A.S. Plant***
		Trickling Filters*	Trickling Filters*
		Primary Basins	Primary Basins
			Digester Mixing and Heating*
***These systems do not have standby electrical power supply.**			

Loss of Edison plus Cen-Gen at Plant No. 2

This type of outage is always serious, particularly as the duration increases. All actions focus on reestablishing Cen-Gen and gaining control of the flow in and out of the plant. The operational strategy is to return to Level 2 (Cen-Gen) or Level 1 (Edison power) as soon as possible. In most cases, the Cen-Gen operator will need approximately 15 minutes to "black start" the Cen-Gen generators. If either Cen-Gen or Edison becomes available while performing this procedure, the operational strategy is to safely and as quickly as possible reconnect to these power sources and reduce reliance on standby power as soon as possible.

Loss of All Supply at Plant No. 2

The loss of all supply is the most serious of all outages and is an emergency situation. This is a rare occurrence due to the three levels of supply we have. It is more likely that only some of the standby generators will fail, not all of them at once.

In a loss of all levels of supply, the operational strategy is to restart Cen-Gen and/or standby generators to restore power to critical systems as soon as possible and to have Plant No. 1 take as much flow as possible.

Both Plants

Loss of Edison

The operational strategy for loss of Edison at both plants is to ensure sufficient staffing at Cen-Gen facilities in case of problems, to check operability of standby supply, and to communicate with Edison to determine length of outage.

Loss of Edison plus Cen-Gen

Follow the operational strategies for the individual plants. Ensure sufficient staffing to get Cen-Gen back online and resources to make environmental notifications if needed.

Loss of All Supply

Follow the operational strategies for the individual plants. Ensure sufficient staffing to get Cen-Gen back online and resources to make environmental notifications if needed.

Collection System

Loss of Edison in the Collection System

Ensure that critical pump stations get power first through either stationary or portable generators. Ensure sufficient electrical staff to start generators and Collections staff to monitor the stations.

Critical Pump Stations in order of priority			
Pump Station	**Location**	**Generator**	**Fuel Gals**
1. Lido Pump Station	3431 Newport Boulevard, Newport Beach, 92663-3817	No	0
2. 15th Street Pump Station	1514 West Balboa Boulevard, Newport Beach, 92663-4510	No	0
3. "A" Street Pump Station	810 East Balboa Boulevard, Newport Beach, 92660	No	0
4. Bitter Point Pump Station	5908½ West Coast Highway, Newport Beach, 92663-2205	Yes	2000
5. Rocky Point Pump Station	1601 West Coast Highway, Newport Beach, 92663-5026	Yes	600
6. Crystal Cove Pump Station	7423 East Pacific Coast Hwy., Newport Beach, 92667	Yes	200
7. Bay Bridge Pump Station	290 East Coast Hwy., Newport Beach, 92660	Yes	200
8. Seal Beach Pump Station	13979 Seal Beach Boulevard, Seal Beach, 90740	No	0
9. Edinger Pump Station	5507 Edinger Ave., Huntington Beach, 92649-1702	No	0
10. Slater Pump Station	7202 Slater Ave., Huntington Beach, 92647	Yes	200
11. Westside Pump Station	3112 Yellowtail Drive, Los Alamitos, 90720-5249	Yes	200
12. MacArthur Pump Station	4219 MacArthur Boulevard, Newport Beach, 92660-2015	No	0
13. College Pump Station	3198 College Ave., Costa Mesa, 92626-2661	No	0
14. Main Street Pump Station	1499 Main Street, Irvine, 92714	Yes	5500
15. Yorba Linda Pump Station	2600 East Yorba Linda Blvd., Fullerton, 92831	No	0

Related EOPs

O&M-EOP 101, Electrical Outage at Plant No. 1
O&M-EOP 104, Loss of Plant Air at Plant No. 1
O&M-EOP 201, Electrical Outage at Plant No. 2
O&M-EOP 204, Loss of Plant Air at Plant No. 2

Natural Gas Outage Plan

Objective

The intent of this plan is to provide guidelines for response to a major or prolonged natural gas outage. It is assumed that minor outages will be handled using Emergency Operating Procedures (EOPs).

The following definitions apply to this plan and are intended as guidelines only. It is not necessary to reach the "threshold" of these definitions if management feels the situation warrants Incident Command System (ICS) activation.

- "Major outage" refers to a natural gas outage affecting both plants or a combined outage of electricity and natural gas.
- "Prolonged outage" refers to an outage longer than 2 hours.

Overview of Processes

Natural gas is used as pilot fuel to run the Cen-Gen generators at both plants.

The gas system is designed as an integrated system that uses both digester gas and natural gas to power the Cen-Gen engines at each plant to produce electricity to run the plants. Natural gas is also used for building and shop heating and supplementary process heat boilers. At both Cen-Gen plants, natural gas is used as a pilot fuel. Both plants uses approximately 95% digester gas and 5% natural gas.

Outage Scenarios

Possible outage scenarios are described below. Table 5B-1 summarizes the scenarios with recommendations for ICS activation.

Any scenario combining loss of natural gas with loss of electricity would be a more serious event and would require ICS activation.

Table 5B-1. Decision Matrix for Natural Gas Outage Scenarios

Scenario	ICS Activation Required?	Comments
Plant No. 1		
Loss of Natural Gas	No	Cen-Gen would continue to run on just digester gas.
Plant No. 2		
Loss of Natural Gas	No	Cen-Gen would continue to run on just digester gas.
Both Plants		
Loss of Natural Gas	No, depending on duration	A limited activation to ensure information sharing and coordination between plants might be considered.

Loss of Natural Gas at Plant No. 1

A loss of natural gas at Plant No. 1 might be caused by a pipeline rupture or interruption of service from the provider. Cen-Gen can run on digester gas only and the operational strategy is to continue to run Plant No. 1 Cen-Gen using the available digester gas. The Edison service would provide for the rest of the plant load. If CenGen failed to operate on 100% digester gas, Edison would automatically provide all the needed power. ***If Edison is unavailable, Plant No. 1 has diesel generators to power the critical plant processes***.

Loss of Natural Gas at Plant No. 2

A loss of natural gas at Plant No. 2 might be caused by the same factors as Plant No. 1. The operational strategy is to keep Cen-Gen at Plant No. 2 running on digester gas only. The Edison service would provide for the rest of the plant load. If CenGen failed to operate on 100% digester gas, Edison would automatically provide all the needed power. ***If Edison is unavailable, Plant No. 1 has diesel generators to power***

the critical plant processes.

Loss of Natural Gas at Both Plants

If both plants lost natural gas, the cause would most likely be a regional outage or interruption from the provider. Both plants would continue to produce power with digester gas only.

Operational Strategies

Operational strategies are presented here for the scenario most likely requiring ICS activation. The strategies for individual plants are included in the respective EOPs.

Natural Gas Outage at Both Plants

With both plants in a natural gas outage, Cen-Gen facilities at both plants cannot continue to operate. The strategy is to:

- Continue to run both plant's Cen-Gen.

The amount of digester gas available at each plant is not sufficient to provide all the power necessary and the Edison connection will provide the deficit. Therefore, the amount of digester gas being produced will have to be monitored, and strategies adjusted as needed.

Related EOPs

O&M-EOP-102, Natural Gas Outage at Plant No. 1
O&M-EOP-202, Natural Gas Outage at Plant No. 2

Water Outage Plan

Objective

The intent of this plan is to provide guidelines for response to a major or prolonged water outage. It is assumed that minor outages will be handled using Emergency Operating Procedures (EOPs).

The following definitions apply to this plan and are intended as guidelines only. It is not necessary to reach the "threshold" of these definitions if management feels the situation warrants Incident Command System (ICS) activation.

- "Major outage" refers to a water outage affecting both plants or a combined outage of two or more types of water.

- "Prolonged outage" refers to an outage longer than 2 hours.

Overview of Processes

The three types of water used are:

- City water
- Reclaimed water
- Plant water

City Water

City water is provided by Fountain Valley for Plant No. 1 and by Huntington Beach for Plant No. 2. At Plant No. 1, city water is piped directly to the Administration Building, Human Resources, and Lab Building. The rest of the plant receives water through the City Water Pump Station, which is a safety feature to prevent sewage or other contaminated water from backing up into Fountain Valley's system. At Plant No. 2, the entire plant receives city water through its City Water Pump Station.

City (potable) water is washrooms, for eyewashes and showers, some landscaping irrigation, and for the fire protection system (sprinklers and standpipes). Process uses are for chemical mixing and makeup water for the Cen-Gen boilers and hot water loop.

Reclaimed Water

We receive reclaimed water from the Orange County Water District (OCWD) and in the winter months (November through March) from Irvine Ranch Water District (IRWD). From April through October, Plant No. 1 sends a portion of its secondary effluent to OCWD, which treats it and returns a portion of the treated water back to both plants as reclaimed water [the remainder of the treated water is used in the Green Acres Project (GAP)]. The IRWD reclaimed water is gravity fed from IRWD but still must go through OCWD to reach the plants. Reclaimed water enters Plant No. 1 property from OCWD and splits to provide water to both plants.

The primary use of reclaimed water is engine cooling at the Cen-Gen facilities at both plants. Reclaimed water is also used for some landscaping irrigation, as seal water for various pumps, and as scrubber make-up water.

Plant Water

Plant water is a product of the secondary treatment process and is cycled back into a variety of plant processes. It is primarily used for pump seals, cooling, belt press operation, and as hose down water.

Outage Scenarios

There are several possible scenarios of water outage of varying levels of likelihood and criticality. The length of the outage is a major factor as well. The longer the outage, the more critical the situation becomes.

This section discusses various outage scenarios to provide overall guidance as to the type of response that may be needed. Table 5C-1 shows the scenarios with recommendations for ICS activation. Generally, it is recommended that ICS activation be considered for a loss of any two or three of the water systems.

Any scenario combining loss of water with loss of electricity would be a more serious event and would require ICS activation.

Table 5C-1. Decision Matrix for Water Outage Scenarios

Scenario	ICS Activation Required?	Comments
Plant No. 1		
Loss of City Water Only	No	Loss of potable water will result in using the Plant warehouse drinking water supplies. Loss of water to the Cen-Gen boilers.
Loss of Reclaimed Water	No	It is more likely that both plants would lose reclaimed water concurrently. See below for both plants.
Loss of Plant Water Only	No	Reclaimed Water is backup for critical processes.
Loss of City Water plus Reclaimed Water	Yes, depending on cause and duration	
Loss of City Water plus Plant Water	Yes	
Loss of Reclaimed Water plus Plant Water	Yes	Severe process impact.
Loss of All Water Systems	Yes	Severe process impact.
Plant No. 2		
Loss of City Water Only	Yes	May impact Cen-Gen
Loss of Reclaimed Water Only	No	It is more likely that both plants would lose reclaimed water concurrently. See below for both plants.
Loss of Plant Water Only	No	Reclaimed Water is backup.
Loss of Reclaimed Water plus Plant Water	Yes	Severe process impact.
Loss of All Water Systems	Yes	Severe process impact

(continued)

Table 5C-1. Decision Matrix for Water Outage Scenarios (continued)

Scenario	ICS Activation Required?	Comments
Both Plants		
Loss of City Water Only	Yes	Assumes a catastrophic event caused both city water systems to fail.
Loss of Reclaimed Water Only	No	
Loss of Plant Water Only	No	Reclaimed Water is backup.
Loss of City Water plus Reclaimed Water	Yes	
Loss of City Water plus Plant Water	Yes	
Loss of Reclaimed Water plus Plant Water	Yes	Severe process impact.
Loss of All Water Systems	Yes	Severe process impact.

Plant No. 1

The following scenarios are possible at Plant No. 1:

- Loss of City Water only
- Loss of Reclaimed Water only
- Loss of Plant Water only
- Loss of City Water plus Reclaimed Water
- Loss of City Water plus Plant Water
- Loss of Reclaimed Water plus Plant Water
- Loss of all water systems

O&M-EOP-103, Water Outage at Plant No. 1, provides instructions for responding to each of these scenarios.

Loss of City Water Only

Generally, the loss of City Water only, and for a short period, is not an emergency and does not warrant an ICS activation. The cause and duration of such an outage will be investigated. For long-term outages, a limited ICS may need to be activated.

Loss of Reclaimed Water Only

Generally, the loss of Reclaimed Water only, and for a short period, is not an emergency and does not warrant ICS activation. Critical systems have backup to Plant Water. Reduction in the use of Plant Water will be necessary because there is not a 100% replacement of water supply between the two systems. In addition, some manual switching to Plant Water will need to occur.

Loss of Plant Water Only	Generally, the loss of Plant Water only, and for a short period, is not an emergency and does not warrant ICS activation. Critical systems have backup to Reclaimed Water. Reduction in the use of Reclaimed Water will be necessary because there is not a 100% replacement of water supply between the two systems. In addition, some manual switching to Reclaimed Water will need to occur.
Loss of City Water plus Reclaimed Water	The loss of these two water systems is an emergency situation requiring ICS activation. Although the loss of Reclaimed Water can be handled with backup to Plant Water, the loss of City Water and Reclaimed Water concurrently places plant operation at high risk.
Loss of City Water plus Plant Water	The loss of these two water systems is an emergency situation requiring ICS activation. Although the loss of Plant Water can be handled with backup to Reclaimed Water, the loss of City Water and Plant Water concurrently places plant operation at high risk.
Loss of Reclaimed Water plus Plant Water	The loss of these two water systems is an emergency situation requiring ICS activation because these two systems provide seal water and cooling water to a variety of process applications.
Loss of All Water Systems	The loss of all water systems is most serious and is an emergency situation requiring ICS activation. This scenario is a rare occurrence and would probably be the result of a catastrophic event such as an earthquake. The cause and duration of the event as well as data collected concerning the cause of the outage will dictate the operational response strategy. Actions detailed in the EOPs for the loss of each system and combinations thereof will be consulted to develop an operational response strategy.

Plant No. 2

The following scenarios are possible at Plant No. 1:

- Loss of City Water only
- Loss of Reclaimed Water only
- Loss of Plant Water only
- Loss of Reclaimed Water plus Plant Water
- Loss of all water systems

O&M-EOP-203, Water Outage at Plant No. 2, provides instructions for responding to each of these scenarios.

Loss of City Water Only

Generally, the loss of City Water only, and for a short period, is not an emergency and does not warrant an ICS activation. The cause and duration of such an outage will be investigated. For long-term outages, a limited ICS may need to be activated.

Loss of Reclaimed Water Only

Generally, the loss of Reclaimed Water only, and for a short period, is not an emergency and does not warrant ICS activation. Critical systems have backup to Plant Water. Reduction in the use of Plant Water will be necessary because there is not a 100% replacement of water supply between the two systems. In addition, some manual switching to Plant Water will need to occur.

Loss of Plant Water Only

Generally, the loss of Plant Water only, and for a short period, is not an emergency and does not warrant ICS activation. Critical systems have backup to Reclaimed Water. Reduction in the use of Reclaimed Water will be necessary because there is not a 100% replacement of water supply between the two systems. In addition, some manual switching to Reclaimed Water will need to occur.

Loss of Reclaimed Water plus Plant Water

The loss of these two water systems is an emergency situation requiring ICS activation because these two systems provide seal water and cooling water to a variety of process applications. Although the primary recovery goal of pumping water through the plant can be achieved, no secondary treatment is possible. If the outage is for an extended period, there is the possibility of the loss of Cen-Gen, and the gas compressors will have to be shut down. Regulatory notifications will also have to be made.

Loss of All Water Systems

The loss of all water systems is most serious and is an emergency situation requiring ICS activation. This scenario is a rare occurrence and would probably be the result of a catastrophic event such as an earthquake.

The cause and duration of the event as well as data collected concerning the cause of the outage will dictate the operational response strategy. Actions detailed in the EOPs for the loss of each system and combinations thereof will be consulted to develop an operational response strategy.

Both Plants

The following scenarios are possible at both plants simultaneously:

- Loss of City Water only
- Loss of Reclaimed Water only
- Loss of Plant Water only
- Loss of City Water plus Reclaimed Water
- Loss of City Water plus Plant Water
- Loss of Reclaimed Water plus Plant Water
- Loss of all water systems

O&M-EOP-103, Water Outage at Plant No. 1, and O&M-EOP-203, Water Outage at Plant No. 2 provide instructions for responding to these scenarios at the each plant.

Loss of City Water

The loss of City Water to both plants is an emergency and warrants ICS activation. This event is a rare occasion and would probably be the result of a catastrophic event.

The cause and duration of the event as well as data collected concerning the cause of the outage will dictate the operational response strategy.

Loss of Reclaimed Water Only

Generally, the loss of Reclaimed Water only, and for a short period, is not an emergency and does not warrant an ICS activation. Critical systems have backup to Plant Water. However, if the loss of Reclaimed Water was caused by a catastrophic event such as an earthquake, an ICS activation will be required.

Loss of Plant Water Only

Generally, the loss of Plant Water only at both plants, and for a short period, is not an emergency and does not warrant an ICS activation.

Critical systems have backup to Reclaimed Water.

Loss of City Water plus Reclaimed Water

The loss of these two water systems at both plants is an emergency situation requiring ICS activation. Although the loss of Reclaimed Water can be handled with backup to Plant Water, the loss of City Water and Reclaimed concurrently places plant operation at high risk.

Loss of City Water plus Plant Water

The loss of these two water systems at both plants is an emergency situation requiring ICS activation. Although the loss of Plant Water can be handled with backup to Reclaimed Water, the loss of City Water and Plant Water concurrently places plant operation at high risk.

Loss of City Water to both plants is rare and would probably be the result of a catastrophic event.

Loss of Reclaimed Water plus Plant Water

The loss of these two water systems at both plants is an emergency situation requiring ICS activation because these systems back up each other. The loss of these systems will have severe process impact.

Loss of All Water Systems

The loss of all water systems at both plants is most serious and is an emergency situation requiring ICS activation. This scenario is a rare occurrence and would probably be the result of a catastrophic event.

The cause and duration of the event as well as data collected concerning the cause of the outage will dictate the operational response strategy. Actions detailed in the EOPs for the loss of each system and combinations thereof will be consulted to develop an operational response strategy.

Operational Strategies

Operational strategies are presented here for the scenarios most likely requiring ICS activation. The strategies for individual plants are also included in the respective EOPs.

Plant No. 1

Table 5C-2 shows the critical plant systems and processes and their primary and secondary water source.

Table 5C-2. Plant No. 1 Critical Systems and Water Sources

Area Listed by Criticality	Primary Supply*	First Backup*
Headworks 2	PLT	RECL
Headworks 1	RECL	PLT
Gas Compressors	PLT	RECL
Cen-Gen	RECL	PLT
Plant Water Station	SS	
Cen-Gen (Boilers)	CW	
Blowers 1, 2, 4, 5	PLT	RECL
Belt Filter Presses	PLT	
Polymer	CW	
City Water	SS	
RAS Pumps	PLT	RECL
WAS Pumps	PLT	RECL
PEPS	SS	
Scrubbers – Headworks	RECL	PLT
Scrubbers - Primary	RECL	PLT
Hot Water Loop	CW	
RSPs	PLT	
Digester Circ. Pumps	PLT	
DAF Recycle Pumps	PLT	
Fire Suppression System (Sprinklers)	CW	
Safety Showers/ Eye Wash	CW	
HVAC in Control Center	CW	
HVA C from Chiller Bldg (Feeds Lab)	CW	

*CW = City Water; PLT = Plant Water; RECL = Reclaimed Water; SS = self-supplied.

Loss of City Water plus Reclaimed Water	The operational strategy is to reduce the use of City Water and switch to Plant Water as the backup to Reclaimed Water. The use of Reclaimed Water must also be reduced because there is not a 100% supply backup.
Loss of City Water plus Plant Water	The operational strategy is to reduce the use of City Water and switch to Reclaimed Water as the backup to Plant Water. The use of Plant Water must also be reduced because there is not a 100% supply backup.
Loss of Reclaimed Water plus Plant Water	The operational strategy is to divert as much flow as possible to Plant No. 2, assuming they are operating normally. It is possible to continue to pump water through Plant No. 1, but no secondary treatment is possible except for the trickling filters. If the outage is for an extended period, Cen-Gen and the gas compressors will be lost due to lack of cooling water. Regulatory notifications will also have to be made because of potential permit violations.
Loss of All Water Systems	The operational strategy is to divert as much flow as possible to Plant No. 2, assuming they are operating normally, and to conserve City Water in storage tanks by reducing usage. It is possible to continue to pump water through Plant No. 1, but no secondary treatment is possible except for the trickling filters. If the outage is for an extended period, Cen-Gen and the gas compressors will be lost due to lack of cooling water. Regulatory notifications will also have to be made because of potential permit violations.

Plant No. 2

Table 5C-3 shows the critical plant systems and processes and their primary and secondary water source.

Table 5C-3. Plant No. 2 Critical Systems and Water Sources

Area Listed by Criticality	Primary Supply*	First Backup*
C Headworks	RECL	PLT
B Headworks (Phlanz)	PLT	
OOBS	PLT	RECL
HVAC	RECL	PLT
Gas Compressors	PLT	
Cen-Gen	RECL	PLT
Plant Water Station	SS	
Cen-Gen (Boilers)	CW	
Foster	SS	
Foster Heat Exchanger	CW	
Auxiliary Plant Water Pumps	SS	
City Water	SS	
Main Air Compressors (O_2) + Vaporizers	PLT	Hi Low
RAS Pumps	PLT	
WAS Pumps	PLT	
PEPS	SS	
North Scrubbers	RECL	PLT
South Scrubbers	PLT	
Hot Water Loop	CW	
Mixing Tanks at Phys-Chem	CW	
Dewatering Polymer Mixing	CW	
RSPs	PLT	
Digester Circ Pumps	PLT	
DAF Recycle Pumps	CW	
Phys. Chem Dilution	CW	

*CW = City Water; PLT = Plant Water; RECL = Reclaimed Water; SS = Self-Supplied.

Loss of City Water plus Reclaimed Water	The operational strategy is to reduce the use of City Water and switch to Plant Water as the backup to Reclaimed Water. The use of Reclaimed Water must also be reduced because there is not a 100% supply backup.
Loss of City Water plus Plant Water	The operational strategy is to reduce the use of City Water and switch to Reclaimed Water as the backup to Plant Water. The use of Plant Water must also be reduced because there is not a 100% supply backup.
Loss of Reclaimed Water plus Plant Water	The operational strategy is to continue to pump water through the plant, but no secondary treatment is possible. The Foster pumps can operate without plant and reclaimed water. If the outage is for an extended period, Cen-Gen and the gas compressors will be lost due to lack of cooling water. Regulatory notifications will also have to be made because of potential permit violations.
Loss of All Water Systems	The operational strategy is to conserve City Water in storage tanks by reducing usage and to pump water through the plant, but no secondary treatment is possible. OOBS has one pump (#5) with a mechanical seal. The Foster pumps can operate without plant and reclaimed water. If the outage is for an extended period, Cen-Gen and the gas compressors will be lost due to lack of cooling water. Regulatory notifications will also have to be made because of potential permit violations.

Related EOPs

O&M-EOP-103, Water Outage at Plant No. 1
O&M-EOP-203, Water Outage at Plant No. 2

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6. High Flow Emergency Response Plan

Purpose and Scope

This plan provides specific information and instructions to support OCSD's response to high influent wastewater flows. The Incident Command System (ICS) applies to many of these situations; therefore, the specific preparation and response actions described in this plan are performed by personnel both prior to and after activation of the ICS..

This plan is designed to provide goals, strategies, guidelines, and specific actions that may be taken, but it is also intended to be applied with flexibility by technically knowledgeable personnel in accordance with the specific situation.

While the plan was designed to prepare for and respond to weather-related high flow events during the winter season (October 15 through April 15), it may also be used anytime there is a process event that causes conditions similar to a high flow event.

This plan addresses the Collection System, Plant No. 1, and Plant No. 2. This plan coordinates with the Joint Standard Operating Procedure (SOP) entitled "GWRS High Flow Response Plan" for the Orange County Water District (OCWD) Groundwater Replenishment System (GWRS), which is a significant component of the OCSD High Flow Emergency Response Plan. The GWRS Advanced Water Purification Facility (AWPF) can discharge up to 100 MGD of microfiltered, disinfected effluent to the Santa Ana River under OCWD's permit to reduce OCSD's ocean discharge and provide peak wet weather flow relief for the outfall. The Joint SOP contains specific information for coordination between OCSD and OCWD during peak flow events. Both the Joint SOP and this plan are organized according to the color codes shown in Table 6-1. The codes are "soft triggers" designed to better coordinate the response; however, onsite supervision has the option to call a code before a specific trigger point is reached and to also modify

the response specified in the code as needed based on their judgment. Once a code is called, it applies to all four facilities: Collection System, Plant No. 1, Plant No. 2, and GWRS.

As shown in Table 6-1, a limited ICS is activated in Code Yellow. The ICS organization expands in succeeding codes. Table 6-2 provides the philosophy of operation for each code.

Table 6-1. Color Code Definitions

Code	General Condition	Response Staffing
Blue	• A storm expected to have 1 inch or more of rain is forecast to occur within 3 days or the upcoming weekend.	• Normal shift staffing. • Establish Storm Watch list and implement portions if necessary. • Notify OCWD of Code Blue.
Yellow	• Collection System: All duty pumps are running at any pump station. • Plant No. 1: 50 MGD (with all primary basins available) above normal for the time of day with the expectation that the flow will increase considering the normal diurnal patterns and/or rainfall rate. • Plant No. 2: 75 MGD (with all primary basins available) above normal for the time of day with the expectation that the flow will increase considering the normal diurnal patterns and/or rainfall rate. • Outfall: 30 MGD above normal for the time of day with the expectation that the flow will increase considering the normal diurnal patterns and/or rainfall rate.	• Activate Storm Watch and Standby level. • Notify OCWD of Code Yellow and request that they maximize their barrier and basin discharge and also discuss the potential to request initiation of a SAR discharge • Limited ICS Organization to maintain operational status and preparation status.

Code	General Condition	Response Staffing
Orange	• Collection System and both Plants No. 1 and No. 2 flows/levels increasing toward maximum. Use of storage possible or probable.	• Full ICS Organization activated • Notify OCWD of Code Orange to continue to maximize production in the Normal Recycled Water Production Mode unless requested by OCSD to switch to the Santa Ana River Discharge Mode. Keep in mind that this request must be made several hours prior to needing the discharge to SAR so we must sufficient outfall capacity for this time period.
Red	• The flow has exceeded the capacity of the 120-inch outfall system, and very limited or no storage is available. Containment of wastewater anywhere in the Collection System has been lost.	• Full ICS Organization Activation • Notify OCWD of Code Red to continue in the Normal Recycled Water Production Mode unless requested by OCSD to switch to the Santa Ana River Discharge Mode. This cannot be accomplished now unless Plant No. One has reserved some final clarifiers for storage of the plant effluent while OCWD prepares for switching to SAR.

Code	General Condition	Response Staffing
Purple	• Collection System: Duty pumps at the pump stations and gravity sewers are below capacity. • Plant No. 1: Storage is no longer needed and the flow is expected to decrease, draining emergency storage can commence. • Plant No. 2: Storage is no longer needed and the flow is expected to decrease, draining emergency storage can commence. • Outfall: Flow has decreased to 375 MGD with the expectation that the decrease will continue.	• ICS Organization can begin demobilizing with transition to normal shift staffing • Notify OCWD of Code Purple to return to the normal Recycled Water Production Mode and or transition the GWRS from Santa Ana River discharge to normal (if OCWD switched over to the Santa Ana River Discharge Mode).

Table 6-2. Color Code Philosophies

Code	Philosophy
Blue	Code Blue is the preparation phase. This code is generally initiated by either of the Chief Plant Operators and implemented to ensure that Plants No. One and No. Two and Collection System as well as the OCWD GWRS have the resources available or ready to put in place to rapidly and efficiently move to Codes Yellow, Orange, and Red as needed. Activities may include double checking all wet weather preparation activities, creating storage in the Collection System and any additional storage needed in both plants as needed. OCWD may need to prepare the GWRS process to handle peak flows.
Yellow	Code Yellow is the "threat" phase. The rainfall event has delivered the predicted quantities (or more) of precipitation, and increasing flow rates are expected. This code is called when the incoming flow levels, combined with the normal time of day diurnal flow patterns, indicate that there is a real possibility or probability of needing to move to Code Orange because we will need to use storage options. Collection System storage, if not already created in Code Blue, will be created in this phase. Code Yellow will prompt a further evaluation of storm intensity and a discussion with OCWD staff on the likelihood of requiring them to prepare GWRS to commence the Santa Ana River discharge to provide up to 100 MGD of flow relief for the OCSD 120-inch ocean outfall. Until OCSD directs OCWD to commence the Santa Ana River discharge, OCWD continues to maximize their water production and discharge to barrier and basins.
Orange	Code Orange is the high flow management and storage utilization phase. This code is called when the incoming flows are high enough and the expected normal diurnal flow pattern is either on the increase or is expected to continue. Therefore, storage capacities in both plants and the Collection System will likely be used to prevent or delay a Code Red. OCWD continues to operate the GWRS AWPF at maximum flow rate and maintains readiness to switch to the Santa Ana River Discharge Mode if requested by OCSD.

Code	Philosophy
Red	In the Code Red phase, most if not all storage in both plants and the Collection System has been used and the incoming flow is either expected to continue to increase or stay at a high level. In addition, the normal diurnal flow pattern is not yet at its daily peak or it is expected to remain at peak, and use of the 78-inch one mile outfall is being discussed in the ICS.. In the Collection System, some portion or portions of the system are surcharged and could be overflowing or very close to overflowing to the streets and the storm drain system. OCWD will either be in the Santa Ana River Discharge Mode or at maximum flow rate in the Normal Recycled Water Production Mode. This phase also includes the last option of letting the outfall termination channel overflow to the Santa Ana river via the Serial Discharge 003 discharge points to protect Plant No. 2 from flooding.
Purple	Code Purple is the phase when staffing and operations return to normal or to Code Blue activities from Yellow, Orange, or Red. OCWD may return to normal production or cease the GWRS discharge to the Santa Ana River

Calling a high flow *emergency*

The Chief Plant Operator at Plant No. 1 calls Code Blue. The Operations Manager calls Code Yellow. The Incident Commander or designee calls Codes Orange, Red, and Purple. All Color Codes indicating a high flow emergency are communicated and discussed with OCWD to clearly state our expectation for their response, OCWD will continue to operate as agreed and will remain ready to respond.

Operational Goal and Strategies

To achieve OCSD's mission to maintain public health and the environment, the overall operational goal of this plan is to accommodate all high flows by using the 120-inch outfall and OCWD GWRS Santa Ana River discharge and to avoid using the 78-inch outfall or the Santa Ana River emergency outlet. If either the 78-inch outfall or the Santa Ana River is used, the goal is to return to using only the 120-inch outfall as soon as possible. Similarly, if the GWRS Santa Ana River discharge is used, the goal is to return the AWPF to normal recycled water production as soon as possible. The discharges are also numbered by priority as shown in Table 6-3.

Table 6-3. Serial Discharges

Priority	Discharge Name	Serial Discharge No.
1	120-inch outfall	OCSD No. 001
2	GWRS Santa Ana River discharge	OCWD permit
3	78-inch outfall	OCSD No. 002
4	Santa Ana River emergency outlet	OCSD No. 003

To support the overall operational goal, the following are major operational strategies to be used before, during, and after the event.

1. Prepare the Collection System, Plant No. 1, Plant No. 2, and GWRS AWPF to accept maximum storm flows before the event.

2. Continuously monitor rainfall gauges throughout the service area and Collection System performance to identify:

   a. Trunklines and pump stations that will be affected
   b. Relative flow rate impact of the rainfall accumulation rate
   c. Approximate time until flow "peak" arrives at the plants

3. Continuously monitor influent flowmeters and wetwell levels at both treatment plants and use the data to determine the expected flow rate to the outfall pumping system. Monitor water surface elevations and flow in the Santa Ana River, dam release rates, and tide levels.

4. Maintain the Collection System storage by maintaining both Plant No. 1 and Plant No. 2 wetwells at their lowest possible levels. In other words, pump influent into the plants at the same rate or slightly higher than the rate at which it is flowing into the headworks of the plants, up to the maximum hydraulic flow-through capacities; hold Collection System storage for as long as possible.

5. Use strategies for storage that will keep both plants operating at the maximum capacity of the 120-inch outfall system while reserving the GWRS AWPF discharge of up to 100 MGD to the Santa Ana River until it is deemed necessary to reduce the potential for using the 78-inch outfall or the Santa Ana River.

6. Store flow from the "bottom" of the wastewater system (OOBS and EPSA wetwells) to the "top" of the system (Collection System).

7. Maximize the use of onsite generation for power needs. The goal is to reduce our reliance on Edison for power.

Figures 6-1 and 6-2 show the major hydraulic flow-through structures for Plant No. 1 and Plant No. 2. These diagrams can be used with the goals and strategies as well as with the detailed procedures.

Note: All figures referenced are located at the end of the plan.

ICS Organization for High Flow Emergency

A limited ICS organization is activated during Code Yellow to ensure that operational and preparation status information is available and up to date in the event a larger ICS structure is needed in Code Orange. Generally, members of the Planning Branch (Situation Unit Leader, Technical Specialists) will be activated to work with the Response Operations Section Chief (Operations Manager) at this stage.

The limited ICS Organization activated in Code Yellow is expanded when a Code Orange condition is imminent. The nature and severity of the condition will dictate the ICS organization activated. A widespread condition affecting all facilities will necessitate activation of Branch Directors (Collection System, Plant No. 1, and Plant No. 2) reporting to the Incident Commander or the Response Operations Section Chief if activated. These Branch Directors will activate staff as needed to handle the emergency. For a more localized condition (at one plant), the Incident Commander may be the Chief Plant Operator or designee, who will activate staff as needed. In any activation, the Incident Commander may need to activate other positions such as the Public Information Officer.

Chapters in the IERP related to the ICS are:

- Volume I, Emergency Preparedness
  - Chapter 2, Incident Command System
- Volume II, Emergency Plans and Procedures
  - Chapter 1, ICS Position Callouts
  - Appendix A, ICS Position Checklists

Specifically for high flow emergencies, references and technical data such as tide programs and storage tables will be available in the Emergency Operations Center (EOC) at the Control Center. Appendix 7A contains a list of these items.

Because the activation of the ICS Organization is customized to each event, this plan assumes that the functional responsibilities named in the plan will be performed by the appropriate ICS position once the position is activated. For example, a function to be performed by "Purchasing" will be performed by the Logistics Section under the ICS.

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Collection System High Flow Emergency Procedures

This section discusses the goals; special tools, equipment, and material; prerequisites; and specific steps performed by the Regional Assets and Services Division (RASD) for each condition code.

Goals

In addition to the operational goal and strategies presented earlier, the major operating goals for RASD are to:

- Keep gravity sewers and pump stations online.
- Ensure critical pump stations in District 5 remain in operation.

Special Tools, Equipment, and Material

Special items that may be needed are:

- Personal Protective Equipment
- Rain gear, gloves, rubber boots
- Radios, pagers, and cell phones with extra batteries
- Flashlights with extra batteries
- Sandbags: minimum of three pallets (300 count)
- Delineators/warning tape
- High-visibility vests/cold weather jackets
- Road flares
- Portable air compressor
- Portable generators with extra fuel
- Gas detectors
- Two 100-foot electrical cords
- Change of clothing and coveralls
- Arrow boards for traffic control
- Picks, sledgehammer, manhole pullers, and hand tools kit
- Mobile field office (optional)
- Trailer-mounted, six-inch bypass discharge pump with hose
- Trailer-mounted, portable three-inch submersible pump with discharge hoses
- Digital camera with extra batteries

Prerequisites

1. Ensure blanket purchase orders (POs) are in place for all major contractors and suppliers.

2. Complete normal maintenance and remove related tools and debris.

3. Coordinate with Electrical Division to ensure that all standby electrical generators are in place and operational.

4. Coordinate with Fleet Services to have fuel for generators available at the pump stations.

5. Have Source Control provide a list of all dewatering permits for possible notification to stop dewatering in Code Yellow.

6. Coordinate with Construction Management to develop a list of all construction projects of member cities and sewer agencies that may add to or interfere with flow in the Collection System.

7. When inspecting or working in easement areas during the rainy season, use caution with vehicles due to possible muddy conditions.

Code Blue

Condition

A storm expected to have 1 inch or more of rain is forecast to occur within 3 days or the upcoming weekend.

Staffing

- Normal shift staffing.
- Establish Storm Watch list and implement if necessary.

Prepare for high flow.

The RASD Director ensures that the following steps are performed:

1. Inform appropriate employees of the Code Blue activation.
2. Establish and activate the Storm Watch list for this event.
3. Alert staff in RASD and coordinate with Source Control staff for additional coverage in the field (if deemed necessary).
4. Coordinating with Construction Management and Maintenance Divisions, gather data on the status of equipment, pump stations, and trunklines to ensure readiness. Identify level of effort and time needed to remove construction equipment and materials from pipelines and pump stations. Identify temporary protection needs.
5. Ensure that all O&M and Engineering requests for modifications to diversion structure boards are complete.
6. Verify all sealed manholes in flood-prone areas are secured.
7. Have Source Control update the list of dewatering permits for possible notification to stop dewatering in Code Yellow.
8. Coordinate with Construction Management to update the list of construction projects of member cities and sewer agencies that may add to or interfere with flow in the Collection System.
9. Have Purchasing call contractors and vendors to obtain status of availability of such equipment and supplies as vacuum pumpers.
10. Have Purchasing buy sandbags and have them delivered.

11. Test pump flow capacity in all pump stations as follows:

    a. Perform a pumpdown.
    b. Check on/off levels.
    c. Ensure proper pump sequence.
    d. Ensure all indicating alarms are working.
    e. Ensure all valves are working.

12. Inspect easement areas to ensure accessibility.

Code Yellow

Condition	All duty pumps are running at any pump station.
Staffing	Limited ICS organization and Storm Watch and Standby List activated. As necessary, the actions performed in this code are continued until the event is over. The RASD Director ensures that the following steps are completed:
	1. Ensure appropriate OCSD employees are notified of Code Yellow activation.
Ensure availability of equipment, material, and staff.	2. If not already done so in Code Blue, activate Storm Watch list. Establish extra standby personnel as needed for 24-hour coverage.
	3. Ensure Fleet Services has dedicated a person to support RASD.
	4. Install plywood and sandbag around the entrances to the 14th Street, Bitter Point, and Crystal Cove Pump Stations to approximately 2 feet in height.
	5. Verify all equipment and materials are available.
	6. Have Purchasing reverify with contractors and vendors the availability of such equipment and supplies as vacuum pumpers.
Monitor weather and rainfall data.	7. Monitor weather forecasts.
	8. Monitor data from Orange County rain gauges from the NOAA website.
Make notifications as necessary.	9. Notify Construction Management to have OCSD contractors and desalters prepare to stop work and remove equipment from pipelines and pump stations. Request a time estimate as to how long the contractors need to stop work, remove equipment, and provide temporary protection once notified.

Collection System
Code Yellow

10. Notify Source Control, Air Quality & Special Projects, and Design Engineering to be prepared to pull as many monitors as possible from sewer lines and structures.

11. Notify member cities and sewer agencies to secure any ongoing sewage construction projects and plug any new piping to prevent rainwater inflow to the Collection System.

Caution for Step 12: Atmosphere beneath the manhole may contain toxic gases:

12. If requested by Plant No. 1 or Plant No. 2 to observe manholes, first test for gases. If atmospheric levels are acceptable, open manhole to observe level. Do not leave manhole open.

Monitor wastewater flows.

13. Monitor individual trunk flowmeters and pump station data and communicate with Operations Manager.

14. Compare historical trends for each trunk from "same day of week" data for the four previous weeks. This data will be used to analyze the impact of inflow/infiltration on the treatment plant flows.

Collection System
Code Orange

Code Orange

Condition

Collection System and plant(s) flows/levels increasing toward maximum. Use of storage possible or probable.

Staffing

ICS Organization

Monitor system.

1. Monitor the spill-prone manholes. If needed, sandbag and delineate around the most spill-prone manholes.

2. Visually monitor:

   - Sunflower trunk level
   - District 5 and 7 pump stations
   - Santa Ana River Interceptor (SARI) level at the sluice gate in Yorba Linda

3. Monitor all pump stations to determine surcharge condition and the need for emergency power.

4. Notify ECM contact person (ICS Liaison Officer if activated) of the Collection System status and the potential for imminent loss of containment.

5. If needed, coordinate with contractors.

Collection System
Code Orange

(blank)

Code Red

Condition

The flow has exceeded the capacity of the 120-inch outfall system, and no storage is available. Containment of wastewater at any point in the Collection System has been lost.

Staffing

ICS Organization

1. For any sewage spill:

   a. Refer to IERP, Volume II, Chapter 17, External Notifications, for notification instructions. Coordinate notifications with ICS Liaison Officer if activated or ECM contact person.

   b. Follow the Sanitary Sewer Overflow procedure.

2. If the Collection System is taking inflow from the Santa Ana River:

   a. Contact Operations Section Chief for permission to close the SARI sluice gate.

   b. Notify the Regional Water Quality Control Board and Orange County Health Care Agency when the gate is closed. Coordinate notifications with ICS Liaison Officer if activated or ECM contact person.

   c. Refer to SARI Line Emergency Response Plan (ERP) for actions to be taken.

3. Continue applicable Code Yellow and Code Orange operations.

Collection System
Code Red

(blank)

Collection System
Code Purple

Code Purple

Condition	Duty pumps at the pump stations and gravity sewers are below capacity.
Staffing	ICS Organization with transition to normal shift staffing.
Perform checks and return to normal operations.	1. Incident Commander or Branch Director ensures OCSD employees are notified of Code Purple activation. 2. Continue to monitor manholes, removing sandbags and delineators as needed. 3. Ensure all diversion boards are in place. 4. Check all major trunk systems for properly seated manhole covers. 5. Clean up sewage debris as required in roadway, trunklines, and pump stations and take debris to Plant No. 1 and/or Plant No. 2. 6. Inspect all pump stations and make repairs as needed. 7. Return to normal operations if there is no immediate forecast for rain. Otherwise, return to the appropriate code.

Collection System
Code Purple

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Plant No. 1 High Flow Emergency Procedures

This section discusses Plant No. 1's overall operating goals; special tools, equipment, and material; prerequisites; and specific steps for each condition code.

Goals

In addition to the operational goal and strategies presented earlier, the major operating goals for Plant No. 1 are to:

- Keep the trunklines as low as possible by a combination of diverting flows and pumping into Plant No. 1.
- Maintain a headworks wetwell level of not more than 13 feet as long as possible to keep the trunklines low, obtain a head start on recovery from the event, and avoid equipment problems that could cause loss of the wetwell. If Headworks No. 1 is online, **do not** let the wetwell level go below 12 feet to avoid cavitation.
- When possible, assist Plant No. 2 and ocean outfall in handling flows by using a combination of taking in more flow or using storage to reduce effluent flow from Plant No. 1 to the outfall system.
- Provide secondary effluent to the OCWD GWRS for production of up to 70 MGD of recycled water or for tertiary treatment and disinfection for discharge of up to 100 MGD (net) to the Santa Ana River.

Special Tools, Equipment, and Material

Special items that may be needed are:

- Rain gear, gloves, rubber boots
- Radios with extra batteries
- Cellular phones
- Flashlights with extra batteries
- Puller for manhole covers
- Portable (pneumatic, hydraulic and/or gasoline powered) gate operator where required

- Sandbags
- Delineators/warning tape
- High-visibility vests
- Road flares
- Portable air compressor
- Portable generators
- Portable sump pumps
- Extra grit bins
- Crane with rubber tires
- Portable submersible pump

Prerequisites

1. Ensure normal winter preparations and the Storm Watch Preparation Checklist are completed.

2. Request Construction Management and Maintenance Divisions to maintain a list of all ongoing OCSD maintenance or construction work that may be affected by or affect the ability to handle high flow.

3. Request Construction Management to ready all construction sites for anticipated rainfall events.

Plant No. 1
Code Blue

Code Blue

Condition

A storm expected to have 1 inch or more of rain is forecast to occur within 3 days or the upcoming weekend.

Staffing

- Normal shift staffing
- Establish Storm Watch list and implement if necessary.

Because the ICS Organization is not activated until Code Orange, the Chief Plant Operator or designee ensures that the following steps are performed:

1. Inform appropriate employees of the Code Blue activation.

2. Verify current year Storm Watch Preparation Checklist is completed.

Notify OCWD.

3. Notify OCWD of Code Blue and discuss their ability to maximize production or prepare GWRS for possible Santa Ana River discharge. (See GWRS High Flow Procedures herein and Joint SOP "GWRS Santa Ana River Discharge".)

Prepare for high flow.

4. Minimize maintenance downtimes for all in-plant pumping systems and Cen-Gen engines.

5. Check with Construction Management and Maintenance Divisions to obtain an updated list of all ongoing OCSD maintenance or construction work that may be affected by or affect the ability to handle high flow.

6. Verify the flow path through Headworks No. 1 is OPEN (see Figure 6-3). **Operational Note:** Typically, Gate L is left closed until Headworks No. 1 is ready to start up due to potential of backflow into the headworks.

7. Verify all pumps at the Primary Effluent Pumping Station (PEPS) are operational.

8. Verify all MSPs are operational.

9. Verify WSSPS #1 and #2 pumps and plant sump pumps are

Plant No. 1
Code Blue

operational.

10. Verify catch basins and storm water collection drains are free and clear of debris.

11. To prevent sump filter screens from clogging, verify all tunnels are clear and free of debris.

12. Ensure sufficient fuel inventory is on hand for stationary and portable equipment.

13. Ensure a crane is available and dedicated for Plant No. 1 response.

14. Ensure standby crane operators are available.

15. Designate and empty any available PSBs 6 through 31 for standby use. If possible, select basins that are on opposite sides.

16. At Effluent Junction Box (EJB) No. 1, ensure 120-inch line is OPEN, then close gates to 66-inch and 84-inch interplant line (see Figure 6-4). Inform Plant No. 2.

17. Designate and empty (pump) any available Secondary Clarifiers 1 through 34.

18. Designate and empty (pump) one Aeration Basin on each side on both AS1 and AS2 if possible.

19. Open and check the Army Corp Engineering Prado Dam release Web page is running normal.

20. Check Green River meter and SARI Gate controls and flow meters and communication are running normal.

Plant No. 1
Code Yellow

Code Yellow

Condition

- 50 MGD above normal for the time of day with the expectation that the flow will increase considering the normal diurnal patterns and/or rainfall rate.

- Outfall: 30 MGD above normal for the time of day with the expectation that the flow will increase considering the normal diurnal patterns and/or rainfall rate.

Staffing

Limited ICS organization and Storm Watch and Standby List activated as needed.

As necessary, the actions performed in this code are continued until the event is over. Generally, the Chief Plant Operator or designee ensures that the following steps are completed.

1. Ensure employees are notified of Code Yellow activation.

Monitor Critical Pump Stations

2. Monitor critical pump stations, especially Main Street Pump Station.

Notify OCWD.

3. Notify OCWD of Code Yellow and coordinate with OCWD as before, OCWD maximizing water production but not activating SAR discharge. (See GWRS High Flow Procedures herein and Joint SOP "GWRS Santa Ana River Discharge".)

Ensure availability of equipment, material, and staff.

4. Establish extra standby personnel as needed for 24-hour coverage over and above the Storm Watch and Standby list if warranted.

5. Verify all equipment and materials are available. Refer to the Special Tools, Equipment, and Material section above.

6. Ensure permanent emergency generators are available and operational.

7. If dedicated crane is not available for Plant No. 1, arrange for rental crane.

8. Verify A-frame is at Metering and Diversion Structure (M&D).

Plant No. 1
Code Yellow

9. Verify standby storage basins are ready to be utilized.

Make notifications as necessary.

10. Notify Construction Management to have OCSD contractors prepare to stop work and remove equipment from pipelines, basins, etc. Request a time estimate as to how long the contractors need to stop work and remove equipment once notified. Request that contractors secure all open trenches with traffic plates.

Monitor power usage.

11. Monitor electrical usage and availability (Cen-Gen operators).

12. Continuously evaluate electrical needs and direct that all nonessential electrical loads be shut down. Perform the Plant No. 1 Load Shedding Procedure if needed.

Monitor wastewater flows.

13. Continuously monitor individual trunk flowmeter and level readings and pump station status.

14. Compare historical trends for each trunkline from "same day of week" data for the four previous weeks. This data will be used to analyze the impact of inflow/infiltration on the treatment plant flows.

15. Continuously monitor weather forecast, rain gauge telemetry information, and available influent storage options.

Precautions during high flows

Notes:

- Monitor the Prado Dam release flow and level also Green River meter and SARI gate flows.
- Monitor critical pump stations, especially Main Street Pump Station.
- The steps in this plan involve changes in normal flow patterns. Consider the following when making the changes:
  - Make all flow changes with care and record the changes made.
  - Monitor the effect of any change, particularly any increase in influent flow or splitter box adjustment, before making another change.
  - Add barscreens and grit chambers before adding extra flow rate

Plant No. 1
Code Yellow

to avoid overflow in the Headworks area.

- For any increase in influent pumping or the addition of extra pumps, carefully observe the PSBs' effluent launders levels. If needed to balance the flow, adjust influent splitter box gates.
- Use caution when returning to normal flows and distribution.

- During the event, increase rounds and checks in all areas with special attention to ground lights and tunnel sumps.

- Ensure that all open trenches (due to construction) are covered or delineated.

- Operate Phys-Chem throughout the event, but do not increase to match flows.

- Odors may increase initially due to the system being flushed out and higher turbulence. Operate and monitor foul air scrubbers throughout the event. Odors may be less evident as the storm flows dilute the influent.

Configure plant for high flow and make adjustments as necessary.

During Code Yellow, plant configurations and adjustments for high flow may be needed at the following:

- M&D Structure/Headworks/Sunflower Pump Station
- PSBs
- Activated Sludge (A.S.) Plant

As needed, continue these operations until the event is over.

Plant No. 1
Code Yellow

M&D Structure/ Headworks/ Sunflower

1. Maintain Plant No. 1 normal hydraulic flow control for as long as possible. As the flow rates into the plant increase and the plant is nearing maximum, gradually divert flow to P-2 if given clearance from Plant No. Two staff or the ICS. Discuss the impacts of SALS flows with Plant No.2 staff

    a. Maintain control of the headworks wetwell level and the influent trunkline levels by maximizing pumping into the plant and diverting the remainder to Plant No. 2

Maintain Headworks No. 2 wetwell level.

    b. If Headworks No. 1 is in operation, maintain Headworks No. 2 wetwell level between 12 and 13 feet by adjusting the appropriate diversion gates. If Headworks No. 1 is not in operation, maintain Headworks No. 2 wetwell level between 10 and 13 feet.

    c. Inform Plant No. 2 of every significant flow change to ensure coordination of response to high flows.

Maintain Sunflower wetwell.

2. If the Sunflower wetwell level or trunkline level is rising **and** flow rate is at or about 40 MGD, start a second pump before the wetwell rises to between 8 and 9 feet:

    a. No. 3 MSP should be brought online early since it is a constant speed pump.

3. If the Sunflower screw pumps fail:

    a. Increase flow to Plant No. 1 from other trunklines.

    b. Divert Sunflower to maintain its water level (preferred method).

    c. Contact Collections about diverting Sunflower to other trunklines if possible.

    d. If necessary, bypass Sunflower to maintain its water level.
    Operational Note: Accurate Sunflower flowmeter readings are lost when Sunflower is bypassed.

4. Before increasing flow rate at Headworks No. 2, ensure that bar screens and grit chambers have been added.

Plant No. 1
Code Yellow

5. Consider lowering the splitter box gates as needed or adding another splitter box (1 or 2) to P-1-33/37.

.

Caution: DO NOT attempt to operate the influent pumps in AUTO. Always reduce pump speeds before starting another pump.

Headworks No. 2 adjustments

1. If the interplant/diversion capacity is near maximum (~130 MGD) and Headworks No. 2 wetwell rises above 13 feet, start another MSP and ramp up slowly. This will bring additional flow into Plant No. 1 above the desired setpoint. Ensure the other pumps are operational, but one pump should always be kept in reserve. Ensure the level does not go below 10 feet to avoid cavitation. Approximate Headworks No. 2 pump capacities are shown below:

Inservice Pump	Flow at Full Speed (MGD)*
1	60 - 70
2	120 - 140
3	180 - 210
4	240 - 280
5	Standby (280 – 350)

* Wetwell level dependent.

2. Make all influent adjustments in small increments.

PSBs

Warning: Step 1 may increase H_2S levels initially until storm flows dilute incoming wastewater.

Plant No. 1
Code Yellow

1. Prepare basins for high flow as follows:

   a. If required to operate PSB's #1&#2 raise the tater valves and effluent channel level controller and open the outlet gate at PEJB.

   b. Fully open PSBs 6 through 15 launder control butterfly valves if 6015 are going into service.

   c. Open the second effluent gate at PEDB to the 108-inch primary effluent transport line from PEDB 2 to EJB 1 (see Figure 6-6) if primary effluent is anticipated to go to outfall.

2. Monitor scrubbers and adjust as needed to maintain compliance.

3. Monitor flow rates and water surface levels at the various hydraulic structures and make adjustments as necessary.

A.S. Plant

1. Maximize flows to Secondary processes making certain not to cause an upset that could cause a permit violation or exceedance.

2. Minimize final clarifier blanket levels to prepare for high flow and make adjustments as necessary.

3. Check and prepare to open plug feed gates on any out-of-service aeration basins.

4. Check and prepare to open influent gates on any out-of-service final clarifiers.

   Note: Filling an aeration basin or final clarifier too rapidly may cause loss of level in the effluent channel and a subsequent loss of plant water and cause a shutdown of GWRS.

5. Monitor flow rates and water surface levels at the various hydraulic structures and make adjustments as necessary.

Plant No. 1
Code Orange

Code Orange

Condition

Collection System and plant(s) flows/levels increasing toward maximum. OCWD GWRS at maximum production or discharging to Santa Ana River at maximum 100 MGD capacity. Use of storage possible or probable.

Staffing

ICS Organization

The Incident Commander coordinates actions performed during Code Orange for all facilities (Collection System, Plant No. 1, and Plant No. 2).

1. Incident Commander ensures Regional Water Quality Control Board and OC Health Department is informed of possible use of Serial Discharge 002 and 003.

Notify OCWD.

2. Notify OCWD of Code Orange and the potential need to maximize the GWRS discharge to the Santa Ana River up to 100 MGD. (See GWRS High Flow Procedures herein and Joint SOP "GWRS Santa Ana River Discharge".)

3. Before and after each change in pumping rates, have operators check the effluent launders at all of the PSBs It may take 15 minutes to stabilize levels between changes.

4. If all duty pumps running at Headworks No. 2 are **not** sufficient to maintain headworks level at 13 feet, perform the following:

    a. To avoid overflowing PSBs, close splitter box weir gates to Splitter Box 3 to PSBs 1 through 5 (see Figure 6-8).

Caution: Pump cavitation will occur if the wetwell level falls below 12 feet.

    b. Place Headworks No. 1 pumps on line one at a time.

    c. To balance flow, adjust the influent splitter box weir gates at Splitter Box 1 or 2 and Splitter Box 3 to maximize flow to PSB 1 through 5.

Plant No. 1
Code Orange

5. If Headworks No. 2 wetwell level rises above 16 feet, perform the following:

Increases Plant No. 1 flow to maximum flow-through capacity (approximately 260 MGD).

   a. If basins were drained in Code Blue, slowly open influent gates to the emergency storage basins a couple at a time as needed in PSBs 6 through 31.

      Note: The influent flow rate can be increased to these basins by increasing MSP pump speed and adjusting splitter box gates.

   b. Leave PSBs online after filling to increase treatment and flow-through capacity.

   c. Increase pumping as needed to maximize flow-through capacity.

6. Continuously communicate with operators observing the effluent launders at PSBs 1 through 31 to prevent spills.

7. If the Headworks No. 2 wetwell continues to exceed 16 feet and is rising, request Collections to check nearby manholes outside the plant to verify levels.

Monitor manholes and yard drains.

8. If the trunkline levels are high, monitor the yard drains.

Note: The drains on the East Plant Road are piped to the Airbase/Baker Main trunkline. If these drains back up, street flooding may be imminent across the river. The East Perimeter Road is designed to flood during heavy rains as a runoff control measure. Flooding of the East Perimeter Road does **not** necessarily indicate flooding conditions across the river.

9. If the East Perimeter Road is flooding, have Collections check to verify flooding conditions across the river.

Plant No. 1
Code Orange

Route flow to storage.

10. Perform the following as necessary in the order presented:

If	Then
All OOBS and EPSA duty pumps are running and OOBS wetwell rises to 8 feet, and EPSA rises to 8 feet	1. Increase flow to A.S. Plant as follows: a. Pull A.S. Plant splitter box slide gates to out-of-service aeration basins (see Figure 7-9) add figures or slowly open influent gates to any out-of-service final clarifiers. b. Open 72-inch butterfly valve in 10% increments to increase flow as needed. c. Raise weir gate as needed to force more flow to A.S. Plant (see Figure 6-6). 2. Leave final clarifiers online after filling. 3. Turn 1 or 2 blowers down or turn off as appropriate to stop from losing solids over the weirs in the finals. 4. If DAFs are in operation, recycle underflows only, not A.S. effluent. 5. If needed to relieve outfall pumping capacity, slowly open the 84-inch and 66-inch effluent lines at EJB.
Additional storage is needed to maintain OOBS wetwell level,	If they are available, fill the basins from PSBs 6 through 31 that were drained in Code Blue.

Plant No. 1
Code Orange

(blank)

Plant No. 1
Code Red

Code Red

Condition

The flow has exceeded the capacity of the 120-inch outfall system, OCWD GWRS is at maximum production or in Santa Ana River discharge, and no storage is available. Containment of wastewater anywhere in the Collection System has been lost.

Staffing

ICS Organization

The Incident Commander coordinates actions performed during Code Orange for all facilities (Collection System, Plant No. 1, and Plant No . 2).

In Code Red, the flow has exceeded the capacity of the 120-inch outfall system and OCWD GWRS is in maximum production or in Santa Ana River discharge, and no storage is available.

1. Continue applicable Code Yellow and Code Orange operations.

2. Continuously monitor plant conditions.

Notify OCWD.

3. Notify OCWD of Code Red.

Plant No. 1
Code Red

(blank)

Plant No. 1
Code Purple

Code Purple

Condition

- Storage is no longer needed and the flow is expected to decrease.
- Outfall: Decrease to 375 MGD with the expectation that the decrease in flow will continue.

Staffing

ICS Organization demobilizing with transition to normal shift staffing.

In addition to the specific steps listed below, there will be specific actions such as equipment and building inspection and restart of any processes that were shut down or bypassed.

Return to normal operations.

1. Incident Commander or Branch Director ensures OCSD employees are notified of Code Purple activation.

Notify OCWD.

2. Notify OCWD of Code Purple and coordinate with OCWD to cease the GWRS Santa Ana River discharge and/or resume normal recycled water production. (See GWRS High Flow Procedures herein and Joint SOP "GWRS Santa Ana River Discharge".)
3. Drain all standby basins as quickly as possible and monitor status of storage options.
4. Monitor storm forecasts.
5. Return to normal operations if there is no immediate forecast for rain. Otherwise, return to the appropriate code.
6. Make any necessary repairs to increase plant efficiency and maintain storm preparedness.

Plant No. 1
Code Purple

(blank)

Plant No. 2 High Flow Emergency Procedures

This section discusses Plant No. 2's goals; special tools, equipment, and material; prerequisites; and specific steps for each condition code.

Goals

In addition to the operational goal and strategies presented earlier, the major operating goals for Plant No. 2 are to:

- Keep flow moving through the 120-inch outfall and avoid using the 78-inch outfall or Santa Ana River.
- Keep trunklines as low as possible by pumping into Plant No. 2.
- Maintain the OOBS and EPSA wetwell level of not more than 8 feet to keep the trunklines low, obtain a head start on recovery from the event, and avoid equipment problems that could cause loss of the wetwell.
- When possible, assist Plant No. 1 by accepting diverted flows.

Special Tools, Equipment, and Material

Special items that may be needed are:

- Rain gear, gloves, rubber boots
- Radios with extra batteries
- Cellular phones
- Flashlights with extra batteries
- Puller for manhole covers
- Portable gate operator where required
- Sandbags
- Delineators/warning tape
- High-visibility vests
- Road flares
- Gas detectors
- Portable air compressor
- Portable generators
- Portable sump pumps

- Sample scoopers
- Chlorine residual kits
- Tide books
- 78-inch job box
- 18-ton rubber tire crane
- Submersible pumps for flow equalization basins

Prerequisites

1. Ensure normal winter preparation is completed.

2. Request Construction Management and Maintenance Divisions to maintain a list of all ongoing maintenance or construction work that may be affected by or affect the ability to handle high flow.

Plant No. 2
Code Blue

Code Blue

Condition

A storm expected to have 1 inch or more of rain is forecast to occur within 3 days or the upcoming weekend.

Staffing

- Normal shift staffing
- Establish Storm Watch list and implement if necessary.

Generally, the Chief Plant Operator or designee ensures the following steps are performed:

Prepare for high flow.

1. Inform appropriate OCSD employees of Code Blue activation.
2. Minimize maintenance downtimes for all outfall pumping systems and Cen-Gen engines.
3. Check with Construction Management and Maintenance Divisions to obtain an updated list of all ongoing OCSD maintenance or construction work that may be affected by or affect the ability to handle high flow.
4. Verify all influent pumps, outfall booster pumps, and other critical pumping systems are operational.
5. Verify all storm water pumps and plant sump pumps are operational.
6. Activate Storm Watch list. Establish extra standby staff as needed for 24-hour coverage.
7. Verify catch basins and storm water collection drains are free and clear of debris.
8. To prevent sump filter screens from clogging, verify all tunnels are clear and free of debris.
9. Arrange for crane to be in place to remove A. S. Plant splitter box gates as needed.
10. Check Serial Discharge 003 flap gate for proper operation.
11. Ensure standby crane operators are available.

Plant No. 2
Code Blue

12. Ensure emergency generators are available and operational.

13. Check rag and grit trailers at D Headworks for adequate space. If necessary, have trailers replaced.

14. Check liquid oxygen (LOX) inventory.

15. Verify appropriate fuel supply for standby emergency generators.

16. Have fuel truck available.

17. Test generators.

Potential storage shown below

18. Verify Flow Equalization Basins A, B, and C are empty.

0.7 million gallons

19. Drain one secondary clarifier for emergency storage.

1.2 million gallons

20. Ensure one primary clarifier is available for storage.

1.2 million gallons

21. If any PSB(s) are out of service for maintenance or contractor work, ensure these basins are available for emergency storage.

0.8 million gallons per basin

22. Verify four reactor basins are on standby. Drain the basins if necessary.

23. Contact City of Huntington Beach to verify that the storm water diversion pumps are OFF.

Plant No. 2
Code Blue

(blank)

Plant No. 2
Code Yellow

Code Yellow

Condition

- 75 MGD above normal for the time of day with the expectation that the flow will increase considering the normal diurnal patterns and/or rainfall rate.

- Outfall: 30 MGD above normal for the time of day with the expectation that the flow will increase considering the normal diurnal patterns and/or rainfall rate.

Staffing

Limited ICS organization and Storm Watch and Standby List activated

As necessary, the actions performed in this code are continued until the event is over.

1. Chief Plant Operator ensures employees are notified of Code Yellow activation.

Verify availability of equipment, material, and staff.

2. Verify all equipment and materials are available. Refer to the Special Tools, Equipment, and Material section.

3. Ensure influent pumps and other critical plant pumping systems are operational.

4. Ensure storm water pumps and plant sump pumps are operational.

Ensure storage is ready.

5. Verify standby storage facilities are ready to come online.

6. Notify Construction Management to have OCSD contractors prepare to stop work and remove equipment from pipelines, basins, etc. Request a time estimate as to how long the contractors need to stop work and remove equipment once notified.

Plant No. 2
Code Yellow

7. Notify member cities and sewer agencies to secure any ongoing sewage construction projects and plug any new piping to prevent rainwater inflow in the Collection System.

Verify power resources.

8. Verify Edison power is available through both A Bus and B Bus.
9. Monitor power usage and availability (Cen-Gen operators).
10. Continuously evaluate power needs and direct that all nonessential power loads be shut down as needed. Consider running plant standby generation to reduce Cen-Gen power demands.

Monitor wastewater flows

11. Monitor individual trunk flow meter readings.
12. Compare historical trends for each trunkline from "same day of the week" data for the four previous weeks. This data will be used to analyze the impact of inflow/infiltration on the treatment plant flows.

Monitor data.

13. Continuously monitor the following:

    - Weather forecast
    - Rain gauge telemetry information
    - Available influent storage options

14. Continuously check tide program and latest outfall capacity test.

Plant No. 2
Code Yellow

Precautions during high flows

Notes:

- The steps in this plan involve changes in normal flow patterns. Consider the following when making such changes:
  - Make all flow changes with care and record the changes made.
  - Monitor the effect of any change, particularly any increase in influent flow, before making another change.
  - For any increase in influent pumping or the addition of extra pumps, carefully observe the PSBs' effluent launders. If needed to balance the flow, adjust influent splitter box gates.
  - After the event, use caution when returning to normal flows and distribution.
- During the event, increase rounds and checks in all areas with special attention to ground lights and tunnel sumps.
- Ensure that all open trenches (due to construction) are covered or delineated.
- Operate Phys-Chem throughout the event, but do not increase to match flows.
- Odors may be caused by lower launder levels and higher turbulence. Operate and monitor foul air scrubbers throughout the event.

Configure plant for high flow and make adjustments as needed.

During Code Yellow, plant configurations and adjustments for high flow may be needed at the following:

- Headworks
- PSBs
- A.S. Plant
- Outfall
- TF/SC

As needed, continue these operations until the event is over.

Plant No. 2
Code Yellow

Headworks

1. Ensure empty rag bins and grit bins are in place. Switch the D Headworks rag compactors in manual forward only position.

2. Adjust flow setup in splitter boxes in preparation for Step 3 (see Figure 6-10).

3. Gradually lower the Headworks wetwell level to create emergency storage space in the trunkline. Closely monitor effect on the outfall wetwell and flow.

Maintain D Headworks wetwell level.

1. If D Headworks level rises above 23 feet, perform the following:

   a. Communicate situation to Plant No. 1 Operations and inform them to notify Plant No. 2 of any diversions made by Plant No. 1.

   b. Increase pumping as needed to maximize flow-through capacity.

2. Check splitter box status.

3. Monitor flow rates and water surface levels at the various hydraulic structures and make adjustments as necessary.

PSBs

1. Monitor flow rates and water surface levels at the various hydraulic structures and make adjustments as necessary.

2. Ensure all gates at the distribution box on the in-service clarifiers are fully open.

A.S. Plant TF/SC

1. Maximize flow to the trickling filters at a peak capacity of 182 MGD. The AS Plant capacity through four reactors is 120 MGD.

2. Pull AS splitter box isolation slide gates to out-of-service aeration basins (see Figure 6-11).

3. Keep individual out-of-service aeration basins motorized influent gates in CLOSED position.

4. Ensure that the out-of-service reactor basins are empty. If needed, open drains to any reactor basin that contains liquid.

Plant No. 2
Code Yellow

5. Monitor flow rates and water surface levels at the various hydraulic structures and make adjustments as necessary.

Outfall

1. Verify mode of operation at OOBS and EPSA pump Stations, which station is in the lead position, and number of pumps selected.

2. If for any reason Flow Equalization Basins A, B, and C have been filled, pump out to a depth of 1.5 feet.

3. Verify isolation gate to Flow Equalization Basins A, B, and C at JB 7 is OPEN.

4. Lower the outfall operating wetwell setpoint to 6.0 feet to increase storage capacity in the interplant lines.

5. Verify status of all outfall system valves (see Figure 6-12):

Valve	Status
No. 2 valve (96-inch to Surge Tower No. 2)	OPEN
No. 8 and 9 valves (120-inch valves downstream of Surge Tower No. 2)	CLOSED
No. 3 valve (72-inch to the 78-inch outfall line)	CLOSED
No. 4 valve (78-inch outfall line)	CLOSED

6. Monitor flow rates and water surface levels at the various hydraulic structures.

7. Monitor temperature, vibration, and other motor data for all OOBS and EPSA duty pumps.

Plant No. 2
Code Yellow

(blank)

Plant No. 2
Code Orange

Code Orange

Condition

Collection System and plant(s) flows/levels increasing toward maximum. OCWD GWRS discharging to Santa Ana River at maximum 100 MGD capacity. Use of storage possible or probable.

Staffing

ICS Organization

The Incident Commander coordinates actions performed during Code Orange for all facilities (Collection System, Plant No. 1, and Plant No. 2).

1. Continuously monitor power usage and consider starting generators and reducing demand.

2. If use of the 78-inch outfall appears possible, notify Regional Water Quality Control Board of the possible use of the 78-inch outfall.

3. Run OOBS and EPSA duty pumps throughout Code Orange and Code Red as needed.

Route flow to storage.

4. Perform the following as necessary:

Plant No. 2
Code Orange

	If	Then
Reduces flow to OOBS/EPSA wetwell by max of 50 MGD for a period of time (with four basins available).	OOBS/EPSA wetwell level rises to 8 feet,	1. Fill A.S. Plant reactor basins drained as follows: a. Close any open drains to reactor basins. b. Open motorized influent gates to individual out-of-service aeration basins. 2. If needed, increase flow to PEPS (a maximum of 120 MGD) and the TF/SC (a maximum of 182 MGD). 3. When aeration basins are full, close motorized influent gates to out-of-service reactor basins.
Reduces flow to OOBS/EPSA wetwell by 25 MGD.	OOBS/EPSA wetwell **again** rises to 8 feet **or** level does not decrease,	1. Fill the two designated AS Plant secondary clarifiers by opening the influent gates. 2. Adjust flow to desired levels.

Plant No. 2
Code Red

Code Red

Condition

The flow has exceeded the capacity of the 120-inch outfall system and OCWD GWRS Santa Ana River discharge, and no storage is available. Containment of wastewater anywhere in the Collection System has been lost.

Staffing

ICS Organization

The Incident Commander coordinates actions performed during Code Red for all facilities (Collection System, Plant No. 1, and Plant No. 2).

1. When OOBS/EPSA wetwell reaches 8 feet **and** storage is no longer available, shut down dewatering and digestion loads if not already down.

Reduce power usage.

2. If additional power is needed, shut down the Oxygen Generation System if not already down. Run standby generation as needed.

3. Run Headworks on standby diesel generation.

4. Leave PEPS in service because the AS Plant's effluent is the first discharge water to go out the 78-inch outfall through the EPSA Pump Station.

Prepare to use 78-inch outfall.

5. Open the EPSA discharge gate to Surge Tower No. 1. Close EPSA Gates #5, 6, and 7 to isolate the AS Plant flow.

6. Open No. 8 and 9 valves (120-inch valves downstream of Surge Tower No. 1) (see Figure 6-12).

7. Open the No. 3 valve (72-inch to the 78-inch outfall line) (see Figure 6-12).

8. Operate EPSA Pumps #7 and #8 as needed to maintain the AS Plant flow.

Plant No. 2
Code Red

9. In accordance with Chapter 14, External Notifications, notify Regional Water Quality Control Board and Orange County Health Care Agency of the emergency use of the 78-inch outfall.

10. If OOBS/EPSA wetwell level is still rising, contact Cen-Gen to ensure power availability. If there are concerns about power, run pumps on portable generation. Notify Division 860.

Discharge to Santa Ana River

Note: If OOBS/EPSA wetwell level reaches 10.25 feet, flow will begin to discharge over the weir into the secondary weir channel.

11. When OOBS/EPSA wetwell reaches 10.25 feet, perform the following:

    a. Monitor the level in the OOBS/EPSA wetwell and Termination Channel secondary weir channels that drain to the Headworks.

12. In accordance with Chapter 14, External Notifications, notify Regional Water Quality Control Board and Orange County Health Care Agency of the emergency use of the Santa Ana River outfall.

Transition to Code Purple

13. As OOBS wetwell level decreases, decrease flow to the 78-inch outfall line.

14. When all flow to the 78-inch line is stopped, adjust gates as follows:

    a. Close No. 8 and 9 valves (120-inch valves downstream of Surge Tower No. 1).

    b. Open the No. 2 valve (96-inch to Surge Tower No. 2).

Plant No. 2
Code Red

(blank)

Code Purple

Condition

- Storage is no longer needed and the flow is expected to decrease.
- Outfall: Flow has decreased to 375 MGD with the expectation that the decrease will continue.

Staffing

ICS Organization with transition to normal shift staffing.

In addition to the specific steps listed below, there will be specific actions such as equipment and building inspection and restart of any processes that were shut down or bypassed.

Return to normal operations.

1. Incident Commander or Branch Director ensures OCSD employees are notified of Code Purple activation.
2. Drain all standby basins as quickly as possible.
3. Monitor storm forecasts.
4. Return to normal operations if there is no immediate forecast for rain. Otherwise, return to the appropriate code.
5. Make any necessary repairs to increase plant efficiency and maintain storm preparedness.

Plant No. 2
Code Purple

(blank)

GWRS High Flow Emergency Procedures

This section discusses GWRS' overall operating goals with respect to providing peak flow relief for OCSD; special tools, equipment, and material; prerequisites; and specific steps for each condition code.

Goals

In addition to the operational goal and strategies presented earlier, the major operating goals for GWRS are to:

- Provide peak wet weather and emergency flow relief for OCSD by providing tertiary treatment and disinfection and discharging up to 100 MGD (net) to the Santa Ana River.

- Divert up to 118 MGD of secondary effluent from Plant No. 1 to the GWRS AWPF and return approximately 18 MGD of backwash waste and other reject streams to OCSD, thereby providing up to 100 MGD (net) of high flow emergency relief. (Flow estimates are based on 85% recovery by the MF process.)

- Divert up to 10 MGD of secondary effluent from Plant No. 1 to the OCWD Green Acres Project (GAP), if GAP is in operation. GAP does not operate year-round. (If GAP is in operation, the total secondary effluent flow diversion to GAP and the GWRS AWPF is 128 MGD.)

Special Tools, Equipment, and Material

Special items that may be needed are:

- Rain gear, gloves, rubber boots
- Radios with extra batteries
- Cellular phones
- Flashlights with extra batteries
- Puller for manhole covers
- Portable (pneumatic and/or gasoline powered) gate operator where required

- Sandbags
- Delineators/warning tape
- High-visibility vests
- Road flares
- Portable air compressor
- Portable generators
- Portable sump pumps
- Extra Screenings Facility dewatered solids "roll-off" bins
- Portable submersible pump

Prerequisites

OCWD Tasks

1. Maintains the AWPF to be ready for possible Santa Ana River discharge events.

2. Exercises valves on FPWBS and Santa Ana River discharge piping

3. Conducts an annual test of Santa Ana River discharge system. Annual testing discharges are made to the 54-inch Santa Ana River discharge pipeline to the 54-inch interconnection bypass valve to the 66-inch Interplant Line, which conveys effluent to the 120-inch ocean outfall. (Testing discharges are not directed to the river.)

4. Verifies (periodically throughout the year and particularly during the rainy season) the operational readiness of the MF system, MF Break Tank, RO Transfer Pump Station, sulfuric acid feed system, UV system, de-chlorination, FPWBS, Santa Ana River discharge pipeline, 54-inch Santa Ana River discharge valve, 54-inch interconnection bypass valve to the 66-inch Interplant Line.

5. Maintains ample stock of chemicals for MF at all times (sodium hypochlorite, citric acid, caustic and Memclean C).

6. Maintains ample stock of sulfuric acid for pH adjustment at all times.

7. Maintains ample stock of sodium bisulfite for de-chlorination at all times.

8. Conducts an annual test of Santa Ana River discharge system.

9. Coordinates with OCSD to simulate the activities of a peak wet weather flow event.

10. Follows the bypass procedures outlined in the Joint SOP "GWRS Bypass to 66-inch Interplant Line".

OCSD Tasks

1. Maintains its facilities in accordance with the IERP to prepare for a Santa Ana River discharge event.

2. Assists OCWD to conduct an annual test of the Santa Ana River discharge system.

3. Exercises the bypass valve on the interconnecting line to the 66-inch Interplant Line. Follows the bypass procedures outlined in the Joint SOP "GWRS Bypass to 66-inch Interplant Line".

(blank)

Code Blue

Condition	A storm expected to have 1 inch or more of rain is forecast to occur within 3 days or the upcoming weekend.
Staffing	OCWD: Normal shift staffing • OCSD: Normal shift staffing. Establish Storm Watch list and implement if necessary.
OCWD Tasks	1. Receives notice from OCSD of Code Blue
	2. Maintains frequent communication with OCSD about the status of forecasted storm events, flowrates, operations, and AWPF readiness preparations.
	3. Continues to operate the AWPF in the Normal Recycled Water Production Mode and increases production up to 70 MGD.
	4. Confirms the availability of recharge facilities to accept recycled water production up to 70 mgd and notifies OCSD of the maximum available recharge capacity. If available recharge capability is less than 70 mgd, OCWD estimates the maximum recycled water recharge capability of the GWRS and notifies OCSD of the highest available recycled water production and peak flow that the AWPF can provide while still in the Normal Recycled Water Production Mode.
	5. Monitors the secondary effluent flowrate to the AWPF (Activated Sludge Plant Effluent and Trickling Filter Effluent to the Screening Facility).
Requires about 48 hours.	6. Monitors the Screening Facility Influent Tank level and excess secondary effluent flowrate over the overflow weir to SEJB No. 3.
	7. Communicates with OCSD about wastewater flows and 120-inch ocean outfall flows.
	8. Places MF cells which may be in standby mode (if any) into active operation mode, if possible.

GWRS
Code Yellow

9. Initiates manual Clean-In-Place (CIP) of MF cells, generally those with moderately elevated transmembrane pressures (TMPs). *(CIP of all MF cells takes 72 hours to complete.)*

10. Confirms that sufficient MF backwash water supply is available in the MF Break Tank.

11. Verifies the operational readiness of the RO flush pumps.

12. Shuts down and flushes RO trains that are not needed for normal pre-storm water production (if any).

13. Verifies the operational readiness of the standby UV trains.

14. Verifies that the 78-inch Post-Treatment Bypass Valve FV7150, located at the southeast corner of the UV system, is in its normally closed position. (AWPF Valve No. FV-805-7150 is normally closed for recycled water production, which continues during Code Blue.)

15. Verifies the operational readiness of the sodium bisulfite feed system.

16. Verifies the operational readiness of the sulfuric acid feed system.

17. Verifies the operational readiness of the FPWBS for Santa Ana River discharge.

18. Confirms that the 54-inch valve on the SAR discharge line located on the south side of the FPWBS is open. (This is AWPF Valve No. FV-840-3500.)

19. Verifies the operational readiness of the 54-inch Santa Ana River discharge pipeline.

20. Confirms that the 54-inch interconnecting bypass valve to the 66-inch Interplant Line in coordination with OCSD to prevent discharge to the 120-inch ocean outfall. (OCSD operates the bypass valve. OCWD confirms its position. For more information see the Joint SOP “GWRS Bypass to 66-inch Interplant Line”.)

GWRS
Code Yellow

21. Opens the 54-inch Santa Ana River discharge valve and securely locks it in the open position. (OCWD operates, locks and unlocks the Santa Ana River discharge valve.)

22. Verifies the operational readiness of the two Santa Ana River discharge water quality analyzer panels: (1) Post-Treatment Bypass Water Quality Panel No. 805-CPD-0002, which operates continuously on-line pH and chlorine residual analyzers monitoring the UVP at the AWPF; and (2) MFE/ROF Panel No. 450-CPF-0001, which operates continuously on-line electrical conductivity and turbidity analyzers monitoring the MFE/ROF at the AWPF.

23. Prepares to take water quality samples of the Santa Ana River discharge for monitoring and reporting in accordance with the NPDES permit.

24. Notifies OCSD that the AWPF is ready to begin the PCS unlock procedures that shutdown and restart the AWPF in the Santa Ana River Discharge Mode.

25. Waits for notification from OCSD to begin switchover to Santa Ana River Discharge Mode to handle peak flows and discharge to the Santa Ana River.

OCSD Tasks

1. Notifies OCWD of Code Blue.

2. Maintains frequent communication with OCWD about the status of forecasted storm events, flowrates, collection system and plant operations, total effluent flowrate/ocean outfall discharge capacity, and operational readiness of the AWPF for handling peak flows for the Santa Ana River discharge.

3. Conducts OCSD facilities readiness steps outlined in the OCSD IERP.

4. Monitors the raw wastewater flowrates in the collection system and Plant No. 1 headworks.

5. Monitors the total effluent flowrate discharged to the 120-inch ocean outfall.

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Code Yellow

6. Monitors the secondary effluent flowrate to the AWPF (Activated Sludge Plant Effluent and Trickling Filter Effluent to the Screening Facility).

7. Monitors the excess secondary effluent flowrate over the Screening Facility overflow weir to SEJB No. 3.

8. Verifies the operational readiness of the "roll-off" bin at the Screenings Facility for storage of dewatered screenings.

9. Confirms flow conditions at the Waste Side Stream Pump Station (WSSPS) No. 1 to determine if the 4-inch screenings dewatering bypass should remain in use provided that this bypass is being used, or if screenings should be sent to the "roll-off" bin at the Screenings Facility because high flows at the WSSPS No. 1 are expected.

10. Closes that the 54-inch interconnecting bypass valve to the 66-inch Interplant Line in coordination with OCWD. (OCSD operates the bypass valve. OCWD confirms its position. For more information see the Joint SOP "GWRS Bypass to 66-inch Interplant Line".)

11. Verifies that the 54-inch Santa Ana River discharge valve is open and locked in the open position. (OCWD locks, unlocks and operates this valve.)

12. Verifies with OCWD that the 54-inch Santa Ana River discharge valve on the south side of the FPWBS is open. (This is AWPF Valve No. 840-FV-3500.)

13. Monitors water quality of secondary effluent for compliance with requirements for MF. (Turbidity shall not exceed 20 NTU for more than 4 hours and shall not exceed 50 NTU at any time.)

14. Monitors water quality of secondary effluent for compliance with requirements for GAP, if GAP is in operation. (Turbidity shall not exceed 5 NTU on average over the past 30 days and shall not exceed 10 NTU at any time.)

15. Verifies with OCWD the operational readiness of the AWPF to switchover to the Santa Ana River Discharge Mode to handle peak flows and discharge to the Santa Ana River.

Code Yellow

Condition

- 50 MGD above normal for the time of day with the expectation that the flow will increase considering the normal diurnal patterns and/or rainfall rate.
- Outfall: 30 MGD above normal for the time of day with the expectation that the flow will increase considering the normal diurnal patterns and/or rainfall rate.
- GWRS discharge to the Santa Ana River may be initiated at up to 100 MGD if requested by OCSD.

Staffing

- OCWD: Activates off-shift plant operations personnel to "on-call" status.
- OCSD: Limited ICS organization and Storm Watch and Standby List activated.

OCWD Tasks

1. Receives notice from OCSD of Code Yellow and the potential to request initiation of SAR discharge.
2. Continues to maintain frequent communication with OCSD about the status of forecasted storm events, flowrates, operations, and AWPF readiness preparations.

Requires about 3 hours.

3. Continues to operate the AWPF in the Normal Recycled Water Production Mode and maintains maximum production up to 70 mgd until directed by OCSD to switchover to the SAR Discharge Mode.
4. Continues to monitor the Screening Facility Influent Tank level and excess secondary effluent flowrate over the overflow weir to SEJB No. 3.
5. Continues to monitor Plant No. 1 wastewater flows and the 120-inch ocean outfall flows.
6. Performs manual CIPs of selected MF cells, generally those with

GWRS
Code Yellow

slightly elevated TMPs.

7. Notifies OCSD that the AWPF is ready to begin the PCS unlock procedures that shutdown and restart the AWPF in the SAR discharge mode.

8. Receives notice from OCSD of Code Yellow and may receive direction to begin switch over to SAR Discharge Mode if OCSD forecasts high flow conditions at the 120-inch outfall.

9. Initiates PCS unlock procedures that shutdown and restart the AWPF in the Santa Ana River Discharge Mode upon receipt of OCSD that peak flow relief is needed. (Requires OCWD management level authorization and password.)

10. Switches AWPF from Normal Recycled Water Production Mode to Santa Ana River Discharge Mode, if requested by OCSD. *(Requires shutdown and restart of the AWPF, which takes about 3 hours.)*

11. Confirms that the UV Decarbonator Discharge Isolation Valve (AWPF Valve No. 710-FV-7115) is closed (if SAR discharge is requested by OCSD).

12. Confirms that the Post-Treatment Bypass Valve FV7150 is open after the switchover to the Santa Ana River Discharge Mode (if SAR discharge is requested by OCSD). (This is 78-inch AWPF Post-Treatment Bypass Valve No. FV-805-7150, which automatically opens during the switchover.

13. Designates flowrate setpoint for Santa Ana River discharge and operates the AWPF in the Santa Ana River Discharge Mode to provide up to 100 MGD (net) of peak flow relief for OCSD's 120-inch outfall (if SAR discharge is requested by OCSD).

14. Notifies off-shift plant operations personnel to "on-call" status.

15. Notifies on-shift plant operations personnel of Emergency Response Code Yellow status and impending Santa Ana River discharge (if SAR discharge is requested by OCSD).

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16. Monitors water level in FPWBS (if SAR discharge is requested by OCSD).

17. Observes the Santa Ana River discharge point periodically or at least hourly during the event (if SAR discharge is requested by OCSD).

18. Adjusts the flowrate setpoint for Santa Ana River discharge as needed based on direction from OCSD (up to 100 MGD (net) maximum) (if SAR discharge is requested by OCSD).

19. Monitors the secondary effluent flowrate and water quality to the AWPF.

20. Monitors the secondary effluent flowrate and water quality to GAP, if GAP is operational, and determines if GAP should be secured. If GAP is secured notifies OCSD. If GAP is not secured, continues to operate GAP.

21. Monitors the Santa Ana River discharge flowrate and water quality (if SAR discharge is requested by OCSD). Takes samples of the Santa Ana River discharge for laboratory testing and compliance monitoring and reporting in compliance with the NPDES permit.

22. Checks the operation of the two Santa Ana River discharge water quality analyzer panel periodically: (1) Post-Treatment Bypass Water Quality Panel No. 804-CPD-0002, which operates continuously online pH and chlorine residual analyzers on the UVP line at the AWPF; and (2) MFE/ROF Panel No. 450-CPF-0001, which operates continuously on-line electrical conductivity and turbidity analyzers on the MFE/ROF Line at the AWPF (if SAR discharge is requested by OCSD).

23. Monitors reject stream flows and water quality discharged to OCSD.

24. Confirms that up to 100 MGD of peak flow relief is provided for OCSD (if SAR discharge is requested by OCSD).

25. Maintains frequent communication with OCSD about the status of flows and forecasted storm events, flowrates, operations,

GWRS
Code Yellow

AWPF operation and Santa Ana River discharge (if SAR discharge is requested by OCSD).

OCSD Tasks

Requires about 3 hours.

1. Notifies OCWD of Code Yellow and potential to request initiation of a SAR discharge mode.
2. Receives notice from OCWD that the AWPF is ready to begin the PCS unlock procedures that shutdown and restart the AWPF in the SAR discharge mode
3. Notifies OCWD of Code Yellow and if high flows are forecasted and peak flow relief is needed, may direct OCWD to begin AWPF switchover from Normal Recycled Water Production Mode to Santa Ana River Discharge Mode. *(Requires shutdown and restart of the AWPF, which takes about 3 hours.)*
4. Discharges up to 70 MGD more effluent from Plant No. 1 to the 120-inch ocean outfall during the AWPF switchover period (if SAR discharge is requested by OCSD).
5. Receives notice from OCWD that the AWPF has restarted in the Santa Ana River Discharge Mode and that the Santa Ana River discharge has begun (if SAR discharge is requested by OCSD).
6. Maintains frequent communication with OCWD about the status of forecasted storm events, flowrates, collection system and plant operations, total effluent flowrate/ocean outfall discharge capacity, and operational status of the AWPF and Santa Ana River discharge (if SAR discharge is requested by OCSD).
7. Notifies OCWD of necessary flowrate (up to 100 MGD (net)) for the Santa Ana River discharge (if SAR discharge is requested by OCSD).
8. Conducts OCSD facilities operation steps outlined in the IERP.
9. Monitors the raw wastewater flowrates in the collection system and Plant No. 1 headworks.
10. Monitors the total effluent flowrate discharged to the 120-inch ocean outfall.

GWRS
Code Yellow

11. Monitors the secondary effluent flowrate to the AWPF (Activated Sludge Plant Effluent and Trickling Filter Effluent to the Screening Facility).

12. Monitors secondary effluent quality for compliance with requirements for MF.

13. Monitors the excess secondary effluent flowrate over the Screening Facility overflow weir to SEJB No. 3.

14. Notifies OCWD of change in the flowrate (up to 100 MGD (net)) for the Santa Ana River discharge (if SAR discharge is requested by OCSD).

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GWRS
Code Yellow

Code Orange

Condition

Collection System and plant(s) flows/levels increasing toward maximum. OCWD GWRS maximizes flow rate and continues to operate in the Normal Recycled Water Production Mode, unless requested by OCSD to switch to discharging to Santa Ana River at maximum 100 MGD capacity. Use of storage possible or probable.

Staffing

OCWD: Maintains "on-call" status of off-shift plant operations personnel.

OCSD: ICS Organization

The Incident Commander coordinates actions performed during Code Orange for all facilities (Collection System, Plant No. 1, and Plant No. 2).

OCWD Tasks

1. Receives notice from OCSD of Code Orange and the potential to request initiation of the SAR discharge.

2. Continues to operate the AWPF in the Normal Recycled Water Production Mode at maximum flow rate unless OCSD requests that the AWPF be switched to the Santa Ana River Discharge Mode.

3. Maximizes the Santa Ana River discharge flowrate (up to 100 MGD (net)) if requested by OCSD.

4. Continues to monitor the Screening Facility Influent Tank level and excess secondary effluent flowrate over the overflow weir to SEJB No. 3.

5. Continues to monitor Plant No. 1 wastewater flows and the 120-inch ocean outfall flows.

6. Performs manual CIPs of selected MF cells, generally those with slightly elevated TMPs.

7. Notifies OCSD that the AWPF is ready to begin the PCS unlock procedures that shutdown and restart the AWPF in the SAR discharge mode.

GWRS
Code Orange

8. Receives notice from OCSD of Code Orange and may receive direction to begin switch over to SAR Discharge Mode if OCSD forecasts high flow conditions at the 120-inch outfall.

9. Initiates PCS unlock procedures that shutdown and restart the AWPF in the Santa Ana River Discharge Mode upon receipt of OCSD that peak flow relief is needed. (Requires OCWD management level authorization and password.)

10. Switches AWPF from Normal Recycled Water Production Mode to Santa Ana River Discharge Mode, if requested by OCSD. *(Requires shutdown and restart of the AWPF, which takes about 3 hours.)*

11. Confirms that the UV Decarbonator Discharge Isolation Valve (AWPF Valve No. 710-FV-7115) is closed (if SAR discharge is requested by OCSD).

12. Confirms that the Post-Treatment Bypass Valve FV7150 is open after the switchover to the Santa Ana River Discharge Mode (if SAR discharge is requested by OCSD). (This is 78-inch AWPF Post-Treatment Bypass Valve No. FV-805-7150, which automatically opens during the switchover.

13. Designates flowrate setpoint for Santa Ana River discharge and operates the AWPF in the Santa Ana River Discharge Mode to provide up to 100 MGD (net) of peak flow relief for OCSD's 120-inch outfall (if SAR discharge is requested by OCSD).

14. Notifies off-shift plant operations personnel to "on-call" status.

15. Notifies on-shift plant operations personnel of Emergency Response Code Orange status and impending Santa Ana River discharge (if SAR discharge is requested by OCSD).

16. Monitors water level in FPWBS (if SAR discharge is requested by OCSD).

17. Observes the Santa Ana River discharge point periodically or at least hourly during the event (if SAR discharge is requested by OCSD).

GWRS
Code Orange

18. Adjusts the flowrate setpoint for Santa Ana River discharge as needed based on direction from OCSD (up to 100 MGD (net) maximum) (if SAR discharge is requested by OCSD).

19. Monitors the secondary effluent flowrate and water quality to the AWPF.

20. Monitors the secondary effluent flowrate and water quality to GAP, if GAP is operational, and determines if GAP should be secured. If GAP is secured notifies OCSD. If GAP is not secured, continues to operate GAP.

21. Monitors the Santa Ana River discharge flowrate and water quality (if SAR discharge is requested by OCSD). Takes samples of the Santa Ana River discharge for laboratory testing and compliance monitoring and reporting in compliance with the NPDES permit.

22. Checks the operation of the two Santa Ana River discharge water quality analyzer panel periodically: (1) Post-Treatment Bypass Water Quality Panel No. 804-CPD-0002, which operates continuously online pH and chlorine residual analyzers on the UVP line at the AWPF; and (2) MFE/ROF Panel No. 450-CPF-0001, which operates continuously on-line electrical conductivity and turbidity analyzers on the MFE/ROF Line at the AWPF (if SAR discharge is requested by OCSD).

23. Monitors reject stream flows and water quality discharged to OCSD.

24. Confirms that up to 100 MGD of peak flow relief is provided for OCSD (if SAR discharge is requested by OCSD).

25. Maintains frequent communication with OCSD about the status of flows and forecasted storm events, flowrates, operations, AWPF operation and Santa Ana River discharge (if SAR discharge is requested by OCSD).

OCSD Tasks

1. Notifies OCWD of Code Orange and the potential to request initiation of the SAR discharge.

GWRS
Code Orange

2. Receives notice from OCWD that the AWPF is ready to begin the PCS unlock procedures that shutdown and restart the AWPF in the SAR Discharge Mode.

3. Notifies OCWD of Code Red and if high flows are forecasted and peak flow relief is needed, may direct OCWD to begin AWPF switchover from Normal Recycled Water Production Mode to SAR Discharge Mode. (Requires shutdown and restart of the AWPF, which takes about 3 hours.)

4. Discharges up to 70 mgd more effluent from Plant No. 1 to the 120-inch ocean outfall during the AWPF switchover period (if SAR discharge is requested by OCSD).

5. Receives notice from OCWD that the AWPF has restarted in the SAR Discharge Mode and that the SAR discharge has begun, (if SAR discharge is requested by OCSD).

6. Maintains frequent communication with OCWD about the status of forecasted storm events, flowrates, collection system and plant operations, total effluent flowrate/ocean outfall discharge capacity, and operational status of the AWPF and SAR discharge (if SAR discharge is requested by OCSD).

7. Notifies OCWD of necessary flowrate (up to 100 mgd (net)) for the SAR discharge (if SAR discharge is requested by OCSD).

8. Conducts OCSD facilities operation steps outlined in the IERP.
9. Monitors the raw wastewater flowrates in the collection system and Plant No. 1 headworks.

10. Monitors the total effluent flowrate discharged to the 120-inch ocean outfall.

11. Monitors the secondary effluent flowrate to the AWPF (Activated Sludge Plant Effluent and Trickling Filter Effluent to the Screening Facility).

12. Monitors secondary effluent quality for compliance with requirements for MF (See Table 3 above.)

GWRS
Code Orange

13. Monitors the excess secondary effluent flowrate over the Screening Facility overflow weir to SEJB No. 3.

14. Notifies OCWD of change in the flowrate (up to 100 mgd (net) for SAR discharge (if SAR discharge is requested by OCSD).

GWRS
Code Orange

(blank)

Code Red

Condition

The flow has exceeded the capacity of the 120-inch outfall system and no storage is available. Containment of wastewater anywhere in the Collection System has been lost. OCWD GWRS maximizes flow rate in the Normal Recycled Water Production Mode unless requested by OCSD to switch to the Santa Ana River Discharge Mode.

Staffing

OCWD: Maintains "on-call" status of off-shift plant operations personnel.

OCSD: ICS Organization

The Incident Commander coordinates actions performed during Code Orange for all facilities (Collection System, Plant No. 1, and Plant No. 2).

OCWD Tasks

1. Receives notice from OCSD of Code Red and the potential to initiate SAR discharge.

2. Continues to operate the AWPF in the Normal Recycled Water Production Mode at maximum flow rate unless OCSD requests that the AWPF be switched to the Santa Ana River Discharge Mode.

3. Maximizes the Santa Ana River discharge flowrate (up to 100 MGD (net)) if requested by OCSD. Continue applicable Code Yellow and Code Orange operations.
4. Continues to monitor the Screening Facility Influent Tank level and excess secondary effluent flowrate over the overflow weir to SEJB No. 3.

5. Continues to monitor Plant No. 1 wastewater flows and the 120-inch ocean outfall flows.

6. Performs manual CIPs of selected MF cells, generally those with slightly elevated TMPs.

7. Notifies OCSD that the AWPF is ready to begin the PCS unlock procedures that shutdown and restart the AWPF in the SAR discharge mode.

8. Receives notice from OCSD of Code Red and may receive direction to begin switch over to SAR Discharge Mode if OCSD forecasts high flow conditions at the 120-inch outfall.

9. Initiates PCS unlock procedures that shutdown and restart the AWPF in the Santa Ana River Discharge Mode upon receipt of OCSD that peak flow relief is needed. (Requires OCWD management level authorization and password.)

10. Switches AWPF from Normal Recycled Water Production Mode to Santa Ana River Discharge Mode, if requested by OCSD. *(Requires shutdown and restart of the AWPF, which takes about 3 hours.)*

11. Confirms that the UV Decarbonator Discharge Isolation Valve (AWPF Valve No. 710-FV-7115) is closed (if SAR discharge is requested by OCSD).

12. Confirms that the Post-Treatment Bypass Valve FV7150 is open after the switchover to the Santa Ana River Discharge Mode (if SAR discharge is requested by OCSD). (This is 78-inch AWPF Post-Treatment Bypass Valve No. FV-805-7150, which automatically opens during the switchover.

13. Designates flowrate setpoint for Santa Ana River discharge and operates the AWPF in the Santa Ana River Discharge Mode to provide up to 100 MGD (net) of peak flow relief for OCSD's 120-inch outfall (if SAR discharge is requested by OCSD).

14. Notifies off-shift plant operations personnel to "on-call" status.

15. Notifies on-shift plant operations personnel of Emergency Response Code Red status and impending Santa Ana River discharge (if SAR discharge is requested by OCSD).

16. Monitors water level in FPWBS (if SAR discharge is requested by OCSD).

17. Observes the Santa Ana River discharge point periodically or at least hourly during the event (if SAR discharge is requested by

OCSD).

18. Adjusts the flowrate setpoint for Santa Ana River discharge as needed based on direction from OCSD (up to 100 MGD (net) maximum) (if SAR discharge is requested by OCSD).

19. Monitors the secondary effluent flowrate and water quality to the AWPF.

20. Monitors the secondary effluent flowrate and water quality to GAP, if GAP is operational, and determines if GAP should be secured. If GAP is secured notifies OCSD. If GAP is not secured, continues to operate GAP.

21. Monitors the Santa Ana River discharge flowrate and water quality (if SAR discharge is requested by OCSD). Takes samples of the Santa Ana River discharge for laboratory testing and compliance monitoring and reporting in compliance with the NPDES permit.

22. Checks the operation of the two Santa Ana River discharge water quality analyzer panel periodically: (1) Post-Treatment Bypass Water Quality Panel No. 804-CPD-0002, which operates continuously online pH and chlorine residual analyzers on the UVP line at the AWPF; and (2) MFE/ROF Panel No. 450-CPF-0001, which operates continuously on-line electrical conductivity and turbidity analyzers on the MFE/ROF Line at the AWPF (if SAR discharge is requested by OCSD).

23. Monitors reject stream flows and water quality discharged to OCSD.

24. Confirms that up to 100 MGD of peak flow relief is provided for OCSD (if SAR discharge is requested by OCSD).
25. Maintains frequent communication with OCSD about the status of flows and forecasted storm events, flowrates, operations, AWPF operation and Santa Ana River discharge (if SAR discharge is requested by OCSD).

GWRS
Code Red

OCSD Tasks

1. Notifies OCWD of Code Red and the potential to request initiation of the SAR discharge.

2. Receives notice from OCWD that the AWPF is ready to begin the PCS unlock procedures that shutdown and restart the AWPF in the SAR Discharge Mode.

3. Notifies OCWD of Code Red and if high flows are forecasted and peak flow relief is needed, may direct OCWD to begin AWPF switchover from Normal Recycled Water Production Mode to SAR Discharge Mode. (Requires shutdown and restart of the AWPF, which takes about 3 hours.)

4. Discharges up to 70 mgd more effluent from Plant No. 1 to the 120-inch ocean outfall during the AWPF switchover period (if SAR discharge is requested by OCSD).

5. Receives notice from OCWD that the AWPF has restarted in the SAR Discharge Mode and that the SAR discharge has begun, (if SAR discharge is requested by OCSD).

6. Maintains frequent communication with OCWD about the status of forecasted storm events, flowrates, collection system and plant operations, total effluent flowrate/ocean outfall discharge capacity, and operational status of the AWPF and SAR discharge (if SAR discharge is requested by OCSD).

7. Notifies OCWD of necessary flowrate (up to 100 mgd (net)) for the SAR discharge (if SAR discharge is requested by OCSD).

8. Conducts OCSD facilities operation steps outlined in the IERP.

9. Monitors the raw wastewater flowrates in the collection system and Plant No. 1 headworks.

10. Monitors the total effluent flowrate discharged to the 120-inch ocean outfall.

11. Monitors the secondary effluent flowrate to the AWPF (Activated Sludge Plant Effluent and Trickling Filter Effluent to the Screening Facility).

GWRS
Code Red

12. Monitors secondary effluent quality for compliance with requirements for MF (See Table 3 above).

13. Monitors the excess secondary effluent flowrate over the Screening Facility overflow weir to SEJB No. 3.

14. Notifies OCWD of change in the flowrate (up to 100 mgd (net) for SAR discharge (if SAR discharge is requested by OCSD).

GWRS
Code Red

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Code Purple

Condition

- Storage is no longer needed and the flow is expected to decrease.
- Outfall: Decrease to 375 MGD with the expectation that the decrease in flow will continue.
- GWRS returns to Normal Recycled Water Production and the Santa Ana River discharge is no longer needed for peak flow relief (if OCWD had switched over to the Santa Ana River Discharge Mode upon receiving OCSD's request).

Staffing

ICS Organization with transition to normal shift staffing.

In addition to the specific steps listed below, there will be specific actions such as equipment and building inspection and restart of any processes that were shut down or bypassed.

OCWD Tasks

1. Receives notice from OCSD of Code Purple and that the Normal Recycled Water Production may resume and that the Santa Ana River discharge may cease (if OCWD had switched over to the Santa Ana River Discharge Mode upon receiving OCSD's request).

Requires about 3 hours.

2. Initiates PCS lock procedures that shutdown and restart the AWPF in the Normal Recycled Water Production Mode upon receipt of OCSD that peak flow relief is no longer needed (if OCWD had switched to the Santa Ana River Discharge Mode). (Rearming the lock requires OCWD management level authorization and password.)

3. Switches AWPF from Santa Ana River Discharge Mode to Restart Mode in preparation for return to Normal Recycled Water Production Mode (if OCWD had switched to the Santa Ana River Discharge Mode). *(Requires shutdown and restart of the AWPF, which takes about 3 hours.)*

4. Confirms that the 54-inch interconnecting bypass valve to the 66-inch Interplant Line in coordination with OCSD. (OCSD operates the bypass valve. OCWD confirms its position. For more information see the Joint SOP "GWRS Bypass to 66-inch Interplant

Line".)

5. Unlocks and closes the 54-inch Santa Ana River discharge valve and then securely relocks it in the closed position. (OCWD operates, locks and unlocks the Santa Ana River discharge valve.)

Requires about 72 hours.

6. Performs manual clean-in-place of all MF cells and places them back in service (as needed). (*Requires about 72 hours total*.) In order to perform MF clean-in-place, RO product water is needed, although domestic water of MF effluent can be substituted in accordance with the GWRS On-line Operation and Maintenance Manual. The MF clean-in-place pumps draw from the RO product water piping downstream of RO Train A. To avoid drawing in hydrogen peroxide, which would damage the membranes, it is suggested that the MF and RO processes be restarted and run without adding hydrogen peroxide until all of the MF cells have been cleaned in place. During this period, effluent is bypassed to the 66-inch Interplant Line to the 120-inch ocean outfall.

7. Restarts the RO process as soon as enough MF cells have been cleaned-in-place to provide feedwater (as needed). Gradually add more RO units as more MF cells are cleaned. It is suggested that 2 to 4 MF cells be cleaned at a time while gradually operating some MF cells to produce MF effluent to send to the RO system and produce more RO product water for subsequent MF clean-in-place, gradually increasing the number of MF cells and RO units on line and coordinating with the UV flush. (Coordinate with the MF clean-in-place as noted above.)

8. Flushes the UV system with at least 3 equivalent reactor volumes of RO product water (as needed). (This is equivalent to a volume of approximately 85,000 gallons, which is operating at 15 MGD for 9 minutes.)

9. The GWRS Process Control System changes the UV Controls from the Santa Ana River Discharge Mode (if OCWD had switched to the Santa Ana River Discharge Mode). (All UV reactors run at 100% output – "Safe Mode" and UV Trains J, K, and L run at 10 MGD/train) to Normal Recycled Water Production Mode (UV reactors ramp up/down based on UV Transmittance, lamp hours, and flow. UV Trains J, K, and L are capped at 2.92 MGD/train.) and

closes the isolation valves and turns off the lamps of the standby UV trains.

10. Discharges effluent to 66-inch Interplant Line via the 54-inch interconnecting bypass and 54-inch Santa Ana River discharge pipeline (as needed).

11. Operates the AWPF in the restart/Santa Ana River bypass mode in compliance with the Online Operation and Maintenance Manual and equipment manufacturers' recommendations until all systems are flushed and water quality is in compliance with permit limits for recycled water production (if OCWD had switched to the Santa Ana River Discharge Mode).

12. Notifies OCSD when the AWPF restart has ended (if OCWD had switched to the Santa Ana River Discharge Mode).

13. Shuts down and restarts the AWPF again in the Normal Recycled Water Production Mode, which automatically opens and closes valves to direct recycled water to the Talbert Barrier and/or Kraemer/Miller Basin(s) (if OCWD had switched to the Santa Ana River Discharge Mode). (*Restart takes about 1 hour*.) The AWPF PCS automatically opens the 78-inch UV Decarbonator Discharge Isolation Valve (AWPF Valve No. 710-FV-7115) and closes the 78-inch Post-Treatment Bypass Valve FV7150 (AWPF Valve No. 805-FV-7150).

14. Maintains the 54-inch interconnecting bypass valve in the open position and in coordination with OCSD. (OCSD operates the bypass valve. OCWD confirms its position. For more information see the Joint SOP "GWRS Bypass to 66-inch Interplant Line".)

15. Resumes Normal Recycled Water Production for injection at Talbert Barrier and spreading at Kraemer/Miller Basin(s) (if OCWD had switched to the Santa Ana River Discharge Mode).

16. Notifies OCSD that the AWPF has resumed the Normal Recycled Water Production Mode (if OCWD had switched to the Santa Ana River Discharge Mode).

17. Maintains the AWPF ready to handle peak flows for the next Santa

GWRS
Color Purple

Ana River discharge event within 72 hours minimum following conclusion of a prior Santa Ana River discharge event.

18. Resumes normal recycled water quality monitoring and reporting in accordance with the GWRS water recycling permit, RWQCB Order No. R8-2004-0002 (if OCWD had switched to the Santa Ana River Discharge Mode).

19. Resumes normal operation of GAP, as needed.

OCSD Tasks

1. Notifies OCWD of Code Purple and that the peak flow event has passed and the Santa Ana River discharge may cease (if OCWD had switched to the Santa Ana River Discharge Mode).

2. Receives notice from OCWD that the AWPF switchover from the Santa Ana River Discharge Mode to the Restart Mode has begun (if OCWD had switched to the Santa Ana River Discharge Mode).

3. Follows storm watch operating procedures for Plant No. 1 and related facilities in accordance with OCSD IERP.

4. Opens the 54-inch interconnecting bypass valve to the 66-inch Interplant Line and coordinates with OCWD (if OCWD had switched to the Santa Ana River Discharge Mode). (OCSD opens this valve for AWPF restart.)

5. Confirms that OCWD has closed the 54-inch Santa Ana River discharge valve and that it is securely locked in the closed position. (OCWD operates, locks, and unlocks this valve.)

6. Verifies the operational readiness of the “roll-off” bin Screenings Facility for storage of dewatered screenings.

7. Confirms flow conditions at the WSSPS No. 1 to determine if the 4-inch screenings dewatering bypass should be used.

8. Monitors water quality of secondary effluent for compliance with requirements (Turbidity shall not exceed 20 NTU for more than 4 hours and shall not exceed 50 NTU at any time.)

GWRS
Code Purple

9. Monitors water quality of secondary effluent for compliance with requirements for GAP. (Turbidity shall not exceed 5 NTU on average over the previous 30 days and shall not exceed 10 NTU at any time.)

10. Receives notice from OCWD that the AWPF restart is completed and normal recycled water production for injection at Talbert Barrier and spreading at Kraemer/Miller Basin(s) has resumed (if OCWD had switched to the Santa Ana River Discharge Mode).

11. Receives notice from OCWD that GAP is or is not in operation.

12. Checks with OCWD to confirm the operational readiness of the AWPF to receive peak flows and if necessary, return to Code Blue to begin a new Santa Ana River discharge event after 72-hour minimum AWPF cleaning period.

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Appendix 6A
EOC Reference Materials

The following maps, tables, and other materials should be available in the EOC for a high flow emergency:

- OCSD trunk sewer map with dry erase capability
- Rain gauge map overlaid on OCSD trunk sewer shed map
- Tide Tables
- Plant No. 1 hydraulic flow-through map with dry-erase capability
- Plant No. 2 hydraulic flow-through map with dry-erase capability
- Plant No. 1 storage tables
- Plant No. 2 storage tables
- Plant No. 1 High Flow Condition Electrical Procedure with load table
- Plant No. 2 High Flow Condition Electrical Procedure with load table
- Electric/Hydraulic Reliability Report (J-33/34 Report)
- Plant No. 1 map with project numbers
- Plant No. 2 map with project numbers
- Single-line drawings
- Collection System map showing diversions
- Collection System map showing locations of construction projects
- Collection System Diversion Book
- Thomas Guide Sewer Atlas
- SARI Line Emergency Response Plan (ERP)
- Joint SOP GWRS Santa Ana River Discharge
- Joint SOP GWRS Bypass to 66-inch Interplant Pipeline

Figures

Figure 6-1.
Plant No. 1 Hydraulic
Flow-Through Schematic

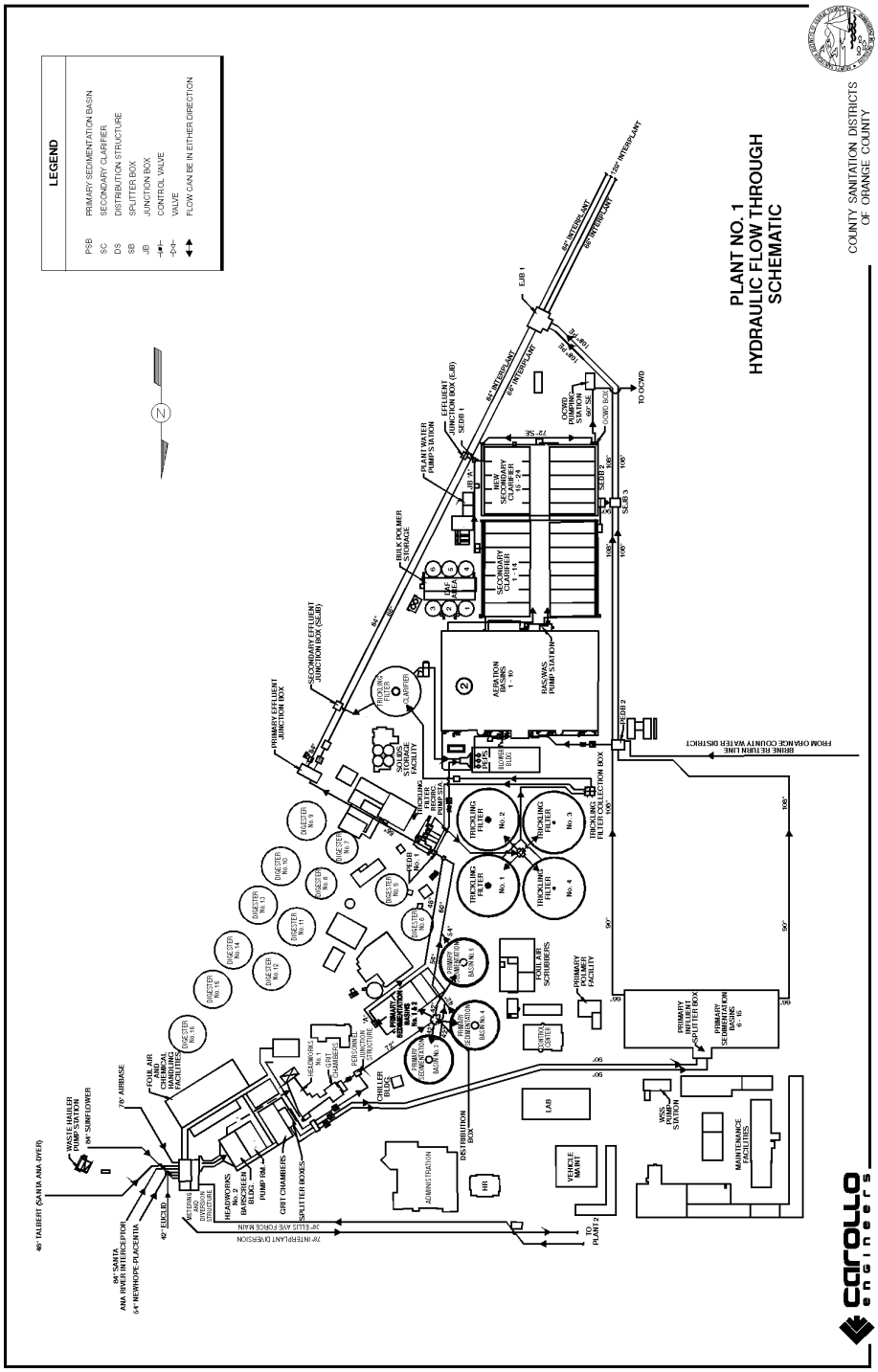

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Figure 6-2.
Plant No. 2 Hydraulic
Flow-Through Schematic

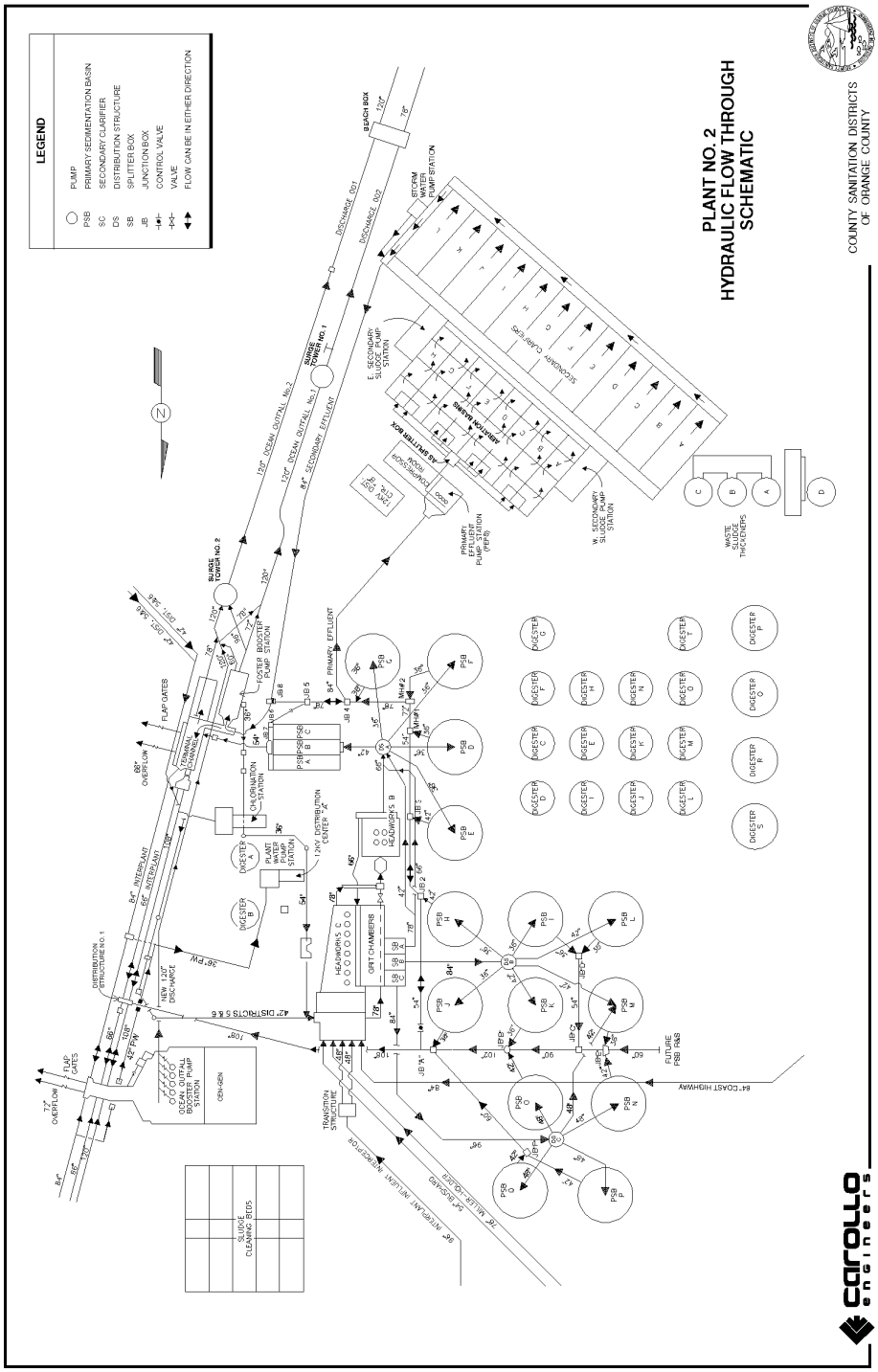

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Figure 6-3.
Headworks No. 1 at Plant No. 1

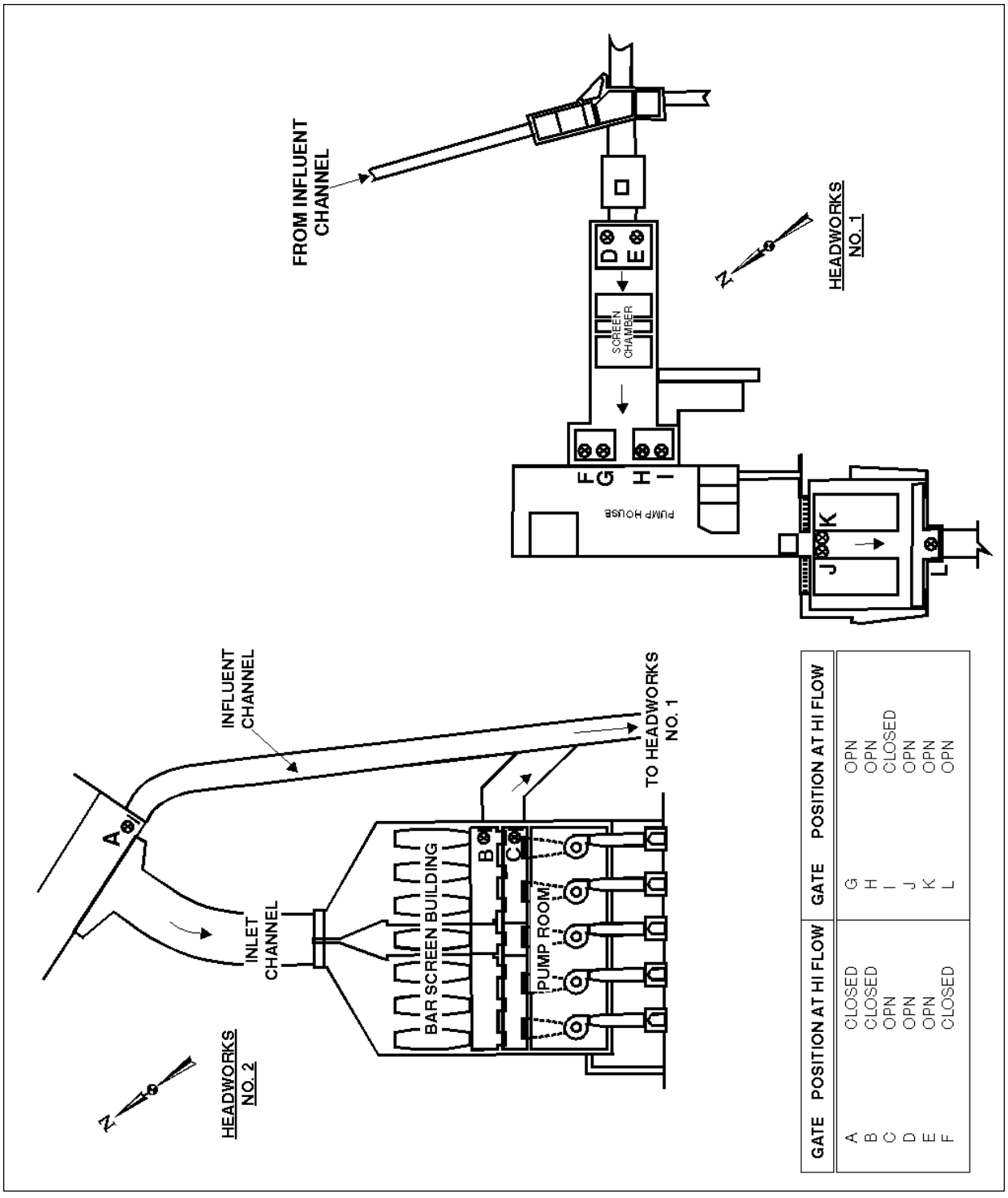

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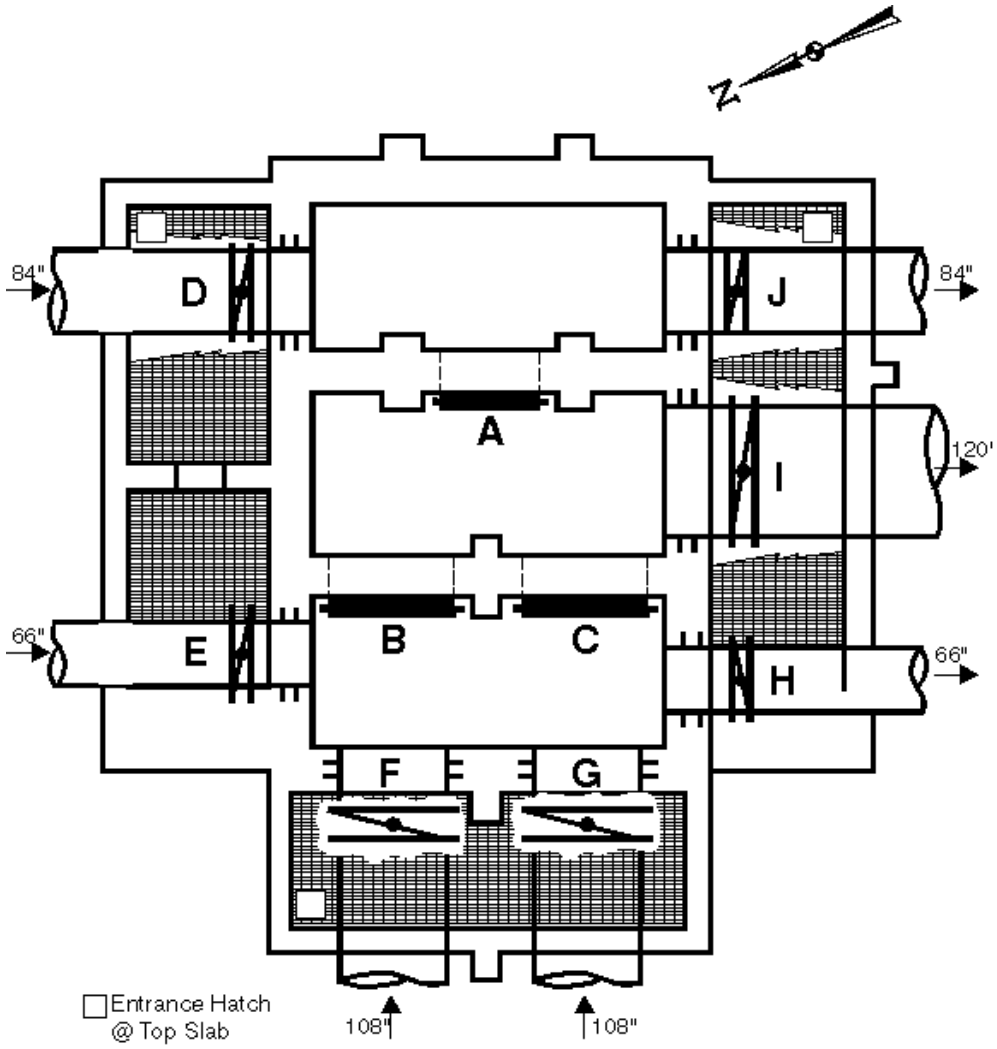
Figure 6-4. Effluent Junction Box (EJB) No. 1 at Plant No. 1



GATE/VALVE	FLOW	POSITION AT HI FLOW
A	Internal Bypass	OPN
B	Internal Bypass	OPN
C	Internal Bypass	OPN
D	From Secondary	OPN
E	From Secondary	OPN
F	From PEDB	OPN
G	From PEDB	OPN
H	66" Outfall	VAR
I	120" Outfall	OPN
J	84" Outfall	OPN

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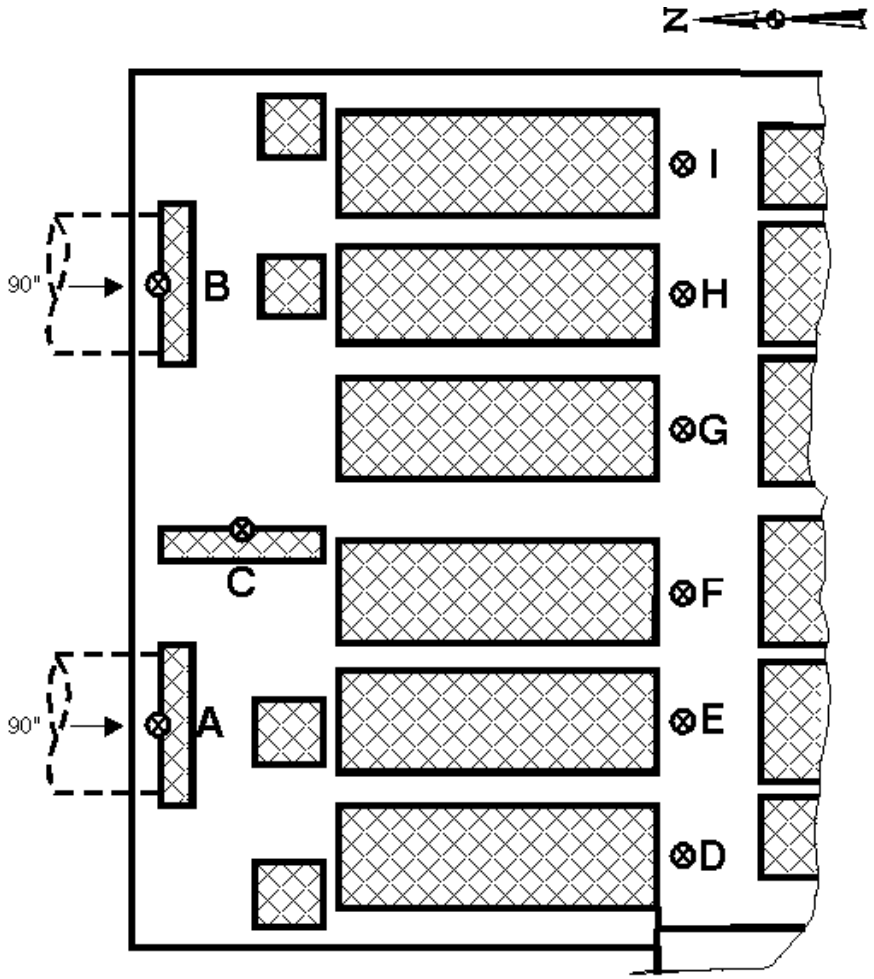
Figure 6-5. Primary Influent Splitter Box (PISB) at PSBs 6 through 15 at Plant No. 1



GATE	FLOW CONTROLLED	POSITION AT HI FLOW
A	Influent Shutoff	OPN
B	Influent Shutoff	OPN
C	Equalization or Bypass	VAR
D	Clarifiers 7-9-11-13-15	OPN
E	Phase III West	FUTURE
F	Phase IV West	FUTURE
G	Phase IV East	FUTURE
H	Phase III East	FUTURE
I	Clarifiers 6-8-10-12-14	OPN

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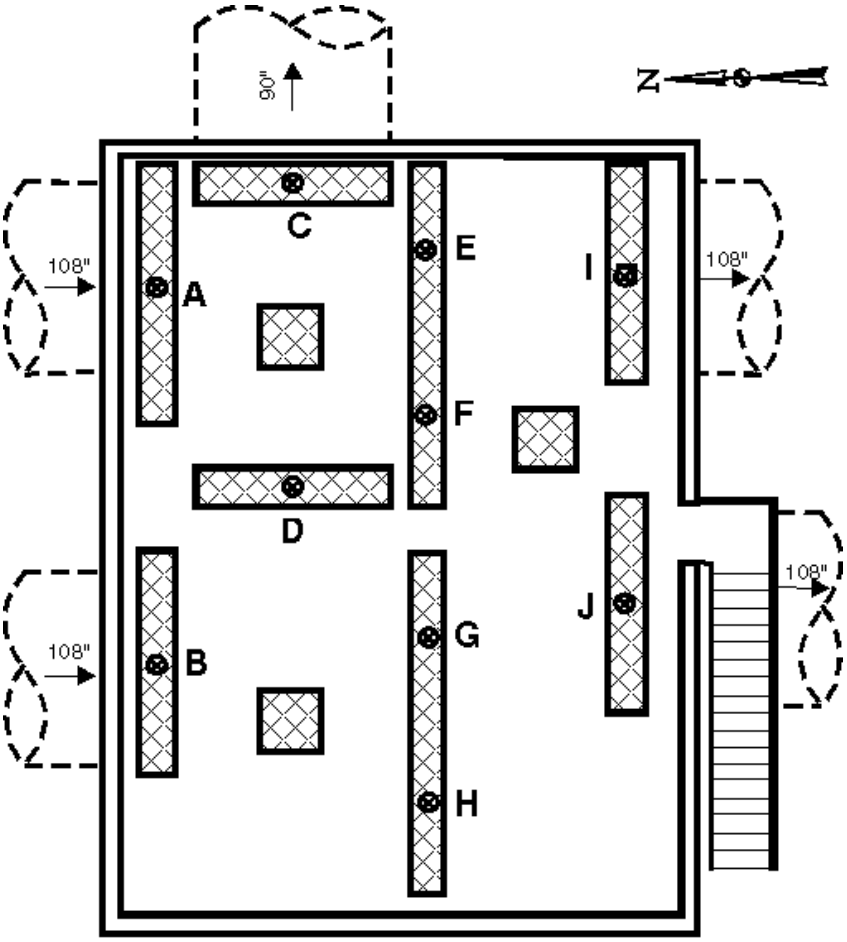
Figure 6-6. Primary Effluent Distribution Box (PEDB) No. 2 at Plant No. 1



GATE	FLOW CONTROLLED	POSITION AT HI FLOW
A	E. Primary Effluent	OPN
B	W. Primary Effluent	OPN
C	A.S. Influent	OPN
D	Internal Bypass	OPN
E	Process Flow vs Plant Effluent	VAR
F	Process Flow vs Plant Effluent	VAR
G	Process Flow vs Plant Effluent	VAR
H	Process Flow vs Plant Effluent	VAR (Weirs Adjusted Per Operational Needs)
I	Plant Effluent	OPN
J	Plant Effluent	OPN

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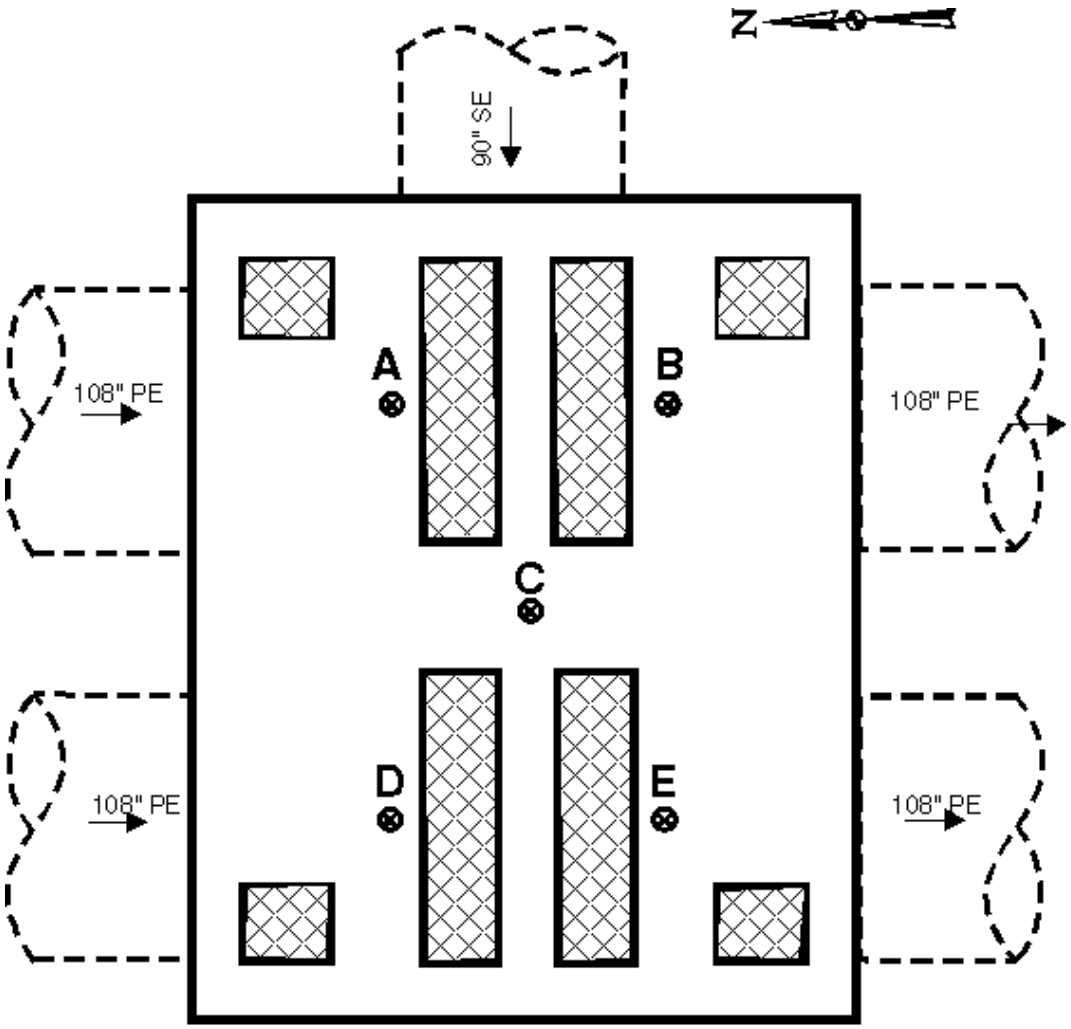
Figure 6-7. Secondary Effluent Junction Box (SEJB) No. 3 at Plant No. 1



GATE	FLOW CONTROLLED	POSITION AT HI FLOW
A	PE From PEDB2	OPN
B	PE From PEDB2	OPN
C	Internal Bypass	OPN
D	Flow to EJB1	OPN
E	Flow to EJB1	OPN

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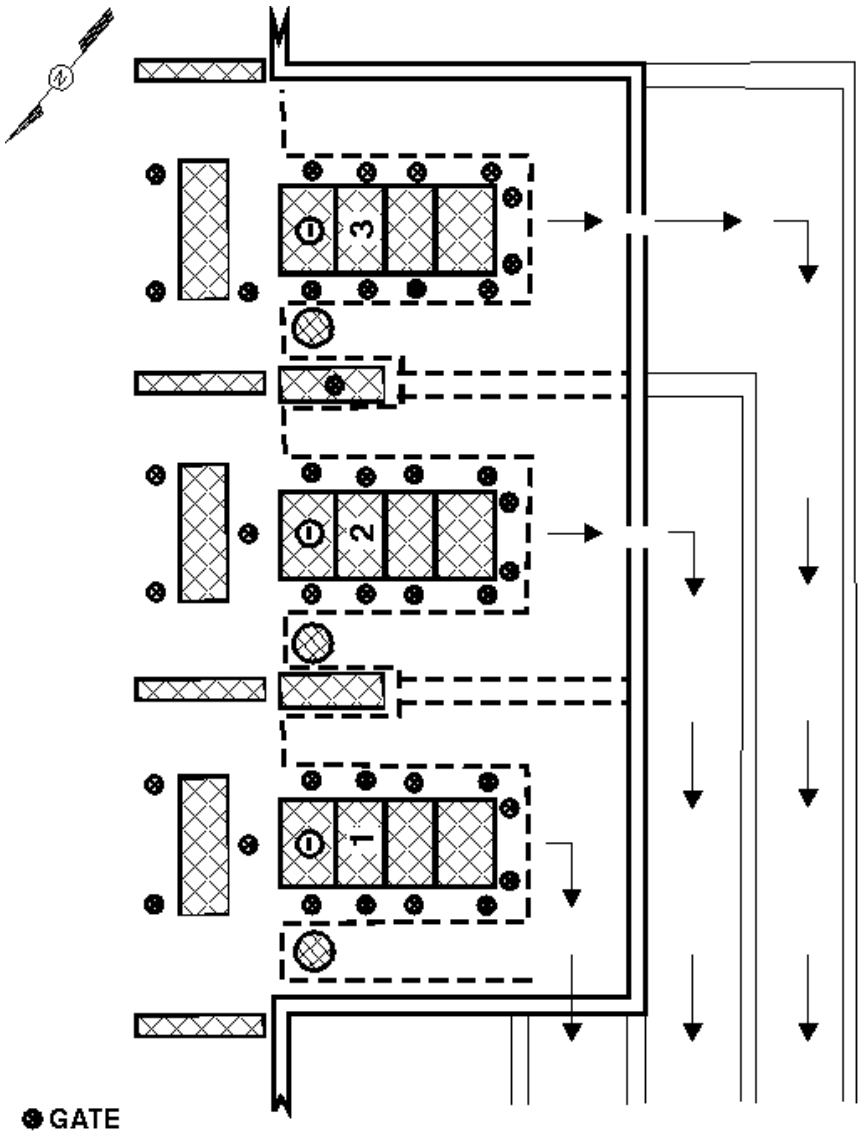
Figure 6-8. Splitter Boxes 1, 2, and 3 at Plant No. 1



SPLITTER BOX	USE	GATE POSITION AT HI FLOW
1*	Clarifiers 6-15	VAR (@70%)
2*	Clarifiers 6-15	VAR (@70%)
3	Clarifiers 1-5	VAR (@30%)

* Normally, only one of these splitters boxes (#1 or #2) is in service for Clarifiers 6-15

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Figure 6-9. A.S. Plant Influent Splitter Box at Plant No. 1

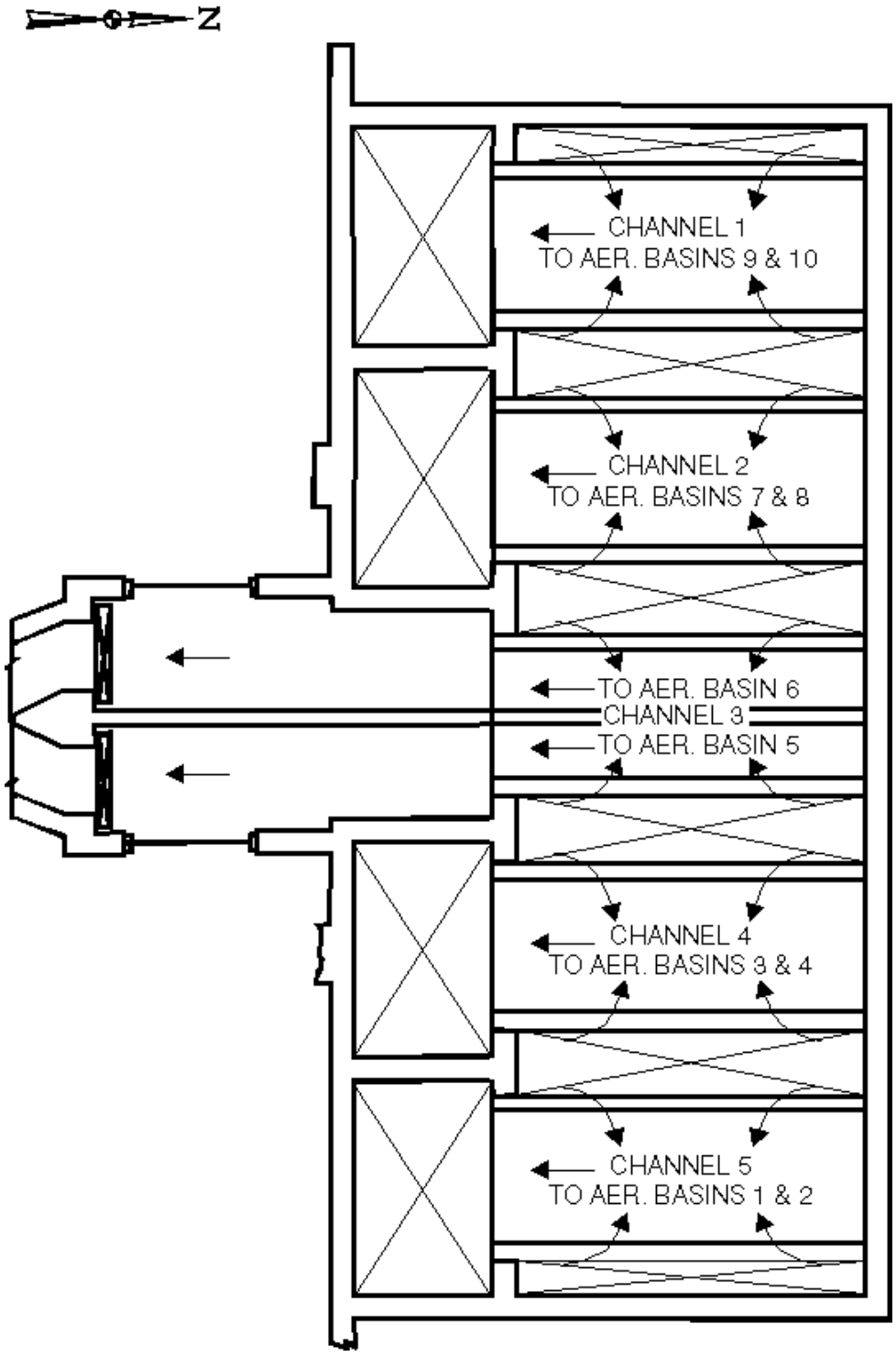

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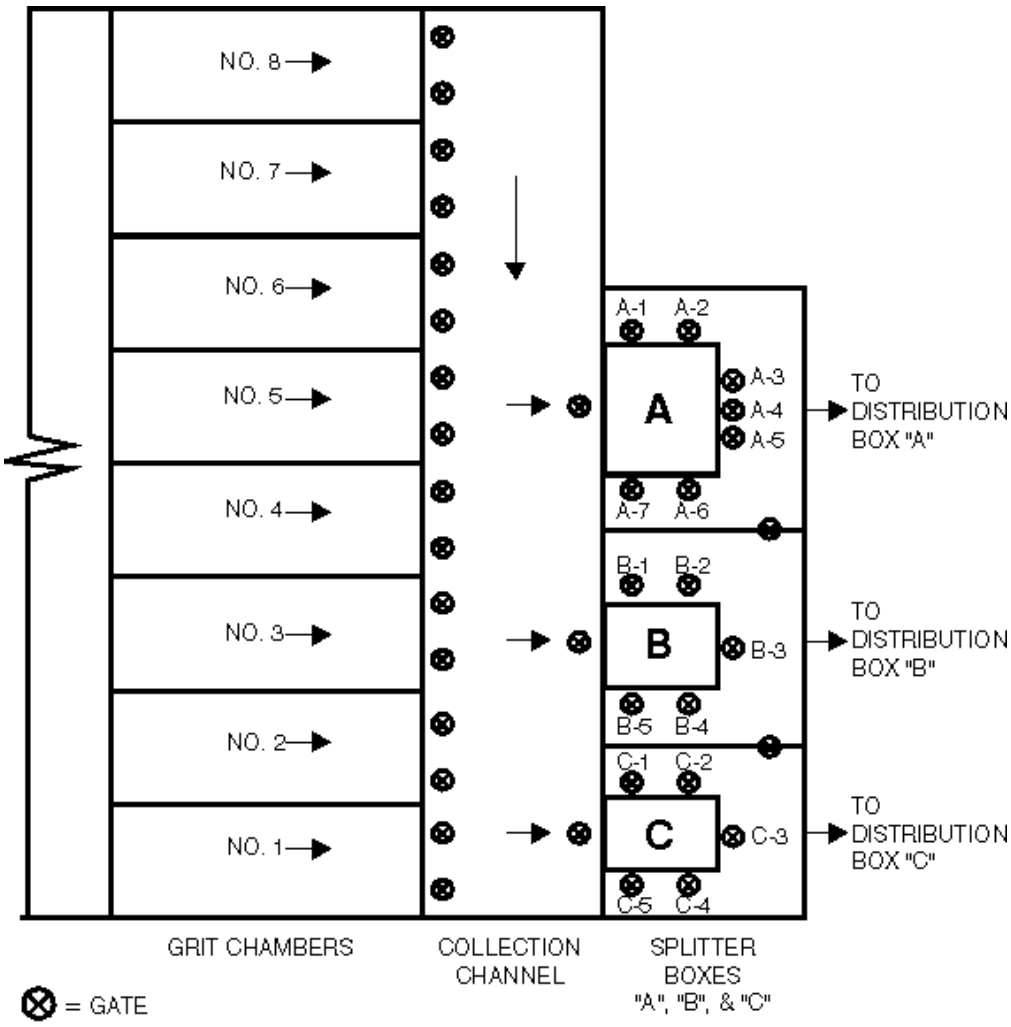
Figure 6-10. Splitter Boxes A, B, and C at Plant No. 2



GATE	FLOW (MGD)	GATE	FLOW (MGD)
A-1	24	B-3	24
A-2	24	B-4	24
A-3	12	B-5	24
A-4	12	C-1	24
A-5	12	C-2	24
A-6	24	C-3	24
A-7	24	C-4	24
B-1	24	C-5	24
B-2	24		

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Figure 6-11. A.S. Plant Effluent Splitter Box at Plant No. 2

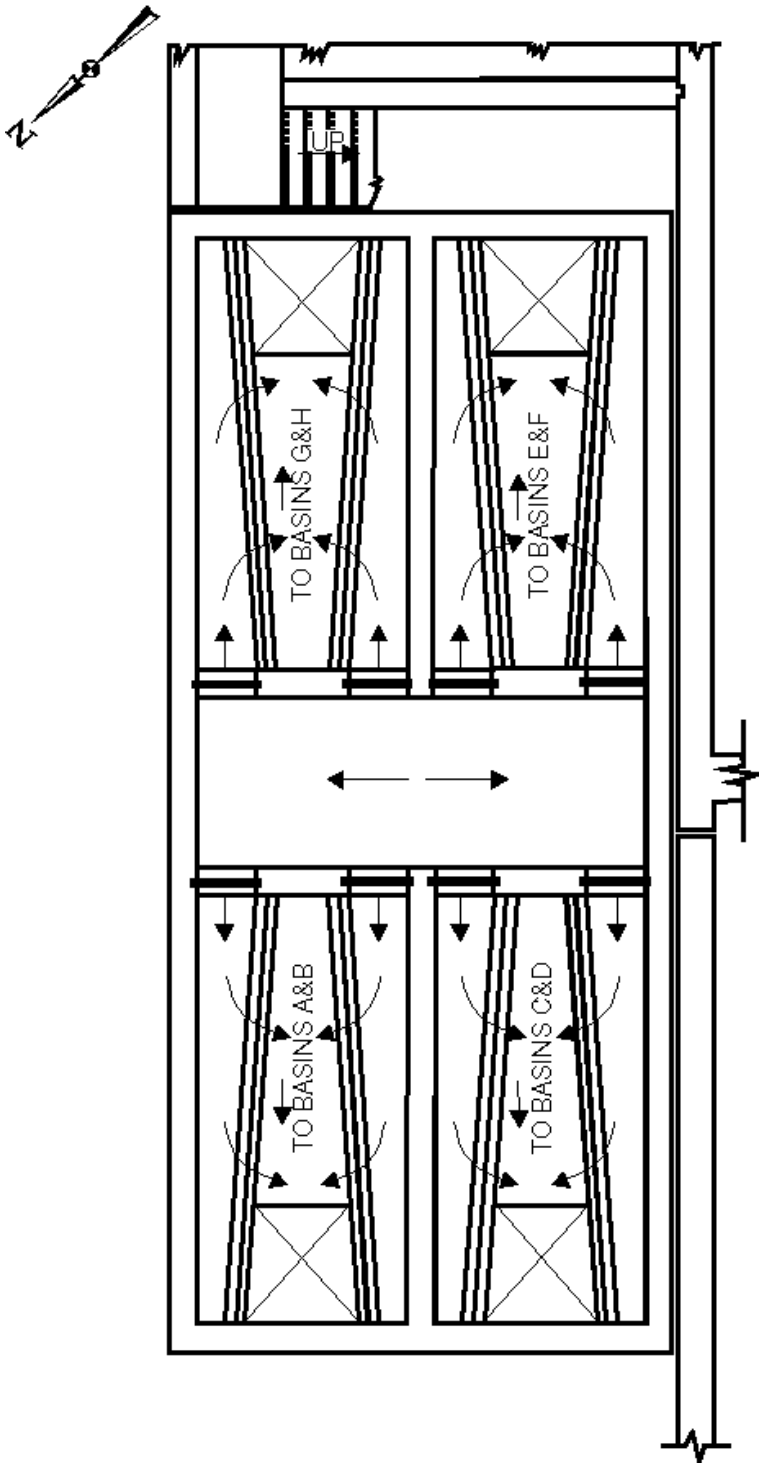

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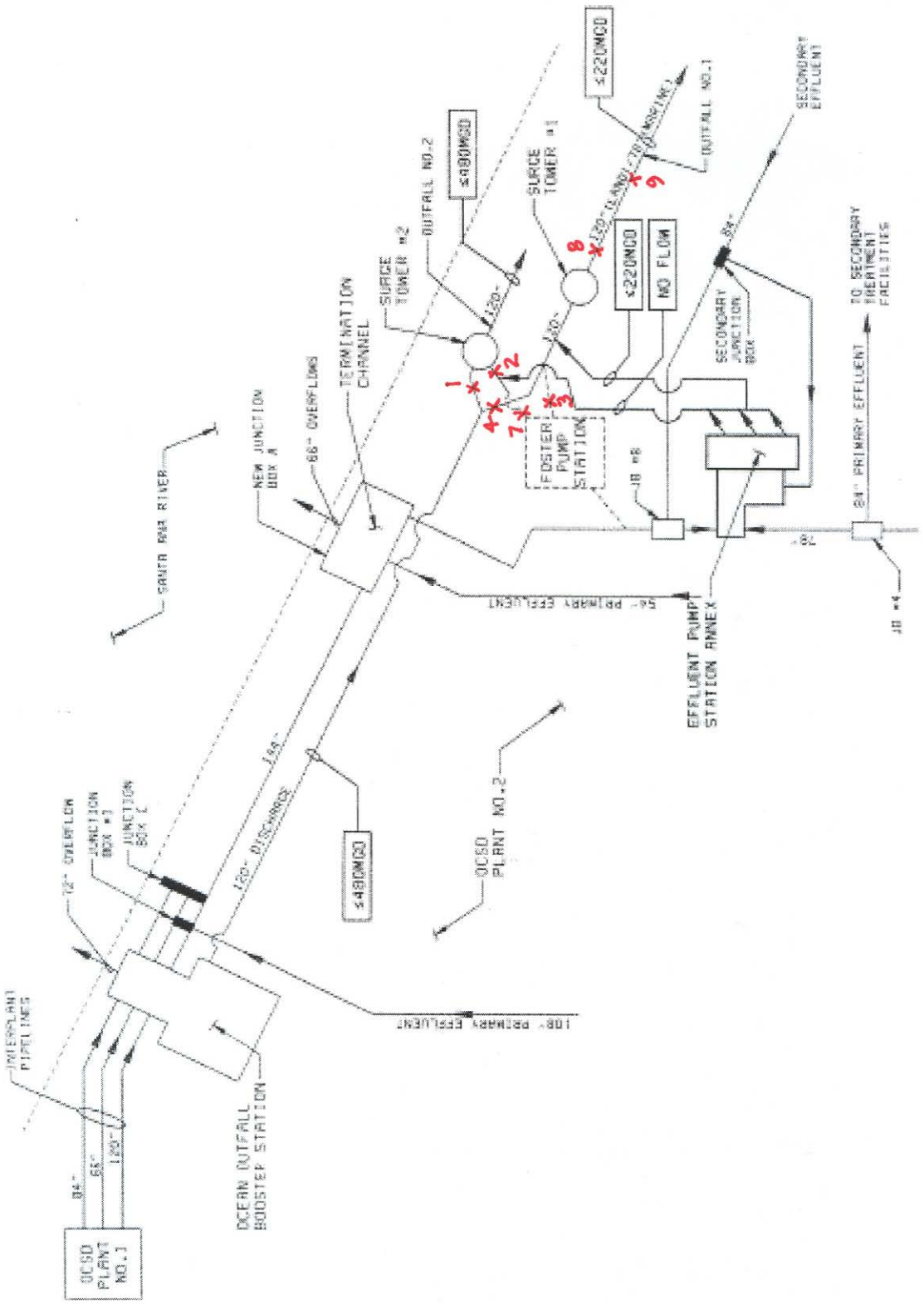
Figure 6-12. Outfall System Valves



Contents

7. Earthquakes

Purpose and Scope

The Incident Command System will be used to respond to an earthquake. This chapter provides additional plans and procedures to cover earthquake-specific issues such as personal preparedness and post-earthquake inspection of buildings.

The Incident Commander takes the lead in determining the ICS personnel who should be activated. The standard ICS structure is customized to the nature of the emergency and the extent of damage.

The sections presented are:

- Responsibilities of Individual Employees
- Earthquake Response Guidelines
- Post-Earthquake Recovery Guidelines

In addition, the following appendices are included:

- Appendix 7A contains the procedures for the Plant No. 1, Plant No. 2, and Collection System Damage Assessment Teams (Construction Management/Engineering personnel).

- Appendix 7B contains the procedures for Collection System personnel and others such as Source Control personnel to conduct damage assessment and equipment inspection.

This plan interfaces with other plans as follows:

- The Incident Command System (Volume I, Chapter 2) provides the overall organizational structure for the response.

- The Evacuation Procedures (Volume II, Chapter 3) provide instructions for evacuating buildings after an earthquake.

- The Tsunami Plan (Volume II, Chapter 15) provide instructions for Plant No. 2 on vertical evacuation and moving to higher ground.

Responsibilities of Individual Employees

This section discusses individual responsibilities with regard to emergency preparedness actions, actions during an earthquake, and actions following an earthquake.

Preparations before an Earthquake

All Employees

1. Earthquake-proof immediate work area as follows:

    a. Remove or secure books and other objects that can fall during an earthquake.

    b. Keep all storage doors closed and latched except when in use.

2. Ensure that Employee Family Contact form from Human Resources is accurate and up to date.

3. Become completely familiar with work area, keeping in mind that the lighting may be poor if electricity is lost. Know the:

    a. Location of the nearest exit that can be used to get out of the building

    b. Evacuation route inside the building

    c. Location of your assigned Assembly Area

    d. Location of hazardous materials that could pose a hazard during a disaster

    e. Possible safe-covers in your work area that could be used during an earthquake such as hallways and door frames

4. Ensure that you maintain a personal emergency kit and store it in your car or work area. Suggested items for each kit are:

    - Flashlight
    - Bottled water
    - Nonperishable food
    - Extra pair of prescription glasses
    - Basic first aid kit

- Three-day supply of needed medication
- Walking shoes
- Jacket
- Pocket money
- Local maps
- Phone contact list
- Portable radio and batteries

5. Know the location of emergency supplies in the work area.

Actions during an Earthquake

Where you are and what you are doing when an earthquake occurs determines the actions you should take to avoid injury. The following table indicates actions for different circumstances.

If You Are	Then
Inside a building at Plant No. 1	1. At the first indication of an earthquake: a. Move away from windows. b. Get to a position that will provide protection from falling objects; for example, crawl under a sturdy desk, crouch down next to a wall or in a hallway, or stand in the frame of a doorway. c. Make yourself as small and stable as possible so that you cannot be thrown from under your safe-cover. Consider holding onto a desk leg or some other sturdy object to keep from being moved. 2. Remain as calm as possible. 3. Remain in the building until the shaking stops.
Outdoors at Plant No. 1	1. Move away from structures and overhead power lines. 2. Stay away from hazardous materials storage such as chemical tanks. 3. Stay in an open area until conditions are stable.

If You Are	Then

Inside a building at Plant No. 2	4. At the first indication of an earthquake: a. Move away from windows. b. Get to a position that will provide protection from falling objects; for example, crawl under a sturdy desk, crouch down next to a wall or in a hallway, or stand in the frame of a doorway. c. Make yourself as small and stable as possible so that you cannot be thrown from under your safe-cover. Consider holding onto a desk leg or some other sturdy object to keep from being moved. 5. Remain as calm as possible. 6. Remain in the building until the shaking stops. 7. Immediately after the shaking has stopped find refuge on the roof of the following structures: a. P2-66 New Headwork's Structure b. EPSA Building c. Co-Generation Building d. P2-90 Trickling Filters and Pump Station e. OOBS (Ocean Outfall Booster Station) f. Truck Loading Structure g. Atop any digester
Outdoors at Plant No. 2	1. Move away from structures and overhead power lines. 2. Stay away from hazardous materials storage such as chemical tanks. 3. Stay in an open area until conditions are stable. 4. Immediately after the shaking has stopped find refuge on the roof of the following structures: a. P2-66 New Headwork's Structure b. EPSA Building c. Co-Generation Building d. P2-90 Trickling Filters e. OOBS (Ocean Outfall Booster Station) f. Truck Loading Structure g. Atop any digester

If You Are	Then
In a pipe tunnel or underground area	1. Get to a doorway or any place that offers protection from falling objects as quickly as possible. Additionally, there might be broken chemical pipes, and damaged water lines. Once the shaking stops, evacuate the tunnel immediately. 2. Be careful when using a stairwell or ladder to exit because the footing may be unstable. 3. Watch for falling objects. 4. If you are at Plant No. 2, immediately find refuge above the second-floor in a multi-story, reinforced- concrete building or structure.

Actions after the Earthquake

Employees at Their Work Site

1. Follow the posted evacuation route to your assigned Assembly Area.

   Note: Evacuation diagrams are posted in plant buildings indicating exit routes and the direction of the Assembly Areas outside the buildings.

   Warning: **The greatest hazard zone immediately following an earthquake is the area around buildings because of the danger of falling objects.**

2. Report to your Evacuation Warden for roll call. Inform your Evacuation Warden of any visitors or contractors assigned to you and their status and any emergency situation you noticed.

3. Help the injured. **Do not attempt to move anyone who appears to have a head or spine injury or is seriously injured unless he or she is in immediate danger of further injury.**

4. Do not smoke or light matches or lighters because of the possibility of escaping gas or spilled flammable or combustible liquids.

5. Report spills of hazardous materials or other potentially harmful material to the Evacuation Warden immediately.

6. Prepare for aftershocks. Although most aftershocks are smaller than the main earthquake, some may be powerful enough to cause additional damage. Wait for instructions from your supervisor, Evacuation Warden, or activated ICS member. Ensure that buildings

have been inspected and determined to be safe (by posted inspection sign) before re-entering them.

7. Return to your normal work station when your building has been determined to be safe. If the building is posted with a red UNSAFE DO NOT ENTER OR OCCUPY sign, then do not enter the building or structure. If the building cannot be occupied then alternate safe building location might need to be identified.

8. Replace all telephone headsets in your work area and wait for directions from your supervisor. Avoid using telephones so that the lines are available for emergency priorities. If possible, use a cellular phone to check on your family to keep lines open.

9. Do not leave the work site until you have checked out with your supervisor. Your Supervisor will make the determination whether your presence is still required at work or you will be allowed to leave work. Confirm that routes of travel are open and safe before attempting to drive home.

12. Plant No. 2 staff, who vertically evacuated to the designated vertical evacuation points, must remain there until an all-clear has been announced by the incident commander.

Offsite OCSD Employees

1. If not already in your vehicle, return to it.
2. Contact the Control Center only in an extreme emergency. The Control Center or your supervisor will contact you to get your location and condition.
3. If conditions appear to be safe, return to your work location.
4. If you are on the coast or near the beach, immediately move inland to higher ground. Do not wait for a Tsunami Warning to be issued.

Employees Who Are at Home

1. If conditions permit, assume that you are expected to report to work and keep normal hours.
2. Contact your immediate supervisor or manager to ascertain whether you are expected to report to work.

Earthquake Response Guidelines

The overall response to an earthquake begins as soon as the shaking stops. The major steps can be summarized as follows:

- Evacuate all buildings.
- At Plant No. 2, immediately find refuge in a designated tsunami evacuation multi-story, reinforced- concrete building or structure because of the potential for a tsunami.
- Account for all personnel.
- Administer first aid.
- Perform search and rescue.
- Assess damage.
- Inspect critical equipment.
- Shut down utilities in nonessential areas and remove all possible ignition sources.
- If needed, shut down noncritical process operations.

Many response and recovery steps do not occur on a strict linear timeline but may be performed concurrently or repeated several times.

Evacuation

When the shaking has stopped, personnel in buildings:

1. Assist personnel around you who may be hurt or otherwise need assistance to evacuate.
2. If any contractors or visitors are working with you, ensure that they also evacuate.
3. If you are at Plant No. 2, immediately find refuge in the designated tsunami multi-story, reinforced- concrete building or structure.
4. Using the guidelines in Chapter 3, Evacuation Procedures,

immediately evacuate the building using the nearest passable exit.

Note: Evacuation diagrams are posted in plant buildings indicating exit routes and the direction of the Assembly Areas outside the buildings.

Report to your assigned Assembly Area as described in Chapter 3, Evacuation Procedures.

5. If you are an Evacuation Warden, take the division roster sheets with you.

Accounting for Personnel

The primary responsibility for accounting for personnel rests with the Evacuation Warden and the Division Evacuation Coordinators. Each division should have a method for accounting for personnel such as an in/out board where personnel sign in and out every day so that their whereabouts will be known in an emergency.

The process of accounting for personnel after an earthquake is conducted as follows by the Evacuation Warden:

1. Bring your division/area roster sheets to be used for roll call to your assigned Assembly Area.

2. Account for personnel in your division using the roster sheet.

    a. If an employee is not present at roll call, record his or her last known location under Remarks. For example, you may be aware that an employee is at an off-site meeting.

    b. If an employee is injured, record details under Remarks. Provide whatever aid and comfort you can.

    c. Record any emergency situation (such as a fire or structural damage).

3. If necessary for safety reasons, move your group Assembly Area to another location that is free of danger.

4. Report the roll call results to the Division Evacuation Coordinator, emphasizing personnel who are unaccounted for and any other emergencies.

First Aid

Evacuation Wardens and Division Evacuation Coordinators maybe trained to administer first aid. Likewise, many OCSD employees have had first aid training. These personnel can assist injured personnel who have been evacuated. Severe injuries requiring further aid must be reported up the line of communication to the Division Evacuation Coordinator. In addition, members of the ICS Medical Team have been trained to provide advance first aid.

Damage Assessment

The ICS Damage Assessment Teams inspect buildings and structures at Plant No. 1 and Plant No. 2 and the Collection System for damage that may cause hazards to employees. The Damage Assessment Teams are made up of qualified personnel who will perform the following evaluations and inspections in accordance with the procedures in Appendixes 7A and 7B.

- Rapid evaluation of OCSD facilities
- Detailed evaluation of OCSD facilities
- Engineering evaluation of OCSD facilities (as needed)

As part of the inspection process, buildings and structures are assigned a structure safety classification as shown in Table 7-1.

Table 7-1. Structure Safety Evaluation Classifications

Posting Class	Color of Sign	Description
INSPECTED	Green	• No apparent hazard found although repairs may be required. • Original lateral load capacity not significantly decreased. • No restriction on use or occupancy.
LIMITED ENTRY	Yellow	• Dangerous condition believed to be present. • Entry by staff for emergency purposes only; no usage on continuous basis. • Entry by public not permitted. • Possible major aftershock hazard.
UNSAFE	Red	• Extreme hazard; may collapse. • Imminent danger of collapse from an aftershock. • Unsafe for occupancy or entry except by authority of Construction Management.

Inspection of Critical Equipment

Our facilities cannot be fully shut down because we must maintain flow of wastewater through the Collection System and the treatment plants to the ocean outfall. The consequence of not maintaining this flow is sewage backing up into homes and through manholes into the streets with potential health risks. Consequently, critical process equipment at both plants need to be inspected and in-service as needed to maintain flow through the plants.

Plant No. 1 Critical Equipment

Members of the Plant No. 1 Damage Assessment Team inspect equipment and areas to ensure that:

- Electrical power is available.
- Flow through the plant can be controlled.
- Utilities are available.
- Process controls are functional.

The following equipment and areas are inspected:

- Electrical Power
  - Generators
  - Connections to Southern California Edison
  - Central Generation
- Flow Control
  - Metering and Diversion Structure
  - Headwork's No. 2
- Utilities
  - Plant Water
  - Plant Air
  - City Water
  - Industrial Water
  - Digester Gas System
- Process Controls

Plant No. 2 Critical Equipment

Members of the Plant No. 2 Damage Assessment Team inspect equipment and areas to ensure that:

- Electrical power is available.
- Flow through the plant can be controlled.
- Utilities are available.
- Process controls are functional.

The following equipment and areas are inspected:

- Operations Building
- Headwork's C
- Headwork's B
- Ocean Outfall Pump Station C
- Surge Tower No. 1
- Surge Tower No. 2
- Emergency Disinfection Station
- Standby Electric Generator (Diesel)
- 12 kV Distribution A
- Primary Power Building A
- Service Center
- 12 kV Distribution B
- Power Building A
- Power Building C
- Gas Compressor Building
- Primary Sedimentation Basins (A through M)
- Distribution Structure A
- Distribution Structure B
- Central Generation
- Air Compressor Building

Collection System Critical Equipment

Priorities for inspection and restoration of equipment in the Collection System are listed below for pump stations (Table 7-2) and trunk lines (Table 7-3). The pump stations are divided into geographical areas, then prioritized within each area.

Table 7-2. Inspection and Restoration Priorities for Pump Stations

Area	Station	Location
A1	1. Bay Bridge	290 E. Coast Hwy., Newport Beach
	2. Rocky Point	1575 W. Coast Hwy., Newport Beach
	3. Lido	3431 Newport Blvd., Newport Beach
A2	4. 15th Street	1514 W. Balboa Blvd., Newport Beach
	5. "A" Street	810 E. Balboa Blvd., Newport Beach
	6. Bitter Point	5908 ½ W. Coast Hwy., Newport Beach
	7. Crystal Cove	7423 E. Coast Hwy., Newport Beach
B	1. Slater	7202 Slater Blvd., Huntington Beach
	2. Seal Beach	13979 Seal Beach Blvd., Seal Beach
	3. Westside	3112 Yellowtail Drive, Los Alamitos
	4. Edinger	5500 Edinger Blvd., Huntington Beach
C1	1. Main Street	1499 Main Street, Irvine
	2. College	3198 College Ave., Costa Mesa
	3. MacArthur	4141 MacAruthur Blvd., Newport Beach
C2	5. Main Street Flume (need traffic control)	1499 Main Street, Irvine
D	1. Yorba Linda	2600 Yorba Linda Blvd., Fullerton
	2. Carbon Canyon	3500 Carbon Canyon Regional Park
	3. Green River Meter/Flume	W.R. Canyon/Santa Ana River to County Line
--	**Last Priority:** Ellis (offline)	SE Corner of Bushard/Ellis, Fountain Valley

Table 7-3. Inspection and Restoration Priorities for Trunk Lines

Priority	Location
1	I-8
2	I-9
3	I-2-4
4	District No. 5, Force Mains
5	District No. 5, Trunk Sewers
6	Seal Beach Force Main
7	Miller Holder System
8	Knott System
9	Euclid System
10	Santa Ana River Interceptor
11	Magnolia System
12	Westside System
13	New Hope Placentia System
14	Sunflower System
15	District No. 6 Sewers including Baker-Gisler Force Main
16	Gisler-Red Hill System
17	District No. 11 Sewers
18	District No. 1 Sewers
19	District No. 7 Sewers
20	Carbon Canyon Force Main

Utilities Shutoff and Removal of Ignition Sources

During the period immediately following an earthquake, there is a major threat of fire or explosion from ruptured natural gas lines, ruptured fuel tanks, downed live power lines, etc. In addition, water pipes and lines may be damaged.

As a safety measure and to conserve energy and water, utilities will need to be shut off in nonessential areas. Inspection in the Collection System will indicate whether any damaged pump stations need to be taken offline as well.

Only qualified O&M personnel may perform shutoffs in accordance with standard operating procedures.

If there has been a release of flammable liquid or gas (or there is a potential release), potential ignition sources must be removed from the vicinity immediately, but only if it is safe to do so. As needed, outside

emergency responders will be contact.

Shutdown of Noncritical Processes

In a major emergency, the Incident Commander may elect to shut down secondary treatment or other auxiliary processes because they are damaged or because they are preventing the primary objective, maintaining flow through our system, from being achieved. Using the technical expertise of O&M personnel, the Incident Commander can activate the appropriate Operations personnel to perform equipment shutdown procedures.

Post-Earthquake Recovery Guidelines

Once the immediate actions have been completed following the shaking, OCSD enters a series of recovery steps, summarized below:

- Restore operations to normal levels (or as near normal as possible).
- Implement other plans as needed such as Finance and Mutual Aid
- Release employees to care for families and secure their homes.
- Provide support as needed to employees suffering from post-traumatic stress.

Restoration of Operations

If critical operations were successfully resumed in the response phase, the objective of this phase is full restoration of operations. The Incident Commander will activate appropriate numbers of Operations and Repair Teams to accomplish this objective as promptly as possible.

Media Relations

OCSD's policy is to keep the media and the public fully informed when there is a concern for the public's health or the environment that arises from our ability to process the wastewater flowing through its system. The Media Plan (Volume I, Chapter 6) is used by the Public Information Officer (a member of the ICS Command Staff) to ensure that this policy is met.

Finance

Critical to both response and recovery are financial issues. ICS members in Finance Unit will implement the appropriate potions of the Finance Plan to ensure the following:

- Accurate tracking of all labor and overtime during the emergency period
- Accurate tracking of expenses for OCSD-owned equipment, supplies, outside support, equipment rental, etc.
- Sufficient blanket purchase orders and other prior arrangements so that emergency needs can be easily met
- Comprehensive reporting of all emergency expenditures in order to file claims for disaster aid and to evaluate the efficiency of response

Employee Support

OCSD provides support and information to employees to help them prepare their homes for earthquakes and other emergencies.

In addition, during an emergency, although maintaining flow through our system is a primary objective, we cannot accomplish that objective without our employees. To work to their fullest capacity, our employees must be released from duty to take care of their homes and families and to get sufficient rest.

In an extended emergency, work shifts are planned so that personnel can be released at least once every 12 hours (the typical operational period or shift during emergency response).

Appendix 7A
Facilities Damage Assessment Procedures

This appendix contains the procedures for conducting damage assessment performed by the Damage Assessment Group, which is composed of teams of Construction Management/Engineering personnel. Members of these teams have received special training in evaluating the safety of buildings and structures.

This appendix contains:

- Damage Assessment Teams
- General Procedure
- Types of Assessments

Damage Assessment Teams

The tables in this section list the areas the Damage Assessment Teams will assess for both plants and the Collection System.

Qualified employees assigned to a Damage Assessment Team perform the following:

1. Report to Assembly Area for roll call.

2. As soon as directed, report to the assigned inspection area.

3. The Damage Assessment Team Leader should provide a situational awareness briefing & specific assignments to all team members.

4. Don the proper personal protective equipment.

5. Work in pairs with another team member at all times.

6. Conduct inspections, complete the appropriate form for the type of evaluation being conducted, and post appropriate safety classification sign as discussed in the following sections.

7. Report results of the inspections to the team leader.

Table 7A-1. Plant No. 1 Damage Assessment Areas

Area	Structures	Assigned to
P1A	P1-33 Waste Sidestream Pump Station Metering and Diversion Structure Headworks No. 1 Headworks No. 2 Chlorine Building Information Technology City Water Pump Station Waste Hauler Dump Station Gas Compressor Building Foul Air/Chemical Facility	
P1B	Control Center Chiller Building Primary Basins 3, 4, & 5 Digesters 5 & 6/Pump Room Central Generation Building Digesters 11 through 14/Pump Room Primary Basins 1 & 2 Santa Ana River Level at Property Line	
P1C	Belt Press Building M Dewatering Building C Solids Storage Facility Digesters 7 & 8/Pump Room Digesters 9 & 10/Pump Room Power Building 2 Plant Water Pump Station Secondary Clarifier No. 2	
P1D	Blower Building Sludge Recirculation Pump Station Waster Sludge Thickeners Industrial Waste Trailer Complex Emergency Disinfection Station PEDB/EJB	
P1E	12 kV Distribution Center Power Buildings 2, 3A, 4, 5, & 6 12 kV Service Center Digesters 15 & 16 Pump Room Secondary Clarifiers Aeration Basins Foul Air Scrubber Complex	
P1F	Administration Building	

(continued)

P1G	Laboratory Purchasing/Warehouse	

Area	Structures	Assigned to
P1H	Human Resources Building Safety Trailer	
P1I	Machine Shop/Building 3 Building 5 & 6 Warehouse Building 4 & 7	
P1J	Fleet Services Building F Paint Shop Building Warehouse Building 1 & 2	
P1K	Construction Management Engineering ”Green Acres” area	

Table 7A-2. Plant No. 2 Damage Assessment Teams

Area	Structure	Assigned to
P2A	Operations Building Maintenance Building Primary Basin Pump Room P & Q Primary Basin Pump Room N & O Primary Basin Pump Room J & K Primary Basin Pump Room H & I Primary Basin Pump Room L & M Primary Basin Pump Room D & E Primary Basin Pump Room F & G Construction Management Trailer Complex Warehouse Sludge Storage & Handling Dewatering Building Gas Compressor Building	
P2B	Digester C & D/ Pump Room Digester F & G/Pump Room Digester I & J/Pump Room Digester L & M/Pump Room Digester N & O/Pump Room Digester T/Pump Room Digester P & Q/Pump Room Digester R & S/Pump Room Waste Sludge Thickeners A B C/Control Rm Surge Towers A & B	
P2C	Headworks C Headworks B Operators Building Plant Water Pump Station Digester A & B/Pump Room Central Generation Building North Scrubber Complex	
P2D	O_2 Generation Facilities Primary Effluent Pump Station Outfall Booster Pump Station South Scrubber Complex Warehouse Facilities Secondary Clarifiers/Aeration Basins Emergency Disinfection Station	
P2E	12 kV Distribution Center 12 kV Switchgear Building Generator Building Central Generation Building	

Table 7A-3. Damage Assessment Teams for OCSD Pump Stations and Pipelines

Area	Station	Location	Assigned to
A1	1. Bay Bridge 2. Rocky Point 3. Lido	290 E. Coast Hwy., Newport Beach 1575 W. Coast Hwy., Newport Beach 3431 Newport Blvd., Newport Beach	
A2	4. 15th Street 5. "A" Street 6. Bitter Point 7. Crystal Cove	1514 W. Balboa Blvd., Newport Beach 810 E. Balboa Blvd., Newport Beach 5908 ½ W. Coast Hwy., Newport Beach 7423 E. Coast Hwy., Newport Beach	
B	1. Slater 2. Seal Beach 3. Westside 4. Edinger	7202 Slater Blvd., Huntington Beach 13979 Seal Beach Blvd., Seal Beach 3112 Yellowtail Drive, Los Alamitos 5500 Edinger Blvd., Huntington Beach	
C1	1. Main Street 2. College 3. MacArthur	1499 Main Street, Irvine 3198 College Ave., Costa Mesa 4141 MacAruthur Blvd., Newport Beach	
C2	4. Main Street Flume (need traffic control)	1499 Main Street, Irvine	
D	1. Yorba Linda 2. Carbon Canyon 3. Green River Meter/Flume	2600 Yorba Linda Blvd., Fullerton 3500 Carbon Canyon Regional Park W.R. Canyon/Santa Ana River to County Line	
	Last Priority: Ellis (offline)	SE Corner of Bushard/Ellis, Fountain Valley	

Inspection Guidelines

Table 7A-4 provides inspection guidelines for evaluating buildings and structures. In addition, the evaluation forms described in the next section also contain some guidelines.

Table 7A-4. Inspection Guidelines

Structure Type	Failure Indications
General Overview	• Obvious distortions in the shape of the buildings such as bent or leaning walls. • Structural damage such as: - Separations between building members, for example, between columns/upright pillars and horizontal beams - Bent or twisted columns or beams - Large cracks visible - Missing sections of concrete (spalling) • Noises such as "creaks," "pops," and "groans"
Reinforced Concrete	• Support columns and/or wall columns offset at roof connection or at base • Support pillars and/or wall columns show 45-degree cracks across half or more of the pillar/column • Support pillars and/or wall columns have concrete spalling with exposed steel showing bending or deformed are pulled away from the tops of the columns • Support beams are pulled away from the tops of columns • Support beams show cracks across half or more of the width of the base
Reinforced Masonry	• Separation and/or offsets between the walls and the roof • Bulging walls • Nonvertical walls • Major cracks (over 2 feet long) in the walls
Braced Steel Frame	• Shearing of anchor bolts on support columns • Separation and or offsets between the walls and the roof • Twisted and/or buckled columns or beams • Nonvertical walls

Types of Assessments

As shown in Figure 7A-1, the three types of assessments performed are

Rapid Evaluation, Detailed Evaluation, and Engineering Evaluation.

Figure 7A-1. Sequence of Inspections and Evaluations

Rapid Evaluation

The objective of a rapid evaluation is to quickly (usually 10 to 20 minutes) and with a minimum of personnel inspect and evaluate

structures for damage. This evaluation accomplishes the following:

1. Rapid assessment of safety, with a quick posting of obviously unsafe structures (using a red sign)

2. Identification of apparently safe structures (green sign)

3. Identification of structures requiring detailed evaluation (yellow sign)

Table 7A-5 defines the Structure Safety Evaluation Classifications and the color-coded signs used for each.

Table 7A-5. Structure Safety Evaluation Classifications

Posting Class	Color of Sign	Description
INSPECTED	Green	• No apparent hazard found but repairs may be required. • Original lateral load capacity not significantly decreased. • No restriction on use or occupancy.
LIMITED ENTRY	Yellow	• Dangerous condition believed to be present. • Entry by staff for emergency purposes only; no usage on continuous basis. • Entry by public not permitted. • Possible major aftershock hazard.
UNSAFE	Red	• Extreme hazard; may collapse. • Imminent danger of collapse from an aftershock. • Unsafe for occupancy or entry except by authority of Construction Management.

Rapid evaluation will also include inspection of outside areas. Similar to the structural classifications, if an outside area is considered unsafe, it must be cordoned off with barricades to prevent entry.

Examples of the types of personnel who will perform this phase of inspection using the Rapid Evaluation Safety Assessment form (found at the end of this appendix) are:

- Construction inspectors
- Source Control inspectors (some of whom may already be out in the field and can quickly get to pump stations)
- Collection System personnel (some of whom may already be out in the field and can quickly get to pump stations)

All personnel performing rapid evaluation will be specifically trained in this technique.

Detailed Evaluation

The objective of detailed evaluation is to evaluate the safety of structures posted as LIMITED ENTRY during the rapid evaluation phase. It is intended to provide reasonable assurance that the structural elements are sufficiently secure before the structure is put back into service or to identify the need for an Engineering Evaluation. This evaluation is a careful visual evaluation of the entire structure inside and out, particularly its structural system, to identify damaged structures and questionable situations. The color-coded classification posting may or may not change following this evaluation.

Generally, the types of personnel who will perform this type of assessment are Structural Engineers supported by Construction Inspectors. The Detailed Evaluation Safety Assessment form at the end of this appendix is used to guide the assessment.

All personnel performing detailed evaluation will be specifically trained in this technique.

Engineering Evaluation

The Engineering Evaluation is the most rigorous of the evaluation levels. It is used whenever a structure has been damaged to an extent that it is not possible to use visual inspection techniques alone to assess its safety. This evaluation is a detailed engineering investigation of damaged structures involving use of record construction drawings, damage data, and new structural calculations.

Personnel required for this type of evaluation are Structural Engineering Consultants. The time needed to perform this type of assessment is 1 to 7 days.

Sample Rapid Evaluation Form

Rapid Evaluation Safety Assessment Form	
Structure Name: _____ **Time:** _____ **Areas Checked:** Exterior and Interior ❒ Exterior Only ❒	**Overall Rating (check one)** Safe (Green) ❒ Limited Entry (Yellow) ❒ Unsafe (Red) ❒
Inspector:	**Inspection Date:**
Instructions: Review the structure for the conditions listed below.	

Condition	Yes	No	Review Needed
1. Collapse, partial collapse, or off foundation	❒	❒	❒
2. Structure or story noticeably leaning	❒	❒	❒
3. Severe cracking of walls, obvious severe damage and distress	❒	❒	❒
4. Parapet or other falling hazards	❒	❒	❒
5. Severe ground or slope movement	❒	❒	❒
6. Other hazard present (e.g., hazardous materials)	❒	❒	❒

If	Then Post
Yes checked for Item 1, 2, 3, or 5	Unsafe (Red)
Any Review Needed box checked	Limited Entry (Yellow)
Yes checked for Item 4	Area Unsafe (Red)and barricade around the hazard
Yes checked for Item 6 (hazmat spill)	Area Unsafe(Red) and barricade around the hazard

Recommendations:

No further action required ❒

Detailed evaluation required (Check one) ❒ Structural ❒ Geotechnical ❒ Other

Barricades needed in the following areas: _____

Comments:

Sample Detailed Evaluation Form (1 of 2)

Detailed Evaluation Safety Assessment Form			
Structure Name: _____ **Time:** _____ **Areas Checked:** Exterior and Interior ❒ Exterior Only ❒		**Overall Rating (check one)** Safe (Green) ❒ Limited Entry (Yellow) ❒ Unsafe (Red) ❒	
Inspector:		**Inspection Date:**	
Structural System			
Wood Frame ❒		Tilt-Up ❒	
Metal Frame ❒		Steel Frame ❒	
Reinforced Masonry ❒		Brick/Concrete ❒	
Instructions: Complete structure evaluation and checklist on the reverse side and summarize results below.			
Posting		**Existing**	**Recommended**
Inspected (Green)		❒	❒
Limited Entry (Yellow)		❒	❒
Unsafe (Red)		❒	❒
None		❒	❒
Recommendations: No further action required ❒ Engineering evaluation required (Check one) ❒ Structural ❒ Geotechnical ❒ Other Barricades needed in the following areas: _____			
Comments:			
(Complete reverse side)			

Sample Detailed Evaluation Form (2 of 2)

Detailed Evaluation Safety Assessment Form (page 2)

Instructions:

1. Examine the structure to determine whether any hazardous conditions exist.
2. If there is any "Yes" answer in Category 1, 2, or 4, post the structure as Unsafe.
3. If a condition is suspected to be unsafe and more review is needed, check Unknown and explain in the Comments section.
4. If Item 3 is answered "Yes," post area as Unsafe and set up barricades around the hazard.
5. Explain all Yes and Unknown responses in the comments section.
6. Attach sketch and/or photos if any.

Condition	Yes	No	Unknown	Comments
1. Structure Hazardous Overall				
Collapse/partial collapse	❒	❒	❒	
Structure or story leaning	❒	❒	❒	
Other	❒	❒	❒	
2. Hazardous Structural Elements				
Foundations	❒	❒	❒	
Roof/flooring	❒	❒	❒	
Columns/corbels/pilasters	❒	❒	❒	
Diaphragms/horizontal bracing	❒	❒	❒	
Precast connections	❒	❒	❒	
Other	❒	❒	❒	
3. Nonstructural Hazards				
Parapets	❒	❒	❒	
Cladding/glazing	❒	❒	❒	
Ceiling/light fixtures	❒	❒	❒	
Interior walls/partitions	❒	❒	❒	
Elevators	❒	❒	❒	
Electrical utilities	❒	❒	❒	
Other	❒	❒	❒	
4. Geotechnical Hazards				
Slope failure/debris	❒	❒	❒	
Ground movement/fissures	❒	❒	❒	

Appendix 7B
Collection System
Damage Assessment Procedure

This procedure is intended for members of Division 420 and others who have been assigned to check the pump stations and trunk lines after an earthquake. This appendix contains:

- General Inspection and Assessment
- Rapid Evaluation

The objective of the Collection System damage assessment procedure is to ensure that OCSD has an accurate status of the condition of its pump stations and trunk lines so that needed repairs can be prioritized and the condition of the pump stations and trunk lines can be available for operational decisions. During an emergency, OCSD personnel from other divisions such as Source Control inspectors can assist in performing the procedures in this appendix.

It is assumed that the Incident Command System (ICS) has been activated. During a full ICS activation, the Branch 3 Director (Collection System) provides overall direction to the efforts associated with the response. The Director is assisted by a Group Supervisor for Pump Stations and a Group Supervisor for Trunk Lines.

General Inspection and Assessment Procedure

Note: All forms referenced are located at the end of this appendix.

Purpose

The objective is to determine the status of the most critical pump stations and the condition of the trunk lines so that a priority of repairs can be established.

Team Members

Each Damage Assessment Team must have two members. Those teams without radios should have three members, with the third member acting as a runner and maintaining communications.

Equipment

In addition to the tools found in the Emergency Response Kits for damage assessment, each person conducting an inspection should have the following:

- Appropriate personal protective equipment such as helmet or hard hat, safety shoes, safety glasses, leather work gloves, dust mask, and proper work clothes
- Equipment such as a flashlight, camera, radio, duct tape, and gas detector

Precautions

While performing inspections/assessments, observe the following safety precautions at all times:

- Do not enter a building that appears to be structurally damaged or has hazardous conditions resulting from nonstructural damage.
- Do not walk on any suspended slab or grate covering a tank or similar depressed area.
- Always remain in sight or in voice contact with a team member.
- Do not enter confined spaces or unretained excavations.
- Do not enter manholes.

- Do not come in contact with sewage.
- Be aware of the danger of small aftershocks that may occur.

Reporting and Assignment

1. Collection System Damage Assessment Team members:
   a. Report to the appropriate Assembly Area for roll call.
   b. If in the field, report your location to the Control Center.
2. Pump Station Group Supervisor and Trunk Lines Group Supervisor develop assignments based on priorities shown on the Pump Station Inspection Assignments form and Trunk Line Inspection Assignments Form.
3. As soon as possible, teams report to the assigned inspection area following the route designated by supervisor.

While en Route and at Trunk Lines

4. Team members:
   a. Check for surfacing water from manholes and underground piping.
   b. Check for damaged manholes.
   c. Check the streets over the sewer lines for signs of undercutting or collapse.
   d. Report any visual damage to the Collection System observed en route.

At the Pump Station

   e. Wear the appropriate personal protective equipment.
   f. Follow all precautions while conducting inspections.
   g. Conduct rapid evaluation using the guidelines in the following section and the Rapid Evaluation Safety Assessment form.

      Warning: If pump station is posted UNSAFE, **do not** enter the pump station.

   h. Ensure that the ventilation is working.
   i. If needed, check atmosphere.

j. Walk around the interior of the pump station and note any damage to pumps and other equipment and the general conditions of the building.

k. If the station has a generator, note the fuel level.

l. Post appropriate safety classification sign.

m. Erect barricades as needed.

Notifications

n. Record results of the inspection and inform Control Center or Group Supervisor in accordance with the Communications Plan.

Repair/Restore Service

5. Collection System Branch Director and/or Group Supervisors:

a. Maintain the following forms:

- Pump Station Equipment Summary
- Pump Station Structural Summary
- Trunk Lines Summary

b. Dispatch emergency generators and/or repair crews as needed to critical pump stations and critical trunk lines.

c. Coordinate with Logistics Branch to contact contractors and suppliers as needed.

Rapid Evaluation

The objective of a rapid evaluation is to quickly and with a minimum of personnel inspect and evaluate structures for damage. This evaluation accomplishes the following:

1. Rapid assessment of safety, with a quick posting of obviously unsafe structures (using a red sign)

2. Identification of apparently safe structures (green sign)

3. Identification of structures requiring detailed evaluation (yellow sign)

Table 7B-1 defines the Structure Safety Evaluation Classifications and the color-coded signs used for each.

Table 7B-1. Structure Safety Evaluation Classifications

Posting Class	Color of Sign	Description
INSPECTED	Green	• No apparent hazard found although repairs may be required. • Original lateral load capacity not significantly decreased. • No restriction on use or occupancy.
LIMITED ENTRY	Yellow	• Dangerous condition believed to be present. • Entry by staff for emergency purposes only; no usage on continuous basis. • Entry by public not permitted. • Possible major aftershock hazard.
UNSAFE	Red	• Extreme hazard; may collapse. • Imminent danger of collapse from an aftershock. • Unsafe for occupancy or entry except by authority of Construction Management.

Sample Pump Station Inspection Assignments Form

Pump Station Inspection Assignments			
Area	**Station**	**Location**	**Assigned To**
A1	1. Bay Bridge 2. Rocky Point 3. Lido	290 E. Beach, Newport Beach Beach at Balboa, Bay Club, Newport Beach Lido/Newport Boulevard, Newport Beach	
A2	4. 14th Street 5. "A" Street 6. Bitter Point 7. Crystal Cove	14th Street, Balboa Peninsula "A" Street, Balboa Peninsula 1575 W. Beach, Newport Beach 500 East of Los Trancos Parking Lot on Beach	
B	1. Slater 2. Seal Beach 3. Westside 4. Edinger	Slater & Goldenwest, Huntington Beach NE Corner Westminster/Seal Beach Boulevard, Seal Beach 3112 Yellowtail Drive, Los Alamitos N/Side Edinger & Graham, Huntington Beach	
C1	1. Main Street 2. College 3. MacArthur	1499 Main Street, Irvine College/Gisler, Costa Mesa MacArthur/Newport Place, Newport Beach	
C2	4. Main Street Flume (need traffic control)	1499 Main Street, Irvine	
D	1. Yorba Linda 2. Carbon Canyon 3. Green River Meter/Flume	600 E. Yorba Linda, Fullerton Carbon Canyon Regional Park, Brea W.R. Canyon/Santa Ana River to County Line	
	Last Priority: Ellis (offline)	SE Corner of Bushard/Ellis, Fountain Valley	

Sample Trunk Line Inspection Assignments Form

Trunk Line Inspection Assignments		
Priority	**Location**	**Assigned To**
1	I-8	
2	I-9	
3	I-2	
4	District No. 5, Force Mains	
5	District No. 5, Trunk Sewers	
6	Seal Beach Force Main	
7	Miller Holding System	
8	Knott System	
9	Euclid System	
10	Santa Ana River Interceptor	
11	Magnolia System	
12	Westside System	
13	New Hope Placentia System	
14	Sunflower System	
15	District No. 6 Sewers including Baker	
16	Gisler Force Main	
17	Gisler-Red Hill System	
18	District No. 11 Sewers	
19	District No. 1 Sewers	
20	District No. 7 Sewers	
21	Carbon Canyon Force Main	

Sample Pump Station Equipment Summary Form

Pump Station Equipment Summary						
Area	**Station**	**Team**	**Time/ Date**	**Operating**	**Pumps/ Eqt**	**Comments**
A1	**Bay Bridge**					
	Rocky Point (Critical)					
	Lido					
A2	14th Street					
	"A" Street					
	Bitter Point (Critical)					
	Crystal Cove (Critical)					
B	**Slater (Critical)**					
	Seal Beach (Critical)					
	Westside (Critical)					
	Edinger					
C1	Main Street					
	College					
	MacArthur					
	Main Street Flume (need traffic control)					
D	Yorba Linda					
	Carbon Canyon					
	Green River Meter/Flume					
	Ellis (offline)					
Completed by:					**Date:**	

Sample Pump Station Structural Summary Form

Pump Station Structural Summary						
Area	**Station**	**Team/ Time/ Date**	**External Structural Damage**	**Non-structural Damage**	**Eng Eval Needed**	**Comments**
A	**Bay Bridge**					
	Rocky Point (Critical)					
	Lido					
	14th Street					
	"A" Street					
	Bitter Point (Critical)					
	Crystal Cove					
B	**Slater (Critical)**					
	Seal Beach (Critical)					
	Westside (Critical)					
	Edinger					
C	Main Street					
	College					
	MacArthur					
	Main Street Flume					
D	Yorba Linda					
	Carbon Canyon					
	Green River Meter/Flume					
Ellis (offline)						
Completed by:						**Date:**

Pump Station Structural Summary						
Area	**Station**	**Team/ Time/ Date**	**External Structural Damage**	**Non-structural Damage**	**Eng Eval Needed**	**Comments**
A1	**Bay Bridge**					
	Rocky Point (Critical)					
	Lido					
A2	14th Street					
	"A" Street					
	Bitter Point (Critical)					
	Crystal Cove (Critical)					
B	**Slater (Critical)**					
	Seal Beach (Critical)					
	Westside (Critical)					
	Edinger					
C1	Main Street					
	College					
	MacArthur					
C2	Main Street Flume (need traffic control)					
D	Yorba Linda					
	Carbon Canyon					
	Green River Meter/Flume					
	Ellis (offline)					
Completed by:						**Date:**

Sample Trunk Lines Summary Form

Trunk Lines Summary			
Trunk Line	**Team**	**Time/ Date**	**Status**
I-8			
I-9			
I-2			
District No. 5, Force Mains			
District No. 5, Trunk Sewers			
Seal Beach Force Main			
Miller Holding System			
Knott System			
Euclid System			
Santa Ana River Interceptor			
Magnolia System			
Westside System			
New Hope Placentia System			
Sunflower System			
District No. 6 Sewers including Baker-Gisler Force Main			
Gisler-Red Hill System			
District No. 11 Sewers			
District No. 1 Sewers			
District No. 7 Sewers			
Carbon Canyon Force Main			
Completed by:			**Date:**

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8. Biosolids Response & Recovery

Biosolids Storage Plans

Biosolids may need to be stored onsite or disposed of when poor weather or a catastrophic event prevents the transportation of biosolids to management locations. Plans for weather-related biosolids storage are:

- Procedure No. O&M-EOP-106, Inability to Ship Biosolids from Plant No. 1
- Procedure No. O&M-EOP-206, Inability to Ship Biosolids from Plant No. 2

If a route to Arizona is accessible, biosolids can be transported to land application sites in Arizona, which allow storage onsite for up to two years.

Biosolids Response and Recovery Plan

The Biosolids Response and Recovery Plan, Procedure No. COMP-SOP-005, establishes a standard operating procedure for OCSD personnel, biosolids contractors, and responding agencies to respond to a biosolids release incident. The plan includes an electronic reporting system, accessed through the OCSD Intranet, which makes automatic notifications to appropriate OCSD staff. External parties are contacted by OCSD staff as required.

Biosolids Contact List

Agency	Contact	Phone
Orange County Sanitation District - Biosolids Program (notify at least one Staff)		
OCSD – ECRA - 1	Leyla Perez	714-593-7471 – Office

		714-425-9172 – Cell
OCSD – ECRA - 2	Lisa Rothbart	714-593-7405 – Office 714-227-9886 – Cell
Orange County Sanitation District – Public Information Office (notify at least one Staff)		
OCSD – PIO - 1	Jennifer Cabral	714-593-7581 – Office 714-803-1905 – Cell
OCSD – PIO - 2	Faviola Miranda	714-593-7350 – Office 714-227-2349 – Cell
Orange County Sanitation District – Safety & Health (notify at least one Staff)		
OCSD – Safety - 1	Wesley Bauer	714-263-5304 – Cell 714-593-7155 – Office
OCSD – Safety - 2	George Rivera	714-423-6921 – Cell 714-593-7156 – Office
CALIFORNIA: Caltrans & Local City Officials		
Caltrans	General Line Orange Los Angeles / Ventura Kern Riverside / San Bernardino	916-654-5266 949-936-3600 213-897-3656 559-488-4020 909-383-4561
Fountain Valley Public Works	Harry Drake Steve Harrel	714-593-4606 714-593-4441
Fountain Valley Police Department	General Line	714-593-4484
Fountain Valley Fire Department	General Line	714-593-4436
Huntington Beach Public Works	Jim Jones	714-375-5054
Huntington Beach Police Department	General Line	714-960-8811
Huntington Beach Fire Department	Tim Greaves	714-536-5411
California Highway Patrol	Communications center	949-559-7888
California Emergency Management Agency		
California Emergency Management Agency	Main Line	916-262-1621 800-852-7550
Agency	**Contact**	**Phone**
ARIZONA: Local City & DOT Officials		
Arizona Department of Environmental Quality	General Line	602-771-2300 800-234-5677
ADOT, Yuma Sector, Hwy Maintenance	General Line	928-317-2124
ADOT, Administration Office	General Line	928-317-2100

Regulators - California		
Orange County Health Care Agency	Larry Honeybourne	714-433-6015
Regional Water Quality Control Board (4) Los Angeles	Blythe Ponek-Bacharowski *(Permitting-Municipal Unit)* Arthur Heath *(Remediation Unit)* Main Line	213-576-6720 bponek@waterboards.ca.gov 213- 576-6725 aheath@waterboards.ca.gov 213-576-6600
Regional Water Quality Control Board (7) Colorado River	Robert Jones Main Line	760-776-8947 rjones@waterboards.ca.gov 760-346-7491
Regional Water Quality Control Board (8) Santa Ana	Julio Lara Main Line	951-782-4901 951-782-4130
Regional Water Quality Control Board (9) Santa Ana	Chris Means Main Line	858-637-5581 858-467-2952
Regulators - Arizona		
Arizona Department of Environmental Quality	Daniel Czecholinski	602-771-4552
Biosolids Contractors and Hauling Companies		
Synagro Haulers/Sub-Contractors: GIC Transport, Inc. Sierra Transport, Inc.	Lorrie Loder Gabriel Cruz Keith Lutrel	909-322-0833 – Cell 661-765-2200 – Office 661-201-9275 – Cell 661-201-3069 – Cell
Tule Ranch Haulers/Sub-Contractors: Western Services Inc., Yuma, Arizona	Shaen Magan John Winn	559-970-9432 – Cell 559-259-8941 - Cell 928-210-2152 – Cell 928-344-9004 - Office
EnerTech Haulers/Sub-Contractors: Terra Renewal	Russ Miller German Navarro	949-235-8677 - Cell 949-276-2344 – Office 888-220-8496 – Cell 310-345-6367 - Office

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9. Industrial Waste Spills

Industrial waste spills can be characterized in several different ways, for example:

- A spill contained on the property of a facility (permitted or other)
- A spill on the property of a facility, and the spill has the capacity to leave the facility and enter sewers, storm drains, or waterways
- An intentional or unintentional discharge of industrial waste or hazardous product into the Collection System

Risks of Industrial Waste Spills

The risks associated with such spills or discharges are:

- **Risk to responders or other personnel.** OCSD personnel who observe spilled product, investigate readings, or in other ways respond are at risk of being exposed to potentially hazardous materials through inhalation, skin contact, etc.
- **Risk to our treatment processes.** An unauthorized discharge of industrial waste into the Collection System may cause damage to our systems and equipment. For example, a sufficient quantity of used fuel oil would damage headworks pumps.
- **Risk to public health and environment.** An unauthorized discharge of industrial waste may pose a danger to public health and the environment. For example, an acid spill that leaves the property with a low pH and enters the storm drains has the potential to be a risk to the public via contact with the acid and/or the acid entering a storm channel may cause environmental damage to plants and animals in the channel.

Symptoms of an Industrial Waste Spill

Since industrial waste spills are not always reported to OCSD, even by

permitted facilities, Source Control Inspectors in the field, Division 340 personnel who are out in the Collection System, and operators at the plants may be able to observe evidence of an industrial waste spill. Some indicators are listed below:

- pH abnormally low (less than 6) or high (greater than 12)
- Unusual color (for example, dye from a T-shirt factory)
- Soapsuds
- Oil or gasoline (may be just an odor if not visible)
- Other unusual odor not typical of wastewater
- High Lower Explosive Limit (LEL) alarm from continuous atmospheric monitor during sewer entry

In addition, Source Control Inspectors may use field test kits to confirm the presence of metals and other substances.

Responding to an Industrial Waste Spill

This section discusses response to a spill. Since such spills can be so varied, methods of response are presented through potential spill scenarios.

Incident Command System

Because of the varied sizes, types, and locations of potential industrial waste spills, a standard ICS structure cannot be dictated here and should be customized to the situation. In many cases, OCSD may not need to activate the ICS. For example, a spill at a permitted facility may require fire department/hazmat response, in which case they would assume incident command. The Source Control Inspector may be used as a consultant or expert to assist the hazmat team in its response since the inspector will have useful knowledge of the facility and its processes and layout.

In other cases, it may be possible have a Unified Command with the fire department, other agencies, and OCSD. For example, the water used by the fire department to fight the fire at a chemical plant is now contaminated and entering the storm drains or storm channels. In such a case, it may be more efficient to have a unified command.
On the other hand, and OCSD ICS may be required in some cases. For example, if there is a large petroleum or ammonia spill into the Collection System an ICS activation may be required to handle isolating the section of line and pumping out the product.

Spill Response Scenarios

Since this type of emergency can be so varied, this section presents several different scenarios and the recommended response for each. Some of these scenarios are based on actual events. The response is based on the assumption that the Source Control Inspector has received the necessary training in handling the response. If an inspector does not feel comfortable in handling the response, he/she shall call the Control Center to report the incident. The Control Center will then notify appropriate Source Control personnel to respond to the incident.

Spill Contained at a Permitted Facility

In this type of scenario, the Source Control Inspector may be on site or the facility owner contacts the assigned Source Control Inspector to coordinate any spill assessment and cleanup using approved disposal methods. The Source Control Inspector may call in other local agencies to help in the response.

If there is a threat to human health, the facility owner or Source Control Inspector contacts the local fire department and the Orange County Health Care Agency to take the lead in the response.

The inspector prepares an Incident Report as shown in Appendix 10A.

Spill Contained at Any Other Facility

A Source Control Inspector happens to be in the area and notices the spill. The inspector offers to assist in coordinating the spill response efforts. If there is a threat to human health, the facility owner or Source Control Inspector contacts the local fire department and the Orange County Health Care Agency to take the lead in the response. The inspector prepares an Incident Report documenting the event and his/her actions regardless of whether he/she assisted in the response.

Spill with the Capacity to Go beyond Permitted Facility's Property

In this type of scenario, the Source Control Inspector is on site or called by the facility owner. Whether the spill has the capacity to go beyond the property or already has, the response is the same.

- If there is a threat to human health, the facility owner or Source Control Inspector contacts the local fire department and the Orange County Health Care Agency to take the lead in the response.
- If the spill is greater than 1,000 gallons of untreated waste water, the California Emergency Management Agency, State Warning Center . Please refer to EC-SOP-009, Sanitary Sewer Overflow Notification Procedure.

Hazardous

If the incident is a hazardous materials spill, approach the spill from a

Materials Spill

safe direction (Upwind, Upgrade and Upstream) and a safe distance (Refer to Emergency Response Guide).

- Position vehicles headed away from the incident.
- Use binoculars to identify/assess incident.
- Make the following notifications:
  - Call Control Center at (714) 593-7025.
  - Administering Agency/CUPA: Local Fire Department.
  - Cal EMA/Warning Center (800) 852-7550.
  - National Response Center (800) 424-8802.

- The Source Control Inspector reports the spill immediately to the OCSD Control Center, giving as much data as possible, e.g.,
  - Material spilled
  - Volume
  - Location
  - Direction of flow
  - Results of field test kit if any
  - Threat to flood control channel system if any
  - Location of flood control access points

- The Control Center notifies Environmental Compliance and Regulatory Affairs (ECRA) Division 790, which will handle the required reporting to the Regional Water Quality Control Board and State Agencies. If the spill threatens the flood control channel system, the OC Public Works, OC Flood Control District, and the Fish and Wildlife Service will also be notified.

- The Source Control Inspector notifies the local municipality.

- If the spill is oil, Source Control Inspector will implement Source Control's Oil Spill Plan to track down the source of the spill.

Note: If the facility in the above scenario is not one of our permitted facilities, we may never learn of the spill and therefore cannot respond. If the Source Control Inspector is in the field and learns of it in that way, the response is the same as described above.

Fire at a Permitted Facility

The responding fire department may use the Source Control Inspector as a consultant/expert since the inspector has knowledge of the facility. If the water used to fight the fire becomes contaminated, the Source Control Inspector reports the spill immediately to the OCSD Control Center, giving as much data as possible, e.g.,

- Material spilled

- Volume
- Location
- Direction of flow
- Results of field test kit if any
- Threat to flood control channel system if any
- Location of flood control access points

A decision will be made as to whether to have an OCSD ICS activation or have a joint ICS command with the other agencies.

High LEL in the Collection System

In this scenario, Division 340 personnel detect a high LEL in the collection system. Division 340 will implement its plan for dealing with this situation. Source Control personnel will be used to trace the source of the high LEL.

- Isolate and deny entry into the contaminated area.
- Set up traffic barricades to deny entry and stop vehicles from driving over the contaminated manholes.
- Ensure that potential ignition sources are eliminated (cigarettes are out, cell phones are turned off, engines are off, etc.).
- Position vehicles headed away from the incident.
- Use binoculars to identify/assess incident.
- Make the following notifications:
  - Call Control Center at (714) 593-7025.
  - Administering Agency/CUPA: Local Fire Department
  - Call local Police Department to assist with traffic control and denying entry to pedestrians and vehicles.
  - Cal EMA/Warning Center (800) 852-7550.
  - National Response Center (800) 424-8802.

Importance of Notifications

Due to the potential damage to the environment that can be caused by industrial waste spills, it is important to notify the appropriate regulatory agencies.

Personnel in the field should notify the Control Center, giving as much information as possible, so that the Control Center can in turn request Environmental Compliance and Regulatory Affairs, Division 790 to make the appropriate notifications. Chapter 14 in this volume, External Notifications, and EC-SOP-009, Sanitary Sewer Overflow Notification Procedure, contain details on required notifications.

References

- Biosolids Management System (BMS) Manual; Emergency Preparedness and Response (Element 11)
- EC-SOP-009, Sanitary Sewer Overflow Notification Procedure

- Sanitary Sewer Overflow (SSO) Flowchart.

- Oil Spill Emergency Response Plan – Source Control Division

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10. Fire

This chapter discusses OCSD's processes and procedures related to fire prevention and fire response. Every employee is responsible for fire prevention, properly handling common fire hazards, and for understanding this fire prevention plan.

Fire Prevention

This section contains OCSD's Fire Prevention Plan prepared in accordance with CCR, Title 8, Section 3221 and Safety Policy 117, Fire Prevention. The regulation requires the following elements:

- Identification of potential fire hazards
- Identification of potential ignition sources and their control procedures
- Proper handling and storage procedures for flammable and combustible materials
- Identification of types of fire protection equipment or systems to control fires
- Maintenance of equipment and systems installed to prevent or control ignition of fires
- Procedures for the control of accumulation of flammable or combustible waste material

In general, buildings at OCSD facilities are constructed of non-combustible concrete, masonry, and steel. However, some materials and equipment pose a potential fire hazard. Identification and proper handling, storage, and control of potential fire hazards are described in this plan.

Potential Fire Hazards

OCSD uses a wide variety of equipment and processes that contain potential fire hazards. The types and examples of potential fire hazards at OCSD's facilities are shown in Table 10-1.

Table 10-1. Potential Fire Hazards

Type of Hazard	Examples
Electrical Fires	• Switchgear • Motor control centers • Computers • Power cables and wires • Local electrical panels • Power tools
Oil and Grease Fires	• Petroleum-contaminated rags and other debris
Fuel Fires	• Gasoline • Diesel fuel • Natural gas • Methane
Ordinary Combustibles	• Paper • Wood • Rags • Plastics • Cardboard containers
Welding Equipment	• Oxyacetylene welding tanks

Sources of Ignition and Control

The regulation requires that sources of ignition such as smoking, welding, and electrical sources be controlled to prevent the inadvertent ignition of material. The following discusses how OCSD controls these sources of ignition.

Smoking

OCSD has a stringent no smoking policy. Smoking is not allowed in any building or process area. No smoking signs and symbols are strategically placed throughout all facilities. Specific warnings are placed near all areas where flammable materials are stored.

Welding Welding flames and cutting and grinding sparks are addressed by OCSD's Injury and Illness Prevention and Hot Work Permit Programs.

Electrical Static electricity is controlled by proper grounding. Electrical shorts are controlled by routine inspection and maintenance procedures.

Handling, Storage, and Control of Fire Hazards

This section discusses the procedures for the routine handling, storage, and control of fire hazards. Specific hazards discussed are:

- Electrical
- Oil and grease
- Fuels
- Ordinary combustibles
- Welding equipment

Electrical Electrical fires may be caused by a short circuit in the line or failure in the equipment, which can cause insulation to burn. In addition, there can also be a great deal of sparking in electrical shorts. When sparking occurs, the sparks can travel and ignite adjacent combustible materials if they are present.

In the case of fire in an electrical panel, employees are trained through OCSD's Hazardous Energy Control (Lockout/Tagout) Program to de-energize the equipment. Class C or multipurpose fire extinguishers, located throughout the facilities, and may be used to extinguish such a fire.

Oil and Grease Oil and grease both new and used, are stored and used in specially designed containers. Storage areas are kept clean, and spills are cleaned up promptly in accordance with good housekeeping practices.

Spontaneous combustion can occur when substances slowly oxidize in an enclosed space that has poor air circulation. The materials can absorb their own heat of reaction and ignite, thus creating a fire hazard. Spontaneous combustion is a potential fire hazard for petroleum-contaminated rags if they are stored in poorly ventilated areas. Therefore, such rags and similar debris are stored in appropriate containers. As mentioned earlier, multipurpose fire extinguishers are located throughout the facilities, and employees are trained to use the appropriate fire extinguisher on the specific type of fire.

Fuels

Natural gas, methane, gasoline, and diesel fuel are handled in specially designed equipment, pipelines, tanks, or containers. Through OCSD's Hot Work Permit Program, sources of ignition such as welding and grinding are monitored while being performed in areas near fuel storage.

Employees are trained to extinguish fuel fires by shutting off the fuel supply and, if necessary, extinguishing the fire using the appropriate type of fire extinguisher.

Ordinary Combustibles

Paper, wood, plastics, cardboard, and rags are stored away from sources of ignition such as welding and grinding. The accumulation of these materials is prevented through the use of good housekeeping practices and routine inspections to prevent the occurrence of a fire hazard.

Welding Equipment

Welding or grinding in an area where there is potential for igniting a fire is closely controlled. In accordance with the Hot Work Permit Program, an employee is available to serve as a fire watch and a fire extinguisher is available. To the extent possible, a fire-resistant barrier or screen is installed between the welding operation and flammable or combustible materials.

Employees are trained to carefully handle oxyacetylene tanks and hoses to avoid damage to valves or hoses that may cause leaks. Employees conducting welding activities are certified welders.

Other Hot Work

Hot work includes any operation, in an area with the potential of a flammable or explosive atmosphere, capable of providing a source of ignition. Examples of equipment and activities capable of providing a source of ignition include:

- Electrical tools and equipment
- Spark producing tools (e.g., hammer and chisel)
- Hot surfaces (e.g., exhaust pipes and steam lines)
- Heating (e.g., heat guns or blowers)
- Grinding
- Welding

- Soldering
- Brazing
- Flame cutting
- Drilling
- Chemical reactions (e.g., hydrogen peroxide with organics, caustic soda or muriatic acid with water)
- Static electricity (e.g., transferring liquids between containers)
- Pneumatic tools (e.g., wrenches and chippers)
- Electrical short circuit

Fire Protection Equipment

OCSD has an extensive system of fire equipment that includes extinguishers, smoke alarms, and sprinkler systems.

Extinguishers Fire extinguishers are located in each building at OCSD's facilities. OCSD personnel are familiar with the specific locations in their plant and in the plant vehicles. A complete list of all the fire extinguishers at Plant No. 1 and Plant No. 2 is maintained online. OCSD uses multipurpose fire extinguishers at most locations.

Fire Alarms OCSD has a total of 15 fire alarm panels installed in buildings at Plant No. 1, and 11 fire alarm panels installed in buildings at Plant No. 2.

Sprinkler Systems Water sprinkler systems are located in all permanent buildings.

Housekeeping

Good housekeeping is required of all OCSD personnel. The accumulation of flammable or combustible waste material is controlled so that they do not contribute to a fire emergency. Specific controls include:

- Sweeping shop floors and keeping work areas generally free of accumulated waste materials
- Having specific Hazardous Waste Collection Facilities for hazardous waste

- Having adequate and appropriate storage space in the work areas to keep usable materials orderly and prevent such materials from becoming waste
- Providing adequate trash containers to encourage the safe disposal of material
- Storing petroleum-contaminated rags in specially designated containers to reduce risk of fire
- Storing clean rags in a separate, designated container to ensure that dirty rags are not mixed with clean rags

Training

All OCSD employees receive fire training as follows:

- New employees receive OCSD's Injury and Illness Prevention Program, a general orientation on the work performed by OCSD and a specific area assignment orientation. This program includes fire prevention and housekeeping training.
- Safety meetings are held monthly for all employees in the field.
- Personnel who conduct the monthly fire extinguisher inspections receive classroom training on fire extinguishers, before performing inspections of fire extinguishers.
- Management along with some Operations and Maintenance employees receive a Fire Training course. This course ensures that employees are aware of hazards that can cause fires and the proper use of fire extinguishers used at OCSD.

Inspections and Maintenance

As part of its ongoing efforts to ensure a safe workplace, OCSD has a comprehensive inspection and maintenance program. This program encompasses both specific emergency equipment such as fire extinguishers and eyewash stations as well as general housekeeping inspections. In addition, OCSD has several contractors who conduct a variety of inspections of fire equipment at Plant No. 1 and Plant No. 2. Table 10-2 lists the various inspections related to fire equipment and housekeeping conducted at OCSD and their frequency. Each inspection is discussed in detail.

Table 10-2. Fire Equipment Inspections

Type of Inspection	Frequency
Quarterly Safety Inspections	Quarterly
Fire Extinguishers	Yearly
Fire Alarm System	Yearly
Halon System	Semi-Annual
Sprinkler System	Quarterly

Quarterly Safety Inspections

Quarterly Safety Inspections are conducted by personnel in all areas of both plants to ensure that good housekeeping practices are used. The inspection is designed to identify any unsafe conditions and have these conditions promptly corrected. The following are included in the inspection:

- General housekeeping
- Aisle space
- Unsafe conditions
- Pavement and walkways
- Emergency lighting
- Fire extinguishers
- Eyewash stations

Fire Extinguishers

All fire extinguishers are routinely inspected by OCSD management as part of the monthly preventative maintenance program. This procedure contains the following topics:

- Fire Extinguishers (Background and Tasks)
- Types of Extinguishers
- Steps to Check an Extinguisher
- Recording the Operational Status
- Frequency of Checks
- Locations
- Action to Take If a Discrepancy Is Found
- Documentation

If any problems are found with an extinguisher, the inspector immediately replaces the extinguisher with spares stored in the warehouse.

In addition to the Monthly Inspections, a contractor checks all extinguishers on a yearly basis. This check includes:

- Inspection
- Weighing
- Tag
- Seal
- Hydro-testing
- Recharging as needed

Each Division is responsible for ensuring that monthly inspections are conducted for the fire extinguishers located in its area(s).

Fire Alarm System

OCSD currently has a total of 11 fire alarm panels at Plant No. 1 and Plant No. 2. These systems are checked by a contractor on a quarterly basis under a blanket purchase order. The contractor also performs any required maintenance under a separate charge number. The Information Technology Department supervises these tasks.

FM-200® Waterless Fire Suppression System

There is the several FM -220® Waterless Fire Suppression Systems inside the Computer Server Rooms throughout both plants. A contractor performs inspection and maintenance work on this system at 6-month intervals. The Facilities Engineering Division 330 supervises these tasks.

Sprinkler System

The sprinkler systems at both plants are frequently inspected and tested by a contractor who is certified by the State Fire Marshal to conduct such inspections and tests. The Mechanical Maintenance Division maintains all records associated with these inspections and tests. Specific inspections and tests conducted are:

- Quarterly Inspection and Maintenance
- Quarterly Test of Sprinkler System Inspectors Test Valve
- Annual Test of Sprinkler System Inspectors Test Valve
- 5-Year Sprinkler System Inspection, Test, and Certification program conducted by a contractor

The Quarterly Maintenance/Test consists of inspecting the following components of the sprinkler system:

- Fire department connections
- Control valves
- Riser
- Gauges
- Sprinkler heads
- Alarms and annunciators

Specific check points, items to look for (cap missing), and corrective actions are included in the inspection.

The Quarterly and Annual Sprinkler System Inspectors Test Valve Test requires that the Inspectors Test Valve be opened and that the alarm sound within 90 seconds of opening the valve. The contractor performs this test at both intervals.

The 5-Year Certification Program requires that all documentation on the inspection, test, and maintenance of the sprinkler system be reviewed by a certified contractor.

Fire Response

This section provides guidelines for OCSD personnel on responding to a fire. Immediate actions are also covered in Chapter 1 of this volume, Emergency Recognition and ICS Activation.

General Guidelines for Reporting a Fire Emergency

- **ALWAYS call 2222. DO NOT call 911 from a phone or cell phone.**

  The Control Center is connected to the 911 system via the 2222 number. For example, if you call 911 from a phone at Plant No. 2, the 911 system sees the address as Plant No. 1 in Fountain Valley. If you call 911 from a cell phone, the call is routed to the Highway Patrol. Thus, calling 911 causes an unnecessary delay in getting the appropriate fire department to respond.

- **If you are in the Collection System:**

  – If a fire occurs at an OCSD pump station that has a hard-wired telephone, call 911 and then the Control Center (714-593-7025). Do not use a cell phone to call 911.

  – If a fire occurs at a pump station or other OCSD facility or location that does not have a hard-wired telephone, contact the Control Center via radio or call 714-593-7025.

Immediate Actions in Response to a Fire

Purpose

This procedure ensures appropriate immediate actions and notifications in a fire emergency.

Please note that all recommended actions in this procedure are based on responding within your abilities and training. Do not attempt to perform any action unless you are qualified.

You will need to use your best judgment as to your immediate response. However, your key initial actions should always be to:

- Notify the Control Center.
- Respond to the immediate problem.
- Inform others in the vicinity if needed and stand by.

Person Discovering Fire

1. Dial 2222 on the nearest phone (in safe area) to report the situation to the Control Center. (If you are in the Collection System, see the telephone instructions under General Guidelines above.) State the following:
   - Your name and the number of the telephone from which you are calling
   - Location and description of the extent of the fire
2. Take immediate actions at the scene to protect life and property:

If	Then
If a person is injured	• Administer basic first aid.
If a small fire is discovered	• Remove any injured from vicinity of fire. • Activate fire alarm (if any in vicinity). • Use the nearest fire extinguisher to attempt to extinguish the fire. • Notify your supervisor.
If a large fire is discovered	• Remove any injured from vicinity of fire. • Activate fire alarm (if any in vicinity). • If needed, evacuate building or area, alerting others. • Notify your supervisor.
If any solid, liquid, gas, or vapor is released that appears to be harmful	• Remain at a safe distance from the release. • Isolate the area to prevent others from entering. • Notify others in the vicinity and evacuate. • **Do not** attempt to investigate or stop the release.

3. If needed, standby or have someone else standby to direct fire department vehicles and personnel.

ICS Activation Procedure for a Fire Emergency

The activation process begins when the Control Center receives a call reporting an emergency.

Control or Operations Centers

1. When a caller alerts you to a fire, ensure that you obtain the following information from the caller:
   - Name of person reporting the emergency and telephone number from which call was placed
   - Location and a description of the extent of the fire
2. Request the caller to stand by near the telephone until emergency vehicles or personnel arrive.
3. Call 911 to request appropriate fire, medical, rescue, or hazardous materials assistance.
4. Notify Operations Supervisor.
5. If the fire is offsite during off-hours, call out the on-call Facilities Support Services person to go to the scene and report back an assessment of the situation.

Operations Supervisor

1. Report to the scene and secure the area.
2. If an immediate evacuation is required, notify the Control Center to make evacuation notifications.
3. Have someone stand by at the gate to escort the responders to the appropriate location.
4. Depending on the location of the fire, have Control Center notify the appropriate Department Director. For example, if the fire is in the Collection System,. Notify the Director of Facilities Support Services Department.
5. If needed based on the extent of the fire, declare an ICS activation and activate the Incident Commander (or assume that role). If needed, consult with other management personnel to determine the appropriate Incident Commander to activate.
6. If not the designated Incident Commander, act as Incident

Commander until relieved.

7. Brief responding ICS members and outside agencies as needed.

8. Revise process operations as needed and inform appropriate Operations and Maintenance personnel.

Incident Commander

1. When activated, report to the scene and assess the situation.

2. Determine the ICS organization to be activated.

3. Notify the Control Center of the positions to be activated.

4. When the fire department reports to the scene, brief the responders.

5. As requested by the fire department, establish a Unified Command ICS organization.

Control Center

1. As directed by the Operations Supervisor or the Incident Commander, perform the following:

   a. If site or area evacuation is needed, make evacuation notifications in accordance with the IERP Evacuation Procedures (Chapter 3 of this volume).

   b. Activate members of the ICS in accordance with ICS Position Callouts (Chapter 2 of this volume).

   Note: Make callouts through the Section Chief level. Make sure that Section Chiefs are aware that they are responsible for activating and calling out personnel in their sections.

2. If after hours, make necessary notifications to outside agencies in accordance with External Notifications (Chapter 14 of this volume).

Contents

11. Site Security Procedures

Purpose and Scope

This chapter contains procedures to be used to ensure the security of the District's facilities during an IERP activation or other emergency. Although the District normally uses contract security forces, it is assumed that these forces will be unavailable or unable to assist during a major emergency. Therefore, during an emergency, the District will use site security officers and security teams made up of employees. The topics in this chapter are:

- Bomb or Similar Threat
- Security Procedures During an Emergency
- Civil Demonstrations
- Terrorism
- Terrorist Explosions
- Biological Threats
- During a Biological Attack

Bomb and Similar Threats

This procedure contains 3 Sections. These procedures have been developed to ensure prompt and safe response to the receipt or discovery of a suspicious-looking package or device, or a terrorist threat by telephone. OCSD's primary concern is the safety of its employees.

The term bomb is used in a general sense; that is, the following procedure is applicable to any type of a terrorist threat such as a biohazard event.

WARNING!

Only properly trained bomb squads of the police or Sheriff's department shall conduct a detailed bomb search or investigate or disarm any potentially explosive device.

If	Then
If a suspected bomb is received or	Use Sections A and C.

discovered	
If a bomb threat is received by telephone	Use Sections B and C.

A. Discovery or Receipt of Possible Bomb

Letter and Parcel Bomb Recognition

The FBI has published a fact sheet to aid in the detection of letter and parcel bombs. The following letter and parcel bomb recognition points are taken from that document:

- Excessive postage
- Incorrect personnel titles
- Handwritten or poorly typed address
- Misspelling of common words
- No return address
- Restrictive markings such as "Confidential" or "Personal"
- Excessive tape or string wrapped around the package
- Rigid envelope
- Protruding wires or tin foil
- Oily stains or discoloration
- Excessive weight
- Lopsided or uneven envelope
- Foreign mail, air mail, or special delivery

Person Discovering Suspicious Package or Device

If you receive or discover any letter, package, or other object that you have reason to believe may be a bomb or other explosive device:

- Leave the room or area immediately, alerting others in the vicinity as you leave.

- Notify the Control Center on 2222 and describe the device and its location.

This procedure continues at Section C, Response to Bomb Threat.

B. Bomb Threat Received by Telephone

Person Receiving a Threat by Phone

If you receive a telephoned bomb threat:

- Prolong the conversation as long as possible and listen carefully, being alert to:

  – Background noises such as music, voices, traffic, or church bells

– Any distinguishing voice characteristics

- Use the Bomb Threat Form (Figure 11-1) as a guideline on what to listen for and what questions to ask. The more information gathered, the better management can assess the threat.

- Notify the Control Center on 2222 and provide all the information you collected concerning the threat.

- Complete the Bomb Threat Form and, if possible, fax or forward it to the Control Center so that it can be provided to the Threat Assessment Team, Incident Commander and any responding agencies such as police or fire.

This procedure continues at Section C, Response to Bomb Threat.

C. Response to Bomb Threat

Control Center and Operations Center response to a Bomb Threat

1. If the bomb threat is at Plant No. 1 or Plant 2 use the PA system to order evacuation of the plant in accordance with the Evacuation Procedures (Chapter 3 of this volume).

2. Call 911 to notify local police and provide the details of the threat.

3. Alert the security officer or station another person at the main gate of the plant (or other position at a safe distance) to meet any responding agencies and provide them access to the site.

4. During normal working hours (8:00 am to 5:00 pm weekdays), the on-duty Operations Supervisor shall notify Department Directors. Including the following-notifications:

Agency	Contact	Telephone
OCSD – Div. 810	Ed Torres	(714) 713-6150 – Cell (714) 593-7080 - Office
OCSD – Div. 830	Jim Spears	(714) 478-3159 – Cell (714) 593-7081 - Office
OCSD – Div. 260	Wes Bauer	(714) 263-5304 - Cell (714) 593-7155 - Office

5. Outside normal working hours, the on-duty Operations Supervisor shall immediately notify the Director of Operations and Maintenance. The O&M Director will notify the rest of the Department Directors. Including the following notifications:

Agency	Contact	Telephone
OCSD – Div. 810	Ed Torres	(714) 713-6150 – Cell (714) 593-7080 - Office
OCSD – Div. 830	Jim Spears	(714) 478-3159 – Cell (714) 593-7081 - Office
OCSD – Div. 260	Wes Bauer	(714) 263-5304 - Cell (714) 593-7155 - Office

6. If directed by management, notify appropriate Incident Command System (ICS) members of the ICS activation (Operations Supervisor on duty serves as the Incident Commander until relieved).

BOMB THREAT CARD

Questions to Ask	Caller's Remarks
1. When is bomb set to explode?	
2. Where did you place the bomb?	
3. What does the bomb look like?	
4. What kind of a bomb is it?	
5. Why did you place the bomb there?	
6. What will make the bomb explode?	
7. What is your name?	
8. Do you have a telephone number where I can contact you?	

Exact Wording of the Threat

Sex of Caller: | Estimated Age:

Length of Call:

Telephone/Extension Number where the call was received:

Date: | Time:

Name of person who received the call:

Immediately call 222 to notify the Control Center of the bomb threat.
DO NOT USE RADIO OR CELL PHONE

CALLER'S VOICE

____ Calm	____ Nasal
____ Angry	____ Stutter
____ Excited	____ Lisp
____ Soft	____ Raspy
____ Loud	____ Deep
____ Laughter	____ Deep Breathing
____ Crying	____ Disguised
____ Distinct	____ Accent
____ Slurred	____ Familiar

If voice is familiar, whom did it sound like?

BACKGROUND SOUNDS:

____ Street Noises	____ Factory/Machinery
____ Dishes/ silverware	____ Animal Noises
____ Other Voices	____ Clear
____ PA System	____ Static
____ Music	____ Long Distance
____ Vehicle Noise	____ Office Machinery
____ Other (jet noise)	

THREAT LANGUAGE:

____ Well Spoken	____ Incoherent
____ Cursing/Abusive	____ Taped
____ Irrational	____ Message Read
____ Poor grammar	____ Sincere
____ Other	

Notes

(Front) **(Back)**

Figure 11-1. Bomb Threat Form

Incident Commander

1. Activate appropriate ICS organization, primarily to assist with evacuation.

2. Activate ICS security personnel as needed to ensure that no unauthorized persons are allowed on site.

All Employees

1. Follow posted evacuation diagrams to evacuate plant buildings and report to Assembly Areas.

2. If Evacuation Coordinators and Wardens are activated, employees are required to follow their directions for evacuation of the site.
3. Do not use radios, cell phones, Nextel radios, or pagers until notified that it is safe to do so.

4. If the location of the device/bomb is not known:

    a. Do not attempt to search for the bomb.

    b. If you discover the bomb while evacuating, continue evacuating and report location to Incident Commander as soon as you are at a safe distance.

Security Procedures During an Emergency

The procedures in this section provides the overall responsibilities of security personnel during an IERP activation. The specific scope may vary due to the level of activation and will be dictated by the Incident Commander. The position of security teams and personnel within the ICS organization is shown in Figure 9-1.
Selected District personnel will be trained to carry out security duties, which can be categorized as follows:

- Security booth (at gate of either or both plants).
- Security patrol and escort (to check perimeter or patrol any areas as required by the Incident Commander; to provide escort to media and responders).

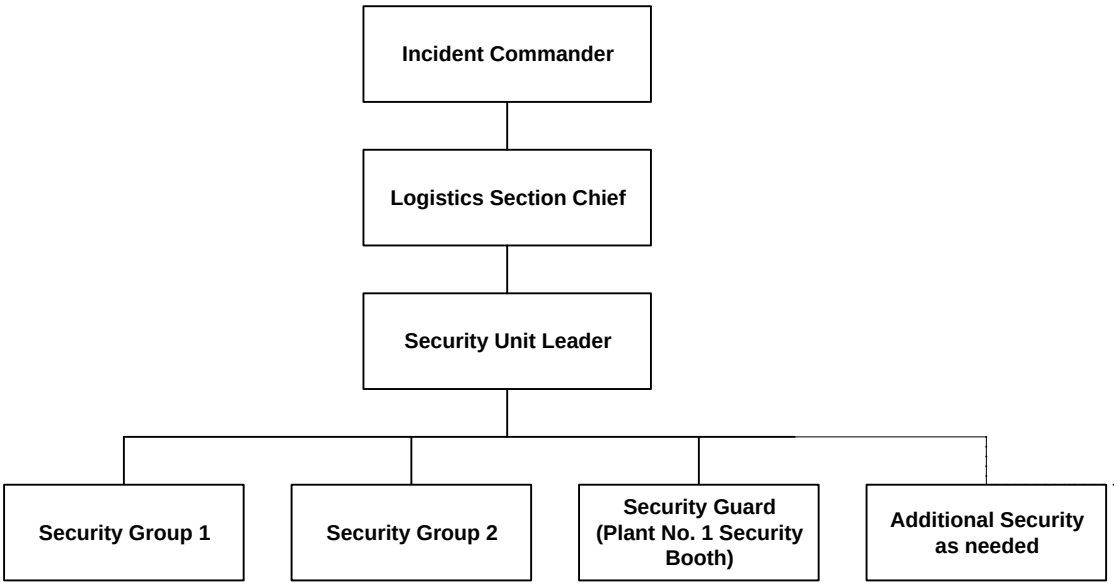

Figure 11-1. Security Personnel in the ICS

- Collection System security (at pump stations and strategic points on the Collection System).
- Emergency site and ICS facilities security [Incident Command Post, Emergency Operations Center (EOC), Media Information Center, staging area, base, camp, etc.]. With the exception of the EOC, which will be at either or both plants, these facilities may be located at the plants or offsite.

Depending on the location of the emergency, these duty categories may not be applicable or they may overlap. For example, security escorts will be needed at the emergency site to escort interested media personnel.

In addition to the preparedness training received and the overview information provided here, ICS Checklists for the Security Unit Leader and Security Team members are provided in Appendix A Volume II of the IERP.

Security Booth

Security personnel stationed at the security booth at either plant will have the following responsibilities during an IERP activation:

- Control site access.
- Check all identification cards.
- Ensure that only authorized personnel are admitted to the site.
- Contact a District management representative before allowing visitors access.
- Log in all visitors and provide passes to be worn and displayed in their cars.
- Issue temporary visitor badges and ensure that all personnel are briefed to display their badges prior to entering the plant facility.
- If visitor is a media representative, contact Public Information Officer or the Media Information Center before allowing the representative entry.
- Control access through the contractor gate.
- Establish log-in procedures for contractors and provide passes to be worn and displayed in their vehicles.
- Ensure that all deliveries are expected by District personnel.
- Report any disturbances or other civil disorder to the Security Manager.
- Maintain a log of activities including any unusual events or disturbances.

Security Patrol and Escort

Personnel assigned as security patrols and escorts will have the following duties during an ICS activation:

- Immediately report any significant incidents to the Control Center or Operations Center via radio or telephone.
- Maintain order throughout plants.
- Keep streets open for emergency vehicles.
- Patrol key areas as directed by the Security Leader.

- Control traffic within the plants.
- Patrol perimeter at regular intervals; alert Maintenance regarding any fence repair needed.
- Assist in evacuating personnel as requested.
- Escort media representatives as requested by the Public Information Officer.
- Escort outside responders or other authorized non-District equipment and personnel to the emergency site.

Collection System Security

In case of civil disorder, Collection System security personnel will patrol and/or protect District facilities, including pump stations and pipelines, from damage.

Emergency Site and ICS Facilities Security

Security team members assigned to the emergency site and ICS facilities will have the following responsibilities:

- Control access to the Incident Command Post.
- Maintain order at the site of the emergency and at any ICS facilities that have been established.
- Protect District personnel, equipment, and supplies at ICS staging areas, bases, and camps.

Civil Demonstrations

- Civil demonstrations can range from mildly disruptive activities, such as peaceful picketing, to violent and uncontrolled events, including civil unrest and looting.
- If a civil demonstration occurs in an area not immediately surrounding our plants, employees will be instructed to travel around the affected area. The best sources of information for determining the affected area and safe travel routes will be local television and radio broadcasts.
- If a peaceful demonstration occurs at OCSD facilities, employees will be advised to enter or leave the plant(s) through whatever access control point that provides the least exposure to demonstrators and to avoid any contact and communications with demonstrators.

- OCSD Risk Management staff and the Public Affairs Office, will monitor civil demonstrations and communicate with the local police agencies as required.

Employees should avoid any interactions or confrontations with demonstrators.

Terrorism

Terrorism is the use of force or violence against persons or property for purposes of intimidation, coercion, or ransom. Terrorists often use threats to:

- Create fear among the public.
- Try to convince citizens that their government is powerless to prevent terrorism.
- Get immediate publicity for their causes.

Acts of terrorism include threats of terrorism; assassinations; kidnappings; hijackings; bomb scares and bombings; cyber-attacks (computer based); and the use of chemical, biological, nuclear and radiological weapons.

High-risk targets for acts of terrorism include military and civilian government facilities, international airports, large cities, and high-profile landmarks. Terrorism might also target large public gatherings, water and food supplies, utilities, and corporate centers. Further, terrorists are capable of spreading fear by sending explosives or chemicals and biological agents through the mail.

Active Shooter

If you are involved in a situation where someone has entered the area and started shooting, the following is a list of actions that are recommended. It should be noted that this type of incident is unpredictable. The below guidelines are recommendations based on past experiences. You may have to alter some of these suggestions, depending on the situation.

1. Evacuate
    a. Have an escape route and plan in mind
    b. Leave belongs behind
    c. Keep your hands visible
    d. Exit the building immediately and notify anyone you may encounter to exit the building also.
    e. Get as far away as possible and find cover. It is not recommended to leave the plant by vehicle as this may

cause traffic jam which could put people in danger. It could also impede incoming emergency vehicles. Attempt to let your supervisor or fellow worker know your status so that everyone can be accounted for.

f. Call 2222 Control Center or 911 when it is safe to do so
    i. You should provide the following information:
        1. Location of active shooter
        2. Number of shooters
        3. Physical descriptions of shooters
        4. Number and type of weapons held by shooters
        5. Number of potential victims at the location

2. Hide Out
    a. Hide in an area out of the shooter's view
    b. Block entry to your hiding place and lock the doors
    c. Silence your cell phone and/or two-way radio or pager
    d. Keep quiet and act as if no one is in the room
3. Take Action against the active shooter as last resort
    a. Act as aggressively as possible against him/her
    b. Improvise weapons and throw items
    c. Yell
    d. Commit to your actions
4. Law Enforcement Response
    a. When law enforcement/police arrives on scene
    b. Remain calm and follow instructions
    c. Raise hands and spread fingers
    d. Keep hands visible at all times
    e. Avoid quick movements toward officers such as holding them for safety
    f. Avoid pointing, screaming or yelling
    g. Do not stop to ask officers for help or direction when evacuating

Terrorist Explosions

If there is an explosion, you should:

- Get under a sturdy table or desk if things are falling around you. When they stop falling, leave quickly, watching for obviously weakened floors and stairwells. As you exit from building, be especially watchful of falling debris.
- Leave the building as quickly as possible. Do not stop to retrieve personal possessions or make phone calls.
- Do use elevators.

Once you are out:

- Do not stand in front of windows, glass doors, or other potentially hazardous areas.
- Move away from sidewalks or streets to be used by emergency officials or others still exiting the building.
- Throughout the incident, first responders and evacuees should be alert to the possibility of further explosions.
- Check the evacuation assembly area for suspicious or secondary device. If found, move away as far as possible (ideally at least 1,000 feet) until emergency response personnel determine a safe distance.

If you are trapped in debris:

- If possible, use a flashlight to signal your location to rescuers.
- Avoid unnecessary movement so you don't kick up dust.
- Cover your nose and mouth with anything you have on hand.
- Tap on a pipe or wall so rescuers can hear where you are.
- If possible, use a whistle to signal rescuers.

Shout only as a last resort. Shouting can cause a person to inhale dangerous amounts of dust, become dehydrated, and lose of strength.

Biological Threats

Biological agents are organisms or toxins that can kill or incapacitate people, livestock, and crops. The three basic groups of biological agents that would likely be uses as weapons are bacteria, viruses, and toxins. Most biological agents are difficult to grow and maintain. Many break down quickly when exposed to sunlight and other environmental factors, while others, such as anthrax, spores, live for very long periods.

Delivery methods include:

- Aerosols – biological agents are dispersed into the air, forming a fine mist that may drift for miles. Inhaling the agent may cause disease, illness, or death in people or animals.

- Animals – some diseases are spread by insects and animals, such as fleas, mice, flies, mosquitoes, and livestock.

- Food and water contamination – some pathogenic organisms and toxins may persist in food and water supplies. Most microbes can be killed, and toxins deactivated, by cooking food and boiling water.

Most microbes are killed by boiling water for one minute, but some require longer.

- Persons-to-person – spread of a few infectious agents is also possible. Humans have been the source of infection for smallpox, and plague.

During a Biological Attack

Specific information on biological agents is available at the Center for Disease Control and Prevention's Web Site, www.bt.cdc.gov.

In the event of a biological attack, public health officials may not immediately be able to provide information on what you should do. It will take time to determine what the illness is, how it should be treated, and who is in danger.

The first evidence of an attack may be when you notice symptoms of the disease caused by exposure to an agent. Be suspicious of any symptoms you notice, but do not assume that any illness is a result of the attack. Use common sense and practice good hygiene.

At any incident scene there is the likelihood of persons who are asymptomatic, who were not necessarily in the immediate danger area and who are concerned about their health and safety, sometimes referred to as the "worried well." Depending upon the circumstances, the number of worried well may exceed those who are actual ill or injured. It is important that these individuals are assessed rapidly, determined not to need immediate medical attention and reassured to avoid further hysteria or panic.

However, if days following the incident, individuals become concerned about their wellbeing then they should seek immediate medical attention.

If you become aware of an unusual and suspicious substance nearby:

- Move away quickly.
- Wash with soap and water.
- Contact authorities.
- Seek medical attention if you become sick

If you are exposed to a biological agent:

- Remove and bag your clothes and personal items. Follow official instructions for disposal of contaminated items.
- Wash yourself with soap and water and put on clean clothes.

- Seek medical attention. You may be advised to stay away from others or even quarantined.

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12. Flood

Floods are one of the most common hazards in the United States. Flood effects can be local, impacting a pump station(s) or an entire plant. A very large flood can potentially impact the entire Orange County Sanitation District (OCSD) service area and Collection System.

Purpose and Scope

This chapter contains procedures to be used for a high water event at any of our plants, pump stations or service area. This plan also contains some protective measures and response actions before and during a high water event. The flood fighting methods outlined in this chapter have proven effective during many years of use by the United States Army Corps of Engineers, and local agencies on flood-related emergencies.

This flood plan is to be used in conjunction with the IERP, Volume II, Chapter 6, High Flow Plan.

Activation

- This plan becomes effective upon potential flood threat to OCSD facilities or service area.
- Any OCSD incident commander may activate this plan under his/her incident command authority.

Flood Threat Recognition

One of the most important considerations in flood planning is the ability to recognize, in advance of the onset of precipitation, that a particular storm is likely to result in a major flood event. Warning time is the time beginning when the potential of a flood event is first recognized, and ending when protective measures and response actions must be completed. The purpose of a flood recognition system is to provide a means of increasing the length and reliability of warning time.

- To anticipate potential flooding, each Chief Plant Operator

should know where to obtain rainfall and river forecast information, and should thoroughly understand the flood warning system that will be used to trigger response actions. Rainfall information is available from the National Weather Service (NWS). Flood forecasting is performed by the National Oceanic and Atmospheric Administration (NOAA).

Flood Watch

- A Flood Watch occurs when high water is possible in the near future, typically when any of the following conditions are predicted:
  - Unusually hard rain for several hours (usually greater than 6 hours) or substantial rain over several days.
  - Rains in conjunction with a spring thaws or a tropical system affecting the area.
  - A flood watch may occur several days before rainfall begins. The conditions that trigger the watch may or may not occur.
  - A flood watch means flooding is possible. For this reason, Control and Operations Center staff should tune in to NOAA Weather Radio, commercial radio, or television for weather related information. Both the Control and Operations Centers are equipped with NOAA Weather Radios with battery back-up.

- A Flash Flood Watch is issued by the local NWS office for events that have the potential for short duration (usually less than 6 hours) intense flooding of communities, streams or areas for which the occurrence is neither certain nor imminent. This watch indicates that flash flooding is a possibility in or close to the watch area. Those in the affected area are urged to be ready to take action if a Flash Flood Warning is issued or flooding is observed. A Flash Flood Watch may be issued for potential flooding from either dam breaks, or torrential downpours.

Flood Warning

- This warning signifies a longer duration and more gradual flooding of communities, streams, or urban areas. Floods usually begin after 6 hours of excessive rainfall.
- A warning may be issued hours or even days before rainfall begins. Predicted rainfall intensities, rainfall amounts and flood forecasts must be continually monitored to ascertain the degree of response likely to be required. A significant flood event

would require a greater level of monitoring and response effort than a moderate flood event.
    - During a moderate flood event:
        - The capacity of interior storm water collection systems may be exceeded and flooding of streets and intersections may occur.
        - Drainage outlet structures become submerged.
    - During a significant flood event:
        - Water levels may approach the top of levees, floodwalls and channels.
        - Culverts may become obstructed by debris.
        - Power outages and some interior flooding are likely to occur.
        - Partial or complete inundation of roads leading to pump stations or other remote facilities may occur.
- A Flood Warning also signifies flooding is occurring or will occur soon.

Flash Flood Warning

- This warning signifies a short duration of intense flooding of communities, streams, or urban areas with high peak rate of flow. Flash floods may result from such things as torrential downpours or dam and levee breaks. They are issued by the local NWS Office for 4 hours or less.

Protective Measures

Emergency Equipment

- It is imperative that emergency and flood-fighting equipment be in good condition and readily available for field personnel during high water.
- At a minimum, emergency lighting, sand and sandbags, shovels, weather gear, gloves, hardhat, personal floating devices (PFD), goggles, and radio communications equipment be available for field personnel.

Before a Flood

- Ensure that emergency electrical generators are not located in flood-prone areas of the facility. Obtain extra fuel for generators. Ensure adequate number of generators for pump stations that require generators.
- Be sure all dry chemicals are stored off the floor in a dry room

that is protected against flooding and water from floors, walls and ceilings.

- Remove or move chemicals to a safe area. If chemicals are removed from an underground or above ground tank, fill the tank with water, if possible, to prevent floating.
- Remove electrical motors, where possible. If not, wrap the motors in plastic and seal as tight as possible, in order to protect the motor from silt, mud, and dirt. Any electrical motors that are submerged should be cleaned and dried prior to start up to prevent damage.

During a Flood

- Be aware that flash flooding can occur. If you are in the field, if there any possibility of a flash flood, move immediately to higher ground. Do not wait for instructions to move.
- Be aware of streams, drainage channels, canyons, and other areas known to flood suddenly such as the Santa Ana River basin. Flash floods can occur in these areas with or without such typical warnings as rain clouds or heavy rain.
- When working around structures such as pump stations, be aware of downed power lines, natural gas or propane leaks, and unstable structure supports.
- Do not walk through moving water. Six inches of moving water can make you fall. If you have to walk in water, walk where the water is not moving. Use a stick to check the firmness of the ground in front of you.

Driving in flood conditions

- Avoid driving into flooded areas. If floodwaters rise around your vehicle, abandoned the vehicle and move to higher ground if you can do so safely. You and the vehicle can be quickly swept away.
- The following are important points to remember when driving in flood conditions:
    - Six inches of water will reach the bottom of most passenger cars causing loss of control and possible stalling.
    - A foot of water will float many vehicles.
    - Two feet of rushing water can carry away most vehicles including sport utility vehicles (SUV's) and pick-up trucks.

Following a flood

- Avoid floodwaters; water may be contaminated by oil, gasoline,

or raw sewage. Water may also be electrically charged from underground or downed power lines.
- Be aware of areas where floodwaters have receded. Roads may have weakened and could collapse under the weight of a car.
- Stay out of any building or structure if it is surrounded by floodwaters.
- Use extreme caution when entering buildings and structures; there may be hidden damage, particularly in foundations.

Flood Fighting Methods

Filling Sandbags

- When filling sandbags you should work in pairs, with one person holding the bag while the other shovels in the fill material. The bag holder should find the most comfortable position while holding the bag open.
- The most common mistake made is overfilling bags. The first shovel of fill should be placed on the lip of the bag to help hold the bag open.
- The shoveler should use rounded scoops of fill until the bag is approximately 1/3 full.
- While shoveling or holding, avoid extra movements (turning or twisting of the back) to prevent injury and reduce fatigue.

Structure Protection

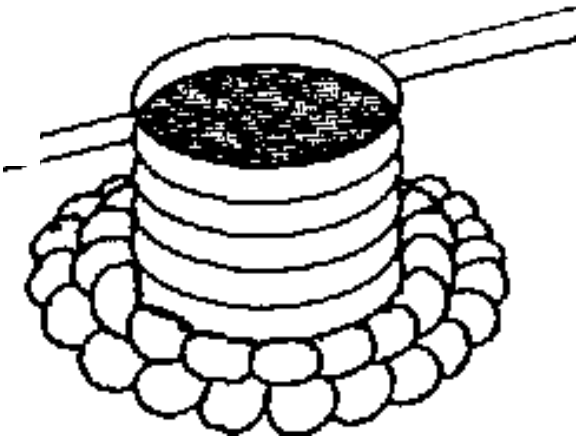
- The following method is used for protection of buildings and other structures along water shores and in similar situations where water is rising with little or no current.
- Lay plastic sheeting on the ground and up the building walls to a point at least 1 foot above the predicted water elevation, and far enough out on the ground to form a half pyramid of sandbags**.** Secure plywood over doors and vents. Overlap plastic sheeting and sandbags at corners of buildings.

Water/Storm Drain Protection

- Water or sewer systems can be protected by placing corrugated metal pipe (CMP) over the utility/man hole (see Figure 12-1).
- Lay plastic sheeting up the walls of the CMP and place sandbags in the form of a half pyramid around the CMP to seal it to the pavement. This method will prevent mud and debris from entering the system and also act as a surge chamber.

Figure 12 -1

Use sandbags to seal pipe to pavement



Using corrugated metal pipe (CMP) over the manhole to isolate sewer line or prevent contamination of water system.

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13. Atmospheric Hazards

Purpose and Scope

This chapter describes the plan for responding to tornados, thunderstorms and lightening. This plan is organized as follows:

- Tornadoes
- Thunderstorms and Lightening

Activation

- This plan becomes effective upon potential tornado threat to OCSD facilities or service area.
- Any OCSD incident commander may activate this plan under his/her incident command authority.

Tornadoes

Facts about Tornado Risk

- Tornadoes are nature's most violent storms. Spawned from powerful thunderstorms, tornadoes can cause fatalities and devastate a neighborhood in seconds. A tornado appears as a rotating, funnel-shaped cloud that extends from a thunderstorm to the ground with whirling winds that can reach 300 miles per hour. Damage paths can be in excess of one mile wide and 50 miles long. Every state is at some risk from this hazard.
- Some tornadoes are clearly visible, while rain or nearby low-hanging clouds obscure others. Occasionally, tornadoes develop so rapidly that little, if any, advance warning is possible.
- Before a tornado hits, the wind may die down and the air may become very still. A cloud of debris can mark the location of a tornado even if a funnel is not visible. Tornadoes generally occur near the trailing edge of a thunderstorm. It is not uncommon to see clear, sunlit skies behind a tornado.

- The following are facts about tornadoes:
    - They may strike quickly, with little or no warning.
    - They may appear nearly transparent until dust and debris are picked up or a cloud forms in the funnel.

- The average tornado moves Southwest to Northeast, but tornadoes has been known to move in any direction.
- The average forward speed of a tornado is 30 MPH, but may vary from stationary to 70 MPH.
- Tornadoes can accompany tropical storms and hurricanes as they move onto land.
- Waterspouts are tornadoes that form over water.
- Tornadoes are most frequently reported east of the Rocky Mountains during spring and summer months.
- Peak tornado season in the southern states is March through May; in the northern states, it is late spring through early summer.
- Tornadoes are most likely to occur between 3 p.m. and 9 p.m., but can occur at any time.

Tornado Threat Recognition

Tornado Watch

- This is issued by the National Weather Service when conditions are favorable for the development of tornadoes in and close to the watch area.
- Their size can vary depending on the weather situation. They are usually issued for duration of 4 to 8 hours. They normally are issued well in advance of the actual occurrence of severe weather.
- During the watch, people should review tornado safety rules and be prepared to move a place of safety if threatening weather approaches.

Tornado Warning

- This is issued when a tornado is indicated on radar or sighted by spotters; therefore, people in the affected area should seek safe shelter immediately.
- They can be issued without a Tornado Watch being already in effect. They are usually issued for duration of around 30 minutes.
- A Tornado Warning is issued by your local National Weather Service office. It will include where the tornado was located and what towns will be in its path.
- If the tornado will affect the near shore or coastal waters, it will be issued as the combined product--Tornado Warning and Special Marine Warning.
- If the thunderstorm which is causing the tornado is also producing torrential rains, this warning may also be combined with a Flash

Flood Warning.

Tornado Protective Measures

Tornado Warning (Shelter in Place)

- Stop classes or work.
- Share the notification with others in the building if possible, but do not leave the area - shelter-in-place.
- Close all windows, exterior doors, and any other openings to the outside.
- If you are in a laboratory equipped with a fume hood and/or a biosafety cabinet, close hoods and sashes.
- Gather essential disaster supplies if possible.
- Select interior room(s) below or at ground level. The room(s) should have adequate space for everyone to be able to sit. Avoid overcrowding by selecting several rooms if necessary.
- It is ideal to have a hard-wired telephone in the room(s) you select. Keep the phone available if you need to report a life-threatening condition.
- Bring everyone into the room(s) and shut door(s).
- Keep listening to the radio or television until you are told all is safe.

If you are in a Mobile Office Trailer at Plant 1 or 2

- During a tornado warning, personnel assigned to mobile office trailers should temporarily relocate into solid concrete structures.
- Evacuate and get inside a substantial shelter. If no shelter or time to evacuate is available, lie flat outside in the nearest low spot and cover your head with your hands.
- At the Plant 1, Engineering and Construction Management Office Complex , if time permits, evacuees should seek shelter in the underground structure. Please see Table 13-1. Plant 1 Tornado Evacuation Route Map below:

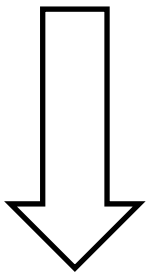
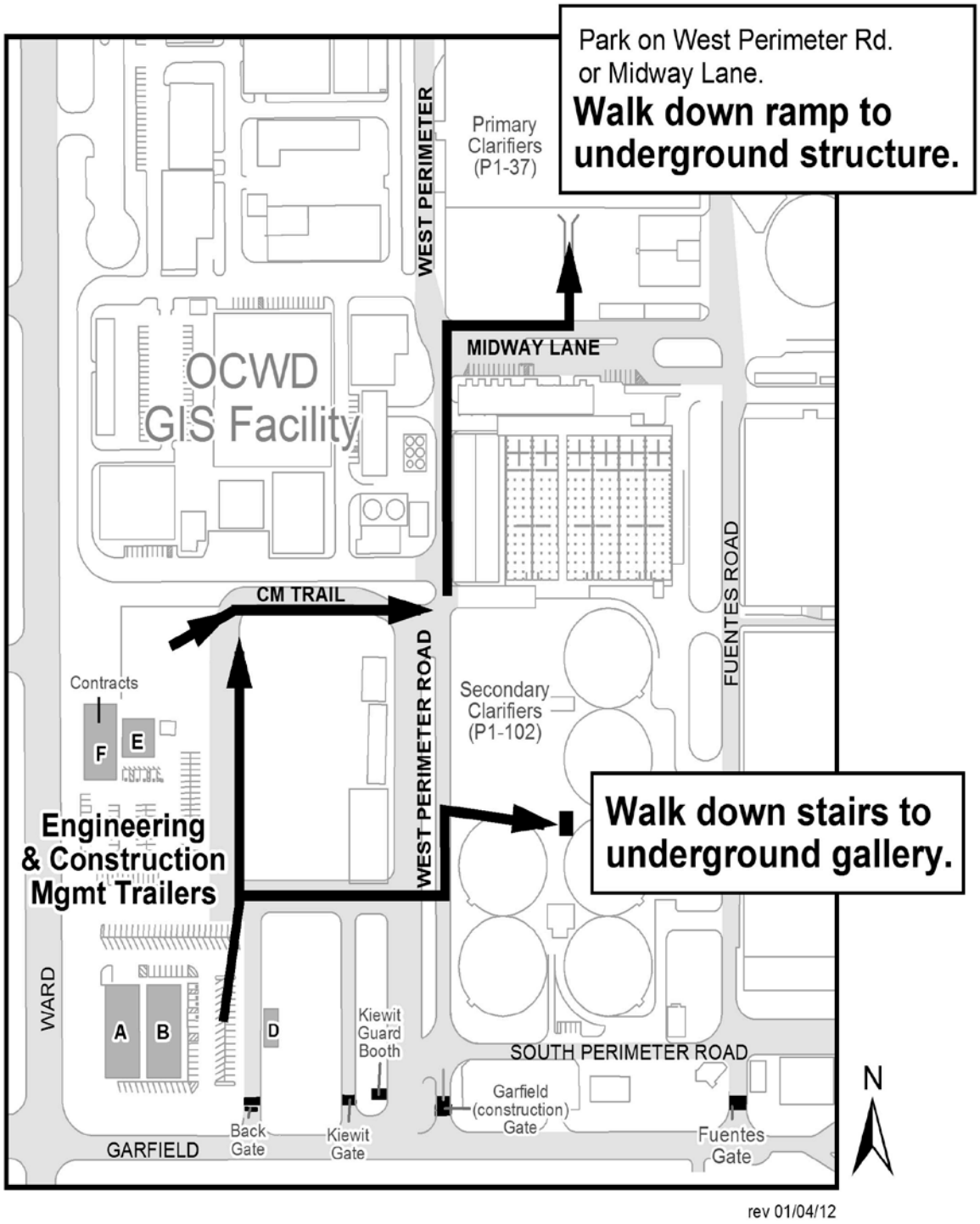


Table 13 - 1. Plant 1 Tornado Evacuation Route Map



Before a Tornado

- Be alert to changing weather conditions.
    - Listen to NOAA Weather Radio or to commercial radio or television newscasts for the latest information.
    - Look for approaching storms.
    - Monitor your OCSD radio for warnings from the Control or Operations Center.
    - Listen for the Plant Public Address and Emergency Siren System for warnings.
    - You may or may not receive a warning from the Control or Operations Center.
- Look for the following danger signs:
    - Dark, often greenish sky
    - Large hail
    - A large, dark, low-lying cloud (particularly if rotating)
    - Loud roar, similar to a freight train.
- If you see approaching storms or any of the danger signs, be prepared to take shelter immediately.

During a Tornado

During a Tornado
If you are under a tornado WARNING, seek shelter immediately!

- Remember to shelter in Place if you are already in a building

Thunderstorms and Lightening

Facts about Thunderstorms and Lightening Risk

All thunderstorms are dangerous. Every thunderstorm produces lightning. In the United States, an average of 300 people are injured and 80 people are killed each year by lightning. Although most lightning victims survive, people struck by lightning often report a variety of long-term, debilitating symptoms.

Other associated dangers of thunderstorms include tornadoes, strong winds, hail, and flash flooding. Flash flooding is responsible for more fatalities—more than 140 annually—than any other thunderstorm-associated hazard.

Dry thunderstorms that do not produce rain that reaches the ground are most prevalent in the western United States. Falling raindrops evaporate, but lightning can still reach the ground and can start wildfires.

Facts about Thunderstorms

- They may occur singly, in clusters, or in lines.
- Some of the most severe occur when a single thunderstorm affects one location for an extended time.
- Thunderstorms typically produce heavy rain for a brief period, anywhere from 30 minutes to an hour.
- Warm, humid conditions are highly favorable for thunderstorm development.
- About 10 percent of thunderstorms are classified as severe—one that produces hail at least three-quarters of an inch in diameter, has winds of 58 miles per hour or higher, or produces a tornado.

Facts about Lightening

- Lightning's unpredictability increases the risk to individuals and property.
- Lightning often strikes outside of heavy rain and may occur as far as 10 miles away from any rainfall.
- "Heat lightning" is actually lightning from a thunderstorm too far away for thunder to be heard. However, the storm may be moving in your direction!
- Most lightning deaths and injuries occur when people are caught outdoors in the summer months during the afternoon and evening.
- Your chances of being struck by lightning are estimated to be 1 in 600,000, but could be reduced even further by following safety precautions.
- Lightning strike victims carry no electrical charge and should be attended to immediately.

Thunderstorm Threat Recognition

Severe Thunderstorm Watch

- This is issued by the NWS when conditions are favorable for the development of severe thunderstorms in and close to the watch area. The size of the watch can vary depending on the weather situation.
- They are usually issued for duration of 4 to 8 hours. They are normally issued well in advance of the actual occurrence of severe weather.
- Watch the sky and stay tuned to NOAA Weather Radio, commercial radio, or television for information.

Severe Thunderstorm Warning

- Issued when severe weather has been reported by spotters or indicated by radar.
- Warnings indicate imminent danger to life and property to those in the path of the storm.

Thunderstorm and Lightening Protective Measures

Thunderstorms

The following are guidelines for what you should do if a thunderstorm is likely in your area:

- Postpone outdoor activities.
- Get inside a home, building, or hard top automobile (not a convertible). Although you may be injured if lightning strikes your car, you are much safer inside a vehicle than outside.
- Remember, rubber-soled shoes and rubber tires provide NO protection from lightning. However, the steel frame of a hard-topped vehicle provides increased protection if you are not touching metal.
- Secure outdoor objects that could blow away or cause damage.
- Shutter windows and secure outside doors. If shutters are not available, close window blinds, shades, or curtains.
- Avoid showering or bathing. Plumbing and bathroom fixtures can conduct electricity.
- Use a corded telephone only for emergencies. Cordless and cellular telephones are safe to use.
- Unplug appliances and other electrical items such as computers and turn off air conditioners. Power surges from lightning can cause serious damage.
- Use your battery-operated NOAA Weather Radio for updates from local officials.

Lightening

Avoid the following:

- Natural lightning rods such as a tall, isolated tree in an open area.
- Hilltops, open fields, the beach, or a boat on the water.
- Isolated sheds or other small structures in open areas.
- Anything metal—tractors, construction equipment, motorcycles, golf carts, and bicycles.

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14. Collection System Emergencies

This chapter describes the plan for responding to Collection System Emergencies.

Purpose and Scope

This chapter was developed to provide a standardized response protocol for Collection System Emergencies including man-made or natural disasters. The overall purpose is to document and understand the response protocol for events and incidents involving the Collection System. In addition, to rapidly restore wastewater service after an emergency in order to minimize adverse effects on public health and the environment.

This plan is to be used in conjunction with the IERP, Volume I, Chapter 2, Incident Command System.

Activation

- This plan becomes effective upon declared emergency in the OCSD Collection System.
- Any OCSD incident commander may activate this plan under his/her incident command authority.

Initial Response

This plan becomes effective upon notification of an emergency in the Collection System. Upon notification, Division 340 Collection personnel should respond and remain on site until the Division 340 Manager or Supervisor arrives at the incident location.

Based on the situation, the Division 340 Manager or Supervisor shall establish an Incident Command Post (ICP) at the incident site and a staging area adjacent to the incident site but in a safe location from potential hazards. Once the ICP has been established and the Control Center has been informed of the location of the ICP, the Incident Command System (ICS) and the Emergency Operations Center (EOC) at Plant1 maybe be activated depending on the type of emergency. If

the OCSD EOC is activated, the Orange County EOC or Operational Area (OA) shall be notified of OCSD EOC activation.

Incident Command Post

The initial ICP location is usually a vehicle at the incident scene. The ICP should be at a location away from the general noise and confusion. In the scenarios where a trunk line ruptured or pump station spill, position the ICP outside of the hazard zone (both present and predicted).

- All OCSD incidents in the field must have a designated ICP. For example, in a major earthquake with multiples incidents throughout OCSD service area.
- The Incident Commander determines the location of the ICP.
- There is only one ICP for each incident.
- Incident Command Post will be designated by the name of the incident, e.g., *Main StreetI ICP*

Initial Response and Assessment

The Division 340 Manager or Supervisor shall assume the role of Repair Group Supervisor or Incident Commander (IC).

- Establish an ICP and Staging Area.
- Use the SARI ERP, Chapter 3 (Activation and Notification) list which contains a suggested ICS organization chart (Figure 1) and lists of names and contact numbers for activation and notification. Mobilize Division 340 Collections personnel, as needed.
- Establish communications with the Control Center and provide an initial status report.
- Establish communications and coordinate efforts with the local City Public Works or Water Department.
- Radio communications should be limited to vital messages only. Radio channels should remain clear until necessary for emergency messages to be sent. Messages should be sent by stating the call sign of the sender and then stating that it is an emergency message. All other radio transmitters should remain off the air unless requesting clearance to report life threatening situations.
- Continue conducting trunk line or pump station damage or repair inspections.
- Begin documentation process, including photos and video recording.
- Consider alerting and/or recalling off-duty Collections personnel.

Incident Briefing

All Collections and Contract Repair personnel should report to the ICP

and obtain an incident briefing from the Incident Commander or the Repair Group Supervisor, if the position has been established.

- Determine incident complexity.
- Develop a sketch map of the incident.
- Ensure interagency notifications with Division 790.
- Clarify/request additional information.
- Clarify/issues and concerns.
- Discuss planned operations and direction.

Incident Action Plan (IAP)

Every incident needs a verbal or written IAP. The IAP is designed to move response operations from a reactive mode to a proactive mode. It provides the responders with direction on what to accomplish in a certain period of time (operational period) and the resources necessary to support the operations.

Response Operations

During response operations, the initial response organization transitions from a reactive response to a proactive response. The goal of the proactive response is to maximize responder safety, adapt incident resources to meet response objectives, and allow for constant assessment of progress toward resolving the incident.

- Execute the IAP and assess progress.
- Initiate bypassing pumping, if necessary.
- Ensure that appropriate staffs are available to assist other emergency responders with the operation of heavy equipment, in coordination with Repair Group Supervisor.
- Refer all contacts with the media to the Public Information Officer (PIO).
- Coordinate emergency public information with the OCSD Public Information Officer at the ICP or at the Plant 1 EOC.
- Assess and determine the necessity of specialized equipment and resources, such as barricades, pumps, temporary pipes, bulldozers, and skip loaders.
- Stage equipment and personnel in the staging area.

- Keep the Plant 1 EOC informed of repair and bypass pumping activities.
- Monitor ongoing response operations.
- Provide direction as needed.
- Assess damages and repair to trunk line or pump station(s) as needed.
- In the event of a total pump station failure, bypass pumping will need to be conducted upstream of the impacted pump station with the use of a wet well.
- Staff the EOC 24-hour a day, 12 hour shifts, as needed.
- Make external notifications to local governments, regulatory agencies, essential suppliers, and others as needed.
- Advise all OCSD employees of the situation, work schedules, and similar matters.

Bypass Pumping Options

Temporary manhole-to-manhole bypass pumping systems may have to be installed if the manholes within the impacted area are accessible during a trunk line rupture. These pumping systems would bypass trunk line effluent from a manhole(s) upstream of the failure point to a manhole(s) downstream of the failure point, thereby isolating the ruptured area of the trunk line and making it accessible for repair.

- The Staging areas is where the primary logistical functions are performed for a trunk line rupture incident. At the Staging area assemble all the necessary pumps and associated piping for bypass pumping within hours following a trunk line rupture.
- Have multiple bypass pumping contractors function as the emergency repair contractor with oversight from OCSD [OCSD may be required to function as the primary emergency repair crew. OCSD emergency repair crew may need to contact pump and supply vendors to procure necessary bypass pumping equipment].
- Keep the Plant 1 EOC informed of repair and bypass pumping activities.
- Supply diesel pumps under wet weather conditions or conditions where a source of electricity is absent. Division 790 will assist with Air Quality permitting requirements.

- Refuel diesel pumps and diesel generators if operated for extended periods of time.
- Implement traffic safety controls during bypass pumping operations that occur on or near local roadways.
- The EOC Liaison Officer or the Repair Group Supervisor shall notify the local city jurisdiction concerning road closure for bypass operations.

Deactivation and Demobilization

No equipment or personnel should leave the incident until authorized by the incident commander or Repair Group Supervisor.

- The incident commander shall authorize deactivation of field response or EOC sections or branches when they are no longer required.
- Deactivate the ICP before deactivating the EOC and close out logs when the emergency situation no longer requires activation.
- Notify the OCSD Executive Management Team (EMT), Orange County Operational Area, and other agencies, as necessary, of planned time of deactivation.
- Ensure that any open actions not yet completed will be taken care of after deactivation.
- Be prepared to provide input to the after action report.

Contents

15. Tsunami

Purpose

The purpose of this plan is to ensure the safety of OCSD personnel and protect District property and equipment. This plan is specifically written for the men and women assigned to Plant No. 2 and other OCSD facilities located in the City of Huntington Beach and the tsunami hazard zone. Specific purposes of this plan are:

- To provide for mobilization and direction of OCSD personnel in support of evacuation of Plant No. 2.
- Minimize wastewater system damage.
- Special response steps to be taken upon Tsunami Warning.

Introduction

The phenomenon called "Tsunami" is a series of ocean waves of extremely long length generated by earthquakes, volcanic eruptions, or massive undersea landslides.

As a tsunami crosses the deep ocean its length from crest to crest may be a hundred miles and its height from trough to crest only a few feet. Tsunamis may reach speeds of 600 miles per hour in deep water.

When the tsunami enters shallow coastal waters, its speed decreases and the wave height increases. This creates the large wave that becomes a threat to life and property. Following the arrival of the first wave, subsequent waves may increase in height and arrive minutes to hours later. The danger from a tsunami can last for several hours after the first wave.

Activation

This plan becomes effective upon notification of a Tsunami Watch or Warning issued by the National Tsunami Warning Center or immediately after a strong earthquake is felt at Plant No. 2. A strong earthquake is a quake strong enough to knock you off your feet.

Any OCSD incident commander may activate this plan for Plant No. 2 under his/her incident command authority.

Tsunami Definitions

Estimated Time of Arrival (ETA)	Time of tsunami arrival at some fixed location, as estimated from modeling the speed and refraction of the tsunami waves as they travel from the source. The first wave is not necessarily the largest, but it is usually one of the first five waves.
All Clear	The incident commander agrees there is no tsunami threat to Plant No. 2 and its personnel. It is up to the local agencies, including OCSD (not the National Tsunami Warning Center to issue an "All Clear."
Inundation Line	Inland limit of wetting, measured horizontally from the mean sea level (MSL) line. The line between living and dead vegetation is sometimes used as a reference. In tsunami science, the landward limit of tsunami run-up.
Run-up	Difference between the elevation of maximum tsunami penetration (inundation line) and the sea level at the time of the tsunami. In practical terms, run-up is only measured where there is a clear evidence of the inundation limit on the shore.
Travel Time	Time required for the first tsunami wave to propagate from its source to a given point on a coastline.
Tsunami Advisory	The lowest level of tsunami alert. Advisories are issued from the National Tsunami Warning Center though a threat exists; there is no evidence that a tsunami will strike the coast.
Tsunami Hazard	The probability of a particular size will strike a particular section of the coast.
Tsunami Source	Point or area of tsunami origin, usually the site of an earthquake, volcanic eruption, or landside that caused large-scale rapid displacement of water to initiate the tsunami waves.
Tsunami Warning	The highest level of tsunami alert. Warnings are issued from the National Tsunami Warning Center due to confirmation of a destructive tsunami wave or the threat of an imminent tsunami. Initially the warnings are based only on seismic information without tsunami confirmation as means of providing the earliest possible alert to at-risk populations. There are two NOAA tsunami warning centers in the Pacific region. Only the tsunami warnings from National Tsunami Warning Center apply to OCSD and not warnings from the Pacific warning center. The Pacific warning center covers the pacific ocean islands and not the West coast.
Tsunami Warnings and Watches	There is agreement within the tsunami and emergency response communities that technology alone, automated warnings that can take up to 15 to 20 minutes to issue, cannot protect coastal inhabitants located in the immediate area of a local-source tsunami. When a large earthquake occurs nearby, the first tsunami waves may reach coastal communities within minutes of the event. Plant personnel at risk should be able to recognize the signs of impending tsunami hazards, such as strong, prolonged ground shaking, and seek higher

ground immediately.

Tsunami Watch

The second highest level of tsunami alert. Watches are issued by the National Tsunami Warning Center based on seismic information without destructive tsunami confirmation. The watch is issued as means of alerting the affected population located, for example, one to three hours tsunami travel time beyond the warned area. Subsequent text messages are issued at least hourly to expand the watch and warning area, upgrade all areas to a warning, or cancel the watch and warning. A Tsunami Watch may be included in the text of the message that disseminates a Tsunami Warning.

National Tsunami Warning Center

The National Tsunami Warning Center in Palmer, Alaska is responsible for warning Alaska, the U.S. continental west coast and east coast states, and states along the Gulf of Mexico, while Richard H. Hagemeyer, Pacific Tsunami Warning Center in Ewa Beach, Hawaii, is responsible for warning Hawaii and U.S. territories in the Pacific Ocean and Caribbean Sea.

Tsunami Categories

Local Tsunami

If a large earthquake occurs at or near the California coast, a tsunami may be generated and the first waves may reach coastal communities within minutes after the ground shaking stops. There is no time for authorities to issue a tsunami warning. A local tsunami has less than 1 hour tsunami travel time from its source.

All low-lying coastal areas, including Huntington Beach, can be struck by tsunami. Scientists estimate that if a tsunami hits the Orange County coast, it could generate waves as great as 32-feet high. The waves can move inland across Pacific Coast Highway faster than a person can run.

The force of a tsunami often carries boats, debris and heavy rocks a great distance inland. The water and debris moves with great force and can kill or injure people.

Regional Tsunami

These tsunamis are by far the most common. Destruction may be limited because the energy released was not sufficient to generate a destructive Pacific-wide tsunami, or because the source area limited the destructive potential of the tsunami. Areas affected by the tsunamis may not have felt the generating event.

Most destructive tsunami can be classified as local or regional. Many tsunami related casualties and considerable property damage also comes from these tsunamis. A regional tsunami has 1-3 hours tsunami travel time from its source.

Pacific-wide Tsunami

Very large earthquakes in other areas of the Pacific Rim may also cause tsunamis which could impact California's coast. The first waves would reach our coastline many hours after the earthquake occurred. A Pacific-wide tsunami has 3-6 hours tsunami travel time from its source.

Tsunami Threat Assessment and Response

Local Tsunami Threat

When a strong earthquake is felt (strong enough to knock you off your feet), a tsunami may have been generated that can strike the coast and Plant No. 2 in less than 5 minutes (See Map 15 – 1).

- Immediately find refuge above the second-floor in a multi-story, reinforced- concrete building or structure.
- The Plant No. 2 Operation Center will sound the emergency alert siren for approximately 15 seconds and make the following announcement:

"Due to the earthquake, there is danger of a tsunami. Move to higher ground immediately! Move to a second floor or higher!"

- The same public address announcement should be made via the two-way radio system.
- All personnel should find refuge on the roof of the following structures:
  - P2-66 New Headwork's Influent Pump Station
  - EPSA Building
  - Co-Generation Building
  - P2-90 Trickling Filters and Pump Station
  - OOBS (Ocean Outfall Booster Station)
  - New Truck Loading Structure

The P2 Incident Commander (IC) can contact Plant No. 1 Control Center at (714) 593-7025 to determine whether a Tsunami has been generated, especially if the earthquake epicenter is off the California coast.

The Plant No. 1 Control Center or P1 Incident Commander can confirm whether a tsunami has been generated along our coast by checking the following tsunami information sources:

- NOAA Tsunami website http://wcatwc.arh.noaa.gov/
- Review CISN at http://quake.usgs.gov/recenteqs/latest.htm
- Television (KCAL Channel 9 usually picks up OC news first)
- Review Emergency Digital Information System (EDIS) electronic warnings.

- Listen for warnings from the weather alert unit (Thunder Eagle) located at the Plant No. 1 Control Center or Plant No. 2 Operations Center.

Between the P1 Incident Commander and/or Operations Manager, they should determine if there's a tsunami threat to Plant No. 2. If there is a threat to the plant, then ascertain what is the estimated time of arrival (ETA) of the tsunami waves as they travel from the source to Plant No. 2? In other words, how much time before the first waves strikes the plant?

- If the tsunami travel time is less than one (1) hour, it is recommended that all plant personnel immediately find refuge above the second-floor in a multi-story, reinforced- concrete building or structure.
- Local Tsunami comes with little or no official warning.
- The Plant No. 1 EOC shall be activated in response to the tsunami threat to Plant No. 2.

If there is no tsunami threat then an "All Clear" shall be issued by the Incident Commander and/or Operations Manager via the plant public address system and two-way radio system.

- All evacuees will reassemble in their evacuation assembly areas and follow the post-earthquake damage assessment procedures as indicated in the IERP, Volume II, Chapter 3, Evacuations and Chapter 7, Earthquakes, Appendix 7A, Facilities Damage Assessment Procedures.

Regional Tsunami Threat

If there is a regional tsunami threat with 1 – 3 hour travel time and Tsunami Warning has been issued. Confirm the Tsunami Warning by the checking the following information sources:

- NOAA Tsunami website http://wcatwc.arh.noaa.gov/
- Review CISN at http://quake.usgs.gov/recenteqs/latest.htm
- Television (KCAL Channel 9 usually picks up OC news first).
- Review Emergency Digital Information System (EDIS) electronic warnings.
- Listen for warnings from the weather alert unit (Thunder Eagle) located at the Plant No. 1 Control Center or Plant No. 2 Operations Center.
- Contact the Huntington Beach Police at 714 - 960-8811.
- Check with Huntington State Beach at 714-536-1454 (days) or 949-443-2970 (nights).

If the tsunami travel time is more than (1) hour, it is recommend that all plant personnel immediately evacuate Plant No. 2 and report to the Plant No. 1 Control Center Auditorium. If the decision is made to evacuate, plant personnel should be notified of the need to evacuate using the siren warning

and public address system and by two-way radio broadcast. The Plant No. 2 Operation Center will sound the emergency alert siren for approximately 15 seconds and make the following announcement:

"A Tsunami Warning has been issued. All Plant No. 2 personnel need to evacuate the plant and report to Plant No. 1 Control Center Auditorium immediately. Please leave immediately. Do not wait because traffic will back up and you may not get out of the area." (Repeat this announcement at least twice)

- Once a plant wide evacuation is ordered, all employees should report to the Plant No. 1 Control Center Auditorium or other pre-designated assembly area, to be accounted for by their supervisor, evacuation coordinator or warden, other pre-designated individual.
- The operational control of Plant No. 2 will then be transferred to Plant No. 1 Control Center. All process control systems should be left in normal operations mode.
- Supervisors are responsible to assure their disabled employees are provided with adequate assistance during an evacuation.

Table 15-1. Tsunami Run-Map

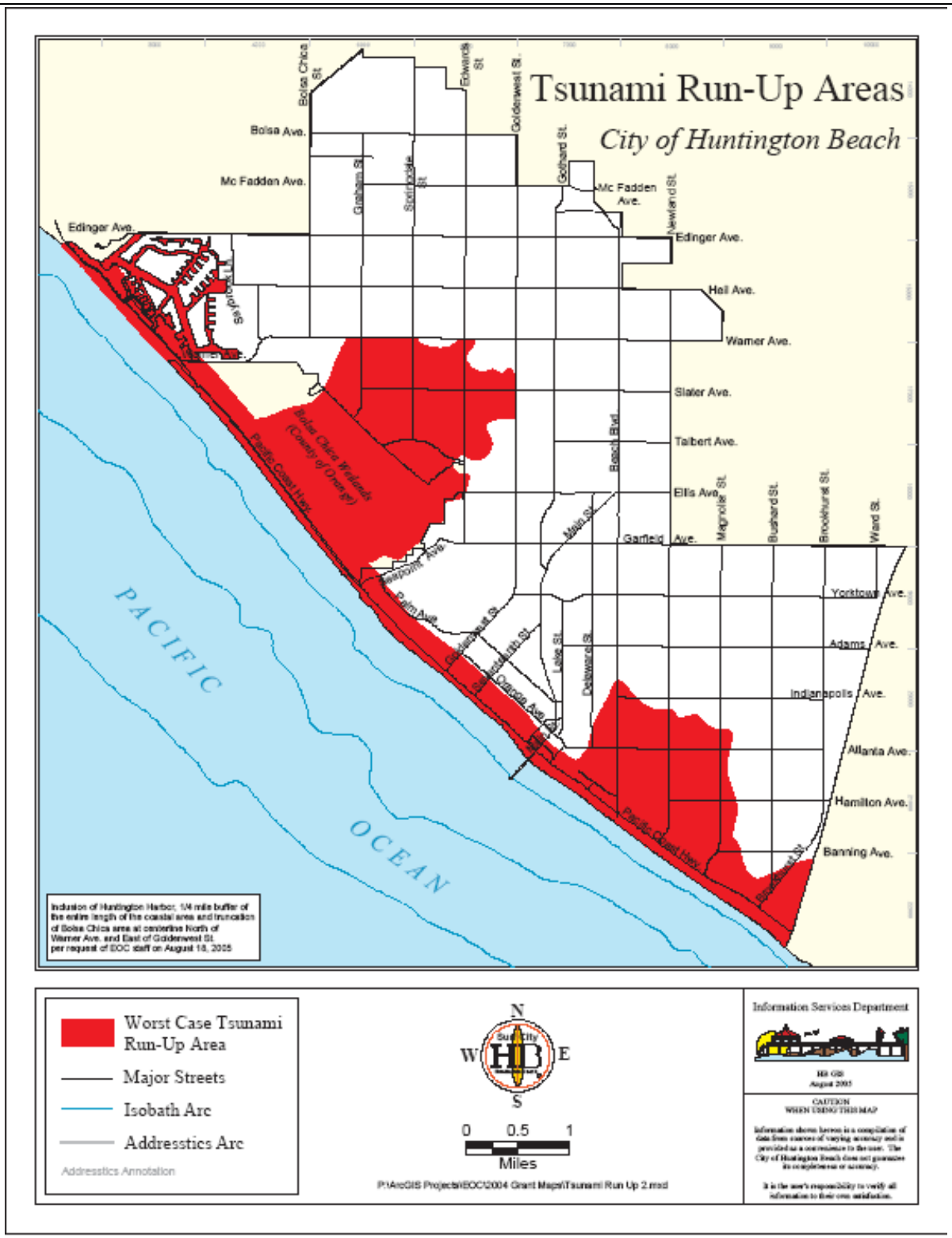
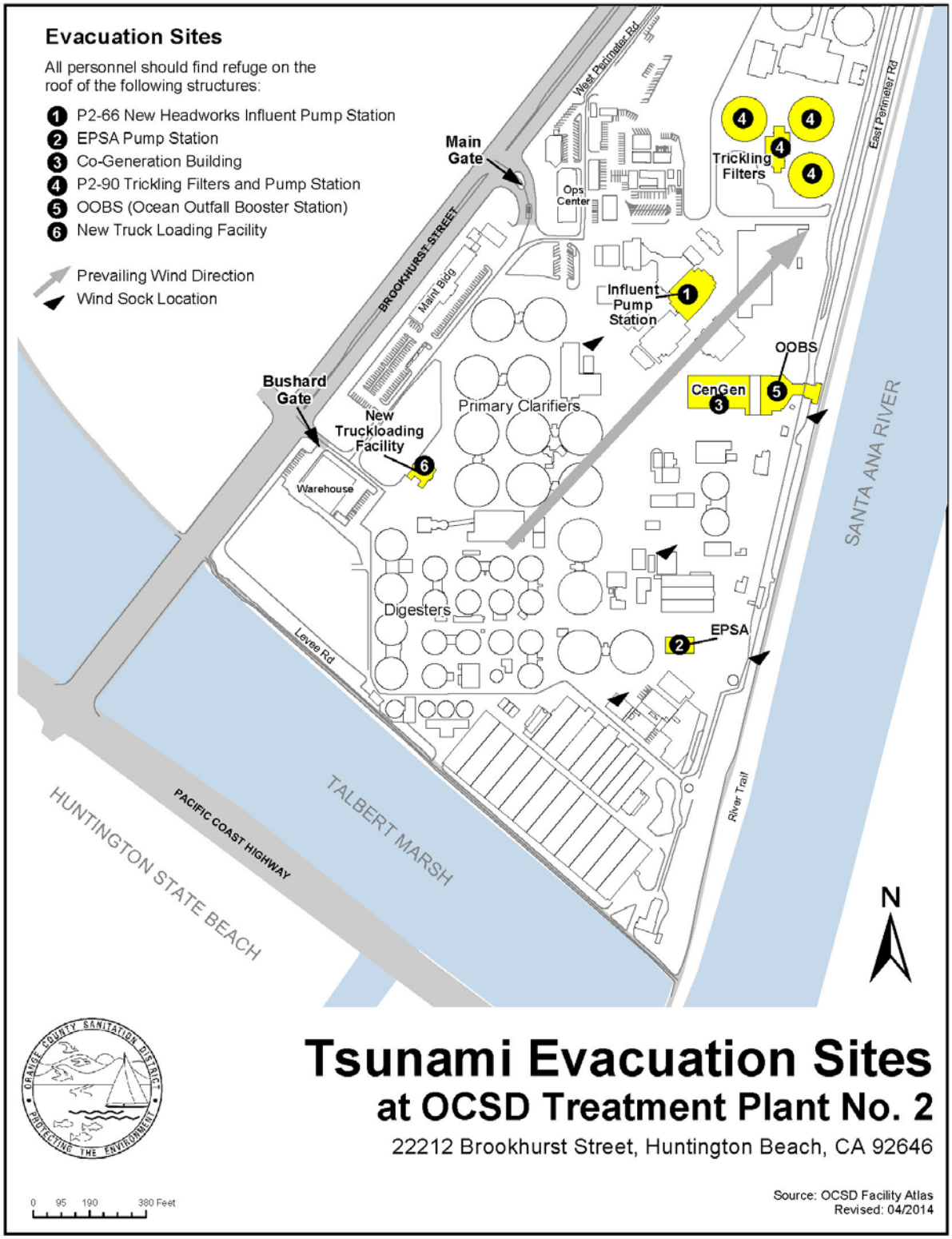


Table 15- 2. Plant 2 Tsunami Evacuation Sites



Tsunami Recovery

Plant No. 1 Emergency Operations Center (EOC) Activation

Specific activities that will be performed by the Plant No. 1 EOC and its personnel during a Plant No. 2 full-evacuation to Plant No. 1:

- Establish an overall Incident Commander to manage the Operations, Planning, Logistics, Finance Sections, and all related sub-functions.
- Set priorities and develop/execute incident action plans.
- Coordinate and support all field level incident activities within OCSD service area.
- Gather, process, and report information within OCSD service area and to other involved agencies regarding the magnitude and potential impact of the tsunami striking Plant No.2 and the potential consequences to our customers, as well as information on specific damages and planned response and recovery actions.

Damage Assessment

Once the water recedes from Plant No. 2, OCSD Damage Assessment Team (DAT) will be sent to Plant No. 2. Damage assessment procedures should follow the guidelines established for the system operability checks and standard determinations of operability/serviceability. At a minimum, the damage assessment team should complete the following activities:

- Conduct an initial analysis of the extent of damage to the system or Plant No. 2 facilities.
- Estimate the repairs required to restore the process system or facilities; the estimate should consider supplies, equipment, rental of specialized equipment (e.g., cranes), and additional staffing needs.

Recovery Planning

During emergency response operations, the Incident Commander or the General Manager should appoint a Recovery Manager. The Recovery Manager will be responsible for selecting a recovery team and developing a recovery strategy prior to emergency termination.

The Recovery Manager will have the responsibility and authority to coordinate recovery planning; authorize recovery activities; protect the health and safety of workers and the public; and initiate, change, or recommend protective actions. Additional responsibilities may include the following:

- Facilitate the transition from tsunami emergency to recovery operations.
- Develop, implement, and maintain a recovery plan.
- Coordinate all vendor and contractor activities that occur at Plant No. 2.
- Informs and briefs Executive Management Team (EMT) on recovery planning and activities. Provides estimated recovery completion.

- Works with the Public Affairs Office (PAO) on dissemination of health warnings, emergency public information, and instructions to OCSD employees, visitors and contractors.
- Ensure that the appropriate safety inspections have been completed.
- Coordinate the completion of emergency repairs and schedule permanent repairs.
- Notify key agencies of emergency repair status and the scheduled completion of system repairs.
- Complete permanent repair and/or replacement of system facilities.
- Release repaired facilities and equipment for normal use.
- Replace, or authorize the replacement of materials and supplies used in the tsunami emergency.

Recovery Activities

The following are examples of activities that might be directed by the Recovery Manager and executed by the recovery team as required following the tsunami or earthquake:

- Notify all appropriate regulatory agencies that recovery phase is underway.
- Install warning signs, barriers and shielding as needed.
- Take measures to protect workers and the public from hazardous exposures.
- Complete detailed evaluations of all affected Plant No. 2 facilities and determine priorities for permanent repair, reconstruction, or replacement at existing or new locations.
- Begin repair activities design and make bids for contractor services.
- Make necessary repairs to the system and un-tag repaired facilities and equipment.
- Restore all Plant No. 2 telecommunications, data processing, and similar services to full operation.
- Complete assessment of losses and costs for repair and replacement, determine approximate reimbursements from insurance and other sources of financial assistance.
- Define needs for additional staff, initiate recruitment process, and adopt temporary emergency employment policies as necessary.
- Execute agreements with vendors to meet service and supply needs.
- Address needs for handling and disposing of any hazardous waste generated during recovery activities.
- Control discharges as a result of recovery activities within regulatory and environmental compliance limits if possible.
- Reevaluate need for maintaining the incident command system organization; consider returning to the normal organizational structure, roles, and responsibilities when feasible.
- Collect cost accounting information gathered during the earthquake and/or tsunami and prepare request for Emergency Disaster Funds (follow FEMA and State CalEMA requirements).
- Debrief staff to enhance response and recovery efforts in the future by

identifying lessons learned, developing action plans and follow-up mechanisms, and providing employee programs if needed.
- Prepare After-Action Reports as required.

Termination and Review Phase

The Recovery Manager should officially terminate the recovery phase when normal operations are resumed at all facilities affected by the tsunami or earthquake. Termination and review actions may include the following:

- Initiate permanent reconstruction of damaged OCSD facilities and systems.
- Obtain inspections and/or certifications that may be required before facilities can be returned to service.
- Restore OCSD operations and services to full pre-event levels.
- Determine how emergency equipment and consumable materials should be replenished, decontaminated, repaired or replaced.
- Identify operational changes that have occurred as a result of repair, restoration, or incident investigation.
- Document the recovery phase, and compile applicable records for permanent storage.
- Continue to maintain liaison as needed with external agencies.
- Update training programs, the IERP, and standard operating procedures, as needed, based upon "lessons learned" during the emergency response and recovery phases of the event.

Contents

16.SARI Line Rupture

The SARI Line ERP is used to respond to a SARI Line Rupture.

This section of the Integrated Emergency Response Plan (IERP) has been prepared by the Orange County Sanitation District (OCSD) in the event the Santa Ana River Interceptor (SARI) trunk line is ruptured and the SARI Control Gate is closed because of the rupture.

Purpose and Scope

This plan is designed to address organized emergency response to a rupture in the SARI trunk line and the closure of the SARI Control Gate to protect OCSD's two treatment plants from inflow of sand and debris into the SARI sewer line.

The overall purpose of this plan is to:

- Establish a District-wide understanding of the special operational concepts, organization, tasks, and coordinated emergency actions of OCSD, the Army Corp of Engineers who operates the Prado Dam and other organizations which would be involved in the SARI trunk line rupture response.
- To provide for mobilization and direction of OCSD personnel and equipment in support of SARI trunk line rupture response and recovery operations.
- To ensure prompt notification of OCSD staff and other appropriate public agencies if the SARI control gate is closed.
- To provide for the rapid deployment of OCSD personnel and/or repair contractors, bypass pumping equipment to the SARI trunk line rupture location and to begin immediate bypass pumping procedures.
- Enhance multi-agency and multi-jurisdictional coordination, particularly between the OCSD and local, state, and federal agencies during emergency operations.
- Pre-event emergency planning as well as emergency operations procedures.

This plan has been designed for conformance with SEMS (Government Code §8607) and should be used in conjunction with the OCSD SARI Line Emergency Response Plan (ERP) and other OCSD Standardized Operating Procedures (SOP) such as:

1. SARI Control Gate Operating and Notification Procedure, OM - SOP - 001
2. SARI Line Rupture Procedure, OM - SOP - 002

Activation and Notification

This plan becomes effective upon notification of SARI trunk line rupture and the closure of the SARI Control Gate. Once the SARI Control Gate is closed, Division 340 Collection personnel should remain on site until the Division 340 Manager or Supervisor arrives at the SARI Control Gate structure.

Based on the situation, the Division 340 Manager or Supervisor shall establish an Incident Command Post (ICP) at the SARI Control Gate structure and a staging area adjacent to the area of the rupture. Once the ICP has been established and the Control Center has been informed of the location of the ICP, the Incident Command System (ICS) and the Emergency Operations Center (EOC) at Plant1 shall be activated. The Orange County EOC or Operational Area (OA) shall be notified of OCSD EOC activation.

Incident Command Post

The initial ICP location is usually a vehicle at the SARI Control Gate structure or near the incident scene. The ICP should be at a location away from the general noise and confusion. In a ruptured SARI trunk line incident, position the ICP outside of the hazard zone (both present and predicted).

- All OCSD incidents in the field must have a designated ICP. For example, in a major earthquake with multiples incidents throughout OCSD service area.
- The Incident Commander determines the location of the ICP.
- There is only one ICP for each incident.
- Incident Command Post will be designated by the name of the incident, e.g., *SARI ICP*

Initial Response and Assessment

The Division 340 Manager or Supervisor shall assume the role of SARI Line Repair Group Supervisor or Incident Commander (IC).

- Establish an ICP and Staging Area.
- Use the SARI ERP, Chapter 3 (Activation and Notification) list which contains a suggested ICS organization chart (Figure 1) and lists of names and contact numbers for activation and notification. Mobilize Division 340 Collections personnel, as needed.
- Establish communications with the Control Center and provide an initial status report.
- Establish communications and coordinate efforts with the Army Corp of Engineers, the operator of the Prado Dam. Maintain contact with Operator of the Dam while repair crews are working within the dam inundation areas and can be potentially at risk.
- Radio communications should be limited to vital messages only. Radio channels should remain clear until necessary for emergency messages to be sent. Messages should be sent by stating the call sign of the sender and then stating that it is an emergency message. All other radio transmitters should remain off the air unless requesting clearance to report life threatening situations.
- Continue conducting SARI trunk line damage inspections.
- Begin documentation process, including photos and video recording.
- Notify SARI trunk line repair contractors.
- Consider alerting and/or recalling off-duty Collections personnel.

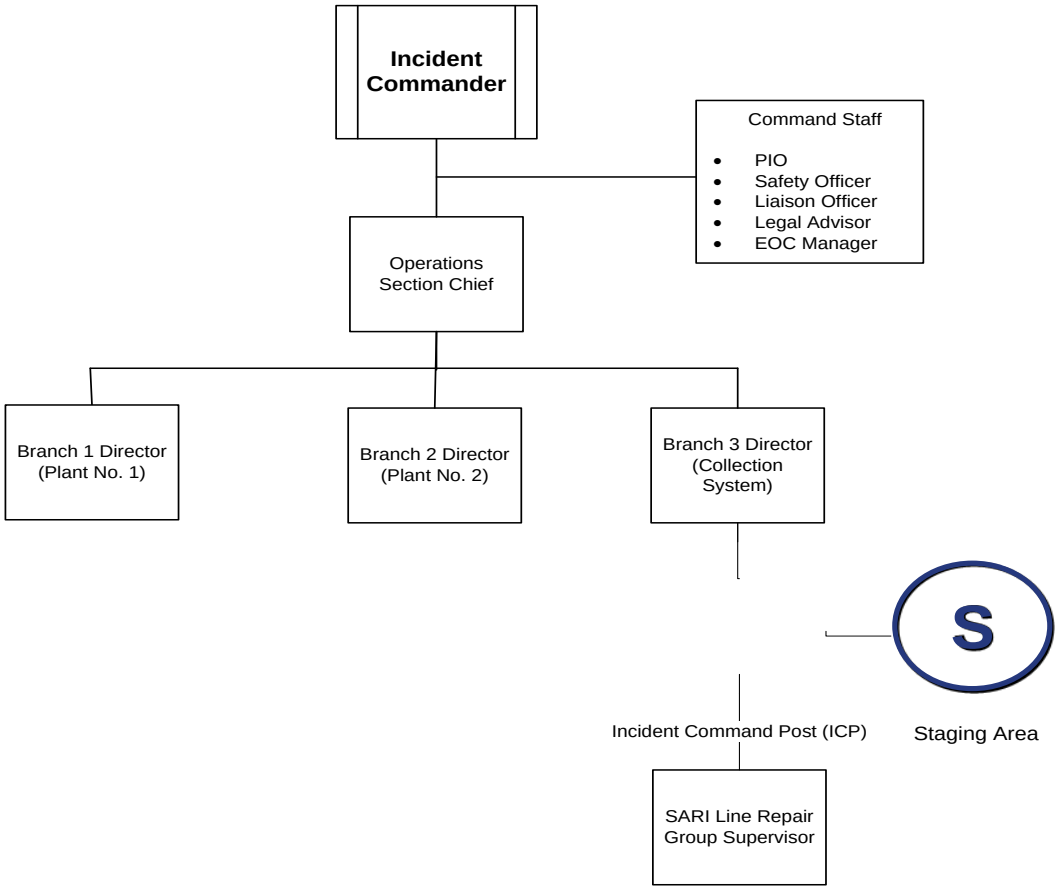
Incident Briefing

All Collections and Contract Repair personnel should report to the ICP and obtain an incident briefing from the Incident Commander or the SARI Line Repair Group Supervisor, if the position has been established.

- Determine incident complexity.
- Develop a sketch map of the incident.
- Ensure interagency notifications with Division 790.
- Clarify/request additional information.
- Clarify/issues and concerns.
- Discuss planned operations and direction.

Incident Action Plan (IAP)

Every incident needs a verbal or written IAP. The IAP is designed to move response operations from a reactive mode to a proactive mode. It provides the responders with direction on what to accomplish in a certain period time (operational period) and the resources necessary to support the operations.



Incident Command System (ICS) Organization Chart for SARI Line Rupture (Figure 1)

Response Operations

During response operations, the initial response organization transitions from a reactive response to a proactive response. The goal of the proactive response is to maximize responder safety, adapt incident resources to meet response objectives, and allow for constant assessment of progress toward resolving the incident.

- Execute the IAP and assess progress.
- Initiate bypassing pumping, if necessary.
- Ensure that appropriate staffs are available to assist other emergency responders with the operation of heavy equipment, in coordination with SARI Line Repair Group Supervisor.
- Refer all contacts with the media to the Public Information Officer (PIO).
- Coordinate emergency public information with the OCSD Public Information Officer at the ICP or at the Plant 1 EOC.
- Assess and determine the necessity of specialized equipment and resources, such as barricades, pumps, temporary pipes, bulldozers, and skip loaders.
- Stage equipment and personnel in the staging area.
- Keep the Plant 1 EOC informed of repair and bypass pumping activities.
- Monitor ongoing response operations.
- Provide direction as needed.
- Repair damage to SARI trunk line.
- Staff the EOC 24-hour a day, 12 hour shifts, as needed.
- Make external notifications to local governments, regulatory agencies, essential suppliers, and others as needed.
- Advise all OCSD employees of the situation, work schedules, and similar matters.

Bypass Pumping Options

Temporary manhole-to-manhole bypass pumping systems may have to be installed if the manholes within the impacted area are accessible during a SARI Line rupture. These pumping systems would bypass

SARI Line effluent from a manhole(s) upstream of the failure point to a manhole(s) downstream of the failure point, thereby isolating the ruptured area of the SARI Line and making it accessible for repair. Extensive description of bypass pumping options, including discussion of two pre-selected failure points, are presented in SARI Line Rupture Procedure OM-SOP-002 and the SARI Line Emergency Response Plan April 2010.

- Do not utilize bypass pumping if sustained high stages of water in the Santa Ana River cover most manholes and preclude the use of temporary bypass system.
- The Staging areas is where the primary logistical functions are performed for a SARI Line rupture incident. At the Staging area assemble all the necessary pumps and associated piping for bypass pumping within hours following a SARI Line rupture.
- Have multiple bypass pumping contractors function as the emergency repair contractor with oversight from OCSD [OCSD may be required to function as the primary emergency repair crew. OCSD emergency repair crew may need to contact pump and supply vendors to procure necessary bypass pumping equipment].
- Keep the Plant 1 EOC informed of repair and bypass pumping activities.
- Temporary bypass systems may need to be retained in place for several weeks up to a year while repairs to the ruptured SARI Line are being performed.
- Coordinate emergency efforts and bypass pumping options with SAWPA. Upstream users of the SARI Line may sustain impacts to service during a rupture.
- Supply diesel pumps under wet weather conditions or conditions where a source of electricity is absent. Division 790 will assist with Air Quality permitting requirements.
- Refuel diesel pumps and diesel generators if operated for extended periods of time.
- Implement traffic safety controls during bypass pumping operations that occur on or near local roadways.

Deactivation and Demobilization

No equipment or personnel should leave the incident until authorized by the incident commander or SARI Line Repair Group Supervisor.

- The incident commander shall authorize deactivation of field response or EOC sections or branches when they are no longer required.
- Deactivate the ICP before deactivating the EOC and close out logs when the emergency situation no longer requires activation.
- Notify the OCSD Executive Management Team (EMT), Army Corp of Engineers Prado Dam Operator, and other agencies, as necessary, of planned time of deactivation.
- Ensure that any open actions not yet completed will be taken care of after deactivation.
- Be prepared to provide input to the after action report.

Contents

17.External Notifications

This chapter covers notifications that are generally external to OCSD and required by environmental permits, environmental laws, and other regulations. These types of notifications are made as soon as OCSD has knowledge of a spill or injury. Internal notifications or activations (2222) and/or immediate external notifications (911) such as calling for a fire or medical emergency are covered elsewhere in the IERP as appropriate (for example, Emergency Recognition and Activation; Chapter 1 of this volume). Where required, other plans and procedures in the IERP reference this procedure to make the necessary appropriate notifications.

Notification Matrix

Table 17-1 lists required notifications by incident type. Table 17-2 contains a contact list with phone numbers for the notifications listed in the table. The types of incidents listed are:

- Medical
- Hazardous Material Spill or Release
- High Flow Condition (resulting in discharge to the 78-inch outfall or to the Santa Ana River)
- Radioactive Material Release
- Electrical Outage

Note: Notifications and contact names for a **sewage spill** are contained in EC-SOP-009, Spill Notification Procedures. The sewage spill SOP is located online at H:\ntglobal\Control Center Reports\Spill Procedures & Forms\SSO_Notification_Procedures_Official_09-29-11

Table 17-1. Required Notifications by Incident

Legend:

OCHCA: Orange County Health Care Agency
Cal EMA: California Emergency Management Agency
NRC: National Response Center
RWQCB: California Regional Water Quality Control Board, Santa Ana Region
SCE: Southern California Edison
S&H: Safety and Health Division of OCSD
EC: Environmental Compliance Division of OCSD
OCPW Orange County Public Works

Incident Type	Required Notifications	Time Frame	OCSD Responsibility
Medical			
Injury, death, hospitalization, and/or multiple injuries	• Emergency family contact (form on file at Human Resources) • CAL/OSHA	As soon as possible As soon as possible	Human Resources S&H
Hazardous Material Spill or Release			
Potential or actual unauthorized discharge to water or storm drain	• OCHCA • Cal EMARWQCB • OCPW	As soon as possible	EC EC EC EC
Release is above reportable quantity	• NRC • Cal EMARWQCB • OCHCA • OCPW	N/A 15 days (written) N/A ASAP ASAP	S&H or EC S&H or EC EC EC EC
Release is more than 500 lb, 55 gal, or 200 cf	• Cal EMA	Written report on required form w/in 15 days	S&H (EC-support)
(Any qty) Significant threat or hazard to human health, safety, or environment	• Cal EMA • NRC • OCHCA • RWQCB • OCPW • EPA	ASAP (Written report on required form w/in 15 days) ASAP ASAP ASAP ASAP ASAP	S&H (EC-support) S&H (EC-support) EC EC EC EC

Incident Type	Required Notifications	Time Frame	OCSD Responsibility
Release occurred during transport (including loading and unloading)	• California Highway Patrol	DOT Form F5800.1 w/in 30 days	S&H
	• OCHCA	ASAP	EC EC
	• RWQCB	ASAP	EC EC
	• OCPW	ASAP	
	• Municipality in which the incident occurred (City)	ASAP	
Release from underground tank	• Cal EMA	Written report on required form w/in 15 days	S&H
	• OCHCA – Environmental Health Division	ASAP	EC
Release contains PCBs >1 lb but <50 ppm concentration	• NRC	N/A	S&H
	• EPA	N/A	EC
	• Cal EMA	Written report w/in 15 days on required form	
Release contains PCBs, any quantity, >50 ppm concentration	• If direct contamination of surface water, sewers, drinking water, grazing lands, or vegetable gardens, notify:		
	- NRC	ASAP	S&H
	- EPA	N/A	EC
	- RWQCB	ASAP	EC
	- - Cal EMA	ASAP	S&H (EC-support)
	- OCPW (only if surface water)	ASAP	EC
	• If **no** direct contamination of surface water, sewers, drinking water, grazing lands, or vegetable gardens, notify Cal EMA only.	Written report w/in 15 days on required form	S&H
Sewage Spill: See EC-SOP-009, Spill Notification Procedures.			
High Flow Condition			
Discharge to the 78-inch outfall or to the Santa Ana River	• OCHCA • RWQCB • EPA	Immediately (prior to discharge whenever possible)	EC EC EC
Radioactive Material Release			
Release of radioactive material	State Department of Public Health – Radiation/Radioactive Materials Division	Immediately	S&H
Electrical Outage			

Incident Type	Required Notifications	Time Frame	OCSD Responsibility
An electrical outage affecting multiple pump stations and/or the treatment plants	SCE OCHCA – heads up RWQCB – heads up	ASAP Only if sewage spills are imminent	Control Center EC EC

Contacts

Table 15-2 contains contact names and phone numbers for the notifications listed in Table 15-1.

Table 17-2. Contacts for Notifications

Normal Hours	Off Hours
EPA Regional Administrator, Region IX: **Jared Blumenfeld** (415) 947-8702	
State Department of Public Health: Radiation/Radioactive Materials Branch General Info Line: (714) 257-2025 Sacramento Office: (916) 327-5106	If no answer or weekend/off-hours: Cal EMA: (800) 852-7550 Control 1: (714) 628-7008
National Response Center (NRC) for Chemical Spills (800) 424-8802	
OCHCA Regular Day Shift: (714) 433-6419 ***Water Resources:*** Mike Fennessy (714) 433-6280 Larry Honeybourne (714) 433-6015 ***Emergency Response:*** (714) 433-6419	Weekend/Off Hours Control 1: (714) 628-7008
Cal EMA (800) 852-7550 or (916) 845-8911 (24 hours)	
Orange County Public Works (714) 955-0600 or (897) 897-7455 (24 hours)	

(continued)

Normal Hours	**Off Hours**
RWQCB - Santa Ana Region Regular Day Shift Office (951)782-4130 ***Water Quality Issues:*** Gary Stewart (951) 782-4379 Julio Lara (951) 782-4901 Fax (951) 781-6288	Weekend/Off Hours (800) 852-7550 (Cal EMA receives calls for RWQCB)
For discharge to the 78-inch outfall or SAR, contact all of the following in the order shown: Kurt Berchtold (951) 782-3286 / Gary Stewart (951) 782-4379 Julio Lara (951) 782-4901	Weekend/Off Hours (Home/Cell) (951) 781-8019 (951) 927-7172 / (951) 203-9303

Appendix A
ICS Checklists

This appendix contains the position checklists for key ICS positions. The checklists are grouped behind a tab for each of the major ICS functions as follows**:**

- Command
  - Incident Commander
  - Safety Officer
  - Liaison Officer
  - Public Information Officer
  - Legal Advisor
  - EOC Manager
- Response Operations
  - Response Operations Section Chief
  - Branch Directors (Plant No. 1, Plant No. 2, and Collections)
  - Emergency Coordinators and Emergency Wardens
  - Group Supervisors
- Response Support
  - Response Support Section Chief
  - Planning Branch Director
    - Situation Unit Leader
    - Documentation Unit Leader
    - Demobilization Unit Leader
  - Logistics Branch Director
    - Personnel Unit Leader
    - Supply Unit Leader
    - Ground Support Unit Leader
    - Medical Unit Leader
    - Communications Unit Leader
    - Security Unit Leader
    - Finance Unit Leader

Command Checklists

Incident Commander

Report to: General Manager	Reporting Location: ICP/EOC

Responsibility: Provides overall management of response to the incident.

Startup Actions

Assess the situation or obtain a briefing from the prior Incident Commander. _____

Activate appropriate ICS organization. _____

Establish an Incident Command Post or activate EOC. _____

Operational Actions

Conduct meeting with Section Chiefs and Command Staff to determine incident strategic objectives. _____

Provide input to, review, and approve Incident Action Plan. _____

Conduct periodic incident briefings to obtain status of event and response. _____

Approve requests for additional personnel or for release of personnel. _____

Periodically brief General Manager on the incident. _____

Reassess events; adjust strategies, staff, and personnel as needed. _____

Authorize release of information to the news media as requested by PIO. _____

Deactivation Actions

Ensure Demobilization Plan is developed as needed. _____

Participate in post-incident debriefing for key ICS staff. _____

Appoint Incident Investigation Team and participate in the investigation. _____

Provide input to the Post-Incident Investigation Report written by the Incident Investigation Team. _____

Safety Officer

Report to: Incident Commander	Reporting Location: ICP/EOC

Responsibility: Develops and recommends measures for ensuring personnel safety and anticipates or assesses hazardous and unsafe situations.

Startup Actions

Obtain a briefing from Incident Commander. _____

Operational Actions

Meet with Incident Commander, other Command Staff, and Section Chiefs to determine incident strategic objectives. _____

Meet with other Command Staff to develop specific objectives and actions for the Command portion of the Incident Action Plan. _____

Provide input to and review the Incident Action Plan to ensure the planned actions exhibit safe work practices. _____

Identify hazardous situations associated with the incident and recommend appropriate safe work practices. _____

Assign qualified assistants as needed to provide oversight of response activities to ensure safe performance. _____

Participate in periodic incident briefings.

Deactivation Actions

Ensure that any required forms or reports are completed before departure. _____

Participate in post-incident debriefing for key ICS staff. _____

Serve as a member of the Incident Investigation Team and participate in the investigation. _____

Provide input to the Post-Incident Investigation Report. _____

Liaison Officer

Report to: Incident Commander	Reporting Location: ICP/EOC

Responsibility: Notifies appropriate agencies and organizations and coordinates and communicates with them as needed.

Startup Actions

Obtain a briefing from Incident Commander. _____

Operational Actions

Meet with Incident Commander, other Command Staff, and Section Chiefs to determine incident strategic objectives. _____

Meet with other Command Staff to develop specific objectives and actions for the Command portion of the Incident Action Plan. _____

Make notifications required by regulation (per Chapter 15, External Notifications). _____

Coordinate and maintain communications with outside agencies as needed.

Keep agencies that are supporting the incident aware of incident status. _____

Participate in incident briefings, providing current status of assisting agencies. _____

Maintain Unit Log. _____

Deactivation Actions

Ensure that any required forms or reports are completed before departure. _____

Participate in post-incident debriefing for key ICS staff. _____

Provide input to the Post-Incident Investigation Report. _____

Public Information Officer

Report to: Incident Commander	Reporting Location: ICP/EOC

Responsibility: Develops and releases information about the incident to news media, public, incident personnel, and other appropriate agencies and organizations.

Startup Actions

Coordinate with Incident Commander regarding the information available and appropriate for release under the initial conditions. _____

Operational Actions

Meet with Incident Commander, other Command Staff, and Section Chiefs to determine incident strategic objectives. _____

Meet with other Command Staff to develop specific objectives and actions for the Command portion of the Incident Action Plan. _____

Communicate with ICS positions as directed by Incident Commander to provide and obtain information for release. _____

Arrange for preparation of media briefing materials as required. _____

Notify media contacts per list in Media Plan. _____

Provide periodic briefings and news releases about the incident. _____

Ensure media credentials have been checked and maintain log of media personnel admitted to OCSD property. _____

Ensure members of Security Team are assigned to escort media. _____

Make a qualified technical spokesperson or witness available to media. _____

Establish a rumor control function as necessary. _____

Monitor broadcast media. Use to develop follow-on news releases and control rumors. _____

Deactivation Actions

Prepare final news releases and advise media representatives of points-of-contact for follow-on stories. _____

Participate in post-incident debriefing for key ICS staff. _____

Legal Advisor

Report to: Incident Commander	Reporting Location: ICP/EOC

Responsibility: Researches the law pertinent to the incident and advises Incident Commander on legal matters.

Startup Actions

Obtain a briefing from Incident Commander. _____

Operational Actions

Meet with Incident Commander, other Command Staff, and Section Chiefs to determine incident strategic objectives. _____

Meet with other Command Staff to develop specific objectives and actions for the Command portion of the Incident Action Plan. _____

Provide legal input and review the Incident Action Plan as requested. _____

As requested, evaluate issues and potential legal liabilities related to the incident. _____

If requested by the Public Information Officer or Incident Commander, review news releases. _____

Attend briefings with Command Staff and government agencies. _____

Provide legal advice regarding OCSD activities, liabilities, and responsibilities. _____

Deactivation Actions

Participate in post-incident debriefing for key ICS staff. _____

Serve as a member of the Incident Investigation Team and participate in the investigation. _____

Provide input to the Post-Incident Investigation Report. _____

EOC Manager

Report to: Incident Commander	Reporting Location: EOC

Responsibility: Set up EOC/ICP.

Startup Actions

Have EOC Setup Checklist available. _____

Operational Actions

Set up EOC in accordance with Volume II Appendix C or as posted in the EOC. _____

Ensure sufficient administrative and clerical support. _____

Maintain needed supplies. _____

Monitor entry of personnel into the EOC to ensure that only required personnel remain in the EOC. _____

As duties allow, help other positions such as Documentation Unit Leader. _____

Deactivation Actions

List supplies that need replenishing and provide to IERP Coordinator. _____

Participate in post-incident debriefing for key ICS staff. _____

Provide input to the Post-Incident Investigation Report. _____

Response Operations Checklists

Response Operations Section Chief

Report to: Incident Commander	Reporting Location: ICP/EOC

Responsibility: Manages all operations directly applicable to tactical response to the incident.

Startup Actions

Obtain a briefing from Incident Commander. _____

Operational Actions

Establish appropriate section organization and monitor effectiveness. _____

Meet with Incident Commander, Command Staff, and Response Support Section Chief to determine incident strategic objectives. _____

Meet with activated Response Operations personnel to develop specific objectives and actions for the Response Operations portion of the Incident Action Plan. _____

Supervise the execution of the Incident Action Plan for Response Operations. _____

Conduct periodic section briefings with Branch Directors and others as required. _____

Identify hazardous situations associated with the incident and recommend safe tactical operations. _____

Determine the need for outside resources (personnel and equipment) and coordinate with Response Support Section Chief. _____

Attend periodic incident briefings and provide status update. _____

Deactivation Actions

Approve release of personnel. _____

Participate in post-incident debriefing for key ICS staff. _____

Provide input to the Post-Incident Investigation Report. _____

Response Operations Branch Director

Report to: Response Operations Section Chief	Reporting Location: ICP or EOC

Responsibility: Manage incident operations within branch.

Startup Actions

Obtain a briefing from Response Operations Section Chief. _____

Operational Actions

For evacuations, collect information from Emergency Coordinators within the branch. _____

For evacuations, assign Search & Rescue groups as needed based on data from Emergency Coordinators concerning missing personnel. _____

Request Medical Unit assistance as needed. _____

Assign appropriate groups such as Damage Assessment and Operations & Repair based on the nature of the incident. _____

If requested, attend periodic incident briefings. _____

Notify Response Operations Section Chief when: _____

- Incident Action Plan needs to be modified.
- Additional personnel are needed.
- Surplus personnel are available.
- Hazardous situations or significant events occur.

Review accident and medical reports originating within the branch. _____

Develop branch plans for the next operational period. _____

Deactivation Actions

Participate in post-incident debriefing for key ICS staff. _____

Provide input to the Post-Incident Investigation Report. _____

Emergency Warden/Coordinator

Report to: Branch Director	Reporting Location: Assembly Area

Responsibility: Emergency Wardens (EWs) account for OCSD personnel, visitors, and contractors and ensure their safety in assigned areas during an evacuation. Emergency Coordinators (ECs) collect and report personnel data from Emergency Wardens.

Startup Actions

EW: Have Emergency Preparedness Roster available. _____

Operational Actions

EW: Conduct roll call at Assembly Area. _____

EW: Review sign-in sheets to determine missing personnel, including contractors and visitors. _____

EW: Ensure Assembly Area is safe from the incident.

EW: Maintain organized Assembly Area. _____

EW: Administer first aid to evacuees where needed (or obtain assistance from other evacuees). _____

EW: Keep employees at Assembly Area informed of ongoing actions. _____

EW: Keep record of those employees who leave the Assembly Area to report for ICS positions. _____

EW: If directed, lead employees to a different area as directed. _____

EW: Report results of roll call to Emergency Coordinator. _____

EC: Consolidate and report results of roll calls in your area to Branch Director.

EC: Determine need for assistance and inform Branch Director of need for such groups as Search and Rescue and Medical. _____

Deactivation Actions

Provide input to the Post-Incident Investigation Report. _____

Group Supervisor

Note: Groups within Response Operations may have various roles: Operations & Repair (at plants), Damage Assessment (at plants or in the Collection System), Trunk Line Operations & Repair, Pump Station Operations & Repair, Electrical Maintenance, Mechanical Maintenance, Search & Rescue, etc.

Report to: Branch Director	Reporting Location: ICP

Responsibility: Implements appropriate portions of the Incident Action Plan, assigns personnel within group, and reports on operations, personnel, and equipment status.

Startup Actions

Obtain a briefing from Branch Director/Response Operations Section Chief. _____

Operational Actions

Activate appropriate group members to implement Incident Action Plan. _____

Review group assignments and incident activities with subordinates and assign tasks. _____

Maintain overview of ongoing operations and modify assignments based on effectiveness of current operations. _____

Determine need for assistance on assigned tasks. _____

Submit situation, personnel, and equipment status information to Response Operations Section Chief or Branch Director. _____

If group expands beyond span of control (seven people), break into teams and appoint Team Leaders. _____

Report special occurrences or events such as accidents or sickness to Response Operations Section Chief/Branch Director. _____

Deactivation Actions

Participate in post-incident debriefing for key ICS staff. _____

Provide input to the Post-Incident Investigation Report. _____

Response Support Checklists

Response Support Section Chief

Report to: Incident Commander	Reporting Location: ICP/EOC

Responsibility: Ensures needed support (personnel, equipment, supplies) is obtained for the incident response.

Startup Actions

Obtain a briefing from Incident Commander. _____

Operational Actions

Meet with Incident Commander, Response Operations Section Chief, and Command Staff to determine incident strategic objectives. _____

Meet with activated Response Support personnel to develop specific objectives and actions for the Response Support portion of the Incident Action Plan. _____

Establish appropriate section organization and monitor effectiveness. _____

Supervise the execution of the Incident Action Plan for Response Support. _____

Conduct periodic section briefings with Branch Directors and others as required. _____

Attend periodic incident briefings and provide status update. _____

Approve release of personnel. _____

Deactivation Actions

Participate in post-incident debriefing for key ICS staff. _____

Provide input to the Post-Incident Investigation Report. _____

Planning Branch Director

Report to: Response Support Section Chief	Reporting Location: ICP/EOC

Responsibility: Collects, evaluates, processes, and disseminates information for incident use.

Startup Actions

Obtain a briefing from Incident Commander. _____

Set up status boards. _____

Operational Actions

Establish appropriate branch organization and monitor effectiveness. _____

Conduct initial briefing and follow-up meetings with unit leaders. _____

Supervise preparation, dissemination, and periodic updates of the Incident Action Plan. _____

Determine need for specialized and/or outside resources in support of the incident and coordinate with Logistics Branch Director. _____

Establish special information collection activities as necessary, for example, weather, environmental, toxins. _____

Compile and display incident status information. _____

Attend periodic incident briefings and provide status updates. _____

Deactivation Actions

Participate in post-incident debriefing for key ICS staff. _____

Provide input to the Post-Incident Investigation Report. _____

Situation Unit Leader

Report to: Planning Branch Director	Reporting Location: ICP/EOC

Responsibility: Collects and organizes incident status and situation information.

Startup Actions

Obtain a briefing from Planning Branch Director. _____

Set up workstation(s) and status boards. _____

Operational Actions

Coordinate with Communications Unit Leader of Logistics Branch to establish communication links for collecting incident data. _____

Assign duties to Situation Unit personnel. _____

Participate in Planning Branch meetings. _____

Gather, display, and maintain incident situation data using status boards and incident status summaries. _____

Maintain Situation Unit records including Unit Log. _____

Deactivation Actions

List supplies that need replenishing and provide to IERP Coordinator. _____

Participate in post-incident debriefing for key ICS staff. _____

Provide input to the Post-Incident Investigation Report. _____

Documentation Unit Leader

Report to: Planning Branch Director	Reporting Location: ICP/EOC

Responsibility: Maintains accurate and complete incident files and provides duplicating services to incident personnel.

Startup Actions

Obtain a briefing from Planning Section Chief. _____

Establish and organize incident file system and duplication services. _____

Operational Actions

Retain and file copies of official forms and reports. _____

Check the accuracy and completeness of records submitted for files. _____

Provide duplication services, ICS forms, maps, and charts as requested. _____

As requested, activate and assign clerical support to ICS functions. _____

Prepare incident documentation as requested by Planning Branch Director. _____

Participate in Planning Branch meetings. _____

Maintain Unit Log. _____

Deactivation Actions

List supplies that need replenishing and provide to IERP Coordinator. _____

Participate in post-incident debriefing for key ICS staff. _____

Provide incident files for input to the Post-Incident Investigation Report. _____

Demobilization Unit Leader

Report to: Planning Branch Director	Reporting Location: ICP/EOC

Responsibility: Prepares Demobilization Plan and assists ICS elements to ensure orderly and safe demobilization.

Startup Actions

Obtain a briefing from Planning Branch Director. _____

Operational Actions

Prepare Demobilization Plan. _____

Submit Demobilization Plan to Planning Branch Director for review. _____

Distribute Demobilization Plan to Command Staff and Section Chiefs. _____

Ensure all sections and units understand their responsibilities under the plan. _____

Monitor implementation of the Demobilization Plan. _____

Participate in Planning Branch meetings. _____

Maintain Unit Log. _____

Deactivation Actions

Ensure all other units have deactivated. _____

List supplies that need replenishing and provide to IERP Coordinator. _____

Participate in post-incident debriefing for key ICS staff. _____

Provide input to the Post-Incident Investigation Report. _____

Logistics Branch Director

Report to: Response Support Section Chief	Reporting Location: ICP/EOC

Responsibility: Provides personnel, equipment, supplies, and services in support of the incident.

Startup Actions

Obtain a briefing from Incident Commander. _____

Operational Actions

Provide input to the Incident Action Plan. _____

Establish appropriate branch organization and monitor effectiveness. _____

Conduct initial briefing and follow-up meetings with unit leaders. _____

Attend incident briefings as requested. _____

Identify incident service and support requirements for planned and expected operations. _____

Ensure requests for additional personnel are being processed. _____

Provide personnel information to Planning Branch. _____

Deactivation Actions

Participate in post-incident debriefing for key ICS staff. _____

Serve as a member of the Incident Investigation Team and participate in the investigation. _____

Provide input to the Post-Incident Investigation Report. _____

Personnel Unit Leader

Report to: Logistics Branch Director	Reporting Location: ICP/EOC

Responsibility: Maintains the status of all personnel assigned to the incident.

Startup Actions

Obtain a briefing from Logistics Branch Director. _____

Set up workstation(s) and status boards. _____

Operational Actions

Ensure/establish check-in function at each incident facility. _____

Prepare and maintain the incident personnel displays including organization chart and personnel allocation _____

Establish contacts with incident facilities (phone, radio, runners) and begin to develop and maintain personnel status. _____

Participate in Logistics Branch meetings as requested. _____

Gather, display, and maintain incident personnel status. _____

Maintain master roster of all personnel checked in at the incident. _____

Prepare organization assignment list and organization chart. _____

Provide personnel summary information to Situation Unit Leader as requested. _____

Maintain Unit Log. _____

Deactivation Actions

List supplies that need replenishing and provide to IERP Coordinator. _____

Participate in post-incident debriefing for key ICS staff. _____

Provide input to the Post-Incident Investigation Report. _____

Supply Unit Leader

Report to: Logistics Branch Director	Reporting Location: ICP/EOC

Responsibility: Orders equipment and supplies; receives and stores supplies; and maintains inventory.

Startup Actions

Obtain a briefing from Logistics Branch Director. _____

Operational Actions

Establish and organize Supply Unit. _____

Arrange for receiving supplies. _____

Receive and respond to requests for supplies and equipment. _____

Ensure supplies and equipment are ordered, received, and distributed. _____

Maintain inventory of supplies and equipment. _____

Service reusable equipment. _____

Attend Logistics Branch meetings. _____

Maintain Unit Log. _____

Deactivation Actions

List supplies that need replenishing and provide to IERP Coordinator. _____

Participate in post-incident debriefing for key ICS staff. _____

Provide input to the Post-Incident Investigation Report. _____

Ground Support Unit Leader

Report to: Logistics Branch Director	Reporting Location: ICP/EOC

Responsibility: Provides transportation; manages fueling, maintenance, and repair of vehicles.

Startup Actions

Obtain a briefing from Logistics Branch Director. _____

Operational Actions

Establish and organize Ground Support Unit. _____

Implement Traffic Plan. _____

Maintain inventory of support and transportation vehicles. _____

Supervise fueling, maintenance, and repair of support and transportation vehicles. _____

Provide transportation services as requested. _____

Requisition maintenance and repair supplies such as fuel and spare parts. _____

Attend Logistics Branch meetings. _____

Maintain Unit Log. _____

Deactivation Actions

List supplies that need replenishing and provide to IERP Coordinator. _____

Participate in post-incident debriefing for key ICS staff. _____

Provide input to the Post-Incident Investigation Report. _____

Medical Unit Leader

Report to: Logistics Branch Director	Reporting Location: ICP/EOC

Responsibility: Obtains medical aid and transportation, and maintains medical records for incident responders.

Startup Actions

Obtain a briefing from Logistics Section Chief. _____

Operational Actions

Determine unit personnel needs. _____

Establish and organize Medical Unit. _____

Prepare medical reports. _____

Keep Safety Officer informed of injury and illness cases treated. _____

Provide status summary to Logistics Branch Director as requested. _____

Request additional personnel as needed. _____

Attend Logistics Branch meetings. _____

Maintain Unit Log. _____

Deactivation Actions

List supplies that need replenishing and provide to IERP Coordinator. _____

Provide records of injury and illness cases to Safety Officer. _____

Participate in post-incident debriefing for key ICS staff. _____

Provide input to the Post-Incident Investigation Report. _____

Communications Unit Leader

Report to: Logistics Branch Director	Reporting Location: ICP/EOC

Responsibility: Develops and implements plan for the use of incident communications equipment and facilities; maintains communications systems.

Startup Actions

Obtain a briefing from Logistics Branch Director.

Operational Actions

Establish and organize communications unit including incident communications center and message area as needed. _____

Prepare and implement Incident Communications Plan. _____

Provide advice to response personnel on communications capabilities and limitations. _____

Ensure communications systems are installed and tested. _____

Establish equipment accountability system. _____

Request additional personnel as needed from Logistics Branch Director. _____

Attend Logistics Branch meetings. _____

Maintain Unit Log. _____

Deactivation Actions

Ensure all distributed equipment is returned. _____

List supplies that need replenishing and provide to IERP Coordinator. _____

Participate in post-incident debriefing for key ICS staff. _____

Provide input to the Post-Incident Investigation Report. _____

Security Unit Leader

Report to: Logistics Branch Director	Reporting Location: ICP/EOC

Responsibility: Provides safeguards needed to protect personnel and property.

Startup Actions

Obtain a briefing from Facilities Unit Leader. _____

Operational Actions

Establish contacts with local law enforcement agencies as required. _____

Develop Security Plan for incident facilities. _____

Coordinate with law enforcement officials as needed. _____

Coordinate with Public Information Officer for security escorts. _____

Keep employees not involved in the response and the public at a safe distance. _____

Document all complaints and suspicious occurrences. _____

At both Plant No. 1 and Plant No 2, ensure that perimeter is patrolled and gates are guarded. _____

Ensure safety of field facilities as needed (for example, guards at pump stations). _____

Attend Logistics Branch meetings. _____

Maintain Unit Log. _____

Deactivation Actions

List supplies that need replenishing and provide to IERP Coordinator. _____

Participate in post-incident debriefing for key ICS staff. _____

Finance Unit Leader

Report to: Logistics Branch Director	Reporting Location: EOC

Responsibility: Provides financial and cost analysis services in response to the incident and coordinates post-incident financial reimbursement.

Startup Actions

Obtain a briefing from Logistics Branch Director. _____

Operational Actions

Ensure all financial recordkeeping mechanisms are in place. _____

Investigate (non-injury) property damage claims associated with the incident. _____

Ensure that all incident cost records (labor, equipment, supplies) are completed correctly. _____

Ensure that appropriate public finance contacts are notified. _____

Attend Logistics Branch meetings. _____

Maintain Unit Log. _____

Deactivation Actions

List supplies that need replenishing and provide to IERP Coordinator. _____

Participate in post-incident debriefing for key ICS staff. _____

Provide input to the Post-Incident Investigation Report. _____

ICS Check-In/Check-Out Form

Position	Name	Check-In Time	Location	Check-Out Time
Command				
Incident Commander				
Safety Officer				
Liaison Officer				
Public Info Officer				
Legal Advisor				
EOC Manager				
Operations				
Operations Section Chief				
Branch 1 Director (Plant No. 1)				
Branch 2 Director (Plant No. 2)				
Branch 3 Director (Collection System)				
Branch 4 Director (Cen-Gen)				
Group Supervisor				
Group Supervisor				
Group Supervisor				
Group Supervisor				
Staging Area Manager				
Other:				
Other:				
Other:				
Other:				
Planning				
Planning Section Chief				
Resources Unit Leader				
Situation Unit Leader				
Documentation Unit Leader				
Demobilization Unit Leader				
Technical Specialist				
Technical Specialist				
Technical Specialist				
Logistics				
Logistics Section Chief				
Supply Unit Leader				
Food Unit Leader				

Position	Name	Check-In Time	Location	Check-Out Time
Ground Support Unit Leader				
Medical Unit Leader				
Facilities Unit Leader				
Base Manager				
Camp Manager				
Security Manager				
Communications Unit Leader				
Finance/Administration				
Finance/Administration Section Chief				
Procurement Unit Leader				
Cost Unit Leader				
Time Unit Leader				
Comp and Claims Unit Leader				

Check-In/Check-Out Form
(Non-ICS Staff)

	Department	Name	Check-In Time	Initial Location	Check-Out Time
1.	**Operations**				
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.	**Collections**				
10.					
11.					
12.					
13.					
14.					
15.					
16.	**Mech Maint (850)**				
17.					
18.					
19.					
20.					
21.	**Inst/Elec (860)**				
22.					
23.					
24.	**Inst/Elec (860) Pump Stations**				
25.					
26.					
27.					
28.					
29.					
30.					
31.	**IT**				
32.					
33.					
34.					
35.					
36.					
37.	**Fleet Services**				
38.					
39.					
40.					
41.	**Finance**				
42.					
	Others				

Orange County Sanitation District

Incident Action Plan

Section 1

Incident Name	Incident Start Date/Time
Date/Time IERP Activated	IERP Activated by
Type of Incident	Location of Incident
Incident Commander	Alternate (if activated)
Plan Prepared by:	Plan Approved by:
Weather Conditions (if applicable)	
Relevant IERP Plan/Procedure	
Major Incidents and Events in Progress	

Situation	Location	Comments
1.		
2.		
3.		
4.		
5.		

Date/Time Section 1 completed:

Section 2

Overall Objectives	Responsibility	Timeframe or Deadline
1.		
2.		
3.		
4.		
5.		
6.		

Attach map if applicable.

Attach ICS Organization Chart.

Date/Time Section 2 completed:

(continued)

COMMAND STAFF
Objectives and Actions
Incident Commander, Safety Officer, PIO, Legal Advisor, Liaison Officer, EOC Manager

Command Section 3		
Objectives and Actions	**Responsible Staff Member**	**Timeframe or Deadline**
Objective #__ (from Section 2):		
__.1		
__.2		
__.3		
Objective #__ (from Section 2):		
__.1		
__.2		
__.3		
Objective #__ (from Section 2):		
__.1		
__.2		
__.3		
Date/Time Command Section 3 completed:		

Response Operations (RO)
Objectives and Actions

Response Operations Section 3		
Objectives and Actions	**Branch/Unit/Group Responsible**	**Timeframe or Deadline**
Objective #__ (from Section 2):		
__.1		
__.2		
__.3		
Objective #__ (from Section 2):		
__.1		
__.2		
__.3		
Objective #__ (from Section 2):		
__.1		
__.2		
__.3		
Date/Time RO Section 3 completed:		

Response Support (RS)
Objectives and Actions

Response Support Section 3		
Objectives and Actions	**Branch/Unit/Group Responsible**	**Timeframe or Deadline**
Objective #__ (from Section 2):		
__.1		
__.2		
__.3		
Objective #__ (from Section 2):		
__.1		
__.2		
__.3		
Objective #__ (from Section 2):		
__.1		
__.2		
__.3		
Date/Time RS Section 3 completed:		

Post-Incident Investigation Report	
Incident Name	Incident Start Date/Time
Date/Time IERP Activated	IERP Activated by
Initial IERP Activation Level	Activation Termination Date/Time
Incident Commander	Alternate (if activated)
Location of Incident	
Type of Incident (sewage spill, high flow, etc.)	
Weather Conditions (if applicable)	
Description of Incident	
Cause of Incident	
Description of Response (Include summary of use of internal resources and any outside responders)	
Government and Other Agencies Contacted	
Losses (injuries, fatalities, property damage; attach data or reports)	
Costs (direct and indirect; attach reports)	

(continued)

Post-Incident Investigation Report (continued)	
Evaluation of Response	
Recommendations (such as the need for additional training, equipment, or IERP revisions)	
Incident Investigation Team Members	
This report was written by	Date
Distribution: District Executive Management (names): ICS Command Staff members (names): ICS Section Chiefs (names): IERP Coordinator:	

Orange County Sanitation District	
Unit Log	
Incident Name	Incident Start Date/Time
Unit Name	Unit Leader (Name and Position)
Operational Period	Date and Time Log Started

Personnel Roster		
Name	**ICS Position**	**Location**
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		

Activity Log	
Time	**Major Events and Activities**

Activity Log	
Time	Major Events and Activities

Appendix C
EOC Setup

This appendix contains EOC setup procedures and lists of equipment and supplies for the:

- Emergency Operations Center (EOC) located at Plant No. 1 (Room 221, Control Center)

- Emergency Operations Center (EOC) located at Plant No. 2 (Training Room, Operations Center)

(blank)

EOP Setup Procedure for Plant No. 1

1. Obtain Radio Room key from the Operations Supervisor.

2. In Room 221 in the Control Center, if needed, remove any remnants from the previous activation and clean the whiteboards.

3. From the EOC Supplies box:

    a. Remove and place an EOC Activation sign on each door entering the EOC.

    b. Remove EOC/ICS phone list.

4. From each of the remaining boxes, distribute materials at the appropriate positions:

    a. Hang vest on chair.

    b. Place checklist, pens, paper, and phone(s) on the table.

    c. Ensure each position has a phone list.

5. Set up the phones as follows:

    a. Move the phone jack device from the front of the room to the middle of the tables.

    b. If not already used, place the cord cover over the wire.

    c. Plug the phones into the appropriately labeled phone jacks as shown on the EOC/ICS phone list. Tables C-1 and C-2 (page C-5) list the EOC phone numbers.

6. If requested by ICS personnel, distribute the following from the Radio Room:

    a. Seven HT-1000 radios and headsets

    b. Three multi-channel radios (these radios are used for communication with Control 1)

Note: ICS members may prefer to use their own radios or cell phones.

7. If they are not already on, turn on the three SCADA computers located next to Room 224 to display the SCADA screens for Plant No. 1, Plant No. 2, and the pump stations.

8. If requested by ICS personnel, set up a laptop computer.

9. Review supplies list below and replenish as needed.

The following equipment and supplies are needed to set up the Plant No. 1 EOC:

Item	Check	Comments
Tables and chairs		
Name tents or hanging signs to identify positions		
One telephone with separate line for each position in the EOC		
Additional phone jack for fax machine		
TV monitor with cable hookup and VCR		
Laptop computer with cellular fax/modem capabilities, extra battery, and network connection capability		
Desktop computer with modem and connection to the OCSD network		
Laser printer		
Fax machine		
Multiband radio		
Full copy of the IERP		
Extra copies of ICS forms		
Wall map of the OCSD system		
Wall map of Orange County		
Thomas Guides		
Easel with two pads and markers		
Push pins (1 box)		
Miscellaneous office supplies		

Table C-1. Plant No. 1 EOC Phone Numbers
(Control Center, Room 221)

Section	Phone No.	Jack No.
Incident Command	593-7810	1
Incident Command	593-7811	2
Command Staff	593-7812	3
Command Staff	593-7813	4
Response Operations	593-7818	9
Response Operations	593-7819	10
Response Support Section Chief	593-7820	11
Planning	593-7814	5
Planning	593-7815	6
Logistics	593-7816	7
Logistics	593-7817	8
Room 223	593-7822	13
Room 224	593-7823	14
Not assigned	593-7821	12

Table C-2. Plant No. 2 EOC or ICP Phone Numbers
(Operations Center, Training Room)

Section	Phone No.	Jack No.
Incident Command	593-7680	1
Incident Command	593-7681	2
Command Staff	593-7682	3
Command Staff	593-7683	4
Response Operations Section Chief	593-7688	9
Response Operations	593-7689	10
Response Support Section Chief	593-7690	11
Planning	593-7684	5
Planning	593-7685	6
Logistics	593-7686	7
Logistics	593-7687	8
Not assigned	593-7691	12

EOP Setup Procedure for Plant No. 2

1. In the Training Room in the Operations Center, if needed, remove any remnants from the previous activation and clean the whiteboards.

   Note: The EOC boxes are located in the DART Room closet.

2. From the EOC Supplies box:

   a. Remove and place an EOC Activation sign on each door entering the EOC.

   b. Remove EOC/ICS phone list.

3. From each of the remaining boxes, distribute materials at the appropriate positions:

   a. Hang vest on chair.

   b. Place checklist, pens, paper, and phone(s) on the table.

   c. Ensure each position has a phone list.

4. Set up the phones as follows:

   a. Move the phone jack device from the front of the room to the middle of the tables.

   b. If not already used, place the cord cover over the wire.

   c. Plug the phones into the appropriately labeled phone jacks as shown on the EOC/ICS phone list. Tables C-1 and C-2 (page C-5) list the EOC phone numbers.

5. If requested by ICS personnel, have the following sent down from the Radio Room (Room 221, Control Center, Plant No. 1):

   a. Seven HT-1000 radios and headsets

b. Three multi-channel radios (these radios are used for communication with Control 1)

Note: ICS members may prefer to use their own radios or cell phones.

c. Laptop computers

6. If requested by ICS personnel, set up a laptop computer.

7. Review supplies list below and replenish as needed.

The following equipment and supplies are needed to set up the Plant No. 2 EOC:

Item	Check	Comments
Tables and chairs		
Name tents or hanging signs to identify positions		
One telephone with separate line for each position in the EOC		
Additional phone jack for fax machine		
TV monitor with cable hookup and VCR		
Laptop computer with cellular fax/modem capabilities, extra battery, and network connection capability		
Desktop computer with modem and connection to the OCSD network		
Laser printer		
Fax machine		
Multiband radio		
Full copy of the IERP		
Extra copies of ICS forms		
Wall map of the OCSD system		
Wall map of Orange County		
Thomas Guides		
Easel with two pads and markers		
Push pins (1 box)		
Miscellaneous office supplies		

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Appendix A
ICS Checklists

This appendix contains the position checklists for key ICS positions. The checklists are grouped behind a tab for each of the major ICS functions as follows**:**

- Command
  - Incident Commander
  - Safety Officer
  - Liaison Officer
  - Public Information Officer
  - Legal Advisor
  - EOC Manager
- Response Operations
  - Response Operations Section Chief
  - Branch Directors (Plant No. 1, Plant No. 2, and Collections)
  - Emergency Coordinators and Emergency Wardens
  - Group Supervisors
- Response Support
  - Response Support Section Chief
  - Planning Branch Director
    - Situation Unit Leader
    - Documentation Unit Leader
    - Demobilization Unit Leader
  - Logistics Branch Director
    - Personnel Unit Leader
    - Supply Unit Leader
    - Ground Support Unit Leader
    - Medical Unit Leader
    - Communications Unit Leader
    - Security Unit Leader
    - Finance Unit Leader

Command Checklists

Incident Commander

Report to: General Manager	Reporting Location: ICP/EOC

Responsibility: Provides overall management of response to the incident.

Startup Actions

Assess the situation or obtain a briefing from the prior Incident Commander. _____

Activate appropriate ICS organization. _____

Establish an Incident Command Post or activate EOC. _____

Operational Actions

Conduct meeting with Section Chiefs and Command Staff to determine incident strategic objectives. _____

Provide input to, review, and approve Incident Action Plan. _____

Conduct periodic incident briefings to obtain status of event and response. _____

Approve requests for additional personnel or for release of personnel. _____

Periodically brief General Manager on the incident. _____

Reassess events; adjust strategies, staff, and personnel as needed. _____

Authorize release of information to the news media as requested by PIO. _____

Deactivation Actions

Ensure Demobilization Plan is developed as needed. _____

Participate in post-incident debriefing for key ICS staff. _____

Appoint Incident Investigation Team and participate in the investigation. _____

Provide input to the Post-Incident Investigation Report written by the Incident Investigation Team. _____

Safety Officer

Report to: Incident Commander	Reporting Location: ICP/EOC

Responsibility: Develops and recommends measures for ensuring personnel safety and anticipates or assesses hazardous and unsafe situations.

Startup Actions

Obtain a briefing from Incident Commander. _____

Operational Actions

Meet with Incident Commander, other Command Staff, and Section Chiefs to determine incident strategic objectives. _____

Meet with other Command Staff to develop specific objectives and actions for the Command portion of the Incident Action Plan. _____

Provide input to and review the Incident Action Plan to ensure the planned actions exhibit safe work practices. _____

Identify hazardous situations associated with the incident and recommend appropriate safe work practices. _____

Assign qualified assistants as needed to provide oversight of response activities to ensure safe performance. _____

Participate in periodic incident briefings.

Deactivation Actions

Ensure that any required forms or reports are completed before departure. _____

Participate in post-incident debriefing for key ICS staff. _____

Serve as a member of the Incident Investigation Team and participate in the investigation. _____

Provide input to the Post-Incident Investigation Report. _____

Liaison Officer

Report to: Incident Commander	Reporting Location: ICP/EOC

Responsibility: Notifies appropriate agencies and organizations and coordinates and communicates with them as needed.

Startup Actions

Obtain a briefing from Incident Commander. _____

Operational Actions

Meet with Incident Commander, other Command Staff, and Section Chiefs to determine incident strategic objectives. _____

Meet with other Command Staff to develop specific objectives and actions for the Command portion of the Incident Action Plan. _____

Make notifications required by regulation (per Chapter 15, External Notifications). _____

Coordinate and maintain communications with outside agencies as needed.

Keep agencies that are supporting the incident aware of incident status. _____

Participate in incident briefings, providing current status of assisting agencies. _____

Maintain Unit Log. _____

Deactivation Actions

Ensure that any required forms or reports are completed before departure. _____

Participate in post-incident debriefing for key ICS staff. _____

Provide input to the Post-Incident Investigation Report. _____

Public Information Officer

Report to: Incident Commander	Reporting Location: ICP/EOC

Responsibility: Develops and releases information about the incident to news media, public, incident personnel, and other appropriate agencies and organizations.

Startup Actions

Coordinate with Incident Commander regarding the information available and appropriate for release under the initial conditions. _____

Operational Actions

Meet with Incident Commander, other Command Staff, and Section Chiefs to determine incident strategic objectives. _____

Meet with other Command Staff to develop specific objectives and actions for the Command portion of the Incident Action Plan. _____

Communicate with ICS positions as directed by Incident Commander to provide and obtain information for release. _____

Arrange for preparation of media briefing materials as required. _____

Notify media contacts per list in Media Plan. _____

Provide periodic briefings and news releases about the incident. _____

Ensure media credentials have been checked and maintain log of media personnel admitted to OCSD property. _____

Ensure members of Security Team are assigned to escort media. _____

Make a qualified technical spokesperson or witness available to media. _____

Establish a rumor control function as necessary. _____

Monitor broadcast media. Use to develop follow-on news releases and control rumors. _____

Deactivation Actions

Prepare final news releases and advise media representatives of points-of-contact for follow-on stories. _____

Participate in post-incident debriefing for key ICS staff. _____

Legal Advisor

Report to: Incident Commander	Reporting Location: ICP/EOC

Responsibility: Researches the law pertinent to the incident and advises Incident Commander on legal matters.

Startup Actions

Obtain a briefing from Incident Commander. _____

Operational Actions

Meet with Incident Commander, other Command Staff, and Section Chiefs to determine incident strategic objectives. _____

Meet with other Command Staff to develop specific objectives and actions for the Command portion of the Incident Action Plan. _____

Provide legal input and review the Incident Action Plan as requested. _____

As requested, evaluate issues and potential legal liabilities related to the incident. _____

If requested by the Public Information Officer or Incident Commander, review news releases. _____

Attend briefings with Command Staff and government agencies. _____

Provide legal advice regarding OCSD activities, liabilities, and responsibilities. _____

Deactivation Actions

Participate in post-incident debriefing for key ICS staff. _____

Serve as a member of the Incident Investigation Team and participate in the investigation. _____

Provide input to the Post-Incident Investigation Report. _____

EOC Manager

Report to: Incident Commander	Reporting Location: EOC

Responsibility: Set up EOC/ICP.

Startup Actions

Have EOC Setup Checklist available. _____

Operational Actions

Set up EOC in accordance with Volume II Appendix C or as posted in the EOC. _____

Ensure sufficient administrative and clerical support. _____

Maintain needed supplies. _____

Monitor entry of personnel into the EOC to ensure that only required personnel remain in the EOC. _____

As duties allow, help other positions such as Documentation Unit Leader. _____

Deactivation Actions

List supplies that need replenishing and provide to IERP Coordinator. _____

Participate in post-incident debriefing for key ICS staff. _____

Provide input to the Post-Incident Investigation Report. _____

Response Operations Checklists

Response Operations Section Chief

Report to: Incident Commander	Reporting Location: ICP/EOC

Responsibility: Manages all operations directly applicable to tactical response to the incident.

Startup Actions

Obtain a briefing from Incident Commander. _____

Operational Actions

Establish appropriate section organization and monitor effectiveness. _____

Meet with Incident Commander, Command Staff, and Response Support Section Chief to determine incident strategic objectives. _____

Meet with activated Response Operations personnel to develop specific objectives and actions for the Response Operations portion of the Incident Action Plan. _____

Supervise the execution of the Incident Action Plan for Response Operations. _____

Conduct periodic section briefings with Branch Directors and others as required. _____

Identify hazardous situations associated with the incident and recommend safe tactical operations. _____

Determine the need for outside resources (personnel and equipment) and coordinate with Response Support Section Chief. _____

Attend periodic incident briefings and provide status update. _____

Deactivation Actions

Approve release of personnel. _____

Participate in post-incident debriefing for key ICS staff. _____

Provide input to the Post-Incident Investigation Report. _____

Response Operations Branch Director

Report to: Response Operations Section Chief	Reporting Location: ICP or EOC

Responsibility: Manage incident operations within branch.

Startup Actions

Obtain a briefing from Response Operations Section Chief. _____

Operational Actions

For evacuations, collect information from Emergency Coordinators within the branch. _____

For evacuations, assign Search & Rescue groups as needed based on data from Emergency Coordinators concerning missing personnel. _____

Request Medical Unit assistance as needed. _____

Assign appropriate groups such as Damage Assessment and Operations & Repair based on the nature of the incident. _____

If requested, attend periodic incident briefings. _____

Notify Response Operations Section Chief when: _____

- Incident Action Plan needs to be modified.
- Additional personnel are needed.
- Surplus personnel are available.
- Hazardous situations or significant events occur.

Review accident and medical reports originating within the branch. _____

Develop branch plans for the next operational period. _____

Deactivation Actions

Participate in post-incident debriefing for key ICS staff. _____

Provide input to the Post-Incident Investigation Report. _____

Emergency Warden/Coordinator

Report to: Branch Director	Reporting Location: Assembly Area

Responsibility: Emergency Wardens (EWs) account for OCSD personnel, visitors, and contractors and ensure their safety in assigned areas during an evacuation. Emergency Coordinators (ECs) collect and report personnel data from Emergency Wardens.

Startup Actions

EW: Have Emergency Preparedness Roster available. _____

Operational Actions

EW: Conduct roll call at Assembly Area. _____

EW: Review sign-in sheets to determine missing personnel, including contractors and visitors. _____

EW: Ensure Assembly Area is safe from the incident.

EW: Maintain organized Assembly Area. _____

EW: Administer first aid to evacuees where needed (or obtain assistance from other evacuees). _____

EW: Keep employees at Assembly Area informed of ongoing actions. _____

EW: Keep record of those employees who leave the Assembly Area to report for ICS positions. _____

EW: If directed, lead employees to a different area as directed. _____

EW: Report results of roll call to Emergency Coordinator. _____

EC: Consolidate and report results of roll calls in your area to Branch Director.

EC: Determine need for assistance and inform Branch Director of need for such groups as Search and Rescue and Medical. _____

Deactivation Actions

Provide input to the Post-Incident Investigation Report. _____

Group Supervisor

Note: Groups within Response Operations may have various roles: Operations & Repair (at plants), Damage Assessment (at plants or in the Collection System), Trunk Line Operations & Repair, Pump Station Operations & Repair, Electrical Maintenance, Mechanical Maintenance, Search & Rescue, etc.

Report to: Branch Director	Reporting Location: ICP

Responsibility: Implements appropriate portions of the Incident Action Plan, assigns personnel within group, and reports on operations, personnel, and equipment status.

Startup Actions

Obtain a briefing from Branch Director/Response Operations Section Chief. _____

Operational Actions

Activate appropriate group members to implement Incident Action Plan. _____

Review group assignments and incident activities with subordinates and assign tasks. _____

Maintain overview of ongoing operations and modify assignments based on effectiveness of current operations. _____

Determine need for assistance on assigned tasks. _____

Submit situation, personnel, and equipment status information to Response Operations Section Chief or Branch Director. _____

If group expands beyond span of control (seven people), break into teams and appoint Team Leaders. _____

Report special occurrences or events such as accidents or sickness to Response Operations Section Chief/Branch Director. _____

Deactivation Actions

Participate in post-incident debriefing for key ICS staff. _____

Provide input to the Post-Incident Investigation Report. _____

Response Support Checklists

Response Support Section Chief

Report to: Incident Commander	Reporting Location: ICP/EOC

Responsibility: Ensures needed support (personnel, equipment, supplies) is obtained for the incident response.

Startup Actions

Obtain a briefing from Incident Commander. _____

Operational Actions

Meet with Incident Commander, Response Operations Section Chief, and Command Staff to determine incident strategic objectives. _____

Meet with activated Response Support personnel to develop specific objectives and actions for the Response Support portion of the Incident Action Plan. _____

Establish appropriate section organization and monitor effectiveness. _____

Supervise the execution of the Incident Action Plan for Response Support. _____

Conduct periodic section briefings with Branch Directors and others as required. _____

Attend periodic incident briefings and provide status update. _____

Approve release of personnel. _____

Deactivation Actions

Participate in post-incident debriefing for key ICS staff. _____

Provide input to the Post-Incident Investigation Report. _____

Planning Branch Director

Report to: Response Support Section Chief	Reporting Location: ICP/EOC

Responsibility: Collects, evaluates, processes, and disseminates information for incident use.

Startup Actions

Obtain a briefing from Incident Commander. _____

Set up status boards. _____

Operational Actions

Establish appropriate branch organization and monitor effectiveness. _____

Conduct initial briefing and follow-up meetings with unit leaders. _____

Supervise preparation, dissemination, and periodic updates of the Incident Action Plan. _____

Determine need for specialized and/or outside resources in support of the incident and coordinate with Logistics Branch Director. _____

Establish special information collection activities as necessary, for example, weather, environmental, toxins. _____

Compile and display incident status information. _____

Attend periodic incident briefings and provide status updates. _____

Deactivation Actions

Participate in post-incident debriefing for key ICS staff. _____

Provide input to the Post-Incident Investigation Report. _____

Situation Unit Leader

Report to: Planning Branch Director	Reporting Location: ICP/EOC

Responsibility: Collects and organizes incident status and situation information.

Startup Actions

Obtain a briefing from Planning Branch Director. _____

Set up workstation(s) and status boards. _____

Operational Actions

Coordinate with Communications Unit Leader of Logistics Branch to establish communication links for collecting incident data. _____

Assign duties to Situation Unit personnel. _____

Participate in Planning Branch meetings. _____

Gather, display, and maintain incident situation data using status boards and incident status summaries. _____

Maintain Situation Unit records including Unit Log. _____

Deactivation Actions

List supplies that need replenishing and provide to IERP Coordinator. _____

Participate in post-incident debriefing for key ICS staff. _____

Provide input to the Post-Incident Investigation Report. _____

Documentation Unit Leader

Report to: Planning Branch Director	Reporting Location: ICP/EOC

Responsibility: Maintains accurate and complete incident files and provides duplicating services to incident personnel.

Startup Actions

Obtain a briefing from Planning Section Chief. _____

Establish and organize incident file system and duplication services. _____

Operational Actions

Retain and file copies of official forms and reports. _____

Check the accuracy and completeness of records submitted for files. _____

Provide duplication services, ICS forms, maps, and charts as requested. _____

As requested, activate and assign clerical support to ICS functions. _____

Prepare incident documentation as requested by Planning Branch Director. _____

Participate in Planning Branch meetings. _____

Maintain Unit Log. _____

Deactivation Actions

List supplies that need replenishing and provide to IERP Coordinator. _____

Participate in post-incident debriefing for key ICS staff. _____

Provide incident files for input to the Post-Incident Investigation Report. _____

Demobilization Unit Leader

Report to: Planning Branch Director	Reporting Location: ICP/EOC

Responsibility: Prepares Demobilization Plan and assists ICS elements to ensure orderly and safe demobilization.

Startup Actions

Obtain a briefing from Planning Branch Director. _____

Operational Actions

Prepare Demobilization Plan. _____

Submit Demobilization Plan to Planning Branch Director for review. _____

Distribute Demobilization Plan to Command Staff and Section Chiefs. _____

Ensure all sections and units understand their responsibilities under the plan. _____

Monitor implementation of the Demobilization Plan. _____

Participate in Planning Branch meetings. _____

Maintain Unit Log. _____

Deactivation Actions

Ensure all other units have deactivated. _____

List supplies that need replenishing and provide to IERP Coordinator. _____

Participate in post-incident debriefing for key ICS staff. _____

Provide input to the Post-Incident Investigation Report. _____

Logistics Branch Director

Report to: Response Support Section Chief	Reporting Location: ICP/EOC

Responsibility: Provides personnel, equipment, supplies, and services in support of the incident.

Startup Actions

Obtain a briefing from Incident Commander. _____

Operational Actions

Provide input to the Incident Action Plan. _____

Establish appropriate branch organization and monitor effectiveness. _____

Conduct initial briefing and follow-up meetings with unit leaders. _____

Attend incident briefings as requested. _____

Identify incident service and support requirements for planned and expected operations. _____

Ensure requests for additional personnel are being processed. _____

Provide personnel information to Planning Branch. _____

Deactivation Actions

Participate in post-incident debriefing for key ICS staff. _____

Serve as a member of the Incident Investigation Team and participate in the investigation. _____

Provide input to the Post-Incident Investigation Report. _____

Personnel Unit Leader

Report to: Logistics Branch Director	Reporting Location: ICP/EOC

Responsibility: Maintains the status of all personnel assigned to the incident.

Startup Actions

Obtain a briefing from Logistics Branch Director. _____

Set up workstation(s) and status boards. _____

Operational Actions

Ensure/establish check-in function at each incident facility. _____

Prepare and maintain the incident personnel displays including organization chart and personnel allocation _____

Establish contacts with incident facilities (phone, radio, runners) and begin to develop and maintain personnel status. _____

Participate in Logistics Branch meetings as requested. _____

Gather, display, and maintain incident personnel status. _____

Maintain master roster of all personnel checked in at the incident. _____

Prepare organization assignment list and organization chart. _____

Provide personnel summary information to Situation Unit Leader as requested. _____

Maintain Unit Log. _____

Deactivation Actions

List supplies that need replenishing and provide to IERP Coordinator. _____

Participate in post-incident debriefing for key ICS staff. _____

Provide input to the Post-Incident Investigation Report. _____

Supply Unit Leader

Report to: Logistics Branch Director	Reporting Location: ICP/EOC

Responsibility: Orders equipment and supplies; receives and stores supplies; and maintains inventory.

Startup Actions

Obtain a briefing from Logistics Branch Director. _____

Operational Actions

Establish and organize Supply Unit. _____

Arrange for receiving supplies. _____

Receive and respond to requests for supplies and equipment. _____

Ensure supplies and equipment are ordered, received, and distributed. _____

Maintain inventory of supplies and equipment. _____

Service reusable equipment. _____

Attend Logistics Branch meetings. _____

Maintain Unit Log. _____

Deactivation Actions

List supplies that need replenishing and provide to IERP Coordinator. _____

Participate in post-incident debriefing for key ICS staff. _____

Provide input to the Post-Incident Investigation Report. _____

Ground Support Unit Leader

Report to: Logistics Branch Director	Reporting Location: ICP/EOC

Responsibility: Provides transportation; manages fueling, maintenance, and repair of vehicles.

Startup Actions

Obtain a briefing from Logistics Branch Director. _____

Operational Actions

Establish and organize Ground Support Unit. _____

Implement Traffic Plan. _____

Maintain inventory of support and transportation vehicles. _____

Supervise fueling, maintenance, and repair of support and transportation vehicles. _____

Provide transportation services as requested. _____

Requisition maintenance and repair supplies such as fuel and spare parts. _____

Attend Logistics Branch meetings. _____

Maintain Unit Log. _____

Deactivation Actions

List supplies that need replenishing and provide to IERP Coordinator. _____

Participate in post-incident debriefing for key ICS staff. _____

Provide input to the Post-Incident Investigation Report. _____

Medical Unit Leader

Report to: Logistics Branch Director	Reporting Location: ICP/EOC

Responsibility: Obtains medical aid and transportation, and maintains medical records for incident responders.

Startup Actions

Obtain a briefing from Logistics Section Chief. _____

Operational Actions

Determine unit personnel needs. _____

Establish and organize Medical Unit. _____

Prepare medical reports. _____

Keep Safety Officer informed of injury and illness cases treated. _____

Provide status summary to Logistics Branch Director as requested. _____

Request additional personnel as needed. _____

Attend Logistics Branch meetings. _____

Maintain Unit Log. _____

Deactivation Actions

List supplies that need replenishing and provide to IERP Coordinator. _____

Provide records of injury and illness cases to Safety Officer. _____

Participate in post-incident debriefing for key ICS staff. _____

Provide input to the Post-Incident Investigation Report. _____

Communications Unit Leader

Report to: Logistics Branch Director	Reporting Location: ICP/EOC

Responsibility: Develops and implements plan for the use of incident communications equipment and facilities; maintains communications systems.

Startup Actions

Obtain a briefing from Logistics Branch Director.

Operational Actions

Establish and organize communications unit including incident communications center and message area as needed. _____

Prepare and implement Incident Communications Plan. _____

Provide advice to response personnel on communications capabilities and limitations. _____

Ensure communications systems are installed and tested. _____

Establish equipment accountability system. _____

Request additional personnel as needed from Logistics Branch Director. _____

Attend Logistics Branch meetings. _____

Maintain Unit Log. _____

Deactivation Actions

Ensure all distributed equipment is returned. _____

List supplies that need replenishing and provide to IERP Coordinator. _____

Participate in post-incident debriefing for key ICS staff. _____

Provide input to the Post-Incident Investigation Report. _____

Security Unit Leader

Report to: Logistics Branch Director	Reporting Location: ICP/EOC

Responsibility: Provides safeguards needed to protect personnel and property.

Startup Actions

Obtain a briefing from Facilities Unit Leader. _____

Operational Actions

Establish contacts with local law enforcement agencies as required. _____

Develop Security Plan for incident facilities. _____

Coordinate with law enforcement officials as needed. _____

Coordinate with Public Information Officer for security escorts. _____

Keep employees not involved in the response and the public at a safe distance. _____

Document all complaints and suspicious occurrences. _____

At both Plant No. 1 and Plant No 2, ensure that perimeter is patrolled and gates are guarded. _____

Ensure safety of field facilities as needed (for example, guards at pump stations). _____

Attend Logistics Branch meetings. _____

Maintain Unit Log. _____

Deactivation Actions

List supplies that need replenishing and provide to IERP Coordinator. _____

Participate in post-incident debriefing for key ICS staff. _____

Finance Unit Leader

Report to: Logistics Branch Director	Reporting Location: EOC

Responsibility: Provides financial and cost analysis services in response to the incident and coordinates post-incident financial reimbursement.

Startup Actions

Obtain a briefing from Logistics Branch Director. _____

Operational Actions

Ensure all financial recordkeeping mechanisms are in place. _____

Investigate (non-injury) property damage claims associated with the incident. _____

Ensure that all incident cost records (labor, equipment, supplies) are completed correctly. _____

Ensure that appropriate public finance contacts are notified. _____

Attend Logistics Branch meetings. _____

Maintain Unit Log. _____

Deactivation Actions

List supplies that need replenishing and provide to IERP Coordinator. _____

Participate in post-incident debriefing for key ICS staff. _____

Provide input to the Post-Incident Investigation Report. _____

ICS Check-In/Check-Out Form

Position	Name	Check-In Time	Location	Check-Out Time
Command				
Incident Commander				
Safety Officer				
Liaison Officer				
Public Info Officer				
Legal Advisor				
EOC Manager				
Operations				
Operations Section Chief				
Branch 1 Director (Plant No. 1)				
Branch 2 Director (Plant No. 2)				
Branch 3 Director (Collection System)				
Branch 4 Director (Cen-Gen)				
Group Supervisor				
Group Supervisor				
Group Supervisor				
Group Supervisor				
Staging Area Manager				
Other:				
Other:				
Other:				
Other:				
Planning				
Planning Section Chief				
Resources Unit Leader				
Situation Unit Leader				
Documentation Unit Leader				
Demobilization Unit Leader				
Technical Specialist				
Technical Specialist				
Technical Specialist				
Logistics				
Logistics Section Chief				
Supply Unit Leader				
Food Unit Leader				

Position	Name	Check-In Time	Location	Check-Out Time
Ground Support Unit Leader				
Medical Unit Leader				
Facilities Unit Leader				
Base Manager				
Camp Manager				
Security Manager				
Communications Unit Leader				
Finance/Administration				
Finance/Administration Section Chief				
Procurement Unit Leader				
Cost Unit Leader				
Time Unit Leader				
Comp and Claims Unit Leader				

Check-In/Check-Out Form
(Non-ICS Staff)

	Department	Name	Check-In Time	Initial Location	Check-Out Time
1.	**Operations**				
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.	**Collections**				
10.					
11.					
12.					
13.					
14.					
15.					
16.	**Mech Maint (850)**				
17.					
18.					
19.					
20.					
21.	**Inst/Elec (860)**				
22.					
23.					
24.	**Inst/Elec (860) Pump Stations**				
25.					
26.					
27.					
28.					
29.					
30.					
31.	**IT**				
32.					
33.					
34.					
35.					
36.					
37.	**Fleet Services**				
38.					
39.					
40.					
41.	**Finance**				
42.					
	Others				

Orange County Sanitation District

Incident Action Plan

Section 1

Incident Name	Incident Start Date/Time
Date/Time IERP Activated	IERP Activated by
Type of Incident	Location of Incident
Incident Commander	Alternate (if activated)
Plan Prepared by:	Plan Approved by:
Weather Conditions (if applicable)	
Relevant IERP Plan/Procedure	
Major Incidents and Events in Progress	

Situation	Location	Comments
1.		
2.		
3.		
4.		
5.		

Date/Time Section 1 completed:

Section 2

Overall Objectives	Responsibility	Timeframe or Deadline
1.		
2.		
3.		
4.		
5.		
6.		

Attach map if applicable.

Attach ICS Organization Chart.

Date/Time Section 2 completed:

(continued)

COMMAND STAFF

Objectives and Actions

Incident Commander, Safety Officer, PIO, Legal Advisor, Liaison Officer, EOC Manager

Command Section 3		
Objectives and Actions	**Responsible Staff Member**	**Timeframe or Deadline**
Objective #__ (from Section 2):		
__.1		
__.2		
__.3		
Objective #__ (from Section 2):		
__.1		
__.2		
__.3		
Objective #__ (from Section 2):		
__.1		
__.2		
__.3		
Date/Time Command Section 3 completed:		

Response Operations (RO)
Objectives and Actions

Response Operations Section 3		
Objectives and Actions	**Branch/Unit/Group Responsible**	**Timeframe or Deadline**
Objective #__ (from Section 2):		
__.1		
__.2		
__.3		
Objective #__ (from Section 2):		
__.1		
__.2		
__.3		
Objective #__ (from Section 2):		
__.1		
__.2		
__.3		
Date/Time RO Section 3 completed:		

Response Support (RS)
Objectives and Actions

Response Support Section 3		
Objectives and Actions	**Branch/Unit/Group Responsible**	**Timeframe or Deadline**
Objective #__ (from Section 2):		
__.1		
__.2		
__.3		
Objective #__ (from Section 2):		
__.1		
__.2		
__.3		
Objective #__ (from Section 2):		
__.1		
__.2		
__.3		
Date/Time RS Section 3 completed:		

Post-Incident Investigation Report	
Incident Name	Incident Start Date/Time
Date/Time IERP Activated	IERP Activated by
Initial IERP Activation Level	Activation Termination Date/Time
Incident Commander	Alternate (if activated)
Location of Incident	
Type of Incident (sewage spill, high flow, etc.)	
Weather Conditions (if applicable)	
Description of Incident	
Cause of Incident	
Description of Response (Include summary of use of internal resources and any outside responders)	
Government and Other Agencies Contacted	
Losses (injuries, fatalities, property damage; attach data or reports)	
Costs (direct and indirect; attach reports)	

(continued)

Post-Incident Investigation Report (continued)	
Evaluation of Response	
Recommendations (such as the need for additional training, equipment, or IERP revisions)	
Incident Investigation Team Members	
This report was written by	Date
Distribution: District Executive Management (names): ICS Command Staff members (names): ICS Section Chiefs (names): IERP Coordinator:	

Orange County Sanitation District	
Unit Log	
Incident Name	Incident Start Date/Time
Unit Name	Unit Leader (Name and Position)
Operational Period	Date and Time Log Started

Personnel Roster		
Name	**ICS Position**	**Location**
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		

Activity Log	
Time	**Major Events and Activities**

Activity Log	
Time	Major Events and Activities