Elsinore Valley Municipal Water District

Sewer System Management Plan

December 2008
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# Elsinore Valley Municipal Water District

## Sewer System Management Plan

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<td>2007 WMP</td>
<td>2007 Water Distribution System Master Plan</td>
</tr>
<tr>
<td>BMP</td>
<td>Best Management Practices</td>
</tr>
<tr>
<td>C</td>
<td>Hazen-Williams Roughness Coefficient</td>
</tr>
<tr>
<td>Carollo</td>
<td>Carollo Engineers, P.C.</td>
</tr>
<tr>
<td>CCTV</td>
<td>Closed Circuit Television</td>
</tr>
<tr>
<td>CDL</td>
<td>California Driver’s License</td>
</tr>
<tr>
<td>cfs</td>
<td>Cubic Feet per Second</td>
</tr>
<tr>
<td>CIP</td>
<td>Capital Improvement Plan</td>
</tr>
<tr>
<td>CIWQS</td>
<td>California Integrated Water Quality System</td>
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<tr>
<td>CMOM</td>
<td>Capacity, Management, Operation, and Maintenance</td>
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<tr>
<td>d/D</td>
<td>Flow Depth to Pipe Diameter Ratio</td>
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<td>District</td>
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<tr>
<td>FOG</td>
<td>Fats, Oils, and Grease</td>
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<tr>
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<tr>
<td>ft/ft</td>
<td>Feet per Feet</td>
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<td>Geographic Information Systems</td>
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<tr>
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<td>Infiltration and Inflow</td>
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<tr>
<td>in</td>
<td>Inches</td>
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<td>MRP</td>
<td>Monitoring Reporting Program</td>
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<td>n</td>
<td>Manning’s Friction Coefficient</td>
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<td>NPDES</td>
<td>National Pollutant Discharge Elimination System</td>
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<tr>
<td>O&amp;M</td>
<td>Operations and Maintenance</td>
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<td>OES</td>
<td>Office of Emergency Services</td>
</tr>
<tr>
<td>Order No. 2006-0003</td>
<td>State Water Resources Control Board Order No. 2006-0003</td>
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<tr>
<td>PM</td>
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<tr>
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<td>Polyvinyl Chloride</td>
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<td>Regional Water Quality Control Board</td>
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<td>SDR</td>
<td>Standard Dimension Ratio</td>
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<td>SOI</td>
<td>Sphere of Influence</td>
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<td>TV</td>
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<td>Waste Discharge Requirement</td>
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<td>Water Reclamation Facility</td>
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<td>Wastewater Master Plan</td>
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Chapter 1

INTRODUCTION

This chapter presents an overview of the need for this Sewer System Management Plan (SSMP).

1.1 PURPOSE

This SSMP has been prepared by Carollo Engineers, P.C. (Carollo) for the Elsinore Valley Municipal Water District (District) as part of the District’s 2008 Wastewater Master Plan (WWMP) project in order to comply with the State Water Resources Control Board (SWRCB) Order No. 2006-0003 (Order No. 2006-0003), adopted May 2, 2006. A copy of Order No. 2006 0003 is included in Appendix B. Order No. 2006-0003 was amended on February 20, 2008. The provisions of this amendment are incorporated in this report.

The purpose of this SSMP is to provide a plan and schedule to properly manage, operate, and maintain all parts of the District’s sanitary sewer system. This will help reduce and prevent sanitary sewer overflows (SSOs) to the extent possible, as well as mitigate any SSOs that do occur.

1.2 SERVICE AREA

The District, which was formed in 1950, is located in the southwestern portion of Riverside County and provides potable water, sewer, and reclamation services to the City of Lake Elsinore, the City of Canyon Lake, portions of the City of Murrieta, Wildomar, and some unincorporated areas of Riverside County (Figure 1.1).

The District currently covers an area of approximately 96 square miles. The ultimate sphere of influence (SOI) of the District covers approximately 132 square miles. Figure 1.2 shows the current District boundary.

The District currently has four separate collection systems that are enrolled in the California Integrated Water Quality System (CIWQS) electronic reporting system. These systems are as follows:

- Regional Collection System;
- Canyon Lake Collection System;
- Horsethief Canyon Collection System;
- Southern Collection System.

This report serves as a comprehensive District SSMP and covers all four of the District’s collection systems.
Elsinore Valley Municipal Water District

FIGURE 1.1
REGIONAL LOCATION MAP

Elevation
High : 9,600 Feet
Low : Sea Level
Major Roads

Miles
0 5 10 20

Pacific Ocean

EVMWD
Legend
- Streets
- Waterway
- District Service Area*
- Existing Sewersheds
  - Canyon Lake
  - Horsethief
  - Regional
  - Southern

*Note: Master Plan Study Area does not include areas outside the District Service Area, but instead the District SOI.
1.3 BACKGROUND

Nationally, SSOs have been in the regulatory spotlight since 1995. The Environmental Protection Agency Report to Congress (August 2004) [1] identified the number and frequency of SSOs as a public health and water quality issue.

On May 2, 2006, the California SWRCB adopted Order No. 2006-0003, which focused on the reduction of SSOs. Order No. 2006-0003 requires that all collection systems with more than one mile of sewer pipe apply for coverage under the order by November 2, 2006.

Several Regional Water Quality Control Boards (RWQCBs) have existing requirements for collection systems and SSOs. Order No. 2006-0003 supplements the existing RWQCB requirements with the intent to gradually make requirements consistent statewide.

However, RWQCBs have the authority to adopt more stringent regional waste discharge requirements (WDRs).

The requirements for SSMPs are closely related to the Environmental Protection Agency’s Capacity, Management, Operation, and Maintenance (CMOM) rule (published in the Federal Register in January 2001) and they constitute a best management practices (BMP) approach to the regulation of collection systems. The SSMP elements are:

- Goals
- Organization Structure
- Overflow Emergency Response Plan
- Fats, Oils, and Grease (FOG) Control Program
- Legal Authority
- Operation and Maintenance (O&M) Program
- Design and Performance Provisions
- System Evaluation and Capacity Assurance Plan
- Monitoring, Measurement, and Program Modifications
- SSMP Audits
- Communication Plan

1.4 SCHEDULE

Order No. 2006-0003 established an SSMP implementation schedule based on the size of the agency. According to the District’s 2007 Draft Water Distribution System Master Plan (2007 WMP), the District’s current population is over 100,000. The schedule for agencies with a population greater than 100,000 therefore governs the District’s implementation schedule (Table 1.1).
Table 1.1  Sewer System Management Plan Implementation Schedule

<table>
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<td>SSMP Development Plan and Schedule</td>
<td>08/01/07</td>
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<td>Goals and Organization Structure</td>
<td>11/01/07</td>
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<td>Overflow Emergency Response Plan</td>
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<td>Legal Authority</td>
<td>11/01/08</td>
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<td>O&amp;M Plan</td>
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<td>FOG Plan</td>
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<td>Design and Performance Standards</td>
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<td>System Evaluation and Capacity Assurance Plan</td>
<td>05/01/09</td>
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<td>Final SSMP and Certification</td>
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Note:
1. Required Certification Date based on Order No. 2006-0003 for Population greater than 100,000 (See Appendix B).

1.5  ACKNOWLEDGEMENTS

Carollo wishes to acknowledge and thank: Mr. Phillip Miller, Director of Engineering; Mr. Sudhir Mohleji (Senior Civil Engineer); Mr. Robert Barnard (Wastewater Collection System Superintendent); and Mr. Theodore Eich (Wastewater Operations Manager). Their own and their staff’s cooperation and courtesy in obtaining a variety of necessary information were valuable components in completing and producing this report.

1.6  REFERENCE FORMAT

References are cited periodically throughout this report, as appropriate. Reference sources are identified by the title of the referenced document followed by a reference number in brackets. The reference format is provided below:

- Title of Report or other Reference Source or Document [No.]

A complete list of references containing detailed information concerning each reference source is provided in Appendix A.

1.7  REPORT ORGANIZATION

This SSMP contains twelve chapters. Appendices are provided to support the information provided in the text. A brief description of the chapters is provided as follows:

Chapter 1 – Introduction. This chapter provides a brief description of the need for the SSMP and a description of the report organization.
Chapter 2 – Goals. This chapter discusses the goals of the District’s SSMP. These goals pertain to the operation and management of the District’s wastewater collection system with respect to SSOs.

Chapter 3 – Organization Structure. This chapter identifies the District’s responsible representative for the implementation of this SSMP. It also includes an organizational chart and a chain of communication for reporting SSOs.

Chapter 4 – Legal Authority. This chapter serves to confirm that the District has the authority, through ordinances, services agreements, or other legally binding procedures, to conform to the requirements of Order No. 2006-0003.

Chapter 5 – Operation and Maintenance Program. This chapter contains a description of the District’s O&M program, including mapping, routine and preventative maintenance, rehabilitation, and training.

Chapter 6 – Design and Performance Provisions. This chapter presents a summary of the District’s design and construction standards, as well as its standards for the inspection and testing of new sewers, pumps, and other appurtenances and for rehabilitation projects.

Chapter 7 – Overflow Emergency Response Plan. This chapter contains a description of the District’s overflow emergency response plan that serves to provide measures to protect the public health and the environment in the event of an overflow.

Chapter 8 – Fats, Oils, and Grease Control Program. This chapter discusses the need for a FOG control program. The purpose of such a program is to limit the amount of fats, oils, and greases that enter the collection system to the extent feasible.

Chapter 9 – System Evaluation and Capacity Assurance Plan. This chapter provides an evaluation of the District’s sanitary sewer system facilities, identifies and proposes improvements for deficiencies, identifies design criteria, and provides a Capital Improvement Program (CIP) and schedule for improvements.

Chapter 10 – Monitoring, Measurement, and Program Modifications. This chapter presents a summary of the steps to be taken by the District to evaluate the effectiveness of this SSMP, and update it should improvements be necessary or desirable.

Chapter 11 – SSMP Program Audits. This chapter presents a summary of the procedures to be used by the District to perform internal audits.

Chapter 12 – Communication Program and Final Certification. This chapter presents a summary of the steps to be taken by the District to communicate with the public on the development, implementation, and performance of the SSMP. This chapter also contains the final certification of this SSMP.
1.8 ABBREVIATIONS

To improve readability, this report includes several abbreviations. The abbreviations are spelled out in the text the first time the phrase or title is used in each chapter and subsequently identified by abbreviation only. A summary of the abbreviations used in this report is located in the List of Abbreviations found immediately after the Table of Contents.
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Chapter 2

GOALS

This chapter discusses the goals of the Elsinore Valley Municipal Water District’s (District’s) Sewer System Management Plan (SSMP). The SSMP goals pertain to the operation and management of the District’s wastewater collection system with respect to sanitary sewer overflows (SSOs).

2.1 REGULATORY REQUIREMENT

Order No. 2006-0003 establishes the goal of the SSMP as follows:

“The purpose of this SSMP is to provide a plan and schedule to properly manage, operate, and maintain all parts of the sanitary sewer system. This will help reduce and prevent SSOs, as well as mitigate any SSOs that do occur.”

2.2 SSMP GOALS

This SSMP has been prepared in order to achieve the following goals:

• Properly manage, operate, and maintain all aspects and components of the District’s wastewater collection system.

• Provide the wastewater collection system with adequate capacity to convey peak wastewater flows.

• Minimize the occurrence of SSOs to the extent possible.

• Mitigate the impacts that are associated with any SSO that may occur.

• Meet all regulatory requirements related to the SSMP and SSO reporting system.

2.3 DEFINITIONS

An SSO is defined as any overflow, release, discharge, or diversion of untreated or partially treated wastewater from a sanitary sewer system. There are three categories of SSOs as established by Order No. 2006-0003:

• **Category 1**: This category includes all discharges of sewage resulting from a failure in the District’s sanitary sewer system that:
  a. Equal or exceed 1,000 gallons, or
  b. Result in a discharge to a drainage channel and/or surface water; or
  c. Discharge to a storm drainpipe that was not fully captured and returned to the sanitary sewer system.
• **Category 2**: This category includes all other discharges of sewage resulting from a failure in the District’s sanitary sewer system.

• **Private Lateral Sewage Discharges**: Sewage discharges that are caused by blockages or other problems within a privately owned lateral.

As part of Order No. 2006-0003, all agencies that own or operate sanitary systems greater than one mile in length that collect and/or convey untreated or partially treated wastewater to a publicly owned treatment facility are required to report Category 1 and Category 2 SSOs. The reporting of Private Lateral Sewage Discharges is optional.

### 2.4 PROHIBITION

Order No. 2006-0003 prohibits any SSO that results in a discharge of untreated or partially treated wastewater to waters of the United States or that causes a “nuisance,” as defined in California Water Code Section 13050(m). There is no “affirmative defense” for unforeseen or unavoidable SSOs. Instead, Section D.6 of Order No. 2006-0003 includes the concept of “enforcement discretion,” and identifies seven specific factors that must be considered in an enforcement action, such as the extent to which the discharger has complied with the provisions of the WDRs. In the event of an SSO, all feasible steps should be taken to limit the released volume and prevent untreated water from entering storm drains, creeks, etc. All SSOs must be reported through a new statewide online reporting system, the California Integrated Water Quality System (CIWQS).
Chapter 3

ORGANIZATION STRUCTURE

This chapter identifies the responsible representative from the Elsinore Valley Municipal Water District (District) for the implementation of this Sewer System Management Plan (SSMP). It also includes an organizational chart and a chain of communication for reporting sanitary sewer overflows (SSOs).

3.1 REGULATORY REQUIREMENT

Order No. 2006-0003 specifies that the SSMP must identify the following:

a. The name of the responsible or authorized representative for the implementation of the SSMP;

b. The names and telephone numbers for management, administrative, and maintenance positions responsible for implementing specific measures of the SSMP program. The SSMP must identify lines of authority through an organizational chart or similar document with a narrative explanation; and

c. The chain of communication for reporting SSOs, from receipt of a complaint and other information, including the person responsible for reporting SSOs to the State and Regional Water Board and other agencies if applicable (such as County Health Officer, County Environmental Health Agency, Regional Water Board, and/or State Office of Emergency Services (OES)).

3.2 AUTHORIZED REPRESENTATIVE

The District has authorized four staff members to serve as authorized representatives. These individuals are the Wastewater Operations Manager (Theodore P. Eich), the Chief Regional Plant Operator (Mitch Pierson), the Director of Operations (TDB), and the General Manager (Ronald Young).

The District has established five data entry designees who are responsible for entering spill data on CIWQS for the authorized representatives. These individuals are:

- Robert Barnard, Collection Systems Superintendent;
- Keith Ray, Senior Lift Station Technician;
- Scott Castillo, Senior Collection Systems Maintenance Worker;
- Dan VerPlank, Senior Collection Systems Maintenance Worker; and
- Shawn Moore, Senior Collection Systems Maintenance Worker.
3.3 ORGANIZATIONAL HIERARCHY

The organizational hierarchy and contact information for the implementation of the measures specified in this SSMP are provided in Appendix C and shown in Figure 3.1. A general description of those positions, as supplied by District Staff, is provided in this section. Appendix D contains the detailed job descriptions for these positions.

- **General Manager.** The General Manager is the chief executive officer of the District and serves as agent of the District Board of Directors in planning, directing, managing, and overseeing the services, activities, and operations of the District.

- **Assistant General Manager.** The Assistant General Manager, under general direction of the General Manager, shares the responsibility for the supervision of and assists the General Manager in directing all departments within the District.

- **Director of Operations.** The Director of Operations plans, directs, manages, and oversees the functions, programs, and operations of the Operations Department. This includes the District's domestic water system, including water treatment, groundwater production, water storage and delivery systems, the District's wastewater collection and treatment operations and source control program, the District's agricultural water pumping and delivery systems, the District's fleet maintenance and repair operations, District facilities and grounds maintenance and repair, and the District's Safety and Health Program.

- **Wastewater Operations Manager.** The Wastewater Operations Manager directs, manages, supervises, and coordinates the activities and operations of the Wastewater Division within the Operations Department, including collection system pipelines, lift stations, water reclamation facilities (WRFs) and the District's facilities source control program.

- **Wastewater Collection Systems Superintendent.** The Wastewater Collection Systems Superintendent oversees, supervises, and coordinates the work of a number of crews engaged in sanitary sewer maintenance and operation within the Wastewater Department.

- **Wastewater Chief Plant Operator.** The Chief Plant Operator oversees, supervises, and coordinates wastewater treatment activities and operations within the Wastewater Treatment Division of the Operations Department.

- **Senior Lift Station Maintenance Technician.** The Senior Lift Station Maintenance Technician leads, oversees, and participates in the more complex and difficult work of staff responsible for the maintenance, operation, diagnostic testing, installation and repair of instrumentation and control systems, auto-dialer maintenance/replacement/programming, and other types of technical maintenance and repair involved with the District's sewage lift stations.
FIGURE 3.1
ORGANIZATIONAL CHART

General Manager

Assistant General Manager

Director of Operations

Wastewater Operations Manager

Public Information Officer

Regional Chief Plant Operator

Collection Systems Field Superintendent

Senior Lift Station Maintenance Technician

Senior Collection Systems Maintenance Worker

Lift Station Maintenance Technician

Collection Systems Maintenance Worker

Lift Station Maintenance Technician

Lift Station Maintenance Technician

Senior Collection Systems Maintenance Worker

Collection Systems Maintenance Worker

Senior Collection Systems Maintenance Worker

Collection Systems Maintenance Worker

Collection Systems Maintenance Worker

Collection Systems Maintenance Worker
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• **Senior Collection Systems Maintenance Worker.** The Senior Collection Systems Maintenance Worker leads, oversees, and participates in the work of a crew performing a variety of unskilled, semi-skilled and skilled operation, maintenance, and repair work involved in the District’s sewage lift stations and sewage collection systems.

• **Lift Station Maintenance Technician.** The Lift Station Maintenance Technician performs skilled work in the maintenance, operation, diagnostic testing, installation and repair of instrumentation and control systems, auto-dialer maintenance/replacement/programming and other types of technical maintenance and repair involved in the District’s sewage lift stations, collection system, and related support equipment.

• **Collection System Maintenance Worker.** The Collection System Maintenance Worker performs a variety of unskilled, semi-skilled, and skilled maintenance, operational, and repair tasks involved in the District’s sewage collection systems and sewage lift stations.

### 3.4 CHAIN OF COMMUNICATION FOR REPORTING SSOs

The District’s Sewage Spill Response Plan (SSRP) contains the procedures utilized by the District to notify the primary SSO response crews (Appendix E). In addition to the SSRP, the City also conforms, as applicable, to the spill response procedures laid out in the Unified Sanitary Sewer Spill Response Procedure (Appendix F). This document is specific to the Santa Ana RWQCB and is meant to act as a bridge between different agencies within the region.

In general, a telephone operator at the District receives calls from the public regarding service calls and potential SSOs. Such calls are then directed to the Field Operations Dispatch Center. The Field Operations Dispatch Center obtains the necessary information from the reporting party to complete “Side A” of the District’s standard Collection System Problem Report Form and dispatches a District service crew to the location of the reported problem. A copy of Collection System Problem Report Form can be found in the District’s SSRP (Appendix E).

Upon arrival at the spill location, the service crew reports their findings to the Field Operations Dispatch Center. If an SSO has occurred, the Dispatch Center completes “Side B” of the Collection System Problem Report Form and immediately starts to notify the appropriate regulatory agencies and other impacted agencies in accordance with the District’s Spill Notification Checklists, which are included in the District’s SSRP (Appendix E).

During non-business hours, calls from the public regarding possible SSOs are received by the District’s contract 24-hour answering service, who will assume identical notification responsibilities as that of the Field Operations Dispatch Center.
In the event of a confirmed SSO that results in a discharge to a drainage channel or surface water, the following regulatory agencies must be notified as soon as possible, but not later than two hours after becoming aware of the discharge:

- Appropriate Regional Water Quality Control Board (RWQCB), depending on location of spill;
- State OES; and
- Appropriate County Health Department.

Additionally, the statewide WDRs require that the District submit a certification to the appropriate RWQCB that the RWQCB, State OES, and County Health Department were notified of the SSO. This certification shall be completed as soon as possible, but no later than 24-hours after becoming aware of the discharge.

The District’s SSRP currently does not contain provisions for the notification of the State Water Resources Control Board (SWRCB) through the California Integrated Water Quality System (CIWQS). The copy of the SSRP included in Appendix E contains suggested revisions to the SSRP to include such provisions and to update certain information based on District comments. The suggested revisions are underlined in red in the document itself.

Figure 3.2 is a flow chart that outlines the SWRCB reporting procedure that should be followed by the District should an SSO occur. A description of the Category 1 and Category 2 SSO reporting procedure is also provided in Sections 3.4.1 and 3.4.2, respectively. It is not anticipated that the District will report SSOs caused by blockages or problems within a privately owned lateral, although the District may choose to do so.

In addition to Figure 3.2, the San Diego RWQCB has also developed a flow chart for guidance on reporting SSOs that occur within their jurisdiction. This flow chart is included in Appendix G.

3.4.1 SWRCB Category 1 SSO Reporting Procedure

Order No. 2006-0003 specifies certain requirements for the reporting of SSOs. The District intends to comply with these requirements. Upon notification that an SSO has occurred, an initial report will be prepared and submitted through CIWQS. This initial report will be submitted as soon as is practicable, but no later than three business days after the District has been made aware of the SSO.

The initial report is then expanded and updated if new information on the overflow is made available. Upon review of the updated report by the District’s authorized representative, it is finalized and certified on CIWQS. This final certification will be completed as soon as possible, but no later than 15 calendar days of the conclusion of SSO response and remediation.
FIGURE 3.2
SWRCB SSO REPORTING
REQUIREMENTS FLOW CHART

Has an SSO occurred as defined by the General WDRs?

If no SSOs occur within a calendar month, a report must be submitted to the SWRCB’s online reporting system certifying that no SSOs have occurred. This report must be submitted within 30 days of the end of the calendar month.

Was it caused by a blockage or problem within a privately owned lateral?

Reporting is optional. Do you want to report?

Answer all three questions below. Any “yes” response makes the spill a Category 1 SSO. All others are Category 2 SSOs.

Was SSO greater than 1,000 gallons?

Was there a discharge to a drainage channel and/or surface water?

Report spill on CIWQS within 30 days after the end of the calendar month of the spill.

Was there a discharge to a storm drain pipe that was not fully captured and returned to the sanitary sewer system?

Report spill on CIWQS, and identify as a Private Lateral Sewage Discharge.

Question 1:

Question 2:

Question 3:

Done

Report can be amended at any time. The amended reports need to be certified by the District’s Authorized Representative.

Submit Final Certified Report within 15 days of conclusion of SSO response and remediation.

All final Report SSOs reported on CIWQS must be certified by the District’s Legally Responsible Official (Authorized Representative).

Notify State OES, County Health Dept, and RWQCB w/in 2 hours. Certify w/ the RWQCB that the OES and County Health Dept were properly notified w/in 24 hours.

Report Spill on CIWQS as soon as possible, but no later than within three business days as per the General WDRs.

If no SSOs occur within a calendar month, a report must be submitted to the SWRCB’s online reporting system certifying that no SSOs have occurred. This report must be submitted within 30 days of the end of the calendar month.

No

Yes

Yes

No

Yes

No

Yes

No

Yes

No

Yes

No

Yes

No

Source: Adapted from Flow Chart created by the California Water Environment Association
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3.4.2   SWRCB Category 2 SSO Reporting Procedure

The requirements for the reporting of Category 2 spills by the SWRCB are far less stringent than the Category 1 requirements. Upon notification that a Category 2 spill has occurred, all information relating to that spill is gathered. Once all the data on the spill is available, a spill report is completed through CIWQS. The report is then reviewed by the District's authorized representative and submitted on CIWQS. This report will be submitted as soon as possible, but no later than 30 days after the end of the calendar month in which the SSO occurs.
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Chapter 4

LEGAL AUTHORITY

This chapter serves to confirm that the Elsinore Valley Municipal Water District (District) has the authority, through ordinances, services agreements, or other legally binding procedures, to conform to the requirements of Order No. 2006-0003.

4.1 REGULATORY REQUIREMENT

Order No. 2006-0003 specifies the following with respect to Legal Authority:

Each Enrollee must demonstrate, through sanitary sewer system use ordinances, service agreements, or other legally binding procedures, that it possesses the necessary legal authority to:

a. Prevent illicit discharges into its sanitary sewer system (examples may include infiltration and inflow (I/I), stormwater, chemical pumping, unauthorized debris and cut roots, etc.);

b. Require that sewers and connections be properly designed and constructed;

c. Ensure access for maintenance, inspection, or repairs for portions of the lateral owned or maintained by the Public Agency;

d. Limit the discharge of fats, oils, and grease and other debris that may cause blockages; and

e. Enforce any violation of its sewer ordinances.

4.2 WASTE DISCHARGE AND SEWER USE ORDINANCES

The District Board of Directors has adopted Ordinance No. 160, which identifies District regulations for waste discharge and sewer use (Appendix H). The following subsections summarize Ordinance No. 160 as it pertains to the requirements established in Order No. 2006-0003.

Based on a review of Ordinance No. 160, it is not anticipated that any additions or modifications are necessary to comply with the requirements (a. through e.) outlined in Section 4.1 of this chapter.

4.2.1 Authority to Enforce Waste Discharge and Sewer Use Regulations

Section 1.900 of Ordinance No. 160 describes the District’s authority to establish regulations on waste discharge and sewer use. This article states that the District is governed by various United States Government and State of California agencies. Through various Federal and State laws, the District has been granted authority to regulate and/or
prohibit direct or indirect discharges into the District’s wastewater facilities. These laws include, but are not limited to, the following:

- The Clean Water Act (33 U.S.C. Section 1251 et seq);
- California Porter Cologne Water Quality Act (California Water Code Section 13000 et seq);
- California Health and Safety Codes sections 25100 to 25250;
- Resource and Recovery Act of 1976 (42 U.S.C. Section 6901 et seq); and
- California Government Code, Sections 54739 - 54740.

### 4.2.2 Illicit Discharges

Article 3.100 of Ordinance No. 160 provides prohibitions on certain types of wastewater discharges into the District’s wastewater collection system. The following subsections summarize Article 3.100, while Appendix H contains the full text of Ordinance 160.

#### 4.2.2.1 General Waste Discharge Prohibitions

Part A of Section 3.100 of Ordinance No. 160 provides generalized discharge prohibitions for the District’s wastewater collection system. This section states, in part:

> “No user shall introduce or cause to be introduced into the District’s collection system any pollutant which, alone or in conjunction with other substances, may cause pass through or interference, or any wastewater which has the potential to adversely or harmfully effect the District’s sewers, maintenance personnel, wastewater treatment plant personnel or equipment, treatment plant process or the quality of treatment plant effluent or bio-solids, public or private property, or wastes which may otherwise endanger the public, the environment, or create a public nuisance.”

#### 4.2.2.2 Specific Waste Discharge Prohibitions

Part B of Section 3.100 of Ordinance No. 160 identifies 21 specific discharge prohibitions for the District’s wastewater collection system. The 21 prohibited discharge types are included in pages 19 through 21 of Appendix H.

### 4.2.3 Design and Construction Requirements

Section 3.1000 of Ordinance No. 160 identifies the requirements for building sewers within the District. This section requires that all new building sewer construction and repair work be in accordance with District construction standards. Section 3.4000 of Ordinance No. 160 identifies the requirements for the inspection of newly constructed building sewer connections.
4.2.4 Maintenance, Inspection, and Repair Access

Section 1.700 of Ordinance No. 160 establishes the District’s right for maintenance, inspection, and repair access. Section 1.700 states:

“The District, Regional Water Quality Control Board, and the United States Environmental Protection Agency (when accompanied by District personnel) shall be permitted to enter all properties from which wastes or wastewaters are being or are capable of being discharged into a public sewer main for purposes of inspecting, copying of records, taking photographs observing, measuring, sampling, and testing pertinent to the discharge of wastes or wastewaters to ascertain whether the intent of this Ordinance is being met and the user is complying with all requirements. The District shall have access at reasonable times and without delay to all parts of the premises for the purposes of inspection and/or sampling. The District shall have the right to set up on the user's property such devices as are necessary to conduct sampling or metering operations. Where a user has security measures in force, the user shall make necessary arrangements so that personnel from the District will be permitted to enter without delay for the purpose of performing their specific responsibilities. Delays in allowing or refusal to allow the District access to the User’s premises shall be a violation of (Ordinance No. 160).”

4.2.5 Limitations on Fats, Oils, and Grease and Other Debris

Part B, Item 3, of Section 3.100 of Ordinance No. 160 prohibits the discharge of:

“Any solids or viscous substances of such size or in such quantity, condition, or nature that they may cause obstruction to flow in the sewer or be detrimental to proper wastewater treatment plant operations. These objectionable substances include…any materials which tend to solidify or collect in the sewer and obstruct wastewater flow.”

Fats, oils, and grease (FOG) usually enter the wastewater collection system in a liquefied state. Reduced turbulence and low water temperatures within the collection system can then cause FOG to solidify and accumulate in sewer pipes and lift stations. This accumulation can lead to pipe blockages and sanitary sewer overflows (SSOs). For this reason, FOG can be interpreted to be covered under Part B, Item 3, of Section 3.100 of Ordinance No. 160.
4.2.6 Policies for Enforcing Violations

Article 5 of Ordinance No. 160 contains the procedures to be followed by the District in the event of a violation of Ordinance No. 160. This article also outlines the process of appeals to the General Manager or Board of Directors. The extent and severity of the enforcement action is generally dependent upon the magnitude and extent of the violation, the effect of the violation on District operations or discharge permits, the compliance history of the user, and the general good faith of the user. The full text of the District’s enforcement policies is included in pages 46 through 62 of Appendix H.
This chapter contains a description of the Elsinore Valley Municipal Water District (District) operations and maintenance program, including mapping, routine and preventative maintenance, rehabilitation, and training.

5.1 REGULATORY REQUIREMENT

Order No. 2006-0003 specifies that a District’s Sewer System Management Plan (SSMP) must include the following elements as appropriate to the system:

a. Maintain an up-to-date map of the sanitary sewer system, showing all gravity line segments and manholes, pumping facilities, pressure pipes and valves, and applicable stormwater conveyance facilities;

b. Describe routine preventative operation and maintenance activities by staff and contractors, including a system for scheduling regular maintenance and cleaning of the sanitary sewer system with more frequent cleaning and maintenance targeted at known problem areas. The preventative maintenance (PM) program should have a system to document scheduled and conducted activities, such as work orders;

c. Develop a rehabilitation and replacement plan to identify and prioritize system deficiencies and implement short-term and long-term rehabilitation actions to address each deficiency. The program should include regular visual and TV inspections of manholes and sewer pipes, and a system for ranking the condition of sewer pipes and scheduling rehabilitation. Rehabilitation and replacement should focus on sewer pipes that are at a risk of collapse or prone to more frequent blockages due to pipe defects. Finally, the rehabilitation and replacement plan should have a capital improvement plan that addresses proper management and protection of the infrastructure assets. The plan shall include a time schedule for implementing the short- and long-term plans plus a schedule for developing the funds needed for the capital improvement plan;

d. Provide training on a regular basis for staff in sanitary sewer system operations and maintenance, and require contractors to be appropriately trained; and

e. Provide equipment and replacement part inventories, including identification of critical parts.
5.2 COLLECTION SYSTEM MAP

The District maintains a comprehensive map of its wastewater collection facilities in a Geographic Information System (GIS) format (Figure 5.1). An extensive amount of information is stored in the Districts collection system GIS data. This data includes the following:

- **Gravity Mains and Force Mains**
  - Diameter;
  - Status (Active or Inactive);
  - Installation Date;
  - Road Centerline Offset Distance;
  - Curb Offset Distance;
  - Pipe Material;
  - Pipe Length;
  - Upstream and Downstream Invert Elevations;
  - Pipe Slope;
  - Water Reclamation Facility (WRF) that the Pipeline is Tributary to;
  - Lift Station that the Pipeline is Tributary to.

- **Manholes**
  - Status (Active or Inactive);
  - Installation Date;
  - Manhole Diameter;
  - Manhole Depth;
  - Influent and Effluent Pipeline Invert Elevations;
  - Manhole Rim Elevation;
  - WRF that the Manhole is Tributary to;
  - Lift Station that the Manhole is Tributary to.

- **Lift Stations**
  - Status (Active or Inactive);
  - Installation Date;
  - Lift Station Name;
  - Number of Pumps;
  - Lift Station Capacity;
  - Address;
  - Location of Lift Station (Latitude and Longitude);
  - WRF that the Lift Station is Tributary to.

The District updates their GIS data periodically whenever changes to the collection system are made.
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5.3 WASTEWATER COLLECTION SYSTEM OVERVIEW

This section provides a brief overview of the District’s wastewater collection system facilities. A detailed description of these facilities can be found in the 2008 Wastewater Master Plan (WWMP) report [4]. The District is divided into four major collection systems, which are distinguished by the WRF that services that collection system:

- Regional collection system;
- Canyon Lake collection system;
- Horsethief collection system; and
- Southern collection system.

5.3.1 Regional Collection System

This section summarizes the major aspects of the Regional collection system.

- Regional WRF.
  - Wastewater flow generated within the Regional collection system is treated at the District operated Regional WRF. This facility is located near the intersection of Chaney Street and Treleven Avenue and serves the District’s customers in the City of Lake Elsinore and portions of the surrounding community.
  - The Regional WRF was constructed in 1985 with a capacity of 2.0 million gallons per day (mgd). The plant was expanded in 1989 to a capacity of 3.0 mgd. In 1994, an ultraviolet disinfection system was implemented and the plant was re-rated to a capacity of 4.0 mgd. In 2002, a new 4.0 mgd process train (Train B) was added to the existing 4.0 mgd Train A, expanding the Regional WRF to accommodate an average flow of 8.0 mgd.

- Gravity Mains.
  - This Regional collection system contains approximately 250 miles of sewer mains up to 54 inches in diameter, approximately 54 miles of which are 10 inches in diameter and larger.

- Lift Stations and Force Mains.
  - The Regional collection system contains 24 lift stations and associated force mains. Details of the District’s lift stations and force mains are provided in the 2008 WWMP Report [4].
5.3.2 Canyon Lake Collection System

This section summarizes the major aspects of the Canyon Lake collection system.

- **Railroad Canyon WRF.**
  - Wastewater flow generated within the Canyon Lake collection system is treated at the Railroad Canyon WRF. This facility is located near Railroad Canyon Road east of Interstate 15 and treats wastewater flow from the communities surrounding Canyon Lake and was constructed in 1984. An expansion of the facility was completed in 2005 to meet the Nitrogen effluent criterion of less than 10 milligrams per liter (mg/L).

  It should be noted that the Railroad Canyon WRF is a scalping plant. Excess wastewater flows from the Canyon Lake area and all waste activated sludge from the plant are discharged to the Regional WRF via the Regional collection system.

- **Gravity Mains.**
  - The Canyon Lake collection system contains approximately 50 miles of sewer mains up to 21 inches in diameter, approximately 6.7 miles of which are 10 inches in diameter and larger.

- **Lift Stations and Force Mains.**
  - The Canyon Lake collection system contains seven lift stations and associated force mains.

5.3.3 Horsethief Collection System

This section summarizes the major aspects of the Horsethief collection system.

- **Horsethief Canyon WRF.**
  - Wastewater flow generated within the Horsethief planned community is treated at the Horsethief Canyon WRF. This facility is located on Shotgun Trail Road in the northeastern portion of the Horsethief Canyon planned community. The plant was constructed in 1990. When the planned Alberhill WRF is constructed in the future, the Horsethief WRF will be abandoned and this plant’s influent will be discharged by gravity to the Alberhill facility.

- **Gravity Mains.**
  - The Horsethief collection system contains approximately 18 miles of sewer mains up to 18 inches in diameter, approximately 0.8 miles of which are 10 inches in diameter and larger.

- **Lift Stations and Force Mains.**
  - The Horsethief collection system contains two lift stations and associated force mains.
5.3.4 Southern Collection System

The Southern Sewershed conveys wastewater from a small area in the southeastern portion of the District to five metering manholes (MMHs) within the RCWD wastewater collection system. The RCWD records flow at these manholes using permanent flow meters. According to the District’s GIS data, the Southern Sewershed currently covers an area of approximately 3.4 square miles (2,200 acres). Upon completion of the Washington Avenue Lift Station (LS) that will divert flow to the Regional WRF, the area tributary to RCWD will decrease by approximately 700 acres.

- **Santa Rosa WRF.**
  - The Santa Rosa WRF is located southeast of the District's service boundary on Washington Avenue in the City of Murrieta. Owned and operated by the RCWD, this facility is currently designed to accommodate an average design flow of 5.0 mgd and serves the cities of Temecula, Murrieta, and other unincorporated areas of Riverside County, including a portion of the District’s service area.

- **Gravity Mains.**
  - This sewershed contains approximately 40 miles of sewer mains up to 15 inches in diameter, approximately 7.0 miles of which are 10 inches in diameter and larger. All wastewater generated within this sewershed presently flows by gravity to the RCWD collection system.

- **Lift Stations and Force Mains.**
  - The Southern collection system does not contain any lift stations or force mains.

5.4 DISTRICT PREVENTATIVE MAINTENANCE PROGRAM

The following subsections summarize the District’s existing maintenance activities with respect to the requirements of Order No. 2006-0003.

5.4.1 Sanitary Sewer Main Line Cleaning

The District has developed a preventative maintenance program in order to more efficiently manage and operate its wastewater collection facilities. This program consists of regular maintenance of the District’s known problem areas, as well as periodic maintenance of the remaining District facilities.

The District has identified several segments of pipes and certain manholes for more frequent maintenance. These “hot spots” are areas within the District’s collection systems where problems are known to exist, which may cause blockages or other maintenance problems for the District. The general location of these “hot spots” is presented visually on Figure 5.2. Appendix I contains a table with more detailed information related to each hot spot, as well as street level maps showing the precise location of each hot spot.
Aside from the District “hot spots,” sewer mains in Old Town Lake Elsinore are cleaned annually, sewer mains in the Canyon Lake sewershed are cleaned every two to three years, and the remaining sewer mains are cleaned every five to 5.5 years. Table 5.1 summarizes the District’s sewer main cleaning schedule.

5.4.2 Lift Station Maintenance Program

The District inspects its sanitary sewer lift stations routinely five days out of the week (Monday through Friday). Any issues uncovered during these inspections are addressed as soon as possible to ensure that each lift station is operating correctly.

<table>
<thead>
<tr>
<th>Table 5.1</th>
<th>Sanitary Sewer Main Cleaning Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sewer System Management Plan</td>
</tr>
<tr>
<td></td>
<td>Elsinore Valley Municipal Water District</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Area</th>
<th>Sewer Main Cleaning Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Old Town Lake Elsinore</td>
<td>Annually</td>
</tr>
<tr>
<td>Canyon Lake Sewershed</td>
<td>Once Every 2 - 3 Years</td>
</tr>
<tr>
<td>Designated “Hot Spots”</td>
<td>Varies (see Appendix I for Cleaning Schedule)</td>
</tr>
<tr>
<td>All Other Areas</td>
<td>Once Every 5 - 5.5 Years</td>
</tr>
</tbody>
</table>

5.5 REHABILITATION AND REPLACEMENT PLAN

Replacement and rehabilitation of deteriorated and capacity limited facilities is coordinated through the District’s Capital Improvement Program (CIP). Details of the District CIP is available through the District’s website [3]. Additionally, the 2008 WWMP [4] provides recommendations for the replacement of certain District facilities.

5.6 STAFF TRAINING

The District trains its maintenance workers through a combination of official certification programs and formal and informal training of staff on District standard operating procedures. Licensing and certification requirements vary depending on position. Table 5.2 lists these requirements for the District’s positions. The District has a tiered Collection System and Lift Station Maintenance Worker Structure, which facilitates staff training. In this system, the higher level maintenance workers (Senior Collection Systems and Lift Station Maintenance Workers) are responsible for training the lower level maintenance workers on work practices and procedures. Lower level maintenance workers thereby gain valuable experience by working under and learning from the more experienced workers.
FIGURE 5.2
SANITARY SEWER "HOT SPOTS"
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Table 5.2 Licensing and Certification Requirements  
Sewer System Management Plan  
Elsinore Valley Municipal Water District

<table>
<thead>
<tr>
<th>License or Certification</th>
<th>Time Frame</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Collections Systems Maintenance Worker</strong></td>
<td></td>
</tr>
<tr>
<td>Valid Driver's License</td>
<td>Upon Appointment</td>
</tr>
<tr>
<td>Class A California Driver's License (CDL) w/ air breaks and tank endorsements</td>
<td>within 6 Months of Appointment</td>
</tr>
<tr>
<td>CWEA Collection System Maintenance Technologist Grade I</td>
<td>within 18 Months of Appointment</td>
</tr>
<tr>
<td>8-Hour First Responder Level Certification</td>
<td>Upon Appointment or Shortly Thereafter</td>
</tr>
<tr>
<td>District provided CPR/First Aid and Bloodborne Pathogen Training</td>
<td>Upon Appointment or Shortly Thereafter</td>
</tr>
<tr>
<td>Grade II Collection Systems Maintenance Certification</td>
<td>Desirable</td>
</tr>
<tr>
<td><strong>Lift Station Maintenance Technician</strong></td>
<td></td>
</tr>
<tr>
<td>Valid Driver's License</td>
<td>Upon Appointment</td>
</tr>
<tr>
<td>Class A CDL</td>
<td>within 6 Months of Appointment</td>
</tr>
<tr>
<td>District provided CPR/First Aid and Bloodborne Pathogen Training</td>
<td>Upon Appointment or Shortly Thereafter</td>
</tr>
<tr>
<td>CWEA Grade I Plant Maintenance Technologist Certification</td>
<td>Upon Appointment</td>
</tr>
<tr>
<td>CWEA Collection System Maintenance Technologist Grade I</td>
<td>within 18 Months of Appointment</td>
</tr>
<tr>
<td>Grade II Plant Maintenance Technologist and Plant Maintenance Electrical/Instrumentation</td>
<td>Desirable</td>
</tr>
<tr>
<td><strong>Senior Collection Systems Maintenance Worker</strong></td>
<td></td>
</tr>
<tr>
<td>Valid Driver's License</td>
<td>Upon Appointment</td>
</tr>
<tr>
<td>Class A CDL w/ air breaks and tank endorsements</td>
<td>within 6 Months of Appointment</td>
</tr>
<tr>
<td>CWEA Grade I Plant Maintenance Technologist and/or Grade III Collection System Maintenance Certification is desirable</td>
<td>Upon Appointment</td>
</tr>
<tr>
<td>8-Hour First Responder Level Certification</td>
<td>Upon Appointment or Shortly Thereafter</td>
</tr>
<tr>
<td>District provided CPR/First Aid and Bloodborne Pathogen Training</td>
<td>Upon Appointment or Shortly Thereafter</td>
</tr>
<tr>
<td>Qualified Applicator Certificate issued by State of California, Department of Food and Agriculture</td>
<td>Desirable</td>
</tr>
<tr>
<td><strong>Senior Lift Station Maintenance Technician</strong></td>
<td></td>
</tr>
<tr>
<td>Valid Driver's License</td>
<td>Upon Appointment</td>
</tr>
<tr>
<td>Class A CDL w/ air breaks and tank endorsements</td>
<td>within 6 Months of Appointment</td>
</tr>
<tr>
<td>District provided CPR/First Aid and Bloodborne Pathogen Training</td>
<td>Upon Appointment or Shortly Thereafter</td>
</tr>
<tr>
<td>CWEA Grade I Plant Maintenance Technologist Certification</td>
<td>Upon Appointment</td>
</tr>
<tr>
<td>CWEA Collection System Maintenance Technologist Grade I</td>
<td>within 18 Months of Appointment</td>
</tr>
<tr>
<td>Grade II Plant Maintenance Technologist and Plant Maintenance Electrical/Instrumentation</td>
<td>Desirable</td>
</tr>
</tbody>
</table>
All new staff are trained on District standard operating procedures for equipment use and tasks upon hire. The standard operating procedures are then reviewed and updated every two years. Safety training and individual department tail gate training sessions are performed on a bi-weekly basis. Specialty training on specific safety programs is provided annually. In addition, staff are scheduled to attend one to two seminars annually.

5.7 EQUIPMENT AND REPLACEMENT PART INVENTORIES

The District has developed an equipment and replacement parts inventory for tracking purposes. The inventory is included in Appendix J of this report. The District uses this equipment in the performance of routine and emergency maintenance to the District’s wastewater collection systems.

The District has a spare parts inventory to minimize downtime in the event of an emergency (such as a pump failure). It is recommended that the District periodically examine its spare parts inventory to determine which spare parts are needed in the event of a breakdown or malfunction.
This chapter presents a summary of the Elsinore Valley Municipal Water District’s (District) design and construction standards, as well as its standards for the inspection and testing of new sewers, pumps, and other appurtenances and for rehabilitation projects.

### 6.1 REGULATORY REQUIREMENT

Order No. 2006-0003 specifies that a Sewer System Management Plan (SSMP) must include the following:

- Design and construction standards and specifications for the installation of new sanitary sewer systems, pump stations, and other appurtenances; and for the rehabilitation and repair of existing sanitary sewer systems; and
- Procedures and standards for inspecting and testing the installation of new sewers, pumps, and other appurtenances and for rehabilitation and repair projects.

### 6.2 DESIGN STANDARDS AND SPECIFICATIONS

Volume 1 of the District’s Standard Specifications and Drawings [2] contains the District’s requirements for the design and construction of sanitary sewer facilities. Excerpts of this document are included in Appendix K. An electronic copy of the entire document is available through the District’s website ([www.evmwd.com](http://www.evmwd.com)) [3], and a hard copy can be purchased from the District.

#### 6.2.1 Design Requirements

This section summarizes the District’s sewer design requirements. For a more detailed account of the District’s design requirements, refer to Volume 1 of the District’s Standard Specifications and Drawings.

##### 6.2.1.1 Mainline Size

The minimum pipe diameter for public collection sewers in the District is 8 inches, unless a smaller pipeline size is authorized by the District. For pipeline sizing, it is necessary to determine the average wastewater flow that is meant to be served by the pipeline. This can be determined in several different ways, depending on the type of development. Section 2.04 of Volume 1 of the District’s Standard Specifications and Drawings contains the procedures that should be followed to determine average wastewater flow.
The District’s Standard Specifications and Drawings specify that the design peak flow for any given development should be calculated using the following equation:

\[
Q_{\text{peak}} = 1.84 \left( Q_{\text{avg}} \right)^{0.92}
\]

Where: \( Q_{\text{peak}} = \) Design Peak Wastewater Flow (in cubic feet per second, cfs)  
\( Q_{\text{avg}} = \) Average Wastewater Flow (cfs)

The District’s design standards specify variable flow depth criteria for various pipe sizes. This criteria is expressed as a maximum depth of flow to pipe diameter ratio \((d/D)\). Design \(d/D\) ratios typically range from 0.5 to 0.92, with the lower values typically used for smaller pipes, which may experience flow peaks greater than the design flow or blockages from debris, paper, or rags. Table 6.1 summarizes the \(d/D\) ratios used for the design of future trunk sewers.

<table>
<thead>
<tr>
<th>Table 6.1</th>
<th>Maximum d/D Ratio for Design of New Sewers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sewer System Management Plan</td>
</tr>
<tr>
<td></td>
<td>Elsinore Valley Municipal Water District</td>
</tr>
<tr>
<td>Pipe Diameter (in)</td>
<td>Maximum d/D Ratio (during peak flows)</td>
</tr>
<tr>
<td>12 and smaller (New Sewers)</td>
<td>1/2</td>
</tr>
<tr>
<td>Larger than 12 (New Sewers)</td>
<td>2/3</td>
</tr>
</tbody>
</table>

Source:
Elsinore Valley Municipal Water District Standard Specifications and Drawings, Volume 1.

### 6.2.1.2 Manning’s Coefficient

The Manning coefficient ‘n’ is a friction coefficient and varies with respect to pipe material, size of pipe, depth of flow, smoothness of joints, root intrusion, and other factors. The District’s design standards specify that a Manning’s roughness coefficient (n) of 0.013 be used for the design of sewer facilities in the District.

### 6.2.1.3 Minimum Pipe Slope

According to the District’s standard design requirements, sewers must be designed and constructed such that the mean velocity during design peak flow conditions is greater than 2 feet per second (fps). The maximum allowable velocity for gravity sewers is 10 fps. Table 6.2 lists the minimum slopes provided in the District’s standard design requirements.

### 6.2.1.4 Minimum Cover

The minimum cover for sewer pipes is seven feet. District approval must be obtained if a shallower depth is needed. Additionally, the District may require greater cover depths, if necessary, to extend the sewer to other areas.
Table 6.2  Minimum Slopes for New Circular Pipes  
Sewer System Management Plan  
Elsinore Valley Municipal Water District

<table>
<thead>
<tr>
<th>Sewer Size (in)</th>
<th>Minimum Pipe Slope (ft/ft)</th>
<th>Pipe Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>0.0200</td>
<td>SDR-35 PVC</td>
</tr>
<tr>
<td>6</td>
<td>0.0100</td>
<td>SDR-35 PVC</td>
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<td>0.0032</td>
<td>SDR-35 PVC</td>
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<tr>
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<td>0.0012</td>
<td>SDR-35 PVC</td>
</tr>
<tr>
<td>21</td>
<td>0.0009</td>
<td>Vylon</td>
</tr>
<tr>
<td>24</td>
<td>0.0008</td>
<td>Vylon</td>
</tr>
<tr>
<td>27</td>
<td>0.0006</td>
<td>Vylon</td>
</tr>
</tbody>
</table>

Source:  
Elsinore Valley Municipal Water District Standard Specifications and Drawings, Volume 1.

6.2.1.5  Manhole Requirements

The following summarizes the District’s requirements for the installation of sanitary sewer manholes:

- Manholes must be installed at all changes in pipe slope, diameter, alignment, and all intersections of main sewers;
- The maximum manhole spacing is 400 feet. For curved sewers, the maximum spacing is 300 feet;
- The minimum drop across a manhole for pipes with less than a 7.5 percent slope is 0.10 feet. For pipe slopes greater than 7.5 percent, the following equation is used:
  \[ \text{Manhole Drop} = (S_1 + S_2)(D_1 + D_2) \]
  Where:  
  \( S_1 \) = Invert slope entering manhole, feet/feet  
  \( S_2 \) = Invert slope leaving manhole, feet/feet  
  \( D_1 \) = Diameter of inlet pipe  
  \( D_2 \) = Diameter of outlet pipe
- When a smaller sewer joins a larger one, the crown elevations should be matched;
- The District must approve drop manholes for pipe sizes over 15 inches;
- The minimum inside diameter of a manhole is 48 inches (4 feet);
• Five-foot manholes are required when sewer depths are greater than 12 feet, when
  more than two sewer mains or laterals are connected to the manhole, and for pipe
  sizes greater than 18 inches;
• Steeply sloped pipes shall be polyvinyl chloride (PVC)-lined and provided with a
  sealed lid;
• Manholes in non-paved areas must have a 10-foot by 10-foot paved area surrounding
  them.

6.2.1.6 Other Miscellaneous Considerations

The District's design standards identify other requirements for the design of sanitary sewer
facilities. These include requirements for the horizontal alignment of sewers, the
requirements for curved sewers, service laterals, inverted siphons, easements, and closed
circuit television (CCTV) inspection. Final inspection of all sewer lines is performed using
CCTV. The contractor shall repair, at its own expense, any defects, should they be
observed, to the satisfaction of the District.

Additionally, Section 2.01 of Volume 1 of the District’s Standard Specifications and
Drawings contains general requirements for the design of potable water, recycled water,
and sanitary sewer facilities. These requirements must be followed in the design of sanitary
sewer facilities.

6.2.2 Inspection Requirements

Section 15043 of the District’s Standard Specifications contains leakage and infiltration
testing requirements for sewers. The District requires the following tests be performed in
the presence of the District:

• **Leakage Test:** Each section of sewer pipe between two successive manholes, or
  between a manhole and its corresponding cleanout or end plug, is tested for leakage,
  including sewer laterals to the property line;
• **Infiltration Test:** An infiltration test is performed in areas where groundwater is
  encountered, or where evidence exists that groundwater has encroached to the
  elevation of the sewer;
• **CCTV Inspection:** A CCTV inspection is required to be performed by the contractor
  upon the installation of the sewer;
• **Vacuum Testing:** Vacuum testing is performed on manholes in accordance with the
  requirements of Section 03461 of the District’s Standard Specifications;
• **Mandrel Testing:** Sewer pipes are tested for deflections, joint offsets, and lateral
  pipe intrusions by pulling a mandrel through the pipe after backfill, but prior to the
  placement of permanent pavement; and
• **Pressure Tests for Sewer Force Mains**: All force mains should be pressure tested in accordance with the requirements of Section 15044 of the District Standard Specifications. The allowable leakage in a sewer force main, however, is zero gallons.

For more detailed descriptions of the test procedures for the aforementioned tests, refer to Volume 1 of the District’s Standard Specifications and Drawings.

### 6.2.3 Standard Drawings

Section 4 of Volume 1 of the District's Standard Specifications and Drawings contains the District's standard drawings for water and sewer facilities. The District's sewer standard drawings have been included in Appendix K as a reference.
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Chapter 7

OVERFLOW EMERGENCY RESPONSE PLAN

This chapter contains a description of the Elsinore Valley Municipal Water District’s (District’s) overflow emergency response plan that serves to provide measures to protect the public health and the environment in the event of an overflow.

7.1 REGULATORY REQUIREMENT

Order No. 2006-0003 specifies that a Sewer System Management Plan (SSMP) must include an Overflow Emergency Response Program that includes, at a minimum, the following:

a. Proper notification procedures so that the primary responders and regulatory agencies are informed of all sanitary sewer overflows (SSOs) in a timely manner;

b. A program to ensure an appropriate response to all overflows;

c. Procedures to ensure prompt notification to appropriate regulatory agencies and other potentially affected entities (e.g. health agencies, Regional Water Boards, water suppliers, etc.) of all SSOs that potentially affect public health or reach the waters of the State in accordance with the monitoring reporting program (MRP), the California Water Code, other State Law, and other applicable Regional Water Board waste discharge requirements (WDRs) or National Pollutant Discharge Elimination Program (NPDES) permit requirements. The SSMP should identify the officials who will receive immediate notification;

d. Procedures to ensure that appropriate staff and contractor personnel are aware of and follow the Emergency Response Plan and are appropriately trained;

e. Procedures to address emergency operations, such as traffic and crowd control and other necessary response activities; and

f. A program to ensure that all reasonable steps are taken to contain and prevent discharge of untreated or partially treated wastewater to waters of the United States and to minimize or correct any adverse impact of 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.
7.2 SEWAGE SPILL RESPONSE PLAN

The District has prepared a Sewage Spill Response Plan (SSRP), which provides information on procedures to be followed by District Staff in the event of an SSO (Appendix E). Suggested revisions to the SSRP are included in red and underlined in Appendix E. These revisions are provided to conform with the new statewide WDRs and to address specific comments provided by District Staff.

As previously mentioned, the City also conforms to the spill response procedures laid out in the Unified Sanitary Sewer Spill Response Procedure (Appendix F), as well as the reporting requirements of the San Diego RWQCB (Appendix G).

7.3 PRIMARY NOTIFICATION PROCEDURES

Section 3 of the District’s SSRP contains the procedures that the District follows in the event of an SSO. This includes the procedures utilized during normal working hours, as well as weekends, holidays, and after hours. These procedures are included in Appendix E, and are summarized in Section 3.4 of this plan.

7.4 SSO RESPONSE PROGRAM

The District’s SSRP contains procedures that are used to promote an appropriate response to SSOs that occur within the District’s service boundary. Figure 7.1 is a flow chart for that response crews follow while responding to an SSO. This flow chart is provided in the SSRP, and provides a general response procedure for SSO response teams. In general, the field responder’s duties are grouped into the following categories:

- First Responder Responsibilities;
- Identify and Relieve the Cause of the Spill;
- Spill Containment and Recovery;
- Cleanup and Disinfection;
- Spill Documentation.

A detailed description of individual tasks to be performed by the response crew is included in Part C of Section 4 of the District’s SSRP.
FIGURE 7.1
SPILL RESPONSE FLOW CHART

Spill Occurs

Spill Reported to EVMWD

Is It In Service Area?

Yes

Call Out Collection System Facility Staff to Investigate

Spill Found By Staff?

No

Complete Service Report

Yes

Notify Operations Dispatch Center of Preliminary Information and Request Additional Support If Needed

Immediately Notify Regulatory Agencies and Other Impacted Agencies of Incident

Clean Up, Disinfect Area, and Contain, If Possible

See Checklist to determine appropriate agencies to be contacted

Monitoring

No

Refer to Correct Agency

Document Contact Phone Numbers and Names

Complete Service Report

Notify Regulatory Agencies of Additional Spill Information and Calculated Volume

Evaluate Response and Implement Necessary Improvements

Document All Field Activities

Field Report Information to Operations Manager

Calculate Spill Volume and Final Report
This page left blank intentionally.
7.5 NOTIFICATION OF REGULATORY AGENCIES

If an SSO has occurred, the Dispatch Center (or the 24-hour answering service) completes “Side B” of the Collection System Problem Report Form and immediately starts to notify the appropriate regulatory agencies and other impacted agencies in accordance with the District’s Spill Notification Checklists, which are included in the District’s SSRP (Appendix E).

Notification of the State Water Resources Control Board (SWRCB) is performed through the California Integrated Water Quality System (CIWQS). On CIWQS, the SSO reporting procedure is dependant upon the type and volume of spill that has occurred. The District is required to use this reporting system to submit SSO spill reports, should they occur, or no spill certification reports. A description of the Category 1 and Category 2 SSO reporting procedure is provided in Sections 3.4.1 and 3.4.2 of this report, respectively.

7.6 EMERGENCY RESPONSE PLAN AWARENESS AND TRAINING

Section 7 of the District’s SSRP stipulates that appropriate District personnel, including management, collection systems, wastewater treatment, engineering, and public information personnel, receive a copy of the SSRP and be informed and trained on its provisions. The SSRP identifies three types of training exercises, which are summarized as follows:

- **Orientation Exercise**: This type of exercise is an introductory, lecture-type, session that includes visuals and dialog between the instructor and District staff. This exercise includes an overview of the SSRP components, provisions, and other appropriate topics. This exercise is given to new hires and provided annually thereafter.

- **Tabletop Exercise**: This type of exercise is a simulation of the SSO response activities, and includes no equipment use or deployment of staff. This exercise is performed annually.

- **Field Exercise**: In this type of exercise, an SSO is simulated. This exercise is used to evaluate the SSRP objectives, and to test equipment, response time, and manpower capabilities.

7.7 EMERGENCY OPERATIONS

Section 4 of the District’s SSRP identifies steps to be taken by the District’s SSO response crew. The first responder to an SSO should take steps to establish an appropriate perimeter around the spill site. This will prevent disruption of the response crew by vehicle traffic, pedestrians, and other factors that may interrupt the crew’s ability to effectively respond to an SSO.
7.8 SSO SURFACE WATER IMPACT MITIGATION PROGRAM

Should an SSO result in a discharge to the waters of the United States, the District should take all feasible steps to avoid the degradation of this body of water. These steps will vary on a case by case basis.
Chapter 8

FATS, OILS, AND GREASE CONTROL PLAN

This chapter discusses the need for a Fats, Oils, and Grease (FOG) control program. The purpose of such a program is to limit the amount of fats, oils, and greases that enter the collection system to the extent feasible.

8.1 REGULATORY REQUIREMENT

Order No 2006-0003 specifies that each Sewer System Management Plan (SSMP) must include an evaluation of the service area of the Elsinore Valley Municipal Water District (District) to determine whether a FOG control program is needed. If no FOG program is needed, justification for why it is not needed must be provided. If FOG is considered to be a problem, a FOG source control program must be prepared and implemented, including the following as appropriate:

a. An implementation plan and schedule for a public education outreach program that promotes the proper disposal of FOG;

b. A plan and schedule for the disposal of FOG generated within the sanitary sewer system service area. This may include a list of acceptable disposal facilities and/or additional facilities needed to adequately dispose of FOG generated within a sanitary sewer system service area;

c. The legal authority to prohibit discharges into the system and identify measures to prevent sanitary sewer overflows (SSOs) and blockages caused by FOG;

d. Requirements to install grease removal devices (such as traps or interceptors), design standards for the removal devices, maintenance requirements, Best Management Practice (BMP) requirements, record keeping and reporting requirements;

e. Authority to inspect grease producing facilities, enforcement authorities, and whether the Enrollee has sufficient staff to inspect and enforce the FOG ordinance;

f. An identification of sanitary sewer system sections subject to FOG blockages and establishment of a cleaning maintenance schedule for each section; and

g. Development and implementation of source control measures for all sources of FOG discharged into the sanitary sewer system for each section identified in (f) above.
8.2 FOG CONTROL PLAN

Based on discussions with District staff familiar with the operation and management of the District’s wastewater collection systems, it has been determined that FOG is not a major maintenance issue for the District. The District has not identified any specific areas in the system that are routinely affected by FOG, and in areas where FOG is encountered, it is usually due to another problem, such as root intrusion. For this reason, it is concluded that a formal FOG Control Plan is not necessary. The District, however, has implemented several FOG control measures already, as discussed in Section 8.3.

Should the District identify FOG as a major maintenance issue in the future, steps would be taken to study the effects of FOG in the District more thoroughly and prepare and develop a formal FOG Control Plan. Such a program would likely consist of source control measures, inspection of FOG producing facilities, requiring grease interceptor maintenance records be submitted to the District, FOG outreach programs, and BMP requirements.

8.3 EXISTING FOG CONTROL MEASURES

The District’s existing FOG control provisions are presented mainly in Article 6 of District Ordinance No. 160 (Appendix H). This article establishes a Gravity Separation Interceptor Program for the District. This includes requirements for the installation of a gravity separation interception system for industrial users that, in the District’s opinion, will contribute FOG, flammable substances, sands, suspended solids, or other harmful constituents to the District’s collection systems.

The design and installation of an interception system is required to be performed in accordance with District standards. The minimum operational fluid capacity of the interceptor is 750 gallons. An interception system is not required for buildings used solely for residential purposes, except where common food preparation occurs.

Article 6 of Ordinance No. 160 also specifies certain requirements for the maintenance of an interceptor system, which is summarized as follows:

- The interceptor system must be maintained such that it is in proper working order at all times;
- Cleaning shall be performed as often as necessary, but not less than two times per calendar year;
- All cleaning shall be performed by a properly licensed and permitted waste hauler;
- The use of chemicals for the emulsification, suspension, or dissolution of FOG is prohibited; and
- Users who are required to have an interceptor system shall have a written plan of operation or program that ensures that the interceptor is properly working.
Additionally, Volume 1 of the District’s Standard Specifications and Drawings [2] contains the standard drawings for sand/oil separators and grease interceptors. Excerpts of this document are included in Appendix K. An electronic copy of the entire document is available through the District’s website (www.evmwd.com) [3], and a hard copy can be purchased from the District.
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Chapter 9

SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN

This chapter provides an evaluation of the Elsinore Valley Municipal Water District’s (District) sanitary sewer system facilities, identifies and proposes improvements for deficiencies, identifies design criteria, and provides a Capital Improvement Program (CIP) and schedule for improvements.

9.1 REGULATORY REQUIREMENT

Order No. 2006-0003 requires that the District prepare and implement a CIP that will provide hydraulic capacity for peak dry weather flows as well as the appropriate design storm or wet weather event. According to Order No. 2006-0003, the Sewer System Management Plan (SSMP) must address, at a minimum, the following:

a. **Evaluation.** Actions needed to evaluate those portions of sanitary sewer system that are experiencing or contributing to a sanitary sewer overflow (SSO) discharge caused by hydraulic deficiency. The evaluation must provide estimates of peak flows (including flows from SSOs that escape from the system) associated with conditions similar to those causing overflow events, estimates of the capacity of key system components, hydraulic deficiencies (including components of the system with limiting capacity) and the major sources that contribute to the peak flows associated with overflow events;

b. **Design Criteria.** Where design criteria do not exist or are deficient, undertake the evaluation identified in (a) above to establish appropriate design criteria;

c. **Capacity Enhancement Measures.** The steps needed to establish a short- and long-term CIP to address identified hydraulic deficiencies, including prioritization, alternatives analysis, and schedules. The CIP may include increases in pipe size, infiltration and inflow (I/I) reduction programs, increases and redundancy in pumping capacity, and storage facilities. The CIP shall include an implementation schedule and shall identify sources of funding; and

d. **Schedule.** The Enrollee shall develop a schedule of completion dates for all portions of the capital improvement program developed in (a) - (c) above. The schedule shall be reviewed and updated consistent with the SSMP review and update requirements as described in Section D.14 (of Order 2006-0003).
9.2 SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN

The District contracted Carollo Engineers, P.C. (Carollo) to complete a wastewater master planning project, which included this SSMP. The District’s 2008 Wastewater Master Plan (2008 WWMP) [4] contains the following elements:

- Chapter 1 - Introduction
- Chapter 2 - Study Area Characteristics
- Chapter 3 - Wastewater Flow Projections
- Chapter 4 - Existing Wastewater Collection Systems
- Chapter 5 - Model Creation and Calibration
- Chapter 6 - Planning and Evaluation Criteria
- Chapter 7 - Existing System Evaluation
- Chapter 8 - Future System Evaluation
- Chapter 9 - Capital Improvement Program

This SSMP has been completed in conjunction with the WWMP [4]. The elements of the 2008 WWMP [4] that are required through Order No. 2006-0003 have been summarized in the following subsections. The executive summary of the 2008 WWMP [4] is included in Appendix L. A full copy of the 2008 WWMP [4] is available for review through the District.

9.2.1 Analysis Method

The District’s wastewater collection systems were analyzed as part of the 2008 WWMP [4] with the aid of computer hydraulic modeling software. There is an abundance of sewer analysis software in the marketplace today, with a variety of features and capabilities. The selection of a particular model generally depends on user preferences, software costs, and the complexity of the sewer system. It was agreed that H2OMAP SWMM, by MWH Soft, would be used to assemble the District’s hydraulic model. H2OMAP SWMM is a fully dynamic, stand alone, wastewater and stormwater modeling software application. This program includes seamless integration with the District’s GIS data.

9.2.2 Planning and Design Criteria

The 2008 WWMP [4] established several criteria to model and evaluate the District’s wastewater collection systems. This section summarizes the most important planning criteria that were used in the 2008 WWMP [4].

9.2.2.1 Gravity Sewers

The District’s gravity sewers were analyzed in accordance with the criteria established in the following subsections.
9.2.2.1.1 Pipe Capacities

Pipe capacities for gravity sewers were determined through the use of the Continuity Equation and Manning’s Equation for steady-state flow. The Continuity and Manning’s Equation are presented as follows:

Continuity Equation:

\[ Q = VA \]

where:
- \( Q \) = peak flow, cfs
- \( V \) = velocity, fps
- \( A \) = cross sectional area of pipe, sq. ft.

Manning’s Equation:

\[ V = \frac{1.486R^{\frac{2}{3}}S^{\frac{1}{2}}}{n} \]

where:
- \( V \) = velocity, fps
- \( n \) = Manning’s coefficient of friction
- \( R \) = hydraulic radius (area divided by wetted perimeter), ft
- \( S \) = slope of pipe, feet per foot

9.2.2.1.2 Manning Coefficient (n)

The Manning coefficient ‘n’ is a friction coefficient and varies with respect to pipe material, size of pipe, depth of flow, smoothness of joints, root intrusion, and other factors. A value of 0.013 was used for gravity sewers in the master planning effort.

9.2.2.1.3 Flow Depth Criteria (d/D)

When designing sewer pipelines, it is common practice to adopt variable flow depth criteria for various pipe sizes. This criteria is expressed as a maximum depth of flow to pipe diameter ratio (d/D). Design d/D ratios typically range from 0.5 to 0.92, with the lower values typically used for smaller pipes, which may experience peak flows greater than the design flow or blockages from debris, paper, or rags. Table 9.1 summarizes the d/D ratios used for planning future trunk sizes.

According to Table 9.1, all new sewer trunks greater than 12 inches in diameter should be sized to carry the design flow at a maximum d/D ratio of 2/3. However, utilizing a d/D ratio of 2/3 for analyzing the existing wastewater collection system may lead to premature or unnecessary replacement of existing pipelines. Therefore, a d/D ratio of 0.92 (pipe flowing full) was utilized to evaluate the District’s existing trunk system.
Table 9.1  
Master Plan Maximum d/D Ratio  
Sewer System Management Plan  
Elsinore Valley Municipal Water District

<table>
<thead>
<tr>
<th>Pipe Diameter (in)</th>
<th>Maximum d/D Ratio (during peak flows)</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 and smaller (New Sewers)</td>
<td>1/2</td>
</tr>
<tr>
<td>Larger than 12 (New Sewers)</td>
<td>2/3</td>
</tr>
<tr>
<td>All Diameters (Existing Pipes)</td>
<td>0.92</td>
</tr>
</tbody>
</table>

Source:  
2008 WWMP [4]

9.2.2.1.4 Changes in Pipe Size

For the master planning effort, and in the absence of field data, sewer crowns were matched at the manholes when a smaller sewer joined a larger sewer.

9.2.2.1.5 Design Velocities and Minimum Slopes

According to the District’s standard design requirements, sewers must be designed and constructed such that the mean velocity during design peak flow conditions is greater than 2 feet per second (fps). The maximum allowable velocity for gravity sewers is 10 fps.

Table 9.2 lists the minimum slopes that were used for planning future improvements. These values are based on the District’s standard design requirements [2].

Table 9.2  
Minimum Slopes for New Circular Pipes  
Sewer System Management Plan  
Elsinore Valley Municipal Water District

<table>
<thead>
<tr>
<th>Sewer Size (in)</th>
<th>Minimum Pipe Slope (ft/ft)</th>
<th>Pipe Material</th>
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</tr>
<tr>
<td>27</td>
<td>0.0006</td>
<td>Vylon</td>
</tr>
</tbody>
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9.2.2.2 Lift Stations and Force Mains

As part of the master planning effort, the District’s lift stations were evaluated and sized for peak flow with the largest pump serving as standby. For the sizing of force mains, the minimum and maximum recommended velocities are 2.0 and 6.5 fps, respectively. The Hazen-Williams formula is commonly used for the sizing of force mains. The Velocity Equation is:

\[ V = 1.32 C R^{0.63} S^{0.54} \]

where:  
\( V \) = mean velocity, fps  
\( C \) = roughness coefficient  
\( R \) = hydraulic radius, ft  
\( S \) = slope of the energy grade line, ft/ft

The value of the Hazen-Williams ‘\( C \)’ varies with the type of pipe material. This value is influenced by the type of construction and age of the pipe. A ‘\( C \)’ value of 130 was used as part of the master planning effort.

9.2.3 Evaluation

To identify existing and future system deficiencies, the City’s hydraulic model was developed using H2OMAP SWMM. In order to accomplish this, the District’s GIS data was converted to the H2OMAP SWMM format and imported into H2OMAP SWMM.

Wastewater flow projections were then developed based on the water demand data available from the 2007 Water Distribution System Master Plan (2007 WMP) [5] in five-year increments through the year 2030. Wastewater loads were then applied to the appropriate District manholes.

Based on the results of the temporary flow monitoring programs performed as part of the master planning effort, diurnal patterns were developed to be applied to the base wastewater flow at manholes in the District. The model was then calibrated to confirm that the modeled flow closely represents the actual flows recorded during the dry and wet weather flow monitoring programs.

Following calibration, the existing wastewater collection systems were evaluated according to the planning and design criteria summarized in this chapter. Deficient facilities were identified and improvement projects were recommended to address the identified deficiencies. Following the evaluation of the existing system, the District’s wastewater collection systems were evaluated for future conditions. Future deficiencies were then identified and improvement projects were recommended such that the District’s wastewater collection systems would be capable of conveying wastewater flows through the planning horizon.
9.2.4 Capacity Enhancement Measures

The 2008 WWMP [4] recommended improvements to mitigate existing and serve future customers. For a detailed description of the recommended improvements, see the District’s 2008 WWMP [4]. The proposed improvements from the 2008 WWMP are shown in Figure 9.1.

9.2.5 Schedule

As part of the 2008 WWMP [4], a CIP and schedule was developed with a planning horizon of 2030. Table 9.3 lists the CIP and schedule for improvements that were included in the 2008 WWMP. As shown in Table 9.3, the total wastewater collection systems CIP is estimated to be approximately $207 million dollars. More details on the wastewater collection systems CIP can be found in the 2008 WWMP [4].
Note: The Serena LS, A-5 LS, and Alberhill LS were not included in the District’s hydraulic model.
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**Table 9.3 Capital Improvement Program**

**Sewer System Management Plan**

**Elsinore Valley Municipal Water District**

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### Table 9.3 Capital Improvement Program

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<th>Description/Limits</th>
<th>Sewer Trunk/Planned Trunk Name</th>
<th>Detail Figure (See Water Plan Report)</th>
<th>Existing Deficiency</th>
<th>Description of CIP Items</th>
<th>CIP Costs</th>
<th>CIP Costs by Phases</th>
<th>CIP Financing Split (Existing vs. Future Users)</th>
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**Subtotal Gravity Main Improvements**: $40,242,000

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<tr>
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<td>-</td>
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**Subtotal Lift Station Improvements**: $58,560,000

December 2008
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### Table 9.3 Capital Improvement Program

**Sewer System Management Plan**  
**Elsinore Valley Municipal Water District**

<table>
<thead>
<tr>
<th>Description of CIP Items</th>
<th>CIP Costs</th>
<th>CIP Costs by Phases</th>
<th>CIP Financing Split (Existing vs. Future Users)</th>
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<tbody>
<tr>
<td><strong>Total</strong></td>
<td></td>
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<tr>
<td><strong>Base Year</strong></td>
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#### Force Main Improvements

<table>
<thead>
<tr>
<th>Force Main No.</th>
<th>Description</th>
<th>Planned Trunk Name</th>
<th>Existing Deficiency</th>
<th>Detail Figure (See Water Master Report)</th>
<th>CIP Sizes</th>
<th>CIP Costs</th>
<th>CIP Costs by Phases</th>
<th>CIP Financing Split (Existing vs. Future Users)</th>
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<th>5%</th>
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<tr>
<td>01</td>
<td>FM-1</td>
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<td>M-224</td>
<td>$7,228,000</td>
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<td>02</td>
<td>FM-2</td>
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#### Gravity Main Improvements

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<thead>
<tr>
<th>Gravity Main No.</th>
<th>Description</th>
<th>Planned Trunk Name</th>
<th>Existing Deficiency</th>
<th>Detail Figure (See Water Master Report)</th>
<th>CIP Sizes</th>
<th>CIP Costs</th>
<th>CIP Costs by Phases</th>
<th>CIP Financing Split (Existing vs. Future Users)</th>
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<th>5%</th>
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<tr>
<td>07</td>
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#### Lift Station Improvements

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<th>Description</th>
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<th>Existing Deficiency</th>
<th>Detail Figure (See Water Master Report)</th>
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<th>CIP Costs by Phases</th>
<th>CIP Financing Split (Existing vs. Future Users)</th>
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<th>5%</th>
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<tr>
<td>07</td>
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<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
</tbody>
</table>

#### Subtotal Force Main Improvements

- $2,462,000 (2021-2025)
- $97,789,000 (2016-2020)
- $7,228,000 (2011-2015)
- $4,240,000 (2006-2010)

#### Subtotal Gravity Main Improvements

- $2,462,000 (2021-2025)
- $97,789,000 (2016-2020)
- $7,228,000 (2011-2015)
- $4,240,000 (2006-2010)

#### Subtotal Regional Sewerhed Improvements

- $11,114,004 (2021-2025)
- $17,263,004 (2016-2020)
- $160,092,004 (2006-2010)

#### Subtotal Gravity Main Improvements

- $2,462,000 (2021-2025)
- $97,789,000 (2016-2020)
- $7,228,000 (2011-2015)
- $4,240,000 (2006-2010)

#### Subtotal Gravity Main Improvements

- $2,462,000 (2021-2025)
- $97,789,000 (2016-2020)
- $7,228,000 (2011-2015)
- $4,240,000 (2006-2010)

#### Subtotal Gravity Main Improvements

- $2,462,000 (2021-2025)
- $97,789,000 (2016-2020)
- $7,228,000 (2011-2015)
- $4,240,000 (2006-2010)
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### Table 9.3 Capital Improvement Program

**Sewer System Management Plan**

**Elsinore Valley Municipal Water District**

#### Description of CIP Items

| No. | Coded No. | Description | Description Limits | Sewer/Trunk/ Planned Sewer Name | Detail Figure | Existing Deficiency | CIP Sizes | CIP Costs | CIP Costs by Phases | CIP Financing Split (Existing vs. Future Users) |
|-----|-----------|-------------|--------------------|---------------------------------|---------------|--------------------|-----------|--|------------------|--|-----------------|
|     |           |             |                    |                                 |               |                    |           |           |                  |                                              |
|     |           |             |                    |                                 |               |                    |           |           |                  |                                              |
|     |           |             |                    |                                 |               |                    |           |           |                  |                                              |
|     |           |             |                    |                                 |               |                    |           |           |                  |                                              |
|     |           |             |                    |                                 |               |                    |           |           |                  |                                              |
|     |           |             |                    |                                 |               |                    |           |           |                  |                                              |
|     |           |             |                    |                                 |               |                    |           |           |                  |                                              |
|     |           |             |                    |                                 |               |                    |           |           |                  |                                              |

#### Gravity Main Improvements

**Alberhill Sewershed**

| No. | Description | Description Limits | Sewer/Trunk/ Planned Sewer Name | Detail Figure | CIP Sizes | CIP Costs | CIP Costs by Phases | CIP Financing Split (Existing vs. Future Users) |
|-----|-------------|--------------------|---------------------------------|---------------|-----------|--|------------------|--|-----------------|
|     |             |                    |                                 |               |           |           |                  |                                              |
|     |             |                    |                                 |               |           |           |                  |                                              |
|     |             |                    |                                 |               |           |           |                  |                                              |
|     |             |                    |                                 |               |           |           |                  |                                              |
|     |             |                    |                                 |               |           |           |                  |                                              |

#### Lift Station Improvements

| No. | Description | Description Limits | Sewer/Trunk/ Planned Sewer Name | Detail Figure | CIP Sizes | CIP Costs | CIP Costs by Phases | CIP Financing Split (Existing vs. Future Users) |
|-----|-------------|--------------------|---------------------------------|---------------|-----------|--|------------------|--|-----------------|
|     |             |                    |                                 |               |           |           |                  |                                              |
|     |             |                    |                                 |               |           |           |                  |                                              |
|     |             |                    |                                 |               |           |           |                  |                                              |
|     |             |                    |                                 |               |           |           |                  |                                              |
|     |             |                    |                                 |               |           |           |                  |                                              |

#### Force Main Improvements

| No. | Description | Description Limits | Sewer/Trunk/ Planned Sewer Name | Detail Figure | CIP Sizes | CIP Costs | CIP Costs by Phases | CIP Financing Split (Existing vs. Future Users) |
|-----|-------------|--------------------|---------------------------------|---------------|-----------|--|------------------|--|-----------------|
|     |             |                    |                                 |               |           |           |                  |                                              |
|     |             |                    |                                 |               |           |           |                  |                                              |
|     |             |                    |                                 |               |           |           |                  |                                              |
|     |             |                    |                                 |               |           |           |                  |                                              |
|     |             |                    |                                 |               |           |           |                  |                                              |

#### Notes

1. Contingency Cost = 30% of the Baseline Construction Cost
2. Engineering and Administrative Costs = 10% of the Baseline Construction Cost
3. Construction Management Cost = 5% of the Baseline Construction Cost
4. Capital Improvement Cost = Baseline Construction Cost + Contingency Cost + Engineering and Administrative Cost + Construction Management Cost. This value is rounded.
5. Capital Improvement Costs were not developed for the Lakeview Hills, Lakeside South, and Lakeside Malaga Trunk Sewer Reaches, Lakeshore Regional 15, and Lakeshore Regional 15 Force mains; because these projects have already been budgeted for in the District's CIP.
6. Proposed Casing size and carrier pipe size.
7. All cost rounded up to the nearest $1,000 and represent ENR CCI 9,895 (Los Angeles, October 2008).

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December 2008

pe\Can\Documents\Client\CA\MV\MV0711A003\Deliverables\SSMP\Table 9.3 (Final)
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Chapter 10

MONITORING, MEASUREMENT, AND PROGRAM MODIFICATIONS

This chapter presents a summary of the steps to be taken by the Elsinore Valley Municipal Water District (District) to evaluate the effectiveness of this Sewer System Management Plan (SSMP) and update it should improvements be necessary or desirable.

10.1 REGULATORY REQUIREMENT

Order No. 2006-0003 specifies that the District shall:

a. Maintain relevant information that can be used to establish and prioritize appropriate SSMP activities;

b. Monitor the implementation and, where appropriate, measure the effectiveness of each element of the SSMP;

c. Assess the success of the preventative maintenance program;

d. Update program elements, as appropriate, based on monitoring or performance evaluations; and

e. Identify and illustrate SSO trends, including frequency, location, and volume.

10.2 SSMP INFORMATION MAINTENANCE PROGRAM

The District should maintain information that is appropriate to the SSMP in a way that is convenient and easily accessible to those individuals involved with the SSMP. This information should be recorded or stored in the appropriate format so that conclusions and trends related to sanitary sewer overflows (SSOs) and the performance of the SSMP can be easily tracked.

It is recommended that the District develop a database to store and analyze information related to the SSMP, which can be accomplished through simple Microsoft Excel based spreadsheets, GIS techniques, or other means.

The District’s SSMP database tracks a few key performance indicators that will be used to measure the progress of the SSMP implementation and the performance of the District’s sanitary sewer collection system. Some key performance indicators that should be considered for tracking by the District are:

- Number of Service Calls, blockages, and SSOs over a one year period;
- SSO events by cause;
• SSO events by Category (i.e. Category 1, Category 2, or Private Lateral Sewage Discharge);
• Volume of SSOs and volume contained;
• Volume of sewage that reached surface waters; and
• SSO events by location within the District.

10.3 SSMP IMPLEMENTATION MONITORING

To accurately gauge the progress of the SSMP and its successes or failures in preventing SSOs, this plan recommends that the District monitor the implementation and effectiveness of the SSMP elements. The District should maintain all records related to SSMP programs in a common location that is known to all District staff members that are involved in these programs. This should include all records related to the maintenance of the system, SSO field reports, California Integrated Water Quality System (CIWQS) reports, and other relevant information.

This plan recommends that the District assign a key staff member, or a group of staff members to perform interim evaluations of the effectiveness of the SSMP based on the key performance indicators established in Section 10.2 of this report. This evaluation should occur at some predetermined interval, such as bi-annually or annually, and more often as necessary. The purpose of these interim evaluations is to establish the overall trend of the key performance indicators. The conclusions of these evaluations should be kept on record and used for program updates and audits.

10.4 PREVENTATIVE MAINTENANCE PROGRAM EVALUATION

This plan recommends that the District assess the success of the preventative maintenance (PM) program periodically similar to the procedure outlined in Section 10.3 of this report. Appropriate staff members should be designated to perform an evaluation of the District’s PM program at some predetermined interval. The District’s designees should evaluate where the District’s PM program can be improved in order to maximize the efficiency of the system. The conclusions of these evaluations should be kept on record and used for program updates and audits.
10.5 SSMP PROGRAM UPDATES

Updates to the District's SSMP programs should be performed based on the results of the interim evaluations on these programs, as well as the two-year program audits discussed in Chapter 11 of this report. All program updates and modifications should be approved by the District's Authorized Representatives and incorporated into the SSMP report, when necessary. If there are major changes to the SSMP, it needs to be re-certified by District's Authorized Representative on CIWQS. At a minimum, the District shall update and re-certify the SSMP once every five years.

10.6 SSO TRENDS

To optimize the performance of the District's wastewater collection systems, it is necessary to identify any SSO trends that may exist. Through the identification of such trends, the District may find capacity deficiencies, areas of the system in need of increased maintenance, or SSO or fats, oils, and grease (FOG) "Hot Spots." The District currently has mapped historical SSOs. This map should be expanded upon whenever a new spill occurs and used to identify SSO trends.

In addition, this plan recommends that the District keep copies of the CIWQS SSO reports on file for use by the District in the identification of SSO trends, as these reports contain very detailed information on specific spills that is not practical to maintain on other databases.
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This chapter presents a summary of the procedures to be used by the Elsinore Valley Municipal Water District (District) to perform internal audits of the District’s Sewer System Management Plan (SSMP).

11.1 REGULATORY REQUIREMENT

Order No. 2006-0003 specifies the following in relation to audits of the SSMP:

As part of the SSMP, the Enrollee shall conduct periodic internal audits, appropriate to the size of the system and the number of sanitary sewer overflows (SSOs). At a minimum, these audits must occur every two years and a report must be kept on file. This audit shall focus on the effectiveness of the SSMP and the Enrollee’s compliance with the SSMP requirements identified in this subsection (D.13), including identification of any deficiencies in the SSMP and steps to correct them.

11.2 EVMWD’S SSMP PROGRAM AUDITS

In accordance with the requirements of Order No. 2006-0003, the District plans to perform periodic performance audits on its SSMP. The following subsections outline the major components of the District’s future performance audits. The costs associated with these audits should be budgeted for by the District.

11.2.1 Responsible Party for Program Audit

The District’s Authorized Representatives will oversee the performance of the SSMP program audit. They will designate certain key District staff that are knowledgeable in the District’s wastewater collection facilities to perform the audits based on the findings of the interim SSMP program evaluations. The District may also choose to contract with a consultant to perform such audits.

11.2.2 Scope of SSMP Program Audits

The District’s program audits will consist of a comprehensive analysis of all elements of the SSMP, including the following:

- Goals
- Organization
- Legal Authority (the District’s sewer use ordinances)
11.2.3 SSMP Program Audit Report

An SSMP Program Audit report will be prepared and kept on file, which highlights the results of the SSMP Program Audit. This report should include supporting material, such as tables, figures and maps that support the conclusions of the report. It should also include the following elements, as well as other information that may be useful in the evaluation of the SSMP:

- An evaluation of each element of the SSMP report, including the District’s sewer ordinances, design standards, O&M program, overflow emergency response plan, FOG control plan, system evaluation and capacity assurance plan, and communication program;
- Progress made on the development of SSMP elements. Justification should be provided if progress has not been made on the development of certain elements of this SSMP;
- A description of the new SSMP program elements since the last program audit;
- The effectiveness of implementing SSMP elements;
- A description of the additions and improvements to the sanitary sewer collection system facilities since the previous program audit; and
- A description of the additions and improvements to the sanitary sewer collection system facilities planned for the next two years.

11.2.4 Schedule for Program Audits

At a minimum, the District’s program audits must occur every two years. Therefore, it is recommended that the District’s initial program audit take place within two years of the adoption of this SSMP report, and every two years subsequently. Should District staff determine, based on the results of the interim program evaluations described in Chapter 10, that more frequent audits are desirable, a shorter time interval, such as annually, may be chosen.
Chapter 12

COMMUNICATION PROGRAM AND FINAL CERTIFICATION

This chapter presents a summary of the steps to be taken by the Elsinore Valley Municipal Water District (District) to communicate with the public on the development, implementation, and performance of the Sewer System Management Plan (SSMP). In addition, steps taken for the final certification of the SSMP are summarized in this chapter.

12.1 REGULATORY REQUIREMENT

Order No. 2006-0003 specifies the following for the District’s communication program:

The Enrollee shall communicate on a regular basis with the public on the development, implementation, and performance of the SSMP. The communication system shall provide the public the opportunity to provide input to the Enrollee as the program is developed and implemented.

The Enrollee shall also create a plan of communication with systems that are tributary and/or satellite to the Enrollee’s sanitary sewer system.

In order to certify the SSMP, Order No. 2006-0003 specifies that the District must complete the following:

Both the SSMP and the Enrollee’s program to implement the SSMP must be certified by the Enrollee to be in compliance with the requirements set forth (in the previous sections) and must be presented to the Enrollee’s governing board for approval at a public meeting. The Enrollee shall certify that the SSMP, and subparts thereof, are in compliance with the general Water Discharge Requirements (WDRs) within the time frames identified in the time schedule provided (in Chapter 1).

In order to complete the certification, the Enrollee’s authorized representative must complete the certification portion in the Online Sanitary Sewer Overflow (SSO) Database Questionnaire by checking the appropriate milestone box, printing and signing the automated form, and sending the form to:

State Water Resources Control Board
Division of Water Quality
Attn: SSO Program Manager
P.O. Box 100
Sacramento, CA 95812
The SSMP must be updated every five years, and must include any significant program changes. Re-certification by the governing board of the Enrollee is required (as specified above) when significant updates to the SSMP are made. To complete this re-certification process, the Enrollee shall enter the data in the online SSO Database and mail the form to the State Water Board, as described above.

12.2 COMMUNICATION PROGRAM AND SSMP ADOPTION

In accordance with Order No. 2006-0003, the District’s Board of Directors held a public hearing and adopted the SSMP on ______. A copy of the adopting resolution is included in Appendix M. A notice of the public hearing was published two successive weeks prior to adoption in the local newspaper, which notified interested parties that the draft SSMP was available for review (Appendix N).

In order to provide the District’s residents with the chance to review and comment on the SSMP, it is recommended that a copy of this document be posted on the District’s website. In addition, it is recommended that the District keeps its residents up to date on the implementation and performance of the SSMP. This could be accomplished through bill inserts, public workshops, brochures, or other means.

12.3 FINAL CERTIFICATION

The District has certified that all sections of this report are in compliance with the applicable general WDRs and the requirements set forth in Order No. 2006-0003. The District’s authorized representatives have completed the certification portion in the Online SSO Database Questionnaire and sent the appropriate signed form to the State Water Resources Control Board (SWRCB). A copy of the SWRCB certification form, sent out on ______, is included in Appendix O of this report.

The District plans to update and re-certify the SSMP when significant changes are made. At a minimum, the District plans to update and re-certify this report every five years.


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STATE WATER RESOURCES CONTROL BOARD
ORDER NO. 2006-0003

STATEWIDE GENERAL WASTE DISCHARGE REQUIREMENTS
FOR
SANITARY SEWER SYSTEMS

The State Water Resources Control Board, hereinafter referred to as “State Water Board”, finds that:

1. All federal and state agencies, municipalities, counties, districts, and other public entities that own or operate sanitary sewer systems greater than one mile in length that collect and/or convey untreated or partially treated wastewater to a publicly owned treatment facility in the State of California are required to comply with the terms of this Order. Such entities are hereinafter referred to as “Enrollees”.

2. Sanitary sewer overflows (SSOs) are overflows from sanitary sewer systems of domestic wastewater, as well as industrial and commercial wastewater, depending on the pattern of land uses in the area served by the sanitary sewer system. SSOs often contain high levels of suspended solids, pathogenic organisms, toxic pollutants, nutrients, oxygen-demanding organic compounds, oil and grease and other pollutants. SSOs may cause a public nuisance, particularly when raw untreated wastewater is discharged to areas with high public exposure, such as streets or surface waters used for drinking, fishing, or body contact recreation. SSOs may pollute surface or ground waters, threaten public health, adversely affect aquatic life, and impair the recreational use and aesthetic enjoyment of surface waters.

3. Sanitary sewer systems experience periodic failures resulting in discharges that may affect waters of the state. There are many factors (including factors related to geology, design, construction methods and materials, age of the system, population growth, and system operation and maintenance), which affect the likelihood of an SSO. A proactive approach that requires Enrollees to ensure a system-wide operation, maintenance, and management plan is in place will reduce the number and frequency of SSOs within the state. This approach will in turn decrease the risk to human health and the environment caused by SSOs.

4. Major causes of SSOs include: grease blockages, root blockages, sewer line flood damage, manhole structure failures, vandalism, pump station mechanical failures, power outages, excessive storm or ground water inflow/infiltration, debris blockages, sanitary sewer system age and construction material failures, lack of proper operation and maintenance, insufficient capacity and contractor-caused damages. Many SSOs are preventable with adequate and appropriate facilities, source control measures and operation and maintenance of the sanitary sewer system.
SEWER SYSTEM MANAGEMENT PLANS

5. To facilitate proper funding and management of sanitary sewer systems, each Enrollee must develop and implement a system-specific Sewer System Management Plan (SSMP). To be effective, SSMPs must include provisions to provide proper and efficient management, operation, and maintenance of sanitary sewer systems, while taking into consideration risk management and cost benefit analysis. Additionally, an SSMP must contain a spill response plan that establishes standard procedures for immediate response to an SSO in a manner designed to minimize water quality impacts and potential nuisance conditions.

6. Many local public agencies in California have already developed SSMPs and implemented measures to reduce SSOs. These entities can build upon their existing efforts to establish a comprehensive SSMP consistent with this Order. Others, however, still require technical assistance and, in some cases, funding to improve sanitary sewer system operation and maintenance in order to reduce SSOs.

7. SSMP certification by technically qualified and experienced persons can provide a useful and cost-effective means for ensuring that SSMPs are developed and implemented appropriately.

8. It is the State Water Board’s intent to gather additional information on the causes and sources of SSOs to augment existing information and to determine the full extent of SSOs and consequent public health and/or environmental impacts occurring in the State.

9. Both uniform SSO reporting and a centralized statewide electronic database are needed to collect information to allow the State Water Board and Regional Water Quality Control Boards (Regional Water Boards) to effectively analyze the extent of SSOs statewide and their potential impacts on beneficial uses and public health. The monitoring and reporting program required by this Order and the attached Monitoring and Reporting Program No. 2006-0003, are necessary to assure compliance with these waste discharge requirements (WDRs).

10. Information regarding SSOs must be provided to Regional Water Boards and other regulatory agencies in a timely manner and be made available to the public in a complete, concise, and timely fashion.

11. Some Regional Water Boards have issued WDRs or WDRs that serve as National Pollution Discharge Elimination System (NPDES) permits to sanitary sewer system owners/operators within their jurisdictions. This Order establishes minimum requirements to prevent SSOs. Although it is the State Water Board’s intent that this Order be the primary regulatory mechanism for sanitary sewer systems statewide, Regional Water Boards may issue more stringent or more
prescriptive WDRs for sanitary sewer systems. Upon issuance or reissuance of a Regional Water Board’s WDRs for a system subject to this Order, the Regional Water Board shall coordinate its requirements with stated requirements within this Order, to identify requirements that are more stringent, to remove requirements that are less stringent than this Order, and to provide consistency in reporting.

REGULATORY CONSIDERATIONS

12. California Water Code section 13263 provides that the State Water Board may prescribe general WDRs for a category of discharges if the State Water Board finds or determines that:

- The discharges are produced by the same or similar operations;
- The discharges involve the same or similar types of waste;
- The discharges require the same or similar treatment standards; and
- The discharges are more appropriately regulated under general discharge requirements than individual discharge requirements.

This Order establishes requirements for a class of operations, facilities, and discharges that are similar throughout the state.

13. The issuance of general WDRs to the Enrollees will:
   a) Reduce the administrative burden of issuing individual WDRs to each Enrollee;
   b) Provide for a unified statewide approach for the reporting and database tracking of SSOs;
   c) Establish consistent and uniform requirements for SSMP development and implementation;
   d) Provide statewide consistency in reporting; and
   e) Facilitate consistent enforcement for violations.

14. The beneficial uses of surface waters that can be impaired by SSOs include, but are not limited to, aquatic life, drinking water supply, body contact and non-contact recreation, and aesthetics. The beneficial uses of ground water that can be impaired include, but are not limited to, drinking water and agricultural supply. Surface and ground waters throughout the state support these uses to varying degrees.

15. The implementation of requirements set forth in this Order will ensure the reasonable protection of past, present, and probable future beneficial uses of water and the prevention of nuisance. The requirements implement the water quality control plans (Basin Plans) for each region and take into account the environmental characteristics of hydrographic units within the state. Additionally, the State Water Board has considered water quality conditions that could reasonably be achieved through the coordinated control of all factors that affect
water quality in the area, costs associated with compliance with these requirements, the need for developing housing within California, and the need to develop and use recycled water.

16. The Federal Clean Water Act largely prohibits any discharge of pollutants from a point source to waters of the United States except as authorized under an NPDES permit. In general, any point source discharge of sewage effluent to waters of the United States must comply with technology-based, secondary treatment standards, at a minimum, and any more stringent requirements necessary to meet applicable water quality standards and other requirements. Hence, the unpermitted discharge of wastewater from a sanitary sewer system to waters of the United States is illegal under the Clean Water Act. In addition, many Basin Plans adopted by the Regional Water Boards contain discharge prohibitions that apply to the discharge of untreated or partially treated wastewater. Finally, the California Water Code generally prohibits the discharge of waste to land prior to the filing of any required report of waste discharge and the subsequent issuance of either WDRs or a waiver of WDRs.

17. California Water Code section 13263 requires a water board to, after any necessary hearing, prescribe requirements as to the nature of any proposed discharge, existing discharge, or material change in an existing discharge. The requirements shall, among other things, take into consideration the need to prevent nuisance.

18. California Water Code section 13050, subdivision (m), defines nuisance as anything which meets all of the following requirements:
   a. Is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property.
   b. Affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal.
   c. Occurs during, or as a result of, the treatment or disposal of wastes.

19. This Order is consistent with State Water Board Resolution No. 68-16 (Statement of Policy with Respect to Maintaining High Quality of Waters in California) in that the Order imposes conditions to prevent impacts to water quality, does not allow the degradation of water quality, will not unreasonably affect beneficial uses of water, and will not result in water quality less than prescribed in State Water Board or Regional Water Board plans and policies.

20. The action to adopt this General Order is exempt from the California Environmental Quality Act (Public Resources Code §21000 et seq.) because it is an action taken by a regulatory agency to assure the protection of the environment and the regulatory process involves procedures for protection of the environment. (Cal. Code Regs., tit. 14, §15308). In addition, the action to adopt
this Order is exempt from CEQA pursuant to Cal.Code Regs., title 14, §15301 to the extent that it applies to existing sanitary sewer collection systems that constitute “existing facilities” as that term is used in Section 15301, and §15302, to the extent that it results in the repair or replacement of existing systems involving negligible or no expansion of capacity.

21. The Fact Sheet, which is incorporated by reference in the Order, contains supplemental information that was also considered in establishing these requirements.

22. The State Water Board has notified all affected public agencies and all known interested persons of the intent to prescribe general WDRs that require Enrollees to develop SSMPs and to report all SSOs.

23. The State Water Board conducted a public hearing on February 8, 2006, to receive oral and written comments on the draft order. The State Water Board received and considered, at its May 2, 2006, meeting, additional public comments on substantial changes made to the proposed general WDRs following the February 8, 2006, public hearing. The State Water Board has considered all comments pertaining to the proposed general WDRs.

IT IS HEREBY ORDERED, that pursuant to California Water Code section 13263, the Enrollees, their agents, successors, and assigns, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted hereunder, shall comply with the following:

A. DEFINITIONS

1. **Sanitary sewer overflow (SSO)** - Any overflow, spill, release, discharge or diversion of untreated or partially treated wastewater from a sanitary sewer system. SSOs include:
   (i) Overflows or releases of untreated or partially treated wastewater that reach waters of the United States;
   (ii) Overflows or releases of untreated or partially treated wastewater that do not reach waters of the United States; and
   (iii) Wastewater backups into buildings and on private property that are caused by blockages or flow conditions within the publicly owned portion of a sanitary sewer system.

2. **Sanitary sewer system** – Any system of pipes, pump stations, sewer lines, or other conveyances, upstream of a wastewater treatment plant headworks used to collect and convey wastewater to the publicly owned treatment facility. Temporary storage and conveyance facilities (such as vaults, temporary piping, construction trenches, wet wells, impoundments, tanks, etc.) are considered to be part of the sanitary sewer system, and discharges into these temporary storage facilities are not considered to be SSOs.
For purposes of this Order, sanitary sewer systems include only those systems owned by public agencies that are comprised of more than one mile of pipes or sewer lines.

3. **Enrollee** - A federal or state agency, municipality, county, district, and other public entity that owns or operates a sanitary sewer system, as defined in the general WDRs, and that has submitted a complete and approved application for coverage under this Order.

4. **SSO Reporting System** – Online spill reporting system that is hosted, controlled, and maintained by the State Water Board. The web address for this site is http://ciwqs.waterboards.ca.gov. This online database is maintained on a secure site and is controlled by unique usernames and passwords.

5. **Untreated or partially treated wastewater** – Any volume of waste discharged from the sanitary sewer system upstream of a wastewater treatment plant headworks.

6. **Satellite collection system** – The portion, if any, of a sanitary sewer system owned or operated by a different public agency than the agency that owns and operates the wastewater treatment facility to which the sanitary sewer system is tributary.

7. **Nuisance** - California Water Code section 13050, subdivision (m), defines nuisance as anything which meets all of the following requirements:
   a. Is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property.
   b. Affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal.
   c. Occurs during, or as a result of, the treatment or disposal of wastes.

**B. APPLICATION REQUIREMENTS**

1. **Deadlines for Application** – All public agencies that currently own or operate sanitary sewer systems within the State of California must apply for coverage under the general WDRs within six (6) months of the date of adoption of the general WDRs. Additionally, public agencies that acquire or assume responsibility for operating sanitary sewer systems after the date of adoption of this Order must apply for coverage under the general WDRs at least three (3) months prior to operation of those facilities.

2. **Applications under the general WDRs** – In order to apply for coverage pursuant to the general WDRs, a legally authorized representative for each agency must submit a complete application package. Within sixty (60) days of adoption of the general WDRs, State Water Board staff will send specific instructions on how to
apply for coverage under the general WDRs to all known public agencies that own sanitary sewer systems. Agencies that do not receive notice may obtain applications and instructions online on the Water Board’s website.

3. Coverage under the general WDRs – Permit coverage will be in effect once a complete application package has been submitted and approved by the State Water Board’s Division of Water Quality.

C. PROHIBITIONS

1. Any SSO that results in a discharge of untreated or partially treated wastewater to waters of the United States is prohibited.

2. Any SSO that results in a discharge of untreated or partially treated wastewater that creates a nuisance as defined in California Water Code Section 13050(m) is prohibited.

D. PROVISIONS

1. The Enrollee must comply with all conditions of this Order. Any noncompliance with this Order constitutes a violation of the California Water Code and is grounds for enforcement action.

2. It is the intent of the State Water Board that sanitary sewer systems be regulated in a manner consistent with the general WDRs. Nothing in the general WDRs shall be:

   (i) Interpreted or applied in a manner inconsistent with the Federal Clean Water Act, or supersede a more specific or more stringent state or federal requirement in an existing permit, regulation, or administrative/judicial order or Consent Decree;

   (ii) Interpreted or applied to authorize an SSO that is illegal under either the Clean Water Act, an applicable Basin Plan prohibition or water quality standard, or the California Water Code;

   (iii) Interpreted or applied to prohibit a Regional Water Board from issuing an individual NPDES permit or WDR, superseding this general WDR, for a sanitary sewer system, authorized under the Clean Water Act or California Water Code; or

   (iv) Interpreted or applied to supersede any more specific or more stringent WDRs or enforcement order issued by a Regional Water Board.

3. The Enrollee shall take all feasible steps to eliminate SSOs. In the event that an SSO does occur, the Enrollee shall take all feasible steps to contain and mitigate the impacts of an SSO.

4. In the event of an SSO, the Enrollee shall take all feasible steps to prevent untreated or partially treated wastewater from discharging from storm drains into
flood control channels or waters of the United States by blocking the storm drainage system and by removing the wastewater from the storm drains.

5. All SSOs must be reported in accordance with Section G of the general WDRs.

6. In any enforcement action, the State and/or Regional Water Boards will consider the appropriate factors under the duly adopted State Water Board Enforcement Policy. And, consistent with the Enforcement Policy, the State and/or Regional Water Boards must consider the Enrollee’s efforts to contain, control, and mitigate SSOs when considering the California Water Code Section 13327 factors. In assessing these factors, the State and/or Regional Water Boards will also consider whether:

   (i) The Enrollee has complied with the requirements of this Order, including requirements for reporting and developing and implementing a SSMP;

   (ii) The Enrollee can identify the cause or likely cause of the discharge event;

   (iii) There were no feasible alternatives to the discharge, such as temporary storage or retention of untreated wastewater, reduction of inflow and infiltration, use of adequate backup equipment, collecting and hauling of untreated wastewater to a treatment facility, or an increase in the capacity of the system as necessary to contain the design storm event identified in the SSMP. It is inappropriate to consider the lack of feasible alternatives, if the Enrollee does not implement a periodic or continuing process to identify and correct problems.

   (iv) The discharge was exceptional, unintentional, temporary, and caused by factors beyond the reasonable control of the Enrollee;

   (v) The discharge could have been prevented by the exercise of reasonable control described in a certified SSMP for:

       • Proper management, operation and maintenance;
       • Adequate treatment facilities, sanitary sewer system facilities, and/or components with an appropriate design capacity, to reasonably prevent SSOs (e.g., adequately enlarging treatment or collection facilities to accommodate growth, infiltration and inflow (I/I), etc.);
       • Preventive maintenance (including cleaning and fats, oils, and grease (FOG) control);
       • Installation of adequate backup equipment; and
       • Inflow and infiltration prevention and control to the extent practicable.

   (vi) The sanitary sewer system design capacity is appropriate to reasonably prevent SSOs.
(vii) The Enrollee took all reasonable steps to stop and mitigate the impact of the discharge as soon as possible.

7. When a sanitary sewer overflow occurs, the Enrollee shall take all feasible steps and necessary remedial actions to 1) control or limit the volume of untreated or partially treated wastewater discharged, 2) terminate the discharge, and 3) recover as much of the wastewater discharged as possible for proper disposal, including any wash down water.

The Enrollee shall implement all remedial actions to the extent they may be applicable to the discharge and not inconsistent with an emergency response plan, including the following:

(i) Interception and rerouting of untreated or partially treated wastewater flows around the wastewater line failure;
(ii) Vacuum truck recovery of sanitary sewer overflows and wash down water;
(iii) Cleanup of debris at the overflow site;
(iv) System modifications to prevent another SSO at the same location;
(v) Adequate sampling to determine the nature and impact of the release; and
(vi) Adequate public notification to protect the public from exposure to the SSO.

8. The Enrollee shall properly, manage, operate, and maintain all parts of the sanitary sewer system owned or operated by the Enrollee, and shall ensure that the system operators (including employees, contractors, or other agents) are adequately trained and possess adequate knowledge, skills, and abilities.

9. The Enrollee shall allocate adequate resources for the operation, maintenance, and repair of its sanitary sewer system, by establishing a proper rate structure, accounting mechanisms, and auditing procedures to ensure an adequate measure of revenues and expenditures. These procedures must be in compliance with applicable laws and regulations and comply with generally acceptable accounting practices.

10. The Enrollee shall provide adequate capacity to convey base flows and peak flows, including flows related to wet weather events. Capacity shall meet or exceed the design criteria as defined in the Enrollee’s System Evaluation and Capacity Assurance Plan for all parts of the sanitary sewer system owned or operated by the Enrollee.

11. The Enrollee shall develop and implement a written Sewer System Management Plan (SSMP) and make it available to the State and/or Regional Water Board upon request. A copy of this document must be publicly available at the Enrollee’s office and/or available on the Internet. This SSMP must be approved by the Enrollee’s governing board at a public meeting.
12. In accordance with the California Business and Professions Code sections 6735, 7835, and 7835.1, all engineering and geologic evaluations and judgments shall be performed by or under the direction of registered professionals competent and proficient in the fields pertinent to the required activities. Specific elements of the SSMP that require professional evaluation and judgments shall be prepared by or under the direction of appropriately qualified professionals, and shall bear the professional(s’) signature and stamp.

13. The mandatory elements of the SSMP are specified below. However, if the Enrollee believes that any element of this section is not appropriate or applicable to the Enrollee’s sanitary sewer system, the SSMP program does not need to address that element. The Enrollee must justify why that element is not applicable. The SSMP must be approved by the deadlines listed in the SSMP Time Schedule below.

Sewer System Management Plan (SSMP)

(i) **Goal:** The goal of the SSMP is to provide a plan and schedule to properly manage, operate, and maintain all parts of the sanitary sewer system. This will help reduce and prevent SSOs, as well as mitigate any SSOs that do occur.

(ii) **Organization:** The SSMP must identify:

   (a) The name of the responsible or authorized representative as described in Section J of this Order.

   (b) The names and telephone numbers for management, administrative, and maintenance positions responsible for implementing specific measures in the SSMP program. The SSMP must identify lines of authority through an organization chart or similar document with a narrative explanation; and

   (c) The chain of communication for reporting SSOs, from receipt of a complaint or other information, including the person responsible for reporting SSOs to the State and Regional Water Board and other agencies if applicable (such as County Health Officer, County Environmental Health Agency, Regional Water Board, and/or State Office of Emergency Services (OES)).

(iii) **Legal Authority:** Each Enrollee must demonstrate, through sanitary sewer system use ordinances, service agreements, or other legally binding procedures, that it possesses the necessary legal authority to:

   (a) Prevent illicit discharges into its sanitary sewer system (examples may include I/I, stormwater, chemical dumping, unauthorized debris and cut roots, etc.);
(b) Require that sewers and connections be properly designed and constructed;

(c) Ensure access for maintenance, inspection, or repairs for portions of the lateral owned or maintained by the Public Agency;

(d) Limit the discharge of fats, oils, and grease and other debris that may cause blockages, and

(e) Enforce any violation of its sewer ordinances.

(iv) **Operation and Maintenance Program.** The SSMP must include those elements listed below that are appropriate and applicable to the Enrollee’s system:

(a) Maintain an up-to-date map of the sanitary sewer system, showing all gravity line segments and manholes, pumping facilities, pressure pipes and valves, and applicable stormwater conveyance facilities;

(b) Describe routine preventive operation and maintenance activities by staff and contractors, including a system for scheduling regular maintenance and cleaning of the sanitary sewer system with more frequent cleaning and maintenance targeted at known problem areas. The Preventative Maintenance (PM) program should have a system to document scheduled and conducted activities, such as work orders;

(c) Develop a rehabilitation and replacement plan to identify and prioritize system deficiencies and implement short-term and long-term rehabilitation actions to address each deficiency. The program should include regular visual and TV inspections of manholes and sewer pipes, and a system for ranking the condition of sewer pipes and scheduling rehabilitation. Rehabilitation and replacement should focus on sewer pipes that are at risk of collapse or prone to more frequent blockages due to pipe defects. Finally, the rehabilitation and replacement plan should include a capital improvement plan that addresses proper management and protection of the infrastructure assets. The plan shall include a time schedule for implementing the short- and long-term plans plus a schedule for developing the funds needed for the capital improvement plan;

(d) Provide training on a regular basis for staff in sanitary sewer system operations and maintenance, and require contractors to be appropriately trained; and
(e) Provide equipment and replacement part inventories, including identification of critical replacement parts.

(v) **Design and Performance Provisions:**

(a) Design and construction standards and specifications for the installation of new sanitary sewer systems, pump stations and other appurtenances; and for the rehabilitation and repair of existing sanitary sewer systems; and

(b) Procedures and standards for inspecting and testing the installation of new sewers, pumps, and other appurtenances and for rehabilitation and repair projects.

(vi) **Overflow Emergency Response Plan** - Each Enrollee shall develop and implement an overflow emergency response plan that identifies measures to protect public health and the environment. At a minimum, this plan must include the following:

(a) Proper notification procedures so that the primary responders and regulatory agencies are informed of all SSOs in a timely manner;

(b) A program to ensure an appropriate response to all overflows;

(c) Procedures to ensure prompt notification to appropriate regulatory agencies and other potentially affected entities (e.g. health agencies, Regional Water Boards, water suppliers, etc.) of all SSOs that potentially affect public health or reach the waters of the State in accordance with the MRP. All SSOs shall be reported in accordance with this MRP, the California Water Code, other State Law, and other applicable Regional Water Board WDRs or NPDES permit requirements. The SSMP should identify the officials who will receive immediate notification;

(d) Procedures to ensure that appropriate staff and contractor personnel are aware of and follow the Emergency Response Plan and are appropriately trained;

(e) Procedures to address emergency operations, such as traffic and crowd control and other necessary response activities; and

(f) A program to ensure that all reasonable steps are taken to contain and prevent the discharge of untreated and partially treated wastewater to waters of the United States and to 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.
(vii) **FOG Control Program:** Each Enrollee shall evaluate its service area to determine whether a FOG control program is needed. If an Enrollee determines that a FOG program is not needed, the Enrollee must provide justification for why it is not needed. If FOG is found to be a problem, the Enrollee must prepare and implement a FOG source control program to reduce the amount of these substances discharged to the sanitary sewer system. This plan shall include the following as appropriate:

(a) An implementation plan and schedule for a public education outreach program that promotes proper disposal of FOG;

(b) A plan and schedule for the disposal of FOG generated within the sanitary sewer system service area. This may include a list of acceptable disposal facilities and/or additional facilities needed to adequately dispose of FOG generated within a sanitary sewer system service area;

(c) The legal authority to prohibit discharges to the system and identify measures to prevent SSOs and blockages caused by FOG;

(d) Requirements to install grease removal devices (such as traps or interceptors), design standards for the removal devices, maintenance requirements, BMP requirements, record keeping and reporting requirements;

(e) Authority to inspect grease producing facilities, enforcement authorities, and whether the Enrollee has sufficient staff to inspect and enforce the FOG ordinance;

(f) An identification of sanitary sewer system sections subject to FOG blockages and establishment of a cleaning maintenance schedule for each section; and

(g) Development and implementation of source control measures for all sources of FOG discharged to the sanitary sewer system for each section identified in (f) above.

(viii) **System Evaluation and Capacity Assurance Plan:** The Enrollee shall prepare and implement a capital improvement plan (CIP) that will provide hydraulic capacity of key sanitary sewer system elements for dry weather peak flow conditions, as well as the appropriate design storm or wet weather event. At a minimum, the plan must include:

(a) **Evaluation:** Actions needed to evaluate those portions of the sanitary sewer system that are experiencing or contributing to an SSO discharge caused by hydraulic deficiency. The evaluation must provide estimates of peak flows (including flows from SSOs
that escape from the system) associated with conditions similar to those causing overflow events, estimates of the capacity of key system components, hydraulic deficiencies (including components of the system with limiting capacity) and the major sources that contribute to the peak flows associated with overflow events;

(b) **Design Criteria:** Where design criteria do not exist or are deficient, undertake the evaluation identified in (a) above to establish appropriate design criteria; and

(c) **Capacity Enhancement Measures:** The steps needed to establish a short- and long-term CIP to address identified hydraulic deficiencies, including prioritization, alternatives analysis, and schedules. The CIP may include increases in pipe size, I/I reduction programs, increases and redundancy in pumping capacity, and storage facilities. The CIP shall include an implementation schedule and shall identify sources of funding.

(d) **Schedule:** The Enrollee shall develop a schedule of completion dates for all portions of the capital improvement program developed in (a)-(c) above. This schedule shall be reviewed and updated consistent with the SSMP review and update requirements as described in Section D. 14.

(ix) **Monitoring, Measurement, and Program Modifications:** The Enrollee shall:

(a) Maintain relevant information that can be used to establish and prioritize appropriate SSMP activities;

(b) Monitor the implementation and, where appropriate, measure the effectiveness of each element of the SSMP;

(c) Assess the success of the preventative maintenance program;

(d) Update program elements, as appropriate, based on monitoring or performance evaluations; and

(e) Identify and illustrate SSO trends, including: frequency, location, and volume.

(x) **SSMP Program Audits** - As part of the SSMP, the Enrollee shall conduct periodic internal audits, appropriate to the size of the system and the number of SSOs. At a minimum, these audits must occur every two years and a report must be prepared and kept on file. This audit shall focus on evaluating the effectiveness of the SSMP and the
Enrollee’s compliance with the SSMP requirements identified in this subsection (D.13), including identification of any deficiencies in the SSMP and steps to correct them.

(xi) **Communication Program** – The Enrollee shall communicate on a regular basis with the public on the development, implementation, and performance of its SSMP. The communication system shall provide the public the opportunity to provide input to the Enrollee as the program is developed and implemented.

The Enrollee shall also create a plan of communication with systems that are tributary and/or satellite to the Enrollee’s sanitary sewer system.

14. Both the SSMP and the Enrollee’s program to implement the SSMP must be certified by the Enrollee to be in compliance with the requirements set forth above and must be presented to the Enrollee’s governing board for approval at a public meeting. The Enrollee shall certify that the SSMP, and subparts thereof, are in compliance with the general WDRs within the time frames identified in the time schedule provided in subsection D.15, below.

In order to complete this certification, the Enrollee’s authorized representative must complete the certification portion in the Online SSO Database Questionnaire by checking the appropriate milestone box, printing and signing the automated form, and sending the form to:

State Water Resources Control Board  
Division of Water Quality  
Attn: SSO Program Manager  
P.O. Box 100  
Sacramento, CA 95812

The SSMP must be updated every five (5) years, and must include any significant program changes. Re-certification by the governing board of the Enrollee is required in accordance with D.14 when significant updates to the SSMP are made. To complete the re-certification process, the Enrollee shall enter the data in the Online SSO Database and mail the form to the State Water Board, as described above.

15. The Enrollee shall comply with these requirements according to the following schedule. This time schedule does not supersede existing requirements or time schedules associated with other permits or regulatory requirements.
## Sewer System Management Plan Time Schedule

<table>
<thead>
<tr>
<th>Task and Associated Section</th>
<th>Completion Date</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Population &gt; 100,000</strong></td>
<td>Population &gt; 100,000</td>
</tr>
<tr>
<td><strong>Population between 100,000 and 10,000</strong></td>
<td>Population between 100,000 and 10,000</td>
</tr>
<tr>
<td><strong>Population between 10,000 and 2,500</strong></td>
<td>Population between 10,000 and 2,500</td>
</tr>
<tr>
<td><strong>Population &lt; 2,500</strong></td>
<td>Population &lt; 2,500</td>
</tr>
<tr>
<td><strong>Application for Permit Coverage</strong></td>
<td>6 months after WDRs Adoption</td>
</tr>
<tr>
<td><strong>Reporting Program</strong></td>
<td>6 months after WDRs Adoption</td>
</tr>
<tr>
<td><strong>SSMP Development Plan and Schedule</strong></td>
<td>9 months after WDRs Adoption</td>
</tr>
<tr>
<td><strong>Goals and Organization Structure</strong></td>
<td>12 months after WDRs Adoption</td>
</tr>
<tr>
<td><strong>Overflow Emergency Response Program</strong></td>
<td>15 months after WDRs Adoption</td>
</tr>
<tr>
<td><strong>Legal Authority</strong></td>
<td>18 months after WDRs Adoption</td>
</tr>
<tr>
<td><strong>Operation and Maintenance Program</strong></td>
<td>24 months after WDRs Adoption</td>
</tr>
<tr>
<td><strong>Grease Control Program</strong></td>
<td>30 months after WDRs Adoption</td>
</tr>
<tr>
<td><strong>Design and Performance</strong></td>
<td>36 months after WDRs Adoption</td>
</tr>
<tr>
<td><strong>System Evaluation and Capacity Assurance Plan</strong></td>
<td>39 months after WDRs Adoption</td>
</tr>
<tr>
<td><strong>Final SSMP, incorporating all of the SSMP requirements</strong></td>
<td>48 months after WDRs Adoption</td>
</tr>
<tr>
<td></td>
<td>51 months after WDRs Adoption</td>
</tr>
</tbody>
</table>
1. In the event that by July 1, 2006 the Executive Director is able to execute a memorandum of agreement (MOA) with the California Water Environment Association (CWEA) or discharger representatives outlining a strategy and time schedule for CWEA or another entity to provide statewide training on the adopted monitoring program, SSO database electronic reporting, and SSMP development, consistent with this Order, then the schedule of Reporting Program Section G shall be replaced with the following schedule:

<table>
<thead>
<tr>
<th>Reporting Program Section G</th>
<th>Time Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regional Boards 4, 8, and 9</td>
<td>8 months after WDRs Adoption</td>
</tr>
<tr>
<td>Regional Boards 1, 2, and 3</td>
<td>12 months after WDRs Adoption</td>
</tr>
<tr>
<td>Regional Boards 5, 6, and 7</td>
<td>16 months after WDRs Adoption</td>
</tr>
</tbody>
</table>

If this MOU is not executed by July 1, 2006, the reporting program time schedule will remain six (6) months for all regions and agency size categories.

2. In the event that the Executive Director executes the MOA identified in note 1 by July 1, 2006, then the deadline for this task shall be extended by six (6) months. The time schedule identified in the MOA must be consistent with the extended time schedule provided by this note. If the MOA is not executed by July 1, 2006, the six (6) month time extension will not be granted.

E. WDRs and SSMP AVAILABILITY

1. A copy of the general WDRs and the certified SSMP shall be maintained at appropriate locations (such as the Enrollee’s offices, facilities, and/or Internet homepage) and shall be available to sanitary sewer system operating and maintenance personnel at all times.

F. ENTRY AND INSPECTION

1. The Enrollee shall allow the State or Regional Water Boards or their authorized representative, upon presentation of credentials and other documents as may be required by law, to:
   a. Enter upon the Enrollee’s premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order;
   b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order;
c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order; and

d. Sample or monitor at reasonable times, for the purposes of assuring compliance with this Order or as otherwise authorized by the California Water Code, any substances or parameters at any location.

G. GENERAL MONITORING AND REPORTING REQUIREMENTS

1. The Enrollee shall furnish to the State or Regional Water Board, within a reasonable time, any information that the State or Regional Water Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order. The Enrollee shall also furnish to the Executive Director of the State Water Board or Executive Officer of the applicable Regional Water Board, upon request, copies of records required to be kept by this Order.

2. The Enrollee shall comply with the attached Monitoring and Reporting Program No. 2006-0003 and future revisions thereto, as specified by the Executive Director. Monitoring results shall be reported at the intervals specified in Monitoring and Reporting Program No. 2006-0003. Unless superseded by a specific enforcement Order for a specific Enrollee, these reporting requirements are intended to replace other mandatory routine written reports associated with SSOs.

3. All Enrollees must obtain SSO Database accounts and receive a “Username” and “Password” by registering through the California Integrated Water Quality System (CIWQS). These accounts will allow controlled and secure entry into the SSO Database. Additionally, within 30 days of receiving an account and prior to recording spills into the SSO Database, all Enrollees must complete the “Collection System Questionnaire”, which collects pertinent information regarding a Enrollee’s collection system. The “Collection System Questionnaire” must be updated at least every 12 months.

4. Pursuant to Health and Safety Code section 5411.5, any person who, without regard to intent or negligence, causes or permits any untreated wastewater or other waste to be discharged in or on any waters of the State, or discharged in or deposited where it is, or probably will be, discharged in or on any surface waters of the State, as soon as that person has knowledge of the discharge, shall immediately notify the local health officer of the discharge. Discharges of untreated or partially treated wastewater to storm drains and drainage channels, whether man-made or natural or concrete-lined, shall be reported as required above.

Any SSO greater than 1,000 gallons discharged in or on any waters of the State, or discharged in or deposited where it is, or probably will be, discharged in or on any surface waters of the State shall also be reported to the Office of Emergency Services pursuant to California Water Code section 13271.
H. CHANGE IN OWNERSHIP

1. This Order is not transferable to any person or party, except after notice to the Executive Director. The Enrollee shall submit this notice in writing at least 30 days in advance of any proposed transfer. The notice must include a written agreement between the existing and new Enrollee containing a specific date for the transfer of this Order’s responsibility and coverage between the existing Enrollee and the new Enrollee. This agreement shall include an acknowledgement that the existing Enrollee is liable for violations up to the transfer date and that the new Enrollee is liable from the transfer date forward.

I. INCOMPLETE REPORTS

1. If an Enrollee becomes aware that it failed to submit any relevant facts in any report required under this Order, the Enrollee shall promptly submit such facts or information by formally amending the report in the Online SSO Database.

J. REPORT DECLARATION

1. All applications, reports, or information shall be signed and certified as follows:

   (i) All reports required by this Order and other information required by the State or Regional Water Board shall be signed and certified by a person designated, for a municipality, state, federal or other public agency, as either a principal executive officer or ranking elected official, or by a duly authorized representative of that person, as described in paragraph (ii) of this provision. (For purposes of electronic reporting, an electronic signature and accompanying certification, which is in compliance with the Online SSO database procedures, meet this certification requirement.)

   (ii) An individual is a duly authorized representative only if:

       (a) The authorization is made in writing by a person described in paragraph (i) of this provision; and

       (b) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity.

K. CIVIL MONETARY REMEDIES FOR DISCHARGE VIOLATIONS

1. The California Water Code provides various enforcement options, including civil monetary remedies, for violations of this Order.

2. The California Water Code also provides that any person failing or refusing to furnish technical or monitoring program reports, as required under this Order,
falsifying any information provided in the technical or monitoring reports is subject to civil monetary penalties.

L. SEVERABILITY

1. The provisions of this Order are severable, and if any provision of this Order, or the application of any provision of this Order to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this Order, shall not be affected thereby.

2. This order does not convey any property rights of any sort or any exclusive privileges. The requirements prescribed herein do not authorize the commission of any act causing injury to persons or property, nor protect the Enrollee from liability under federal, state or local laws, nor create a vested right for the Enrollee to continue the waste discharge.

CERTIFICATION

The undersigned Clerk to the State Water Board does hereby certify that the foregoing is a full, true, and correct copy of general WDRs duly and regularly adopted at a meeting of the State Water Resources Control Board held on May 2, 2006.

AYE: Tam M. Doduc
      Gerald D. Secundy

NO: Arthur G. Baggett

ABSENT: None

ABSTAIN: None

Song Her
Clerk to the Board
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## Organization Chart Contact Information

<table>
<thead>
<tr>
<th>Position</th>
<th>Name</th>
<th>Phone Number</th>
<th>Fax Number</th>
<th>E-Mail Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Manager</td>
<td>Ronald Young</td>
<td>(951) 674-3146 ext. 8251</td>
<td>(951) 674-9872</td>
<td><a href="mailto:ryoung@evmwd.net">ryoung@evmwd.net</a></td>
</tr>
<tr>
<td>Assistant General Manager</td>
<td>Norris Brandt</td>
<td>(951) 674-3146 ext. 8359</td>
<td>(951) 674-9872</td>
<td><a href="mailto:nbrandt@evmwd.net">nbrandt@evmwd.net</a></td>
</tr>
<tr>
<td>Director of Operations</td>
<td>TBD</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Wastewater Operations Manager</td>
<td>Theodore P. Eich</td>
<td>(951) 674-3146 ext. 8203</td>
<td>(951) 245-5946</td>
<td><a href="mailto:teich@evmwd.net">teich@evmwd.net</a></td>
</tr>
<tr>
<td>Collection Systems Superintendent</td>
<td>Robert Barnard</td>
<td>(951) 674-3146 ext. 8283</td>
<td>(951) 245-5946</td>
<td><a href="mailto:robertb@evmwd.net">robertb@evmwd.net</a></td>
</tr>
<tr>
<td>Chief Plant Operator</td>
<td>Mitch Pierson</td>
<td>(951) 674-3135 ext. 8350</td>
<td>(951) 245-6293</td>
<td><a href="mailto:mpierson@evmwd.net">mpierson@evmwd.net</a></td>
</tr>
<tr>
<td>Senior Collection Systems Maintenance Worker</td>
<td>Scott Castillo</td>
<td>(951) 674-3146 ext. 8323</td>
<td>(951) 245-5946</td>
<td><a href="mailto:scastillo@evmwd.net">scastillo@evmwd.net</a></td>
</tr>
<tr>
<td>Senior Collection Systems Maintenance Worker</td>
<td>Dan VerPlank</td>
<td>(951) 674-3146 --</td>
<td>--</td>
<td><a href="mailto:dverplank@evmwd.net">dverplank@evmwd.net</a></td>
</tr>
<tr>
<td>Senior Collection Systems Maintenance Worker</td>
<td>Shawn Moore</td>
<td>(951) 674-3146 --</td>
<td>--</td>
<td><a href="mailto:smoore@evmwd.net">smoore@evmwd.net</a></td>
</tr>
<tr>
<td>Senior Lift Station Technician</td>
<td>Keith Ray</td>
<td>(951) 674-3146 ext. 8298</td>
<td>(951) 245-5946</td>
<td><a href="mailto:kray@evmwd.net">kray@evmwd.net</a></td>
</tr>
<tr>
<td>Collection Systems Maintenance Worker</td>
<td>Jesus Barron</td>
<td>(951) 674-3146 --</td>
<td>--</td>
<td><a href="mailto:jbarron@evmed.net">jbarron@evmed.net</a></td>
</tr>
<tr>
<td>Collection Systems Maintenance Worker</td>
<td>Angel Rubio</td>
<td>(951) 674-3146 --</td>
<td>--</td>
<td><a href="mailto:arubio@evmwd.net">arubio@evmwd.net</a></td>
</tr>
<tr>
<td>Collection Systems Maintenance Worker</td>
<td>Humberto Aguilar</td>
<td>(951) 674-3146 --</td>
<td>--</td>
<td><a href="mailto:haguilar@evmed.net">haguilar@evmed.net</a></td>
</tr>
</tbody>
</table>

**Note:**

1. Source: Data Provided by District Staff
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ELSONE VALLEY MUNICIPAL WATER DISTRICT

General Manager

Job descriptions are intended to present a descriptive list of the range of duties performed by employees in this job. Specifications are NOT intended to reflect all duties performed with the job.

SUMMARY DESCRIPTION
Under policy direction, serves as agent of the Board of Directors in planning, directing, managing, and overseeing the services, activities, and operations of the District including Engineering, Finance, Human Resources, Operations, and Public Affairs; serves as chief executive officer of the District ensuring that services and operations are delivered in an efficient and effective manner; implements policy decisions made by the Board of Directors; facilitates the development and implementation of District goals and objectives; and provides highly complex administrative support to the Board of Directors.

REPRESENTATIVE DUTIES
The following duties are typical for this classification. Incumbents may not perform all duties and/or may be required to perform additional or different duties from those set forth below to address business needs and changing business practices.

- Serves as Chief Executive Officer of the Elsinore Valley Municipal Water District; assumes full management responsibility for all District operations, services, and activities; plans, directs, manages, and oversees the activities and operations of the District including Engineering, Finance, Human Resources, Operations, and Public Affairs.
- Provides general direction to the design, construction, operation, and maintenance of District facilities; directs water production, treatment, storage, and distribution services and activities, wastewater collection, treatment, and disposal services and activities, reclaimed water storage distribution services and activities, administrative activities including personnel, purchasing, and administrative complex maintenance, and customer service activities.
- Facilitates the development, implementation, and administration of District goals and objectives; interprets and implements, through subordinates, goals, policies, rules and regulations set by the Board of Directors in an efficient and cost-effective manner.
- Directs and participates, with department head cooperation, in the development and administration of the District’s budget; prepares long-term plans of capital improvements including financing plans; approves the forecast of funds needed for staffing, equipment, materials, and supplies; approves expenditures and implement budgetary adjustments as appropriate and necessary.
- Establishes organizational standards and objectives; establishes, within District policy, appropriate service and staffing levels; monitors and evaluates the efficiency and effectiveness of service delivery methods and procedures; allocate resources accordingly.
- Plans, directs, and coordinates, through department heads, the work plan for the District; assigns projects and programmatic areas of responsibility; reviews and evaluates work methods and procedures; ensures that the District is being operated in compliance with applicable regulations and laws, that the District’s needs are being assessed, and that improvements are being developed and implemented as necessary; meets with management staff to identify and resolve issues.
- Assesses and monitors workload, administrative support systems, and internal reporting relationships; identifies opportunities for improvement and implement as appropriate.
- Provides staff assistance to the Board of Directors; prepares, submits, and presents staff reports and other necessary correspondence and recommendations to the Board of Directors on issues for its consideration and action; oversees the preparation and administration of Board agendas; keeps Board of Directors advised of financial conditions, program progress, and present and future needs of the District; prepares recommendations and advises the Board of Directors on matters requiring legislative action; carries out direction of the Board by assigning tasks and evaluating results.
- Assumes responsibility for establishing and maintaining favorable contacts with state and national government leaders to develop sound water related legislation and programs.
- Confers with and represents the District to all departments, regulatory agencies, customers, businesses, and other individuals, groups, and outside agencies having an interest or potential interest in affairs of the District’s concern; coordinates District activities with those of other districts, cities, counties, outside agencies, and organizations in accordance with the Board of Directors’ policies.
General Manager (continued)

- Negotiates a variety of contracts and agreements on the District's behalf in areas including, but not limited to, labor relations, development reimbursements, interagency relationships, and professional service provisions.
- Prepares reports and correspondence and makes presentations to legislative bodies, other agencies, the Board of Directors, the general public, and District personnel on issues regarding District administrative activities and functions.
- Responds to and resolves difficult, complex, and sensitive inquiries and complaints; contacts departments involved; provides direction and delegates authority as necessary to correct issues; interprets, analyzes, defends, and explains District policies, procedures, programs, and activities; negotiates and resolves sensitive and controversial issues; handles public relations dealing with the news media.
- Attends and participates in professional group meetings; stays abreast of new trends and innovations in the fields of business and public administration and issues related to the ongoing operation of a public utility.
- Prepares for and acts as necessary to carry out the mission of the District in emergency circumstances.
- Establishes and complies with the District's Safety Manual; attends safety meetings as necessary; reports all accidents, violations, or infractions.
- Performs related duties as required.

QUALIFICATIONS
The following generally describes the knowledge and ability required to enter the job and/or be learned within a short period of time in order to successfully perform the assigned duties.

Ability to:
- Provide effective leadership to and coordinate the activities of the Elsinore Valley Municipal Water District.
- Analyze a variety of administrative and organizational problems and make sound policy and procedural recommendations.
- Analyze and define problems, identify alternative solutions, project consequences of proposed actions and implement recommendations in support of goals.
- Identify and respond to community and Board of Directors' issues, concerns, and needs.
- Serve effectively as the administrative agent of the Board of Directors.
- Develop and administer District-wide goals, objectives, and procedures.
- Research, analyze, and evaluate new service delivery methods and techniques.
- Prepare clear and concise administrative and financial reports.
- Prepare and administer large and complex budgets.
- Interpret and apply federal, state, and local policies, laws, and regulations.
- Plan, organize, and direct the work of staff. Plan, organize, and direct the work of staff.
- Select, supervise, train and evaluate staff.
- Delegate authority and responsibility.
- Negotiate and resolve complex issues.
- Operate a variety of office equipment including a computer and standard office applications.
- Make effective oral and written presentations to groups within and outside the District including legislative bodies.
- Exercise tact and diplomacy in dealing with sensitive, complex and confidential issues and situations.
- Effectively represent the District to outside individuals and agencies to accomplish the goals and objectives of the unit.
- Interact with elected officials at every level of government.
- Work cooperatively with other departments, District officials, and outside agencies.
- Communicate clearly and concisely, both orally and in writing.
- Establish and maintain effective working relationships with those contacted in the course of work.
Education and Experience Guidelines

Any combination of educational and experience that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:

Education

- Equivalent to a Bachelor’s degree from an accredited college or university with major course work in public administration, business administration, engineering, or a related field. A Master’s degree is desirable.

Experience

- Ten years of progressively responsible administrative or staff experience in a private or public organization with at least five years of experience in a high level administrative or executive capacity involving responsibility for planning, organizing, directing, and financing a varied work program and preferably involved in water and wastewater systems and technologies.

Knowledge

- Advanced principles and practices of public administration including the organization, functions, and problems of a public utility.
- Operations, services, and activities of a public utility.
- Government, governing body, and legislative processes.
- Principles and practices of budget preparation and administration.
- Current social, political, and economic trends and operating problems of public utilities.
- Advanced principles and practices of organization, management and supervision.
- Principles and practices of strategic planning.
- Methods of analyzing, evaluating, and modifying administrative procedures.
- Decision making techniques.
- Controlling principles and practices.
- Pertinent federal, state, and local laws, codes and regulations.
- Principles of effective public relations and interrelationships with community groups and agencies, private businesses and firms, and other levels of government.
- Advanced interpersonal relations skills.
- Principles and practices of program development and administration.
- Methods and techniques of research, statistical analysis, and report preparation and presentation.
- Principles of business letter writing.
- Office procedures, methods, and equipment including computers and applicable software applications such as word processing, spreadsheets, and databases.

License/Certification

- Possession of, or ability to obtain, an appropriate, valid driver’s license.

PHYSICAL DEMANDS AND WORKING ENVIRONMENT

The conditions herein are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential job functions.

ENVIRONMENT

Standard office setting; frequent interaction with District staff, the general public, elected officials, and the media.

PHYSICAL

- Level One

Incumbents require sufficient mobility to work in an office setting; stand or sit for prolonged periods of time; operate office equipment including use of a computer keyboard; light lifting and carrying; ability to verbally communicate to exchange information.
VISION
See in the normal visual range with or without correction; vision sufficient to read computer screens and printed documents; and to operate assigned equipment.

HEARING
Hear in the normal audio range with or without correction.

JOB STATUS  Exempt  Contract - Individual

SALARY RANGE: 50
(10GM)
ELSIONORE VALLEY MUNICIPAL WATER DISTRICT

Assistant General Manager

Job descriptions are intended to present a descriptive list of the range of duties performed by employees in this job. Specifications are NOT intended to reflect all duties performed with the job.

SUMMARY DESCRIPTION
Under general direction of the General Manager, directly responsible for the supervision of the administration, human resources, public information, purchasing, warehousing, building and grounds maintenance, and vehicle maintenance divisions. Assists the General Manager in directing all other divisions within the District. Acts as General Manager in the absence of the General Manager.

REPRESENTATIVE DUTIES
The following duties are typical for this classification. Incumbents may not perform all duties and/or may be required to perform additional or different duties from those set forth below to address business needs and changing business practices.

• Assists General Manager in carrying out directives of the Board of Directors; ensures compliance with District policy; ensures timely completion of a variety of projects; develops and implements District's business plan.
• Works with the Board of Directors and other high level officials to develop policy. Assists General Manager with special projects, studies, research, and reports.
• Selects, trains, supervises and evaluates personnel within administration, human resources, public information, purchasing, warehousing, building and grounds maintenance, and vehicle maintenance divisions; prepares and administers divisional budgets.
• Maintains minutes, resolutions, ordinances and other official District records; prepares, publishes, posts and mails all legal notices; performs official CEQA filings with County Clerk's office; coordinates preparation and distribution of Board agendas and back up material; administers timely filing of Conflict of Interest Statements and Annual Campaign Disclosure Statements.
• Provides assistance and works with District's right-of-way consultants on real property acquisitions and dispositions.
• Processes District annexations which include meetings with developers, engineers, consultants, and Local Agency Formation Commission.
• Establishes procedures, schedules, and methods for administrative services including word processing, records management, and maintenance of the District's library.
• Directly supervises public information activities including preparation of District newsletter, press releases, public workshops, open houses, and water education and tours; provides supervision of purchasing and warehouse activities, personnel functions, building and grounds maintenance, vehicle maintenance, and Injury Prevention Program activities; evaluates and prepares performance evaluations and disciplinary recommendations for employees in each of these areas.
• Reads, understands and complies with the District's Safety Manual; attends safety meetings, as required; reports all accidents, violations or infractions to supervisor.
• Interrelates effectively and diplomatically with management and coworkers.
• Performs other related duties as assigned.

QUALIFICATIONS
The following generally describes the knowledge and ability required to enter the job and/or be learned within a short period of time in order to successfully perform the assigned duties.

Ability to:
• Appear to work on time.
• Interact effectively with co-workers.
• Understand & follow work rules and procedures.
• Accept constructive criticism.
• Ability to lead and manage others.
Assistant General Manager (continued)

Education and Experience Guidelines
Any combination of educationa and experience that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:

Education
• Graduation from high school or equivalent required.
• Bachelors Degree in Business or Public Administration.

Experience
• At least 10 years experience in management level public administration work.

License/Certification
• California Drivers License Must possess and maintain a valid California Driver License, provide proof thereof and maintain a driving record acceptable to the District's automobile insurance carrier.

PHYSICAL DEMANDS AND WORKING ENVIRONMENT
The conditions herein are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accomodations may be made to enable individuals with disabilities to perform the essential job functions.

ENVIRONMENT

PHYSICAL • Level One

VISION

HEARING

JOB STATUS Exempt Unrepresented

SALARY RANGE: 48

(10AGM)
ELsinore Valley Municipal Water District

Director of Operations

Job descriptions are intended to present a descriptive list of the range of duties performed by employees in this job. Specifications are NOT intended to reflect all duties performed with the job.

SUMMARY DESCRIPTION
Under general administrative direction, plans, directs, manages, and oversees the functions, programs, and operations of the Operations Department; oversees and directs the District's domestic water system, including water treatment, ground water production, water storage and delivery systems, the District's wastewater collection and treatment operations and source control program, the District's agricultural water pumping and delivery systems, the District's fleet maintenance and repair operations, District facilities and grounds maintenance and repair, and the District's Safety and Health Program as efficiently and economically as possible; formulates and implements operating policies and procedures within general administrative guidelines; coordinates assigned activities with other departments and outside agencies; and provides highly responsible and complex administrative support to the General Manager.

REPRESENTATIVE DUTIES
The following duties are typical for this classification. Incumbents may not perform all duties and/or may be required to perform additional or different duties from those set forth below to address business needs and changing business practices.

• Assumes full management responsibility for all Operations Department functions, programs, and operations including water treatment, ground water production, water storage and delivery systems, wastewater collection and treatment operations and source control program, agricultural water pumping and delivery systems, fleet maintenance and repair operations, facilities and grounds maintenance and repair, and the District's Safety and Health Program.

• Manages the development and implementation of Departmental goals, objectives, and priorities for each assigned service area; recommends and administers policies and procedures.

• Establishes within District policy, appropriate service and staffing levels; monitors and evaluates the efficiency and effectiveness of service delivery methods and procedures; allocates resources accordingly.

• Assesses and monitors work load, administrative support systems, and internal reporting relationships; identifies opportunities for improvement; directs and implements changes.

• Plans, directs, and coordinates, through subordinate level staff, the Operations Department’s work plan; assigns projects and programmatic areas of responsibility; reviews and evaluates work methods and procedures; meets with key staff to identify and resolve problems; encourages professional growth of subordinate managers.

• Selects, trains, motivates, and evaluates assigned personnel; provides or coordinates staff training; works with employees to correct deficiencies; implements discipline and termination procedures.

• Oversees and participates in the development and administration of the Department budget; approves the forecast of funds needed for staffing, equipment, materials, and supplies; approves expenditures and implements budgetary adjustments as appropriate and necessary.

• Develops and recommends cost saving mechanisms and programs; coordinates budget requests of the managed divisions to eliminate waste and maximize efficiency; monitors and controls departmental expenditures of approved budget allocations to assure the efficient and effective use of available resources; directs cost projections and estimates for departmental objectives; recommends Operations capital improvement needs to District Engineer.

• Maintains contact with various governmental and regulatory agencies regarding special projects through the use of subordinates; ensures compliance with reporting and other requirements of regulatory agencies; supervises the preparation of various reports to regulatory and other agencies.

• Develops, implements, and directs the maintenance of accurate records.

• Administers and directs through subordinate management staff, the work of predictive, preventive and reactive maintenance, repair and upkeep of District Administrative Office complex and grounds, the Operations, Warehouse and Fleet Maintenance Buildings, parking lots, parking lot structures and driveways, and support systems including heating, ventilation and air conditioning (HVAC) and emergency/backup power generation.

• Provides oversight of Mutual Water Company operational activities; represents the District in meetings with governmental agencies, private firms, contractors, vendors and others as necessary; assists District Finance Department with related financial and budgetary requirements.
Director of Operations (continued)

- Oversees and directs through subordinate safety staff the District's comprehensive Safety and Health Program; plans, implements, and directs formulation of operational safety procedures and manuals including District's major disaster program; interfaces with the various regulatory and governmental agencies, as required.
- Interrelates effectively and diplomatically in all areas of employee relations, always projecting a professional image in keeping with the District's goals and objectives while exercising the highest degree of confidentiality.
- Provides staff assistance to the General Manager; prepares and presents staff reports and other necessary correspondence.
- Represents the Operations Department to other departments, elected officials, and outside agencies; coordinates assigned activities with those of other departments and outside agencies and organizations.
- Explains, justifies, and defends department programs, policies, and activities; negotiates and resolves sensitive and controversial issues.
- Participates on a variety of boards, commissions, and committees.
- Attends and participates in professional group meetings; stays abreast of new trends and innovations in the field of operation maintenance; directs the incorporation of new developments into program areas, as appropriate.
- Responds to and resolves difficult and sensitive citizen inquiries and complaints.
- Reads, understands and complies with the District's Safety Manual; attends safety meetings as required; reports all accidents, violations or infractions occurring within the Operations Department; ensures that departmental functions are carried out in a safe and efficient manner.
- Performs related duties as required.

QUALIFICATIONS
The following generally describes the knowledge and ability required to enter the job and/or be learned within a short period of time in order to successfully perform the assigned duties.

Ability to:
- Manage and direct a comprehensive domestic water system program.
- Develop and administer departmental goals, objectives, and procedures.
- Prepare and administer large and complex budgets.
- Analyze and assess programs, policies, and operational needs and make appropriate adjustments.
- Research, analyze, and evaluate new service delivery methods and techniques.
- Select, train, and evaluate staff.
- Plan, organize, direct, and coordinate the work of lower level staff.
- Delegate authority and responsibility.
- Analyze problems, identify alternative solutions, project consequences of proposed actions, and implement recommendations in support of goals.
- Prepare clear and concise administrative and financial reports.
- Understand the organization and operation of the District and of outside agencies as necessary to assume assigned responsibilities.
- Interpret and apply applicable federal, state, and local policies, laws, and regulations.
- Identify and respond to sensitive community and organizational issues, concerns, and needs.
- Effectively represent the District to outside individuals and agencies to accomplish the goals and objectives of the unit.
- Work cooperatively with other departments, District officials, and outside agencies.
- Communicate clearly and concisely, both orally and in writing.
- Establish and maintain effective working relationships with those contacted in the course of work.

Education and Experience Guidelines
Any combination of education and experience that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:

Education
- Equivalent to a Bachelor's Degree from an accredited college or university with major course work in business administration, public administration, or related field.
Experience
- Ten (10) years of increasingly responsible experience in municipal utility administration including five years of management and administrative responsibility, principles, operations and techniques, including planning, budgeting, safety and staff organization and development.

Knowledge
- Operational characteristics, services, and activities of a comprehensive domestic water system program.
- Advanced principles and practices of water distribution systems including wells, booster stations and water storage facilities.
- Advanced principles and practices of water treatment, wastewater collection/treatment and agricultural water delivery system.
- Advanced principles and practices of fleet maintenance management.
- Advanced principles and practices of building and grounds maintenance management.
- Principles and practices of Injury and Illness Prevention Program Administration.
- Principles and practices of program development and administration.
- Principles and practices of budget preparation and administration.
- Principles of supervision, training, and performance evaluation.
- Pertinent federal, state, and local laws, codes, and regulations.
- Office procedures, methods, and equipment including computers and applicable software applications such as word processing, spreadsheets, and databases.

License/Certification
- Possession of an appropriate, valid driver’s license.
- Certification required in District provided CPR/First Aid training.
- Possession of a Valid Grade IV California Water Environment Certification in the disciplines of Mechanical Technology and/or Wastewater Collection Systems is highly desirable.
- Possession of a State of California certification in Water or Wastewater Treatment Plant Operations is desirable.
- Possession of a State of California, Department of Health Services, Water Distribution Operator Certification is desirable.
- Possession of a United States Department of Labor (OSHA) Safety Trainer Certification is desirable.
- Possession of a California Department of Food and Agriculture Qualified Applicator certification is desirable.

PHYSICAL DEMANDS AND WORKING ENVIRONMENT
The conditions herein are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential job functions.

ENVIRONMENT
Standard office setting.

PHYSICAL
- Level One

Incumbents require sufficient mobility to work in an office setting; stand or sit for prolonged periods of time; operate office equipment including use of a computer keyboard; light lifting and carrying; ability to verbally communicate to exchange information.

VISION
See in the normal visual range with or without correction; vision sufficient to read computer screens and printed documents; and to operate assigned equipment.

HEARING
Hear in the normal audio range with or without correction.
JOB STATUS          Exempt      Unrepresented
SALARY RANGE: 44
(80DOO)
Job descriptions are intended to present a descriptive list of the range of duties performed by employees in this job. Specifications are NOT intended to reflect all duties performed with the job.

SUMMARY DESCRIPTION
Under administrative direction, directs, manages, supervises, and coordinates the activities and operations of the Wastewater Division within the Operations Department including collection system pipelines, lift stations, wastewater reclamation treatment facilities and the District’s facilities source control program; coordinates assigned activities with other divisions, departments, and outside agencies; and provides highly responsible and complex administrative support to the Director of Operations.

REPRESENTATIVE DUTIES
The following duties are typical for this classification. Incumbents may not perform all duties and/or may be required to perform additional or different duties from those set forth below to address business needs and changing business practices.

- Assumes management responsibility for assigned services and activities of the Wastewater Division including organizing, scheduling, assigning and supervising directly, and through subordinates, the daily and long-term management and operation of the District’s wastewater reclamation plants, wastewater collection systems including lift stations, foremen and gravity lines and the District’s source control program.
- Manages and participates in the development and implementation of goals, objectives, and priorities for assigned programs; recommends and administers policies and procedures.
- Monitors and evaluates the efficiency and effectiveness of service delivery methods and procedures; recommends, within departmental policy, appropriate service and staffing levels.
- Plans, directs, coordinates, and reviews the work plan for assigned staff; assigns work activities, projects, and programs; reviews and evaluates work products, methods, and procedures; meets with staff to identify and resolve problems.
- Selects, trains, motivates, and evaluates assigned personnel; provides or coordinates staff training; works with employees to correct deficiencies; implements discipline and termination procedures.
- Oversees and participates in the development and administration of the Wastewater Division’s annual budget including capital outlay and capital improvement projects; participates in the forecast of funds needed for staffing, equipment, materials, and supplies; monitors and approves expenditures; implements adjustments.
- Reports significant operational problems and recommendations for resolution to the Director of Operations; in emergencies, has the authority to take corrective actions where such actions are deemed essential to public safety and continued service to the District’s customers.
- Prepares and submits periodic reports in accordance with District and other regulatory agency requirements.
- Provides professional operational advice related to the construction of various District water facilities and field projects in progress, as necessary.
- Administers and reviews reclaimed water facilities and users for compliance with District standards and other applicable federal, state, and local regulations.
- Maintains up-to-date knowledge of wastewater regulations and makes recommendations to ensure current and future District compliance with all local, state, and federal regulations.
- Administers the District’s Industrial Waste Source Control Program; works with Industrial Waste Inspector to schedule routine source control investigations and inspections.
- Monitors requisition of supplies, materials and equipment for the District’s wastewater facilities and collection systems.
- Interrelates effectively and diplomatically in all areas of employee relations, always projecting a professional image in keeping with the District’s goals and objectives while exercising the highest degree of confidentiality.
- Serves as the Incident Commander during hazmat and confined space rescue operations.
- Provides responsible staff assistance to the Director of Operations; conducts a variety of organizational studies, investigations, and operational studies; recommends modifications to wastewater programs, policies, and procedures as appropriate.
Wastewater Operations Manager (continued)

- Serves as the liaison for the Wastewater Division to other divisions, departments, and outside agencies; negotiates and resolves sensitive and controversial issues; interprets policies and procedures established by regulatory agencies.
- Serves as staff on a variety of boards, commissions, and committees; prepares and presents staff reports and other necessary correspondence.
- Attends and participates in professional group meetings; stays abreast of new trends and innovations in the field of wastewater operations and administration; directs the incorporation of new developments into program areas, as appropriate.
- Responds to and resolves difficult and sensitive citizen inquiries and complaints.
- Reads, understands, and ensures compliance with the District Safety Manual; attends safety meetings, as required; reports all accidents, violations, or infractions to supervisor.
- Performs related duties as required.

QUALIFICATIONS

The following generally describes the knowledge and ability required to enter the job and/or be learned within a short period of time in order to successfully perform the assigned duties.

Ability to:

- Oversee and participate in the management of a comprehensive wastewater operations program.
- Oversee, direct, and coordinate the work of lower level staff.
- Select, train, and evaluate staff.
- Oversee and participate in the development and administration of division goals, objectives, and procedures.
- Research, analyze, and evaluate new service delivery methods and techniques.
- Prepare and administer large program budgets.
- Prepare clear and concise reports including administrative and financial reports.
- Read and interpret blueprints, schematics, plans, and drawings.
- Manage multiple tasks and projects.
- Prioritize work loads and goals.
- Operate office equipment including computers and supporting word processing, spreadsheet, and database applications.
- Ensure adherence to established safety rules, regulations and guidelines.
- Analyze problems, identify alternative solutions, project consequences of proposed actions and implement recommendations in support of goals.
- Understand the organization and operation of the District and of outside agencies as necessary to assume assigned responsibilities.
- Understand, interpret, and apply general and specific administrative and departmental policies and procedures as well as applicable federal, state, and local policies, laws, and regulations.
- Effectively represent the District to outside individuals and agencies to accomplish the goals and objectives of the unit.
- Work cooperatively with other departments, District officials, and outside agencies.
- Communicate clearly and concisely, both orally and in writing.
- Establish and maintain effective working relationships with those contacted in the course of work.

Education and Experience Guidelines

Any combination of education and experience that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:

Education

- Equivalent to the completion of the twelfth grade supplemented by college level coursework in wastewater operations and water distribution or a related field.
Experience
- Seven years of increasingly responsible experience in the operation, inspection, maintenance, and repair of wastewater collection, pumping systems, wastewater treatment and wastewater reclamation including four years of administrative and supervisory responsibility.

Knowledge
- Operational characteristics, services, and activities of a wastewater operations program.
- Advanced wastewater treatment principles, methods, tools and equipment, safety procedures, wastewater sampling and control test procedures, chemicals and regulatory requirements.
- Modern and complex principles and practices of operating a wastewater treatment plant.
- Principles and techniques of various processes and sub processes that effectively result in the efficient treatment of wastewater.
- Principles and practices of operating equipment such as pneumatic and hydraulic tools.
- Use, application, and safe handling of chemicals, chemical agents, and biological processes in the effective treatment of wastewater.
- Principles and practices of program development and administration.
- Principles and practices of budget preparation and administration.
- Principles of supervision, training, and performance evaluation.
- Pertinent federal, state, and local laws, codes, and regulations.
- Principles and procedures of record keeping.
- Office procedures, methods, and equipment including computers and applicable software applications such as word processing, spreadsheets, and databases.

License/Certification
- Possession of an appropriate, valid driver’s license.
- Possession of a valid Grade V Wastewater Treatment Operator Certificate issued by the California State Water Resources Control Board.
- Possession of a valid Grade IV Wastewater Collection Systems Certification issued by the California Water Environment Association.
- Possession of a valid Grade I Environmental Compliance Inspector Certification issued by the California Waster Environment Association.

PHYSICAL DEMANDS AND WORKING ENVIRONMENT
The conditions herein are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential job functions.

ENVIRONMENT
Standard office setting with some travel to various locations to attend meetings or to inspect job sites.

PHYSICAL
- Level One

Incumbents require sufficient mobility to work in an office setting; stand, walk or sit for prolonged periods of time; operate office equipment including use of a computer keyboard; light lifting and carrying; ability to verbally communicate to exchange information.

VISION
See in the normal visual range with or without correction; vision sufficient to read computer screens and printed documents; and to operate assigned equipment.

HEARING
Hear in the normal audio range with or without correction.
ELSINORE VALLEY MUNICIPAL WATER DISTRICT
Wastewater Operations Manager (continued)

JOB STATUS       Exempt       Unrepresented

SALARY RANGE: 40

(90WOP)
Job descriptions are intended to present a descriptive list of the range of duties performed by employees in this job. Specifications are NOT intended to reflect all duties performed with the job.

**SUMMARY DESCRIPTION**

Under general direction, oversees, supervises, and coordinates the work of a number of crews engaged in sanitary sewer maintenance and operation within the Wastewater Department; assists in inspection of sewer lines and mains and performs skilled and supervisory work in the construction, maintenance and repair of sanitary sewers and sewage lift stations; participates in the District’s Hazwhopper Program; coordinates assigned activities with other divisions, outside agencies, and the general public; may be required to perform weekend duty, standby duty and call back for sewer and/or water problems; and provides highly responsible and complex staff assistance to the Wastewater Operations Manager.

**REPRESENTATIVE DUTIES**

The following duties are typical for this classification. Incumbents may not perform all duties and/or may be required to perform additional or different duties from those set forth below to address business needs and changing business practices.

- Assumes responsibility for collection systems activities and operations within the Wastewater Department including the work of a number of crews engaged in sanitary sewer maintenance and operation.
- Coordinates the organization, staffing, and operational activities for the wastewater collections program.
- Directs, coordinates, and reviews the work plan for assigned wastewater collections services and activities; assigns work activities and projects; monitors work flow; reviews and evaluates work products, methods, and procedures; meets with staff to identify and resolve problems.
- Participates in the development and implementation of goals, objectives, and priorities; recommends and participates in the implementation of resulting policies and procedures; monitors work activities to ensure compliance with established policies and procedures.
- Identifies opportunities for improving service delivery methods and procedures; identifies resource needs; reviews with appropriate management staff; implements improvements.
- Selects, trains, motivates, and evaluates assigned personnel; provides or coordinates staff training; works with employees to correct deficiencies; implements discipline and termination procedures.
- Participates in the development and administration of assigned program budget; forecasts funds needed for staffing, equipment, materials, and supplies; monitors and approves expenditures; recommends adjustments as necessary.
- Supervises, schedules, assigns and participates in the work of skilled and unskilled workers engaged in the maintenance and repair of sewer lines including cleaning, rodding and replacement of sewer lines and manholes; supervises, schedules, assigns and participates in the operation and maintenance of sewage lift stations.
- Inspects the work of crews engaged in sewer maintenance and repair; assists in the inspection of existing and newly constructed sanitary sewer collection systems including conveyance lines and lift stations.
- Ensures compliance with the State Water Quality Control Board’s discharge permits concerning sanitary sewer overflows, sewer overflow prevention plans, and sewer overflow remediation plans.
- Applies, trains and directs others in the application of Pesticides and Herbicides.
- Operates a variety of heavy equipment including, but not limited to, tractor trailer unit, crane, skip loader, tandem drive axle rigs, service trucks and backhoe/loaders as necessary.
- Must be able to respond to emergency call-out situations and perform standby duty for emergency response after hours, on weekends and holidays according to predetermined schedule; while performing stand-by duty and during emergency situations, or as otherwise directed, diagnoses and performs corrective actions involving collection system and sewage liftstation malfunctions using a variety of specialized mechanical and electrical tools.
- Performs confined space and permit confined space entries as defined by the California Code of Regulations-Title8. General Industry Safety Orders, Section 5157 and Federal OSHA Standards 29 CFR 1910.146. Has designated authority to complete pre-entry checklists, performs atmospheric testing and evaluation of various entry conditions and situations as outlined in Appendix C to the above referenced regulations.
- Provides staff assistance to the Wastewater Operations Manager; conducts a variety of studies and investigations; develops and recommends modifications to wastewater collections programs, policies, and procedures as appropriate.
Wastewater Collections System Superintendent

- Maintains records concerning operations and programs; prepares reports on operations and activities; may keep operational records, such as operations logs, test results, and unusual operating conditions; may prepare regulatory reports for review by Utility Operations Manager; may be required to update sewer overflow remediation and prevention plans.
- Coordinates collection system maintenance activities with those of other divisions and outside agencies and organizations; resolves sensitive and controversial issues.
- Serves as staff on a variety of boards, commissions, and committees; prepares and presents staff reports and other necessary correspondence.
- Attends and participates in professional group meetings; stays abreast of new trends and innovations in the field of collection system maintenance; directs and participates in the incorporation of new developments into program areas, as appropriate.
- Responds to and resolves citizen inquires and complaints related to sewer maintenance, repairs, lift stations, and sewer odors.
- Review collection system and liftstation plans.
- Reads, understands, and ensures compliance with the District Safety Manual; attends and may be responsible for initiating safety meetings, as required; reports all accidents, violations, or infractions to supervisor.
- Performs related duties as required.

QUALIFICATIONS
The following generally describes the knowledge and ability required to enter the job and/or be learned within a short period of time in order to successfully perform the assigned duties.

Ability to:
- Oversee and participate in the management of collection systems maintenance activities and operations within the Wastewater Department.
- Supervise, direct, and coordinate the work of assigned staff.
- Plan and organize work to meet changing priorities and deadlines.
- Select, train, and evaluate staff.
- Participate in the development and administration of division goals, objectives, and procedures.
- Research, analyze, and evaluate new service delivery methods and techniques.
- Understand the organization and operation of the District and of outside agencies as necessary to assume assigned responsibilities.
- Understand, interpret, and apply general and specific administrative and departmental policies and procedures as well as applicable federal, state, and local policies, laws, and regulations.
- Participate in the preparation and administration of assigned budgets.
- Prepare clear and concise reports including administrative and financial reports.
- Analyze problems, identify alternative solutions, project consequences of proposed actions and implement recommendations in support of goals.
- Effectively represent the District to outside individuals and agencies to accomplish the goals and objectives of the unit.
- Work cooperatively with other departments, District officials, and outside agencies.
- Respond tactfully, clearly, concisely, and appropriately to inquiries from the public, District staff, or other agencies on sensitive issues in area of responsibility.
- Operate a variety of vehicles and equipment in a safe and effective manner.
- Use Self Contained Breathing Apparatus (SCBA).
- Communicate clearly and concisely, both orally and in writing.
- Establish and maintain effective working relationships with those contacted in the course of work.
Education and Experience Guidelines

Any combination of education and experience that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:

Education/Training

- Equivalent to the completion of the twelfth grade supplemented by college level course work in wastewater operations or a related field.

Experience

- Six years of responsible experience in lift station operation and line cleaning including three years of administrative and supervisory responsibility.

Knowledge

- Operations, services, and activities of a collection systems maintenance program.
- Modern wastewater system methods, materials, practices, tools, machinery, and technical equipment.
- Operation of power equipment, including trucks, loaders and related equipment.
- Operational characteristics of maintenance and construction equipment and tools.
- Advanced Methods, techniques and safety practices in maintaining wastewater systems.
- Confined space entry.
- The use of power operated and hand tools and safety gear.
- Mathematical principles.
- Principles and practices of record keeping.
- Occupational hazards and standard safety practices including those used for entrance into confined spaces.
- Principles of supervision, training, and performance evaluation.
- Principles and practices of budget preparation and administration.
- Basic principles and practices of program development and administration.
- Pertinent federal, state, and local laws, codes, and regulations.
- Principles and procedures of record keeping.
- Office procedures, methods, and equipment including computers and applicable software applications such as word processing, spreadsheets, and databases.

License/Certification

- Possession of an appropriate, valid driver’s license.
- Possession of a Class A California Drivers License with air brake and tank endorsements within 6 months of hire.
- Possession of a valid Grade III Collection Systems Maintenance Technologist Certification issued by the California Water Environment Association (CWEA).
- Possession of a valid Grade II Plant Maintenance Electrical/Instrumentation or Mechanical Technology Certification issued by the California Water Environment Association (CWEA).
- Possession of a confined space entry supervisor certificate.
- Must hold or be willing to be trained to 8 hour First Responder level for disaster preparedness and emergency response purposes.
- Certification required in District provided CPR/First Aid and Bloodborne Pathogen training.
- Possession of a Grade IV Collection System Maintenance Certification issued by CWEA is desirable.
- Possession of a Qualified Applicators Certificate issued by the State of California, Department of Food and Agriculture is desirable.
PHYSICAL DEMANDS AND WORKING ENVIRONMENT
The conditions herein are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential job functions.

ENVIRONMENT
Standard office setting and outdoor field environment; travel from site to site; exposure to noise, dust, grease, smoke, fumes, noxious odors, gases, vibrations, and all types of weather and temperature conditions; exposure to hazardous traffic conditions; work in or around water; work and/or walk on various types of surfaces including slippery or uneven surfaces and rough terrain; incumbents may be required to work extended hours including evenings and weekends.

PHYSICAL
• Level Three
• NIDA
• Pulmonary

Incumbents require sufficient mobility to work in an office setting and field environment; walk, stand, and sit for prolonged periods of time; frequently stoop, bend, kneel, crouch, crawl, climb, reach, and twist; push, pull, lift, and/or carry light to moderate amounts of weights; operate office equipment including use of a computer keyboard; operate assigned equipment and vehicles; ability to verbally communicate to exchange information.

VISION
See in the normal visual range with or without correction; vision sufficient to read computer screens and printed documents; and to operate assigned equipment.

HEARING
Hear in the normal audio range with or without correction.

JOB STATUS Non-Exempt: Management Team Association

SALARY RANGE: 33

(91WWCSS)
ELSINORE VALLEY MUNICIPAL WATER DISTRICT

Wastewater Chief Plant Operator

Job descriptions are intended to present a descriptive list of the range of duties performed by employees in this job. Specifications are NOT intended to reflect all duties performed with the job.

SUMMARY DESCRIPTION
Under general direction, oversees, supervises, and coordinates wastewater treatment activities and operations within the Wastewater Treatment Division within the Operations Department; plans, organizes, trains, directs, and supervises a staff of wastewater treatment plant operators in the operation of the District’s state-of-art biological nutrient removal wastewater facility; ensures and demonstrates that the facility or facilities supervised are in compliance with all regulatory agencies through the documentation of plant performance and reporting these performances and compliance levels through monthly, quarterly, semi-annual and annual reports; coordinates assigned activities with other divisions, outside agencies, and the general public; and provides highly responsible and complex staff assistance to the Wastewater Operations Manager.

REPRESENTATIVE DUTIES
The following duties are typical for this classification. Incumbents may not perform all duties and/or may be required to perform additional or different duties from those set forth below to address business needs and changing business practices.

- Assumes responsibility for wastewater treatment activities and operations within the Wastewater Treatment Division within the Operations Department including the operation of the District’s state-of-art biological nutrient removal wastewater facility.
- Coordinates the organization, staffing, and operational activities for the wastewater treatment plant program.
- Directs, coordinates, and reviews the work plan for assigned wastewater treatment services and activities; assigns work activities and projects; monitors work flow; reviews and evaluates work products, methods, and procedures; meets with staff to identify and resolve problems.
- Participates in the development and implementation of goals, objectives, and priorities; recommends and participates in the implementation of resulting policies and procedures; monitors work activities to ensure compliance with established policies and procedures.
- Identifies opportunities for improving service delivery methods and procedures; identifies resource needs; reviews with appropriate management staff; implements improvements.
- Selects, trains, motivates, and evaluates assigned personnel; provides or coordinates staff training; establishes performance requirements and personnel development targets for assigned staff; works with employees to correct deficiencies; implements discipline and termination procedures.
- Participates in the development and administration of assigned program budget; forecasts funds needed for staffing, equipment, materials, and supplies; monitors and approves expenditures; recommends adjustments as necessary.
- Provides day-to-day leadership and works with staff to ensure a high performance, safe, efficient and customer service-oriented work environment that supports achieving the facility’s and District’s mission, strategic plan, objectives and values.
- Reads and interprets plant piping and distribution plans; assists in locating and troubleshooting plant malfunctions as necessary.
- Maintains operational records, such as plant operational logs, test results, unusual operating conditions, and maintenance of work performed; generates monthly and annual regulatory reports as required for operations.
- Monitors, researches, develops, and recommends improvements, modifications, enhancements, and changes to the Facility’s DCS System.
- Reviews and coordinates with appropriate personnel the implementation of local, state and federal laws and regulations regarding wastewater treatment, effluent disposal, biosolids and grit disposal.
- Ensures operational status of facility’s treatment systems and processes; ensures treatment standards, and goals are achieved through proper operation and maintenance of facilities and equipment.
- Ensures the District’s safety program and goals are implemented and carried out within the facility.
- Inspects plant facilities and evaluates laboratory and operational performance data to analyze trends; directs staff in making process changes to ensure plant compliance with Federal and State regulations pertaining to wastewater treatment and disposal.
Wastewater Chief Plant Operator (continued)

- Schedules delivery of chemicals and supplies with vendors; places orders and requisitions for materials and supplies.
- Interrelates effectively and diplomatically in all areas of employee relations, always projecting a professional image in keeping with the District’s goals and objectives while exercising the highest degree of confidentiality.
- Provides staff assistance to the Wastewater Operations Manager; conducts a variety of studies and investigations; develops and recommends modifications to wastewater treatment programs, policies, and procedures as appropriate.
- Maintains records concerning operations and programs; prepares reports on operations and activities.
- Coordinates assigned activities with those of other divisions and outside agencies and organizations; resolves sensitive and controversial issues.
- Serves as staff on a variety of boards, commissions, and committees; prepares and presents staff reports and other necessary correspondence.
- Attends and participates in professional group meetings; stays abreast of new trends and innovations in the field of wastewater treatment; directs and participates in the incorporation of new developments into program areas, as appropriate.
- Responds to and resolves citizen inquiries and complaints.
- Reads, understands, and ensures compliance with the District Safety Manual; attends safety meetings, as required; reports all accidents, violations, or infractions to supervisor.
- Performs related duties as required.

QUALIFICATIONS
The following generally describes the knowledge and ability required to enter the job and/or be learned within a short period of time in order to successfully perform the assigned duties.

Ability to:
- Oversee and participate in the management of wastewater treatment activities and operations within the Wastewater Treatment Division within the Operations Department.
- Supervise, direct, and coordinate the work of assigned staff.
- Plan and organize work to meet changing priorities and deadlines.
- Select, train, and evaluate staff.
- Participate in the development and administration of division goals, objectives, and procedures.
- Research, analyze, and evaluate new service delivery methods and techniques.
- Understand the organization and operation of the District and of outside agencies as necessary to assume assigned responsibilities.
- Understand, interpret, and apply general and specific administrative and departmental policies and procedures as well as applicable federal, state, and local policies, laws, and regulations.
- Participate in the preparation and administration of assigned budgets.
- Prepare clear and concise reports including administrative and financial reports.
- Analyze problems, identify alternative solutions, project consequences of proposed actions and implement recommendations in support of goals.
- Effectively represent the District to outside individuals and agencies to accomplish the goals and objectives of the unit.
- Work cooperatively with other departments, District officials, and outside agencies.
- Respond tactfully, clearly, concisely, and appropriately to inquiries from the public, District staff, or other agencies on sensitive issues in area of responsibility.
- Respond within thirty (30) minute time period to the District’s Corporate Yard while on standby duty; must be able to communicate by telephone while on standby duty.
- Communicate clearly and concisely, both orally and in writing.
- Establish and maintain effective working relationships with those contacted in the course of work.
ELSIOR VALLEY MUNICIPAL WATER DISTRICT

Wastewater Chief Plant Operator (continued)

Education and Experience Guidelines

Any combination of educational experience that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:

**Education**

- Equivalent to the completion of the twelfth grade supplemented by college level coursework in wastewater treatment or a related field.

**Experience**

- Six years of responsible experience in the operation, construction, maintenance, inspection and repair of a wastewater treatment facility with biological nutrient removal processes including three years of administrative and supervisory responsibility.

**Knowledge**

- Operations, services, and activities of a wastewater treatment program.
- Advanced wastewater treatment principles, methods, tools and equipment, safety procedures, wastewater sampling and control test procedures, chemicals and regulatory requirements.
- Modern and complex principles and practices of operating a wastewater treatment plant.
- Principles and techniques of various processes and sub processes that effectively result in the efficient treatment of wastewater.
- Principles and practices of operating equipment such as pneumatic and hydraulic tools.
- Use, application, and safe handling of chemicals, chemical agents, and biological processes in the effective treatment of wastewater.
- Principles of supervision, training, and performance evaluation.
- Principles and practices of budget preparation and administration.
- Basic principles and practices of program development and administration.
- Pertinent federal, state, and local laws, codes, and regulations.
- Principles and procedures of record keeping.
- Office procedures, methods, and equipment including computers and applicable software applications such as word processing, spreadsheets, and databases.

**License/Certification**

- Possession of an appropriate, valid driver's license.
- Certification required in the District-provided CPR/First Aid training.
- Possession of a valid Grade IV Wastewater Treatment Plant Operator Certificate issued by the California State Water Resources Control Board.
- Must hold or be willing to be trained in 24 hour Hazardous Technician Hazwhoper level for disaster preparedness and emergency response purposes.

**PHYSICAL DEMANDS AND WORKING ENVIRONMENT**

The conditions herein are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential job functions.

**ENVIRONMENT**

Wastewater treatment plant and field environment; exposure to noise, dust, grease, fumes, gases, potentially hazardous chemicals, electrical energy, and inclement weather conditions including wet and/or humid conditions; work around water or wastewater; work on slippery surfaces; regularly work near moving mechanical parts; and work around moderately loud noise levels; incumbents may be required to work evenings, nights, and weekends.

**PHYSICAL**

- Level Three
- NIDA
- Pulmonary
Wastewater Chief Plant Operator (continued)

Incumbents require sufficient mobility to work in a wastewater treatment plant and field environment; walk, stand, and sit for prolonged periods of time; frequently stoop, bend, kneel, crouch, crawl, climb, reach, and twist; push, pull, lift, and/or carry moderate to heavy amounts of weights; operate assigned equipment and vehicles; ability to verbally communicate to exchange information.

VISION
See in the normal visual range with or without correction; vision sufficient to read computer screens and printed documents; and to operate assigned equipment.

HEARING
Hear in the normal audio range with or without correction.

JOB STATUS  Exempt  Management Team Association

SALARY RANGE: 36

(90WWCPO)
ELsinore Valley Municipal Water District

Senior Lift Station Maintenance Technician

Job descriptions are intended to present a descriptive list of the range of duties performed by employees in this job. Specifications are NOT intended to reflect all duties performed with the job.

SUMMARY DESCRIPTION
Under direction, leads, oversees, and participates in the more complex and difficult work of staff responsible for the maintenance, operation, diagnostic testing, installation and repair of instrumentation and control systems, auto-dialer maintenance/replacement/programming and other types of technical maintenance and repair involved in the District’s sewage lift stations, wastewater collection systems and related support equipment; ensures that the general waste discharge orders issued by the State Water Quality Board are complied with; operates a variety of maintenance and construction tools and equipment; may be required to participate in the research, formulation and implementation of job specific safety programs; and performs a variety of tasks relative to assigned areas of responsibility.

REPRESENTATIVE DUTIES
The following duties are typical for this classification. Incumbents may not perform all duties and/or may be required to perform additional or different duties from those set forth below to address business needs and changing business practices.

- Plans, leads, and reviews the work of staff responsible for the maintenance, operation, diagnostic testing, installation and repair of instrumentation and control systems, auto-dialer maintenance/replacement/programming and other types of technical maintenance and repair involved in the District’s sewage lift stations, wastewater collection systems and related support equipment.
- Trains assigned employees in their areas of work including lift station maintenance methods, procedures, and techniques.
- Supervises the use, care, and operation of lift station maintenance equipment including crane truck, multi-meters, megometers, ampmeters, and loop calibrator.
- Verifies the work of assigned employees for accuracy, proper work methods, techniques, and compliance with applicable standards and specifications; ensures adherence to safe work practices and procedures; works with staff to correct deficiencies; communicates any possible inefficiencies to immediate supervisor; conducts tailgate safety meetings.
- Oversees and participates in installing, troubleshooting and maintaining various types of lift station control systems including, floats ultrasonic level controllers, pressurized air (bubbler) controllers and pressure differential controllers; field tests, troubleshoots, programs and maintains multi-zone auto dialers and alarm systems.
- Oversees, performs, repairs, inspects and troubleshoots work associated with electrical circuits, alarm circuits, motors, pumps, valves, piping and pneumatic/electrical controls; installs and modifies equipment as needed.
- Oversees and participates in using hand, bench and machine tools in the repair of pumps, valves, and other lift station machinery and equipment; operates drill presses, grinders and other related equipment; repairs/replaces bearings, shaft sleeves, pressure and drain piping and other parts.
- Leads and performs the installation of electrical and mechanical equipment including pumps, motors, valves, solenoids, timers; installs and maintains time delay relays, magnetic controllers, contact points, mechanical seals, seal fluid filters, lighting fixtures, receptacles, switches, fuses, bearings and gaskets.
- Oversees and participates in diagnosing and performing corrective action involving sewage lift station malfunctions using a variety of specialized tools and testing/diagnostic instrumentation.
- Reads, interprets, performs, supervises and inspects work from electrical schematics blueprints, plans and maps as related to sewage liftstations, control systems, wastewater collection system maintenance and manufacturer maintenance and operation manuals; performs plan checking, as directed, related to lift station and collection system construction/improvements.
- Maintains, schedules and performs repairs at all District sewage lift stations, coordinates and performs repair operations, equipment replacement and related special projects with, and as directed by, supervisor; maintains records and prepares a variety of reports including time, supplies/materials relevant to collections system and pumping system operations.
- Oversees and participates in troubleshooting and maintaining stand-by power generation systems, transfer switches and related components; bends and installs electrical conduit and pull wire for power above and below ground.
Senior Lift Station Maintenance Technician

- Performs confined space and permit required confined space entry as defined by the California Code of Regulations - Title 8, General Industry Safety Orders, Section 5157 and Federal OSHA Standard 29 CFR 1910.146. Has designated authority to complete re-entry checklists, perform atmospheric testing and evaluation of various entry conditions and situations as outlined in Appendix C to the above referenced regulations. Supervises the calibration and maintains confined space atmospheric testing instrumentation and self contained breathing apparatus units.
- Applies pesticides and herbicides under the direction of a licensed applicator.
- Performs standby duty as assigned and must be able to respond to emergency call-out situations, while performing stand-by duty, during emergency situations and as otherwise directed, diagnoses and performs corrective actions involving collection system and sewage liftstation malfunctions using a variety of specialized and electrical tools.
- Responds to public inquiries in a courteous manner; provides information within the area of assignment; resolves complaints in an efficient and timely manner.
- Estimates time, materials, and equipment required for jobs assigned; requisitions materials as required; keeps inventory of replacement parts; prepares and maintains records and written reports, as required.
- Assists superintendent in department budget preparation.
- Reads, understands, and ensures compliance with the District Safety Manual; attends safety meetings, as required; reports all accidents, violations, or infractions to superintendent.
- Performs related duties as required.

QUALIFICATIONS
The following generally describes the knowledge and ability required to enter the job and/or be learned within a short period of time in order to successfully perform the assigned duties.

Ability to:
- Lead, organize, and review the work of assigned staff.
- Independently perform the most difficult maintenance, operation, diagnostic testing, installation and repair of instrumentation and control systems, auto-dialer maintenance/replacement/programming and other types of technical maintenance and repair involved in the District’s sewage lift stations, wastewater collection systems and related support equipment.
- Interpret, explain, and enforce department policies and procedures.
- Inspect, troubleshoot, diagnose, and repair electrical and electronic malfunctions.
- Operate a variety of maintenance and repair equipment in a safe and effective manner.
- Read, interpret, and work from blueprints, electrical diagrams and schematics, manufacturer instructions and directions.
- Accurate diagnose repair needs.
- Perform heavy manual labor.
- Perform preventative and corrective maintenance on assigned equipment.
- Perform assigned work in accordance with appropriate safety practices and regulations.
- Operate office equipment including computers.
- Work independently and with minimum direct supervision.
- Understand and carry out oral and written instructions.
- Maintain a variety of records.
- Respond within a thirty (30) minute time period to the District’s corporate yard during an emergency situation.
- Per Cal-OSHA, must be clean shaven (except for close trimmed mustache/sideburns) in order to comply with respirator face mask fit test requirements.
- Communicate clearly and concisely, both orally and in writing.
- Establish and maintain effective working relationships with those contacted in the course of work.
Senior Lift Station Maintenance Technician

Education and Experience Guidelines

Any combination of education and experience that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:

**Education**

- Equivalent to the completion of the twelfth grade supplemented by specialized training in the areas of mechanical equipment maintenance and repair.

**Experience**

- Three years of experience in the maintenance and repair of sewage lift stations (or similar pumping applications) or experience in a mechanical trade such as electrical work, plumbing or pipe fitting, preferably at a journey level, and two years full time experience in the maintenance and repair of sewage lift stations.

**Knowledge**

- Operations, services, and activities of wastewater systems and facilities.
- Principles of lead supervision and training.
- Advanced methods and techniques for performing preventive and corrective maintenance on assigned equipment.
- Advanced principles, methods, materials, and tools employed in the repair and maintenance of assigned equipment, vehicles, and/or machinery.
- Advanced methods and techniques of performing diagnostic troubleshooting services.
- Advanced preventive and corrective maintenance techniques.
- Basic electrical and mechanical practices.
- Office procedures, methods, and equipment including computers.
- Principles and practices of record keeping.
- Occupational hazards and standard safety practices.
- Pertinent federal, state, and local laws, codes, and regulations.

**License/Certification**

- Possession of an appropriate, valid driver’s license.
- Possession of a Class A California Drivers License, with air brakes and tank endorsement, within 6 months of hire.
- Certification required in District provided CPR/First Aid and Bloodborne Pathogen training.
- Possession of a valid Grade I Plant Maintenance Technologist Certification issued by the California Water Environment Association.
- Possession of a valid Grade II Collection System Maintenance Technologist Certification issued by the California Water Environment Association.
- Possession of a valid Grade II or higher Electrical/Instrumentation Technologist Certification issued by the California Water Environment Association is required within 18 months of appointment.
- Be willing to be trained for and maintain 8 hour First Responder level certification disaster preparedness and emergency response purposes.
- Possession of a valid Grade III Plant Maintenance Technologist, and Grade III Plant Maintenance Electrical/Instrumentation Technologist Certification is desirable.

**PHYSICAL DEMANDS AND WORKING ENVIRONMENT**

The conditions herein are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential job functions.

**ENVIRONMENT**

Outdoor field environment; travel from site to site; exposure to noise, dust, grease, smoke, fumes, noxious odors, gases, vibrations, and all types of weather and temperature conditions; exposure to hazardous traffic conditions; work in or around water; work and/or walk on various types of surfaces including slippery or uneven surfaces and rough terrain; incumbents may be required to work extended hours including
Senior Lift Station Maintenance Technician

evenings and weekends.

PHYSICAL

• Level One

Incumbents require sufficient mobility to work in a field environment; walk, stand, and sit for prolonged periods of time; frequently stoop, bend, kneel, crouch, crawl, climb, reach, and twist; push, pull, lift, and/or carry moderate to heavy amounts of weights; operate assigned equipment and vehicles; ability to verbally communicate to exchange information.

VISION

See in the normal visual range with or without correction; vision sufficient to read printed documents and to operate assigned equipment.

HEARING

Hear in the normal audio range with or without correction

JOB STATUS

Non-Exempt: Employees Association

SALARY RANGE: 29

(90SLSMT)
EL SINORE VALLEY MUNICIPAL WATER DISTRICT

Senior Collection Systems Maintenance Worker

Job descriptions are intended to present a descriptive list of the range of duties performed by employees in this job. Specifications are NOT intended to reflect all duties performed with the job.

SUMMARY DESCRIPTION
Under direction, leads, oversees, and participates in the work of a crew performing a variety of unskilled, semi-skilled and skilled operation, maintenance, and repair work involved in the District’s sewage lift stations and sewage collection systems; ensures compliance with waste discharge orders issued by the California State Water Quality Control Board; operates and maintains a variety of maintenance and construction tools and equipment; and performs a variety of technical tasks relative to assigned areas of responsibility.

REPRESENTATIVE DUTIES
The following duties are typical for this classification. Incumbents may not perform all duties and/or may be required to perform additional or different duties from those set forth below to address business needs and changing business practices.

- Plans, leads, and reviews the work of staff responsible for performing a variety of unskilled, semi-skilled and skilled operation, maintenance, and repair work involved in the District’s sewage lift stations and sewage collection systems; participates in performing the most complex work of the unit including backfilling and compacting excavations to District standards.
- Trains assigned employees in their areas of work including collection systems maintenance methods, procedures, and techniques including confined space entry; assists in assigned employee evaluations.
- Supervises the use, care, and operation of collection systems equipment including Hydrojet, vacuum and mechanical line cleaning equipment.
- Verifies the work of assigned employees for accuracy, proper work methods, techniques, and compliance with applicable standards and specifications; ensures adherence to safe work practices and procedures; communicates any possible inefficiencies to immediate supervisor.
- Oversees and participates in flushing, rodding, cleaning, and repairing sewer collection lines and manholes; performs repair work resulting from mainline damage; raises manholes and cleanouts to grade; replaces system components.
- Oversees and participates in responding to system blockages and provides temporary repair of trench failures; performs system disconnects.
- Oversees and participates in excavating for various purposes; loads and unloads asphalt, rock, dirt, and construction and repair related materials and equipment.
- Oversees and participates in spreading and placing asphalt for patching and repairing street excavations as necessary including placement of hot and cold asphalt and the operation of equipment necessary to provide a finished street surface.
- Oversees and participates in operating a variety of sewer cleaners, jet rodders, pressure washers, and TV inspection equipment in the inspection, maintenance, and construction of sewer lines and laterals.
- Oversees the maintenance of all sewer equipment including emergency power generator, sewer rodder, power sprayer, and pneumatic tools; performs safety checks and checks fluid levels of vehicles and equipment; lubricates pumps, motors, and equipment; replaces sectional rods on sewer rodder; replaces and repairs high pressure hoses on Hydro-jet units and suction tubing on vacuum units; cleans assigned vehicles and equipment.
- Works at wastewater treatment plants under direct supervision of licensed operators.
- Assists Liftation Maintenance Technicians in the troubleshooting, maintenance and repair of the District’s sewage lift stations including pumps, motors control panels and standby power generators.
- Assists the Liftation Maintenance Technicians by monitoring and servicing lift station odor control systems and reading and interpreting mechanical and electrical plans as related to lift station operations.
- Oversees and participates in performing line locating and marking.
- Performs confined space and permit required confined space entries as defined by the California Code of Regulations - Title 8 GISO Section 5157 and Federal OSHA Standards 29 CFR1910.146; completes pre-entry checklists, performs atmospheric testing and evaluation of various entry conditions and situations as outlined in Appendix C of the above referenced regulations.
- Applies and may train and direct others in the application of pesticides and herbicides.
- Oversees and participates in the establishment of appropriate traffic control including safety devices, signs, and barricades; ensures safety of public and work crew; may flag traffic when necessary.
Senior Collection Systems Maintenance Worker

- Responds to emergency call out situations and perform standby duty for emergency response on weekends and holidays according to predetermined schedule; while performing stand-by duty, during emergency situations, or as otherwise directed, diagnoses and performs corrective actions involving collection system and assist Liftstation Maintenance Technician diagnoses and repairs of sewage liftstation malfunctions using a variety of specialized mechanical and electrical tools.
- Responds to public inquiries in a courteous manner; provides information within the area of assignment; resolves complaints in an efficient and timely manner.
- Estimates time, materials, and equipment required for jobs assigned; requisitions materials as required; keeps inventory of replacement parts; prepares and maintains records and written reports, as required.
- Assists supervisor in department budget preparation.
- Reads, understands, and ensures compliance with the District Safety Manual; attends safety meetings, as required; reports all accidents, violations, or infractions to supervisor.
- Performs related duties as required.

QUALIFICATIONS

The following generally describes the knowledge and ability required to enter the job and/or be learned within a short period of time in order to successfully perform the assigned duties.

Ability to:

- Lead, organize, and review the work of assigned staff.
- Independently perform the most difficult semi-skilled and skilled tasks involved in the operation, maintenance, and repair work involved in the District’s sewage lift stations and sewage collection systems.
- Interpret, explain, and enforce department policies and procedures.
- Perform a variety of un-skilled, semi-skilled, and skilled maintenance, operational, and repair tasks involved in the District’s sewage lift stations and sewage collection systems.
- Operate a variety of vehicles and equipment in a safe and effective manner.
- Use and operate vehicles and equipment, hand tools, and power tools and equipment required for the work in a safe and efficient manner.
- Ensure safety around work areas in high traffic.
- Perform heavy manual labor.
- Ensure adherence to safe work practices and procedures.
- Understand and carry out oral and written directions.
- Respond within a thirty (30) minute time period to the District’s Corporate Yard while on standby duty; must be able to communicate by telephone while on standby duty.
- Basic computer skills.
- Communicate clearly and concisely, both orally and in writing.
- Establish and maintain effective working relationships with those contacted in the course of work.

Education and Experience Guidelines

Any combination of education and experience that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:

Education/Training
- Equivalent to the completion of the twelfth grade.

Experience
- Three years of experience in sewer operation, maintenance, and repair.

Knowledge
- Operations, services, and activities of wastewater systems and facilities.
Senior Collection Systems Maintenance Worker

Knowledge

- Principles of lead supervision and training.
- Methods, tools, and equipment used in the maintenance, operational, and repair of wastewater systems.
- Operation of power equipment, including trucks, loaders and related equipment.
- Operational characteristics of maintenance and construction equipment and tools.
- Methods, techniques and safety practices in maintaining wastewater systems.
- Procedures and techniques used in concrete and asphalt work.
- Practices and procedures of traffic control.
- Confined space entry.
- The use of power operated and hand tools and safety gear.
- Basic mathematical principles.
- Basic principles and practices of record keeping.
- Occupational hazards and standard safety practices including those used for entrance into confined spaces.
- Pertinent federal, state and local codes, laws and regulations.

License/Certification

- Possession of an appropriate, valid driver’s license.
- Possession of a Class A California Drivers License with air brakes and tank endorsements within 6 months of hire.
- Possession of a Grade I Plant Maintenance Technologist and/or Grade III Collection System Maintenance Certification is desirable.
- Certification required in District provided CPR/First Aid and Bloodborne Pathogen training.
- Must hold or be willing to be trained to and maintain 8 hour First Responder level certification for disaster preparedness and emergency response purposes.
- Possession of a Grade I Plant Maintenance Technologist and/or Grade III Collection System Maintenance Certification is desirable.
- Possession of a Qualified Applicator Certificate issued by the State of California, Department of Food and Agriculture is desirable.

PHYSICAL DEMANDS AND WORKING ENVIRONMENT

The conditions herein are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential job functions.

ENVIRONMENT

Outdoor field environment; travel from site to site; exposure to noise, dust, grease, smoke, fumes, noxious odors, gases, vibrations, and all types of weather and temperature conditions; exposure to hazardous traffic conditions; work in or around water; work and/or walk on various types of surfaces including slippery or uneven surfaces and rough terrain; incumbents may be required to work extended hours including evenings and weekends.

PHYSICAL

- Level Three

- Pulmonary

Incumbents require sufficient mobility to work in a field environment; walk, stand, and sit for prolonged periods of time; frequently stoop, bend, kneel, crouch, crawl, climb, reach, and twist; push, pull, lift, and/or carry moderate to heavy amounts of weights; operate assigned equipment and vehicles; ability to verbally communicate to exchange
ELSINORE VALLEY MUNICIPAL WATER DISTRICT

Senior Collection Systems Maintenance Worker

information.

VISION
See in the normal visual range with or without correction; vision sufficient to read printed documents and to operate assigned equipment.

HEARING
Hear in the normal audio range with or without correction.

JOB STATUS Non-Exempt: Employees Association

SALARY RANGE: 27

(90SCSMW)
ELSIWRE VALLEY MUNICIPAL WATER DISTRICT

Lift Station Maintenance Technician

Job descriptions are intended to present a descriptive list of the range of duties performed by employees in this job. Specifications are NOT intended to reflect all duties performed with the job.

SUMMARY DESCRIPTION
Under general supervision, performs skilled work in the maintenance, operation, diagnostic testing, installation and repair of instrumentation and control systems, auto-dialer maintenance/replacement/programming and other types of technical maintenance and repair involved in the District's sewage lift stations, collection system and related support equipment; ensures compliance with the general waste discharge orders issued by the California Water Quality Board; operates a variety of maintenance and construction tools and equipment; and may be required to participate in formulation of District safety programs.

REPRESENTATIVE DUTIES
The following duties are typical for this classification. Incumbents may not perform all duties and/or may be required to perform additional or different duties from those set forth below to address business needs and changing business practices.

- Installs, troubleshoots and maintains various types of lift station control systems including floats, ultrasonic level controllers, pressurized air (bubbler) controllers and pressure differential controllers; field tests, troubleshoots, programs and maintains multi-zone auto dialers and alarm systems.
- Makes repairs and troubleshoots electrical circuits, alarm circuits, motors, pumps, valves, piping and pneumatic/electrical controls; installs and modifies equipment as needed.
- Uses hand, bench and machine tools in the repair of pumps, valves, and other lift station machinery and equipment; operates drill presses, grinders and other related equipment; repairs/replaces bearings, shaft sleeves, pressure and drain piping and other parts.
- Installs electrical and mechanical equipment including pumps, motors, valves, and solenoids, timers; installs and maintains time delay relays, magnetic controllers, contact points, mechanical seals, seal fluid filters, lighting fixtures, receptacles, switches, fuses, bearings and gaskets.
- Diagnoses and performs corrective action involving sewage lift station malfunctions using a variety of specialized tools and testing/diagnostic instrumentation.
- Reads, interprets and works from electrical schematic blueprints, plans and maps as related to sewage lift stations, control systems, manufacturer maintenance, operation manuals and wastewater collection system maintenance.
- Assists in training departmental staff in proper lift station maintenance methods, procedures, and techniques as assigned; works with staff to correct deficiencies.
- Assists in maintaining, scheduling and performing repairs at all District sewage lift stations; coordinates repair operations, equipment replacement and related special projects with, and as directed by the superintendent.
- Maintains records and prepares a variety of reports including time and supplies/materials relevant to collection system and pumping system operations.
- Troubleshoots and maintains stand-by power generation systems, transfer switches and related components; bonds and installs electrical conduit and pull wire for power above and below ground.
- Performs confined space and permit required confined space entry as defined by the California Code Of Regulations - Title 8, General Industry Safety Orders, Section 5157 and Federal OSHA Standard 29 CFR 1910.146; completes pre entry check lists, performs atmospheric testing and evaluation of various entry conditions and situations as outlined in Appendix C to the above referenced regulations, assists in the calibration and maintenance of confined space atmospheric testing instrumentation and self contained breathing apparatus units.
- Performs standby duty assigned and must be able to respond to emergency call-out situations; while performing stand-by duty, during emergency situations or as otherwise directed, diagnoses and performs corrective actions involving sewage lift station and collection system malfunctions using a variety of specialized mechanical and electrical tools.
- Reads, understands, and ensures compliance with the District Safety Manual; attends safety meetings, as required; reports all accidents, violations, or infractions to supervisor.
- Performs related duties as required.
QUALIFICATIONS
The following generally describes the knowledge and ability required to enter the job and/or be learned within a short period of time in order to successfully perform the assigned duties.

Ability to:
- Perform a variety of maintenance, operation, diagnostic testing, installation and repair of instrumentation and control systems, auto-dialer maintenance/replacement/programming and other types of technical maintenance and repair involved in the District’s sewage lift stations, collection system and related support equipment.
- Inspect, troubleshoot, diagnose, and repair electrical and electronic malfunctions.
- Operate a variety of maintenance and repair equipment in a safe and effective manner.
- Read, interpret, and work from blueprints, electrical diagrams and schematics, manufacturer instructions and directions.
- Accurately diagnose repair needs.
- Perform heavy manual labor.
- Perform preventative and corrective maintenance on assigned equipment.
- Perform assigned work in accordance with appropriate safety practices and regulations.
- Operate office equipment including computers.
- Work independently and with minimum direct supervision.
- Understand and carry out oral and written instructions.
- Maintain a variety of records.
- Must be able to respond within a thirty (30) minute time period to the District’s corporate yard during an emergency situation while on stand-by.
- Comply with Cal-OSHA respirator face mask fit test requirements.
- Use Self Contained Breathing Apparatus (SCBA).
- Communicate clearly and concisely, both orally and in writing.
- Establish and maintain effective working relationships with those contacted in the course of work.

Education and Experience Guidelines
Any combination of education and experience that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:

Education
- Equivalent to the completion of the twelfth grade supplemented by specialized training in the areas of mechanical equipment maintenance and repair.

Experience
- Two (2) years of full time experience in the maintenance and repair of sewage lift stations (or similar pumping applications) or experience in a mechanical trade such as electrical work, plumbing or pipe fitting, preferable at a journey level and 1 year full time experience in the maintenance and repair of sewage lift stations (or similar pumping applications).

Knowledge
- Operations, services, and activities of wastewater systems and facilities.
- Methods and techniques for performing preventive and corrective maintenance on assigned equipment.
- Operational characteristics of wastewater treatment plant systems and equipment.
- Principles, methods, materials, and tools employed in the repair and maintenance of assigned equipment, vehicles, and/or machinery.
- Methods and techniques of performing diagnostic troubleshooting services.
- Preventive and corrective maintenance techniques.
- Basic electrical and mechanical practices.
- Office procedures, methods, and equipment including computers.
- Principles and practices of record keeping.
- Occupational hazards and standard safety practices.
- Pertinent federal, state, and local laws, codes, and regulations.
License/Certification

- Possession of an appropriate, valid driver’s license.
- Possession of a Class A California Drivers License within 6 months of hire.
- Certification required in District provided CPR/First Aid and Bloodborne Pathogen training.
- Possession of a valid Grade I Plant Maintenance Certification issued by the California Water Environment Association.
- Possession of a valid Grade I Collection System Maintenance certification issued by the California Water Environment Association within 18 months of hire.
- Be willing to be trained to (and maintain) 8 hour First Responder level certification for disaster preparedness and emergency response purposes.
- Possession of a Grade II Plant Maintenance Technologist and Plant Maintenance Electrical/Instrumentation Certification is desirable.

PHYSICAL DEMANDS AND WORKING ENVIRONMENT
The conditions herein are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential job functions.

ENVIRONMENT
Outdoor field environment; travel from site to site; exposure to noise, dust, grease, smoke, fumes, noxious odors, gases, vibrations, and all types of weather and temperature conditions; exposure to hazardous traffic conditions; work in or around water; work and/or walk on various types of surfaces including slippery or uneven surfaces and rough terrain; incumbents may be required to work extended hours including evenings and weekends.

PHYSICAL

- Level One

Incumbents require sufficient mobility to work in a field environment; walk, stand, and sit for prolonged periods of time; frequently stoop, bend, kneel, crouch, crawl, climb, reach, and twist; push, pull, lift, and/or carry moderate to heavy amounts of weights; operate assigned equipment and vehicles; ability to verbally communicate to exchange information.

VISION
See in the normal visual range with or without correction; vision sufficient to read printed documents and to operate assigned equipment.

HEARING
Hear in the normal audio range with or without correction.

JOB STATUS
Non-Exempt: Employees Association

SALARY RANGE: 27
(90LSMT)
Collection Systems Maintenance Worker

Job descriptions are intended to present a descriptive list of the range of duties performed by employees in this job. Specifications are NOT intended to reflect all duties performed with the job.

SUMMARY DESCRIPTION
Under general supervision, performs a variety of un-skilled, semi-skilled and skilled maintenance, operational, and repair tasks involved in the District’s sewage collection systems and sewage lift stations; and operates a variety of maintenance and construction tools and equipment.

REPRESENTATIVE DUTIES
The following duties are typical for this classification. Incumbents may not perform all duties and/or may be required to perform additional or different duties from those set forth below to address business needs and changing business practices.

- Performs a variety of un-skilled, semi-skilled and skilled maintenance, operational, and repair tasks involved in the District’s sewage collection systems and sewage lift stations.
- Flushes, rods, cleans and repairs sewer collection lines and manholes; performs repair work resulting from mainline damage; raises manholes and cleanouts to grade; replaces system components.
- Responds to system blockages and provides temporary repair of trench failures; performs system disconnects.
- Excavates for various purposes; loads and unloads asphalt, rock, dirt and construction and repair related materials and equipment.
- Spreads and places asphalt for patching and repairing street excavations as necessary.
- Operates a variety of sewer cleaners, jet rodders, pressure washers, and TV inspection equipment in the inspection, maintenance, and construction of sewer lines and laterals.
- Maintains and performs minor maintenance of all sewer equipment including emergency power generator, sewer rodder, power sprayer, and pneumatic tools; performs safety checks and checks fluid levels of vehicles and equipment; lubricates pumps, motors, and equipment; replaces sectional rods on sewer rodder; replaces and repairs high pressure hoses on Hydro-jet units and suction tubing on vacuum units; cleans assigned vehicles and equipment.
- Assists Lift Station Maintenance Technicians with facility monitoring of lift stations; performs minor lift station maintenance and repair work; assists Lift Station Maintenance Technicians with major repairs.
- Performs line locating and marking.
- Performs confined space and permit confined space entries as defined by the California Code of Regulations - Title 8, General Industry Safety Orders, Section 5157 and Federal OSHA Standards 29 CFR 1910.146; completes pre-entry checklists, performs atmospheric testing and evaluation of various entry conditions and situations as outlined in Appendix C to the above referenced regulations.
- Applies pesticides and herbicides under the direction of a licensed applicator as assigned.
- Sets traffic control including safety devices, signs, and barricades; ensures safety of public and work crew; may flag traffic when necessary.
- Assists other departments in the performance of work as required.
- Responds to emergency call out situations and performs standby duty for emergency response after hours, on weekends and holidays according to predetermined schedule; while performing stand-by duty and during emergency situations, or as otherwise directed, diagnoses and performs corrective actions involving collection system and sewage liftstation malfunctions using a variety of specialized mechanical and electrical tools.
- Maintains records of work performed.
- Reads, understands, and ensures compliance with the District Safety Manual; attends safety meetings, as required; reports all accidents, violations, or infractions to supervisor.
- Performs related duties as required.

QUALIFICATIONS
The following generally describes the knowledge and ability required to enter the job and/or be learned within a short period of time in order to successfully perform the assigned duties.
Collection Systems Maintenance Worker

Ability to:
- Perform a variety of un-skilled, semi-skilled, and skilled maintenance, operational, and repair tasks involved in the District's sewage lift stations and sewage collection systems.
- Operate a variety of vehicles and equipment in a safe and effective manner.
- Use and operate vehicles and equipment, hand tools, and power tools and equipment required for the work in a safe and efficient manner.
- Use Self Contained Breathing Apparatus (SCBA).
- Ensure safety around work areas in high traffic.
- Perform heavy manual labor.
- Read, understand, and comply with the District Safety Manual.
- Must be able to respond within a thirty (30) minute time period to the District's Corporate Yard while on standby duty; must be able to communicate by telephone while on standby duty.
- Communicate clearly and concisely, both orally and in writing.
- Establish and maintain effective working relationships with those contacted in the course of work.

Education and Experience Guidelines
Any combination of education and experience that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:

Education
- Equivalent to the completion of the twelfth grade.

Experience
- Some general maintenance and repair experience is desirable.

Knowledge
- Operations, services, and activities of wastewater systems and facilities.
- Methods, tools, and equipment used in the maintenance, operational, and repair of wastewater systems.
- Operation of power equipment, including trucks, loaders and related equipment.
- Operational characteristics of maintenance and construction equipment and tools.
- Methods, techniques and safety practices in maintaining wastewater systems.
- Procedures and techniques used in concrete and asphalt work.
- Practices and procedures of traffic control.
- Confined space entry.
- The use of power operated and hand tools and safety gear.
- Computer hardware and applicable software at an intermediate level.
- Basic mathematical principles.
- Basic principles and practices of record keeping.
- Occupational hazards and standard safety practices including those used for entrance into confined spaces.

License/Certification
- Possession of an appropriate, valid driver's license.
- Possession of a Class A California Drivers License with air brakes and tank endorsements within 6 months of hire.
- Possession of a CWEA Collection System Maintenance Technologist Grade I certificate within 18 months of hire.
- Must hold or be willing to be trained to and maintain 8 hour First Responder level certification for disaster preparedness and emergency response purposes.
- Certification required in District provided CPR/ First Aid and Bloodborne Pathogen training.
- Certification required in District provided CPR/ First Aid and Bloodborne Pathogen training.
- Possession of a Grade II Collection Systems Maintenance certification is desirable.

PHYSICAL DEMANDS AND WORKING ENVIRONMENT
The conditions herein are representative of those that must be met by an employee to successfully perform the essential
Collection Systems Maintenance Worker

functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential job functions.

ENVIRONMENT
Outdoor field environment; travel from site to site; exposure to noise, dust, grease, smoke, fumes, noxious odors, toxic gases, vibrations, and all types of weather and temperature conditions; exposure to hazardous traffic conditions; work in or around water; work and/or walk on various types of surfaces including slippery or uneven surfaces and rough terrain; incumbents may be required to work extended hours including evenings and weekends.

PHYSICAL
• Level Three
• NIDA
• Pulmonary
• Endurance

Incumbents require sufficient mobility to work in a field environment; walk, stand, and sit for prolonged periods of time; frequently stoop, bend, kneel, crouch, crawl, climb, reach, and twist; push, pull, lift, and/or carry moderate to heavy amounts of weights; operate assigned equipment and vehicles; ability to verbally communicate to exchange information.

VISION
See in the normal visual range with or without correction; vision sufficient to read printed documents and to operate assigned equipment.

HEARING
Hear in the normal audio range with or without correction.

JOB STATUS    Non-Exempt: Employees Association

SALARY RANGE: 22

(91CSMW)
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Elsinore Valley Municipal Water District

Sewage Spill Response Plan

31315 Chaney Street, P.O. Box 3000, Lake Elsinore, CA 92530
(951)674-3146  FAX (951) 245-5946
Table of Contents

Section 1: Introduction
Section 2: Authority and Responding Staff Responsibilities
Section 3: Mandatory Notification Procedures
Section 4: Field Activities
Section 5: Monitoring
Section 6: Record Keeping and Reporting
Section 7: Training
Section 8: Emergency Contact Lists
Section 1

Introduction
Introduction

The Elsinore Valley Municipal Water District was incorporated on December 23, 1950, under the provisions of the Municipal Water District Act of 1911. The District’s 125 square mile service area lies in western Riverside County between the cities of Corona and Temecula. The District currently provides water to approximately 25,691 accounts and sewer service to approximately 20,475 accounts.

Elsinore Valley Municipal Water District owns and operates three wastewater treatment facilities within its service area. The treatment plants include:

- Regional Wastewater Treatment Plant (8.0 MDG, tertiary treatment)
- Railroad Canyon Wastewater Treatment Plant (1.2 MGD, tertiary treatment)
- Horsethief Canyon Wastewater Reclamation Plant (0.50 MGD, tertiary treatment)

The District’s sanitary wastewater collection system consists of four separate collection system areas:

- The Canyon Lake Collection System which serves the City of Canyon Lake
- The Southern (California Oaks) Collection System which serves a portion of the City of Murrieta
- The Horsethief Canyon Collection System designed to serve a 2,000 home community in the Temescal Canyon area of Riverside County
- The Regional (Elsinore Valley) Collection System, which serves portions of the City of Lake Elsinore and the unincorporated areas of Lakeland Village, Sedco Hills, and Wildomar.

These four areas contain more than 287 miles of sanitary sewer pipeline ranging from 6 to 52 inches in diameter and a total of 30 sewage lift stations.
Section 2

Authority and Responding Staff Responsibilities
Authority and Responding Staff Responsibilities

Authority

The General Manager is provided with the authority to direct emergency response activities of the collection system facility.

In the event the General Manager is not available, or at his delegation, the Assistant General Manager or the Director of Operations will assume the role of overall authority.

In the event the Assistant General Manager or the Director of Operations is not available, the Wastewater Operations Manager shall assume the role of overall authority.

Responding Staff Responsibilities

The responding supervisor has the immediate responsibility to protect people, property, and the environment from the effects of sewage release. To meet these objectives in a rapid, efficient and organized manner, District personnel will respond and fulfill the duties of the following categories as directed by the On-Scene Supervisor:

A. On-Scene Supervisor:

1. Assume primary management and coordination of all emergency actions.
2. Request assistance from other departments.
3. Designate spill assessment personnel.
4. Assess spill information (including on and off site spill migration).
5. Establish spill abatement priorities.
6. Direct immediate spill control and containment measures.
7. Communicate with the Public Information Officer.
8. Act as primary liaison with responding agencies.
9. Perform or delegate the following responsibilities as necessary:
   a) Identification of potential impacts to the public and environment.
   b) Notification of all necessary agencies providing them immediate spill information.
c) Coordination with responding agencies: spill information, incident site and affected off-site areas.

d) Notification of outside contractor and overseeing of cleanup activities.

e) Assignment and coordination of on and off-site sample collection with in-house staff, regulatory and other affected agencies.

f) Mobilization and direction of in-house field crews and equipment for spill abatement activities to include containment, disinfection and cleanup.

g) Lockout/tag electrical as necessary (lift stations).

h) Verification of emergency power status as required.

i) Establishment of ingress and egress routes, as necessary.

j) Establishment of site security, as necessary.

k) Personnel evacuation, as necessary.

B. Engineering Director

1. Provide as-built drawings of all facilities

2. Assist in assessing damage to facilities.

3. Provide input for appropriate technical specifications for emergency repair and materials.

C. Public Information Officer

1. Report to the On-Scene Supervisor for status reports of spill abatement activities.

2. Release information to the press and public (as necessary).

3. Provide the General Manager with timely status reports, i.e. documents, photos, spill and abatement activities.
Section 3

Mandatory Notification Procedures
Mandatory Notification Procedures

During Normal Working Hours:

During normal working hours, Collection System service calls are directed to the Field Operations Dispatch Center. It is the responsibility of the Field Operations Dispatch Center to obtain the necessary information from the reporting party to complete “Side A” of the Collection System Problem Report Form (see page 3-4 of this Section) and dispatch a District service crew to the location of the reported problem.

If the reporting party advises that a sewage overflow or spill is involved, dispatch shall obtain additional information from the reporting party and initiate the actions as outlined on the Spill Response Plan Flow Chart (see page 3-9 of this Section).

Upon arrival, the responding service crew will report their findings to Dispatch. If a spill is involved, Dispatch will begin completion of “Side B” of the Collection System Problem Report Form (see page 3-5 of this Section) and immediately begin notification of regulatory agencies and other impacted agencies per the Spill Notification Check Lists (see pages 3-2 and 3-5 of this Section).

In the event of a confirmed spill that results in a sewage discharge to a drainage channel or surface water, the following regulatory agencies must be notified as soon as possible, but not later than two hours after becoming aware of the discharge: appropriate Regional Water Quality Control Board (depending on location of spill), State Office of Emergency Services, and the appropriate County Health Department.

Additionally, a certification must be submitted to the appropriate Regional Water Quality Control Board that the Regional Water Quality Control Board, State Office of Emergency Services, and County Health Department were notified of the spill. This certification shall be completed as soon as possible, but no later than 24-hours after becoming aware of the discharge.

On Weekends, Holiday and After Hours:

On weekends, holidays and after hours, all calls are received by the District’s contract 24-hour answering service who will assume identical notification responsibilities as that of the Field Operations Dispatch Center.

State Water Resources Control Board Notification Requirements:

The notification requirements for the State Water Resources Control Board vary depending on the type of spill. There are two general types of spills that require notification of the State Water Resources Control Board. See the District SSMP for a description of each spill category, and page 3-2 for notification procedures.
### Mandatory Notification-First Priority

<table>
<thead>
<tr>
<th>AGENCY</th>
<th>PHONE</th>
<th>CRITERIA</th>
</tr>
</thead>
</table>
| California Regional Water Quality Control Boards | Santa Ana -------------- 909/782-4130  
FAX------------------ 909/781-6288  
Najah N. Amin ------ 909/320-6362  
Gary Stewart--------- 909/732-4379  
San Diego ------------ 858/467-2952 | Whenever a sewage spill enters or threatens to impact any waters of the State, **Contact within 2 hours for spills that reach a drainage channel or surface water.**  
Within 24 hours of spill that reaches drainage channel or surface water, certify to appropriate RWQCB that the RWQCB, State OES, and appropriate County Health Department were notified. |
| Office of Emergency Services | Sacramento--------------- 800/852-7550 | Whenever a sewage spill enters or threatens any water of the State, **Contact within 2 hours for spills that reach a drainage channel or surface water.** |
| State Department of Health Services  
Office of Drinking Water | San Diego -------------- 619/525-4159 | Whenever a sewage spill enters the Canyon Lake Reservoir (Canyon Lake), **Contact within 2 hours.** |
| Riverside County Health Services Agency, Department of Environmental Health | Riverside ------------------- 951/500-3730  
FAX------------------- 951/781-9653 | Whenever a sewage spill occurs, **Contact within 2 hours for spills that reach a drainage channel or surface water.** |
| Department of Health Services | Jim Gillis------------------ 951/955-8928  
FAX------------------ 951/781-9653 | Whenever a sewage spill occurs. |
| State Water Resources Control Board | No Phone Number.  
All correspondence performed online via California Integrated Water Quality System (CIWQS). | Category 1 SSO:  
**Initial Report - Submit on CIWQS within 3 business days.**  
**Final Report - Certify on CIWQS within 15 calendar days.**  
Category 2 SSO:  
**Final Report - Submit and Certify on CIWQS within 30 days after the end of the calendar month.** |
## Next Priority-if applicable call:

<table>
<thead>
<tr>
<th>AGENCY</th>
<th>PHONE</th>
<th>CRITERIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>California Department of Fish and Game</td>
<td>310/590-5113</td>
<td>Whenever a sewage spill enters or threatens State water.</td>
</tr>
<tr>
<td>California Highway Patrol</td>
<td>Normally contacted by OES.</td>
<td>Whenever a sewage spill occurs within their jurisdictional boundaries.</td>
</tr>
<tr>
<td>Department of Transportation (CALTRANS)</td>
<td>Riverside----------951/383-6470</td>
<td>Whenever a sewage spill threatens to contaminate or otherwise disrupt the operation of the State Water Project.</td>
</tr>
<tr>
<td>Riverside County Flood Control &amp; Conservation District</td>
<td>Riverside---------951/275-1250  FAX---------951/788-9965 Emergency ----951/275-1230</td>
<td>Whenever a sewage spill impacts the storm drain system in Riverside County.</td>
</tr>
<tr>
<td>City of Canyon Lake Canyon Lake POA</td>
<td>951/244-2955 519/244-6841</td>
<td>Whenever a sewage spill occurs in Canyon Lake Reservoir (Canyon Lake).</td>
</tr>
<tr>
<td>City of Lake Elsinore City Yard</td>
<td>951/674-3124 951/674-5170 951/674-7730</td>
<td>Whenever a sewage spill threatens or flows into Lake Elsinore.</td>
</tr>
<tr>
<td>City of Murrieta</td>
<td>951/698-1040</td>
<td>Whenever a sewage spill over 1,000 gallons occurs in California Oaks</td>
</tr>
<tr>
<td>County of Riverside Transportation Department</td>
<td>Riverside--------951/275-6790  FAX---------951/275-6797</td>
<td>Whenever a sewage spill affects a Riverside County highway/street.</td>
</tr>
</tbody>
</table>
COLLECTION SYSTEM PROBLEM REPORT

Fill Out Completely
(Reverse Side for Spill Information)

Date of Occurrence: ___________________________ Time of Occurrence: _________ AM/PM
Date of Notification: _________________________ Time of Notification: _________ AM/PM

PERSON REPORTING PROBLEM:
Name: ___________________________________ Phone: __________________
Agency: __________________________________
Address: __________________________________

LOCATION OF PROBLEM: _____________________________
City: ___________________________ Nearest Cross Street: ___________________________
Thomas Guide Page and Coordinates: ________________________________

PROBLEM:  □ Odor  □ Lift Station  □ Sewage Spill*  □ Other

________________________________________________________

*Fill Out Reverse Side Spill Section

IS PROBLEM IN DISTRICT SERVICE AREA?  □ Yes  □ No

Note:  If spill is involved, tell reporting individual that EVMWD staff will clean it up or notify responsible agency.

LIFT STATION AUTO ALARM CALL:
Station Name/Number _____________________________
Type of Alarm (i.e. high level, power outage, intruder, etc.): ___________________________

________________________________________________________

ACTION TAKEN:  (Detailed description including responding personnel and equipment):

________________________________________________________

________________________________________________________

Report Received By: ___________________________ Date: _________ Time: _________
Dispatched To: ___________________________ Date: _________ Time: _________

Name             Emp.#
SPILL REPORT

Type of Spill:       Sewage ☐       Chemical (I.W.) ☐        Other ☐

Estimated Spill Volume (Gallons)*:
☐ Small <1,000
☐ Medium 1,000 - 10,000
☐ Large >10,000

Identify Receiving Water**: ____________________________

Is there a potential health hazard from the spill? ☐ Yes ☐ No
If yes, explain. __________________________________________________________________________

Source of information: ____________________________  Phone No: ________________
Quantity of disinfectant: ____________________________
*Must be a verifiable estimation
**If applicable: Creek, River, Flood Control Channel, Lake, etc.

NOTIFICATION LIST (NON-SPILL):

<table>
<thead>
<tr>
<th>Responding Unit No.</th>
<th>Time</th>
<th>Date</th>
<th>Initial</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
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</tr>
</tbody>
</table>

NOTIFICATION LIST (SPILL) (In this order):

<table>
<thead>
<tr>
<th>Responding Unit No:</th>
<th>Time</th>
<th>Date</th>
<th>Initial</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tr>
</tbody>
</table>

Collection Systems Field Superintendent

Operations Manager

Director of Operations

Health Department (Contact)

Regional Board (Contact)

General Manager

Public Information Officer

Supervisor Completing Report: ____________________________ Date: ________________

(Full Name)

Follow Up:

_________________________________________________________________________________

Follow Up By: ____________________________ Date: ________________

(Name) (Dept.)
## Elsinore Valley Municipal Water District
### Spill Notification Checklist

**INTERNAL**

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Daytime Telephone</th>
<th>After Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ron Young</td>
<td>General Manager</td>
<td>951/674-3146 Ext. 224</td>
<td>951/757-0002</td>
</tr>
<tr>
<td></td>
<td></td>
<td>951/757-0002 Cell</td>
<td></td>
</tr>
<tr>
<td>Norris Brandt</td>
<td>Assistant General Manager</td>
<td>951/674-3146 Ext. 8359</td>
<td>951/579-8240</td>
</tr>
<tr>
<td></td>
<td></td>
<td>951/579-8240 Cell</td>
<td></td>
</tr>
<tr>
<td>Wally Borchard</td>
<td>Director of Operations TBD</td>
<td>951/674-3146 N/A</td>
<td>951/678-1333 N/A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>951/376-0531 Cell</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>951/372-5717 Pager</td>
<td></td>
</tr>
<tr>
<td>Theodore P. Eich</td>
<td>Operations Manager</td>
<td>951/674-3146</td>
<td>951/674-2225</td>
</tr>
<tr>
<td></td>
<td></td>
<td>951/236-6466 Cell</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>951/308-7716 Pager</td>
<td></td>
</tr>
<tr>
<td>Robert Barnard</td>
<td>Collection Systems Field</td>
<td>951/674-3146</td>
<td>951/678-2923</td>
</tr>
<tr>
<td></td>
<td>Superintendent</td>
<td>951/453-3850 Cell</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>951/301-0724 Pager</td>
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</tr>
<tr>
<td>Greg Morrison</td>
<td>Public Information Officer</td>
<td>951/674-3146</td>
<td>951/693-9570</td>
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<tr>
<td></td>
<td></td>
<td>951/376-1318 Cell</td>
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</table>
### Key Personnel of Key Personnel and Outside Agencies

<table>
<thead>
<tr>
<th>Key Personnel</th>
<th>Adjacent Water Districts</th>
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<tbody>
<tr>
<td>Ron Young</td>
<td>951/757-0002 Eastern MWD</td>
</tr>
<tr>
<td></td>
<td><strong>Cell Phone</strong></td>
</tr>
<tr>
<td>Wally Borchard Norris Brandt</td>
<td><strong>Cell Phone</strong></td>
</tr>
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</table>

#### EVMWD Wholesale Customers

<table>
<thead>
<tr>
<th>Ted Eich</th>
<th>951/674-2225 Elsinore WD 951/674-2168</th>
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</thead>
<tbody>
<tr>
<td>Julius Ma</td>
<td>951/453-3903 The Farm 951/244-4198</td>
</tr>
<tr>
<td>George Cambero</td>
<td>951/674-3124 Inland Valley Regional Medical Ctr. 951/677-1111</td>
</tr>
<tr>
<td>Daniel Hebert</td>
<td>951/696-0332 Answering Service</td>
</tr>
<tr>
<td>Steve House</td>
<td>951/699-6166 A &amp; K Communications 951/699-7122</td>
</tr>
<tr>
<td>Bob Hughes</td>
<td>909/825-6148 Police, Fire and Sheriff 911</td>
</tr>
<tr>
<td>Jake Hernandez Angel Marquez</td>
<td>951/674-3327</td>
</tr>
<tr>
<td>Administration</td>
<td>Gail Hanson 951/674-3146</td>
</tr>
<tr>
<td>Engineering (Base 6)</td>
<td>Phil Miller 951/688-4167</td>
</tr>
<tr>
<td></td>
<td>Loren Sorber Sudhir Mohleji 951/245-1382 757-3105</td>
</tr>
<tr>
<td></td>
<td>Steve Simmons 951/678-1154</td>
</tr>
<tr>
<td>Local Media</td>
<td>Phone Number</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>Channel 3</td>
<td>(951) 674-0661</td>
</tr>
<tr>
<td>KRTM 88.9 FM</td>
<td>(951) 694-0866</td>
</tr>
<tr>
<td>K-HI 105.7 FM</td>
<td>(951) 925-9000</td>
</tr>
<tr>
<td>KNSJ 1320 AM</td>
<td>(951) 925-9000</td>
</tr>
<tr>
<td>Press Enterprise</td>
<td>(951) 245-2923</td>
</tr>
<tr>
<td>Lake Elsinore Valley Sun-Tribune</td>
<td>(951) 674-1535</td>
</tr>
<tr>
<td>The Californian</td>
<td>(951) 676-4315</td>
</tr>
<tr>
<td>Friday Flyer</td>
<td>(951) 244-1966</td>
</tr>
<tr>
<td>INSTITUTIONS &amp; FOOD SERVICE DIRECTORY</td>
<td></td>
</tr>
<tr>
<td>--------------------------------------</td>
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<tr>
<td>(951 AREA CODE)</td>
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<table>
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<tr>
<th>PUBLIC SCHOOLS (11.26.08-revised)</th>
<th>TELEPHONE (951)</th>
<th>EMERGENCY HEALTH CARE PROVIDERS</th>
<th>TELEPHONE (951)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lake Elsinore Unified SD</td>
<td>253-7000</td>
<td>Inland Valley Med Center</td>
<td>677-9712</td>
</tr>
<tr>
<td>Head Start Program</td>
<td>253-7091</td>
<td>Rancho Springs Med Center</td>
<td>696-6000</td>
</tr>
<tr>
<td>Butterfield Elementary</td>
<td>253-7470</td>
<td>A Plus Walk-In Urgent Care</td>
<td>461-6963</td>
</tr>
<tr>
<td>Cottonwood Cyn. Elementary</td>
<td>244-2585</td>
<td>Total Care Urgent Care</td>
<td>674-4114</td>
</tr>
<tr>
<td>Donald Graham Elementary</td>
<td>678-8450</td>
<td>Inland Urgent Care</td>
<td>600-0110</td>
</tr>
<tr>
<td>Earl Warren Elementary</td>
<td>253-7810</td>
<td>Industrial Medical Care</td>
<td>600-9070</td>
</tr>
<tr>
<td>Elsinore Elementary</td>
<td>253-7615</td>
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<tr>
<td>Luiseño Elementary</td>
<td>674-0750</td>
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<tr>
<td>Machado Elementary</td>
<td>253-7500</td>
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<tr>
<td>Railroad Cyn. Elementary</td>
<td>674-8671</td>
<td>A’s Pizza</td>
<td>244-3886</td>
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<tr>
<td>Rice Cyn. Elementary</td>
<td>471-2184</td>
<td>Pepe’s</td>
<td>244-7373</td>
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<tr>
<td>Ronald Reagan Elementary</td>
<td>253-7650</td>
<td>Dominos</td>
<td>244-5111</td>
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<tr>
<td>Tuscany Hills Elementary</td>
<td>245-6850</td>
<td>Surfer Bean</td>
<td>244-2978</td>
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<tr>
<td>William Collier Elementary</td>
<td>678-8488</td>
<td>Canyon Lake Market</td>
<td>244-0123</td>
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<tr>
<td>Wildomar Elementary</td>
<td>253-7555</td>
<td>Sports Stop Pub</td>
<td>244-3369</td>
</tr>
<tr>
<td>Withrow Elementary</td>
<td>678-0132</td>
<td>Canyon Lake Country Club</td>
<td>244-6841</td>
</tr>
<tr>
<td>Canyon Lake Middle School</td>
<td>244-2123</td>
<td>Canyon Lake Lodge</td>
<td>244-6841</td>
</tr>
<tr>
<td>David A. Brown Middle School</td>
<td>253-7430</td>
<td>Rockin Tacos</td>
<td>246-8226</td>
</tr>
<tr>
<td>Elsinore Middle School</td>
<td>674-2118</td>
<td>CAL OAKS AREA</td>
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</tr>
<tr>
<td>Lakeland Village Middle School</td>
<td>253-7400</td>
<td>Cal Oaks Bowl</td>
<td>698-2202</td>
</tr>
<tr>
<td>Terra Cotta Middle School</td>
<td>253-7380</td>
<td>Dominos</td>
<td>696-0117</td>
</tr>
<tr>
<td>Elsinore High School</td>
<td>253-7200</td>
<td>WILDMAR AREA</td>
<td></td>
</tr>
<tr>
<td>Lakeside High School</td>
<td>253-7300</td>
<td>Yanaka Sushi</td>
<td>677-9004</td>
</tr>
<tr>
<td>Temescal Cyn. High School</td>
<td>253-7250</td>
<td></td>
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</tr>
<tr>
<td>Ortegg Continuation High School</td>
<td>253-7065</td>
<td>Ultimate Sports Pizza</td>
<td>304-9292</td>
</tr>
<tr>
<td>Murrieta Valley Unified SD</td>
<td>696-1600</td>
<td>Golden Spoon Yogurt</td>
<td>677-3528</td>
</tr>
<tr>
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INSTITUTIONS & FOOD SERVICE DIRECTORY
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Spill Response Plan Flowchart

Spill Occurs

Spill Reported to EVMWD

Is It In Service Area?

No

Refer To Correct Agency

Document Contact Phone #’s and Names

Complete Service Report

Yes

Call Out Collection Facility Staff To Investigate

Spill Found By Staff

No

Complete Service Report

Yes

Notify Operations Dispatch Center of Preliminary Information and Request Additional Support If Needed

Immediately Notify Regulatory Agencies and Other Impacted Agencies of Incident

Clean Up, Disinfect Area and Contain If Possible

See Checklist to determine appropriate agencies to be contacted.

Monitoring

Document All Field Activities

Field Report Information To Operations Manager

Calculate Spill Volume and Final Report

Notify Regulatory Agencies of Additional Spill Information and Calculated Volume

Evaluate Response and Implement Necessary Improvements
Section 4

Field Activities
FIELD ACTIVITIES

Spill categories are defined as follows:

- **Small:** Less than 1,000 gallons
- **Medium:** 1,000 gallons to 10,000 gallons
- **Large:** More than 10,000 gallons

A. **Small Spill**

For small, non-threatening spills such as have been contained and/or have not reached receiving waters (creek, river, lake, flood control channel, etc.) the following procedure shall be followed by the responding service crew:

1. Contain as appropriate/applicable.
2. Determine cause of spill and correct as required (i.e. by use of vactor, rodding machine, etc.).
3. Disinfect and abate spill as follows:
   - a) Apply Lysol disinfectant concentrate or liquid chlorine solution using appropriate protective equipment (gloves, masks, etc.)
   - b) Vacuum up residual, as necessary.
   - c) Wash down area with high-pressure hand held gun on vactor.
   - d) Vacuum up residual, as necessary.
   - e) Remove containment, if applicable.
   - f) Notify field supervisor (or if unavailable, the Collections System Manager) of spill.
   - g) Complete Field Sewage Soil Report form (see at end of this section) and submit to Field Supervisor for follow-up.

B. **Medium and Large Spills**

Spills of 1,000 gallons or more shall immediately be reported to the Collection Systems Field Supervisor or in his absence, the Wastewater Operations Manager, who will immediately report to the site and assume On-Scene Supervisor responsibilities per Section 2 of this plan.
C. **In the Event of Any Spill, the Following Shall Be Implemented**

1. **Upon arrival of first responder:**
   a) Protect public health, environment and property from the sewage spill event and restore the area back to normal as soon as possible.
   b) Safely and competently respond with appropriate resources and capabilities.
   c) Establish perimeters and control zones with cones, barricades, vehicles, or terrain.
   d) Promptly notify agency’s communication center of preliminary spill information and potential impacts.
   e) Contain the sewage discharge to the maximum extent possible. Every effort must be made to prevent the discharge of sewage into surface waters.

2. **Identify and Relieve the Cause of the Spill**
   a) **Collection System**
      (1) Determine section of line containing the blockage.
      (2) Go to the downstream manhole (where possible) and set up traffic control, as needed.
      (3) Position vactor and begin hydrojetting operation.
      (4) Relieve blockage.
   b) **Sewage Lift Stations**
      (1) Refer to lift station trouble shooting guide for determination of source of problem (i.e. power outage, tripped breaker, pump blockage, etc.).

3. **Spill Containment and Recovery**
   The following shall be used for methods of spill containment, as applicable.
   a) Plug, block, divert around (sand bag) storm drains whenever appropriate to contain the spill.
   b) Divert spill by building a small berm to change direction of flow back to sewer.
   c) Divert spill by pumping around overflow and return to sewer.
   d) Retain spill by letting it collect in a natural low area and recover sewage when time permits.
   e) Dike/dam spill by building berm to collect spill.
4. **Cleanup and Disinfection**

Cleanup all sewage liquid/solids as follows:

a) Apply Lysol disinfectant concentrate or liquid chlorine solution where practicable, using necessary personal protective equipment. Do not over broadcast or over apply.

b) Wash down and vacuum up residual as necessary, using vactor or contract vacuum dump trucks (see Contractor Listing in Emergency Contacts Lists, Section 9). Return residual to sewer system.

c) Utilize the District water tank trailer or District street washer (ramrodder) for cleanup of large pavement/hard surface areas. Contain and vacuum residual returning it to sewer.

5. **Spill Documentation**

a) Provide accurate flow measurements and duration of spill using flow calculation method or alternative visual method (see examples at end of this section).

b) **Provide map of problem location showing manhole(s) involved and where the spill discharged (i.e. storm drain, field, stream, etc.).

c) Take photos of event.

d) **Describe cause of spill (i.e. blockage due to roots, grease or breakage of the line due to contractor, etc.).

e) **Report when crew was on site, when spill was stopped and when the cleanup was completed.

f) **Report type and quantity of disinfectant used.

g) **Report size of line where stoppage occurred, if applicable.

**Note: These items will be accomplished with completion of the “Field Sewage Spill Report” form.
<table>
<thead>
<tr>
<th>Responding Unit #(s)</th>
<th>Emp. Name(s) &amp; #(#(s))</th>
</tr>
</thead>
<tbody>
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<tr>
<td></td>
<td>Time: AM PM</td>
</tr>
<tr>
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<td>Time: AM PM</td>
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<tr>
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<tr>
<td>Sewage spill:</td>
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</tr>
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<td>Estimated gallons:</td>
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<tr>
<td>Recovered gallons:</td>
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<tr>
<td>Volume discharged* (check box below)</td>
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</tr>
<tr>
<td>☐ Small ----------- 1,000 gal. or less</td>
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</tr>
<tr>
<td>☐ Medium --------- 1,000-10,000 gal.</td>
<td></td>
</tr>
<tr>
<td>☐ Large ---------- 10,000 gal. or over</td>
<td></td>
</tr>
<tr>
<td>*Must be a verifiable estimation</td>
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<tr>
<td>Date of arrival:</td>
<td></td>
</tr>
<tr>
<td>Time: AM PM</td>
<td></td>
</tr>
<tr>
<td>Cause: ☐ Roots ☐Grease ☐Other (specify below)</td>
<td></td>
</tr>
</tbody>
</table>

| Line size where stoppage occurred (if applicable):  ☐ 6” ☐8” ☐10” ☐12” ☐Other __________ |
| Type of disinfectant: ____________________________ | Quantity used: ____________________ |

| Receiving Water | Creek ☐ River ☐ Flood Control Channel ☐ Lake ☐ Other ☐ |
| Identify Receiving Water: ________________________ |

**NOTE:** Notify Operations Dispatch (Base 2) immediately of any spills!

| Time Operations dispatch (Base 2) notified of a confirmed spill: __________ AM ☐ PM ☐ |
| Date spill stopped: __________ | Date cleanup completed: __________ |
| Time: __________ AM ☐ PM ☐ | Time: __________ AM ☐ PM ☐ |
| Corrective Action Taken: __________________________ |
| __________________________ |

Supervisory Follow Up: __________________________ |
Supervisor: __________________________ |

Note: Map showing location of spill drainage must be drawn up ASAP and submitted to Collection System Field Supervisor (use back of form for map).
The purpose of this report is to take the mystery out of calculating spills. Ninety-eight percent of all spills can be calculated using the two examples discussed in this section.

The orifice equation is used to calculate the volume of a spill. Understanding the orifice equation is not as complex as it may sound. If you know the diameter of the hole (i.e., pick hole or annular space between the ring and cover) and the height at which the fluid is coming out of the hole, then you can calculate the flow out of that hole.

\[
Q = C a \sqrt{\frac{2gh}{2gh}}
\]

Where \( Q \) = flow of fluid from the hole,
\( C \) = coefficient of discharge,
\( a \) = area of the hole (measured in ft.),
\( g \) = gravity (32.2 ft/sec) and
\( h \) = height of the fluid above the cover (measured in ft.)

The coefficient of discharge (\( C \)) is the product of the coefficient of velocity (\( C_v \)) multiplied by the coefficient of contraction (\( C_c \)). The values for \( C_v \) have been found to vary from 0.954 for \( \frac{3}{4} \) inch orifices to 0.991 for 2.5-inch orifices. The values for \( C_c \) have been found to vary from 0.67 for \( \frac{3}{4} \) inch orifices to 0.614 for 2.5-inch orifices.
Example 1

A report of a spill occurring at 12 noon is reported. Crews respond to the spill and relieve the spill at 2:30 p.m. In addition, you are informed that the flow was coming from two ¾ inch pick holes in the manhole cover, and when crews arrived on the scene, the flow appeared to be coming out of the holes approximately four inches above the lid. What is the total flow that you are to report to the Regional Board?

Assumptions for Example 1 spill:

1. Flow started at noon and was stopped at 2:30 p.m.
   Total time of spill was 2.5 hours (150 minutes).

2. Flow was coming from two - ¾ inch pick holes.
   The area of each ¾ inch hole is 0.44179 in. (see Table 1-2)
   To convert in² to ft² multiply by 0.006944.

   Therefore, \( a = 0.44179 \text{ in}^2 \times 0.006944 = 0.0031 \text{ ft}^2 \) for each hole

3. Flow was coming out of each hole at a height of four inches.

   To convert inches to feet, multiply by \( \frac{1\text{ foot}}{12\text{ inches}} \)

   Therefore, \( H = 4 \text{ inches} \times \frac{1\text{ foot}}{12\text{ inches}} = 0.33 \text{ ft} \)

4. The coefficient of discharge, \( C = Cv \times Cc \). For a ¾ inch hole
   \( Cv = 0.954, Cc = 0.67 \).

   Therefore, \( C = 0.954 \times 0.67 = 0.639 \)

5. Using the orifice equation \( Qh = Ca \sqrt{2gh} \), the flow from each hole is:

   \[
   Qh = 0.639 \cdot \sqrt{(0.0031 \text{ ft}^2) \cdot 2(32.2 \text{ ft/sec}^2)(0.33 \text{ ft})}
   \]

   \[
   = 0.009 \text{ ft}^3/\text{sec} \times 448.831 \text{ gpm/ft}^3/\text{sec} = 4.099 \text{ gpm/hole}
   \]

6. Total flow, \( Qt = Qh \times \text{number of holes} \times \text{length of spill (minutes)} \)

   \( Qt = 4.099 \text{ gpm/hole} \times 2 \text{ holes} \times 150 \text{ minutes} = 1230 \text{ gallons.} \)
Example 2

In this next Example, the facts are similar to Example 1; except, in addition to the flow coming out of the two pick holes, it is also coming out of the ¼ inch gap between the ring and cover at a height of 4 inches.

13. In addition to steps 1-6 in Example 1, calculate the total area where the flow is coming out between the ring and cover.

We know that the relationship between the ring and cover probably looks like this:

![Diagram of ring and cover with a ¼ inch gap between them.]

This problem is made simple if you take the ID of the ring (shown here to be 36 inches), figure out it’s area and subtract it from the area of the cover (shown here to be 36” - ½” = 35.5 inches). Since both of these areas are circles, we know that the formula is \( A = \pi (D/2)^2 \). Therefore:

\[
A = A_{\text{ring}} - A_{\text{cover}} = \left[ \pi \left(\frac{36}{2}\right)^2 \right] - \left[ \pi \left(\frac{35.5}{2}\right)^2 \right] = \[3.1416 (324)] - [3.1416 (315.1)] = 1017.9 - 989.8 = 28.1 \text{ in}^2 \times 0.006944 = 0.195 \text{ ft}^2
\]

8. From example 1; \( H = 0.33 \text{ ft} \), \( g = 32.2 \text{ ft/sec}^2 \), \( C = 0.639 \)

9. Using orifice equation \( Q = Ca \sqrt{2gh} \)

\[
Q = (0.639 \text{ ft}^2)(0.195 \text{ ft}^2) \sqrt{2(32.2 \text{ ft/sec}^2)(0.33 \text{ ft})} = 0.574 \text{ ft/sec} = 257.82 \text{ gpm}
\]

\[
= 257.82 \text{ gpm} \times 150 \text{ min} = 38,673 \text{ gallons}
\]
10. In this example, flow was coming from two pick holes and the space between the ring and cover. Therefore, in this example we must add the flow calculated in step 6 above to the flow calculated in step 9 above—making the total flow of the spill in this example:

\[
QT = 1230 \text{ gallons} + 38,673 \text{ gallons}
\]

\[
= 39,903 \text{ gallons}
\]

**Alternative Method: Visual**

Calculating spills is not for everybody, so, thanks to the City of San Diego, a series of pictures that show the relationship of various flows between 5 gpm to 275 gpm follow this page.
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## Sewer Overflow Volumes

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Section 5

Monitoring
MONITORING

Sample collection, preservation, and analyses shall be done in a timely manner. Sampling responsibility shall of that of the On-Scene Supervisor as outlined in Section 2A, 9e.

District and/or contract laboratories (i.e. Babcock Laboratory, McDonald Stevens Laboratory, etc., see Contractors Listing in Appendix of this plan) shall be used as necessary for sample analyses.

Sample coordination with State and County Health Departments and the Regional Water Quality Control Board will be practiced.
Section 6

Record Keeping
And
Reporting
RECORD KEEPING AND REPORTING

Record Keeping
The Operations Manager will maintain a system file on all sewage spills.

Reporting
Within ten (10) working days from the date of the spill abatement, the General Manager or his delegate shall submit a written report to the Regional Water Quality Control Board, local public health agency, and other appropriate agencies. The report shall include:

A. Estimate of the total volume of the sewage discharged.
B. Estimate of the total volume of sewage that was contained and returned to sewer.
C. Discussion of the events or circumstances that resulted in the sewage spill.
D. Discussion of the impact of the spill on public health and environment.
E. Summary of cleanup activities and any mitigation measures taken to protect public health and the environment.
F. Corrective actions to prevent the recurrence of such incidents.
G. Size of the line where spill occurred, if applicable.
H. When crew was on site.
I. When spill was relieved.
J. When cleanup was complete.
Section 7

Training
TRAINING

Appropriate District personnel (i.e. Management, Collection Systems, Wastewater Treatment, Engineering And Public Information) at all levels of responsibility shall receive a copy of this plan and shall be informed and trained in regard to its components, objectives and use.

Three types of training exercises will be used. These exercises, while providing training and promoting preparedness, will also test the plans effectiveness.

1. Orientation Exercise

   This exercise will be conducted as an introductory session utilizing lecture, visuals, and dialog between instructor and employees. Instruction will be provided regarding the purpose of the plan, its individual components, documentation/record keeping, spill reporting, and procedure. Orientation will be provided to all appropriate employees initially, and to new hires as required. Re-orientation shall be provided annually to be followed by a tabletop exercise.

2. Tabletop Exercise

   In this exercise, there is no use of equipment or deployment of resources. All activities are simulated. Participants play through discussion and the use of a facilitator. Exercise effectiveness is determined by the feedback from participants, impact on, and revisions to plans, procedures, and systems. This exercise will be performed annually, followed by a field exercise.

3. Field Exercise

   A spill event is simulated during this exercise. Controllers monitor the play, and observers record the players’ actions. This type of exercise will be used to evaluate plan objectives. It will also test equipment, response time, training resource, and manpower capabilities.

All exercises will have a follow-up meeting to critique strengths/weaknesses and recommend improvements.
Section 8

Emergency Contact Lists
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<th>TITLE</th>
<th>TELEPHONE DAY</th>
<th>TELEPHONE EVENING</th>
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<tr>
<td>1. Ron Young</td>
<td>General Manager</td>
<td>674-3146, Ext. 2248451</td>
<td>757-0002</td>
</tr>
<tr>
<td>2. Wally Borchard</td>
<td>Director of Operations</td>
<td>674-3146, Ext. 8208</td>
<td>678-1333</td>
</tr>
<tr>
<td>3. Julius Ma</td>
<td>Water Quality &amp; Treatment Manager</td>
<td>674-3146, Ext. 8203</td>
<td>949-733-9938</td>
</tr>
<tr>
<td>4. Theodore P. Eich</td>
<td>Wastewater Operations Manager</td>
<td>674-3146, Ext. 8201</td>
<td>674-2225</td>
</tr>
<tr>
<td>5. Angel Marquez</td>
<td>District Maintenance Manager</td>
<td>674-3146, Ext. 8201</td>
<td>244-1308</td>
</tr>
<tr>
<td>7. Russell Adams</td>
<td>Water Treatment Supervisor</td>
<td>674-3146, Ext. 8203</td>
<td>244-3884</td>
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<tr>
<td>8. Daniel Hebert</td>
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<td>696-0337</td>
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<tr>
<td>9. Steve House</td>
<td>Field Superintendent</td>
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<td>699-6166</td>
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<td>10. Bob Hughes</td>
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<tr>
<td>12. George Cambero</td>
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State of California  
Department of Health Services  
Drinking Water Field Operations Branch  
Emergency Contact Numbers

Office General Number:  (619) 525-4159  
FAX:  (619) 525-4383  
Cell Phone (619) 379-3632

<table>
<thead>
<tr>
<th>Name/Title</th>
<th>Day</th>
<th>Evening</th>
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| Steve Williams, P.E., District Engineer  
Riverside District  
e-mail---swillia7@dhs.ca.gov | (619) 525-4580  
Cell (619) 865-3278 | (619) 561-2661 |
| Edward Hitti, Sanitary Engineer  
e-mail---ehitti@dhs.ca.gov | (619) 525-4013 | (858) 487-3375 |
| Jing Chao, P.E., Sanitary Engineer  
e-mail---jchao@dhs.ca.gov | (619) 525-4834 | (858) 622-1246 |

Riverside County  
Emergency Contact Numbers  
(760) 863-7000

<table>
<thead>
<tr>
<th>Name/Title</th>
<th>Day</th>
<th>Evening</th>
</tr>
</thead>
</table>
| Greg Dellenbach  
Public Health Engineer | (909) 955-8932 | (909) 358-5055 |
| Don Park  
Public Health Engineer | (760) 863-7008 | (760) 863-7008 |

If the above personnel cannot be reached, contact: Office of Emergency Services, Warning Center (24 hours). The State number is Sacramento is: (916) 262-1621.
CITY OF LAKE ELSINORE

Public Service Emergency Call Out List

Please make every attempt to contact the Department Manager before calling the Foremen.

PUBLIC WORKS          (951) 674-5170
EMERGENCY STANDBY:     (951) 232-4884

DEPARTMENT MANAGER - WILLIAM PAYNE

Home:   (951) 674-1246
Mobile: (951) 721-9231

PARKS/TREE/STREETS FOREMEN - JON FAZZIO

Home:   (951) 354-5665

LAKE MAINTENANCE - PAT KIROY

Office: (951) 674-7730
Home:   (909) 678-5962

CODE ENFORCEMENT – BOB BRADY

Office: (951) 322-6663
CITY OF MURRIETA

EMERGENCY AFTER HOURS PHONE NUMBERS

PUBLIC WORKS MATTERS

Mike Brooks, Maintenance Superintendent (951) 679-1829
Ben Minamide, Director of Public Works (714) 779-1296
(some week nights) (951) 698-7766
Russ Napier, Principal Public Works Inspector (951) 443-4808
Ken Burris, Senior Public Works Inspector (951) 672-9813
Dan Clark, Assistant City Engineer (951) 677-0246
Bob Brock, Civil Engineer Associate (951) 698-3315
Wayne Watson, Maintenance Leadman (951) 698-5338
Jason Morrel, Equipment Operator (951) 678-5543
Chris Vega-McCain, Maintenance Worker (951) 698-6523

BUILDING & SAFETY MATTERS

Dennis Blundell, Building Official (951) 698-2208
RIVERSIDE COUNTY ROAD DEPARTMENT

County Yard (7 am - 4 pm) (951) 677-5889
Jim Posey, Road Maint. Supervisor (951) 686-0131
Martin Harris, Leadman (951) 674-3266

RIVERSIDE COUNTY FLOOD CONTROL (951) 275-1250
(951) 955-1248

MS4 PERMITTEE (Storm Drains)

City of Murrieta (951) 461-6075
City of Lake Elsinore (951) 6714-3124 ext.244
City of Canyon Lake (951) 244-2955
City of Corona — (951) 736-2443

MURRIETA POLICE (951) 696-3615

Dispatch (24 hours Police & Fire Dept.)

RIVERSIDE SHERIFF DEPT. (800) 950-2444
After-hours can contact County by Radio
CANYON LAKE PROPERTY OWNERS ASSOCIATION
OPERATIONS DEPARTMENT

Monday thru Friday  6:00AM - 3:30PM Call Operations Dept. 951/244-6841 Ext. 510

Direct Line 951/246-1751

Weekends and Holidays 24 Hours call: Pager (951) 508-1546

Monday thru Friday  3:30PM - 6:00AM call: Pager (951) 508-1546 OR CALL DIRECT

ACCORDING TO CATEGORY:

1. General Manager     Clint Warrell     951/672-7734
2. Director of Operations  Paul Johnson    951/679-2101
3. Coordinator of Operations Merrie Shaw    951/244-2236
4. Operations Clerk     Carolyne Rogers    951/244-5834
5. Mechanic             Dave Norton        951/244-2042
6. Plumbing             Gene Hill          951/674-5572
7. Marine/Lake          Jose Gomez         951/943-2561
8. Carpenter            Chuck Grantham     951/674-5101
9. Electrical (Refrigeration/Gas) Jan Pianka    951/652-4452
10. Grounds Superintendent Evaristo Garcia    951/657-0429
11. Building Superintendent Mark De Husson     951/674-7011
12. Grounds Leadman     Jesus Falcon        951/678-4523

Golf Course Emergency

Greg Swanson    Pager 416-6649    (760) 721-9781

CITY OF CANYON LAKE
(951) 244-2955
31532 Railroad Canyon Road
Canyon Lake, CA 92587
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Unified Sanitary Sewer Spill Response Procedure

Submitted to the
SANTA ANA REGIONAL WATER QUALITY CONTROL BOARD

(SARWQCB ORDER No. R8-2002-0011)

July 10, 2008

BY THE RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT, COUNTY OF RIVERSIDE, AND CITIES OF RIVERSIDE COUNTY (SANTA ANA REGION)
Unified Sanitary Sewer Spill Response Procedure

1.0 Background

The Santa Ana Regional Water Quality Control Board (SARWQCB) adopted Order No. R8-2002-11 (NPDES No. CAS 618033), Waste Discharge Requirements for Riverside County Flood Control and Water Conservation District (RCFC), the County of Riverside, and the incorporated cities of Riverside County within the Santa Ana Region (Permittees). This Order, also known as the Municipal Separate Storm Sewer System permit (MS4 permit), requires the Permittees to control the discharge of pollutants from the MS4s to Waters of the United States. The local sewer agencies are under separate permits for operation of portions of the sanitary sewer facilities under the jurisdiction of the SARWCQB.

The SARWQCB has found that effluent from sanitary sewer overflows (SSOs) that may enter the MS4 can ultimately have a negative impact on Beneficial Uses of downstream Waters of the U.S. Therefore, Section VII.A of the MS4 permit requires the sewer agencies and the Permittees to jointly develop a Unified Sanitary Sewer Spill Response Procedure for containing and cleaning up effluent from SSOs that have or could infiltrate to the MS4. The SARWQCB has used their regulatory authority over the sewer agencies and the Permittees within its jurisdiction to coordinate the joint development of this procedure. This procedure may also be used to address SSO response in other Regions of Riverside County.

2.0 Purpose

Both sewer agencies and the Permittees are required to provide notification, documentation, spill response and reporting pursuant to established federal and state regulations, and individual National Pollutant Discharge Elimination System (NPDES) permits. The purpose of this procedure is to act as a bridge between these response programs to ensure effective coordination between sewer agencies and the Permittees in the event that a SSO threatens to impact, or impacts, the MS4. This procedure will:

- Enhance communication between the Permittees, sewer agencies and the SARWQCB
- Clarify and streamline interagency SSO response procedures
- Provide additional protection of Waters of the U.S. necessary to meet the requirements of Section VII.A of the MS4 permit

This procedure incorporates elements of spill release notification guidance published by the California Office of Emergency Services Hazardous Materials Unit. As that guidance is updated, this procedure will be revised to conform. This procedure is intended to address any occurring or impending SSO that may enter the MS4.
3.0 Procedure

Sewering Agency SSO Response Procedure

Upon determination by a sewering agency or Permittee, persons in charge, contractor or field crew that a SSO has occurred that may impact the MS4, the following procedure will be implemented.

Notification

The following notification requirements are applicable to sewering agencies:

All significant or threatened SSOs require immediate notification of government agencies by owners, operators, persons in charge and employers per established reporting guidelines.

- Less than 1,000 gallons and not impacting the MS4 – Established reporting procedures only.
- Less than 1,000 gallons and potential impact to the MS4 – Established reporting procedures, as well as report to Riverside County Environmental Health, RCFC and the appropriate City.
- More than 1,000 gallons – Established reporting procedures, OES, Riverside County Environmental Health, RCFC and appropriate City.

The following notification requirements are applicable to Permittees:

Should a Permittee discover a SSO or determine that sewage is leaching into the MS4, the Permittee shall immediately contact the appropriate sewering agency. The Permittee must also make other contacts as required by established notification guidelines in the Riverside County Santa Ana/Santa Margarita Drainage Area Management Plan.

A list of the current contact phone numbers for various agencies is provided below:

Sewering agency with jurisdiction in spill area

See Attachment A

County of Riverside, DEH, Environmental Resources Management 951.955.8980

Governor’s Office of Emergency Services: 1.800.852.7550 (1,000 gallons or greater only).

Regional Water Quality Control Board:  Santa Ana: 951.782.4130
San Diego: 858.467.2952
Colorado River Basin: 760.346.7491

Riverside County Flood Control and Water Conservation District NPDES Section: 951.955.1200

Permittee Staff (whose MS4 may be affected by spill):  See Attachment C
Minimum Information for Notification

Persons providing notice should make reasonable attempts to reach staff contacts during and after normal working hours. In cases where staff contacts are not available, messages should be left. Noticing requirements are generally specified through established state, federal or NPDES permit reporting guidelines, however in communications between Permittees and sewering agencies the following minimum information should be conveyed as appropriate:

- Identity of caller
- Location, date and time of incident, status of the release (actual or threatened release)
- Substance and quantity of sewage released (estimate flow or volume)
- Need for public safety or traffic control measures (For Permittees informing sewering agency of spill).
- Identify cause of the release
- Description of immediate measures taken to contain/mitigate SSO
- Estimate of additional containment and/or clean-up options
- Determination if sewage was discharged to MS4 or areas otherwise impacting the MS4 (Refer to Attachments B and D)

A copy of a sample SSO Reporting form is included in Attachment E.

Reporting Requirements

Each agency responsible for the SSO shall file reports as required under federal and state law, including any applicable NPDES or other permits. Sewering agencies are required to report any discharges to the Department of Environmental Health immediately, per the requirements of Health and Safety Codes section 5411.5. Permittees shall additionally follow specific reporting requirements as described in Section 4 of the Riverside County Drainage Area Management Plan for the Santa Ana and Santa Margarita Regions.

The Person in Charge at the responsible sewering agency must CC the final SSO Report provided to the Regional Board to the affected Permittees via hard copy or electronic means.

Response Requirements

Responsible sewering agencies will lead response to SSOs and will assume Person in Charge responsibilities in most cases. Person in Charge of spill response:

- Will take all immediate measures necessary to contain release or potential release of sewage and prevent/minimize impacts to water quality and the MS4.
- May cut locks, open manholes, or otherwise enter MS4 as necessary to contain and clean SSOs.
- Will contact the maintenance/public works department of the appropriate Permittee as necessary and as soon as possible to notify them of actions within their MS4. Contact numbers are included
in **Attachment C**. If necessary, Permittee staff will support spill response by providing MS4 maps or other support if available.

- Will coordinate with Permittee staff as necessary to ensure that the clean up adequately remedies impacts of the sewage released to the MS4. It should be noted that the Regional Board prefers that MS4 facilities are not sanitized with disinfectant, where not immediately impacting public health (i.e. no chlorine shall be used when discharge is within 1,500 ft of a waterway).

- Will coordinate with local fire, police, and traffic departments, as necessary to ensure the safety of the response effort, and to manage traffic and local residents.

**Private Property SSOs**

Sewering agencies and their contractors will respond to all SSOs within their service area. If a private property is the source of an SSO, agencies and their contractors shall assist in the control and containment to ensure that the sewage does not enter the MS4. If the SSO was a result of a private lateral, the private property owner will be informed of the blockage, and will be responsible to remove the blockage. If the SSO was a result of the sewer trunk line blockage, the response crew will correct the problem.

**Sampling/Monitoring**

Monitoring may be required by the Regional Board for spills that reach surface waters. Testing of soils may also be required.

**Training Requirements**

Sewering Agencies and Permittee staff will ensure that training for this procedure is incorporated into appropriate training programs related to SSO response.

**Unified Detection Involving Infiltration into MS4**

In the event that Permittees encounter evidence of potential sewage infiltration into the MS4 due to water quality monitoring or field observation, the Permittees will notify the relevant sewering agency (see **Attachment A**) to coordinate a response.
Glossary

**MS4 (Municipal Separate Storm Sewer System)** - A MS4 is a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, natural drainage features or channels, modified natural channels, man-made channels, or storm drains):

(i) Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer authorized Indian tribal organization, or designated and approved management agency under section 208 of the CWA that discharges to Waters of the U.S.;

(ii) (Designated or used for collecting of conveying storm water;

(iii) Which is not a combined sewer;

(iv) Which is not part of the POTW as defined at 40 CFR 122.2.

**Region** – Either the Santa Ana, Santa Margarita, or Whitewater River watershed regions of Riverside County. These regions are regulated by the Santa Ana, San Diego and Colorado River Region Regional Water Quality Control Boards, respectively.

**Sanitary Sewer Overflow (SSO)** - A sanitary sewer overflow is any overflow, spill, release, discharge or diversion of wastewater from a sanitary sewer system. SSOs include:

(i) Overflows or releases of wastewater that reach waters of the United States;

(ii) Overflows or releases of wastewater that do not reach waters of the United States; and

(iii) Wastewater backups into buildings and on private property that are caused by blockages or flow conditions in a sanitary sewer, other than a building lateral. Wastewater backups into buildings caused by a blockage or other malfunction of a building lateral that is privately owned is a SSO when sewage is discharged off of private property into streets, stormdrains, or waters of the State.

**Sanitary Sewer System** - Any system of pipes, pump stations, sewer lines, etc., used to collect and convey sewage to a treatment plant. Temporary storage and conveyance facilities (such as vaults, temporary piping, construction trenches, wet wells, impoundments, tanks, highlines, etc.) are considered to be part of the sanitary sewer system, and discharges of sewage to these facilities are not sanitary sewer overflows.

**Sewage** - The waste and wastewater produced by residential and commercial establishments and discharged into sewers.

**Waters of the United States** – Waters of the United States can be broadly defined as the navigable surface waters and all tributary waters to navigable surface waters. Groundwater is not considered to be a Waters of the United States. See 40 CFR 122.2 for a more expansive definition.
Attachment A
Unified Sanitary Sewer Spill Response Procedure

Attachment A (Sewering Agency Contact Roster)

City of Beaumont
Mr. Roger Vesely
550 E. 6th Street
Beaumont, CA  92223
951.769.8534, After Hours: 951.505.9234
Fax: 951.769.0914
rvesely@4conops.com

City of Corona
Rudy Fandel, Dept. of Water and Power
400 S. Vicentia Avenue
Corona, CA  92882
951.736.2476, After Hours: 951.736-2223
Fax 951.739.4909
Rudy.fandel@ci.corona.ca.us

City of Hemet Water/Wastewater Dept.
Mr. Randy Hundley
3777 Industrial Avenue
Hemet, CA  92545
951.765.3710, Cell: 951.634.3101, Police Dispatch: 951.765.2400
Fax 951.765.2493
Rhundley@cityofhemet.org

City of Riverside
Mr. Reagan S. Bailey
5950 Acorn Street
Riverside, CA  92504
951.351.6095, After Hours: 951.351.6140
Fax 951.687.6978
RSbailey@riversideca.gov

Eastern Municipal Water District
Integrated Operations Center or
Mr. Mark Chamberlin
P.O. Box 8300
Perris, CA  92572
951.928.3777 ext. 6265 (During & After Work Hours)
Fax 951.928.6177
chamberm@emwd.net

Edgemont Community Services District
Mr. Joe Teague 951.233.8860
Ms. Virginia Lou Rahn 951.683.0685 or After Hours 951.656.1234
P.O. Box 2024
Riverside, CA  92516-2024
Sam.Gershon@webbassociates.com

Elsinore Valley Municipal Water District
Mr. Ted Eich
P.O. Box 3000
Lake Elsinore, CA  92531-3000
951.674.3146 ext. 8203, After Hours: 951.258.9299
Fax: 951.245.5946
teich@evmwd.net

Jurupa Community Services District
Mr. Steve Jaynes
11201 Harrel Street
Mira Loma, CA  91752
951.681.1482 ext.107, Cell: 951.830.1517
Fax: 951-685-1153
info@jcsd.org  OR  sjaynes@jcsd.us

Lake Hemet Municipal Water District
Mitch Freeman (Sr W. Operator), Jeff Wall (Chief Engineer)
P.O. Box 5039
Hemet, CA  92544
951.658.3241 ext. 247; 951.658.3241 ext. 238
After Work Hours: 951.956.4836; 951.970.8970
Fax 951.766.7031
mfreeman@lhmwd.org

Lee Lake Water District
Ken Codwell (Plant Super.) Mr. Harry Riebe (Eng.) Jeff Pape (GM)
22646 Temescal Canyon Rd.
Corona, CA  91719
During Work: 760.277.1414; 760.479.4120; 951.277.1414
After Work: 951.830.3651; 760.473.4120; 760.250.9658
Fax 951.277.1419
hriebe@dudek.com

Lee Lake Water District
Mr. Dan Ballow
P.O. Box 3098
Riverside, CA  92519
951.684.7580, After Work Hours: 951.684.7580
Fax: 951.369.4061
dballow@rcsd.org

Rubidoux Community Services District
Mr. Dan Ballow
P.O. Box 3098
Riverside, CA  92519
951.684.7580, After Work Hours: 951.684.7580
Fax: 951.369.4061
dballow@rcsd.org

Rubidoux Community Services District
Mr. Dan Ballow
P.O. Box 3098
Riverside, CA  92519
951.684.7580, After Work Hours: 951.684.7580
Fax: 951.369.4061
dballow@rcsd.org

Yucaipa Valley Water District
Mr. John Wrobel
P.O. Box 730
909.797.5117, After Work Hours: 951.789.5109
Fax 909.797.5937
jwrobel@yvwd.dst.ca.us

Western Municipal Water District
Mr. John Gallegos or Ed Acosta
450 East Alessandro Boulevard
Riverside, CA  92508
951.789.5110, After Work Hours: 951.789.5109
Fax: 951.780.0272
westernops@wmwd.com
Attachment B
Attachment C
Unified Sanitary Sewer Spill Response Procedure

Attachment C (MS4 Permittee Contact Roster)

City of Beaumont
Mr. John Wilder
550 E. 6th Street
Beaumont, CA 92223
951.769.8520 Fax 951.769.8526
ulcjoh1@aol.com

City of Calimesa
Mr. Bob French
908 Park Avenue
Calimesa, CA 92320
909.795.9801 Fax 951.795.4399
bfrench@cityofcalimesa.net

City of Canyon Lake
Robert Bohan, Senior Special Enforcement Officer
31516 Railroad Cyn. Rd., Ste 101
Canyon Lake, CA 92587
951.244.2955 Fax 951.246.2022
Cell 951.265.1796 Home 951.244.3935(Deputy)
Kathy@cityofcanyonlake.com

City of Hemet
Ms. Linda Nixon
510 E. Florida Avenue
Hemet, CA 92543
951.765.3880 Fax 951.765.3878
lnixon@cityofhemet.org

City of Moreno Valley
Mr. Kent Wegelin or Ms. Phuong Hunter
14177 Frederick Street
Moreno Valley, CA 92552-0805
951.413.3480 Fax 951.413.3498
After hours: Emergency Stand-by group
Cell 951.442.5208 Pager 909.783.7149
kentw@moval.org or phuongh@moval.org

City of Norco
Mr. Terry Piorkowski
1281 Fifth Street
Norco, CA 92860
951.270.5607 Fax 951.735.0186
Emergency 951.273.6069 Pager 909.448.5550
tpiorkowski@ci.norco.ca.us

City of Perris
Mr. Michael Morales
101 N. "D" Street
Perris, CA 92570
951.461.6075 Fax 951.943.5003
mmorales@perris-ca.org

City of Riverside
Mr. Reagan S. Bailey or Mr. Ernie Meloy
5950 Acorn Street
Riverside, CA 92504
951.351.6095 Fax 951.687.6978
rbailey@riversideca.gov or emeloy@riversideca.gov

City of Temecula
Mr. Aldo Licitra
43200 Business Park Drive
Temecula, CA 92589-9033
951.394.6411 Fax 951.694.6475
After Hours: Brad Burton 951.551.4669
licitra@cityoftemecula.org or Brad.Burton@CityofTemecula.org

Riverside County Exec. Office
Mr. Alex Gann
4080 Lemon Street, 9th Floor
Riverside, CA 92501
951.955.1180 Fax 951.955.1105
agann@rceo.org

Riverside County Flood Control & Water Conservation District
Ms. Arlene Chun
1995 Market Street, Riverside, CA 92501
951.955.1330 Fax 951.788.9965
Mark Biloki, Maintenance Superintendent
mbiloki@rcflood.org
Office 951.955.1310, Cell 951.288.5254, Home 909.877.2716

Steve Stump, Maintenance Division Manager
sstump@rcflood.org
Office 951.955.1280, Cell 909.214.6159

City of San Jacinto
Mike Emberton (Public Works Director), Aaron Anderson (Utilities Super.)
201 E. Main Street
San Jacinto, CA 92583
951.654.4041, Cell: 951.538.9499, Pager: 951.765.8197
Fax 951.487.7382
Memberton@sanjacintoca.us; Aanderson@sanjacintoca.us

City of Corona
Mr. Ed Lockhart
730 Corporation Yard Way, 1st Floor
Corona, CA 92880
951.736.2443 Fax 951.279.3613
951.232.2510
edl@ci.corona.ca.us

City of Lake Elsinore
Mr. Ken Seumalo
130 South Main Street
Lake Elsinore, CA 92530
951.674.3124 Ext. 244 Fax 951.674.2392
kseumalo@lake-elsinore.org

City of Murrieta
Ms. Farida Naceem
26442 Beckman Court
Murrieta, CA 92562
951.461.6075 Fax 951.698.4509
fnaceem@murrieta.org

City of Temecula
Mr. Aldo Licitra
43200 Business Park Drive
Temecula, CA 92589-9033
951.394.6411 Fax 951.694.6475
After Hours: Brad Burton 951.551.4669
licitra@cityoftemecula.org or Brad.Burton@CityofTemecula.org

Riverside County Flood Control & Water Conservation District
Ms. Arlene Chun
1995 Market Street, Riverside, CA 92501
951.955.1330 Fax 951.788.9965
Mark Biloki, Maintenance Superintendent
mbiloki@rcflood.org
Office 951.955.1310, Cell 951.288.5254, Home 909.877.2716

Steve Stump, Maintenance Division Manager
sstump@rcflood.org
Office 951.955.1280, Cell 909.214.6159

City of Temecula
Mr. Aldo Licitra
43200 Business Park Drive
Temecula, CA 92589-9033
951.394.6411 Fax 951.694.6475
After Hours: Brad Burton 951.551.4669
licitra@cityoftemecula.org or Brad.Burton@CityofTemecula.org

Riverside County Flood Control & Water Conservation District
Ms. Arlene Chun
1995 Market Street, Riverside, CA 92501
951.955.1330 Fax 951.788.9965
Mark Biloki, Maintenance Superintendent
mbiloki@rcflood.org
Office 951.955.1310, Cell 951.288.5254, Home 909.877.2716

Steve Stump, Maintenance Division Manager
sstump@rcflood.org
Office 951.955.1280, Cell 909.214.6159
Attachment D
Unified Sanitary Sewer Spill Response Procedure

Attachment E

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SANITARY SEWER OVERFLOW REPORT FORM

THIS REPORT IS (CIRCLE ONE): PRELIMINARY FINAL REVISED FINAL

SANITARY SEWER OVERFLOW SEQUENTIAL TRACKING NUMBER: _____________

REPORTED TO: ____________________________________________________________
(ENTER FAX, VOICE MAIL, OR NAME OF REGIONAL BOARD STAFF)

DATE REPORTED: ___________ (MM/DD/YY)
TIME REPORTED: ______________ (24 HOUR CLOCK)

REPORTED BY: __________________________________________________________
PHONE: __________________________________________________________________

REPORTING SEWER AGENCY: _____________________________________________
RESPONSIBLE SEWER AGENCY: ___________________________________________

OVERFLOW START: DATE: ___________ (MM/DD/YY)
TIME: ______________ (24 HOUR CLOCK)

OVERFLOW END: DATE: ___________ (MM/DD/YY)
TIME: ______________ (24 HOUR CLOCK)

ESTIMATED OVERFLOW FLOW RATE: ______________ (GALLONS PER MINUTE)

TOTAL OVERFLOW VOLUME: ______________ (GALLONS)
OVERFLOW VOLUME RECOVERED: ______________ (GALLONS)
OVERFLOW VOLUME RELEASED TO ENVIRONMENT: ______________ (GALLONS)

SANITARY SEWER OVERFLOW LOCATION AND DESCRIPTION:

STREET: __________________________________________________________________

CITY: ________________________________  ZIP CODE: _____________

COUNTY: __________ (SD, RI, OR)

SANITARY SEWER OVERFLOW STRUCTURE I.D.:

_________________________________________________________________________

NUMBER OF OVERFLOWS WITHIN 1000 FT. OF THIS LOCATION IN PAST 12 MONTHS ________
Unified Sanitary Sewer Spill Response Procedure

Attachment E

DATES OF OVERFLOWS WITHIN 1000 FT OF THIS LOCATION IN PAST 12 MONTHS

OVERFLOW CAUSE -- SHORT DESCRIPTION -- CIRCLE ONE

ROOTS  GREASE  LINE BREAK  INFILTRATION
ROCKS  BLOCKAGE  POWER FAILURE  PUMP STATION FAILURE
DEBRIS  VANDALISM  FLOOD DAMAGE  MANHOLE FAILURE
OTHER  UNKNOWN  CONSTRUCTION  PRIVATE PROPERTY

OVERFLOW CAUSE -- DETAILED DESCRIPTION OF CAUSE

SANITARY SEWER OVERFLOW CORRECTION -- DESCRIPTION OF ALL PREVENTATIVE AND CORRECTIVE MEASURES TAKEN OR PLANNED

WAS THERE MEASURABLE PRECIPITATION DURING 72-HOUR PERIOD PRIOR TO THE OVERFLOW?  (Y OR N)

INITIAL AND SECONDARY RECEIVING WATERS:

DID THE SANITARY SEWER OVERFLOW ENTER A STORM DRAIN?  (Y OR N)
Unified Sanitary Sewer Spill Response Procedure

Attachment E

DID THE SANITARY SEWER OVERFLOW REACH SURFACE WATERS OTHER THAN A STORM DRAIN? ___ (Y OR N)

NAME OR DESCRIPTION OF INITIAL RECEIVING WATERS. (IF NONE, TYPE NONE)

NAME OR DESCRIPTION OF SECONDARY RECEIVING WATERS. (IF NONE, TYPE NONE)

IF THE SANITARY SEWER OVERFLOW DID NOT REACH SURFACE WATERS, DESCRIBE THE FINAL DESTINATION OF SEWAGE.

NOTIFICATION:

WAS THE LOCAL HEALTH SERVICES AGENCY NOTIFIED? ___ (Y OR N)

IF THE OVERFLOW WAS OVER 1,000 GALLONS, WAS THE OFFICE OF EMERGENCY SERVICES (OES) NOTIFIED? ___ (Y or N) (NOT APPLICABLE, ENTER NA)

AFFECTED AREA POSTING:

WERE SIGNS POSTED TO WARN OF CONTAMINATION? ___ (Y OR N)

LOCATION OF POSTING (IF POSTED): ________________________________

HOW MANY DAYS WERE THE WARNING SIGNS POSTED? ___

REMARKS:

_________________________________________________________________________

_________________________________________________________________________

_________________________________________________________________________
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San Diego Regional Board general guidelines for sewage collection overflows

- These general guidelines are for sewage collection agencies in the San Diego Region and do not supersede any requirements by other agencies (for example - OES and department of health). Please check with other agencies for any additional requirements.
- If a report is entered into CIWQS as a draft or certified report, then there is no need to fax or email a report to the San Diego Regional Board.

During business hours, the San Diego RWQCB contact is Joann Cofrancesco at 858-637-5589. After hours, the San Diego RWQCB number is 858-822-8344.
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Elsinore Valley Municipal Water District

APPENDIX H – SEWER USE ORDINANCE
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Regulations
For
Waste Discharge
And Sewer Use

ORDINANCE NO. 160

ADOPTED BY THE BOARD OF DIRECTORS
OF ELSINORE VALLEY MUNICIPAL WATER DISTRICT

December 20, 2004
ADOPTED, SIGNED, AND APPROVED this 20th day of December, 2004

W. Ben Wicke, President of the Board of Directors of the Elsinore Valley Municipal Water District

ATTEST:

Terese Quintanar, Secretary of the Board of Directors of the Elsinore Valley Municipal Water District
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TABLE A

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ARTICLE 1

General Provisions

1.100 INTENT

A. It is the intent of this Ordinance to protect public health, District personnel, the District’s wastewater collection, treatment systems and the environment from waste discharges by users with the potential to detrimentally impact the beneficial use of reclaimed (recycled) water and municipal sludge (bio-solids).

1.200 PURPOSE

A. The purpose of this Ordinance is to set forth:

1. Conditions and limitations on the use of the District's sewer system;

2. Specific enforcement provisions to resolve noncompliance with the District's Ordinance, thereby allowing the District to:

   a. Comply with the laws, regulations, and rules imposed upon it by Regulatory Agencies;

   b. Ensure that the District's sewerage facilities and treatment processes are protected and are able to operate with the highest degree of efficiency;

   c. Protect the beneficial use of reclaimed (recycled) water and municipal sludge (bio-solids); and

   d. Protect the public health and environment.

1.300 POLICY

A. This Ordinance shall be interpreted in accordance with the definitions set forth in Article 2. The provisions of this Ordinance shall apply to the direct and indirect discharge of all wastes to facilities of the District.

B. The District shall seek the cooperation of the users of the collection system to ensure compliance with this Ordinance. Reasonable approaches shall be utilized when applying applicable regulations without compromising the intent, purpose and policies of this Ordinance.
C. The District shall adopt more stringent quality requirements on wastewater discharges regulated by 40 CFR, Chapter I, Subchapter N, Parts 405-471, in the event that more stringent quality requirements are necessary to protect beneficial use of reclaimed (recycled) water and municipal sludge (bio-solids).

D. The District shall encourage conservation and pollution prevention through source control strategies, which reduce the amount of pollutants entering the environment, prior to recycling, pretreatment, or disposal.

E. The District shall use the revenues derived from the application of this Ordinance to defray the cost of regulating sewer usage to include, but not be limited to, administration, monitoring, inspecting, permitting, reporting, and enforcement.

F. All costs and expenses incurred by the administration, monitoring, inspecting, permitting, reporting, and enforcement procedures of the District’s Source Control Division shall be paid by the applicant/discharger. All applicable fees shall be pursuant to the most current edition of the Districts Pretreatment Program Fee Schedule and as amended thereto.

G. The District shall ensure that all parties are afforded due process of law. An applicant or user shall be given written notice of rejection of an application, or violation of a control mechanism, or of any enforcement action. Such notice shall include a statement of reasons in support thereof and proposed actions to be taken, if any. Affected applicants or users shall have the right to a hearing. Decisions/determinations may be appealed as set forth in Article 5.

H. The District, in its sole and reasonable discretion, may utilize any one, combination, or all enforcement remedies provided in Article 1.600(A) (10) in response to any violation.

1.400 SCOPE

A. The provisions of these Regulations shall apply to sewer construction, use, maintenance, discharge, deposit, or disposal of wastewater, both directly and indirectly, into and through all District collection systems and to the issuance of control mechanisms and assessment/imposition of fees, fines and penalties thereof.

1.500 APPLICABILITY

A. This "Regulations for Waste Discharge and Sewer Use" Ordinance applies to all users of the District's sewer system and specifies herein that all
users of the District’s sewer system are subject to regulation and enforcement.

1.600 POWERS

A. The General Manager is authorized to:

1. Issue Waste Discharge Authorizations;
2. Issue Waste Discharge Permits;
3. Require the installation and maintenance of pretreatment and/or monitoring facilities and equipment;
4. Conduct inspections of facilities, including, but not limited to, inspecting and copying records;
5. Require monitoring and reporting of discharges to the public sewer system;
6. Monitor the quality of wastewater entering the sewer system;
7. Require the development of Spill Containment Plans and reporting of accidental discharges;
8. Require the development of a Slug Control Plan (per Title 40 of the Code of Federal Regulations (40 CFR) 403.8(f)(2)(v));
9. Deny, approve or approve with conditions, new or increased discharges or change in the quantity or characteristics of discharges, when such discharges do not meet applicable pretreatment requirements as specified in 40 CFR 403.8(f)(1)(i).
10. Take enforcement actions against those who violate or cause violation of this Ordinance or Waste Discharge Permit conditions. These actions may include, but are not limited to the following:
   a. Issuing letters;
   b. Issuing Notices of Violation;
   c. Issuing Administrative Orders;
   d. Issuing Cease and Desist Orders;
   e. Initiating and conducting non-compliance meetings;
   f. Initiating and conducting non-compliance inspections;
   g. Initiating and conducting administrative hearings;
   h. Petitioning the courts for injunctions or civil penalties;
i. Signing criminal complaints;
j. Terminating water and or wastewater services;
k. Requiring payment of violation charges;
l. Revoking and/or suspending the discharge permit.

11. Delegate authority to the Division Head, Department Head or Inspector of any power granted to or the carrying out of any duty imposed upon the General Manager pursuant to this Ordinance.

1.700 ACCESS

A. The District, Regional Board, and USEPA (when accompanied by District personnel) shall be permitted to enter all properties from which wastes or wastewaters are being or are capable of being discharged into a public sewer main for purposes of inspecting, copying of records, taking photographs, observing, measuring, sampling, and testing pertinent to the discharge of wastes or wastewaters to ascertain whether the intent of this Ordinance is being met and the user is complying with all requirements. The District shall have access at reasonable times and without delay to all parts of the premises for the purposes of inspection and/or sampling. The District shall have the right to set up on the user's property such devices as are necessary to conduct sampling or metering operations. Where a user has security measures in force, the user shall make necessary arrangements so that personnel from the District will be permitted to enter without delay for the purpose of performing their specific responsibilities. Delays in allowing or refusal to allow the District access to the User’s premises shall be a violation of this Ordinance.

1.800 INFORMATION REQUIRED

A. To provide for fair and equitable use of sewerage facilities, the District shall have the unqualified right to require a discharger to provide information necessary to insure compliance with all rules, regulations and provisions of this Ordinance.

B. All information and data on a user shall be available to the public and governmental agencies in accordance with Public Records unless the user specifically requests and is able to demonstrate to the satisfaction of the District that the release of such information would divulge information, processes or methods which would be detrimental to the user's competitive position. The demonstration of the need for confidentiality made by the permittee must meet the burden necessary for holding such information from the general public under applicable State and Federal law.
In any event, the District shall not limit EPA’s access to any information provided by the discharger.

In any event, information concerning wastewater quality and quantity will not be deemed confidential. Such information may include, but is not limited to:

1. Wastewater discharge peak flow rates and volume over a specified time period;
2. Physical, chemical, bacteriological, or radiological analysis of wastewaters;
3. Information on raw materials, processes, and products;
4. Quantity and disposition of specific liquid, sludge, oil, solvent, or other materials;
5. Details of wastewater pretreatment facilities, their operation and maintenance;
6. Details of systems to prevent and control the losses of materials through spills to the public sewer main;
7. Detailed plumbing plans indicating all sources discharging to the on or off-site pretreatment or sewerage facilities;
8. A slug control program, per 40 CFR 403.8(f)(2)(v);
9. Notification of discharges of a listed hazardous waste (Section 3001 of the Resource Conservation and Recovery Act (RCRA) to the sewer system per 40 CFR 403.12(p));
10. Baseline monitoring reports per 40 CFR 403.12(b);
11. Compliance progress reports in accordance with all provisions listed in 40 CFR 403.12(c), (d), and (e).
12. Notification of potential problems, including slug loading in accordance with all provisions listed in 40 CFR 403.12(f).
13. Notification of substantial changes in volume or character of pollutants discharged in accordance with all provisions listed in 40 CFR 403.12(j).
14. Monitoring and analysis reports demonstrating continued compliance in accordance with all provisions listed in 40 CFR 403.12(g).

1.900 AUTHORITY

The District is regulated by several agencies of the United States Government and the State of California, pursuant to the provisions of Federal and State Law. Federal and State Laws (including, but not limited to: 1) Federal Water Pollution Control Act, commonly known as the Clean Water Act (33 U.S.C. Section 1251 et seq); 2) California Porter Cologne Water Quality Act (California Water Code section 13000 et seq.); 3) California Health & Safety Code sections 25100 to 25250; 4) Resource Conservation and Recovery Act of 1976 (42 U.S.C. Section 6901 et seq.); and 5) California Government Code, Sections 54739-54740) grant to the District the authority to regulate and/or prohibit, by the adoption of an ordinance, and by issuance of control mechanisms, the discharge of any waste, directly or indirectly, to the District sewerage facilities. Said authority includes the right to establish limits, conditions, and prohibitions; to establish flow rates or prohibit flows discharged to the District sewerage facilities; to require the development of compliance schedules for the installation of equipment systems and materials by all users; and to take all actions necessary to enforce its authority, whether within or outside the District boundaries, including those users that are tributary to the District or within areas for which the District has contracted to provide sewerage services.

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ARTICLE 2
Definitions

2.100 DEFINITIONS

A. Unless otherwise defined herein, terms related to water quality shall be as adopted in the latest edition of Standard Methods for the Examination of Water and Wastewater, published by the American Public Health Association, the American Water Works Association and the Water Environment Federation. The testing procedures for waste constituents and characteristics shall be as provided in 40 CFR 136 (Code of Federal Regulations; Title 40; Protection of Environment; Chapter I, Environmental Protection Agency; Part 136, Test Procedures for the Analyses of Pollutants), or as specified. Other terms not herein defined are defined as being the same as set forth in the International Conference of Building Officials, Uniform Building Code, Current Edition, or the International Association of Plumbing and Mechanical Officials, Uniform Plumbing Code, Current Edition.

B. Unless a provision explicitly states otherwise, the following terms and phrases, as used in this Ordinance, shall have the meanings hereinafter designated.

1. Applicant shall mean any person or persons who have applied for permission to use the District’s collection system for commercial or industrial purposes.

2. Board shall mean the Board of Directors of Elsinore Valley Municipal Water District.

3. Building Sewer shall mean the entire length of a private sewage service lateral extending from the facility or structure to be served to the point of connection with the public sewer main.

4. Categorical Pretreatment Standards shall mean those final regulations promulgated and adopted by EPA (as outlined in 40 CFR 403, and 40 CFR, Chapter I, Subchapter N, 405-471) for each standard industrial classification (S.I.C.) or subcategory containing pollutant discharge limits.

5. Categorical User shall mean any industrial user whose process (es) are subject to Categorical Pretreatment Standards.
6. **Cesspool** shall mean a lined excavation in the ground which receives the discharge of a sewage drainage system, or part thereof, so designed as to retain the solids and organic matter, but permitting liquids to seep through the bottom and sides. This shall also mean Seepage Pit.

7. **Class I User** shall mean a discharger that is a Categorical or Significant Industrial User.

8. **Class II User** shall mean a discharger that discharges non-domestic wastewater and has the potential to discharge incompatible pollutants and/or pollutants that are limited by the adoption of local limits established by the District.

9. **Class III User** shall mean food service facilities (refer to Article 2, item 23).

10. **Class IV User** shall mean a discharger that is required to install and maintain or has an existing oil/sand gravity separation interceptor or clarifier system.

11. **Class V User** shall mean waste hauler.

12. **Class VI User** shall mean any discharger that discharges only domestic wastewater but has the potential to discharge hazardous materials and/or incompatible pollutants and/or pollutants that are limited by the adoption of local limits established by the District.

13. **Code of Federal Regulations (CFR)** shall mean the codification of the general and permanent rules published in the United States Federal Register by the Executive departments and agencies of the Federal Government to include but not be limited to the Environmental Protection Agency.

14. **Collection System** shall mean the combined pipes, conduits, manholes, liftstations and other structures, above and below ground, whose purpose is to convey wastewater to a District RWRF.

15. **Compatible or Conventional Pollutant** shall mean a combination of BOD, Total Suspended Solids, pH, fecal coliform bacteria, plus other pollutants that the District’s treatment facilities are designed to accept, treat and/or remove. Some compatible pollutants may be considered incompatible when discharged in quantities that have an adverse effect on the District’s collection, treatment, disposal
systems and/or discharge permit regulating the treatment facilities cause interference or pass through.

16. Control Mechanism shall mean Waste Discharge Permit, Waste Discharge Authorization or Special Agreement.

17. Department Head shall mean that person duly designated by the General Manager to direct the Source Control Division and perform the duties as specified in this Ordinance.

18. Discharger shall mean any person, entity or collection agency that discharges or causes a discharge of domestic or non-domestic wastewater directly or indirectly to the District’s POTW. Discharger shall mean the same as User.

19. Discharge Requirements shall mean the requirements of Federal (as listed in 40 CFR 403), state or local public agencies having jurisdiction over the effluent discharges from District Regional Water Reclamation Facilities.

20. District shall mean the Elsinore Valley Municipal Water District.

21. Division Head shall mean that person duly designated by the General Manager to implement the District’s Source Control Program and perform the duties as specified in this Ordinance.

22. Domestic Wastewater shall mean the liquid and solid waterborne wastes derived from the ordinary living processes of humans of such character as to permit satisfactory disposal, without special treatment, into the public sewer or by means of a private disposal system.

23. Food Service Facilities shall include, but not limited to, retail establishments selling prepackaged foods, prepared foods and or drinks for consumption either on or off the premises. Institutional kitchens are included, but not limited to, schools, hospitals, convalescent/health care homes, community centers, fire stations etc., also, lunch counters and refreshment stands selling prepackaged and prepared foods/drinks for immediate consumption. Restaurants, lunch counters, and drinking places operating as a subordinate service facility by other establishments shall also be included.
24. **General Manager** shall mean the General Manager of the Elsinore Valley Municipal Water District or his designee, agent, representative or inspector.

25. **Incompatible or Non-Conventional Pollutant** shall mean any pollutant which is not a compatible pollutant as defined herein.

26. **Indirect Discharger** shall mean any person, entity or collection agency which discharges or causes a discharge of wastewater to a septic tank, cesspool, chemical toilet, or private sewer system which, from time to time, is serviced by a Liquid Waste Hauler permitted by the District to discharge to District sewerage facilities.

27. **Industrial User** shall mean any discharger of non-domestic wastewater to a collection agency's sewer main either directly or indirectly. Also any discharger who has the potential to discharge non-domestic wastewater.

28. **Industrial Wastewater** shall mean, unless otherwise exempted, all liquid carried wastes including, but not limited to, all wastewater from any producing, manufacturing, processing, institutional, commercial, restaurant, agriculture, or other operation where the wastewater discharged contains quantities of wastes of non-human origin and excluding domestic wastewater, rainwater, uncontaminated groundwater, storm water, and drainage of uncontaminated water.

29. **Inspector** shall mean a person authorized by the General Manager to inspect any establishment directly or indirectly discharging or anticipating discharge to a public sewer main or a RWRF.

30. **Interference** shall mean a discharge by a User which, alone or in conjunction with discharges by other sources, inhibits or disrupts the District's RWRF, its treatment processes or operations, or its sludge processes (bio-solids), use or disposal; and which is a cause of a violation of any requirement of the RWRF's discharge order (including an increase in the magnitude or duration of a violation), or of the prevention of sewage sludge (bio-solid) use or disposal in compliance with applicable Federal, State, and local regulations (per 40 CFR 403.3 (i)).

31. **Liquid Waste Hauler** shall mean the same as Waste Hauler.

32. **Local Limits** shall mean a set of technically based discharge limits that are developed by the District to protect the public sewer...
system and to prevent sludge (bio-solid) contamination or violation of discharge requirements.

33. **Mass Emission Rate** shall mean the weight of material discharged to the sewer system during a given time interval. Unless otherwise specified, the mass emission rate shall mean pounds per day of a particular constituent or combination of constituents.

34. **New Source** shall mean any building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which commenced after the publication of proposed pretreatment standards under section 307c of the Act. (See also 40 CFR 403.3(k) Definitions)

35. **Non-domestic Wastewater** shall mean all wastewater except domestic wastewater and pollutant-free wastewater. This shall also mean Industrial Wastewater.

36. **Non-Significant Industrial User (NSIU)** shall mean any industrial user that is not classified as a Categorical or Significant Industrial User.

37. **Normal Working Day** shall mean the period of time during which production and/or operation is taking place.

38. **Pass Through** shall mean the discharge of pollutants through the RWRF in quantities or concentrations, which discharge is a cause in whole or in part of a violation of any requirement of the RWRF's discharge order (per 40 CFR 403.3(n)).

39. **Permittee** shall mean a person who has applied for and received permission to discharge into the District's collection system subject to the requirements and conditions established by the District.

40. **Person** shall mean any individual, partnership, company, firm, association, corporation or public agency, including the State of California and the United States of America.

41. **Photographic Processing Facility** a facility, which processes images from silver-sensitized films and papers. These includes, but is not limited to, commercial photographic and film processing facilities, micro labs, printers, x-ray and other medical/dental/chiropractic/industrial institutional diagnostic facilities which use silver-based imaging materials, the processing of which produces a silver rich solution.
42. **Pollutant** shall mean any constituent or characteristic of wastewater on which a discharge limitation or prohibition may be imposed either by the District or the regulatory agencies empowered to regulate the District.

43. **Pretreatment** shall mean the reduction of the amount of pollutants, the elimination of pollutants, or the alteration of the nature of pollutant properties in wastewater to a less harmful state prior to discharge of the wastewater into a collection agency's system. The reduction or alteration may be accomplished by physical, chemical or biological process or process changes, or by other means.

44. **Pretreatment Facility** shall mean any works or devices for the treatment or flow control of wastewater prior to discharge.

45. **Pretreatment Requirements** shall mean any substantive or procedural requirement related to pretreatment imposed on a user, other than a pretreatment standard.

46. **Pretreatment Standard or Standards** shall mean prohibited discharge standards, categorical pretreatment standards, and local limits.

47. **Priority Pollutants** shall mean the listing of the toxic pollutants causing the greatest environmental concern and requiring pretreatment prior to discharge (in 40 CFR 403).

48. **Public Agency** shall mean the State of California or any city, county, district, other local authority or public body within this state.

49. **Publicly Owned Treatment Works (POTW)** shall mean treatment works as defined by Section 212 of the Clean Water Act, (33 USC 1292). This definition includes any devices or systems owned and operated by the District, which are used in the conveyance, storage, treatment, recycling and reclamation of municipal sewage. It also includes the District’s interceptors and tributary sewer systems.

50. **Public Nuisance** shall mean anything which: (1) is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property, and (2) affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted
upon individuals may be unequal, and (3) occurs during or as a result of the treatment or disposal of wastes.

51. **Public Sewer Main** shall mean any closed conduit, excluding building sewers, which is financed, installed, owned, operated, or maintained by a Public Agency for the purpose of transporting wastewater from building sewers.


53. **Regional Water Reclamation Facility (RWRF)** shall mean the District sewage treatment plant designed to serve a specific area of the District.

54. **Regulatory Agencies** shall mean those agencies having oversight of the operation of the District, including but not limited to the following:

   A. United States Environmental Protection Agency (EPA);
   B. California Environmental Protection Agency (Cal-EPA);
   C. California State Water Resources Control Board (SWRCB);
   D. California Regional Water Quality Control Board, Santa Ana Region (CRWQCB, SAR);
   E. California Regional Water Quality Control Board, San Diego Region (CRWQCB, SDR)

55. **Residential User** shall mean a household which discharges only domestic wastewater from a dwelling unit.

56. **Responsible Party** shall mean:

   A. if the User is a corporation, a responsible corporate officer, that is:

      1. A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions for the corporation, or
2. the manager of one or more manufacturing, production, or operation facilities employing more than 250 persons or having gross annual sales or expenditures exceeding $25 million (in second-quarter 2001 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

B. if the User is a partnership or sole proprietorship, a general partner or proprietor, respectively.

C. if the User is a Federal, State, or local governmental entity, or their agents, the principal executive officer or director having responsibility for the overall operation of the discharging facility.

D. By a duly authorized representative of the individual designated in paragraph (A), (B) or (C) of this definition if:

1. The authorization is made in writing by the individual described in paragraph (A), (B) or (C);

2. The authorization specifies either an individual or a position having responsibility for the overall operation of the facility from which the discharge originates, such as the position of plant manager, operator of a well, or well field superintendent, or a position of equivalent responsibility, or having overall responsibility for environmental matters for the company; and

3. The written authorization is submitted to the District.

E. If an authorization under paragraph (D) of this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility or overall responsibility for environmental matters for the company, a new authorization satisfying the requirements of paragraph (D) of this section must be submitted to the District.

57. **Sanitary Wastewater** shall mean domestic quality wastewater from other than a dwelling unit.

58. **Septic Tank** shall mean a watertight receptacle, which receives the discharge from a sewer system and is designed and constructed to
retain solids, digest organic matter through a period of detention, and allow the liquids to discharge for disposal.

59. **Sewerage Facilities** shall mean any and all facilities used for collecting, conveying, pumping, treating and disposing of wastewater.

60. **Significant Industrial User** shall mean:

   A. A user subject to categorical pretreatment standards; or

   B. A user that:

      1. Discharges an average of twenty-five thousand (25,000) gallons per day (gpd) or more of process wastewater to the District’s collection system (excluding sanitary, non-contact cooling, and boiler blowdown wastewater);

      2. Contributes a process wastestream which makes up five (5) percent or more of the average dry weather hydraulic or organic capacity of the RWRF; or

      3. Is designated as such by the District on the basis that it has a potential for adversely affecting the RWRF’s operation or for violating any pretreatment standard or requirement.

   C. Upon a finding that a user meeting the criteria in Subsection (B) has no reasonable potential for adversely affecting the RWRF’s operation or for violating any pretreatment standard or requirement, the District may at any time, on its own initiative or in response to a petition received from a user, and in accordance with procedures in 40 CFR 403.8 (f) (6), determine that such user should not be considered a significant industrial user.

61. **Significant Non-Compliance (SNC)** shall mean any user with compliance violations, which meet one or more of the following criteria:

   A. Chronic violations of wastewater discharge limits, defined as those in which sixty-six (66%) percent or more of all of the measurements taken during a six-month (6) period exceed
(by any magnitude) the daily maximum limit or the average limit for the same pollutant parameter;

B. Technical review criteria (TRC) violations, defined as those in which thirty-three percent (33%) or more of all of the measurements taken during a six-month (6) period equal or exceed the product of the daily maximum limit or the average limit times the applicable TRC (TRC=1.4 for BOD, TSS, fats, oil and grease, and 1.2 for all other pollutants except pH);

C. Any other violation of a pretreatment effluent limit (daily maximum or longer term average) that the District determines has caused, alone or in combination with other discharges, interference or pass through (including endangering the health of District personnel or the general public);

D. Any discharge of a pollutant that has caused imminent endangerment to human health, welfare or to the environment or has resulted in the District's exercise of its emergency authority to halt or prevent such a discharge;

E. Failure to meet, by ninety-days (90) or more after the schedule date, a compliance schedule milestone contained in a local control mechanism or enforcement order, for starting construction, completing construction, or attaining final compliance;

F. Failure to provide required reports such as baseline monitoring reports, ninety-days (90) day compliance reports, periodic self-monitoring reports, and reports on compliance with compliance schedules within thirty days of the due date;

G. Failure to accurately report non-compliance;

H. Any other violation or group of violations, which the District considers to be significant.

62. **Single Pass Cooling** shall mean unpolluted water used for the absorption and immediate discharge of excess thermal energy to the environs prior to heat exchange and reuse.

63. **Silver CMP** shall mean the Code of Management Practice for Silver Discharges, issued by The Silver Council and the Association of
Metropolitan Sewerage Agencies (AMSA), September 1995, and all subsequent revisions thereto. The Silver CMP provides recommendations on technology, equipment and management practices for controlling silver discharges from facilities that process photographic materials.

64. **Silver Recovery** shall mean the process of removing silver from silver-rich solutions such as fixers, bleach fixes, washless stabilizers and low-flow washes.

65. **Silver-Rich Solution** shall mean a solution containing sufficient silver such that cost-effective recovery can be done either on-site or off-site. Within photographic processing facilities, such solutions include, but are not limited to fix and bleach-fix solutions, stabilizers (e.g., plumbless stabilizers and chemical washes), low replenished (low-flow) washes and all functionally similar solutions. It does not include such low silver solutions as used developers, bleaches, stop baths, pre-bleaches, stabilizers following washes and wash waters.

66. **Slug** shall mean any discharge of water or wastewater which, in concentration of any given constituent or in quantity of flow, exceeds five (5) times the average 24-hour concentration of flows during normal operation for a period of fifteen (15) minutes or more and/or has a significant adverse impact, either singly or in combination with other discharges, on the collection agency's sewer system or the quality of the effluent from the involved District treatment plant.

67. **Spill Containment** shall mean a protection system installed by the user to prohibit the accidental discharge to the sewer of incompatible pollutants.

68. **Standard Industrial Classification (S.I.C.)** shall mean the system of classifying industries identified in the S.I.C. Manual, issued by the Office of Management and Budget.

69. **Toxic Pollutants** shall mean those substances which, individually or when combined with other substances normally found in domestic sewage, result in wastes in a collection agency sewer system in concentrations or quantities which could have an adverse or harmful effect on such sewer system facilities, sewer treatment plant operations and maintenance personnel or equipment, treated sewage effluent quality, water reclamation procedures, public or
private property, or which may endanger the public, local environment, or create a public nuisance.

70. **User** shall mean any person who discharges or causes a discharge of domestic or non-domestic wastewater directly or indirectly to the District’s POTW. User shall mean the same as Discharger.

71. **Violation** shall mean an event or condition at a user's facility or dwelling that is prohibited by Ordinance, control mechanism, or Order.

72. **Violation Charge** shall mean that charge levied against a discharger for costs incurred by the District as a result of a waste discharge violation.

73. **Waste Discharge Authorization** shall mean the revocable permission to discharge wastewater to the public sewer main possibly subjected to technically based limits on wastewater constituents and characteristics.

74. **Waste Discharge Permit (WDP)** shall mean the periodically renewable, revocable permission to discharge industrial wastewater to the public sewer main subject to technically based limits on wastewater constituents and characteristics.

75. **Waste Discharge Violation** shall mean the failure by a user to comply with this Ordinance, or any conditions or reporting requirements as contained in their control mechanism.

76. **Waste Hauler** shall mean any commercial pumper that is permitted by Riverside County Department of Health as a Non-Hazardous Liquid Waste Hauler, discharging portable/chemical toilet, domestic and sanitary wastewater only. This definition shall also mean septic tank pumper and liquid waste hauler.

2.101 **OTHER MEANINGS**

Words used in this Ordinance in the singular may include the plural and the plural the singular. Use of masculine shall mean feminine and use of feminine shall mean masculine. Shall is mandatory; may is permissive or discretionary.
ARTICLE 3

GENERAL SEWER USE REQUIREMENTS

3.100 PROHIBITED DISCHARGE STANDARDS

A. General Prohibitions. No user shall introduce or cause to be introduced into the District’s collection system any pollutant or wastewater which, alone or in conjunction with other substances, may cause pass through and/or interference, or any wastewater which has the potential to adversely or harmfully effect the District’s sewers, maintenance personnel, wastewater treatment plant personnel or equipment, treatment plant processes or the quality of treatment plant effluent or bio-solids, public or private property, or wastes which may otherwise endanger the public, the environment, or create a public nuisance. These general prohibitions apply to all users whether or not they are subject to categorical pretreatment standards or any other National, State, or local pretreatment standards or requirements.

B. Specific Prohibitions. No user shall introduce or cause to be introduced into the District’s collection system the following pollutants, substances, or wastewater:

1. Pollutants which can create a fire or explosive hazard in the District’s RWRF or collection system, including, but not limited to, wastestreams with a closed-cup flashpoint of less than 140°F (60°C) using the test methods specified in 40 CFR 261.21;

2. Wastewater having a pH less than 6.0 or more than 11.0, or wastewater having any other corrosive property capable of causing damage or hazard to structures, equipment and/or personnel of the POTW;

3. Any solids or viscous substances of such size or in such quantity, condition, or nature that they may cause obstruction to flow in the sewer or be detrimental to proper wastewater treatment plant operations. These objectionable substances include, but are not limited to, asphalt, dead animals, concrete, ashes, sand, mud, straw, industrial process shavings, metal, glass, diatomaceous earth, rags, feathers, tar, plastics, wood, paunch manure, bones, hair and/or fleshings, entrails, disposable dishes, disposable cups, or other similar paper products whole or ground or any materials which tend to solidify or collect in the sewer and obstruct wastewater flow.

4. Pollutants, including oxygen-demanding pollutants (BOD, etc.), released in a discharge at a flow rate and/or pollutant concentration
which, either singly or by interaction with other pollutants, could cause interference with the District’s RWRF’s or collection system;

5. Wastewater having a temperature greater than 140°F (60°C), or which will inhibit biological activity in the RWRF resulting in interference, but in no case wastewater which causes the temperature at the introduction into the RWRF to exceed 104°F (40°C);

6. Any petroleum oil, refined petroleum products, or products of mineral origin in amounts, which has the potential to cause interference or pass-through;

7. Any non-biodegradable or biodegradable cutting oils, commonly called soluble oils, which form persistent water emulsions; including engine/machine coolants and ethylene glycol.

8. Pollutants which result in the presence of toxic gases, vapors, or fumes within the District’s RWRF or collection system in a quantity that may cause acute worker health and safety problems;

9. Trucked or hauled pollutants, except at discharge points designated by the General Manager;

10. Noxious or malodorous liquids, gases, solids, or other wastewater which, either singly or by interaction with other wastes, may create a public nuisance or a hazard to life, or to prevent entry into the sewers for maintenance or repair;

11. Wastewater, which imparts color, which cannot be removed by the treatment process, such as, but not limited to, dye wastes and vegetable tanning solutions, which consequently imparts color to the RWRF’s effluent;

12. Any wastewater containing any radioactive wastes or isotopes of such half-life or concentration as may cause Interference, Pass-Through, or violation of applicable State or Federal regulations;

13. Storm water, surface/yard water, ground water, sulfur water, artesian well water, roof runoff, subsurface drainage, hot springs water, swimming/wading pool drainage, spa/whirlpool drainage, condensate, deionized water, non-contact cooling water, recreation vehicle (RV) holding tank waste and unpolluted wastewater. The General Manager in his sole and reasonable discretion may approve on a temporary basis, the discharge of certain types of waters to the POTW when no reasonable alternative method of
disposal is available, subject to current District policy and the payment of all applicable User charges and fees by the discharger;

14. Sludges, screenings, or other residues from the pretreatment of industrial wastes;

15. Detergents, surface-active agents, or other substances, which may cause excessive foaming in the District’s RWRF or collection system;

16. Wastewater required to be manifested under RCRA, unless specifically authorized by the General Manager;

17. Solid wastes from hospitals, clinics, offices of medical doctors, convalescent homes, mortuaries, medical laboratories or other medical facilities including, but not limited to, hypodermic needles, syringes, instruments, IV bags, utensils or other paper and plastic items of a disposable nature, also including, but not limited to, pharmaceutical wastes such as antibiotics, painkillers, antineoplastics, and controlled substances;

Infectious wastes may not be discharged to the District’s sewer system without prior written authorization from the District. All dischargers who wish to discharge infectious waste must make the request in writing and include the source and volume of the infectious waste. The District shall have the authority to require that any discharge of an infectious waste to the sewer system be rendered non-infectious prior to discharge;

18. Dissolved sulfides above a concentration of 0.1 mg/l or wastes which contribute to excessive sulfide production;

19. Any quantities of herbicides, germicides, biocides, algaecides, pesticides, fertilizers or any types of bacteriological retardation type compounds. This shall include any of the following substances: DDT (both isomers), DDD, DDE, Aldrin, Chlordane, Dieldrin, Endosulfan (alpha, beta and sulfate), Endrin, Aldehyde, Heptachlor, Perchloroethylene, Heptachlor Epoxide, Lindane, Disulfoton, Formaldehyde, Phorate, Glutaraldehyde, Dichlorobenzene and/or Toxaphene;

20. Any quantity of Dissolved Organic Halides (DOX), also known as Purgeable Halocarbons;

21. Any quantity of any of the following compounds: Aroclors 1221, 1228, 1232, 1242, 1254, 1260 and 1262. Any quantity of TCDD equivalents.
C. Pollutants, substances, or wastewater prohibited by this section shall not be processed or stored in such a manner that they could be discharged to the District’s collection system.

3.200 NATIONAL CATEGORICAL PRETREATMENT STANDARDS

A. The categorical pretreatment standards found at 40 CFR Chapter I, Subchapter N, Parts 405-471 are hereby incorporated.

B. Where a categorical pretreatment standard is expressed only in terms of either the mass or the concentration of a pollutant in wastewater, the General Manager may impose equivalent concentration or mass limits in accordance with 40 CFR 403.6(c).

C. When wastewater subject to a categorical pretreatment standard is mixed with wastewater not regulated by the same standard, the General Manager shall impose an alternate limit using the combined wastestream formula in 40 CFR 403.6(e).

D. A user may obtain a variance from a categorical pretreatment standard if the user can prove, pursuant to the procedural and substantive provisions in 40 CFR 403.13, that factors relating to its discharge are fundamentally different from the factors considered by EPA when developing the categorical pretreatment standard.

E. A user may obtain a net gross adjustment to a categorical standard in accordance with 40 CFR 403.15.

3.300 LOCAL LIMITS

A. No user shall discharge or cause to be introduced directly or indirectly into the District’s collection system, a quantity or quality of wastewater, which exceeds the Local Limits on discharges to public sewer mains, established by the District. (Refer to Table A)

B. These limits apply at the point where the wastewater is discharged to the District’s collection system. The General Manager may impose limitations based on concentrations of pollutants in milligrams per liter or as an amount of pollutants in pounds per day.

3.400 LIMITATIONS ON WATER SOFTENERS

Residential water softeners will be regulated in accordance with State law. Industrial and commercial users may not discharge wastewater from the regenerative process of onsite water softening units into the District’s collection system. Any person installing or operating a water softener apparatus of any kind
shall make such apparatus accessible to the District for inspection at all times and shall submit pertinent information as requested by the General Manager.

3.500 RIGHT OF REVISION

The District reserves the right to establish, by ordinance or in wastewater discharge permits, more stringent standards, conditions or requirements on discharges to the District’s RWRF’s or collection system.

3.600 DILUTION

No user shall ever increase the use of process water or in any way attempt to dilute a discharge as a partial or complete substitute for adequate treatment to achieve compliance with a discharge limitation unless expressly authorized by an applicable pretreatment standard or requirement. The General Manager may impose such limitations on the amount, in pounds per day, of pollutants discharged by users who are using dilution to meet applicable pretreatment standards or requirements, or in other cases when the imposition of such limitations is appropriate.

3.700 LIQUID WASTE HAULER PERMIT APPLICATIONS

A. All liquid waste haulers shall comply with all permitting and disposal procedures as established by this Section and pay all applicable fees established by the District. In addition, all liquid waste haulers shall abide by the following requirements and conditions:

1. The District’s RWRF located at 14980 Strickland Avenue, Lake Elsinore, CA shall be the only designated disposal site for hauled liquid wastes.

2. Liquid waste haulers seeking a Waste Discharge Permit to use the District’s designated disposal site shall complete and file with the District an application provided by the District. This application shall require the following information:

   a.) Name, address and telephone number of the liquid waste hauler.

   b.) Number of vehicles, gallon capacity of each vehicle, license plate of each vehicle, ownership, make and model of all vehicles that are operated by the hauler for purposes of hauling liquid wastes.

   c.) Person to contact regarding the information contained in the application.
d.) The name and policy number of the insurance carrier and bonding company.

e.) The number of the current permit required by the Riverside County Department of Environmental Health for transportation and disposal of liquid wastes.

f.) Other information as may be required by the District.

3.701 LIQUID WASTE HAULER DISCHARGE PERMIT CONDITIONS AND LIMITS

A. All liquid waste haulers shall obtain a Waste Discharge Permit for discharge to the District’s RWRF. This permit shall be issued for no longer than one (1) year. All terms and conditions of the permit may be subject to modification and change by the District at any time during the duration of the permit. Conditions contained within the permit may include, but are not limited to, the following:

1. Business name, address, and telephone number.
2. Authorized representative and signature.
3. Certification of permit condition acceptance.
4. Restrictions on operating hours for designated dumpsite.
5. Conditions upon which permit revocation, suspension, or termination can occur.
6. Permit number.
7. Record keeping and reporting requirements.
8. Compliance with applicable rules and regulations of this Article and the Riverside County Health Department regarding cleanliness and sanitary conditions.
9. Requirements to notify the District immediately of any unusual circumstances observed during liquid waste pumping operations.
10. Other conditions, policies, procedures, limitations or prohibitions deemed appropriate by the District.

B. Permits to use the designated disposal site of the District are subject to all the provisions of this section and any other discharge limits, policies and procedures enacted by the District.
C. Liquid wastes disposed of at the District’s designated disposal site may be subject to sampling and analysis to determine compliance with all applicable provisions of this section and any other applicable provisions of this Ordinance. The sampling shall be performed by authorized personnel of the District and may be taken at any time. If the wastes are found to be unacceptable, the liquid waste hauler shall be liable for all costs associated with the inspection, sampling, and analysis.

D. If the liquid waste hauler is in the business of hauling both industrial wastes and domestic wastes, the liquid waste hauler shall remove all industrial waste contamination from the interior of the vacuum tank prior to removing any domestic wastes from a site.

E. Falsification by a liquid waste hauler of any information in any permit application, hauler’s report, manifest, or correspondence shall be a violation of this Ordinance and may result in termination, revocation or suspension of the Waste Discharge Permit and all discharge privileges.

F. All reports and records required to be retained by this Section, shall be retained for a minimum of three (3) years and shall be made available to the District immediately upon request.

G. All liquid waste haulers shall pay all applicable fees and charges. Failure to pay any applicable fee or charge shall be a violation of this Ordinance and shall be cause for the District to suspend all waste discharge privileges until all applicable fees and charges have been paid.

H. All liquid waste haulers shall provide detailed documentation as to the origin of the wastes hauled prior to discharging into the District’s RWRF.

I. If the wastes hauled by a liquid waste hauler are found unacceptable for discharge into the District's POTW, the liquid waste hauler shall dispose of the wastes at a legal disposal site. The liquid waste hauler shall provide the District with a copy of the waste hauler’s manifest documenting the legal disposal of the rejected wastes within fourteen (14) days from the date the wastes were rejected. Failure to provide verifiable documentation shall constitute a violation of this section.

J. Liquid waste haulers are prohibited from discharging industrial waste into the District’s POTW. No liquid waste hauler shall mix industrial waste and domestic septic wastes in an attempt to discharge the mixture to the District’s designated dumpsite.

K. No liquid waste hauler shall discharge or cause to be discharged any material defined as hazardous by RCRA.
L. The District shall accept only domestic septic tank and portable/chemical toilet wastes. At no time shall the permittee discharge grease interceptor waste, sand/oil separator waste, industrial waste, hazardous waste or any other non-domestic waste to the RWRF dump station. In the case of portable/chemical toilet waste, only wastes containing bacteria based deodorizers will be accepted at the District's RWRF dump station. The District in its sole and reasonable discretion must first approve the type of bacteria based chemical toilet products that an applicant or permittee wishes to discharge.

M. The General Manager may deny the issuance or re-issuance of a Waste Discharge Permit for any of the following conditions:

1. The applicant knowingly falsified information on the application;

2. The applicant’s previous liquid waste hauler permit is under suspension or probation or has been otherwise revoked and the condition upon which such action was taken still exists; or

3. The applicant is not current on all disposal and permit related reports and charges.

N. In the event that a liquid waste haulers permit is denied, the District may notify the applicant in writing of such denial and the appeal procedures. Such notification shall state the grounds for such denial and necessary actions which must be taken by the applicant prior to the issuance of a permit.

O. All liquid waste hauler permits issued to any person or company may be revoked, suspended or entered into a probationary period upon a finding by the District that any of the following conditions exist:

1. Such person or representative thereof failed to display the authorization document upon request by a District employee.

2. Such person or representative thereof has changed, altered or otherwise modified the face of a permit or authorization document without the permission of the District;

3. Such person or representative thereof has violated any condition of the permit;

4. Such person or representative thereof has falsified any application record, report or monitoring results required to be maintained or has failed to make them immediately available to the District upon request;
5. Such person or representative thereof failed to halt immediately the discharge from his or her truck into designated disposal facilities of the District upon the order of any authorized District employee;

6. Such person or representative thereof discharged or attempted to discharge a hazardous waste or material into the designated discharge point;

7. Such person or representative thereof discharged or attempted to discharge industrial waste into the designated discharge point;

8. Such person or representative thereof discharged has repeatedly filed documents with falsified or incorrect information;

9. Such person or representative thereof has done physical violence or harm to any District employee;

10. Such person or representative thereof has made threatening remarks or threatening acts toward any District employee.

P. Any Waste Discharge Permit, which has been revoked, suspended or entered into probation pursuant to this Ordinance, may request to be reinstated after submitting a formal written request to the District for review.

Q. Upon determination of a violation of this Ordinance or a Waste Discharge Permit violation, the permittee shall be subject to the enforcement actions set forth in the Enforcement Article of this Ordinance, or as is otherwise contained in the Waste Discharge Permit as necessary to protect the District’s RWRF, the public, the environment or District employees.

R. Suspension and periods of probation may be imposed by the District for any length of time, up to a two (2) year period.

S. Any authorized District employee shall have the authority to order the immediate cessation of the discharge from any liquid waste hauler truck in the designated disposal site of the District. Such order shall be based on the employee’s best professional judgment that said discharge may be in violation of any applicable condition of this Ordinance or may otherwise be harmful to the operation of the District’s POTW or its employees.

3.800 USE OF AND DAMAGE TO DISTRICT EQUIPMENT OR FACILITIES

A. No person shall enter, break, damage, destroy, uncover, deface or tamper with any temporary or permanent structure, equipment or appurtenance which is part of the District’s collection system or POTW.
B. Any person who discharges or causes the discharge of wastewater or materials, which cause detrimental effects on the District’s collection system, POTW, the environment or any other damages, including the imposition of fines by Federal, State or other regulatory agencies against the District, shall be liable to the District for all damages and fines incurred including all legal and administrative expenses. An administrative fee of fifty (50%) percent of the District’s repairs and personnel costs shall be added to these charges. All charges shall be due and payable to the District within thirty (30) days of invoicing by the District.

3.900 DISCHARGERS OF SILVER RICH SOLUTIONS

3.901 PROHIBITION

It shall be unlawful for silver-rich solution from a photographic processing facility to be discharged or otherwise introduced into the District’s POTW, unless such silver-rich solution is managed by the photographic processing facility in accordance with the Silver CMP (or its District-approved equivalent) prior to its introduction into the POTW.

3.902 ENFORCIBILITY

The Silver CMP (or its District-approved equivalent) is a fully enforceable element of the District’s pretreatment program and constitutes a local limitation for silver discharged from photographic processing facilities.

3.903 INSPECTIONS

The District shall have the right to enter the property or premises of the photographic processing facility, at reasonable times and upon presentation of suitable identification, to verify the facility’s implementation of and compliance with the Silver CMP (or its District-approved equivalent). The District shall have the right to inspect any silver recovery equipment, relevant operation and maintenance records, any monitoring equipment or method, and to sample any discharge of wastewater to the POTW. The photographic processing facility shall make available for inspection and copying by the District all record and sampling results required under the Silver CMP (or its District-approved equivalent).

3.904 REGISTRATION

In addition to applying for a control mechanism in accordance with Section 4.106 of this Ordinance all photographic processing facilities shall within sixty (60) days of the effective date of this article (for existing photographic processing facilities), or within forty five (45) days before the date upon which a new photographic processing facility commences the discharge of silver-rich solutions to the Districts POTW, the photographic processing facility shall submit the following notification to the District: [Photographic processing facility] hereby notifies the
District that it is or will soon be discharge silver-rich solutions to the District’s POTW and that such discharges will hereafter be managed in accordance with the Silver CMP.

3.905 COMPLIANCE CERTIFICATION

Each photographic processing facility which has implemented the Silver CMP (or its District approved equivalent) for the control of silver discharges to the Districts POTW shall submit an annual compliance certification to the District by February 1 of each calendar year. This compliance certification, to be completed by an authorized representative of the photographic processing facility shall consist of the following statement:

On behalf of [photographic processing facility], I certify that, except as specifically noted below, this facility has implemented since the date of its last certification the CMP (or its District approved equivalent) for the control of silver discharges to the Districts POTW and as of the date of this certification, is in compliance with the requirements of the CMP (or its District approved equivalent).

3.906 ANNUAL REPORT

In addition to the submittal of a compliance certification, each photographic processing facility which is required to implement the CMP (or its District approved equivalent) shall submit an annual report and certification to the District by February 1 of each calendar year. The annual report shall contain the following information for the preceding calendar year: (i) type and description of silver recovery processes employed at the facility, (ii) quantity of silver-rich solution generated, (iii) description of any major changes in silver recovery equipment or operation since the submittal of the last annual report, (iv) all wastewater sampling results, (v) the average, minimum and maximum silver recovery achieved since the last annual report, and (v) explanation of all deviations from the CMP.

3.1000 BUILDING SEWERS

All building sewers connected to the District’s wastewater collection systems shall be regularly and adequately maintained by the property owners, so as to prevent sewer blockages and/or spills caused by damage to the building sewer. All construction, reconstruction, or maintenance of a building sewer shall be accomplished by the property owner at their sole expense. All new construction and repair work shall be in accordance with District construction standards.

3.2000 CHARGE FOR EXCESSIVE SEWER MAINTENANCE

No person shall discharge or cause to be discharged to a District’s sewer system, either directly or indirectly, any waste that obstructs, interferes with, or otherwise requires excessive maintenance of any District’s sewer or sewerage
facility; including any waste that creates a stoppage or breakage; any toxic, hazardous or odorous condition; or any damage or deterioration of any District’s sewer or sewerage facility. Any excessive sewer or sewerage maintenance expenses or reconstruction costs including administrative costs attributable thereto shall be charged to the discharger causing or contributing to such conditions. Any refusal to pay such charges shall constitute a violation of this Ordinance.

3.3000 IMPROPER USE OF CONNECTED SEWERS

The District may inspect any building sewer or collecting sewers that discharge wastewater directly or indirectly to the District’s public sewer system. If the General Manager determines that the improper use, maintenance, or construction of a building sewer or collecting sewer causes or contributes to the discharge of septic wastewater, excessive groundwater, debris or any other objectionable substance to the District’s public sewer main, the General Manager may give notice of the unsatisfactory condition to any discharger contributing to such condition and shall direct that condition be corrected. In the event of a failure to comply with the General Manager’s directive, the District may disconnect such building sewer or collecting sewer from the District’s sewerage system.

3.4000 INSPECTION OF CONSTRUCTION

A. All building sewers to be connected directly to a District collection system will be inspected by personnel of the District during construction. The District shall be notified at least forty-eight (48) hours prior (excluding weekends and holidays) to excavating to expose a public sewer main or commencing construction of a manhole that is connected to a public sewer main. In making a connection to a District collection system, no physical alteration of the District facilities shall commence until a District inspector is present.

B. Upon completion of construction and prior to removal of the downstream bulkhead and upon receiving forty-eight (48) hours notice (excluding weekends and holidays), the District will inspect the work to determine if it has been constructed in a satisfactory manner and to determine if all facilities are cleaned of construction debris that could be flushed into the District collection system. Sewerage facilities which will not be directly connected to a District collection system will not be inspected routinely by the District during construction.

C. No wastewater shall be discharged into any sewerage facility tributary to a District facility prior to obtaining inspection and approval of sewerage construction by the District.
D. Following satisfactory completion of construction, the District will, if requested, issue a construction inspection completion statement.

3.5000 AVAILABILITY OF DISTRICT SEWERAGE FACILITIES

If sewerage capacity is not available, the District may require any industrial wastewater discharger to restrict a discharge until sufficient capacity can be made available. When requested, the District will advise persons desiring to locate new facilities of those areas where industrial wastewater of their proposed quantity and quality can be accommodated by available sewerage facilities. The District may, in its sole and reasonable discretion, refuse service to persons locating facilities in areas where their proposed quantity or quality of industrial wastewater would adversely affect the available sewerage facility.

3.6000 FLOW MEASUREMENT

All industrial users who discharge twenty-five thousand gallons per day (gpd) or more of industrial wastewater, or as otherwise required by the District, shall install a continuous monitoring flow meter capable of measuring the industrial user’s discharge to the District’s collection system. The flow measurement device shall conform to standards issued by the District. In regards to industrial users who were discharging to the District’s collection system prior to the adoption of this Ordinance, the District may evaluate each discharger on a case-by-case basis.

3.7000 ANTI-FLOODING DEVICE

Whenever, in the opinion of the District, there exists the possibility of domestic or non-domestic wastewater from a District collection system flooding private property as a result of a restriction or stoppage from a District collection system, an anti-flooding device (backwater valve), approved by the District, shall be installed and connected to a building sewer. This device shall be purchased, installed, and maintained at the discharger’s expense.

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Article 4

Control Mechanisms

4.100 General Requirements

4.101 WASTEWATER ANALYSIS

When requested by the District, a user must submit information on the nature and characteristics of its wastewater within sixty (60) days of the request. The District may prepare a form for this purpose and may periodically require users to update this information.

4.102 CONTROL MECHANISM REQUIREMENTS

A. All industrial users shall notify the District of the volume and characteristics of their wastewater at least sixty (60) days prior to commencing their discharge on a form provided by the District. This notification shall include but not be limited to any new introduction of wastewater constituents or any substantial change in the volume or character of the wastewater being introduced into the RWRF.

B. It shall be unlawful for any industrial user to discharge wastewater either directly or indirectly into the District’s sanitary sewer system without first obtaining a control mechanism or other authorization from the District's Source Control Division. Any violation of the terms and conditions of a control mechanism shall be deemed a violation of this Ordinance and subject the user to the sanctions set out in Article 5 of this Ordinance. Obtaining a control mechanism does not relieve the user of its obligation to comply with all Federal and State pretreatment standards or requirements or with any other requirements of Federal, State, and local law.

4.103 EXISTING CONNECTIONS

Any user who was discharging wastewater into the District’s collection system prior to the effective date of this Ordinance and who wishes to continue such discharges in the future, shall, within ninety (90) days after said date, apply to the District for a control mechanism in accordance with Section 4.107 of this Ordinance, and shall not cause or allow discharges to the District's collection system to continue after one hundred twenty (120) days of the effective date of this Ordinance except in accordance with a control mechanism issued by the District.
4.104 NEW CONNECTIONS

Any categorical or significant industrial user required to obtain a control mechanism who proposes to begin or recommence discharging into the District’s collection system must apply for such control mechanism prior to the beginning or recommencing of such discharge. An application for this control mechanism, in accordance with Section 4.107 of this Ordinance, must be filed at least sixty (60) days prior to the date upon which any discharge will begin or commence.

4.105 RESPONSIBILITY OF USERS

It shall be the responsibility of the user and/or discharger to comply with all of the provisions of this Ordinance. The omission to act by the District and/or the failure of the District to take cognizance of the nature of the operation of the user and/or the properties of the user’s wastewater shall not relieve the user of responsibility to comply with the conditions of this Ordinance, including, but not limited to, such requirements regarding permitting, pretreatment of wastewaters, monitoring, sampling and reporting. It shall be the responsibility of the user to make determinations as to the nature of its operation and wastewater flow and to take such actions as may be required under this Ordinance prior to any discharge of wastewater, whether or not the user has been informed by the District of the requirements, which may apply to the user regarding its discharge.

4.106 CLASS OF USERS

A. The District will classify all users in accordance with the activities conducted on the premises where the discharge occurs. The purpose of the classification is to facilitate regulation of discharges to the District’s POTW’s on the basis of each user’s waste discharge quality and quantity. The classification shall further provide a means of imposing an appropriate level of oversight, control and enforcement according to the source of the discharge. The classification system will also allow equitable recovery of capital and operating costs for the District’s pretreatment program.

   1. Users are categorized as Class I, II, III, IV, V or VI as defined in Article 2 of this Ordinance.

B. All classes of users shall apply for and must receive a Waste Discharge Permit or authorization prior to discharging wastewater to the Districts POTW.

C. Residential users, under normal circumstances, will not be required to apply for or receive a control mechanism as defined in this Ordinance, providing that said residential user discharges only that wastewater which is consistent with the definition of domestic wastewater set forth in this Ordinance.
4.107 **WASTE DISCHARGE APPLICATION CONTENTS**

All users required, or who may be required, to obtain a control mechanism must submit a Waste Discharge Application. The District may require all users to submit as part of an application the following information:

A. All information required in Section 4.301 (B) of this Ordinance;

B. Description of activities, facilities, and plant processes on the premises, including a list of all raw materials and chemicals used or stored at the facility, which are or could accidentally or intentionally be discharged to the District’s collection system;

C. Number and type of employees, hours of operation, and proposed or actual hours of operation;

D. Each product produced by type, amount, process or processes, and rate of production;

E. Type and amount of raw materials processed (average and maximum per day);

F. Site plans, floor plans, mechanical and plumbing plans, and details to show all sewers, floor drains, and appurtenances by size, location, and elevation, and all points of discharge;

G. Time and duration of discharges; and

H. Any other information as may be deemed necessary by the General Manager to evaluate the Waste Discharge Application.

Incomplete or inaccurate applications will not be processed and will be returned to the user for revision.

4.108 **APPLICATION SIGNATORIES AND CERTIFICATION**

All Waste Discharge Applications and user reports must be signed by an authorized representative of the user and contain the following certification statement:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting"
false information, including the possibility of fine and imprisonment for knowing violations."

4.109 CONTROL MECHANISM DECISIONS

The District will evaluate the data furnished by the user and may require additional information. Within forty five (45) days of receipt of a complete Waste Discharge Application, the District will determine whether or not to issue or modify a control mechanism. The District may deny any application for a control mechanism.

4.200 CONTROL MECHANISM ISSUANCE PROCESS

4.201 CONTROL MECHANISM DURATION

A. A Waste Discharge Permit shall be issued for a specified time period, not to exceed three (3) years from the effective date of the permit. A Waste Discharge Permit may be issued for a period less than three (3) years, at the discretion of the District’s Pretreatment Program Division. Each Waste Discharge Permit will indicate a specific date upon which it will expire.

B. A Waste Discharge Authorization shall be issued for an indefinite time period, subject to review and reconsideration at the discretion of the District.

C. A Special Agreement shall be issued for a specified time period, set forth in the terms of the Special Agreement.

4.202 WASTE DISCHARGE PERMIT CONTENTS

A. Waste Discharge Permit shall include such conditions as are deemed reasonably necessary by the District to prevent pass through or interference, protect the quality of the water body receiving the RWRF’s effluent, protect worker health and safety, facilitate sludge management and disposal, and protect against damage to the RWRF and the District’s collection system.

Waste Discharge Permits may contain:

1. A statement that indicates Waste Discharge Permit duration, which in no event shall exceed three (3) years;

2. A statement that the Waste Discharge Permit is nontransferable without prior notification to the District in accordance with Section 4.205 of this Ordinance, and provisions for furnishing the new owner or operator with a copy of the existing Waste Discharge Permit;
3. Effluent limitations based on applicable pretreatment standards;

4. Self-monitoring, sampling, reporting, notification, and record-keeping requirements. These requirements shall include an identification of pollutants to be monitored, sampling location, frequency, and sample type based on Federal, State, and local law;

5. A statement of applicable civil and criminal penalties for violations of pretreatment standards and requirements, and any applicable compliance schedule. Such schedule may not extend the time for compliance beyond that required by applicable Federal, State, or local law.

B. Waste Discharge Permits may contain, but need not be limited to, the following conditions:

1. Limits on the average and/or maximum rate of discharge, time of discharge, and/or requirements for flow regulation and equalization;

2. Requirements for the installation and maintenance of pretreatment technology, pollution control, or construction of appropriate containment devices, designed to reduce, eliminate, or prevent the introduction of pollutants into the District’s collection system;

3. Requirements for the development and implementation of spill control plans or other special conditions including management practices necessary to adequately prevent accidental, unanticipated, or routine discharges;

4. Development and implementation of waste minimization plan to reduce the amount of pollutants discharged to the District’s collection system;

5. The unit charge or schedule of user charges and fees for the management of the wastewater discharged to the District’s collection system;

6. Requirements for installation and maintenance of inspection and sampling facilities and pretreatment equipment;

7. A statement that compliance with the Waste Discharge Permit does not relieve the permittee of responsibility for compliance with all applicable Federal and State pretreatment standards, including those which become effective during the term of the Waste Discharge Permit; and
8. Other conditions as deemed appropriate so as to ensure compliance with this ordinance, and State and Federal laws, rules, and regulations.

4.203 WASTE DISCHARGE PERMIT APPEALS

Any person, including the user, may petition in writing the District to reconsider the terms of a Waste Discharge Permit within thirty (30) days of notice of its issuance.

A. Failure to submit timely petition for review shall be deemed to be a waiver of the administrative appeal.

B. In its petition, the appealing party must indicate the Waste Discharge Permit provisions objected to, the reasons for this objection, and the alternative condition, if any, it seeks to be placed in the Waste Discharge Permit.

C. The effectiveness of the Waste Discharge Permit shall not be stayed pending the appeal.

D. If the District fails to act within thirty (30) days of the filing of an appeal, a request for reconsideration shall be deemed to be a decision to deny such request. Decisions not to reconsider a Waste Discharge Permit, not to issue a Waste Discharge Permit, or not to modify a Waste Discharge Permit shall be considered final administrative actions for the purposes of judicial review.

E. Aggrieved parties seeking judicial review of the final administrative Waste Discharge Permit decision shall do so by filing a petition for writ of mandate with the Superior Court for Riverside County within ninety (90) days.

4.204 WASTE DISCHARGE PERMIT MODIFICATION

The District may modify a Waste Discharge Permit for good cause including, but not limited to, the following reasons:

A. To incorporate any new or revised Federal, State, or local pretreatment standards or requirements;

B. To address significant alterations or additions to the discharger's operation processes, or wastewater volume or character since the time of Waste Discharge Permit issuance;

C. A change in the RWRF that requires either a temporary or permanent reduction or elimination of the authorized discharge;
D. Information indicating that the permitted discharge poses a threat to the District's collection system, District personnel or the receiving waters;

E. Violation of any terms or conditions of the Waste Discharge Permit;

F. Misrepresentation or failure to fully disclose all relevant facts in the Waste Discharge Application or in any required reporting;

G. Revision of or a grant of variance from such categorical standards pursuant to 40 CFR 403.13;

H. Correction of typographical or other errors in the Waste Discharge permit; or

I. To reflect a transfer of the facility ownership or operation to a new owner or operator.

J. Other terms and conditions determined to be necessary to protect the District's POTW.

4.205 WASTE DISCHARGE PERMIT TRANSFER

Waste Discharge Permits may be transferred to a new owner or operator only if the permittee gives at least thirty (30) days advance notice to the District and the District approves the Waste Discharge Permit transfer. The notice to the District must include a written certification by the new owner or operator which:

A. States that the new owner and/or operator has no immediate intent to change the facility’s operations and processes;

B. Identifies the specific date on which the transfer is to occur; and

C. Acknowledges full responsibility for complying with the existing Waste Discharge Permit.

Failure to provide advance notice (in accordance with this article) of a transfer renders the Waste Discharge Permit void as of the date of facility transfer.

4.206 WASTE DISCHARGE PERMIT REVOCATION

A. A Waste Discharge Permit may be revoked for good cause including, but not limited to the following reasons:

   1. Failure to notify the District of significant changes to the wastewater prior to the changed discharge;
2. Failure to provide prior notification to the District of changed conditions pursuant to Section 4.305 of this Ordinance;

3. Misrepresentation or failure to fully disclose all relevant facts in the Waste Discharge Application;

4. Falsifying self-monitoring reports;

5. Tampering with monitoring equipment;

6. Refusing to allow the District timely access to the facility premises and records;

7. Failure to meet effluent limitations;

8. Failure to pay fines;

9. Failure to pay sewer charges;

10. Failure to meet compliance schedules;

11. Failure to complete a wastewater survey or the Waste Discharge Application;

12. Failure to provide advance notice of the transfer of business ownership of a permitted facility; or

13. Violation of any pretreatment standard, requirement, or condition or any terms of the Waste Discharge Permit or this Ordinance.

B. Waste Discharge Permits shall be void upon cessation of operations or transfer of business ownership. All Waste Discharge Permits issued to a particular user are void upon the issuance of a new Waste Discharge Permit to that user.

C. Waste Discharge permit revocation is subject to appeal as set forth in article 5.1000

4.207 WASTE DISCHARGE PERMIT REISSUANCE

A user with an expiring Waste Discharge Permit shall apply for Waste Discharge Permit reissuance by submitting a complete Waste Discharge Application (or a statement signed by the responsible party that there are no changes to the application previously submitted), in accordance with Section 4.107 of this Ordinance, a minimum of sixty (60) days prior to the expiration of the user's existing Waste Discharge Permit.
4.300 REPORTING REQUIREMENTS

4.301 BASELINE MONITORING REPORTS

A. Within either one hundred eighty (180) days after the effective date of a categorical pretreatment standard, or the final administrative decision on a category determination under 40 CFR 403.6 (a)(4), whichever is later, existing categorical users currently discharging to or scheduled to discharge to the District’s collection system shall submit to the General Manager a report which contains the information listed in paragraph B, below. At least ninety (90) days prior to commencement of their discharge, new sources, and sources that become categorical users subsequent to the promulgation of an applicable categorical standard, shall submit to the General Manager a report which contains the information listed in paragraph B, below. A new source shall report the method of pretreatment it intends to use to meet applicable categorical standards. A new source shall also give estimates of its anticipated flow and quantity of pollutants to be discharged.

B. Users described above shall submit the information set forth below.

1. Identifying Information. The name and address of the facility, including the name of the operator and owner.

2. Environmental Permits. A list of any environmental control permits held by or for the facility.

3. Description of Operations. A brief description of the nature, average rate of production, and standard industrial classifications of the operation(s) carried out by such user. This description should include a schematic process diagram, which indicates points of discharge to the District’s collection system from the regulated processes.

4. Flow Measurement. Information showing the measured average daily and maximum daily flow, in gallons per day, to the District’s collection system from regulated process streams and other streams, as necessary, to allow use of the combined waste stream formula set out in 40 CFR 403.6(e).


   a. The categorical pretreatment standards applicable to each regulated process.

   b. The results of sampling and analysis identifying the nature and concentration, and/or mass, where required by the
standard or by the General Manager, of the regulated pollutants in the discharge from each regulated process. Instantaneous, daily maximum, and long-term average concentrations, or mass, where required, shall be reported. The sample shall be representative of daily operations and shall be analyzed in accordance with procedures set out in section 4.309 of this Ordinance.

c. Sampling must be performed in accordance with procedures set out in Section 4.310 of this Ordinance.

6. Certification. A statement, reviewed by the user’s authorized representative and certified by a qualified professional, indicating whether pretreatment standards are being met on a consistent basis, and, if not, whether additional operation and maintenance (O&M) and/or additional pretreatment is required to meet the pretreatment standards and requirements.

7. Compliance Schedule. If additional pretreatment and/or O&M will be required to meet the pretreatment standards, the shortest schedule by which the user will provide such additional pretreatment and/or O&M shall be implemented. The completion date in this schedule shall not be later than the compliance date established for the applicable pretreatment standard. A compliance schedule pursuant to this section must meet the requirements set out in Section 4.302 of this Ordinance.

8. Signature and Certification. All baseline-monitoring reports must be signed and certified in accordance with Section 4.106 of this Ordinance.

4.302 COMPLIANCE SCHEDULE PROGRESS REPORTS

The following conditions shall apply to the compliance schedule required by section 4.301(B)(7) of this Ordinance:

A. The schedule shall contain progress increments in the form of dates for the commencement and completion of major events leading to the construction and operation of additional pretreatment required for the user to meet the applicable pretreatment standards (such events include, but are not limited to, hiring an engineer, completing preliminary and final plans, executing contracts for major components, commencing and completing construction, and beginning and conducting routine operation);

B. No increment referred to above shall exceed nine (9) months;
C. The user shall submit a progress report to the General Manager no later than fourteen (14) days following each date in the schedule and the final date of compliance including, as a minimum, whether or not it complied with the increment of progress, the reason for any delay, and, if appropriate, the steps being taken by the user to return to the established schedule; and

D. In no event shall more than nine (9) months elapse between such progress reports to the General Manager.

4.303 REPORTS ON COMPLIANCE WITH CATEGORICAL PRETREATMENT STANDARD DEADLINE

Within ninety (90) days following the date for final compliance with applicable categorical pretreatment standards, or in the case of a new source following commencement of the introduction of wastewater into the District's collection system, any user subject to such pretreatment standards and requirements shall submit to the General Manager a report containing the information described in Section 4.301(B)(4-6) of this Ordinance. For users subject to equivalent mass or concentration limits established in accordance with the procedures in 40 CFR 403.6(c), this report shall contain a reasonable measure of the user's long-term production rate. For all other users subject to categorical pretreatment standards expressed in terms of allowable pollutant discharge per unit of production (or other measure of operation), this report shall include the user's actual production during the appropriate sampling period. All compliance reports must be signed and certified in accordance with Section 4.108 of this Ordinance.

4.304 PERIODIC COMPLIANCE REPORTS

A. If a permitted user monitors any pollutant using the procedures prescribed in Section 4.310 of this Ordinance, the results of this monitoring shall, at a frequency determined by the General Manager but in no case less than twice per year be reported. The report shall indicate the nature and concentration of pollutants in the discharge, which are limited by pretreatment standards, and the measured or estimated average and maximum daily flows for the reporting period. All such reports must be signed and certified in accordance with Section 4.108 of this Ordinance.

B. All wastewater samples must be representative of the user’s discharge. Wastewater monitoring and flow measurement facilities shall be properly operated, kept clean, and maintained in good working order at all times. The failure of a user to keep its monitoring facility in good working order shall not be grounds for the user to claim that sample results are unrepresentative of its discharge.
4.305 REPORTS OF CHANGED CONDITIONS

Each user must notify the General Manager of any planned significant changes to the user’s operations or system, which might alter the nature, quality, or volume of its wastewater at least forty-five (45) days before the change is made.

A. The General Manager may require the user to submit such information as may be deemed necessary to evaluate the changed condition, including the submission of a Waste Discharge Application under Section 4.106 of this Ordinance.

B. The General Manager may issue a Waste Discharge Permit under Section 4.106 of this Ordinance or modify an existing Waste Discharge Permit under Section 4.204 of this Ordinance in response to changed conditions or anticipated changed conditions.

C. For purposes of this requirement, significant changes include, but are not limited to, flow increases of twenty percent (20%) or greater, and the discharge of any previously unreported pollutants.

4.306 REPORTS OF A DISCHARGE OF HAZARDOUS WASTE

Any industrial user shall give notice of the discharge of hazardous waste, as defined in 40 CFR Part 261, and in accordance with the pretreatment requirements in 40 CFR Part 403.12 (p).

4.307 REPORTS OF POTENTIAL PROBLEMS

A. In the case of any discharge, including, but not limited to, accidental discharges, discharges of a non-routine, episodic nature, a non-customary batch discharge, or a slug load, that may cause potential problems for the RWRF or the District’s collection system, the user shall immediately telephone and notify the District of the incident. This notification shall include the location of the discharge, type of waste, concentration and volume, if known, and corrective actions taken by the user.

B. Within five (5) days following such discharge, the user shall, unless waived by the General Manager, submit a detailed written report describing the cause(s) of the discharge and the measures to be taken by the user to prevent similar future occurrences. Such notification shall not relieve the user of any expense, loss, damage, or other liability which may be incurred as a result of damage to the District’s collection system or RWRF, natural resources, or any other damage to person or property; nor shall such notification relieve the user of any fines, penalties, or other liability which may be imposed pursuant to this Ordinance.
4.308 REPORTS FROM UNPERMITTED USERS

All users not required to obtain a Waste Discharge Permit shall provide appropriate reports to the General Manager as the General Manager may require.

4.309 REPORTS OF SAMPLING VIOLATIONS/REPEAT SAMPLING

If sampling performed by a user indicates a violation, the user must notify the General Manager within twenty-four (24) hours of becoming aware of the violation. The user shall also repeat the sampling and analysis and submit the results of the repeat analysis to the General Manager within thirty (30) days after becoming aware of the violation. The user is not required to resample if the District monitors at the user's facility at least once a month, or if the District samples between the user's initial sampling and when the user receives the results of this sampling.

4.310 ANALYTICAL REQUIREMENTS

All pollutant analyses, including sampling techniques, to be submitted as part of a waste discharge application or report shall be performed in accordance with the techniques prescribed in 40 CFR Part 136, unless otherwise specified in an applicable categorical pretreatment standard. If 40 CFR Part 136 does not contain sampling or analytical techniques for the pollutant in question, sampling and analysis must be performed in accordance with procedures approved by US EPA.

4.311 SAMPLE COLLECTION

A. Except as indicated in Section B, below, the user must collect wastewater samples using flow proportional composite collection techniques. In the event flow proportional sampling is infeasible, the General Manager may authorize the use of time proportional sampling or a minimum of four (4) grab samples where the user demonstrates that this will provide a representative sample of the effluent being discharged. In addition, grab samples may be required to show compliance with instantaneous discharge limits.

B. Samples for oil and grease, temperature, pH, cyanide, phenols, sulfides, and volatile organic compounds must be obtained using grab collection techniques.

4.312 TIMING

Written reports will be deemed to have been submitted on the date postmarked. For reports which are not mailed, postage prepaid, into a mail facility serviced by
the United States Postal Service, the date of the District’s receipt of the report shall govern.

4.313 RECORD KEEPING

Users subject to the reporting requirements of this Ordinance shall retain, and make available for inspection and copying, all records of information obtained pursuant to monitoring activities undertaken by the user independent of such requirements. Records shall include the date, exact place, method, and time of sampling, and the name of the person(s) taking the samples; the dates analyses were performed; who performed the analyses; the analytical techniques or methods used; and the results of such analyses. These records shall remain available for a period of at least three (3) years. This period shall be automatically extended for the duration of any litigation concerning the user or the District, or where the General Manager has specifically notified the user of a longer retention period.

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ARTICLE 5
Enforcement

5.100 NON-COMPLIANCE MONITORING PROCEDURES AND APPLICABLE FEES

A. Self-Monitoring Requirements as a Result of Non-Compliance

1. If analysis of any sample obtained by the District or by a user shows non-compliance with the applicable wastewater discharge limits set forth in the Ordinance or in the permittee's discharge permit, the District may impose self-monitoring requirements on the permittee or user.

2. A user shall perform required self-monitoring of constituents in a frequency, at the specific location, and in a manner directed by the District.

3. All analyses of self-monitoring samples shall be performed by an independent laboratory acceptable to the District and submitted to the District in a form and at a frequency determined by the District.

4. All self-monitoring costs shall be borne by the user.

5. Nothing in this section shall be deemed to limit the authority of the District to impose self-monitoring as a permit condition.

B. Noncompliance Sampling Fees

1. If analysis of any sample of a user's discharge obtained by the District shows a violation by the user of the mass emission rates or concentration limits specified in the user's discharge permit or in this Ordinance, then the user shall be subject to noncompliance sampling fees pursuant to the most current edition of the Districts Pretreatment Program Fee Schedule and as amended thereto.

2. The fees specified in subsection 5.100(B)(1) herein shall be imposed for each date on which the District conducts sampling as a result of a violation by a user.

C. Noncompliance Inspection Fees

1. Each user is subject to routine inspections and fees. When non-compliance with any of the provisions of this Ordinance or in the permittee's discharge permit is determined, a follow-up inspection may be required. Each user shall receive one follow-up inspection
to verify compliance for each routine inspection without being subject to noncompliance inspection fees.

2. When it becomes necessary to perform additional inspections in order to determine compliance with the provisions of this Ordinance, then the user shall pay noncompliance inspection fees to the District pursuant to the most current edition of the Districts Pretreatment Program Fee Schedules and as amended thereto.

3. The fees specified in subsection 5.100(C)(2) herein shall be imposed for each date (excluding one follow-up inspection) on which the District conducts an inspection as a result of a violation by a user.

5.200 ELECTION OF ENFORCEMENT REMEDIES

The General Manager, upon finding a violation, may employ any of the remedies set forth in this article, subject to due consideration of the following:

A. The magnitude of the violation;
B. The duration of the violation;
C. The effect of the violation on RWRF compliance with Discharge Order;
D. The effect of the violation on the operation of the RWRF;
E. The compliance history of the user; and
F. The good faith of the user.

5.300 NOTICE OF VIOLATION

A. Upon finding a violation, the District may issue a notice of violation. Within ten (10) working days of the delivery of this notice, the user shall respond to the Pretreatment Program Division with either an objection contesting the finding, or an explanation of the violation and a plan for the satisfactory correction and prevention thereof, to include specific required action. Said response in no way relieves the user of liability for any violations occurring before or after the receipt of the notice of violation.

B. Upon receipt of an objection contesting a finding of violation, the Division Head will schedule a hearing within ten (10) working days at which the user may present information supporting the objection. Within five (5) working days of the hearing, the Division Head shall determine the validity of the objection, either rescinding the notice of violation or denying the objection, thereby requiring submission of the plan. The user may appeal
the Division Head’s determination as set forth in Article 5.1000.

5.400 ADMINISTRATIVE ORDERS

Administrative Orders include, but are not limited to, Consent Orders, Show Cause Orders, Cease and Desist Orders, and Compliance Orders.

5.401 CONSENT ORDERS

The General Manager may enter into Consent Orders, assurances of voluntary compliance, or other similar documents establishing an agreement with any user responsible for noncompliance. Such documents will include specific action to be taken by the user to correct the noncompliance within a time period specified by the document. Such documents shall have the same force and effect as the administrative orders issued pursuant to Sections 5.403 of this Ordinance and shall be judicially enforceable.

5.402 SHOW CAUSE ORDERS

A. The General Manager may order a user which has been given a notice of violation and which has failed to submit an acceptable plan of corrective action or which, having submitted such a plan, fails to follow through with execution of the plan, to appear at a hearing scheduled by the General Manager to show cause why the enforcement action proposed in the Show Cause Order should not be taken.

B. The Show Cause Order shall specify the time and place for the hearing, the proposed enforcement action, the reasons for such action, and a request that the user show why the proposed enforcement action should not be taken. The Show Cause Order shall be served personally or by registered or certified mail (return receipt requested) at least fifteen (15) days prior to the hearing. The Order may be served on any authorized representative of the user. A Show Cause Order shall not be a bar against, or prerequisite for, taking any other action against the user.

C. At the conclusion of the show cause hearing, the General Manager may: rescind previous enforcement action; issue an appropriate Administrative Order (Consent Order, Compliance Order, or Cease and Desist Order), including assessment of fines; initiate control mechanism revocation proceedings or termination of sewer services; or direct the remission of the file to Counsel for legal action.

5.403 COMPLIANCE ORDERS

A. When the General Manager finds a violation, he may issue an order to the user responsible for the discharge directing that the user come into
compliance within a specified time. If the user does not come into compliance within the time provided, sewer service may be discontinued unless adequate treatment facilities, devices, or other related appurtenances are installed and properly operated.

B. Compliance orders also may contain other requirements to address the noncompliance, including additional self-monitoring and management practices designed to minimize the amount of pollutants discharged to the sewer. A compliance order may not extend the deadline for compliance established for a pretreatment standards or requirement, nor does a compliance order relieve the user of liability for any violation, including any continuing violation.

C. Issuance of a compliance order shall not be a bar against, or a prerequisite for, taking any other action against the user.

5.500 ADMINISTRATIVE FINES

A. When, subsequent to a Show Cause hearing, the General Manager finds a violation, he may fine the user in an amount not to exceed $5,000.00 per violation per day of discharge in violation of any control mechanism or order issued hereunder, or any other pretreatment standards or requirement.

B. The user may be responsible for the District’s costs of preparing administrative enforcement actions, such as notices and orders.

C. Unpaid charges, fines, and penalties shall, after thirty (30) calendar days, be assessed an additional penalty of five percent (5%) of the unpaid balance, and interest shall accrue thereafter at a rate of one and one half percent (1.5%) per month. A lien against the user’s property will be sought for unpaid charges, fines, and penalties.

D. Users desiring to dispute an administrative fine must file a written request for the General Manager to reconsider the fine along with full payment of the fine amount within thirty (30) days of the user’s receipt of notice of the fine. Assessment of fines may be appealed pursuant to Article 5.1000. In the event the user’s appeal is successful, the payment, together with any interest accruing thereto, shall be returned to the user.

E. Issuance of an administrative fine shall not be a bar against, or a prerequisite for, taking any other action against the user.

5.600 EMERGENCY SUSPENSIONS

A. The District may immediately suspend a user’s discharge or water supply, after informal notice to the user, whenever such suspension is necessary
to stop an actual or threatened discharge which reasonably appears to present or cause an imminent or substantial endangerment to the health or welfare of persons or the environment.

B. The District may also immediately suspend a user’s discharge or water supply, after notice and opportunity to respond, that threatens to interfere with the operation of a Regional Water Reclamation Facility, or which presents, or may present, an endangerment to the environment.

C. Any user notified of a suspension of its discharge or water supply shall immediately stop or eliminate its contribution. In the event of a user’s failure to immediately comply voluntarily with the suspension order, the District may take such steps as deemed necessary, including immediate severance of the sewer connection, to prevent or minimize damage to the District’s collection system, the District’s RWRF, the receiving stream, or endangerment to any individuals. The District may allow the user to recommence its discharge when the user has demonstrated to the satisfaction of the District that the period of endangerment has passed, unless the termination proceedings in Section 5.700 of this Ordinance are initiated against the user.

D. A user that is responsible, in whole or in part, for any discharge presenting imminent endangerment shall submit a detailed written statement, describing the causes of the harmful contribution and the measures taken to prevent any future occurrence, to the District prior to the date of any show cause or termination hearing under Sections 5.402 or 5.700 of this Ordinance.

E. Nothing in this section shall be interpreted as requiring a hearing prior to any emergency suspension.

5.700 TERMINATION OF DISCHARGE

In addition to the provisions in Section 4.206 of this Ordinance, any user who violates the following conditions is subject to discharge termination:

A. Violation of Waste Discharge Permit conditions;

B. Failure to accurately report the wastewater constituents and characteristics of its discharge;

C. Failure to report significant changes in operations or wastewater volume, constituents, and characteristics prior to discharge;

D. Refusal of reasonable access to the user’s premises for the purpose of inspection, monitoring, or sampling; or
E. Violation of the pretreatment standards in Article 3 of this Ordinance. Such user will be notified of the proposed termination of its discharge and be offered an opportunity to show cause under Section 5.402 of this Ordinance why the proposed action should not be taken. Exercise of this option by the District shall not be a bar to, or a prerequisite for, taking any other action against the user.

5.800 PUBLISHED NOTICES FOR SIGNIFICANT NONCOMPLIANCE

In accordance with Federal Regulations, the District shall annually cause to be published the names of all Categorical or Significant Industrial users in significant non-compliance. Said publication shall be made in the newspaper of the largest daily circulation published in the District's service area.

5.900 JUDICIAL ENFORCEMENT REMEDIES

In certain circumstances, judicial enforcement may be appropriate. Such remedies may include, but are not limited to, injunctive relief, civil penalties, and criminal prosecution.

5.901 INJUNCTIVE RELIEF

When the General Manager finds a violation, the District may petition the Superior Court for the issuance of a temporary or permanent injunction, as appropriate, which restrains or compels the specific performance of the control mechanism, order, or other requirement imposed by this Ordinance on activities of the user. The District may also seek such other action as is appropriate for legal and/or equitable relief, including a requirement for the user to conduct environmental remediation.

A petition for injunctive relief shall not be a bar against, or a prerequisite for, taking any other action against the user.

5.902 CIVIL PENALTIES

A. Authority

All users of the District's system and facilities are subject to administrative or judicial enforcement actions by the District, U.S. EPA, State of California Regional Water Quality Control Board, or the County of Riverside District Attorney. Said actions may be taken pursuant to the authority and provisions of several laws, including but not limited to: (1) Federal Water Pollution Control Act, commonly known as the Clean Water Act (33 U.S.C.A. Section 1251 et seq.); (2) California Porter-Cologne Water Quality Act (California Water Code Section 13000 et seq.); (3) California Hazardous Waste Control Law (California Health & Safety Code Sections 25100 to 25250); (4) Resource Conservation and Recovery Act

B. Recovery of Fines or Penalties

When the District must pay fines or penalties imposed by other regulatory or enforcement agencies based, and the District can establish said violation was the result of the discharge of any user, which discharge was in violation, as defined in this Ordinance, the District shall be entitled to recover from the user all costs and expenses, including, but not limited to, the full amount of said fines or penalties.

C. Ordinance

Pursuant to the authority of California Government Code Sections 54739-54740, any person who violates any provision of this Ordinance, any permit condition, prohibition or effluent limit, or any suspension or revocation order, shall be liable civilly for a sum not to exceed $25,000.00 per violation for each day in which such violation occurs. Pursuant to the authority of the Clean Water Act, 33 U.S.C. Section 1251 et seq., any person who violates any provision of this Ordinance, or any permit condition, prohibition, or effluent limit shall be liable civilly for a sum not to exceed $25,000.00 per violation for each day in which such violation occurs. The District shall petition the Superior Court to impose, assess, and recover such penalties, or such penalties as the District may impose, assess, and recover pursuant to Federal and/or State law.

D. Administrative Civil Penalties

1. Pursuant to the authority of California Government Code Sections 54740.5 and 54740.6, the District may issue an administrative complaint against any person who violates:

   a. any provision of this Ordinance;
   
   b. any permit condition, prohibition, or effluent limit; or
   
   c. any suspension or revocation order.

2. The administrative complaint shall be served by personal delivery or certified mail, and shall specify a date and time for a hearing, which will be held within sixty (60) days following service. The administrative complaint will allege the act or failure to act that constitutes the violation of the District's requirements, the provisions of law authorizing civil liability to be imposed, and the proposed civil penalty. A hearing officer designated by the Board of Directors shall hear the matter. The person against whom an
administrative complaint has been issued may waive the right to a hearing.

3. At the hearing, the person shall have an opportunity to respond to the allegations set forth in the administrative complaint by presenting written or oral evidence.

4. After the hearing, the hearing officer shall deliver a written report to the General Manager, setting forth findings of fact, conclusions and a recommendation. Upon receipt of the written report, the General Manager shall issue his decision and order in writing within thirty (30) calendar days after the hearing. The decision and order shall be served by personal delivery or certified mail.

5. In determining the amount of civil penalties, the General Manager may take into consideration all relevant circumstances, including but not limited to the extent of harm caused by the violation, the economic benefit derived through any noncompliance, the nature and persistence of the violation, the length of time over which the violation occurs, and corrective action, if any, attempted or taken by the person involved.

6. Civil penalties may be assessed as follows:

   a. In an amount which shall not exceed $2,000.00 for each day for failing or refusing to furnish technical or monitoring reports;

   b. In an amount, which shall not exceed $3,000.00 for each day for failing or refusing to timely comply with any compliance schedules established by the District;

   c. In an amount, which shall not exceed $5,000.00 per violation for each day of discharge in violation of any waste discharge limit, permit condition, or requirement issued, reissued, or adopted by the District;

   d. In any amount, which does not exceed $10.00 per gallon for discharges in violation of any suspension, revocation, cease and desist order or other orders, or prohibition issued, reissued, or adopted by the District;

7. The General Manager’s order assessing administrative civil penalties shall be final on the thirty-first (31st) day after it is served on the person unless an appeal and request for hearing is filed with the Board of Directors before the thirty-first (31st) day. Copies of the administrative order shall be served on the party served with
the administrative complaint, either by personal service or by registered mail, and a copy forwarded to other persons who appeared at the hearing and requested a copy.

8. The General Manager’s decision and order is subject to appeal to the Board of Directors pursuant to Section 5.1100. Any person aggrieved by a final order issued by the Board of Directors may obtain review of the order of the Board of Directors in the superior court, pursuant to Government Code Section 54740.6, by filing a petition for writ of mandate within thirty (30) days following service of the Board’s decision or order.

9. Payment of any order setting administrative civil penalties shall be made within thirty (30) days of the date the order becomes final. The amount of any administrative civil penalties imposed, which have remained delinquent for a period of sixty (60) days, shall constitute a lien against the real property of the discharger from which the discharge resulting in the imposition of the civil penalty originated. The lien shall have no effect until recorded with the county recorder. The District may record the lien for any unpaid administrative civil penalties on the ninety-first (91st) day following the date the order becomes final.

10. No administrative civil penalties shall be recoverable under Section 5.902(D) for any violation for which the District has recovered civil penalties through a judicial proceeding filed pursuant to Government Code Section 54740.

E. Filing a suit for civil penalties shall not be a bar to, or a prerequisite for, taking any other action against a user.

5.903 CRIMINAL PROSECUTION

A user who willfully or negligently violates any provision of this Ordinance, a control mechanism, or order issued hereunder, or any other pretreatment standard or requirement shall, upon conviction, be guilty of a misdemeanor, punishable by a fine not to exceed $25,000.00, or imprisonment for not more than six (6) months, or both. Each violation and each day in which a violation occurs may constitute a new and separate violation of this Ordinance and shall be subject to the penalties contained herein.

5.1000 APPEALS TO GENERAL MANAGER

A. General

Any user or applicant affected by any decision, action or determination may file with the General Manager a written request for an appeal hearing.
The District must receive the request within thirty (30) days of mailing of notice of the decision, action, or determination to the user or applicant. The request for hearing shall set forth in detail all facts supporting the request.

B. Notice

The General Manager shall, within fifteen (15) days of receiving the request for appeal, designate a Hearing Officer who will hear the appeal and provide written notice to the user or applicant of the hearing date, time and place. The hearing date shall not be more than thirty (30) days from the mailing of such notice by certified mail, unless the user or applicant agrees to a later date. If the hearing is not held at the agreed time due to actions or inactions of the user or applicant, then the decision shall be deemed final.

C. Hearing

At the hearing, the user or applicant shall have the opportunity to present information supporting its position concerning the decision, action or determination.

D. Written Determination

After the hearing, the Hearing Officer shall deliver a written report to the General Manager setting forth findings of fact, conclusions, and a recommendation whether to uphold, modify or reverse the original decision, action or determination. Upon receipt of the written report, the General Manager shall issue his decision and order within thirty (30) calendar days of the hearing. The written decision and order of the General Manager shall be sent by certified mail. The order of the General Manager shall be final on the sixteenth (16th) day after it is mailed, unless a request for hearing is filed with the Board of Directors pursuant to Section 5.1100, no later than 5:00 p.m. on the fifteenth (15th) day following such mailing.

5.1100 APPEALS TO THE BOARD OF DIRECTORS

A. General

1. Any user or applicant may appeal a decision, action, or determination made by the General Manager prior to the date that the General Manager's order becomes final, by filing a written request for hearing with the Board of Directors accompanied by an appeal fee of $250.00. The request for hearing shall set forth in detail all the issues in dispute and all facts supporting the request.
2. No later than sixty (60) days after receipt of the request for hearing, the Board of Directors shall either set the matter for a hearing, or deny the request for a hearing.

3. A hearing shall be held by the Board of Directors within sixty-five (65) days of the date the request for a hearing was granted, unless the user or applicant and the Board of Directors agree to a later date. If the matter is not heard within the required time, due to actions or inactions of the user or applicant, the General Manager’s order shall be final.

B. Granting Request for Hearing

The Board of Directors shall grant all requests for an appeals hearing concerning permit suspension, revocation, or denial. Whether to grant or deny the request for a hearing on appeals of other decisions of the General Manager shall be within the sole discretion of the Board of Directors.

C. Appeal Fee Refund

The appeal fee shall be refunded if the Board of Directors denies a hearing.

D. Written Determination

1. After the hearing, the Board of Directors shall make a determination whether to uphold, modify, or reverse the decision, action, or determination made by the General Manager.

2. The Board’s decision shall be set forth in writing and shall contain findings of fact and conclusions. The written decision and order of the Board of Directors shall be sent by certified mail within sixty-five (65) days after the close of the hearing.

3. The order of the Board of Directors shall be final upon its adoption.

5.1200 APPEAL OF CHARGES AND FEES

A. Any user or applicant may request reconsideration of the imposition and collection of fees or charges, such as connection charges, sewer use charges, and waste hauler fees. Following review of such a request, the District shall notify the user or applicant by certified mail of the District's decision on the reconsideration request within thirty (30) days of the District's receipt of the request. Any user or applicant may file an appeal, which shall be heard by the Board of Directors. The District must receive
the notice of appeal within thirty (30) days of the mailing of the District's decision on the reconsideration request.

B. Notwithstanding the foregoing, appeals of non-compliance sampling fees shall be made pursuant to the appeal procedure set forth in Sections 5.1000 and 5.1100.

5.1300 PAYMENT OF CHARGES

A. Except as otherwise provided, all fees, charges and penalties established by this Ordinance or by the most current edition of the District’s Pretreatment Program Fee Schedule and as amended thereto are due and payable upon notice thereof. All such amounts are delinquent if unpaid thirty (30) days after date of invoice.

B. Any charge that becomes delinquent shall have added to it a penalty in accordance with the following:

1. Thirty-one (31) days after date of invoice, a basic penalty of 5% of the base invoice amount, not to exceed a maximum of $1,000.00; and

2. Interest at a rate of 1.5% per month of the sum of base invoice amount and basic penalty shall accrue from and after the thirty-first (31st) day after date of invoice.

C. Any invoice outstanding and unpaid after sixty (60) days shall be cause for immediate initiation of permit revocation proceedings or immediate suspension of the permit.

D. Penalties charged under this section shall not accrue to those invoices successfully appealed.

5.1400 REMEDIES NONEXCLUSIVE

The remedies provided for in this Ordinance are not exclusive. The General Manager may take any, all, or any combination of these actions against a noncompliant user. Enforcement of pretreatment violations will be in accordance with this ordinance. However, the General Manager may take other action against any user when the circumstances warrant. Further, the General Manager is empowered to take more than one enforcement action against any noncompliant user.

5.1500 COLLECTION OF DELINQUENT ACCOUNTS

Collection of delinquent accounts shall be in accordance with the District's policy resolution establishing procedures for collection of delinquent obligations owed to
the District, as amended from time to time by the Board of Directors. Any such action for collection may include an application for an injunction to prevent repeated and recurring violations of this Ordinance.

5.1600  **RECOVERY OF COSTS INCURRED BY DISTRICT**

In the event a user fails to comply with any of the terms and conditions of the District's Ordinance, an administrative order, a permit suspension or revocation, a Consent Order, or a permit issued hereunder, the District shall be entitled to reasonable attorney's fees and costs which may be incurred in order to enforce any of said terms and conditions with or without filing proceedings in court.

5.1700  **FINANCIAL SECURITY/AMENDMENTS TO PERMIT**

A.  **Compliance Deposit**

Users that have been subject to enforcement and/or collection proceedings may be required to deposit with the District an amount necessary to guarantee payment of all charges, fees, penalties, costs and expenses that may be incurred in the future, before permission is granted for further discharge to the collection system.

B.  **Delinquent Accounts**

The District shall review and examine user’s account to determine whether previously incurred fees and charges have been paid in accordance with time requirements prescribed by this Ordinance. The District may thereafter issue an amendment to the user’s control mechanism in accordance with the provisions of Article 4 and Section 5.1700 E. of this Ordinance.

C.  **Bankruptcy**

Every user filing any legal action in any court of competent jurisdiction, including the United States Bankruptcy Court, for purposes of discharging its financial debts or obligations or seeking court-ordered, protection from its creditors, shall, within ten (10) days of filing such action, apply for and obtain the issuance of an amendment to its control mechanism.

D.  **Permit Amendments**

The District shall review and examine user’s account to determine whether previously incurred fees and charges have been paid in accordance with time requirements prescribed by this Ordinance. The District may thereafter issue an amendment to the user’s permit in accordance with the provisions of Article 4 and Section 5.1700 E. of this Ordinance.
E. Security

An amendment to a control mechanism issued pursuant to Sections 5.401, 5.402, and 5.403, may be conditioned upon the user depositing financial security in an amount equal to the average total fees and charges for three (3) calendar months during the preceding year. Said deposit shall be used to guarantee payment of all fees and charges incurred for future services and facilities furnished by District and shall not be used by the District to recover outstanding fees and charges incurred prior to the user filing and receiving protection from creditors in the United States Bankruptcy Court.

F. Return of Security

In the event the user makes payment in full within the time prescribed by this Ordinance of all fees and charges incurred over a period of two (2) years following the issuance of an amendment to the control mechanism pursuant to Sections 5.1700 (B), (C), (D), the District shall either return the security deposit posted by the user or credit their account.

G. Water Supply Severance

Water service to the user may be severed for any violation. Service will only recommence, at the user’s expense, after it has satisfactorily demonstrated its ability to comply.

5.1800 JUDICIAL REVIEW

A. Purpose and Effect

Pursuant to Section 1094.6 of the California Code of Civil Procedure, the District hereby enacts this part to limit to ninety (90) days following final decisions in adjudicatory administrative hearings the time within which an action can be brought to review such decisions by means of administrative mandamus.

B. Definitions

As used in this section, the following terms and words shall have the following meanings:

1. Decision shall mean and include ad judicatory administrative decisions that are made after hearing, or after revoking, suspending, or denying an application for a permit or a license.

2. Complete Record shall mean and include the transcript, if any, of the proceedings, all pleadings, all notices and orders, any proposed
decision by the General Manager, the final decision, all admitted exhibits, all rejected exhibits in the possession of the District or its offices or agents, all written evidence, and any other papers in the case.

3. **Party** shall mean a person whose permit or service has been denied, suspended, or revoked.

C. **Time Limit for Judicial Review**

Judicial review of any decision of the District or its officer or agent may be made pursuant to Section 1094.5 of the Code of Civil Procedure only if the petition for writ of mandate is filed not later than the 90th day following the date on which the decision becomes final. If there is no provision for reconsideration in the procedures governing the proceedings or if the date is not otherwise specified, the decision is final on the date it is made. If there is provision for reconsideration, the decision is final upon the expiration of the period during which reconsideration can be sought; provided that if reconsideration is sought pursuant to such provision the decision is final for the purpose of this section on the date that reconsideration is rejected.

D. **Preparation of the Record**

The petitioner may request, in writing, the complete record of the proceedings. The record shall be prepared by the District officer or agent who made the decision and shall be delivered to the petitioner within ninety (90) days after filing the written request. The District may recover from the petitioner its actual costs for transcribing or preparing the record.

E. **Extension**

If the petitioner files a request for the record within ten (10) days after the date the decision becomes final, the time within which a petition, pursuant to Section 1094.5 of the Code of Civil Procedure, may be filed shall be extended to not later than the 30th day following the date on which the record is either personally delivered or mailed to the petitioner or the petitioner's attorney of record, if appropriate.

F. **Notice**

In making a final decision, the District shall provide notice to the party that the time within which judicial review must be sought is governed by Section 1094.6 of the Code of Civil Procedure.
G. Administrative Civil Penalties

Notwithstanding the foregoing in Section 5.1700, and pursuant to Government Code Section 54740.6, judicial review of an order of the Board of Directors imposing administrative civil penalties pursuant to Section 5.902(D) may be made only if the petition for writ of mandate is filed not later than the 30th day following the day on which the order of the Board of Directors becomes final.

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ARTICLE 6

GRAVITY SEPARATION INTERCEPTOR PROGRAM

6.100 PURPOSE AND SCOPE

A. All industrial users shall be required to install and maintain a gravity separation interceptor system when the District finds that it is necessary for the proper handling of (a) liquid waste containing fats, oils and grease (of animal, vegetable or petroleum origin), (b) flammable wastes, (c) sand and or suspended solids that will settle, or (d) other harmful constituents which may be properly eliminated from the collection system by use of a gravity separation interceptor. The interceptor shall have a minimum operational fluid capacity of not less than 750 gallons. The interceptor system shall be watertight, structurally sound, and durable and shall have a minimum of two chambers and a sample box.

B. An interceptor system is not required for a building used solely for residential purposes except where common food preparation occurs.

C. An interceptor system shall be required when the wastewater flow from the building is anticipated to contain fats, oils, grease (of animal, vegetable or petroleum origin), flammable substances, sand and or suspended solids or other harmful ingredients in amounts or concentrations which, in the discretion of the District, present the possibility of causing or contributing to the fouling of, the blockage of, or other damage to the District’s POTW.

D. All industrial users for which a gravity separation interceptor system is required shall have an interceptor system, which shall serve only that singular establishment or business.

6.101 ADMINISTRATION OF INTERCEPTOR PROGRAM

A. The District may administer a Gravity Separation Interceptor Program which is intended to prevent fats, oils, and grease (of animal, vegetable, and petroleum origin), sand, flammable liquids, and other substances which are likely to block, restrict or create a hazard within the collection system from entering the system through use of gravity separation interceptors.

B. The District may require any industrial user to install or increase the size of an interceptor system according to the guidelines set forth in the District's Standard Specifications and or the most current edition of the Uniform Plumbing Code or any other District
requirement, program or procedure prior to connection to the
District or at any time after connection to the District if the District
discovers or determines subsequent to the connection that the
building, facility, or operation of the user produces a waste with
characteristics that would require installation of an interceptor
system pursuant to this Ordinance.

C. The installation of a properly sized interceptor system shall be the
responsibility of the parcel owner and the entity, which applies for
the connection or waste discharge permit, and the owner/proprietor
of the business or entity whose operations cause or contribute to
the necessity for an interceptor system.

D. The District shall determine whether a gravity interceptor or some
other type of interceptor system is required on a case-by-case
basis based on an evaluation of objective criteria including but not
limited to factors such as those listed hereunder:

1. The type of facility (e.g. restaurant, bakery, coffee house,
sandwich shop, car wash, gas station, lube/oil facility, body
shop, vehicle repair shop etc.);

2. The volume of the user's business or operation (such as
number of meals served, number of seats, hours of
operation);

3. The peak flow of process wastewater discharged to the
collection system;

4. Size and nature of facilities (including kitchen facilities)
based on size, type, number of fixtures, and type of
processing or cooking equipment used;

5. The type of service provided or operation undertaken (such
as dine-in meal service versus carry-out meal service);

6. The type of foods or other materials used in the cooking,
processing or manufacturing operations carried on within the
user's facility;

7. The overall potential for fats, grease and oil-laden (of animal,
vegetable or petroleum origin), flammable or sand-laden
discharges;

8. The existence of devices, procedures or processes which
are designed to minimize the amount of fats, grease, sand,
oil or other flammable liquids from entering the collection system.

E. The District shall approve the design, location and procedures for operation and maintenance of a required interceptor system. Such approval shall be obtained prior to the user's connection of the facility to the District's collection system, in the event of new construction or remodeling.

F. In circumstances where a user has already connected (e.g. prior to adoption of this Ordinance or failure by a user to contact the District regarding interceptor requirements and approval) and the District determines that an interceptor system must be installed, the user shall promptly provide for the installation of the interceptor system within a reasonable time frame (as may be set by the District), including providing design plans and operational plans for District approval prior to interceptor system installation.

G. The installation of an interceptor system as required by this Ordinance on an existing users facility shall occur within reasonable time not to exceed ninety (90) days after the user has been provided notice of the requirement that an interceptor system be installed. Upon written request and approval this ninety-day (90) limit may be extended to a maximum of one hundred and eighty days (180) from the time of the first notice.

6.102 INTERCEPTOR MAINTENANCE PROGRAM REQUIREMENTS

A. Any user who is required by the District and/or this Ordinance to install and/or operate a gravity separation interceptor system shall be required to adequately maintain the system so that such a device is in proper working order at all times. Cleaning and completely pumping out of all interceptor contents including the sample box shall be completed as needed, but in no case shall the frequency of cleaning and pumping out be less than (2) two times per calendar year.

B. All types of gravity separation interceptor systems shall be cleaned a minimum of two (2) times per calendar year by a properly licensed and permitted waste hauler or as often as necessary so as to assure that the interceptor will operate as designed at all times.

C. The use of chemicals or other materials for the emulsification, suspension or dissolution of oil or grease is prohibited.

D. The use of microbiological agents to metabolize oil and grease shall be reviewed on a case-by-case basis. The user shall submit a written request to the District for the use of any microbiological agent prior to
the use of that agent. The use of microbiological agents shall not be a substitute for adequate interceptor maintenance.

E. The user may be required to perform a study to document the effectiveness of any proposed microbiological agent’s ability to metabolize oil and grease under the conditions of the intended use. These studies shall be performed at each unique site where the microbiological agent is proposed for use. The study shall include effluent wastewater sampling by both the user and the District. The user shall be responsible for all costs associated with the study, including all District sampling and analysis costs. The elements of the study shall be submitted to the District for review and approval prior to any element of the proposed study being implemented.

F. Any users who are required to install or have in operation an interceptor system pursuant to this Ordinance, shall be required to have a written plan of operation or program for their facility which is intended to insure that the interceptor operates as designed to prevent grease, fats, oil (of animal, vegetable or petroleum origin), sand or other harmful constituents from entering the collection system. These procedures may include: adoption of kitchen practices to minimize the fat, oil and grease-laden garbage which ultimately enters the facility's drains and floor traps; maintaining records of inspections by the user of the interceptor; maintaining, on-site, manifests from the licensed and permitted waste hauler servicing the interceptor system; and/or other such procedures as may be required for the proper operation of the interceptor system.

G. All gravity separation interceptor systems shall be located and maintained so as to provide immediate and easy access for maintenance and inspection at all times.

6.103 Prohibited Restaurant Surface Discharges

No person who owns, operates, or maintains a restaurant shall at any time discharge any wastewater to a service dock area, parking lot, storm drain or the ground. Wastewater generated by restaurants must be disposed of through an approved gravity separation interceptor system that is connected to the Districts collection system or hauled offsite to a legal disposal site.

6.104 Conditional Waivers For Gravity Separation Interceptors

The District on a case-by-case basis may, in its sole and reasonable discretion grant conditional waivers for gravity separation interceptors to those users, which are determined by the District not to have any potential adverse effects on the Districts POTW. The user shall submit a written
request to the District and must be granted approval prior to commencing construction or remodeling. In lieu of installing a gravity separator interceptor system and a condition of granting an approved conditional waiver the District may require the user to install a sampling/monitoring manhole or box to the discharger’s process wastestream.

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ARTICLE 7

Severability

7.100 SEVERABILITY

If any provision of this Ordinance or the application to any person or circumstances is held invalid, the remainder of the Ordinance or the application of such provision to other persons or other circumstances shall not be affected.
ARTICLE 8

Repeal

8.100 REPEAL

The Ordinance No. 71 is hereby repealed on the effective date hereof and all Ordinances or parts of Ordinances inconsistent with this Ordinance are hereby repealed to the extent that they are inconsistent with the provisions of this Ordinance.
ARTICLE 9

Effective Date

9.100 EFFECTIVE DATE

The effective date of this Ordinance shall be December 20, 2004.
TABLE A

Local Limits for Discharge to the EVMWD Sewer System

<table>
<thead>
<tr>
<th>Pollutant Category</th>
<th>Constituent</th>
<th>Units</th>
<th>Local Limit</th>
<th>Time Frequency Associated with Local Limit</th>
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<tr>
<td>Physical Chemical</td>
<td>Grease and oil of petroleum or mineral origin</td>
<td>mg/l</td>
<td>100&lt;sup&gt;1&lt;/sup&gt;</td>
<td>Daily Average&lt;sup&gt;1&lt;/sup&gt;</td>
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<td>TDS</td>
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<td>μg/l</td>
<td>23&lt;sup&gt;5&lt;/sup&gt;</td>
<td>Inst. Maximum&lt;sup&gt;5&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>1,1-dichloroethylene</td>
<td>μg/l</td>
<td>21&lt;sup&gt;4&lt;/sup&gt;</td>
<td>Monthly Average&lt;sup&gt;4&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>bis (2-ethylhexyl) phthalate</td>
<td>μg/l</td>
<td>&lt; 5&lt;sup&gt;6,6&lt;/sup&gt;</td>
<td>Monthly Average&lt;sup&gt;6,6&lt;/sup&gt;</td>
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<tr>
<td></td>
<td>Hexachlorocyclobutadiene</td>
<td>μg/l</td>
<td>&lt; 1&lt;sup&gt;6,6&lt;/sup&gt;</td>
<td>Inst. Maximum&lt;sup&gt;6,6&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

1. Daily average concentration limit.
2. pH range not to be exceeded at any time.
3. Limit expressed in terms of incremental difference between potable water supply concentration and concentration in the discharge to the EVMWD sewer system.
4. Maximum mean monthly concentration.
5. Instantaneous maximum concentration limit.
6. Not to be discharged to the EVMWD sewer system in any detectable concentrations. The listed concentration limits are minimum detection limits set forth by the State Water Resources Control Board in Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (2000).
### TABLE B

ELSINORE VALLEY MUNICIPAL WATER DISTRICT

PRETREATMENT PROGRAM

FEE SCHEDULE

#### DISCHARGER CLASS

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>1</th>
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<th>3</th>
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<td>PERMIT FEE/YR.</td>
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<td>PERMIT REVISION FEE</td>
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<td>ROUTINE/FOLLOW-UP INSPECTIONS</td>
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<td>$730</td>
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#### ALL DISCHARGER CLASSES

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<tr>
<td>ENVIRONMENTAL COMPLIANCE REVIEW FEE</td>
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<td>CONSTRUCTION INSPECTION FEE</td>
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<td>ADDITIONAL MANPOWER/HR.</td>
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<td>REPLACE DUMP STATION ACCESS CARD</td>
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<tr>
<td>LIQUID WASTE PROCESS FEE/PER GALLON</td>
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<td>LIQUID WASTE PROCESS FEE/PER GALLON (OFFSITE)</td>
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<tr>
<td>CHEMICAL ANALYSIS</td>
<td>ACTUAL COSTS AS BILLED BY LAB PLUS G&amp;A O/H</td>
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* = TO BE DETERMINED (TBD)
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<tr>
<th>Wastewater Hot Spots Description</th>
<th>Footage to be cleaned</th>
<th>Location</th>
<th>NOV</th>
<th>DEC</th>
<th>JAN</th>
<th>FEB</th>
<th>MAR</th>
<th>APR</th>
<th>MAY</th>
<th>JUN</th>
<th>JUL</th>
<th>AUG</th>
<th>SEP</th>
<th>OCT</th>
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<tbody>
<tr>
<td>Skylink Dr. to Railroad Canyon Rd to golf course</td>
<td>757’</td>
<td>CL</td>
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<td>Burning Tree Dr to shopping center</td>
<td>1024’</td>
<td>CL</td>
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<tr>
<td>Village Way Dr boat ramp</td>
<td>925’</td>
<td>CL</td>
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<td>Easement from Cove View to CLDN</td>
<td>317’</td>
<td>CL</td>
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<tr>
<td>Lighthouse Dr into condos</td>
<td>677’</td>
<td>CL</td>
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<tr>
<td>Old Wrangler to Big Range</td>
<td>608’</td>
<td>CL</td>
<td></td>
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<tr>
<td>Longhorn from Strawberry Ln. to Happy Camp</td>
<td>900’</td>
<td>CL</td>
<td></td>
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<tr>
<td>Point Marina, check manholes at end of culdesac</td>
<td></td>
<td>MH-1738 MH-1740</td>
<td>CL</td>
<td></td>
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<tr>
<td>Manholes in alley between Sumner/Pottery off Main</td>
<td>MH-2403 MH-2413</td>
<td>Downtown Els</td>
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<tr>
<td>Heald &amp; Mohr, west</td>
<td>191’</td>
<td>Downtown Els</td>
<td></td>
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<tr>
<td>Sumner btwn Davis and Townsend, low pressure</td>
<td>282’</td>
<td>Downtown Els</td>
<td></td>
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<tr>
<td>Main St from Sumner to Peck</td>
<td>1023’</td>
<td>Downtown Els</td>
<td></td>
<td></td>
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<tr>
<td>Riley from Pottery south to alley, alley between Riley and Langstaff</td>
<td>204’</td>
<td>Downtown Els</td>
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<tr>
<td>Alley behind SCE substation from Pottery</td>
<td>618’</td>
<td>Downtown Els</td>
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<tr>
<td>Ellis and Pottery- Pottery and alley, low pressure</td>
<td>522’</td>
<td>Downtown Els</td>
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<tr>
<td>Heald and Matich, west, low pressure</td>
<td>279’</td>
<td>Downtown Els</td>
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<tr>
<td>Main St and Sumner, east, 6” to 4” outside MH, low pressure</td>
<td>215’</td>
<td>Downtown Els</td>
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<tr>
<td>Nashland to parking lot</td>
<td>823’</td>
<td>Els</td>
<td></td>
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<tr>
<td>Harbor Grand Apts to Riverside Dr</td>
<td>1480’</td>
<td>Els</td>
<td></td>
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<td>Machado School to Quail</td>
<td>2638’</td>
<td>Els</td>
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<tr>
<td>Riverside Drive from Lake Crest to Corner of Sears Plaza, one segment up Eisenhower and Lake Crest.</td>
<td>1972’</td>
<td>Els.</td>
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<tr>
<td>Lincoln from A-3 to Robin</td>
<td>1880’</td>
<td>Els</td>
<td></td>
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<tr>
<td>Outrigger from Edgewater to Spyglass</td>
<td>326’</td>
<td>Els</td>
<td></td>
<td></td>
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<tr>
<td>Laurlwood Ct. to Terra Cotta,Terra Cotta - St Clair Ave to Broadway Ave</td>
<td>528’</td>
<td>Els</td>
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<tr>
<td>Lake Crest Dr to Mari &amp; dolly St.</td>
<td>172’</td>
<td>Els</td>
<td></td>
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<tr>
<td>Navut from Pashal to Gatu</td>
<td>496’</td>
<td>Windsong V</td>
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<tr>
<td>Wanki &amp; Woshka</td>
<td>803’</td>
<td>Windsong V</td>
<td></td>
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<tr>
<td>Twinflower from Larkspur to Aster</td>
<td>270’</td>
<td>Windsong V</td>
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<tr>
<td>Cashew from Wesley to Mission Trail</td>
<td>3468’</td>
<td>Wildomar</td>
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<tr>
<td>Monroe Ave. &amp; Sunflower St.</td>
<td>443’</td>
<td>Cal Oaks</td>
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<tr>
<td>Cal Oaks fm Saradella to the Colony</td>
<td>383’</td>
<td>Cal Oaks</td>
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<tr>
<td>B-8 Liftstation Wet Well (clean &amp; degrease)</td>
<td></td>
<td></td>
<td>Lakeland Village</td>
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# Hot Spot Calendar

Date and initial each box indicating cleaned. Turn into Supervisor when complete.

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<tr>
<th>Month/Year</th>
<th>Revised 9-10-07</th>
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<table>
<thead>
<tr>
<th>Location</th>
<th>Code</th>
<th>Remarks</th>
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</thead>
<tbody>
<tr>
<td>Knollwood to Horsethief Canyon to Bay Meadows</td>
<td>707' Horsethief</td>
<td></td>
</tr>
<tr>
<td>Mountain View</td>
<td>MH-176 Horsethief</td>
<td></td>
</tr>
</tbody>
</table>
Hotspot:
Alley behind SCE substation from Pottery
Hotspot: Clean debris from sump in manholes in alley between Pottery and Sumner west of Main St.
Hotspot: B-8 Liftstation wet well, clean and add degreaser
Hotspot:
Burning tree Dr to shopping center
Hotspot:
Cal Oaks Rd from Saradella Ct to the Colony
Hotspot:
Easement from Cove View St to Canyon Lake Drive North
Hotspot:
Ellis St. from Pottery, south,
Pottery from Ellis to Alley
Alley from Pottery to Clean out, north.
low pressure
Hotspot: Easement through Harbor Grand Apt's to Riverside Dr.
Hotspot:
Heald and Mohr
West on Heald to cleanout
Hotspot:
Knollwood Dr. to Horsethief Canyon to Bay Meadows Ct.
Hotspot:
Lake Crest to Marie-Dolly,
Check manhole at Marie-Dolly.
Hotspot:
Laurelwood Ct.to Terra Cotta
Terra Cotta Rd.-St. Clair Ave to Broadway
Hotspot: Lighthouse Dr. along lake behind homes into condo complex, 2 segments
Hotspot:
Lincoln from A-3 to Robin, 1 segment up
Robin and 1 segment up Flannery.
Riverside Dr from A-3 south to end of line
Hotspot: Longhorn from Strawberry to Happy Camp
Hotspot:
Machado School playground to Quail, 2 segments up
Quail, check MH on Parkview Dr and ParkviewPl
Hotspot: Main St. and Sumner, east. 6" to 4" outside manhole, low pressure.
Hotspot: Main St from Sumner to Peck
Hotspot: Monroe Ave and Sunflower Rd, 2 segments east of Sunflower
Mountain View, check manhole for roots.
MH-176
Hotspot:
Old Wrangler Rd. to Big Range Rd.
cautions: manhole located on side of the hill, can be cleaned from manhole in Big Range Rd.
Hotspot:
Outrigger from Edgewater to Spyglass
Check for roots and debris in manholes on Point Marina and Clearwater. MH-1738, MH-1740, MH-1737, MH-1762
Hotspot:
Riley from Pottery south to alley, alley between Riley to Langstaff.
Hotspot: Riverside Dr. from Lake Crest to Sears Plaza, one segment up Eisenhower and Lake Crest.
Hotspot:
Skylink Dr. to Railroad Canyon Rd.
to golf course parking lot.
Hotspot:
Sumner between Davis and Townsend, low pressure
Hotspot:
Twinflower Ave. from Larkspur Dr. to Aster Dr.
Hotspot: Village Way Drive boat ramp
Hotspot:
Woshka Ave and Wanki Ave,
1segment up Washka, Wanki and Showut
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## Appendix J  Inventory Parts and Equipment List

### Submersible Pumps and Motors

<table>
<thead>
<tr>
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<th>HP</th>
<th>RPM</th>
<th>ID</th>
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<tr>
<td>X320TY</td>
<td>RELIANCE</td>
<td>25</td>
<td>875</td>
<td>1YLE62247A1</td>
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<tr>
<td>X320TY</td>
<td>RELIANCE</td>
<td>25</td>
<td>875</td>
<td>1YLE62247A2</td>
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<td>X250TY</td>
<td>RELIANCE</td>
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<td>1160</td>
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### Motors

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<tr>
<td>286TPZ</td>
<td>ALLIS CHALMERS</td>
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<td>1750</td>
<td>51-321-852</td>
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<td>256VPZ</td>
<td>DP US MOTORS</td>
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<td>213TPZ</td>
<td>ALLIS CHALMERS</td>
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<td>1755</td>
<td>51-321-862</td>
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<td>215HPZ</td>
<td>SMITH &amp; LOVELESS</td>
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### Spare Pump Parts

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<td>TY250 POTHEAD AND CABLE USED</td>
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<tr>
<td>TY320 POTHEAD AND CABLE USED</td>
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</tr>
<tr>
<td>TY320 POTHEAD AND CABLE NEW FOR NEW LONGHORN</td>
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</tr>
<tr>
<td>TY320 POTHEAD AND CABLE NEW FOR MCVICAR</td>
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<tr>
<td>IMPELLAR FOR NEW LONGHORN</td>
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<tr>
<td>PUMP FRAMES AND VOLUMES WITH 90 DEGREE SUCTION FLANGE FOR A-3</td>
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</tr>
<tr>
<td>1 3/8&quot; OD SHAFT BY 10&quot; OD LENGTH</td>
<td>2</td>
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<tr>
<td>4&quot; WEAR PLATE TO FLANGE ADAPTOR</td>
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### Electrical Parts

<table>
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<tr>
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<tr>
<td>ASCO 940 TRANSFER SWITCH</td>
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<td>DIALOG ELITE DIALER FROM OLD LIGHTHOUSE</td>
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<tr>
<td>9070E01DT CONTROL TRANSFORMER</td>
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<tr>
<td>PRIMARY VOLTS 220/440 230/460 240/480</td>
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<tr>
<td>SECONDARY VOLTS 110 115 120 0.05 KVA 60 HZ</td>
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<td>9070T250D1 CONTROL TRANS</td>
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<td>PRIMARY VOLTS 220/440 230/460 240/480</td>
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<td>SECONDARY VOLTS 110 115 120 0.16KVA 60 HZ</td>
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<td>MOTOR SAVER PANEL DISPLAY</td>
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## Electrical Parts

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<td>CT’S INSTRUMENT TRANSFORMER INC. CURRENT TRANSFORMER MOD. 2RL-500</td>
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<td>LIQUID LEVEL SWITCH MOD. 2A551</td>
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<tr>
<td>GE INDICATOR LIGHT MOD. CR104PLG32</td>
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<td>OVERLOAD RESET KIT MOD. 49MARSR</td>
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<tr>
<td>GE SINGLE CIRCUIT CONTACT BLOCK MOD. CR104PXC1</td>
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<td>HD OIL LIGHT PUSH BUTTON CR 104 PBG00UI</td>
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<td>BURNDY VERSI-POLE TERMINAL BLOCK MOD. BDC-11-2/0-1</td>
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<td>REDDINGTON HOUR METER 120 VAC CAT. 48905</td>
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<td>12&quot; LONG 12 GA TERMINAL BLOCK STRIP</td>
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<td>MOTOR STARTER OVERLOAD MOD. CR123C180B</td>
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<tr>
<td>A-3 VFD FANS NMB-MAT MOD. 2410ML-04W-B60 12 VDC 0.40A</td>
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<tr>
<td>D152 LEVEL CONTROLLERS</td>
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<tr>
<td>MAGNETIC MOTOR STARTER CR306C002 SIZE 1 115-120 COIL 3 POLE 3 OVERLOADS</td>
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<td>CRAMER COMPANY HOUR METER MOD. 6X137</td>
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<tr>
<td>BUBBLER COMPRESSOR MOTOR &quot;2 NEW&quot; MOD. HH2OP</td>
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<td>CONERY HIGH/LOW LEVEL FLOAT MOD. 2902-B4S2-50 FT</td>
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<tr>
<td>SPECTRA RMS ACCESSORY CAT. SRPE150A125</td>
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<tr>
<td>SIEMENS HOA BLACK KNOB MOD. 3SB02-3MKBP</td>
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<tr>
<td>SIEMENS MILLTRONICS ISOLATOR LIS1 SER. 580152 ITEM 51014421</td>
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# Appendix J  Inventory Parts and Equipment List

## Electrical Parts

<table>
<thead>
<tr>
<th>PART DESCRIPTION</th>
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<tbody>
<tr>
<td>TERMINAL BLOCK 175A-600V BUSS 3LINE MOD. BUSS 16321-3</td>
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<tr>
<td>GE PORTABLE SUPPLEMENTARY POWER SUPPLY MOD. TVPBP</td>
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<td>WEATHER PROOF OUTLET BOX MOD. 1B503</td>
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<td>WARRICK CONTROL MOD. 1D1E0</td>
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<td>IDEC HOA SWITCH MOD. HWIS-3JTF21NI</td>
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<td>IDEC POWER SUPPLY 24V DC 1.3A TYPE PS5R-C24 CAT. 71007</td>
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<td>24 HR TIME SWITCH 120 VOLT MOD. 2A517</td>
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<td>OMRON POWER SUPPLY TRANSFORMER 120V INPUT 6V DC OUTPUT MOD. 97ADPT</td>
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<td>SIEMENS 40 AMP BREAKER MOD. ED43B040L</td>
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<tr>
<td>ASCO ATS PC BOARD 295462 120 VOLT</td>
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## Other Related Parts

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<thead>
<tr>
<th>PART DESCRIPTION</th>
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<tbody>
<tr>
<td>KENNEDY 3&quot; CHECK VALVE NEW</td>
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<tr>
<td>APCD 8&quot; CHECK VALVE USED</td>
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</tr>
<tr>
<td>500FT SPOOL 1/4&quot; STAINLESS CABLE</td>
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<td>6&quot; CHECK VALVE FOR PORTABLE LIFTATION</td>
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<tr>
<td>CHEMICAL MIXER MOTORS WITH SHAFT MODEL G-13</td>
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## Equipment

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<tr>
<th>EQUIPMENT DESCRIPTION</th>
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<tr>
<td>ON SITE STANDBY GENERATORS</td>
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<td>PORTABLE GENERATORS</td>
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<tr>
<td>DUMP TRUCKS</td>
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<tr>
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<td>SERVOCE TRUCKS</td>
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<tr>
<td>SUPPORT VEHICLES</td>
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<tr>
<td>COMBINATION SEWER LINE CLEANING UNITS</td>
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<tr>
<td>SECTIONAL RODDER WITH 300 FEET OF ROD</td>
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<tr>
<td>CCTV VAN</td>
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<tr>
<td>MOBILE CRANES</td>
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<tr>
<td>PORTABLE LIFT STATION/PUMP</td>
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<tr>
<td>TRAILER MOUNTED HOSE REEL WITH 1,950 FEET OF LAY FLAT HOSE</td>
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</table>

*Source: Data Provided by District Staff*
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Elsinore Valley Municipal Water District

Standard Specifications And Drawings

FOR THE CONSTRUCTION OF POTABLE WATER, RECYCLED WATER AND SEWER FACILITIES

SEPTEMBER 2006
Sewer
2.04 SEWER REQUIREMENTS

A. Mainline Size

No public collection sewer shall be smaller than 8 inches in diameter, except as authorized by the District.

The following criteria shall be used in determining the size of pipes:

1. Residential Areas - 100 gal/capita/day average
2. People/Dwelling Unit - 2.5 Single family residence
3. Check with District for criteria to be used for other types of development.
4. The design peak flow in c.f.s. can be calculated from the average flow by: Peak flow = 1.84 (average flow in cfs)^0.92
5. Sewers over 12 inches in diameter shall be designed to flow 2/3 full. Sewers 12 inches in diameter or less shall be designed to flow 1/2 full.
6. For other sewer demand factors use the water requirement table (Section 2.02 A for average daily demand factors divided by two.

B. Design Criteria

1. The value of 0.013 shall be used as a coefficient of roughness equivalent to Manning's "n".
2. All sewers shall be designed and constructed with hydraulic slopes sufficient to give mean velocities at design peak flow of not less than 2.0 feet per second. Maximum allowable velocity in the sewer shall not be greater than 10.0 feet per second.
3. Following are minimum slopes and pipe material that should be provided under normal depth conditions:

<table>
<thead>
<tr>
<th>Sewer Size, inches</th>
<th>Minimum Percent Grade</th>
<th>Pipe Material</th>
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<tbody>
<tr>
<td>4</td>
<td>2.0</td>
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<td>6</td>
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</tr>
<tr>
<td>8</td>
<td>0.4</td>
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<td>10</td>
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</tr>
<tr>
<td>27</td>
<td>0.06</td>
<td>Vylon</td>
</tr>
</tbody>
</table>
4. For depths of cover in excess of 15 over the top of the sewer, for pipes 4 inches through 12 inches in diameter, the pipe material shall be C900 PVC Class 100 (DR 25). For depths of cover greater than 15 feet, and for pipes 15 inches and 18 inches in diameter, the pipe material shall be C905 PVC Class 165 (DR 25) and a diameter of 16 inch shall be used for the 15-inch diameter sewer.

5. Manholes shall be installed on sewer mains at all changes in slope, size of pipe, alignment and at all intersections of main line sewers.
   a. The maximum allowable spacing between manholes is 400 feet. See Section paragraph D, Section 2.03 of the Standard Design Requirements for curved sewer exceptions.
   b. A minimum drop 0.10 foot shall be used for sewer with slopes less than 7.5 percent. For sewer greater than 7.5 percent, the following formula shall be used to determine the drop, up to a maximum drop across the manhole of 0.60 feet:

   \[ \text{Drop in feet} = 2(S_1 + S_2) \times (D_1 + D_2)/2, \text{ for sizes up to and including 15 inches} \]

   \( S_2 = \) Invert slope leaving manhole in feet/foot
   \( S_1 = \) Invert slope entering manhole in feet/foot
   \( D_2 = \) diameter in feet of outlet pipe
   \( D_1 = \) diameter in feet of inlet pipe
   c. Where the inlet pipe size is of a smaller diameter than that of the outlet pipe, the inlet pipe shall be designed to be at the same soffit elevation as the outlet pipe.
   d. For a 90 degree bend through the structure, a minimum of 0.20 foot and a maximum of 1.00 foot shall be used.
   e. For sizes over 15 inches, obtain authorization of drop across manhole from District.
   f. Minimum inside dimension of manholes shall be 48 inches.
   g. Where diameter of the downstream pipe is larger than the diameter of the upstream pipe, the soffit of the downstream outlet shall not be higher than the soffit of the upstream inlet.
   h. Five foot diameter manholes shall be used when sewer depths exceed 12 feet or when more than two mains or buildings laterals enter into the manhole. Five foot diameter manholes shall also be used to connect pipe sizes 18 inches in diameter and larger.
   i. Manholes located within an intersection inlet channels and a stub-out shall be provided in all directions for each intersecting roadway or easement, in addition to the main inlet and outline pipe. This requirement will apply to locations
where the roadway could be extended, at a future time, but is currently undeveloped.

j. Manhole shall be located at the end of sewers where it is anticipated that the roadway or the sewer may be extended in the future. A minimum stub of 5 feet shall be provided in the direction of the future extension.

k. Manholes at the downstream end of a steeply sloped sewer shall be PVC-lined and provided with a sealed lid. Manholes upstream of a steeply sloped short-length sewer shall be PVC-lined with a sealed lid. The implementation of the requirement related to PVC lining for steeply sloped sewer shall be solely at the District's discretion.

l. Manholes located in non-paved areas shall have a 10-foot by 10-foot paved area surrounding it in accordance with Standard Drawings S-10.

6. Where a proposed sewer connects to an existing manhole, the elevation of the inlets and outlets shall be shown in profile as determined by actual survey. If an existing sewer is straddled by a new manhole, the elevations of the proposed manhole shall be determined by actual survey. The applicant's private engineer shall submit the field notes.

7. The minimum vertical distance between sewers and other utilities shall be one (1) foot, outside of pipe to outside of pipe.

8. When an existing "live" sewer exists in an easement or unpaved roadway, and construction is proposed adjacent to the sewer (and the street will be paved), the existing manholes shall be covered and protected as follows:

   a. Prior to construction, cover existing manhole with 2 layers of 20 mil visqueen.

   b. Cover visqueen with ¾-inch plywood cut to a diameter 2 inches larger than manhole diameter.

   c. Place sandbags (6 minimum) over plywood to weight down.

   d. Remove sandbags, plywood and visqueen after road is paved. For easements, remove after grading and construction has been completed.
C. **Horizontal Alignment**

Sewer shall be located as follows:

1. In public streets parallel to and 6 feet north or east of the street centerline. When located in narrow streets where potable water and recycled water are present, the sewer alignment may differ from the 6-foot requirement (alignment to be reviewed by the District under these conditions).

2. In local residential and industrial streets, pipe is to be located six (6) feet off the street centerline in the middle of the driving lane. In major, primary, and secondary highways, pipe will be located in the center of the driving lane nearest to the center of the street. Pipe will not be located in median strips or parking lanes.

3. On curvilinear streets, the pipe shall be concentric or parallel to the street centerline.

4. The standard minimum distance between the sewer and other utilities is five (5) feet outside of pipe to outside of pipe, except for potable water and recycled water lines, which shall be ten (10) feet outside of pipe to outside of pipe.

D. **Curved Sewer**

Curved sewers shall be designed using the following requirements:

1. No curved sewers with radius less than 200 feet or the manufacturer’s minimum recommended radius, whichever is greater, will be permitted.

2. Longitudinal bending deflections shall not exceed 1-1/2 degrees or 80-percent of the manufacturer’s recommended maximum allowed deflection, whichever is less.

3. Manholes are required at the beginning of curve (B.C.), or end of curve (E.C.).

4. Manhole spacing in curved runs shall not exceed 300 feet.

5. Minimum slopes shall be 50 percent greater than those given in paragraph B.3, Section 2.03 of the Standard Design Requirements, if the radius for the curve requires the use of high deflection couplings to construct the horizontal curve.

E. **Sewer Depth**

The minimum cover to the top of sewers is seven (7) feet. However, in some instances, if the existing outlet sewers are too shallow to obtain such a depth, a shallower depth may be approved. Shallow sewers are subject to specific review and authorization by the District and may require additional protection. The District may require greater depths where it is necessary to extend sewers to serve other areas.
F. Service Laterals

The following criteria apply to the design of sewer laterals:

1. A 4-inch sewer service lateral shall be installed for each property occupied by a single-family dwelling provided a minimum 2 percent grade from the main line sewer to the property line can be maintained with a minimum 5-1/2 feet of depth below the surface at the property line.

2. A 6-inch service lateral may be laid on a grade of one percent.

3. Sewer lateral connections to the main cannot be made within 3 feet of each other nor closer than 3 feet from the outside of a manhole.

4. Any sewer laterals installed within driveways will be required to be removed and relocated away from the driveway.

5. All service laterals shall be constructed perpendicular to the sewer main. If impractical or impossible to do so, the service lateral may enter the main sewer at any angle up to 45 degrees measured from the upstream side of the lateral, subject to District review.

6. A service lateral shall be installed for each property along a main line extension.

7. A cleanout one foot inside of the property must be installed as shown on Drawing S-12.

8. For multiple-family dwellings, commercial lots, schools, etc., calculation should be submitted to determine the proper size of the lateral, but shall be no less than 6 inches in diameter.

9. If sewer laterals appear to have less than 2 feet of vertical clearance while crossing under the water main, profiles of sewer laterals may be required to be plotted at the District's discretion. Minimum clearances shall be in accordance with State of California Department of Health Services requirements and the Standard Drawings.

10. Deep cut risers or chimneys shall be used only upon written District authorization.

11. All sewer laterals shall be constructed of polyvinyl chloride pipe.

12. Alternate types of materials proposed by the private engineer, such as ductile iron, may be used for special applications or conditions, with prior written approval by the District.

13. All sewer laterals must be shown in a laterals table and include the stations, length, and depth at property line, slope and remarks.

14. Provide a backwater valve in accordance with the Standard Drawings for sewer laterals to properties where the house slab elevation is below the nearest upstream manhole rim elevation.
G. **Inverted Siphons**

Inverted siphons should be avoided wherever possible. Where required, at least two barrels should be designed with a minimum pipe diameter of six inches and a minimum velocity of 3 fps in each barrel.

H. **Easements**

Sewer easements shall comply with the requirements set forth in paragraph Y, Section 2.02 of the Standard Design Requirements, except that the final width for a sewer easement will depend upon the depth of the sewer, the soil conditions encountered and easement location.

I. **TV Inspection**

Final inspection of all sewer lines shall be by color TV camera. A color video in DVD (TV) format shall be recorded in the presence of the District's Inspector and presented to the District along with a written report of the location of laterals, manholes and any defects encountered. The video shall be in color and show stationing and locations of all manholes and laterals. The DVD shall have a program embedded that will allow indexing of information to be performed. The developer and/or contractor shall bear all costs for the video inspection process.

Any areas showing evidence of reverse slope as indicated by ponding water or dips in vertical pipe alignment, as well as any other defects shall be repaired to the satisfaction of the District at the Contractor's expense.

**END OF SECTION**
Standard Specifications
SECTION 03461
PRECAST CONCRETE MANHOLES

PART 1 – GENERAL

1.01 DESCRIPTION

This section includes materials, testing, and installation of precast concrete manholes for sewers or for access to below grade water mains and appurtenances.

1.02 REFERENCE STANDARDS

The publications listed below form part of this specification to the extent referenced and are referred to in the text by the basic designation only. Reference shall be made to the latest edition of said standards unless otherwise called for.

ASTM A 48 - Gray Iron Castings
ASTM C 478 - Precast Reinforced Concrete Manhole Sections
ASTM C 478M - Precast Reinforced Concrete Manhole Sections [Metric]
ASTM C 923 - Resilient Connectors Between Reinforced Concrete Manhole Structures, Pipes and Laterals

1.03 RELATED WORK SPECIFIED ELSEWHERE

A. EVMWD Standard Drawings
B. Trenching, Backfilling and Compacting: Section 02223
C. Cast-in-Place Concrete: Section 03300
D. Field Painting and Coating: Section 09902

1.04 SUBMITTALS

A. Submit shop drawings in accordance with Standard Specification Section 01300.

B. Submit manufacturer’s catalog data on precast items. Show dimensions of vault and location of openings including thicknesses of shaft and cone sections and grade rings.

C. Submit manufacturer’s design calculations and certification signed and sealed by a professional civil or structural engineer registered in the State of California the precast section design and construction comply with the specified design load conditions and the referenced ASTM specification.

D. Submit manufacturer’s catalog data, descriptive literature and installation instructions for the recommended waterproofing material.

1.05 SEWER MANHOLES

Sewer manholes shall have inside diameters consistent with the sizes stated in EVMWD Standard Drawing Nos. S-4 and S-5.
1.06 DROP MANHOLEs

Use 60-inch diameter drop manholes for sewer applications and constructed only at locations shown on the approved plans in accordance with EVMWD Standard Drawing No. S-8.

1.07 CORROSION PROTECTION

A corrosion protection lining and/or coating as described in these specification's shall be applied to the interior of manholes for sewer mains 18-inch or larger, and to all drop manholes and manholes with excessive difference in inlet and outlet slopes, as determined by the District, regardless of sewer pipe size.

1.08 DAMP-PROOFING

A damp-proofing material shall be applied to the exterior portions of manholes in accordance with Section 03300 and as directed by the District when located at or below the water table or when moisture or seepage is indicated.

1.09 JOINT SEALING

Joint sealant shall be used to form a continuous watertight seal on the concrete base and between successive precast concrete manhole or vault sections.

1.10 SAFETY GRATING

A safety grating shall be provided above the drain channels in manholes and drop manholes for sewer mains 18-inch and larger. Safety grating shall be installed only in locations shown on the plans or as called for by the District.

1.11 VACUUM TESTING OF MANHOLES

Vacuum testing of manholes is intended for testing precast concrete manhole sections to demonstrate the integrity of the installed materials and construction procedures.

PART 2 - MATERIALS

2.01 PRECAST CONCRETE MANHOLES

A. Precast components and other appurtenant materials shall be selected from the Approved Materials List.

B. Precast concrete manhole components shall be in accordance with ASTM C 478 and the Standard Drawings.

C. Manhole components shall be designed for H-20 highway wheel loading and specific site conditions.
D. Manhole bases may be either precast or cast-in-place, as appropriate for the application, with a formed recess shaped to match the first precast shaft section. The manhole base shall extend 1 foot below the bottom of the lowest pipe and 6-inch above the top of the largest pipe. Manhole bases for mains 18-inch or larger shall incorporate a 4-inch wide grating-support ledge, cast integrally with the drain channels, at the top of the base.

E. Manhole shafts shall be fabricated only from precast shaft sections, eccentric cone sections and grade rings.

F. Pipe penetrations for sewer applications shall incorporate a watertight flexible pipe connector or ring-type seal according to the method of manhole construction as shown in the Standard Drawings. Precast manholes shall utilize either an integrally cast embedded pipe connector, or a boot-type connector installed in a circular block out opening in accordance with ASTM C 923. Connections to existing manholes shall utilize a boot type connector per ASTM C 923 installed in a cored opening. Cast-in-place bases shall incorporate a ring-type seal on the pipe to be embedded in the concrete.

G. All drop manholes regardless of the size of the sewer main, shall be PVC lined and polyurethane coated. Precast shaft sections, cone sections and grade rings on PVC-lined manholes shall have an integrally-cast PVC T-shaped liner of 0.065-inch minimum thickness. A 100% solids elastomeric polyurethane coating shall be applied to exposed concrete at the interior of precast and cast-in-place bases. Other manholes may require PVC lining as determined by the District.

2.02 CRUSHED ROCK BASE AND BACKFILL MATERIALS

Crushed rock base and backfill materials shall be in accordance with Section 02223.

2.03 MANHOLE FRAMES AND COVERS

A. Manhole frames shall be 30-inch diameter single piece cover, made of cast-iron in accordance with ASTM A 48, Class 30, the Standard Drawings and the Approved Materials List. Locking frames and covers, in accordance with the Standard Drawings, may be required as determined by the District.

B. A 36-inch diameter manhole with two concentric covers shall be used where indicated on the drawings.

C. Frames and covers shall be designed for H-20 highway wheel loading.

D. Covers shall have the words "EVMWD' and 'WATER', 'RECYCLED WATER', or, 'SEWER"' cast into the cover as appropriate to the application. No other lettering will be permitted on the top portion of the cover.

Castings shall be smooth, clean, and free from blisters, blowholes, and shrinkage. Mating surfaces of the frame and cover shall be machined to prevent movement of the lid. Frames and covers shall be match marked in sets before shipping to the site.
E. All castings shall be dipped twice in a preparation of asphalt or coal tar and oil applied at a temperature of not less than 290°F nor more than 310°F and in such a manner as to form a firm and tenacious coating.

2.04 CONCRETE

Concrete used for manholes and appurtenances shall be in accordance with Section 03300.

2.05 REPAIR MORTAR AND EPOXY BONDING AGENT

Repair mortar and an epoxy bonding agent shall be used to repair minor surface damage to precast sections or cast-in-place manhole bases at the discretion of the District. Repair products shall be in accordance with Section 03300.

2.06 CORROSION PROTECTION

PVC lining for manholes shall be accordance with Section 03475.

2.07 DAMP-PROOFING

Damp-proofing material shall be in accordance with Section 03300.

2.08 JOINT SEALING COMPOUND

Joint sealing compound shall be a mastic-type material in a flexible rope or rolled form with removable wrapper sized to fit into the key of manhole or vault sections. Joint sealing compound shall be selected from the Approved Materials List.

2.09 MORTAR

Mortar for use on joints between grade rings and for setting manhole cover frames shall be in accordance with Section 03300.

PART 3 – EXECUTION

3.01 WORK WITHIN EXISTING MANHOLES

Contractor shall comply with all Federal and State regulations for confined space entry. Work inside confined spaces, as defined by the applicable regulations, shall not be undertaken until all the tests and safety provisions of the Code of Federal Regulations 1910.146, and the General Industry Safety Orders of the California Code of Regulations, Title 8, Section 5159, for confined space entry have been performed and the area is verified as safe to enter. District policy prohibits entry into any confined space with Immediately Dangerous to Life and Health (IDLH) conditions except by trained emergency rescue personnel.
3.02 EARTHWORK

Manhole excavation, foundation stabilization (if necessary), placement of base material, backfill and compaction shall be performed in accordance with Section 02223.

3.03 MANHOLE BASE

A. The invert of precast and cast-in-place bases shall be hand-worked to provide channels conforming in size to the inside diameter of the piping as indicated on the Approved Plans. The channels shall vary uniformly in size and shape from inlet to outlet. The concrete base shall be shaped with a wood float and shall receive a hard steel trowel finish before the concrete sets. A template shall be used to accurately form the level surface that will receive the first precast section.

B. During construction of cast-in-place bases, all sewer mains and stub piping shall be in place, including ring-type seals, before concrete placement. Pipe grade and alignment shall be verified immediately upon placement of concrete to assure that the pipelines are in proper position prior to the concrete taking an initial set. The invert elevation and flow line of piping shall be as shown on the Approved Plans and Standard Drawings. The manhole base shall extend 1-foot below the bottom of the lowest pipe and 6-inch above the top of the largest pipe.

C. Cast-in-place bases shall set a minimum of 24 hours before the manhole construction is continued. In certain critical situations, the setting time may be reduced upon approval of the District.

3.04 INSTALLING MANHOLE SECTIONS

A. The concrete manhole base and successive precast sections will receive a mastic joint sealing compound prior to setting the precast sections in place as shown on the Standard Drawings. Following the vacuum testing as described in this section, the joints will be mortared and tooled to a smooth finish, free of voids. Note that sewer manholes are to be vacuum tested following assembly of the concrete sections, but prior to mortaring the joints, or backfilling.

B. Manhole components incorporating a PVC liner and polyurethane coating shall be installed and tested in accordance with these specifications, the manufacturer's recommendations, and the Standard Drawings. Upon assembly of the precast sections and vacuum testing as described in this section, the mortaring and finishing of joints shall be performed. The PVC liner seams at the joints shall then be welded. The PVC liner shall be secured by insertion between the uppermost grade ring and the manhole cover frame. Note that PVC lined sewer manholes are to be vacuum tested following assembly of the concrete sections, but prior to mortaring the joints, welding the seams of the PVC liner, or backfilling. The polyurethane coating of all exposed concrete on the manhole base shall follow completion of the entire installation and all construction activity within the manhole.
C. Assemble the precast sections to the elevation required by the location of the manhole as follows:

1. Paved Areas: Top of cover shall be flush with the finished paving surface.

2. Traveled Way: Top of cover shall be flush with the existing surface where it is in a traveled way.

3. Shoulder Areas: Top of cover shall be 1-inch above the existing surface where outside the limits of a traveled way. Vaults shall not be placed in roadside ditches without the prior approval of the District.

4. Unpaved easements: Top of cover shall be 6-inch above the ground surface. Guard Posts around the vault may be required in this area as directed by the District.

D. Secure the manhole frame to the grade ring with mortar.

E. After the frame is securely set the cover shall be installed. All necessary cleaning of foreign materials from the frames and covers shall be accomplished to ensure a satisfactory fit.

F. Where manholes are to be given a protective coating, they shall be free of seepage and surface moisture.

G. Piping installation adjacent to the manhole and connection to the base or shaft sections shall be performed as shown on the Standard Drawings and Approved Plans. Piping installation into flexible pipe connectors shall be in accordance with the manufacturer's recommendations for assembly, lubricants and limits of deflection.

H. In order to prevent accidental use of the new sewer before completion and acceptance, the new inlet to existing tie-in manhole(s) and the outlet of the first new upstream manhole(s) shall be sealed with expandable plugs. The District shall approve the specific location of these plugs. Plugs shall be removed at the time of final inspection or as directed by the District. Removal of all construction debris and water shall be completed prior to removal of plugs.

I. Brick or mortar bulkheads shall be installed by the Contractor at the manhole end of all unused stub channels over 36-inch beyond manhole base. The bulkheads are intended to prevent ponding of sewage and debris in the unused channels until such time as the manhole stub is connected and normal sewage flow can occur.

J. New connections to existing manholes, where stubs have not been provided, shall be made by core drilling through the walls or base as directed by the District. Flexible seals selected from the Approved Materials List and installed in accordance with the Standard Drawings shall be used for the pipe penetration. Apply a protective epoxy coating to the cored concrete and the ends of any reinforcing steel exposed in accordance with Section 03300.
K. A concrete collar shall be cast around manhole frames in accordance with the Standard Drawings.

L. Replacement of asphalt or concrete pavement shall be in accordance with the requirements of the agency having jurisdiction.

3.05 CORROSION PROTECTION

PVC lining shall be installed in accordance with Section 03475.

3.06 DAMP-PROOFING

At the discretion of the District, damp-proofing material shall be applied to the exterior surfaces of manholes in accordance with the manufacturer's recommendations and Section 03300. The material shall be applied to all exterior surfaces below a point 12-inch above the water table or indications of seepage or moisture as directed by the District.

3.07 VACUUM TESTING OF MANHOLES

A. Vacuum testing of manholes is required and shall be performed as directed in the presence of the District.

B. Vacuum testing equipment shall be as manufactured by P.A. Glazier, Inc. or equal.

C. Manholes shall be tested after assembly and prior to mortaring the joints or backfilling. In the case of manholes incorporating a PVC liner and polyurethane coating, the testing is to take place prior to mortaring the joints, welding the liner seams between sections, applying the coating, or backfilling.

D. All lift holes shall be plugged with an approved grout prior to testing.

E. All pipes entering the manhole shall be plugged, and bracing installed, to prevent the plug from being drawn into the manhole.

F. The test head shall be placed inside the top of the cone section and the seal inflated in accordance with the manufacturer's recommendations.

G. A vacuum of 10-inch of mercury shall be drawn. The time shall be measured for the vacuum to drop to 9-inch. The manhole shall pass the test if the time taken for the drop is greater than 60 seconds.

H. If the manhole fails the test, necessary repairs shall be made and the test repeated until acceptable results are obtained. The leak(s) shall be located and repaired according to their nature with material-in-kind.
3.08  PULL TESTING OF PVC-LINED MANHOLES

PVC-lined manholes shall have field-welded joints pull tested. Field welds shall withstand a pull test of at least 100 lbs per liner inch, applied perpendicularly to the concrete surface for a period of one minute, without evidence of cracks or separations. This test shall be conducted at a temperature of 70°F to 80°F inclusive.

3.09  HOLIDAY TESTING OF PVC-LINED MANHOLES

PVC-Lined and Polyurethane-coated surfaces shall be holiday tested with an electrical holiday detector as manufactured by Tinker and Rasor (Model #AP-W with power pack) with the instrument set at 20,000 volts and used as directed by the District. All imperfections identified on the PVC lining and polyurethane coating shall be repaired with materials-in-kind and the test shall be repeated until no holidays are evident.

END OF SECTION
SECTION 15043
SEWER LEAKAGE AND INFILTRATION TESTING

PART 1 – GENERAL

1.01 DESCRIPTION

This section designates the requirements and procedures for leakage and infiltration testing of gravity sewer pipelines. The Contractor shall furnish all labor, materials, tools, and equipment necessary to provide and complete leakage and infiltration testing as specified. It is the intent of the Plans and Specifications that the completed gravity sewer pipes of all types, along with manholes and other appurtenances, shall be watertight.

1.02 REFERENCED STANDARDS

The publications listed below form part of this specification to the extent referenced and are referred to in the text by the basic designation only. Reference shall be made to the latest edition of said standards unless otherwise called for.

UNI-B-6 - Recommended Practice for Low-Pressure Air Testing of Installed Sewer Pipe (Uni-Bell PVC Pipe Association)
SSPWC - Standard Specifications for Public Works Construction ("Greenbook")

1.03 RELATED WORK SPECIFIED ELSEWHERE

A. Trenching, Backfilling and Compacting: Section 02223
B. Precast Concrete Manholes: Section 03461
C. Hydrostatic Testing of Pressure Pipe: Section 15044

1.04 SUBMITTALS

Contractor shall furnish submittals in accordance with the requirements of Section 01300, Shop Drawing Submittals. The following submittals are required:

A. The Contractor shall furnish a detailed plan showing how the Contractor intends to test and flush the pipeline.

1.05 REQUIREMENTS PRIOR TO TESTING

Trenching for all dry utilities such as electrical, telephone and cable television shall be completed prior to performing any tests on the sewer pipe.
1.06 TESTING

A. The official tests for the District will not be made until after all other utilities have been installed and trench compaction verified.

B. All tests shall be made in the presence of the District.

C. All tests must be completed before the street or trench is paved, unless otherwise allowed by the District.

D. Leakage Test: Each section of sewer pipe between two successive manholes, or between a manhole and its corresponding cleanout or end plug, shall be tested for leakage. The sewer laterals to the property line shall be included in the test.

E. Infiltration Test: In addition to the leakage test, an infiltration test shall be made where groundwater is encountered, or evidence exists that ground water has encroached to the elevation of the sewer, and as directed by the District.

F. Closed Circuit Television: A closed circuit television inspection shall be required to be performed, by the Contractor, on the sewer installation.

G. Vacuum testing of manholes shall be performed in accordance with Section 03461.

H. Mandrel Test: Following the completion of the required testing, the placement and densification of backfill, and the installation of all utilities, and prior to the placing of the permanent paving, all PVC sewer pipe shall be cleaned and then mandrelled, to measure for obstructions (deflections, joint offsets, and lateral pipe intrusions).

I. Testing may be repeated, as directed by the District, if the subsequent construction operations of the Contractor or others may have damaged or affected the structural integrity of the sewer pipe and/or laterals.

PART 2 - MATERIALS

The Contractor shall furnish all labor, materials and equipment necessary for completing the testing process as specified herein. The equipment utilized by the Contractor shall arrive on the site in good and proper working order and ready for use.

PART 3 - EXECUTION

3.01 AIR TEST FOR PVC GRAVITY SEWERS

PVC pipe shall be air pressure tested in accordance with UNI-B-6.
3.02 INfiltration TEST

A. Prior to testing for infiltration, the ends of the sewer pipe section to be tested shall be cleaned using a Wayne Ball, capped or plugged to prevent the entrance of water, and pumping of groundwater shall be discontinued for at least three days.

B. Any infiltration discovered before completion and acceptance of the sewer shall be corrected. The sewer shall be examined and the source of infiltration eliminated. Following repairs or replacement as necessary, including backfill and compaction, the subject line shall be retested to assure no infiltration.

3.03 MANdrel TEST

Mandrel tests shall be in accordance with the requirements of the Standard Specifications for Public Works Construction (latest edition) Section 306-1.2.12. A rigid mandrel, with a circular cross section having a diameter of at least 95 percent of the specified inside diameter, shall be pulled through the pipe by hand. The minimum length of the circular portion of the mandrel shall be equal to the nominal diameter of the pipe.

Obstructions encountered by the mandrel shall be corrected by the Contractor. All material, equipment, and labor to perform the test shall be provided by the Contractor at no cost to the Owner.

3.04 PRESSURE TESTS FOR SEWER FORCE MAINS

Pressure tests for sewer force mains shall be in accordance with Section 15044 except that the allowable leakage shall be zero (0) gallons. All leak points shall be located and stopped. All defective pipe, fittings, valves and other appurtenances discovered shall be removed and replaced with sound material and tests repeated until the leakage is zero (0) gallons.

3.05 CLOSED-CIRCUIT TELEVISION INSPECTION

A. In addition to the leakage and infiltration tests, closed-circuit television inspections will be conducted. The inspection shall be conducted after all utilities have been installed, the backfill compaction certified, and after the line has been flushed and tested but prior to final paving.

B. Closed-circuit television inspections shall be performed in accordance with the Regional Supplement Amendments to the SSPWC, Section 306.

C. The video format shall be DVD with viewing program indexing.

D. All defects and evidence of reverse slope by ponding of water or dips in pipe alignment revealed by the closed-circuit television inspection shall be repaired to the satisfaction of the District at the Contractors expense.

3.06 VACUUM TESTING OF MANHOLES

Vacuum testing of manholes shall be performed in accordance with Section 03461.
3.07 FINAL ACCEPTANCE

The requirements of this section shall be considered acceptable when each sewer section's air leakage rate is less than the maximum allowed, the television inspection is satisfactory, and the water infiltration rate is zero.

END OF SECTION
SECTION 15044
HYDROSTATIC TESTING OF PRESSURE PIPELINES

PART 1 - GENERAL

1.01 DESCRIPTION
This section describes the requirements and procedures for pressure and leakage testing of all ductile iron (DI) and polyvinyl chloride (PVC) pressure mains.

1.02 RELATED WORK SPECIFIED ELSEWHERE
A. Disinfection of Pipe: Section 15041
B. Backflow Prevention: Section 15112
C. Ductile Iron Pipe and Fittings: Section 15056
D. PVC Pressure Pipe: Section 15064

1.03 SUBMITTALS
A. Submit shop drawings in accordance with Standard Specification Section 01300.
B. Submit plan testing pressure pipeline. Plan should indicate source of water to fill pipeline, locations of temporary air release valves and blow-offs, equipment and materials required to deliver the potable water to the testing area, temporary thrust block locations and proposed point of discharge of the test water.
C. Submit request for potable water source from the District 96 hours in advance of testing date.

1.04 REQUIREMENTS PRIOR TO TESTING
A. All piping, valves, fire hydrants, services, and related appurtenances shall be installed prior to testing.
B. The pipe trench shall have trench zone backfill placed and compacted with a minimum of 3.0-feet of material over the pipe.
C. All concrete anchor blocks shall be allowed to cure until a minimum strength of 2,500 psi is achieved before testing.
D. Pressure tests on exposed and aboveground piping shall be conducted only after the entire piping system has been installed and attached to pipe supports, hangers or anchors as shown on the Approved Plans.

1.05 CONCURRENT HYDROSTATIC TESTING AND DISINFECTION OF PIPELINES
Hydrostatic testing of pipelines shall be performed prior to or concurrently with the disinfection operations. In the event repairs are necessary, as indicated by the hydrostatic test, the District may require additional disinfection testing. Any costs associated with additional disinfection testing after said repairs shall be borne by the Contractor at no additional cost to the District.
1.06 CONNECTION TO EXISTING MAINS

Hydrostatic testing shall be performed prior to connections to existing mains. District authorization for connection to the existing system shall be given only on the basis of acceptable hydrostatic, disinfection and bacteriological test results. Connection to existing mains shall be performed in accordance with Section 15000, General Piping Systems and Appurtenances.

PART 2 - MATERIALS

2.01 WATER

A. Potable water shall be used for hydrostatic testing of potable and recycled water mains when such testing is performed separately from disinfection operations.

B. Potable water shall be supplied by a District-approved source. Make-up water for testing shall also be potable water.

C. A chlorinated water solution, in accordance with section 15041, shall be used to charge the line and for make-up water when hydrostatic testing and disinfection operations are combined.

2.02 CONNECTIONS

A. Testing water shall be supplied through a metered connection equipped with a backflow prevention device in accordance with Section 15112 at the point of connection to the potable water source used.

B. The Contractor shall provide any temporary piping needed to deliver potable water to the piping that is to be tested.

PART 3 - EXECUTION

3.01 GENERAL

A. The Contractor shall provide the District with a minimum of four working days notice prior to the requested date and time for hydrostatic tests.

B. The Contractor shall furnish all labor, materials, tools, and equipment for testing.

C. Temporary blocking during the tests will be permitted only at temporary plugs, caps or where otherwise directed by the District.

D. All valves and appurtenances shall be operated during the test period. The test shall be conducted with valves in the open position.
E. At the onset of testing, all valves, air vacuum assemblies, blowoffs, and services shall be monitored for possible leakage and repairs made, if necessary, before the test proceeds. The appurtenances shall be monitored through the duration of the testing.

F. For pipe with porous lining, such as cement mortar, the pipe shall be filled with water and placed under a slight pressure for a minimum of two working days prior to the actual hydrostatic test.

3.02 FIELD TEST PROCEDURE

A. Before applying the specified test pressure, care shall be taken to release all air within the pipe and appurtenances to be tested. Air shall be released through services, fire hydrants, air release valves, or other approved locations.

B. A four (4) hour hydrostatic pressure test shall be performed after the pipe and all appurtenances have been installed and after any trench backfill compaction with heavy-duty compaction equipment has been completed. The hydrostatic test pressure shall be 50 psi above the working pressure of the pipe at the lowest point in the section being tested and shall be at least equal to the design class of the pipe at the highest point in the line.

The test pressure shall be applied and continuously maintained by pumping for a period of four (4) hours. During the pumping phase of the test, the test pressure shall be maintained at not less than 95% of the specified test pressure at all times.

At the end of the fourth (4th) hour, the pressure shall meet the requirements stated above. Pumping shall then be discontinued for one hour and the drop in pressure shall be recorded. Pumping shall then be resumed to restore the initial test pressure, and the quantity of water pumped into the line shall be accurately measured. This measured quantity shall not exceed that which would result from leakage at the following rates:

1. The allowable leakage for steel (flanged or welded) and ductile iron (flanged) pipe shall be zero.

2. The leakage for polyvinyl chloride (PVC) pipe, and for steel or ductile-iron pipes with rubber joints shall be considered as the total amount of water pumped into the pipe system after the fifth (5th) hour of testing. Allowable leakage during the fifth (5th) hour shall be in accordance with the following formula:

\[
2 \text{ gal} \times \text{nominal diameter of pipe (in)} \times \text{length of pipe (ft)} \times 24 \text{ (hrs)} \times 5,280 \text{ (ft)}
\]

If the leakage exceeds the allowable loss, the leak points shall be located and repaired as required by the District. All defective pipe, fittings, valves and other appurtenances discovered shall be removed and replaced with sound material. Additional disinfection shall be performed as necessary per Section 15041. The hydrostatic test shall be repeated until the leakage does not exceed the rate specified above. All visible leaks shall be similarly repaired.

END OF SECTION
Standard Drawings
Sewer
STANDARD BEDDING (P.V.C.)

NOTES:

1. IF UNSUITABLE SOIL IS ENCOUNTERED, DEPTH OF REMOVAL AND SIZE OF FOUNDATION ROCK WILL BE DETERMINED BY THE SOILS REPORT.

2. SEE STD. DWG. W-3 FOR REMAINDER OF TRENCH RESTORATION.

3. EXCAVATION, BACKFILL AND COMPACTION TO BE IN ACCORDANCE WITH SECTION 02223 OF THE STANDARD SPECIFICATIONS.
NOTES:

1. CONCRETE ENCASEMENT SHALL BE USED WHEN COVER IS UNDER 4' OR OVER 20', WHERE APPROVED BY DISTRICT.

2. ENCASEMENT TO BE PLACED AGAINST UNDISTURBED NATURAL GROUND OR FILL COMPACTED TO 95% RELATIVE DENSITY.

3. NO. 4 STEEL REINFORCING BARS SHALL BE USED AS SPECIFIED.

4. TYPE OF CONCRETE ENCASEMENT SHALL BE 480-B-2500 CONCRETE, UNLESS A DIFFERING RECOMMENDATION IS GIVEN BY GEOTECHNICAL INSPECTOR TO MEET UNFORSEEN SITE CONDITIONS.

5. WHERE SLOPED TRENCHES ARE USED, WALLS WILL NOT BEGIN TO SLOPE CLOSER THAN 12" FROM THE TOP OF THE PIPE.
NOTES:

1. SEPARATION OF SEWER MAIN FROM WATER AND RECYCLED WATER MAINS SHALL BE IN ACCORDANCE WITH STATE OF CALIFORNIA DEPARTMENT OF HEALTH SERVICES GUIDANCE MEMO NO. 2003-02.

2. DIMENSIONS ARE FROM OUTSIDE OF SEWER MAIN TO OUTSIDE OF WATER OR RECYCLED WATER MAINS.

3. SANITARY SEWERS ARE NOT PERMITTED WITHIN ANY OF THE ABOVE INDICATED ZONES UNLESS CONSTRUCTED IN CONFORMANCE WITH THE SPECIAL REQUIREMENTS AS SHOWN BELOW.

4. WATER AND SEWER MAINS SHALL BE INSTALLED IN SEPARATE TRENCHES. SEWER MAINS SHALL BE INSTALLED AT LEAST 10-FEET HORIZONTALLY FROM, AND A MINIMUM OF 1-FOOT BELOW SANITARY SEWERS WHEN PARALLEL TO THE SEWER MAIN AND A MINIMUM OF 1-FOOT LOWER THAN SANITARY SEWERS WHEN CROSSING THE SEWER MAIN.

<table>
<thead>
<tr>
<th>ZONE</th>
<th>SPECIAL WATER CONSTRUCTION REQUIREMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zone A</td>
<td>NO SANITARY SEWER MAINS PARALLEL TO WATER OR RECYCLED WATER MAIN SHALL BE CONSTRUCTED WITHOUT PRIOR WRITTEN APPROVAL FROM THE DEPARTMENT OF HEALTH SERVICES.</td>
</tr>
<tr>
<td>Zone B</td>
<td>SPECIAL SEWER PIPE – RUBBER GASKETED PVC SEWER PIPE (ASTM 3034) OR EQUIVALENT; OR HDPE PIPE WITH FUSION WELDED JOINTS.</td>
</tr>
<tr>
<td>Zone C</td>
<td>NO JOINTS IN SEWER MAIN – SPECIAL SEWER PIPE MAY BE REQUIRED.</td>
</tr>
<tr>
<td>Zone D</td>
<td>NO JOINTS IN SEWER MAIN – USE PIPE MATERIALS DESCRIBED IN ZONE B.</td>
</tr>
<tr>
<td>Zone E</td>
<td>CONSTRUCTION PROHIBITED IN THIS AREA.</td>
</tr>
</tbody>
</table>

PIPELINE SEPARATION REQUIREMENTS
SECTION A–A
(SIDE INLETS NOT SHOWN)

SECTION B–B
(SIDE INLETS NOT SHOWN)

JOINT DETAIL

NOTES:
1. FOR SEWER GREATER THAN 12' DEEP OR 18" DIA. OR GREATER, USE 5" DIA. MANHOLE PER STD. DWG. S–5.

2. MANHOLES AT INTERSECTIONS SHALL HAVE STUB OUTS IN THE OTHER TWO DIRECTIONS WITH RESPECT TO THE INLET AND OUTLET. SEE SECTION 2.03B OF THE STANDARD DESIGN REQUIREMENTS.

3. SEE SECTION 2.03B OF THE STANDARD DESIGN REQUIREMENTS FOR INLET AND OUTLET PIPE OF DIFFERENT SIZES.

SECTION C–C
(PLAN MANHOLE BASE)

4' DIA. MANHOLE WITH CAST IN PLACE BASE

REVISION BY APPRO DATE

STD. DWG. NO.

10/10/06
JOINT DETAIL

NOTES:
1. FOR SEWER GREATER THAN 12' DEEP OR 18" DIA. OR GREATER, USE 5' DIA. MANHOLE PER STD. DWG. S-5.
2. MANHOLES AT INTERSECTIONS SHALL BE 5' DIA. AND SHALL HAVE STUB OUTS IN THE OTHER TWO DIRECTIONS WITH RESPECT TO THE INLET AND OUTLET. SEE SECTION 2.03B OF THE STANDARD DESIGN REQUIREMENTS.
3. SEE SECTION 2.03B OF THE STANDARD DESIGN REQUIREMENTS FOR INLET AND OUTLET PIPE OF DIFFERENT SIZES.

SECTION C-C
(PLAN MANHOLE BASE)
ALL LATERALS MUST BE PLACED UPSTREAM OF MANHOLE

HOUSE LATERALS

LADDER

LOCATION OF MANHOLE COVER

HOUSE LATERALS

60"

2" MIN.

MIN. DIA. = O.D. M.H. RINGS + 4"

TYPICAL PIPE CONNECTION PER STD. DWG. S-11

PLAN
TERMINUS MANHOLE WITH HOUSE LATERALS

SECTION A--A

NOTES:
1. REFER TO STANDARD DRAWINGS OF MANHOLES FOR DETAILS PERTAINING TO MANHOLES ONLY.
2. THE MAXIMUM NUMBER OF LATERALS INTO A TERMINUS MANHOLE SHALL BE LIMITED TO FOUR.
3. THE MAXIMUM NUMBER OF LATERALS INTO A KNUCKLE MANHOLE SHALL BE LIMITED TO TWO.
4. ALL LATERAL CONNECTIONS SHALL BE ORIENTED SUCH THAT THEY WILL NOT BE IN LINE WITH ANY OF THE CONNECTING SEWER MAINS.
5. ALL LATERAL CONNECTIONS IN A KNUCKLE MANHOLE SHALL NOT CONNECT OPPOSING THE DIRECTION OF FLOW IN THE MANHOLE.
6. ALL KNUCKLE MANHOLES WITH 1 OR MORE CONNECTION LATERALS SHALL BE 5' DIA.
NOTES:

1. EXCEPT AS INDICATED HEREON OR ON THE PROJECT PLANS, MANHOLES SHALL CONFORM TO STD. DWG. S-4 PRECAST CONCRETE MANHOLE.

2. IN UNPAVED TRAFFIC AREAS FORM A CONCRETE COLLAR 10" WIDE AND 10" DEEP AROUND MANHOLE FRAME.

3. MAXIMUM DEPTH SHALL BE 6 FEET.
SECTION A—A

NOTE:
1. THIS STD. DWG. TO BE USED ONLY WITH WRITTEN APPROVAL FROM EVMWD ENGINEERING DEPARTMENT.

2. SEE STD. DWG. S—4 FOR NOTES AND DETAILS.
TYPICAL INSTALLATION NOTES:

1. FRAME AND COVER SHALL BE MACHINED TO PROVIDE A NON-ROCKING SURFACE. MACHINED TOLERANCE BETWEEN FRAME AND COVER SHALL BE ±1⁄8" TOTAL. FRAME AND COVER TO BE SELECTED FROM APPROVED MATERIALS LIST.

2. GREY CAST IRON SHALL CONFORM TO A.S.T.M. A48, CLASS 35B.

3. MANHOLE COVERS 36" DIAMETER AND GREATER SHALL BE OF 2-PIECE CONSTRUCTION WITH INSERT NOT SMALLER THAN 24" IN DIAMETER.


5. THE MARKING LETTERS SHALL BE CAST IN THE COVER AND SHALL BE A MINIMUM 2 1/2" HIGH.

BOLT-DOWN COVER INSTALLATION NOTES:

1. WATER PROOF, BOLT DOWN LIDS WITH S.S. BOLTS REQUIRED FOR COVERS NOT IN PUBLIC STREETS/ALLEYS.
   A. SIDE PRY AND PICK HOLE SHALL BE REPLACED WITH A CLOSED PICK HOLE.
   B. GASKET MATERIAL SHALL BE 1/2" x 1/2" NEOPRENE GASKET.
   C. BOLTS SHALL BE 1 1/2" x 1/2" S.S. TYPE 307, SIX EQUALLY SPACED.
   D. BOLT DOWN LIDS SHALL BE SELECTED FROM APPROVED MATERIALS LIST.
PLACE 2" X 6" REDWOOD HEADERS

PLACE 2" X 6" REDWOOD HEADER IF MORE THAN
5' TO EXISTING PAVEMENT, OTHERWISE CONSTRUCT
MATCH UP BASE & PAVING TO EXISTING EDGE OF
PAVEMENT

MEET EXISTING
PAVEMENT OR
MIN. OF 5'

SEE NOTE 1

MATCH EXISTING CONCRETE
OR A.C. THICKNESS
(2-1/2" A.C. MIN.)

PLACE 6" OF 3/4" CLASS 2
CRUSHED AGGREGATE BASE

1 SACK SLURRY BACKFILL
AROUND MANHOLES IN
EXISTING STREETS.
SLURRY TO EXTEND FROM
BOTTOM OF EXCAVATION
TO SUBGRADE

NOTE:

1. SLOPE WILL CONFORM TO THE GOVERNING LOCAL AGENCIES' ROAD
IMPROVEMENT STANDARDS AND SPECIFICATIONS, OR MEET EXISTING
CONDITIONS AS DIRECTED BY ENGINEER.
NOTE:
1. SEE STD. NO. S-4 OR S-5 FOR MANHOLE.
2. SEE APPROVED MATERIALS LIST FOR WATER STOP.

DETAIL OF WATER STOP RING WITH P.V.C. PIPE
TYPICAL LATERAL ASSEMBLY

CLEANOUT BOX

COVER LID

3/4" CLASS 2 CRUSHED AGGREGATE BASE

CROSS SECTION OF 10" DIAMETER P.V.C. STAND PIPE

SEWAGE BACKWATER VALVE

DETAIL "A" – SEWAGE BACKFLOWS VALVE ASSEMBLY
NOTES:


3. A PLASTIC CLEANOUT BOX AND LID IS REQUIRED OVER THE CLEANOUT STACK (AND BACKWATER VALVE, IF USED) WHEN LOCATED IN NON-VEHICULAR TRAFFIC AREAS. IN VEHICULAR TRAFFIC AREAS (I.E. DRIVeways) A CONCRETE CLEANOUT BOX WITH CAST IRON LID IS REQUIRED.

4. IF HOUSE SLAB DRAINAGE ELEVATION IS BELOW THE NEAREST UPSTREAM MANHOLE LID, A SEWAGE BACKFLOW VALVE ASSEMBLY WILL BE REQUIRED, IN ACCORDANCE WITH THE LATEST EDITION OF THE U.P.C., CHAPTER 7, SECTION 710.0 PARAGRAPH 710.1 READS:

SECTION 710.0: DRAINAGE OF FIXTURES LOCATED BELOW THE NEXT UPSTREAM MANHOLE OR BELOW THE MAIN SEWER LEVEL, FOR ASSISTANCE CALL E.V.M.W.D.

(710.1): “DRAINAGE PIPING SERVING FIXTURES WHICH HAVE FLOOD LEVEL RIMS LOCATED BELOW THE ELEVATION OF THE NEXT UPSTREAM MANHOLE COVER OF THE PUBLIC SEWER SERVING SUCH DRAINAGE PIPING SHALL BE PROTECTED FROM BACKFLOW OF SEWAGE BY INSTALLING AN APPROVED TYPE BACKWATER VALVE, FIXTURES ABOVE SUCH ELEVATION SHALL NOT DISCHARGE THROUGH THE BACKWATER VALVE.”

5. THE BACKWATER VALVES SHALL BE LOCATED SO ACCESS FOR MAINTENANCE IS NOT IMPAIRED.

6. MATERIAL SHALL BE SELECTED FROM APPROVED MATERIALS LIST.
1. SACK SLURRY TO SUBGRADE FOR TRENCH RESTORATION IN EXISTING STREETS

2. PLACE 3/4" CRUSHED AGGREGATE (NO. 67) IN AREAS OF OVEREXCAVATION FOR LATERAL AND 1" ABOVE PIPE

PROPERTY LINE

SECTION A-A

STREET LATERAL

BUILDING LATERAL

BUILDING SEWER

TO BUILDING

STREET OR SERVICE LATERAL

FLOW WIRE WITH 2" DIA. COPPER TAG OR 2"x4"x8' VERTICAL BOARD 2'-6" ABOVE GROUND IN TRACT DEVELOPMENTS

NOTES:

1. MINIMUM SEWER LATERAL SIZE (UNLESS OTHERWISE SHOWN ON PLANS) SHALL BE:
   - 6" FOR MULTI-UNIT RESIDENTIAL, COMMERCIAL, SCHOOLS AND INDUSTRIAL ZONED AREAS
   - 4" FOR SINGLE FAMILY DWELLING UNITS

2. SEE SECTION 02223 OF STANDARD SPECIFICATIONS FOR 3/4" CRUSHED AGGREGATE NO. 67.
NOTES:

1. GASKETED BELL SHALL BE IN ACCORDANCE WITH APPROVED MATERIALS LIST.

2. THE INSTALLATION OF GASKETED BELLS SHALL COMPLY WITH THE MANUFACTURER’S INSTALLATION GUIDELINES.

3. THE HOLE FOR THE GASKETED BELL FITTING SHALL BE MADE WITH A TAPPING MACHINE OR PROPERLY SIZED CORE DRILL. THE HOLE SHALL BE CLEANLY MACHINED AND IF NECESSARY WORKED BY HAND WITH A RASP OR SANDED TO ACCOMPLISH A TRUE AND NEAT OPENING FOR THE COLLAR WYE.

4. THE APPLICANT SHALL KEEP ALL CHIPS, DIRT, AND OTHER FOREIGN MATTER OUT OF THE SEWER LATERAL CONNECTION AND SHALL PERFORM A CLEANING AND BALLING OF THE REACH LATERAL CONNECTION IF DIRECTED TO DO SO BY THE INSPECTOR.

5. THE APPLICANT SHALL REPAIR OR REPLACE ANY DAMAGED PIPE AS DIRECTED BY THE INSPECTOR.

6. THE APPLICANT SHALL CONTACT THE GASKETED BELL MANUFACTURER AND SPECIFY THE SEWER MAIN SIZE AND MATERIAL FOR THE CORRECT SEWER PIPE CONNECTION MODEL.
PLAN - 3 CHAMBERED INTERCEPTOR

SECTION

NOTES:

1. ALL INTERCEPTORS SHALL HAVE A MINIMUM LIQUID CAPACITY OF 750 GALLONS.

2. ALL INTERCEPTORS SHALL BE UPC/IAPMO ACCEPTED.

3. ALL WASTEWATER EXCLUDING RESTROOMS, MUST PASS THROUGH THE INTERCEPTOR.

4. ALL SURFACE WATER SHALL DRAIN AWAY FROM THE INTERCEPTOR.

5. ALL INTERCEPTORS, SEPARATORS, AND CLARIFIERS SUBJECT TO VEHICULAR TRAFFIC LOADING SHALL HAVE H-20 RATED TANK TOPS. ALL OTHER LOADING CONDITIONS SHALL BE PER MANUFACTURER SPECIFICATIONS.

6. EXTERNAL PLUMBING PER LOCAL PLUMBING CODE.
CONSTRUCTION NOTES
1. GREASE TRAP SHALL BE DESIGNED TO RETAIN MAXIMUM AMOUNTS OF GREASE, SAND, CHEMICALS, AND OTHER INDUSTRIAL WASTES FROM ENTRANCE INTO THE SEWER SYSTEM.
2. INTERCEPTORS AND GRADE RING MANHOLES SHALL BE PRECAST CONCRETE OF 3000 P.S.I. COMpressive STRENGTH AT 28 DAYS, VIBRATED FOR DENSITY, REINFORCED WITH INTERMEDIATE OR HARD GRADE DEFORMED STEEL BARS CONFORMING TO ASTM SPEC. A615 GRADE 60. ALL CONTINUOUS MONOLITHIC CONST.
3. INTERIOR OF INTERCEPTOR TO BE BARE CONCRETE.
4. COMPONENTS SHALL BE IN ACCORDANCE WITH APPROVED MATERIALS LIST.

INSTALLATION NOTES
1. PRIOR TO INSTALLATION, CONTACT E.V.M.W.D. AND DEPARTMENT OF BUILDING AND SAFETY FOR REQUIRED TANK SIZE AND/OR SPECIAL INSTALLATION REQUIREMENTS.
2. ALL SURFACE WATER SHALL DRAIN AWAY FROM INTERCEPTOR EXCLUDING RAIN WATER FROM THE SEWER SYSTEM. WASTES ENTER THROUGH INLET PIPE ONLY.
3. TRAFFIC LOCATION INSTALLATIONS WILL REQUIRE THE TOP OF THE INTERCEPTOR TO BE PLACED BELOW THE PAVING. INSPECTION MANHOLES MUST BE BROUGHT TO THE SURFACE WITH A GRADE RING OF 8" MAXIMUM HEIGHT.
4. INTERCEPTOR SHALL REST ON FIRM LEVEL GROUND TO AVOID SETTLING.
5. SEPARATOR AND SAMPLE BOX COVER PLATES NOT SUBJECT TO VEHICULAR TRAFFIC MAY BE 3/8" STEEL CHECKER PLATES BY 24" SQUARE. AT TRAFFIC LOCATIONS USE STEEL H-20 RATED STEEL FRAMES AND COVERS.

GR-22 GRADE RING
WITH OR WITHOUT STEEL FRAME.
SIZES 3", 4", 5", 6" (HIGH)
SPECIAL AND FOUNDRY COVERS AVAILABLE ON REQUEST.

PLAN

NOT SUBJECT TO VEHICULAR TRAFFIC AREAS

TRAFFIC AREA

TYPICAL MANHOLE DETAILS
BOX TO BE SET 2" ABOVE FINISHED GRADE WITH 36" FEATHER INTO FINISHED GRADE TO AVOID TRIP HAZARD

COVER: A NON-SKID SURFACE SUCH AS DIAMOND PLATE OR OTHER APPROVED SURFACE IS REQUIRED. FRAME AND COVER MUST BE GAS TIGHT.

SEE APPROVED MATERIALS LIST FOR PRECAST VAULTS

520-A-3000 CONCRETE

SECTION A-A

PLAN

NOTES:

1. ALL SURFACE WATER SHALL DRAIN AWAY FROM THE SAMPLE BOX.

2. LID AND ANGLE IRON THICKNESS WILL DEPEND ON TRAFFIC PATTERNS IN SAMPLE BOX AREA.

3. INSTALLATION TO BE IN ACCORDANCE WITH ALL LOCAL PLUMBING CODES.

4. WHEN USED IN CONJUNCTION WITH AN INTERCEPTOR, SEPARATOR, OR CLARIFIER THE SAMPLE BOX SHALL BE Poured MONOLITHICALLY WITH THE TANK END WALL.
NOTE:

1. SPACING OF SURFACE ACCESS POINTS TO INTERCEPTOR (RAISED MANHOLE COVERS) SHALL BE PROVIDED AT NOT LESS THAN 15' INTERVALS.

TYPICAL INSTALLATION

DISTRICT APPROVED COVER WITH H-20 TRAFFICLOADING, GAS TIGHT BOLT-DOWN MANHOLE COVER AND FRAME (RUBBER "O" RING OR RUBBER GASKET TYPE) TYP.

NOTE:

1. ALL INTERCEPTORS SHALL HAVE A MINIMUM LIQUID CAPACITY OF 750 GALLONS.
2. ALL INTERCEPTORS SHALL BE UPC/AIPMO ACCEPTED.
3. ALL WASTEWATER EXCLUDING RESTROOMS, MUST PASS THROUGH THE INTERCEPTOR.
4. ALL SURFACE WATER SHALL DRAIN AWAY FROM THE INTERCEPTOR.
5. ALL INTERCEPTORS, SEPARATORS, AND CLARIFIERS SUBJECT TO VEHICULAR TRAFFIC. LOADING SHALL HAVE H-20 RATED TANK TOPS AND ACCESS COVERS. ALL OTHER LOADING CONDITIONS SHALL BE PER MANUFACTURER SPECIFICATIONS.
6. EXTERNAL PLUMBING PER LOCAL PLUMBING CODE.
EXISTING GROUND

36" DIA. MANHOLE COVER AND FRAME WITH 24" DIA. INSERT COVER, ALHAMBRA FOUNDRY CO. A-1325

MANHOLE SHAFTS AND GRADE RINGS (GRADE RINGS 8" MAX.)

SEWAGE AIR RELEASE VALVE PER APPROVED MATERIALS LIST

1/2" PLASTIC COATED STEP SAVER APPROVED MATERIALS LIST

4'x6' PRECAST CONCRETE VAULT

LINK SEAL (TYP)

SEWER FORCE MAIN

3" CLEAR

1 1/2" CRUDED ROCK WITH FILTER FABRIC

#4 BARS @ 18" ON CENTER EACH WAY

3000 P.S.I. CONCRETE

PROFILE

NOTE:

1. SEE APPROVED MATERIALS LIST FOR MATERIALS AND EQUIPMENT MANUFACTURERS.
FOR PVC CARRIER PIPE, USE POLYETHYLENE CASING INSULATORS WITH POLYETHYLENE SKIDS, FOR CMIL&C STEEL AND DUCTILE IRON CARRIER PIPE, USE STAINLESS STEEL BAND SPACERS AND INSULATORS WITH GLASS FILLED POLYMER PLASTIC RUNNERS. ALL CASING INSULATORS SHALL BE DESIGNED BY THE MANUFACTURER FOR APPLICATION GIVEN THE PARTICULAR CARRIER PIPE O.D. AND CASING PIPE I.D. ALL BOLTS AND BANDS SHALL BE TYPE 304 STAINLESS STEEL.

### Casing Schedule

<table>
<thead>
<tr>
<th>Nominal Pipe Size</th>
<th>Minimum Casing Size</th>
<th>Min. Wall</th>
</tr>
</thead>
<tbody>
<tr>
<td>8&quot;</td>
<td>16&quot; I.D.</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>10&quot;</td>
<td>18&quot; I.D.</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>12&quot;</td>
<td>20&quot; I.D.</td>
<td>5/16&quot;</td>
</tr>
<tr>
<td>15&quot;</td>
<td>24&quot; I.D.</td>
<td>5/16&quot;</td>
</tr>
<tr>
<td>18&quot;</td>
<td>30&quot; I.D.</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>21&quot;</td>
<td>33&quot; I.D.</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>24&quot;</td>
<td>36&quot; I.D.</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>27&quot;</td>
<td>39&quot; I.D.</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>30&quot;</td>
<td>42&quot; I.D.</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>36&quot;</td>
<td>48&quot; I.D.</td>
<td>5/8&quot;</td>
</tr>
<tr>
<td>42&quot;</td>
<td>54&quot; I.D.</td>
<td>3/4&quot;</td>
</tr>
</tbody>
</table>

**NOTES:**

1. SPACING BETWEEN THE CASING INSULATORS SHALL BE PER THE MANUFACTURERS RECOMMENDATIONS EXCEPT THAT THERE SHALL BE AT LEAST 4 CASING INSULATORS PER PIPE SECTION, ONE 12" FROM EACH JOINT AND ONE CENTERED. ADDITIONALLY, ONE INSULATOR SHALL BE INSTALLED 12" FROM EACH END OF THE CASING.

2. BOTH ENDS OF THE CASING BETWEEN THE CASING AND CARRIER PIPE MUST BE SEALED WATERTIGHT USING AN END SEAL, SELECTED FROM APPROVED MATERIALS LIST. BANDS SHALL BE TYPE 304 STAINLESS STEEL.

3. ALL STEEL CASING PIPE JOINTS SHALL BE WELDED FULL CIRCUMFERENCE.

4. ABOVE CASING THICKNESS ARE FOR OPEN TRENCH ONLY. FOR JACKED CASING SEE SPECIFICATION NO. 15130.

STEEL CASING FOR SEWER MAINS
1. PIPE ANCHORS REQUIRED ON ALL SLOPES OF 3:1 OR GREATER.

2. ANCHOR SHALL EXTEND 12" INTO NATURAL UNDISTURBED SOIL.

3. CONCRETE SHALL BE 480-B-2500.

4. ANCHORS FOR TRAPEZOIDAL TRENCH SECTIONS WILL CONFORM TO TRENCH CROSS SECTION AND EXTEND 12" INTO UNDISTURBED SOIL.

5. DESIGN REQUIREMENTS FOR TRENCH DRAIN SUBDRAIN OR CANYON DRAIN SHALL BE IN ACCORDANCE WITH PROJECT GEOTECHNICAL ENGINEER'S RECOMMENDATIONS.
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This executive summary presents a brief background of the Elsinore Valley Municipal Water District (District) wastewater collection systems, the need for this master plan, proposed improvements to mitigate existing system deficiencies, and proposed expansion projects.

**ES.1 STUDY OBJECTIVE**

On June 28, 2007, the District authorized Carollo Engineers, P.C. (Carollo) to prepare this wastewater master plan (WWMP) study, which included the following tasks:

- Development of planning criteria and flow projections;
- Hydraulic model development and calibration, which included both dry weather and wet weather flow-monitoring programs;
- Evaluation of the District’s existing collection systems and development of the future wastewater collection systems, including improvement recommendations to mitigate existing deficiencies and to serve future growth;
- Development of a wastewater Capital Improvement Program (CIP); and
- Preparation of the Wastewater Master Plan Report.

**ES.2 STUDY AREA**

The District, which was formed in 1950, is located in the southwestern portion of Riverside County and provides potable water, irrigation, sewer, and reclamation services to the City of Lake Elsinore, the City of Canyon Lake, portions of the City of Murrieta, and some unincorporated areas of Riverside County.

The District currently covers an area of approximately 96 square miles. The ultimate sphere of influence (SOI) of the District covers approximately 132 square miles. The study area for this master plan is shown on Figure ES.1. According to the 2007 Water Distribution System Master Plan (2007 WMP), development in areas within the District SOI but outside the current District service area is projected to occur after the year 2030. Additionally, the SOI development areas are not practically served by sanitary sewer due to the topography of the region.

This master plan identifies the wastewater collection system infrastructure necessary to service developed lands within the current District boundary only excluding the SOI development areas.
Legend
- Streets
- Waterway
- District Service Area*
- Existing Sewersheds
- Canyon Lake
- Horsethief
- Regional
- Southern

*Note: Master Plan Study Area does not include areas outside the District Service Area, but instead the District SOI.
ES.3 EXISTING WASTEWATER COLLECTION SYSTEMS
OVERVIEW

The District’s existing wastewater collection systems consist of approximately 358 miles of sewer mains up to 54 inches in diameter. The “backbone” of the system consists of trunk sewers, generally 10 inches in diameter and larger, that convey the collected wastewater to the District’s Water Reclamation Facilities (WRFs). The locations of the District’s wastewater collection system facilities are shown on Figure ES.2.

The District’s current service area is delineated into four separate collection systems. These are the Regional, Canyon Lake, Horsethief, and Southern collection systems. The flows conveyed in the Regional, Canyon Lake, and Horsethief collection systems are treated by the District’s Regional, Railroad Canyon, and Horsethief WRFs, respectively. Whereas wastewater discharged into the Southern collection system is conveyed through the Rancho California Water District’s (RCWD’s) wastewater collection system to the RCWD operated Santa Rosa WRF for treatment. These sewershed areas are also shown on Figure ES.3.

It should be noted that future wastewater flows generated within the Horsethief collection system will be routed to the planned Alberhill WRF for treatment. This master plan assumes that the Alberhill WRF will be operational by the year 2010.

ES.4 WASTEWATER FLOWS

Historical flows at the District’s WRFs were reviewed and analyzed to determine daily, monthly, and seasonal fluctuations experienced in the wastewater collection systems. Existing dry weather flows were developed based on water meter data provided by the District. Future wastewater flows were projected based on the water demand projections provided in the 2007 WMP [2]. A 10-year, 24-hour storm event was used to simulate wet weather flows by simulating rainfall derived infiltration and inflow (RDII). Table ES.1 summarizes the District wide dry weather and wet weather flows used for this study.

<table>
<thead>
<tr>
<th>Planning Year</th>
<th>Average Dry Weather Flow (mgd)</th>
<th>Peak Wet Weather Flow (mgd)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing</td>
<td>8.1&lt;sup&gt;1&lt;/sup&gt;</td>
<td>23.4</td>
</tr>
<tr>
<td>2030</td>
<td>22.5</td>
<td>49.7</td>
</tr>
<tr>
<td>Build Out</td>
<td>30.0</td>
<td>63.9</td>
</tr>
</tbody>
</table>

Notes:
(1) Based on 2006 data.
(2) Peak wet weather flow was simulated using the hydraulic computer model.
ES.5 EVALUATION AND PROPOSED IMPROVEMENTS

The District's wastewater collection system facilities were analyzed under existing and future peak flow conditions. Figure ES.4 identifies District’s existing facilities that were flagged as deficient under existing peak flow conditions. The proposed improvements to mitigate existing deficiencies and to serve future growth are shown on Figure ES.5. Details of each improvement are also provided in Table ES.2.

ES.5.1 Existing System Project Prioritization

This master plan assumes that the District will implement all of the improvements required to mitigate existing deficiencies in the first capital improvement phase (2008-2010). However, the District may not be capable of implementing all of the proposed improvements to mitigate existing deficiencies. For this reason, the existing system improvements were prioritized based on the severity of the existing deficiency. Table ES.3 summarizes the priority of the existing system improvements.

ES.5.2 Project Phasing

The phasing of the improvements recommended in this chapter is based on the development area assumptions presented in the 2007 WMP [2]. This master plan utilizes the following project phases:

- **Phase 1.** This short-term phase includes improvements that are allocated based on annual fiscal budgets between 2008 and 2010.
- **Phase 2.** This intermediate phase includes improvements that are allocated based on annual fiscal budgets between 2011 and 2015.
- **Phase 3.** This intermediate phase includes improvements that are allocated based on annual fiscal budgets between 2016 and 2020.
- **Phase 4.** This long-term phase includes improvements that are allocated based on annual fiscal budgets between 2021 and 2025.
- **Phase 5.** This long-term phase includes improvements that are allocated based on annual fiscal budgets between 2026 and 2030.
- **Phase 6.** This long-term phase includes improvements that are allocated based on annual fiscal budgets after 2030.
FIGURE ES.2
EXISTING WASTEWATER COLLECTION SYSTEM OVERVIEW

Legend
- WRF
- Lift Stations
- Streets
- Waterway

Existing Collection System
Diameter
- 8" and Smaller
- 10" - 16"
- 18" - 24"
- 27" and Larger
- Force Main

Sewersheds
- Canyon Lake
- Horsethief
- Regional
- Southern

Note: The Serena LS, A-5 LS, and Alberhill LS were not included in the District's hydraulic model.
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This page left blank intentionally.
Note: The Serena LS, A-5 LS, and Alberhill LS were not included in the District's hydraulic model.
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Note: The Serena LS, A-5 LS, and Alberhill LS were not included in the District's hydraulic model.
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### Regional Sewershed

#### Gravity Main Improvements

<table>
<thead>
<tr>
<th>No.</th>
<th>Coded No.</th>
<th>Type of Improvement</th>
<th>Description/Street</th>
<th>Existingget Trunk Name</th>
<th>New Size/Diam. (in.)</th>
<th>Planned Trunk Name</th>
<th>Ex. Size/Diam. (in.)</th>
<th>New Size/Diam. (in.)</th>
<th>Parallel/Replace</th>
<th>Length (ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>RP-1</td>
<td>Pipe Riverside Dr.</td>
<td>Grand Ave. to 1,300' s/o Grand Ave.</td>
<td>A Trunk</td>
<td>Figure 1</td>
<td>X</td>
<td>10</td>
<td>15</td>
<td>Replace</td>
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<tr>
<td>2</td>
<td>RP-2</td>
<td>Pipe Riverside Dr.</td>
<td>1,300' s/o Grand Ave. to 500' e/o A-4 LS</td>
<td>A Trunk</td>
<td>Figure 2</td>
<td>X</td>
<td>10</td>
<td>15</td>
<td>Replace</td>
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<td>3</td>
<td>RP-3</td>
<td>Pipe Mission Trail</td>
<td>McVicar Force Main Discharge to Bundy Canyon Rd.</td>
<td>Lakeshore South</td>
<td>Figure 4A</td>
<td>X</td>
<td>12/15</td>
<td>33</td>
<td>Parallel</td>
<td>4,700</td>
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<td>RP-4</td>
<td>Pipe Mission Trail</td>
<td>Bundy Canyon Rd. to Croydon St.</td>
<td>Lakeshore South</td>
<td>Figure 4A</td>
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<td>18</td>
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<td>5</td>
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<td>Pipe Mission Trail</td>
<td>Croydon St. to 600' s/o Sedco Blvd.</td>
<td>Lakeshore South</td>
<td>Figure 5</td>
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<td>21</td>
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<td>6</td>
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<td>600' s/o Sedco Blvd. to Malaga Rd.</td>
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<td>Figure 5</td>
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<td>21</td>
<td>48</td>
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<td>RP-7</td>
<td>Pipe Malaga Rd.</td>
<td>Mission Trail to planned Lakeshore Regional LS</td>
<td>Lakeshore Malaga</td>
<td>Figure 5</td>
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<td>8</td>
<td>RP-8</td>
<td>Pipe e/o Mission Trail</td>
<td>Lakeshore Dr. to Malaga Rd.</td>
<td>Regional/Lakeshore South</td>
<td>Figure 5</td>
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<td>-</td>
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<td>9</td>
<td>RP-9</td>
<td>Pipe Various Streets</td>
<td>B-3 Force Main Discharge to 3rd St.</td>
<td>Lakeshore North</td>
<td>Figure 6</td>
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<td>Pipe Jana Ln.</td>
<td>Roberts Way LS Force Main Discharge End to Clinton Keith Rd.</td>
<td>Clinton Keith</td>
<td>Figure 3</td>
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<td>11</td>
<td>RP-11</td>
<td>Pipe Coal Ave.</td>
<td>s/o Robb Rd. to Terra Cotta Rd.</td>
<td>Nichols Road</td>
<td>Figure 9</td>
<td>-</td>
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<td>RP-12</td>
<td>Pipe Coal Ave.</td>
<td>Terra Cotta Rd. to Nichols Rd.</td>
<td>Nichols Road</td>
<td>Figure 9</td>
<td>-</td>
<td>12</td>
<td>New</td>
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<td>RP-13</td>
<td>Pipe Turnbull Ave.</td>
<td>se/o Lula Ln. &amp; Riverside St.</td>
<td>A Trunk</td>
<td>Figure 1</td>
<td>X</td>
<td>10</td>
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<td>Pipe Lula Ln.</td>
<td>e/o Lula Ln. &amp; e/o Riverside Dr</td>
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<td>Figure 1</td>
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<td>New</td>
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<td>Pipe Hammack Ave.</td>
<td>Telford Ave. to Maurice St.</td>
<td>3rd Street Trunk Extension</td>
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<td>16</td>
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<td>Pipe e/o Existing Street</td>
<td>940' s/o Greenwood Ave. to New Tuscany Hills LS</td>
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<td>Figure 8</td>
<td>-</td>
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<td>Pipe Summing Drive Extension</td>
<td>Existing Temporary Tuscany Hills LS to Tuscany Hills LS.</td>
<td>New Tuscany Hills</td>
<td>Figure 8</td>
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<td>Science Crest Dr. to 940' s/o Greenwood Ave.</td>
<td>New Tuscany Hills</td>
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<td>RP-19</td>
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<td>e/o Hyatt Rd. to Science Crest Dr.</td>
<td>New Tuscany Hills</td>
<td>Figure 8</td>
<td>-</td>
<td>12</td>
<td>New</td>
<td>2,300</td>
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<td>RP-20</td>
<td>Pipe Maurice St.</td>
<td>Penny Place to Greenwood Ave.</td>
<td>New Tuscany Hills</td>
<td>Figure 8</td>
<td>-</td>
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<td>New</td>
<td>1,400</td>
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<td>21</td>
<td>RP-21</td>
<td>Pipe Ridge St.</td>
<td>Sevilla Ave. to Maurice St.</td>
<td>New Tuscany Hills</td>
<td>Figure 8</td>
<td>-</td>
<td>10</td>
<td>New</td>
<td>1,900</td>
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<tr>
<td>22</td>
<td>RP-22</td>
<td>Pipe e/o Lakeshore Dr.</td>
<td>e/o Lakeshore Park to e/o San Jacinto River</td>
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#### Lift Station Improvements

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<th>New Size/Diam. (in.)</th>
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<th>Length (ft)</th>
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**Table ES.2 Proposed Improvements**

**Wastewater Master Plan**

**Elsinore Valley Municipal Water District**

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<td>1,200</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>82</td>
<td>AP-9</td>
<td>Pipe</td>
<td>Horsethief Canyon Rd.</td>
<td>Horsethief Canyon Road</td>
<td>Horsethief Canyon Road Connector Trunk</td>
<td>Figure 22</td>
<td>1.2 mgd</td>
<td>New</td>
<td>1,200</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>83</td>
<td>AP-9a</td>
<td>Casing¹</td>
<td>Intersect 15</td>
<td>Crossing Under Intersect 15</td>
<td>Horsethief Canyon Road Connector Trunk</td>
<td>Figure 22</td>
<td>1.2 mgd</td>
<td>New</td>
<td>1,200</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>84</td>
<td>AP-10</td>
<td>Pipe</td>
<td>Horsethief Canyon Rd.</td>
<td>Kidder Highland Dr. to s/o Horsethief WRF</td>
<td>Horsethief Canyon Road Connector Trunk</td>
<td>Figure 22</td>
<td>1.2 mgd</td>
<td>New</td>
<td>1,200</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>85</td>
<td>AP-11</td>
<td>Pipe</td>
<td>Kidder Highland Dr.</td>
<td>near Horsethief WRF to Horsethief Canyon Road</td>
<td>Horsethief Canyon Road Connector Trunk</td>
<td>Figure 22</td>
<td>1.2 mgd</td>
<td>New</td>
<td>1,200</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>86</td>
<td>ALS-1</td>
<td>Lift Station</td>
<td>Bolo St.</td>
<td>Bolo LS Upgrade</td>
<td>Bolo Trunk</td>
<td>Figure 23</td>
<td>0.4 mgd</td>
<td>Replace</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>87</td>
<td>ALS-2</td>
<td>Lift Station</td>
<td>Temescal Canyon Rd.</td>
<td>New Glen Eden LS</td>
<td>New Glen Eden</td>
<td>Figure 19</td>
<td>0.75 mgd</td>
<td>New</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>88</td>
<td>AFM-1</td>
<td>Force Main</td>
<td>Parallel to Intersect 15</td>
<td>From the Glen Eden LS to Horsethief Canyon Rd.</td>
<td>Glen Eden</td>
<td>Figure 19</td>
<td>New</td>
<td>Replace</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**Note:**

1. Proposed casing size and carrier pipe size.
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Table ES.3 Existing System Project Prioritization

<table>
<thead>
<tr>
<th>Priority</th>
<th>Improvement Number</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Highest Priority</strong> - Severe surcharging with potential for extended SSOs during a large storm; PWWF is greatly above lift station firm capacity.</td>
<td>RP-9, RLS-1</td>
</tr>
<tr>
<td><strong>High Priority</strong> - Severe surcharging with potential for SSOs during a large storm; PWWF is greatly above lift station firm capacity.</td>
<td>RP-1, RP-2, RP-3, RP-4, RP-5, RP-6, RP-7, RLS-3, RFM-2, RFM-3,</td>
</tr>
<tr>
<td><strong>Medium Priority</strong> - Surcharging in pipelines; PWWF is appreciably above lift station firm capacity.</td>
<td>RP-8, RLS-2,</td>
</tr>
<tr>
<td><strong>Lower Priority</strong> - Slight Surcharging in pipelines; PWWF is slightly above lift station firm capacity.</td>
<td>RP-10, CLP-1, RFM-1</td>
</tr>
</tbody>
</table>

As noted previously, it is assumed that all improvements necessary to mitigate existing deficiencies are implemented in the first capital improvement phase (2008 - 2010). Improvements within the existing collection system that are not required to mitigate existing deficiencies are phased in the period in which the deficiency is expected to occur.

Expansion projects were phased so that high priority was given to the construction of new pipelines and lift stations in the phase in which the development is expected to come online. For example, if growth within a specific plan area, such as Sunset Ridge, is projected to occur from 2011 to 2020, then the infrastructure necessary to service the development would be required in improvement Phase 2 (2011 -2015). For this reason, many of the improvements recommended in this master plan are stacked in earlier phases (such as Phases 2 and 3).

**ES.6 CAPITAL IMPROVEMENT PROGRAM**

The cost estimates presented in the CIP include a 30-percent contingency cost, 15-percent engineering and administrative cost, and a 10-percent construction management cost, all of which are applied to the baseline construction cost. Table ES.4 summarizes the District’s Sewer System CIP by phase and by user category.
Table ES.4  Capital Improvement Program Summary by Phases/User Categories
Wastewater Master Plan
Elsinore Valley Municipal Water District

<table>
<thead>
<tr>
<th>Planning Period</th>
<th>Existing Users(^{(1)})</th>
<th>Future Users(^{(1)})</th>
<th>Capital Cost(^{(1)})</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase 1</td>
<td>2008-2010</td>
<td>$31.6</td>
<td>$33.5</td>
</tr>
<tr>
<td>Phase 2</td>
<td>2011-2015</td>
<td>$0.0</td>
<td>$73.7</td>
</tr>
<tr>
<td>Phase 3</td>
<td>2016-2020</td>
<td>$0.0</td>
<td>$15.0</td>
</tr>
<tr>
<td>Phase 4</td>
<td>2021-2025</td>
<td>$0.0</td>
<td>$27.9</td>
</tr>
<tr>
<td>Phase 5</td>
<td>2026-2030</td>
<td>$0.0</td>
<td>$10.8</td>
</tr>
<tr>
<td>Phase 6</td>
<td>Post 2030</td>
<td>$0.0</td>
<td>$14.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>$31.6</td>
<td>$175.3</td>
</tr>
</tbody>
</table>

**Note:**
(1) All costs are in millions of dollars (ENR CCI 9,895, Los Angeles Oct 2008)

As shown in ES.2, the majority of improvements and capital costs are associated with growth and are therefore allocated to future customers ($168.2 million). The total CIP is estimated to cost approximately $207 million, of which 15.3 percent ($31.6 million) is allocated to existing customers. Table ES.5 provides a breakdown of cost by facility type per planning phase. As can be seen in the table the greatest percentage of cost comes from Lift Stations ($101.2 million).

Table ES.5  Capital Improvement Program Summary by Phases/Facility Type
Wastewater Master Plan
Elsinore Valley Municipal Water District

<table>
<thead>
<tr>
<th>Improvement Type</th>
<th>Phase 1 2007-2010</th>
<th>Phase 2 2010-2015</th>
<th>Phase 3 2015-2020</th>
<th>Phase 4 2020-2025</th>
<th>Phase 5 2025-2030</th>
<th>Phase 6 Post 2030</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gravity Pipelines</td>
<td>$8.3</td>
<td>$46.6</td>
<td>$11.1</td>
<td>$15.6</td>
<td>$3.1</td>
<td>$1.8</td>
<td>$86.5</td>
</tr>
<tr>
<td>Lift Stations</td>
<td>$49.6</td>
<td>$19.4</td>
<td>$3.1</td>
<td>$11.3</td>
<td>$7.8</td>
<td>$10.1</td>
<td>$101.2</td>
</tr>
<tr>
<td>Force Mains</td>
<td>$7.2</td>
<td>$7.8</td>
<td>$0.8</td>
<td>$1.0</td>
<td>$0.0</td>
<td>$2.4</td>
<td>$19.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$65.2</strong></td>
<td><strong>$73.7</strong></td>
<td><strong>$15.0</strong></td>
<td><strong>$27.9</strong></td>
<td><strong>$10.8</strong></td>
<td><strong>$14.3</strong></td>
<td><strong>$206.9</strong></td>
</tr>
</tbody>
</table>

**Note:**
(1) All costs are in millions of dollars (ENR CCI 9,895, Los Angeles Oct 2008)
APPENDIX M – SSMP ADOPTING RESOLUTION
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