

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SANTA ANA REGION**

ORDER NO. R8-2002-0014

**GENERAL WASTE DISCHARGE REQUIREMENTS
For
SEWAGE COLLECTION AGENCIES IN
ORANGE COUNTY
WITHIN THE SANTA ANA REGION**

**SSO Emergency Response Plan (SSOERP)
by
Orange County Sanitation District**

January 1, 2003

Introduction:

This SSOERP follows the General Waste Discharge Requirements (WDR) sequentially; that is, each section of the SSOERP follows the WDR requirements so the reviewer and auditor can easily reference the WDR language to the appropriate SSOERP action item.

After the WDR was adopted on April 26, 2002, OCSD hired Brown and Caldwell (B&C) to assist OCSD staff with meeting the requirements of the WDR order. Development of our formal SSOERP is one of those tasks. Since then, OCSD and B&C have been determining what tasks need to be done, assigning the resources, and starting those tasks that are due first.

OCSD currently has an effective SSO response program in place that includes extensive notification procedures. A team of B&C staff is also working on expanding the existing internal standard operating procedures (SOPs) as well as creating a portable aerator plan, which will include input from the Regional Water Quality Control Board (RWQCB) staff and others as this plan develops.

The SSOERP is a major subsection of the Sewer System Management Plan (SSMP) and will be incorporated into the appropriate section of the final SSMP. The SSOERP is, therefore, presented in the same format.

Volume 1 of the final SSMP is will have expanded responses to the action items, and will be a narrative summary of how we will comply with each appropriate WDR or Monitoring and Reporting Program (M&RP) paragraph.

Volume 2 of the final SSMP will contain those specific support documents referenced in Volume 1 needed for quick access by staff or auditors.

Our goal is to develop user-friendly documents for staff use, regulator use, and public review as required by the WDR order. This SSOERP also becomes a part of OCSD's Integrated Emergency Response Plan (IERP) for major local or regional disasters.

OCSD has reviewed and updated its existing SSOERP. The SSOERP is illustrated in the attached "OCSD SSO Response Plan Flow Chart" that provides a step-by-step description of the OCSD SSO emergency response procedures. The flow chart is also designed to be used as a decision tool for responding to different types of events in gravity sewers and pump stations. Where appropriate, based on staff input and professional judgment, more detailed flow charts, procedures, and other referenced documents will be used as supplemental data. These will be contained in Volume 2 of the SSMP.

OCSD SSOERP action items are as follows:

(ii) Description of Organization:

(A) Administrative, Operations and Maintenance and Lines of Authority:

OCSD currently maintains organization charts that provide this information. Much of this general information is available for review in our FY 02/03 budget book. The latest versions of this information will be included in Volume 2 of our final SSMP due on September 30, 2005.

The Collection Facilities O&M Division staff have the lead role in SSO response activities. Other agency staff and contractors assist them as necessary.

(B) Chain of Communication for Reporting SSOs:

The chain of communication for reporting SSOs, from receipt of a complaint or other information, including the person responsible for reporting SSOs to the RWQCB, the Orange County Health Care Agency (OCHCA), and the State Office of Emergency Services (OES) (if the discharge is 1,000 gallons or larger), is contained in the "Chain of Communication for Reporting SSOs" flowchart that describes the OCSD Control Center and Collection System staff procedures for reporting SSOs. An up-to-date spill notification distribution list is a part of this document. Detailed procedures will be included in the "Chain of Communication for Reporting SSOs" flowchart in Volume 2 of the SSMP, including the email addresses of SSO notification recipients.

(J) In accordance with the County of Orange's Drainage Area Management Plan, establish a plan for Responding to SSOs

**from private property that discharge to public right of ways
and storm drains to prevent discharges from SSOs to Surface
Waters and Storm Drains**

Current OCSD practice is to respond, investigate and attempt to contain all SSOs that reach public rights of way and storm drains.

OCSD has limited legal responsibilities regarding private property SSOs. OCSD's responsibilities include those areas where OCSD provides local sewer services in the Irvine Business Complex (IBC) section of Irvine, portions of the City of Tustin, and the OCSD Unincorporated Area 7 north of the City of Tustin.

- Excluded from our responsibility are the local sewerage areas owned and operated by other cities and agencies that are named by the WDR on pages 1 and 2 of the order.
- OCSD staff have met with County of Orange staff and provided them with our SSO response planning information. OCSD staff has been working with County of Orange staff to develop integrated procedures to respond to SSOs that discharge to surface waters and storm drains.
- Orange County's Drainage Area Management Plan (DAMP) discusses the respective roles, responsibilities, and procedures for responding to illicit discharges as well as SSOs from public and private property. OCSD staff presented information regarding the county and city roles in responding to private property SSOs at a stormwater co-permittee authorized inspector-training session in May 2002.
- OCSD's current SSO notification procedures include specific steps to respond to private property spills in the "Private Property Procedure" of the OCSD SSO Notification Procedures. A complete copy of the updated OCSD SSO Notification Procedures will be included in Volume 2 of the final SSMP.

(vii) Overflow Emergency Response Plan (ERP)

OCSD has developed and implemented an overflow emergency response plan that identifies measures to protect public health and the environment, and includes, at a minimum, the following:

- (A) Ensure proper notification procedures so that the primary responders are informed of all SSOs in a timely manner (to the greatest extent possible)

The OCSD SSO response plan flow chart illustrates the established procedures that are followed when a problem is reported. The plan provides the following:

- Reporting of a problem from internal and external sources

- Actions taken during normal (6:00 a.m. to 4:30 p.m., Monday thru Thursday) and after normal OCSD business hours
- Staff and/or primary standby mobilization by the duty Operations Supervisor or designee.

(B) Ensure that all overflows (including those that do not discharge to waters of the State) are appropriately responded to, including ensuring that reports of overflows are immediately dispatched to appropriate personnel for investigation and appropriate action taken;

As shown in the OCSD SSO response plan flow chart, OCSD staff responds to all reported problems, including those SSOs that do not discharge to waters of the state. OCSD has a formal process to evaluate the jurisdictional responsibility and the cause of the problem. This also includes a process in the event the reported event cannot be located in the field. Once located, the following sequence occurs as outlined in the flow chart:

- Attempt containment, using spill containment procedures
- If the SSO is OCSD's responsibility, initiate the spill notification process
- Control the SSO and eliminate the problem
- Recovery and cleanup
- Field documentation
- If the SSO is not OCSD's responsibility, the notification process includes notification of responsible party, site assistance when requested, and field documentation of the event.

(C) Ensure immediate notification of health agencies and other impacted entities (e.g., water suppliers) of all overflows. Report all SSOs to the Regional Water Quality Control Board and the Orange County Health Care Agency (OCHCA), and report to the State OES, if the overflow is 1,000 gallons or larger.

As shown in the OCSD SSO response plan flow chart, when a problem is reported, the Control Center dispatcher notifies OCSD staff in accordance with established procedures. The chain of communication for reporting is then implemented beginning with a possible spill notification, and communicating with those on the spill notification distribution list. OCSD staff responds and investigates, while the notification of SSOs procedure provides notification processes for the following:

- Events that occur during normal (6:00 a.m. to 4:30 p.m., Monday thru Thursday) and after normal business
- Non-OCSD service area events
- Internal notification for support from the OCSD Environmental Compliance and Monitoring (ECM) division
- OCSD laboratory staff or other appropriate OCSD divisions

- Evaluation on case-by-case basis to initiate monitoring, reporting and additional control and elimination procedures as necessary.

(D) Ensure that appropriate staff and contractor personnel are aware of and follow the plan and are appropriately trained;

OCSD has an existing formal training program for OCSD staff that requires mandatory safety training, technical skills training and supervisory/management skills training. The program also uses California Water Environment Association (CWEA) certification and on-the-job training (OJT) as part of this program. The current program is being supplemented with a multiyear focused training and validation program.

OCSD recently completed construction of an on-site SSO simulator that allows crews to practice SSO response, containment procedures, and estimate overflow volume using metered discharges from a manhole and cover. Documented SOPs are being developed for this purpose. Contract specifications for Capital Improvement Projects (CIP) require that contractors develop their own SSOERPs.

(E) Provide emergency operations, such as traffic and crowd control and other necessary emergency response.

OCSD has existing traffic and safety control procedures that comply with Caltrans and CalOSHA requirements. These include:

- Adherence to Work Area Traffic Control Handbook (WATCH) procedures
- Use of confined space entry/rescue certified personnel as necessary
- Use of personal protective equipment
- Site security
- Use of law enforcement agencies as necessary for site-specific needs. Events requiring law enforcement assistance are evaluated on a case-by-case basis.
- Contractors are used to supplement agency staff as necessary

(F) Take all reasonable steps to contain sewage and prevent sewage discharges to surface waters and minimize or correct any adverse impact on the environment resulting from the SSOs, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the discharge.

The OCSD SSO response plan flow chart has steps identified that are specific to:

- Containment
- Control and elimination of the SSO
- Cleanup
- Failure analysis and debriefing

Standard procedures and materials have been developed for the specific steps in the flow chart, and are available in OCSD vehicles. Equipment to assist in the containment, control and elimination, and cleanup is also available.

Events are evaluated on a case-by-case basis. The need for monitoring is determined based on possible impact to recreational waters, and in coordination with RWQCB and OCHCA staff. Laboratory resources are available for monitoring and analysis, and are a part of the chain of communication for reporting SSOs procedure.

OCSD staff is also working with the County of Orange to develop a plan for containing and recovering SSOs to surface waters, storm drains and channels. This may include hiring an on-call contractor to assist in recovering SSOs that have reached storm drains or channels.

- (G) Develop and implement a plan for the use of portable aerators where complete recovery of the sanitary sewer overflows is not practicable and where severe oxygen depletion in existing surface waters is expected.

OCSD has initiated a WDR project task with B&C for this requirement. This task will describe the purpose of portable aerators, and establish procedures for their use, including:

- Mobilization of staff and equipment
- Equipment installation, operation and maintenance
- Public notification and protection
- Demobilization
- Employee and public health and safety
- Water quality testing and measurement
- Training
- Possible response and services through private contractors

A draft portable aerator plan has been prepared, and OCSD and the consultant will be communicating with other stakeholders in Orange County to define the circumstances and locations where portable aerators may be required. The above procedures will then be developed and incorporated into a stand-alone WDR document.

- (H) Develop and implement a plan to respond in a timely manner to spills and other emergencies. Collection system staff should be able to respond to a sewage spill in less than an hour from the first call. The system should be capable of meeting this response time day or night, every day of the week. The system must own or have ready access to spill and emergency response equipment such as vacuum trucks, hydro-flushers, pumps, temporary bypass hoses, and portable generators.

The OCSD Control Center is staffed with dispatchers 24 hours a day, 7 days a week. OCSD has an on-call list with a primary contact. If the primary contact cannot be dispatched, an assigned secondary staff person is contacted and dispatched. On-call staff is authorized to mobilize additional staff and equipment as needed. A response time of one hour or less is an established goal and measured performance metric. OCSD has adequate staff and equipment to respond to historic normal service requests, including SSOs. If additional resources are needed for extraordinary events, OCSD maintains a contact list of contractors and suppliers, and has standing blanket purchase orders to mobilize the additional resources rapidly and specific to the event, whether it is a gravity sewer or pump station problem.