



**ELSINORE VALLEY
MUNICIPAL WATER DISTRICT
SEWER SYSTEM MANAGEMENT PLAN**

October 2018

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ELSINORE VALLEY MUNICIPAL WATER DISTRICT

SEWER SYSTEM MANAGEMENT PLAN

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LIST OF ABBREVIATIONS

Abbreviation	Definition
2016 WMP	2016 Water Distribution System Master Plan
BMP	Best Management Practices
C	Hazen-Williams Roughness Coefficient
CCTV	Closed Circuit Television
CDL	California Driver's License
cfs	Cubic Feet per Second
CIP	Capital Improvement Plan
CIWQS	California Integrated Water Quality System
CMOM	Capacity, Management, Operation, and Maintenance
d/D	Flow Depth to Pipe Diameter Ratio
District	Elsinore Valley Municipal Water District
FOG	Fats, Oils, and Grease
fps	Feet per Second
ft/ft	Feet per Feet
GIS	Geographic Information Systems
I/I	Infiltration and Inflow
in	Inches
MRP	Monitoring Reporting Program
n	Manning's Friction Coefficient
NPDES	National Pollutant Discharge Elimination System
O&M	Operations and Maintenance
OES	Office of Emergency Services
Order No. 2006-0003	State Water Resources Control Board Order No. 2006-0003
Order No. 2013-0058	State Water Resources Control Board Order No. 2013-0058
PM	Preventative Maintenance
PVC	Polyvinyl Chloride
RWQCB	Regional Water Quality Control Board
SDR	Standard Dimension Ratio
SOI	Sphere of Influence
SSMP	Sewer System Management Plan
SSO	Sanitary Sewer Overflow
SSRP	Sewage Spill Response Plan

Abbreviation	Definition
TBD	To Be Determined
TV	Television
WDR	Waste Discharge Requirement
WRF	Water Reclamation Facility
WWMP	Wastewater Master Plan

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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 Elsinore Valley Municipal Water District 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 and an additional amendment on September 9, 2013. The provisions of these amendments 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

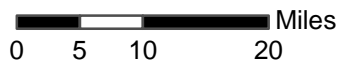
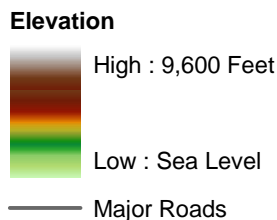
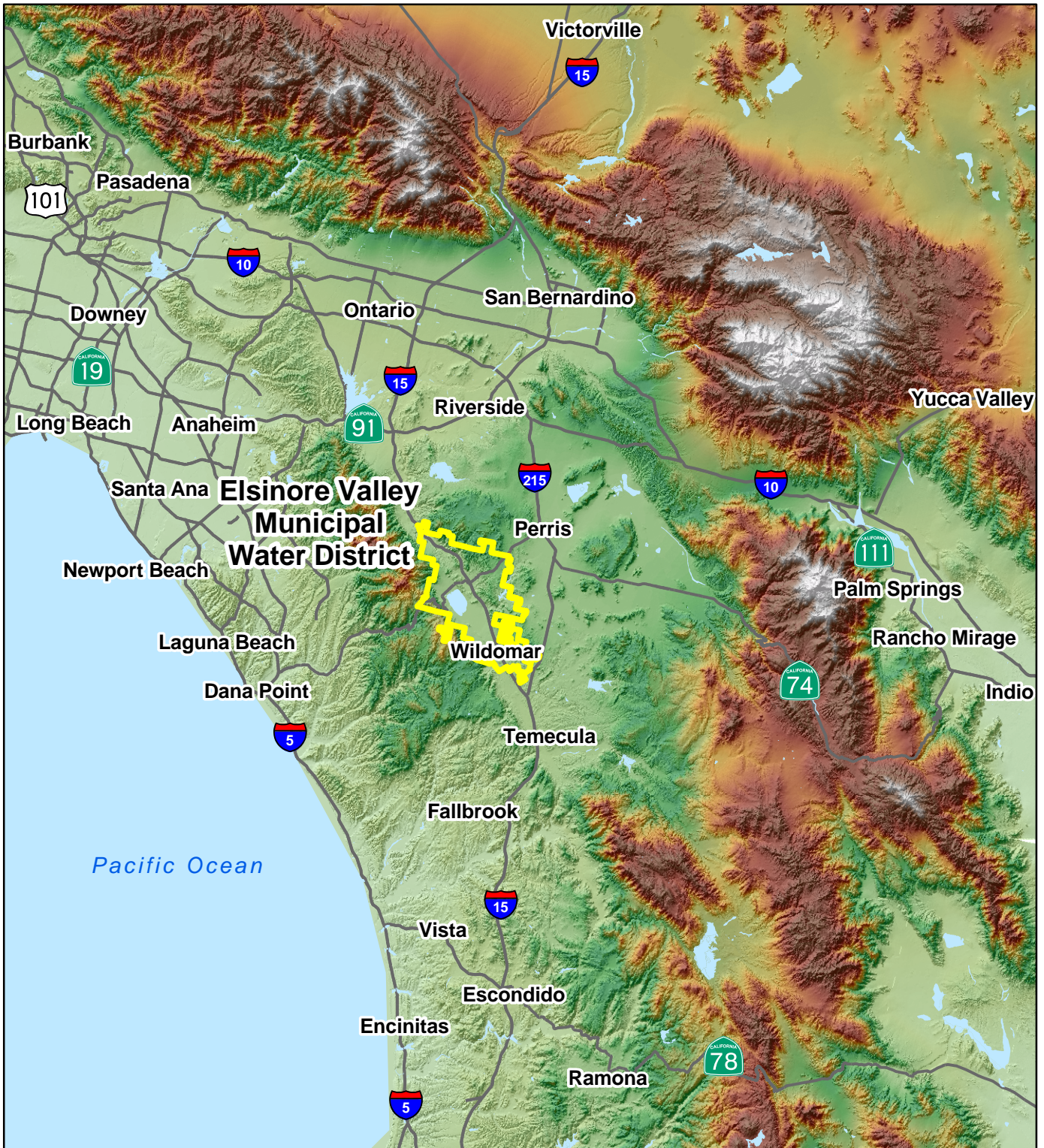
The District, which was formed in 1950, is located in the southwestern portion of Riverside County and provides potable water, sewer, and reclamation services to the City of Lake Elsinore, the City of Canyon Lake, portions of the City of Murrieta, Wildomar, and some unincorporated areas of Riverside 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 three separate collection systems that are enrolled in the California Integrated Water Quality System (CIWQS) electronic reporting system. These systems are as follows:

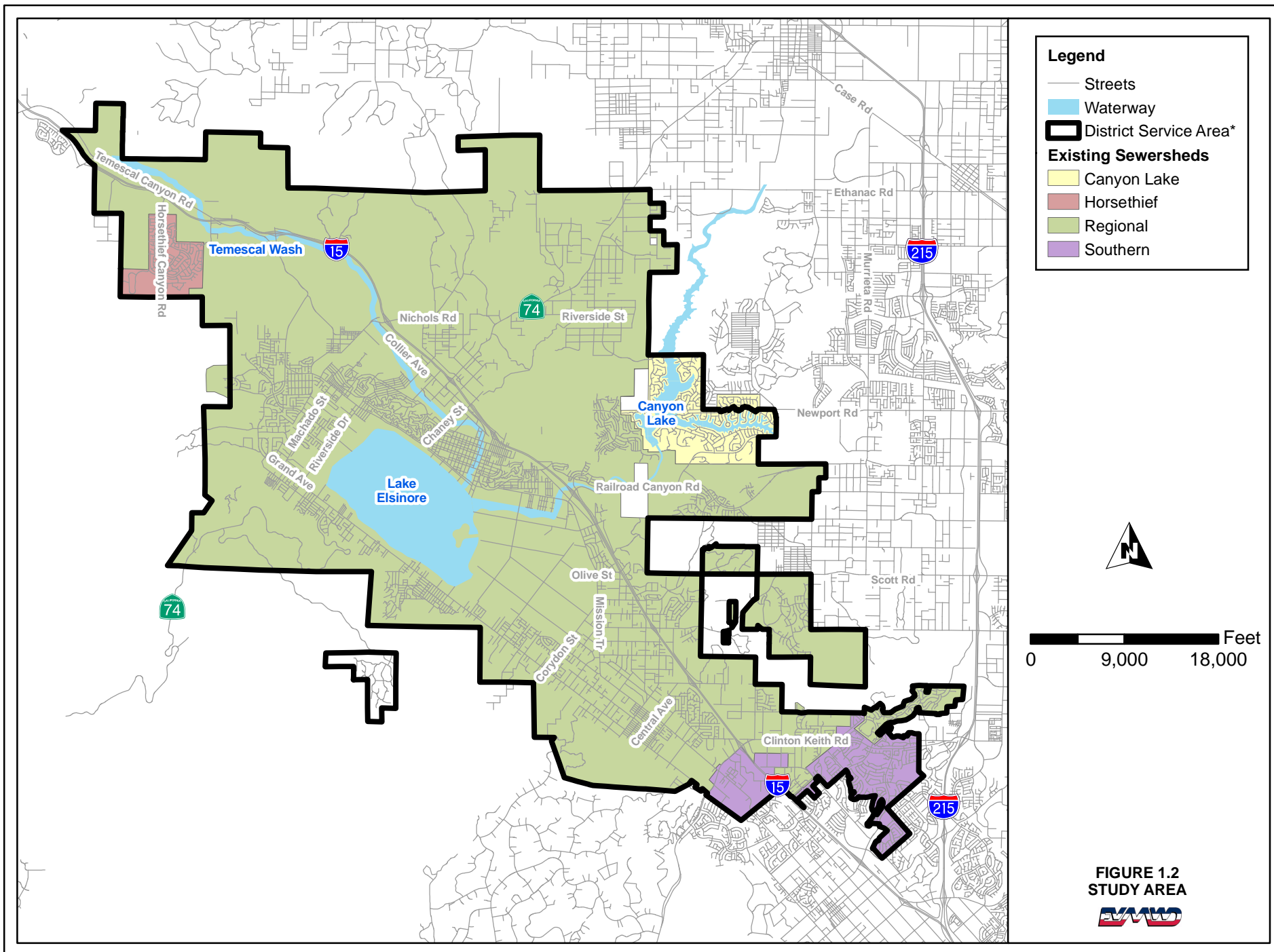
- Regional Collection System;
- Horsethief Canyon Collection System;
- Southern Collection System.

This report serves as a comprehensive District SSMP and covers all three of the District's collection systems.



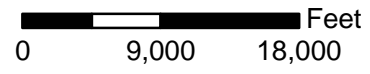
**FIGURE 1.1
REGIONAL LOCATION MAP**





Legend

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



**FIGURE 1.2
STUDY AREA**



*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 Sewer System Management Plan Elsinore Valley Municipal Water District	
Task	Required Certification Date⁽¹⁾
SSMP Development Plan and Schedule	08/01/07
Goals and Organization Structure	11/01/07
Overflow Emergency Response Plan Legal Authority O&M Plan FOG Plan	11/01/08
Design and Performance Standards System Evaluation and Capacity Assurance Plan Final SSMP and Certification	05/01/09
Performance Audits completed every 2 years	
Review, Update and Recertify every 5 years	
<u>Note:</u>	
1. Required Certification Date based on Order No. 2006-0003 for Population greater than 100,000 (See Appendix B).	

1.5 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.

1.6 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.

1.7 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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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 four categories of SSOs as established by Order No. 2013-0058-EXEC:

- **Category 1:** This category includes **Any Volume** discharges of sewage resulting from a failure in the District's sanitary sewer system that:
 - a. Result in a discharge to a drainage channel and/or surface water; or
 - b. Discharge to a storm drainpipe that was not fully captured and returned to the sanitary sewer system.
- **Category 2:** This category includes any discharges of sewage resulting from a failure in the District's sanitary sewer system that:

- a. Equal or exceeds 1,000 gallons, or
 - b. Result in a discharge but **does not** reach a drainage channel and/or surface water or storm drain.
- **Category 3:** 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. 2013-0058-EXEC, 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, Category 2 and Category 3 SSOs. The reporting of Private Lateral Sewage Discharges is voluntary.

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).

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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 Quality Control Board and other agencies if applicable (such as County Health Officer, County Environmental Health Agency, Regional Water Quality Control Board, and/or State Office of Emergency Services (OES)).*

3.2 AUTHORIZED REPRESENTATIVE

The District has authorized nine positions to serve as authorized representatives. These positions are the General Manager, AGM- Engineering & Operations, Director of Engineering & Water Resources, Engineering Manager, Director of Operations, Maintenance Manager, Wastewater Operations Manager, Wastewater Collections Superintendent and Mechanical Maintenance Superintendent.

The District has established three data entry designees who are responsible for entering spill data on CIWQS for the authorized representatives. The position is Collection Systems Maintenance Worker III.

The names and positions and contact information for the authorized representatives are presented in Appendix C.

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 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.
- **AGM- Engineering & Operations.** The Assistant General Manager, under general direction of the General Manager, the Assistant General Manager-Engineering and Operations plans, directs, manages and oversees the functions, programs, and operations of the Water Resources, Engineering, and Operations Divisions, including Water Operations, Wastewater Operations, and Maintenance; and provides highly responsible and complex administrative support to the General Manager. The Assistant General Manager also acts as General Manager in the absence of the General Manager.
- **Director of Engineering & Water Resources.** The Director of Engineering, under general administrative direction, plans, organizes, directs, manages, and oversees the functions, programs, and operations of the Engineering and Water Resources Departments; coordinates assigned activities with other departments and outside agencies; and provides highly responsible and complex administrative support to the Assistant General Manager.
- **Engineering Manager.** The Engineering Manager plans, directs, manages, and oversees the functions, programs, and operations of the Engineering Division, including planning, design, and construction of all District facilities; coordinates assigned activities with other departments and outside agencies; and provides highly responsible and complex administrative support to the Assistant General Manager.
- **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 and water reclamation facilities (WRFs).

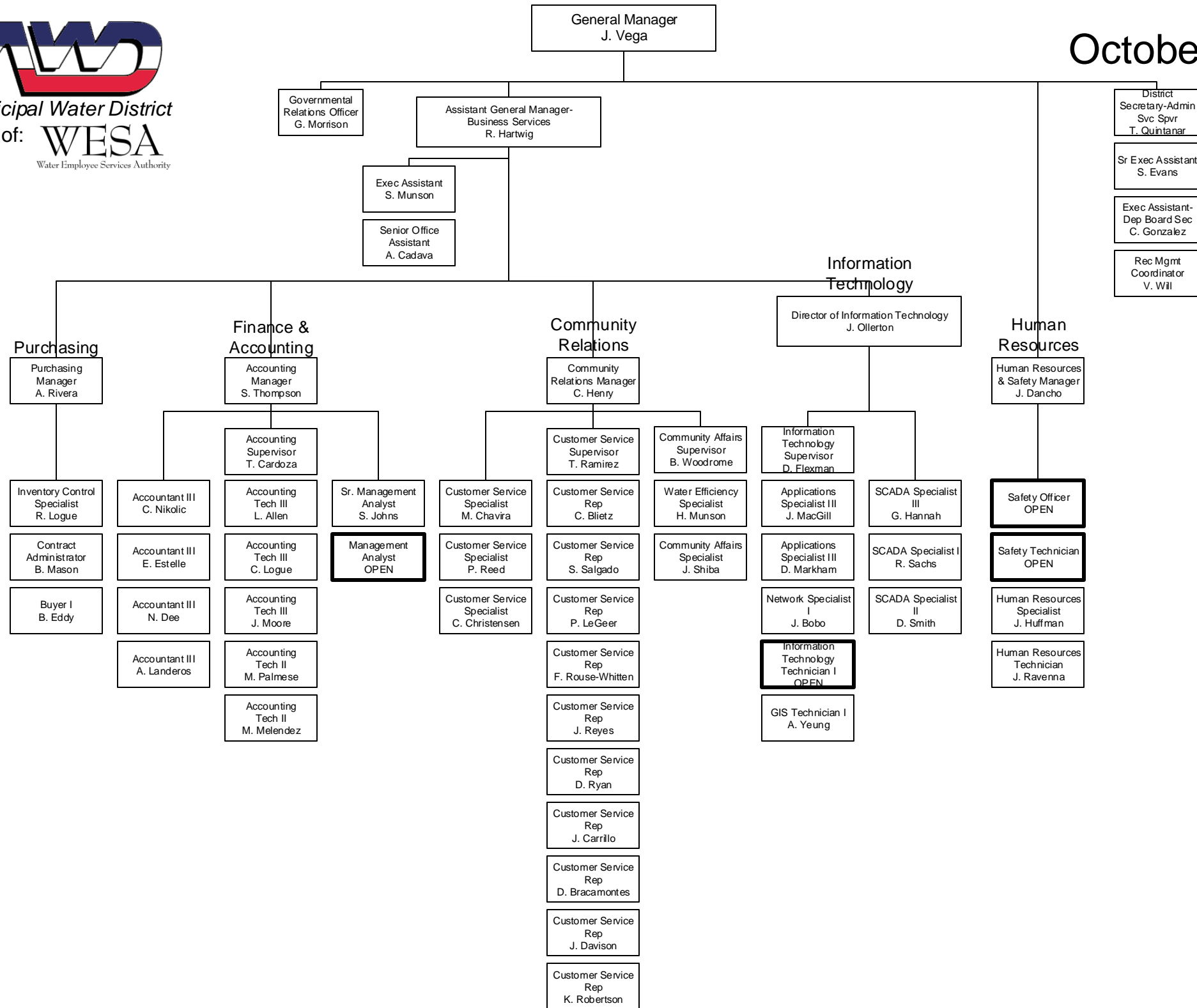
- **Wastewater Collection Systems Superintendent.** The Wastewater Collection Systems Superintendent oversees, supervises, and coordinates the work of a number of crews engaged in sanitary sewer maintenance and operation within the Wastewater Department.
- **Collection Systems Maintenance Worker III.** 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 collection systems.
- **Collection System Maintenance Worker II.** 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.
- **Collection System Maintenance Worker I.** 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.
- **Lift Station Technician.** The Lift Station Technician Performs daily lift station checks and observes the integrity and functional operations of all lift station systems. Diagnose and determine repair needs for sewage lift stations.
- **Maintenance Manager.** The Maintenance Manager directs, manages, supervises and coordinates the activities of the Facilities Maintenance, (buildings) and Mechanical Maintenance, (treatment plants, wells boosters and lift stations) divisions.
- **Mechanical Maintenance Superintendent.** The Mechanical Maintenance supervisor plans, assigns, directs and inspects the work of field service crews and personnel involved in the installation, maintenance, repair and servicing of mechanical equipment and machinery used in the production, treatment, storage, transmission and distribution of potable, non-potable, and reclaimed water, and the treatment and collection of wastewater.
- **Electromechanical Technician I.** The Electrical Technician I performs a wide variety of skilled, journey-level duties in the design construction, installation maintenance and repair of industrial electrical and electronic control systems and process control used in the water, wastewater and agricultural water systems.
- **Mechanical Maintenance Technician III.** The Maintenance Technician III participates in the installation, maintenance, inspection and servicing of mechanical equipment used in the water, wastewater, reclaimed and agricultural divisions. Performs preventative and predictive maintenance on assigned equipment, diagnoses and repairs involving the sewage lift stations.
- **Mechanical Maintenance Technician II.** The Maintenance Technician II participates in the installation, maintenance, inspection and servicing of mechanical equipment used in the water, wastewater, reclaimed and agricultural divisions. Performs

preventative and predictive maintenance on assigned equipment, diagnoses and repairs involving the sewage lift stations.

- **Mechanical Maintenance Technician I.** The Maintenance Technician I participate in the installation, maintenance, inspection and servicing of mechanical equipment used in the water, wastewater, reclaimed and agricultural divisions. Performs preventative and predictive maintenance on assigned equipment, diagnoses and repairs involving the sewage lift stations.
- **Director of Information Technology.** The Director of Information technology directs, manages, supervises and coordinates the activities and operations of the information Technology Division. within the Administrative Services Department including assuming responsibility for the development of the Authority's overall information systems strategy, management of Authority-wide information systems planning, ensuring mid- to long-term plans are prioritized and consistent with resource allocations, developing new automated systems and programs as well as the modification, management and enhancement of existing systems to meet the business needs of the Authority, management of the Authority's acquisition of new and replacement software and hardware, and planning, management and coordination of the Authority's Geographic Information System activities and the SCADA (supervisory control and data acquisition) systems.
- **SCADA specialist I/II/III.** The SCADA Specialists plans organizes and participates in a wide variety of advanced professional and technical duties related to the construction, maintenance and repairs of SCADA (Supervisory Control and Data Acquisition), telemetry, instrumentation, motor control centers, process control systems and other types of electronic and electrical equipment used in the water, wastewater and agricultural water systems.
- **Water Quality Supervisor.** The Water Quality Supervisor oversees, supervises, and coordinates the work of staff engaged in a number of tasks associated with the Water Quality Laboratory for water, wastewater, recycled and agricultural testing.
- **Water Quality Technician.** The Water Quality Technician performs water quality department duties including potable and wastewater laboratory testing including field sampling research and testing.
- **Water Quality Analyst.** Under general supervision, performs a variety of tests and analyses on raw and potable water, wastewater, and biosolids associated with the District's extensive water quality and related technical programs; maintains and operates the District's water/wastewater laboratory for microbiological and chemical analysis in compliance with federal, state, and local requirements; performs professional and scientific work associated with regulatory oversight for District's Laboratory.



October 1, 2018





Elsinore Valley Municipal Water District

Staffed by members of: WESA Water Employee Services Authority

October 1, 2018

General Manager J. Vega

Assistant General Manager - Engineering & Operations OPEN

Director of Operations J. Warner

Director of Strategic Programs M. Armstrong

Director of Engineering & Water Resources J. Dafforn

Executive Assistant C. Ramirez

Sr Office Assistant G. Malone

Sr Office Assistant A. Carpenter

Sr Office Assistant R. Miller

Management Analyst J. Chavez

WW Operations Manager D. McBride

Wtr Operations Manager T. Colie

Maintenance Manager J. Manhard

Engineering Manager M. Bates

Wtr Resources Manager P. Kalaria

Wastewater Treatment

Collection Systems

Water Production

Construction Maintenance

Preventive Maintenance

Field Services

Facilities Maintenance

Mechanical Maintenance

Capital Design

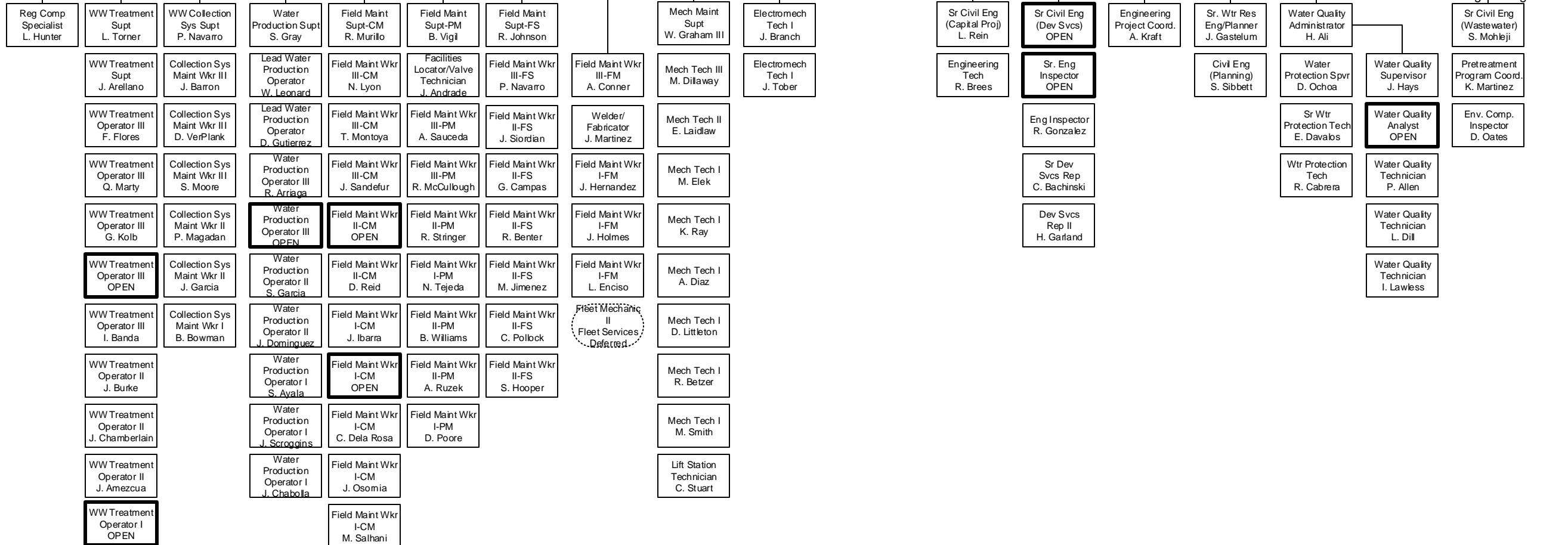
Development Services

Water Resources Planning

Water Systems Engineering

Water Quality/Laboratory

Wastewater Systems Engineering



3.4 CHAIN OF COMMUNICATION FOR REPORTING SSOs

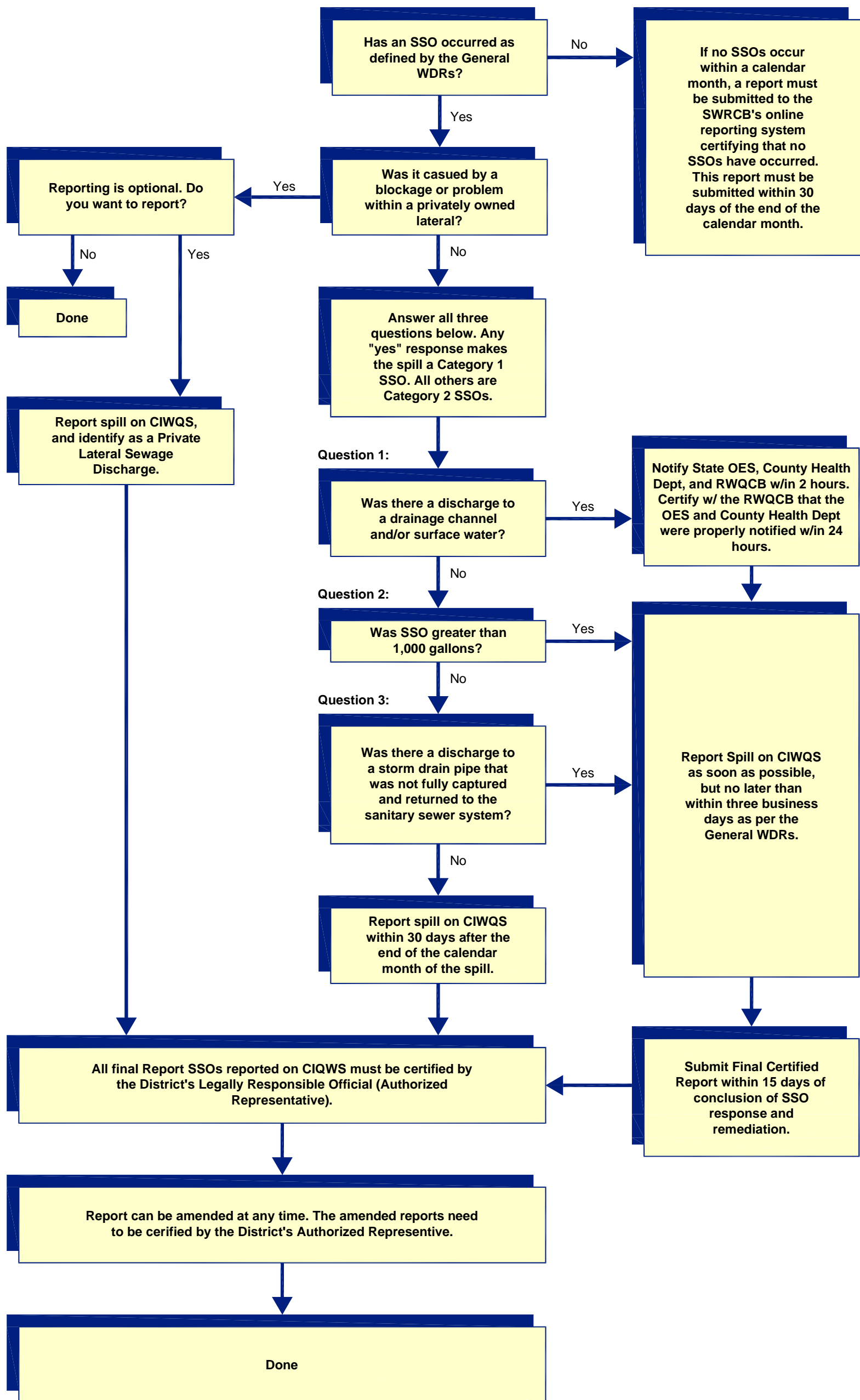
The District's Sewage Spill Response Plan (SSRP) contains the procedures utilized by the District to notify the primary SSO response crews (Appendix E). In addition to the SSRP, the District also conforms, as applicable, to the spill response procedures laid out in the Unified Sanitary Sewer Spill Response 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 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 SSO Reporting Procedure

Order No. 2006-0003 specifies certain requirements for the reporting of SSOs. The District will comply with these requirements. Upon notification that an SSO has occurred, an initial report will be made to the State Office of Emergency Services, Regional Water Quality Control Board and the Riverside County Environmental Health as outlined in Attachment A of Order No. 2013-0058-EXEC. The online CIWQS SSO reporting shall be prepared and submitted as outlined in Attachment A Order No. 2013-0058-EXEC. All Orders, including amended Orders, are in Appendix B.

Source: Adapted from Flow Chart created by the California Water Environment Association



**FIGURE 3.2
SWRCB SSO REPORTING
REQUIREMENTS FLOW CHART**

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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.

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OPERATION AND MAINTENANCE PROGRAM

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

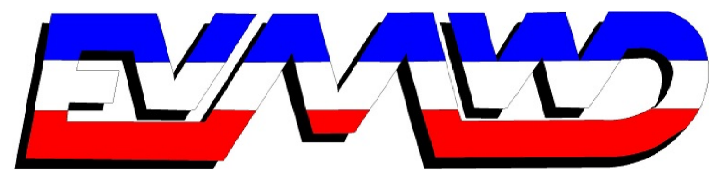
The District maintains a comprehensive map of its wastewater collection facilities in a Geographic Information System (GIS) format (Figure 5.1). An extensive amount of information is stored in the Districts collection system GIS data. This data includes the following:

- **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.



Elsinore Valley Municipal Water District

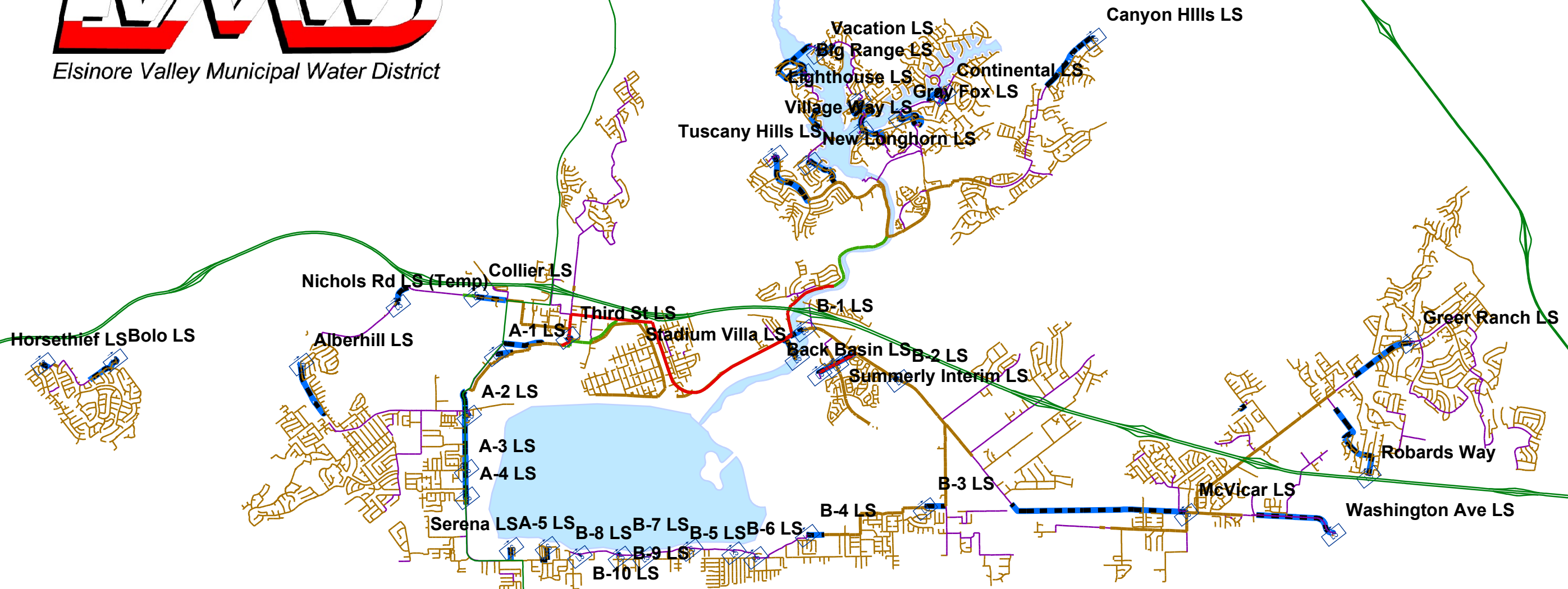


Figure 5.1
Existing Sewer System Map

- highway
- LS Lift Station
- Greater than 36" Gravity Mains
- 27"-36" Gravity Mains
- 18"-24" Gravity Mains
- 10"-16" Gravity Mains
- 8" or smaller Gravity Mains
- Force Main
- Waterbodies



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 2016 Sewer System Master Plan report. 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 total capacity of 4.0 mgd (Train A). 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. The disinfection process with chlorine was replaced with an ultraviolet disinfection system designed to treat 8.0 mgd average flow and 16.0 mgd peak flow. Currently the Regional WRF is in design for increasing flows.
- **Gravity Mains.**
 - This Regional collection system contains approximately 2 miles of sewer mains up to 54 inches in diameter, approximately 66 miles of which are 10 inches in diameter and larger.
- **Lift Stations and Force Mains.**
 - The Regional collection system contains 29 lift stations and associated force mains. Details of the District's lift stations and force mains are provided in the 2016 Sewer System Master Plan Report.

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 effluent Nitrogen criterion of less than 10 milligrams per liter (mg/L).

It should be noted that the Railroad Canyon WRF is a scalping plant designed to treat up to 1.3 mgd average daily flow. 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 46 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 6 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 and is designed to treat up to 0.5 mgd of average daily flow. The plant was constructed in 1990.
- **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 2 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 Rancho California Water District (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 2.3 square miles (1,500 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 sewer shed contains approximately 36 miles of sewer mains up to 15 inches in diameter, approximately 5.0 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. The District has developed a preventative maintenance program to more efficiently manage and operate its wastewater collection facilities. The facilities are divided into two departments, Wastewater Collections Systems and Mechanical Maintenance

5.4.1 Sanitary Sewer Main Line Cleaning

The sanitary sewer main line cleaning program consists of regular maintenance of the District's known problem areas, as well as scheduled maintenance of the remaining District facilities.

The District has identified several segments of pipes and certain manholes for more frequent maintenance. These High Frequency Maintenance Lines 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 High Frequency Maintenance Lines is presented visually on Figure 5.2. Appendix I contains a table with

more detailed information related to each High Frequency Maintenance Lines, as well as street level maps showing the precise location of each High Frequency Maintenance Lines.

Aside from the District High Frequency Maintenance Lines, 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.

Table 5.1 Sanitary Sewer Main Cleaning Schedule Sewer System Management Plan Elsinore Valley Municipal Water District	
Area	Sewer Main Cleaning Frequency
Old Town Lake Elsinore	Annually
Canyon Lake Sewershed	Once Every 2 - 3 Years
Designated “Hot Spots”	Varies (see Appendix I for Cleaning Schedule)
All Other Areas	Once Every 5 - 5.5 Years

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. In addition to the daily inspections, all liftstations had SCADA installed by July 2013. This allows for trending of the liftstation functions. All employees responsible for the operation of the liftstations have been trained in the use of the of the SCADA system.

Cleaning of the wet wells is performed on an as needed basis or scheduled due to the past history cleaning cycles.

5.5 REHABILITATION AND REPLACEMENT PLAN

Replacement and rehabilitation of deteriorated and capacity limited facilities are coordinated through the District’s Capital Improvement Program (CIP). Details of the District CIP are available through the District’s website. Additionally, the 2016 Sewer System Master Plan provides recommendations for the replacement of certain District facilities. Additionally, the district has a re-occurring CIP established for the rehabilitation of manholes throughout the district.

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 Mechanical Technician Structure, which facilitates staff training. In this system, the higher-level maintenance workers (Collection System Maintenance Worker III and Mechanical Technician III) 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.

The Electrical Technicians and the SCADA Technicians are trained and informed if there is a change that is or needs to be made in the operations of the liftstations.

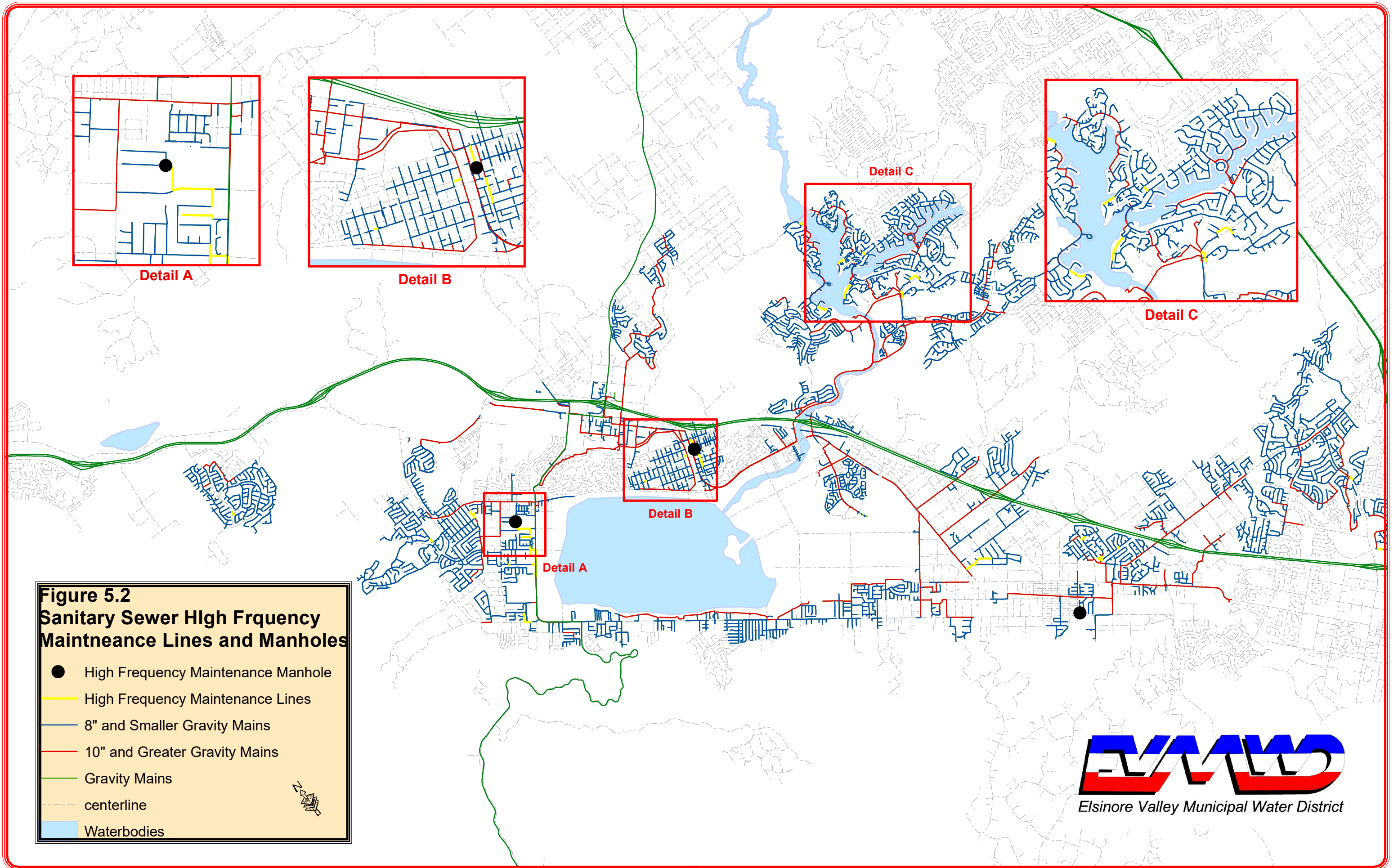


Table 5.2 Licensing and Certification Requirements Sewer System Management Plan Elsinore Valley Municipal Water District	
License or Certification	Time Frame
Collections Systems Maintenance Worker I	
Valid Driver's License	Upon Appointment
Class B California Driver's License (CDL) with air breaks and tank endorsements	within 18 Months of Appointment
CWEA Collection System Maintenance Technologist Grade I	Upon Appointment
District provided CPR/First Aid and Bloodborne Pathogen Training	Upon Appointment or Shortly Thereafter
Collections Systems Maintenance Worker II	
Valid Driver's License	Upon Appointment
Class B California Driver's License (CDL) with air breaks and tank endorsements	Upon Appointment
CWEA Collection System Maintenance Technologist Grade II	Upon Appointment
District provided CPR/First Aid and Bloodborne Pathogen Training	Upon Appointment or Shortly Thereafter
Collection Systems Maintenance Worker III	
Valid Driver's License	Upon Appointment
Class B CDL w/ air breaks and tank endorsements	Upon Appointment
CWEA Grade II Collection System Maintenance Certification	Upon Appointment
District provided CPR/First Aid and Bloodborne Pathogen Training	Upon Appointment or Shortly Thereafter
Mechanical Technician I	
Valid Driver's License	Upon Appointment
Class B CDL with Air Brake and Tank Endorsement	within 6 Months of Appointment
District provided CPR/First Aid and Bloodborne Pathogen Training	Upon Appointment or Shortly Thereafter
CWEA Grade I Mechanical Technology Certification	Upon Appointment
Mechanical Technician II	
Valid Driver's License	Upon Appointment
Class B CDL with Air Brake and Tank Endorsement	within 6 Months of Appointment
District provided CPR/First Aid and Bloodborne Pathogen Training	Upon Appointment or Shortly Thereafter
State of California D2 Water Distribution Certification	Upon Appointment
CWEA Grade II Mechanical Technology Certification	Upon Appointment
CWEA Grade I Collection System Maintenance Certification	Upon Appointment
Mechanical Technician III	
Valid Driver's License	Upon Appointment
Class B CDL with Air Brake and Tank Endorsement	within 6 Months of Appointment
District provided CPR/First Aid and Bloodborne Pathogen Training	Upon Appointment or Shortly Thereafter
State of California D2 Water Distribution Certification	Upon Appointment
CWEA Grade III Mechanical Technology Certification	Upon Appointment
CWEA Grade I Collection System Maintenance Certification	Upon Appointment
CWEA Plant Maintenance Electrical/Instrumentation Certification	Desirable

Table 5.2 Licensing and Certification Requirements Sewer System Management Plan Elsinore Valley Municipal Water District	
Electromechanical Technician I	
Valid Driver's License	Upon Appointment
Grade II Electrical/Instrumentation Certificate issued by the California Water Environment Association	Within 24 months of appointment
Lift Station Technician	
Valid Driver's License	Upon Appointment
Class B CDL with Air Brake and Tank Endorsement	Desirable
Grade I Water Distribution Operator License issued by the California Department of Public Health	within 18 Months of Appointment
Grade I Collections System Maintenance License issued by the California Water Environment Association	within 12 Months of Appointment

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 of 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.

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DESIGN AND PERFORMANCE PROVISIONS

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:

- 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.*

6.2 DESIGN STANDARDS AND SPECIFICATIONS

Volume 1 of the District's Standards and Standard 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/Departments/Engineering/Development Services) [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 Standards and Standard 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:

$$Q_{\text{peak}} = 1.84 (Q_{\text{avg}})^{0.92}$$

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

Q_{avg} = Average Wastewater Flow (cfs)

The District's design standards specify variable flow depth criteria for various pipe sizes. These criteria are 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 6.1 Maximum d/D Ratio for Design of New Sewers Sewer System Management Plan Elsinore Valley Municipal Water District	
Pipe Diameter (in)	Maximum d/D Ratio (during peak flows)
12 and smaller (New Sewers)	1/2
Larger than 12 (New Sewers)	2/3

Source:
Elsinore Valley Municipal Water District Standards Standard 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**

Sewer Size (in)	Minimum Pipe Slope (ft/ft)	Pipe Material
4	0.0200	SDR-35 PVC
6	0.0100	SDR-35 PVC
8	0.0040	SDR-35 PVC
10	0.0032	SDR-35 PVC
12	0.0024	SDR-35 PVC
15	0.0015	SDR-35 PVC
18	0.0012	SDR-35 PVC
21	0.0009	Vylon
24	0.0008	Vylon
27	0.0006	Vylon

Source:

Elsinore Valley Municipal Water District Standards and Standard 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 of Volume 1 of the District's Standards and Standard Drawings (2013) 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 50 of the District's Technical Specifications (2011) 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 53 of the District's Technical Specifications (2011);
- **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 56 of the District Technical Specifications (2011). 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 Standards and Standard Drawings, Vol 1.

6.2.3 Standard Drawings

Section 3 of Volume 1 of the District's Standards and Standard 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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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 Quality Control Boards, water suppliers, etc.) of all SSOs that potentially affect public health or reach the waters of the State in accordance with the monitoring and reporting program (M & RP), the California Water Code, other State Law, and other applicable Regional Water Quality Control Board's 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).

As previously mentioned, the District 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

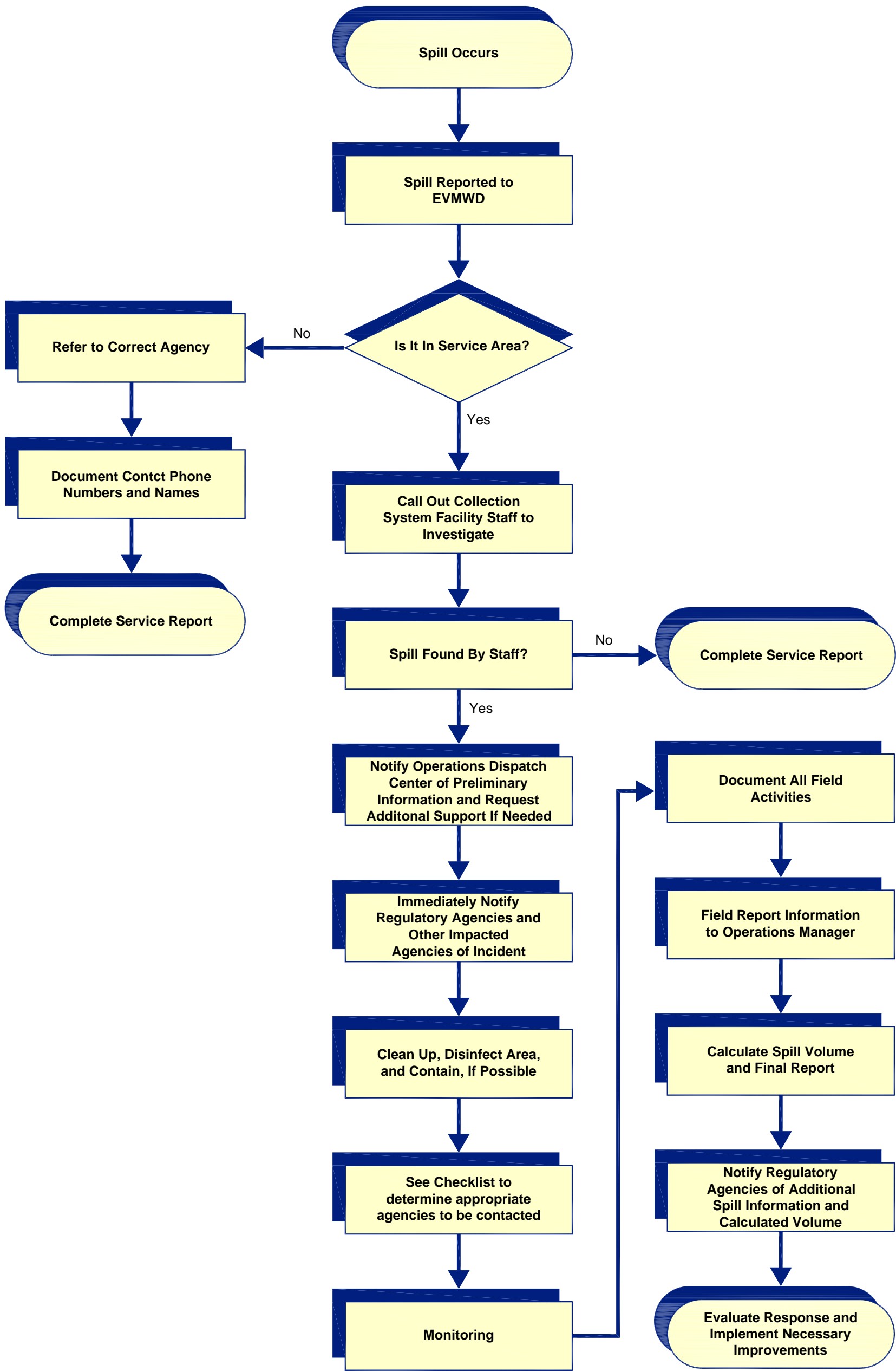
Section 3 of the District's SSRP contains the procedures that the District follows in the event of an SSO. This includes the procedures utilized during normal working hours, as well as weekends, holidays, and after hours. These procedures are included in Appendix E and are summarized in Section 3.4 of 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 that the response crews follow for 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 (Appendix E).



**FIGURE 7.1
SPILL RESPONSE FLOW CHART**

7.5 NOTIFICATION OF REGULATORY AGENCIES

If an SSO has occurred, the Superintendent, Wastewater Operations Manager or their designee shall immediately start 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 Appendix B, SWRCB Order No. 2006-0003-EXEC Attachment A, and in Appendix E (SSRP section 4) of this report.

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.

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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 to the extent feasible the amount of fats, oils, and greases that enter the collection system.

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 gravity grease interceptor systems, construction design standards for the grease interceptor 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

The District implemented a FOG Control Program in 2007 to document program activities and facilitate the maximum beneficial use for the Districts sanitary sewer system, while

preventing blockages of the sewer lines and reducing the adverse effects on sewage treatment facilities resulting from discharges of FOG into the system.

The Districts FOG Control Program documents the processes and procedures intended to reduce the quantity of FOG discharged into the Districts sanitary sewer system to achieve the goal of minimizing SSOs due to excessive FOG. Elements of the Districts FOG control program include the following:

- Issuance of Waste Discharge Permits to Food Service Facilities (FSFs)
- Kitchen BMPs
- Regular Site Inspections
- Grease Interceptor Installation, Operation and Maintenance Requirements
- Record Keeping and Reporting Requirements
- Public Education
- Required Submission of Plans and Applications for New and Remodeled FSFs
- Enforcement Measures through District Ordinance No. 160

To address the components listed in Section 8.1 and as required by Order No 2006-0003, the following subsections provide a summary of the applicable FOG control procedures currently being implemented.

8.2.1 Public Education Program

The primary focus of the Districts FOG Control Program has been on source control, with a concentrated effort on educating FSF staff on the negative impacts of putting FOG into the wastewater collection system. During regularly performed site inspections, District staff provides informative and practical suggestions for reducing the quantity of FOG discharged into the Districts wastewater and storm drain system, engaging FSF staff in reducing FOG related SSOs. As necessary, the District will require an increase in the cleaning frequency of a facility's pretreatment device to ensure the FSF is in compliance with the Districts Ordinance and permitting requirements. To date, the Districts efforts to educate FSF staff has been effective in attaining the desired results from these types of facilities.

8.2.2 Disposal of FOG

The FOG Control Program includes written BMPs, which include simple and effective practices that an FSF can implement to prevent and reduce the quantity of FOG discharged into the sanitary sewer system. Regular inspections performed by District staff provide the District an opportunity to reiterate the importance of limiting FOG discharge into the Districts wastewater collection system and reduce the potential of SSOs due to excessive FOG.

The requirement for the pretreatment of wastewater flows generated at FSFs is included within the Districts Ordinance No. 160 and includes the installation of a minimum 750 gallon grease interceptor systems as determined necessary by the District. Also, the cleaning and removal of all accumulated grease is required to be performed by a licensed waste hauler.

8.2.3 Legal Authority to Prohibit Discharges

The District is required to prevent discharges of illicit and undesirable substances from entering the wastewater collection system.

The Districts current legal authority to limit and prohibit FOG is established through Ordinance No. 160 and wastewater discharge permit terms and conditions.

8.2.4 Requirements for Installation of FOG Pretreatment Devices

The Districts Ordinance No. 160 and FOG Control Program requires that each FSF be solely responsible for the proper operation, maintenance, and repair of District approved grease interceptor systems. Sizing and installation requirements for gravity grease interceptor systems are approved by the Districts Pretreatment Program Coordinator. Cleaning and removal of accumulated FOG within an interceptor system is required to be performed by a licensed waste hauler. To ensure proper disposal of the collected FOG, the District requires that waste hauling manifests be maintained by each FSF for a period of three (3) years and be made available to District Inspectors during facility inspections.

8.2.5 Facility Inspection

The Districts Ordinance No. 160 and FOG Control Program requires all applicable FSFs to obtain and renew a Wastewater Discharge Permit. Although the requirements for compliance with permit conditions vary somewhat among the FSFs, generally each permit requires the FSF to meet the requirements for installation, maintenance, and repair of the facility's FOG removal equipment.

To determine whether the FSF is in compliance with the conditions of the Wastewater Discharge Permit, FOG Control Program, and District Ordinance No. 160, authorized personnel of the District have the authority to inspect unannounced each FSF. Compliance with the FOG Control Program and Ordinance No. 160 requires that reasonable access to all parts of the FSF be made available when inspection and/or sampling of the wastewater are required.

8.2.6 Maintenance Schedule for High Frequency Maintenance Locations

The identification, performance and scheduling of preventive maintenance activities regarding sewer system sections subject to potential FOG blockages (high frequency lines) is performed by existing Wastewater Collection System staff. The Preventive Maintenance Program includes a repetitive cleaning schedule for the areas that have been identified by District staff as wastewater collection system high frequency lines.

8.2.7 Development and Implementation of Source Control Measures

Detailed information regarding sanitary sewer system sections (high frequency lines) subject to FOG blockages and establishment of a cleaning maintenance schedule is included in the Appendix section for reference.

8.3 EXISTING FOG CONTROL MEASURES

The District's FOG control provisions are presented mainly in Article 6 of the 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 constituents harmful to the District's collection systems.

The design and installation of an interception system is required to be performed in accordance with the 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 are 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 contains the standard drawings for grease interceptors' systems. Excerpts of this document are included in Appendix B. An electronic copy of the entire document is available through the District's website (www.evmwd.com).

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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 both peak dry weather flows and 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 Stantec (previously known as MWH) to complete a Sewer System Master Plan. The District's 2016 Sewer System Master Plan [3] contains the following elements:

- Section 1 - Introduction
- Section 2 - Service Area Description and Population
- Section 3 – Existing Wastewater Facilities
- Section 4 - Model Development and Calibration
- Section 5 - Wastewater Flow Projections
- Section 6 - Recommended Design Criteria
- Section 7 - Sewer System Capacity Evaluation
- Section 8 - Capital Improvement Program

The Executive Summary of the 2016 Sewer System Master Plan is included in Appendix L. A full copy of the 2016 Sewer System Master Plan is available on the District website [4].

9.2.1 Analysis Method

The District's wastewater collection systems were analyzed as part of the 2016 Sewer Master Plan [3] using 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 Innovyze (formerly 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 that provides seamless integration with the District's GIS data.

9.2.2 Planning and Design Criteria

The 2016 Sewer Master Plan [3] 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 2016 Sewer System Master Plan [3].

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 Equations 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:

$$V = \frac{1.486R^{2/3}S^{1/2}}{n}$$

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 0.9, 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 18 inches in diameter should be sized to carry the peak dry weather design flow at a maximum d/D ratio of 0.75. However, utilizing a d/D ratio of 0.75 for analyzing the existing wastewater collection system may lead to premature or unnecessary replacement of existing pipelines. Therefore, a d/D ratio of 0.85 at peak dry weather flow was utilized to evaluate the District's existing trunk system.

Table 9.1 Maximum d/D Ratio Elsinore Valley Municipal Water District	
Pipe Diameter (in)	Maximum d/D Ratio (during peak dry weather flows)
18 and smaller (New Sewers)	0.5
Larger than 18 (New Sewers)	0.75
All Diameters (Existing Pipes)	0.85

Source:
2016 Sewer System Master Plan [3]

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 2016 Sewer System Master Plan [3], the mean velocity at the average dry weather flow conditions is not less than 2 feet per second (fps) to minimize grit and debris accumulation. The maximum allowable velocity for gravity sewers is 10 fps to minimize potential for scouring and pipe erosion.

Table 9.2 lists the minimum slopes that were used for planning future improvements. These values are from the 2016 Sewer System Master Plan [3].

Sewer Size (in)	Minimum Pipe Slope (ft/ft)	Pipe Material
6	0.0100	SDR 35 PVC
8	0.0040	SDR 35 PVC
10	0.0032	SDR 35 PVC
12	0.0024	SDR 35 PVC
15	0.0015	SDR 35 PVC
18	0.0012	SDR 35 PVC
21	0.0009	Vylon
24	0.0008	Vylon
27	0.0006	Vylon

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 evaluating the force mains, the maximum recommended flow velocity of 8 fps was used. 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 120 was used as part of the master planning effort.

9.2.3 Evaluation

To identify existing and future system deficiencies, the District's hydraulic model was developed by converting the District's GIS data to H₂OMAP SWMM format and importing it into H₂OMAP SWMM.

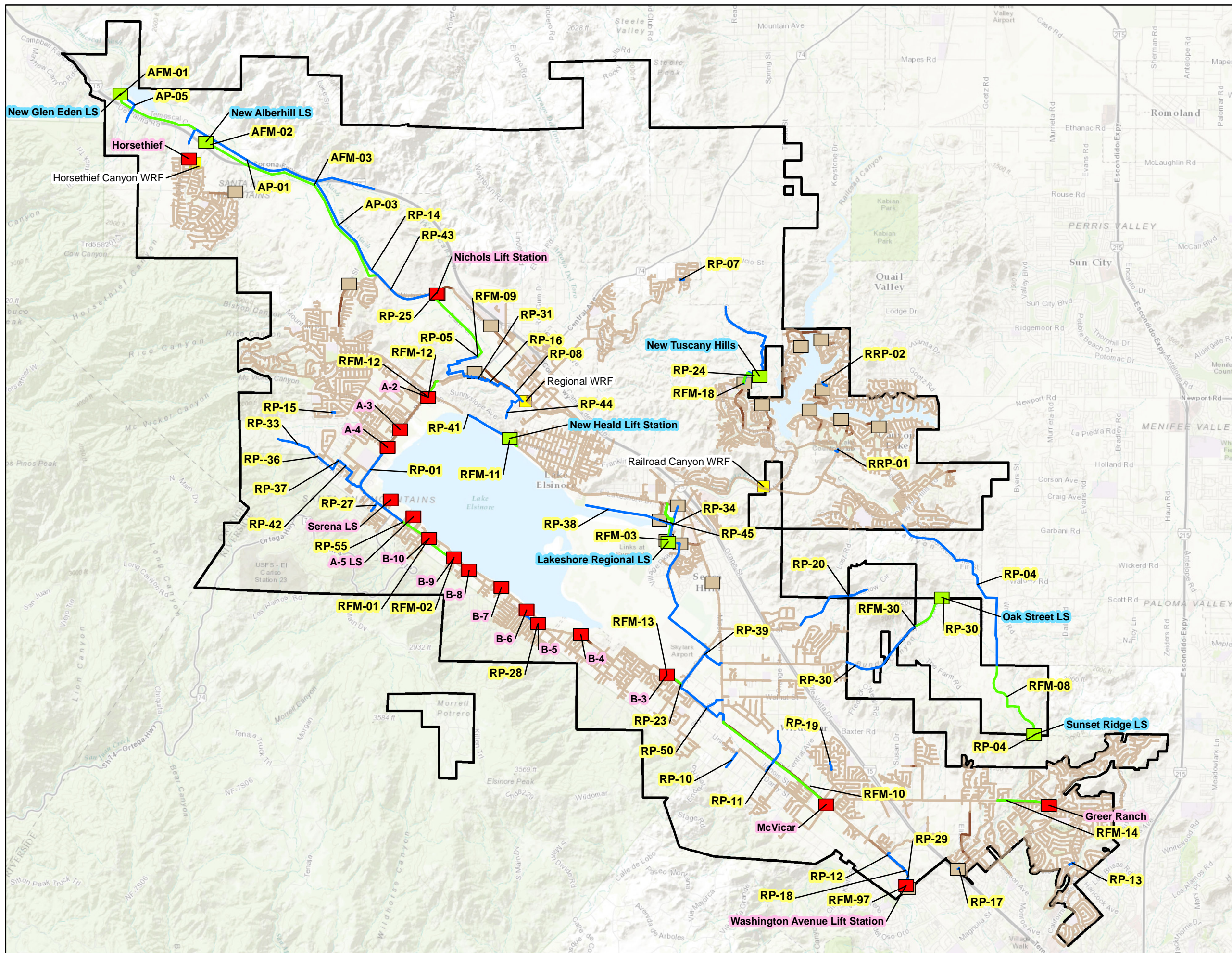
Based on the results of the temporary flow monitoring programs performed as part of the master planning effort, diurnal patterns were developed to be applied to the base wastewater flow at manholes in the District. The model was then calibrated to confirm that the modeled flow closely represents the 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 (CIP Program)

The 2016 Sewer System Master Plan [3] recommended improvements to mitigate existing and serve future customers. These improvements considered for the 25-years planning period (2015-2040) are shown in Figure 9.1. The 25-years planning period (2015-2040) recommendations are considered into five phases; i.e., 2015-20, 2020-25; 2025-30; 2030-35 and 2035-40. A complete list of the wastewater conveyance CIP including description and cost of each project for each of the five phases is included in Table 9.3. The Phase 1 (2015-2020) total CIP cost is \$ 125.6 M (2015 dollars). The detailed specific CIP recommendations for each of the five phases, respectively, are graphically shown on Figures 8-5 thru 8-9 of the 2016 Sewer System Master Plan [3]

Figure 9.1

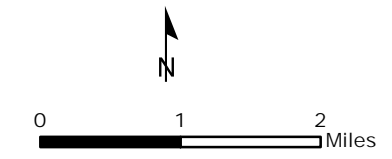


All Horizons
(2015 - 2040)
Recommended
Improvements

-  Pump Station
-  Force Main
-  Gravity Main
-  Wastewater Reclamation Facility
-  Highway
-  EVMWD Service Boundary
-  Recommended Force Main Improvement
-  Recommended Gravity Main Improvement
-  Pump Upsize Recommendation
-  New Lift Station Recommendation

Note: See Table 8-12 & Appendix A for details of individual recommendations

Basemap Source: ESRI



Document: \\Uspas1s01\mun\clients\Elsinore Valley MWD\Water, Sewer and Recycled Water Master Plans\14 Electronic Files - Modeling\GIS\MXD\Sewer Improvements Ind Maps\Sewer_Improvements_Arc102_AllYears.mxd



Description of CIP Item												CIP Costs (Rounded) (\$)			
Project ID	Type of Improvement	Description/ Street	Description/ Limits	Sewer Trunk/ Planned Trunk Name	Reference Figure Name (See Appendix A)	Deficiency	CIP Sizes					Pipe Costs	Manhole Costs	Lift Station Costs	Total Capital Improvement Cost
							Existing Diameter (in.)	New Diameter (in.)	Parallel/ Replace/ New/ Upsize	Length (ft.)	HP				
Age Based Replacement Pipes												SUBTOTAL			\$38,077,400
ABR-20	All Infrastructure	Age-Based Replacements	Various	Various		No	Various	Various	Replacement	-	-	-	-	-	\$38,077,400
2020-2025 Improvements (Phase 2)												SUBTOTAL			\$66,010,800
RFM-11	Force Main	Lakeshore Dr.	Chaney St. to Townsend St.	Regional/ Lakeshore North	A-27	No	-	4	New	1,018	-	\$448,100	-	-	\$448,100
RFM-18	Force Main	Off Road	Force Main for New Tuscany Hills LS	Regional	A-7	Yes	-	Parallel 8	Replacement	3,835	-	\$728,600	-	-	\$728,600
RP-07	Pipe	Riverside St.	Steele Valley Rd. to 350 ft. e/o Ambridge St.	Regional	A-6	Yes	8	16	Replacement	358	-	\$157,700	\$17,900	-	\$175,600
RP-10	Pipe	Wesley St.	Grand Ave. to Union St.	Regional	A-14, A-15, A-16, A-17	No	-	8	New	1,351	-	\$391,700	\$67,600	-	\$459,300
RP-11	Pipe	Orange St. and Gruwell St.	Laguna Rd. to Front St.	Regional	A-13, A-14	No	-	8	New	3,619	-	\$1,181,000	\$181,000	-	\$1,362,000
RP-12	Pipe	Harwood Ln to Palomar St.	205 ft ne/o Harwood Ln and Wing Elm Cir. To 700 ft se/o Robin Scott St and Palomar St.	Regional/ Washington	A-21	Yes	8/10/12/15	15	Replacement	1,291	-	\$361,800	\$64,600	-	\$426,400
RP-13	Pipe	Via Graziana	Via Llanio to 130 e/o	Southern	A-20	Yes	8	12	Replacement	492	-	\$275,300	\$24,500	-	\$299,800
RP-24	Pipe	Grenwald Ave. and Theda St.	Large Extension spanning many streets	Regional	A-6, A-7	No	-	12	New	9,771	-	\$3,661,500	\$488,700	-	\$4,150,200
RP-41	Pipe	Lakeshore Dr. and W Heald Ave.	Lakeshore Dr. and Cowell St. to W. Heald Ave. and Chaney St.	Regional/ N. Lakeshore	A-27	No	-	12	New	3,814	-	\$1,639,400	\$190,600	-	\$1,830,000
RP-44	Pipe	Palm Dr.	Palm Dr. and Canyon Dr. to Regional WRF	Regional/ N. Lakeshore	A-26, A-27	No	-	12	New	2,308	-	\$1,292,200	\$115,300	-	\$1,407,500
RLS-03	Lift Station	Chaney St.	New Heald LS	Regional/ N. Lakeshore	A-27	No	-	-	New	-	5	-	-	\$168,750	\$168,750
RLS-17	Pumps	Grand Ave	B-9 LS	Regional/ B-Series	A-23	No	-	-	Replacement	-	5	-	-	\$28,150	\$28,150
RLS-18	Pumps	Grand Ave	B-10 LS	Regional/ B-Series	A-23	No	-	-	Replacement	-	5	-	-	\$28,150	\$28,150
RLS-19	Pump	Grand Ave.	B-4 LS	Regional/ B-Series	A-22	No	-	-	Replacement	-	25	-	-	\$112,500	\$112,500
RLS-20	Pump	Russel St.	B-5 LS	Regional/ B-Series	A-22	No	-	-	Replacement	-	10	-	-	\$56,300	\$56,300
RLS-21	Pump	Churchill St.	B-6 LS	Regional/ B-Series	A-22	No	-	-	Replacement	-	10	-	-	\$56,300	\$56,300
RLS-22	Pump	Arch Way	B-7 LS	Regional/ B-Series	A-22	No	-	-	Replacement	-	10	-	-	\$56,300	\$56,300
RLS-23	Pump	Grand Ave.	B-8 LS	Regional/ B-Series	A-23	No	-	-	Replacement	-	10	-	-	\$56,300	\$56,300
RLS-26	Pumps	Riverside Dr.	A-3 LS	Regional/ A-Series	A-25	No	-	-	Replacement	-	15	-	-	\$84,450	\$84,450
RLS-13	Pump	Palomar St. and Cape Cod Dr.	B-3 LS	Regional	A-15	Yes	-	-	Upsize	-	50	-	-	\$562,500	\$562,500

Description of CIP Item												CIP Costs (Rounded) (\$)			
Project ID	Type of Improvement	Description/ Street	Description/ Limits	Sewer Trunk/ Planned Trunk Name	Reference Figure Name (See Appendix A)	Deficiency	CIP Sizes					Pipe Costs	Manhole Costs	Lift Station Costs	Total Capital Improvement Cost
							Existing Diameter (in.)	New Diameter (in.)	Parallel/ Replace/ New/ Upsize	Length (ft.)	HP				
RLS-06	Pump	Off Road	New Tuscany Hills LS	Regional	A-7	Yes	-	-	Upsize	-	60	-	-	\$675,000	\$675,000
ALS-03	Wet Well	Horsethief Canyon Rd.	Horsethief LS	Alberhill/ Horsethief	A-2	No	-	-	Replacement	-	-	-	-	\$300,000	\$300,000
ABR-25	All Infrastructure	Age-Based Replacements	Various	Various		No	Various	Various	Replacement	-	-	-	-	-	\$52,538,600
2025-2030 Improvements (Phase 3)													SUBTOTAL	\$19,400,100	
RFM-01	Force Main	Grand Ave.	B-10 LS to Grand Ave. and Bonnie Lee Dr.	Regional	A-23	No	-	6	New	2,417	-	\$483,400	-	-	\$483,400
RFM-02	Force Main	Grand Ave.	B-9 LS to B-10 LS	Regional/ A-Trunk	A-23	No	-	6	New	2,884	-	\$519,100	-	-	\$519,100
RFM-12	Force Main	Riverside Dr.	A-2 LS	Regional/ A-Trunk	A-25	Yes	14	21	Replacement	1,720	-	\$516,100	-	-	\$516,100
RP-14	Pipe	Coal Rd. and Nichols Rd.	Alberhill Ranch Rd. to Lake St.	Regional, Nichols	A-3, A-4	No	-	12	New	1,142	-	\$340,600	\$57,200	-	\$397,800
RP-15	Pipe	Sugarpine St. to Knollwood St. to Teakwood St.	Sugarpine St. and Amarosa St. to Teakwood St. and Terra Cotta St.	Regional	A-25	Yes	8/10	10	New	266	-	\$125,100	\$13,300	-	\$138,400
RP-17	Pipe	Robards Way	Intake to Robards Way LS	Southern	A-21	Yes	8	12	Replacement	121	-	\$37,600	\$6,100	-	\$43,700
RP-18	Pipe	Palomar St.	Roughly 1,000 ft n/o Washington LS	Regional/ Washington	A-21	Yes	12	18	Replacement	294	-	\$91,300	\$14,700	-	\$106,000
RP-19	Pipe	Wanki Ave	Akipa Ct. and Supa Ct.	Regional/ McVicar	A-13, A-14	Yes	8	8	Replacement	711	-	\$156,500	\$35,600	-	\$192,100
RP-20	Pipe	Crab Hollow Cir., Lost Rd., Lemon St.	Lemon St. and Blondon Ct. to Crab Hollow Cir. and Crooked Arrow Dr.	Regional/ Mission Trail	A-28	No	-	12	New	6,405	-	\$1,793,400	\$320,300	-	\$2,113,700
RP-27	Pipe	Macy St.	Lake Terrace Dr. and Grand Ave.	Regional/ A-Trunk	A-24	Yes	8	10	Replacement	1,022	-	\$245,300	\$51,100	-	\$296,400
RP-36	Pipe	Grand Ave.	Grand Ave. and Via Lakistas to Tiller Ln. and Machado St.	Regional	A-24	Yes	8	12	Replacement	2,418	-	\$749,500	\$120,900	-	\$870,400
RP-37	Pipe	Tiller Ln	Keel Dr. to Machado St.	Regional	A-24	Yes	8	12	Replacement	708	-	\$184,000	\$35,400	-	\$219,400
RP-38	Pipe	Off Road	Extension of Back Basin/ Lakeshore Regional Collection adjacent to Lake Elsinore	Regional/ Back Basin	A-18	No	-	15	New	5,907	-	\$1,939,000	\$295,200	-	\$2,234,200
RP-39	Pipe	Garden St.	Mission Trail and Corydon Rd.	Regional/ Back Basin Interceptor	A-15, A-16	No	-	18	New	2,317	-	\$1,320,700	\$115,800	-	\$1,436,500
RP-42	Pipe	Grand Ave.	Trubutary of Riverside Dr. and A-Train	Regional/ A-Trunk	A-24	Yes	8	12	Replacement	2,842	-	\$881,100	\$142,100	-	\$1,023,200
RP-50	Pipe	Bryant St.	Connection to Back Basin Interceptor	Regional/ Back Basin	A-14, A-15	No	-	15	New	1,500	-	\$764,800	\$75,000	-	\$839,800
RP-55	Pipe	Grand Ave.	Connection of B-9 and B-10 to A-Train	Regional/ A-Trunk	A-23, A-24	No	-	18	New	2,524	-	\$782,600	\$126,200	-	\$908,800
ABR-30	Pipe and Force Main, And Lift Stations	Age-Based Replacements	Various	Various		No	Various	Various	Replacement	-	-	-	-	-	\$7,061,100

Description of CIP Item												CIP Costs (Rounded) (\$)			
Project ID	Type of Improvement	Description/ Street	Description/ Limits	Sewer Trunk/ Planned Trunk Name	Reference Figure Name (See Appendix A)	Deficiency	CIP Sizes					Pipe Costs	Manhole Costs	Lift Station Costs	Total Capital Improvement Cost
							Existing Diameter (in.)	New Diameter (in.)	Parallel/ Replace/ New/ Upsize	Length (ft.)	HP				
2030-2035 Improvements (Phase 4)												SUBTOTAL			\$55,632,600
RP-33	Pipe	Toft Dr. and Grand Ave.	Toft Dr. and Rockridge Rd. to Grand Ave. and Via Lakistas	Regional	A-24	No	-	8/12	New	3,236	-	\$782,100	\$161,700	-	\$943,800
RLS-14	Pump	Palomar St./Washington	Washington LS	Regional/ Washington	A-21	Yes	-	-	Upsize	-	35	-	-	\$157,500	\$157,500
ABR-35	All Infrastructure	Age-Based Replacements	Various	Various		No	Various	Various	Replacement	-	-	-	-	-	\$54,015,200
2035-2040 Improvements (Phase 5)												SUBTOTAL			\$87,118,900
RFM-13	Force Main	Cathy Lane	B-3 LS	Regional/ B-Trunk	A-15	Yes	10	12	Replacement	1,378	-	\$344,600	-	-	\$344,600
RFM-14	Force Main	Clinton Keith Rd.	Greer Ranch LS	Regional/ McVicar	A-19	Yes	6	8	Replacement	4,184	-	\$794,900	-	-	\$794,900
RP-25	Pipe	Nichols Rd	New Intake for Nichols LS	Regional/ Nichols	A-4	Yes	16	24	Replacement	72	-	\$25,300	\$3,600	-	\$28,900
RP-28	Pipe	Grand Ave.	Wood St. and Tettersington St.	Regional/ A-Trunk	A-22	Yes	8	12	Replacement	1,671	-	\$468,000	\$83,600	-	\$551,600
RP-29	Pipe	Palomar St.	Robin Scott St. to Washington LS	Regional/ Washington	A-21	Yes	15	18	Replacement	2,070	-	\$680,200	\$103,500	-	\$783,700
RRP-01	Pipe	Off Road	Railroad Canyon Road, n/o Skylink Dr.	Railroad Canyon	A-8	Yes	15	18	Replacement	510	-	\$235,800	\$25,600	-	\$261,400
RRP-02	Pipe	Redwood Rd.	Boating Way	Railroad Canyon	A-7	Yes	8	12	Replacement	495	-	\$230,700	\$24,800	-	\$255,500
ABR-40	All Infrastructure	Age--Based Replacements	Various	Various		No	Various	Various	Replacement	-	-	-	-	-	\$84,098,300
TOTAL															\$353,720,000

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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. The key performance indicators can be tracked through the District's Maximo work order program, review of the SSO responses that are electronically stored by the District and the California Integrated Water Quality System (CIWQS) online reporting web site.

- 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, Category 3 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 PM programs are adjusted according to recommendations of the District's field crews.

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) "High Frequency Lines." The District currently has mapped historical SSOs. This map should be expanded upon whenever a new spill occurs and used to identify SSO trends.

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SSMP PROGRAM AUDITS

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 once every two years and a report 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 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 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)

- Design and Performance Provisions (the District's design and construction standards)
- Overflow Emergency Response Plan
- FOG Control Plan
- System Evaluation and Capacity Assurance Plan (the District's Wastewater Master Plan)
- Monitoring, Measurement, and Program Modifications
- SSMP Program Audits
- Communication Program

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.

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Elsinore Valley Municipal Water District
Sewer System Management Plan

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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 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.

In accordance with Order No. 2006-0003, the District's Board of Directors held a public hearing and adopted the SSMP on November 19, 2018. A copy of the adopting resolution is included in Appendix M. A notice of the public hearing was posted on the District's website several weeks prior to adoption, which notified interested parties that the draft SSMP was available for review (Appendix N).

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 November 28, 2018 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.

Elsinore Valley Municipal Water District
APPENDIX A – REFERENCES

- [1] United States Environmental Protection Agency, *Report to Congress, Impacts and Control of CSOs and SSOs*, August 2004.
- [2] Elsinore Valley Municipal Water District, *Standards and Standard Drawings, Volume 1*, September 2013.
- [3] 2016 Elsinore Valley Municipal Water District Sewer System Master Plan.
- [4] Elsinore Valley Municipal Water District website,
www.evmwd.com/Department/Engineering/Development Services

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**APPENDIX B - STATE WATER RESOURCE
CONTROL BOARD ORDER**

1. SWRCB Order No. 2006-0003
2. SWRCB Order No. 2008-0002 Attachment A
3. SWRCB Order No. WQ 2013-0058-EXEC Attachment A

**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

<u>Task and Associated Section</u>	Completion Date			
	Population > 100,000	Population between 100,000 and 10,000	Population between 10,000 and 2,500	Population < 2,500
Application for Permit Coverage Section C	6 months after WDRs Adoption			
Reporting Program Section G	6 months after WDRs Adoption ¹			
SSMP Development Plan and Schedule No specific Section	9 months after WDRs Adoption ²	12 months after WDRs Adoption ²	15 months after WDRs Adoption ²	18 months after WDRs Adoption ²
Goals and Organization Structure Section D 13 (i) & (ii)	12 months after WDRs Adoption ²		18 months after WDRs Adoption ²	
Overflow Emergency Response Program Section D 13 (vi)	24 months after WDRs Adoption ²	30 months after WDRs Adoption ²	36 months after WDRs Adoption ²	39 months after WDRs Adoption ²
Legal Authority Section D 13 (iii)				
Operation and Maintenance Program Section D 13 (iv)				
Grease Control Program Section D 13 (vii)	36 months after WDRs Adoption	39 months after WDRs Adoption	48 months after WDRs Adoption	51 months after WDRs Adoption
Design and Performance Section D 13 (v)				
System Evaluation and Capacity Assurance Plan Section D 13 (viii)				
Final SSMP, incorporating all of the SSMP requirements Section D 13				

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:

Reporting Program Section G	
Regional Boards 4, 8, and 9	8 months after WDRs Adoption
Regional Boards 1, 2, and 3	12 months after WDRs Adoption
Regional Boards 5, 6, and 7	16 months after WDRs Adoption

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, or

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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STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

ORDER NO. WQ 2008-0002-EXEC

ADOPTING AMENDED MONITORING AND REPORTING REQUIREMENTS FOR
STATEWIDE GENERAL WASTE DISCHARGE REQUIREMENTS FOR SANITARY SEWER
SYSTEMS

The State of California, Water Resources Control Board (State Water Board) finds:


1. The State Water Board is authorized to prescribe statewide general waste discharge requirements for categories of discharges that involve the same or similar operations and the same or similar types of waste pursuant to Water Code 13263, subdivision (i).
2. The State Water Board on May 2, 2006, adopted Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, Order No. 2006-0003-DWQ, pursuant to that authority.
3. The State Water Board on May 2, 2006, adopted Monitoring and Reporting Requirements to implement the General Waste Discharge Requirements for Sanitary Sewer Systems.
4. State Water Board Order No. 2006-0003-DWQ, paragraph G.2., and the Monitoring and Reporting Requirements, both provide that the Executive Director may modify the terms of the Monitoring and Reporting Requirements at any time.
5. The time allowed in those Monitoring and Reporting Requirements for the filing of the initial report of an overflow is too long to adequately protect the public health and safety or the beneficial uses of the waters of the state when there is a sewage collection system spill. An additional notification requirement is necessary and appropriate to ensure the Office of Emergency Services, local public health officials, and the applicable regional water quality control board are apprised of a spill that reaches a drainage channel or surface water.
6. Further, the burden of providing a notification as soon as possible is de minimis and will allow response agencies to take action as soon as possible to protect public health and safety and beneficial uses of the waters of the state.

IT IS HEREBY ORDERED THAT:

Pursuant to the authority delegated by Resolution No. 2002-0104 and Order No. 2006-0003-DWQ, the Monitoring and Reporting Requirements for Statewide General Waste Discharge Requirements for Sanitary Sewer Systems No. 2006-0003-DWQ is hereby amended as shown in Attachment A, with new text indicated by double-underline.

Dated:

February 20, 2008



Dorothy Rice
Executive Director

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ATTACHMENT A

STATE WATER RESOURCES CONTROL BOARD MONITORING AND REPORTING PROGRAM NO. 2006-0003-DWQ (AS REVISED BY ORDER NO. WQ 2008-0002-EXEC)

STATEWIDE GENERAL WASTE DISCHARGE REQUIREMENTS FOR SANITARY SEWER SYSTEMS

This Monitoring and Reporting Program (MRP) establishes monitoring, record keeping, reporting and public notification requirements for Order No. 2006-2003-DWQ, "Statewide General Waste Discharge Requirements for Sanitary Sewer Systems." Revisions to this MRP may be made at any time by the Executive Director, and may include a reduction or increase in the monitoring and reporting.

NOTIFICATION

Although State and Regional Water Board staff do not have duties as first responders, this Monitoring and Reporting Program is an appropriate mechanism to ensure that the agencies that do have first responder duties are notified in a timely manner in order to protect public health and beneficial uses.

1. For any discharges of sewage that results in a discharge to a drainage channel or a surface water, the Discharger shall, as soon as possible, but not later than two (2) hours after becoming aware of the discharge, notify the State Office of Emergency Services, the local health officer or directors of environmental health with jurisdiction over affected water bodies, and the appropriate Regional Water Quality Control Board.
2. As soon as possible, but no later than twenty-four (24) hours after becoming aware of a discharge to a drainage channel or a surface water, the Discharger shall submit to the appropriate Regional Water Quality Control Board a certification that the State Office of Emergency Services and the local health officer or directors of environmental health with jurisdiction over the affected water bodies have been notified of the discharge.

A. SANITARY SEWER OVERFLOW REPORTING

SSO Categories

1. Category 1 - All discharges of sewage resulting from a failure in the Enrollee's sanitary sewer system that:
 - A. Equal or exceed 1000 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.

2. Category 2 – All other discharges of sewage resulting from a failure in the Enrollee's sanitary sewer system.
3. Private Lateral Sewage Discharges – Sewage discharges that are caused by blockages or other problems within a privately owned lateral.

SSO Reporting Timeframes

4. Category 1 SSOs – Except as provided above, all SSOs that meet the above criteria for Category 1 SSOs must be reported as soon as: (1) the Enrollee has knowledge of the discharge, (2) reporting is possible, and (3) reporting can be provided without substantially impeding cleanup or other emergency measures. Initial reporting of Category 1 SSOs must be reported to the Online SSO System as soon as possible but no later than 3 business days after the Enrollee is made aware of the SSO. Minimum information that must be contained in the 3-day report must include all information identified in section 9 below, except for item 9.K. A final certified report must be completed through the Online SSO System, within 15 calendar days of the conclusion of SSO response and remediation. Additional information may be added to the certified report, in the form of an attachment, at any time.

The above reporting requirements are in addition to do not preclude other emergency notification requirements and timeframes mandated by other regulatory agencies (local County Health Officers, local Director of Environmental Health, Regional Water Boards, or Office of Emergency Services (OES)) or State law.

5. Category 2 SSOs – All SSOs that meet the above criteria for Category 2 SSOs must be reported to the Online SSO Database within 30 days after the end of the calendar month in which the SSO occurs (e.g. all SSOs occurring in the month of January must be entered into the database by March 1st).
6. Private Lateral Sewage Discharges – All sewage discharges that meet the above criteria for Private Lateral sewage discharges may be reported to the Online SSO Database based upon the Enrollee's discretion. If a Private Lateral sewage discharge is recorded in the SSO Database, the Enrollee must identify the sewage discharge as occurring and caused by a private lateral, and a responsible party (other than the Enrollee) should be identified, if known.
7. If there are no SSOs during the calendar month, the Enrollee will provide, within 30 days after the end of each calendar month, a statement through the Online SSO Database certifying that there were no SSOs for the designated month.
8. In the event that the SSO Online Database is not available, the enrollee must fax all required information to the appropriate Regional Water Board office in

accordance with the time schedules identified above. In such event, the Enrollee must also enter all required information into the Online SSO Database as soon as practical.

Mandatory Information to be Included in SSO Online Reporting

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 thirty (30) days of receiving an account and prior to recording SSOs into the SSO Database, all Enrollees must complete the "Collection System Questionnaire", which collects pertinent information regarding an Enrollee's collection system. The "Collection System Questionnaire" must be updated at least every 12 months.

At a minimum, the following mandatory information must be included prior to finalizing and certifying an SSO report for each category of SSO:

9. Category 2 SSOs:

- A. Location of SSO by entering GPS coordinates;
- B. Applicable Regional Water Board, i.e. identify the region in which the SSO occurred;
- C. County where SSO occurred;
- D. Whether or not the SSO entered a drainage channel and/or surface water;
- E. Whether or not the SSO was discharged to a storm drain pipe that was not fully captured and returned to the sanitary sewer system;
- F. Estimated SSO volume in gallons;
- G. SSO source (manhole, cleanout, etc.);
- H. SSO cause (mainline blockage, roots, etc.);
- I. Time of SSO notification or discovery;
- J. Estimated operator arrival time;
- K. SSO destination;
- L. Estimated SSO end time; and
- M. SSO Certification. Upon SSO Certification, the SSO Database will issue a Final SSO Identification (ID) Number.

10. Private Lateral Sewage Discharges:

- A. All information listed above (if applicable and known), as well as;
- B. Identification of sewage discharge as a private lateral sewage discharge; and
- C. Responsible party contact information (if known).

11. Category 1 SSOs:

- A. All information listed for Category 2 SSOs, as well as;
- B. Estimated SSO volume that reached surface water, drainage channel, or not recovered from a storm drain;
- C. Estimated SSO amount recovered;
- D. Response and corrective action taken;
- E. If samples were taken, identify which regulatory agencies received sample results (if applicable). If no samples were taken, NA must be selected.
- F. Parameters that samples were analyzed for (if applicable);
- G. Identification of whether or not health warnings were posted;
- H. Beaches impacted (if applicable). If no beach was impacted, NA must be selected;
- I. Whether or not there is an ongoing investigation;
- J. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the overflow and a schedule of major milestones for those steps;
- K. OES control number (if applicable);
- L. Date OES was called (if applicable);
- M. Time OES was called (if applicable);
- N. Identification of whether or not County Health Officers were called;
- O. Date County Health Officer was called (if applicable); and
- P. Time County Health Officer was called (if applicable).

Reporting to Other Regulatory Agencies

These reporting requirements do not preclude an Enrollee from reporting SSOs to other regulatory agencies pursuant California state law. These reporting requirements do not replace other Regional Water Board telephone reporting requirements for SSOs.

1. The Enrollee shall report SSOs to OES, in accordance with California Water Code Section 13271.

Office of Emergency Services
Phone (800) 852-7550

2. The Enrollee shall report SSOs to County Health officials in accordance with California Health and Safety Code Section 5410 et seq.
3. The SSO database will automatically generate an e-mail notification with customized information about the SSO upon initial reporting of the SSO and final certification for all Category 1 SSOs. E-mails will be sent to the appropriate County Health Officer and/or Environmental Health Department if the county desires this information, and the appropriate Regional Water Board.

B. Record Keeping

1. Individual SSO records shall be maintained by the Enrollee for a minimum of five years from the date of the SSO. This period may be extended when requested by a Regional Water Board Executive Officer.

[2. Omitted.]

3. All records shall be made available for review upon State or Regional Water Board staff's request.
4. All monitoring instruments and devices that are used by the Enrollee to fulfill the prescribed monitoring and reporting program shall be properly maintained and calibrated as necessary to ensure their continued accuracy;
5. The Enrollee shall retain records of all SSOs, such as, but not limited to and when applicable:
 - a. Record of Certified report, as submitted to the online SSO database;
 - b. All original recordings for continuous monitoring instrumentation;
 - c. Service call records and complaint logs of calls received by the Enrollee;
 - d. SSO calls;
 - e. SSO records;
 - f. Steps that have been and will be taken to prevent the SSO from recurring and a schedule to implement those steps.
 - g. Work orders, work completed, and any other maintenance records from the previous 5 years which are associated with responses and investigations of system problems related to SSOs;
 - h. A list and description of complaints from customers or others from the previous 5 years; and
 - i. Documentation of performance and implementation measures for the previous 5 years.
6. If water quality samples are required by an environmental or health regulatory agency or State law, or if voluntary monitoring is conducted by the Enrollee or its agent(s), as a result of any SSO, records of monitoring information shall include:
 - a. The date, exact place, and time of sampling or measurements;
 - b. The individual(s) who performed the sampling or measurements;
 - c. The date(s) analyses were performed;
 - d. The individual(s) who performed the analyses;
 - e. The analytical technique or method used; and,
 - f. The results of such analyses.


C. Certification

1. All final reports must be certified by an authorized person as required by Provision J of the Order.
2. Registration of authorized individuals, who may certify reports, will be in accordance with the CIWQS' protocols for reporting.

Monitoring and Reporting Program No. 2006-0003 will become effective on the date of adoption by the State Water Board. The notification requirements added by Order No. WQ 2008-0002-EXEC will become effective upon issuance by the Executive Director.

CERTIFICATION

The undersigned Clerk to the Board does hereby certify that the foregoing is a full, true, and correct copy of an order amended by the Executive Director of the State Water Board.



Jeanne Townsend
Clerk to the Board

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STATE OF CALIFORNIA
WATER RESOURCES CONTROL BOARD
ORDER NO. WQ 2013-0058-EXEC

AMENDING MONITORING AND REPORTING PROGRAM
FOR
STATEWIDE GENERAL WASTE DISCHARGE REQUIREMENTS FOR
SANITARY SEWER SYSTEMS

The State of California, Water Resources Control Board (hereafter State Water Board) finds:

1. The State Water Board is authorized to prescribe statewide general Waste Discharge Requirements (WDRs) for categories of discharges that involve the same or similar operations and the same or similar types of waste pursuant to Water Code section 13263(i).
2. Water Code section 13193 *et seq.* requires the Regional Water Quality Control Boards (Regional Water Boards) and the State Water Board (collectively, the Water Boards) to gather Sanitary Sewer Overflow (SSO) information and make this information available to the public, including but not limited to, SSO cause, estimated volume, location, date, time, duration, whether or not the SSO reached or may have reached waters of the state, response and corrective action taken, and an enrollee's contact information for each SSO event. An enrollee is defined as the public entity having legal authority over the operation and maintenance of, or capital improvements to, a sanitary sewer system greater than one mile in length.
3. Water Code section 13271, *et seq.* requires notification to the California Office of Emergency Services (Cal OES), formerly the California Emergency Management Agency, for certain unauthorized discharges, including SSOs.
4. On May 2, 2006, the State Water Board adopted Order 2006-0003-DWQ, "Statewide Waste Discharge Requirements for Sanitary Sewer Systems"¹ (hereafter SSS WDRs) to comply with Water Code section 13193 and to establish the framework for the statewide SSO Reduction Program.
5. Subsection G.2 of the SSS WDRs and the Monitoring and Reporting Program (MRP) provide that the Executive Director may modify the terms of the MRP at any time.
6. On February 20, 2008, the State Water Board Executive Director adopted a revised MRP for the SSS WDRs to rectify early notification deficiencies and ensure that first responders are notified in a timely manner of SSOs discharged into waters of the state.
7. When notified of an SSO that reaches a drainage channel or surface water of the state, Cal OES, pursuant to Water Code section 13271(a)(3), forwards the SSO notification information² to local government agencies and first responders including local public health officials and the applicable Regional Water Board. Receipt of notifications for a single SSO event from both the SSO reporter

¹ Available for download at:

http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2006/wqo/wqo2006_0003.pdf

² Cal OES Hazardous Materials Spill Reports available Online at:

[http://w3.calema.ca.gov/operational/mal haz.nsf/\\$defaultview](http://w3.calema.ca.gov/operational/mal haz.nsf/$defaultview) and <http://w3.calema.ca.gov/operational/mal haz.nsf>

and Cal OES is duplicative. To address this, the SSO notification requirements added by the February 20, 2008 MRP revision are being removed in this MRP revision.

8. In the February 28, 2008 Memorandum of Agreement between the State Water Board and the California Water and Environment Association (CWEA), the State Water Board committed to re-designing the CIWQS³ Online SSO Database to allow "event" based SSO reporting versus the original "location" based reporting. Revisions to this MRP and accompanying changes to the CIWQS Online SSO Database will implement this change by allowing for multiple SSO appearance points to be associated with each SSO event caused by a single asset failure.
9. Based on stakeholder input and Water Board staff experience implementing the SSO Reduction Program, SSO categories have been revised in this MRP. In the prior version of the MRP, SSOs have been categorized as Category 1 or Category 2. This MRP implements changes to SSO categories by adding a Category 3 SSO type. This change will improve data management to further assist Water Board staff with evaluation of high threat and low threat SSOs by placing them in unique categories (i.e., Category 1 and Category 3, respectively). This change will also assist enrollees in identifying SSOs that require Cal OES notification.
10. Based on over six years of implementation of the SSS WDRs, the State Water Board concludes that the February 20, 2008 MRP must be updated to better advance the SSO Reduction Program⁴ objectives, assess compliance, and enforce the requirements of the SSS WDRs.

IT IS HEREBY ORDERED THAT:

Pursuant to the authority delegated by Water Code section 13267(f), Resolution 2002-0104, and Order 2006-0003-DWQ, the MRP for the SSS WDRs (Order 2006-0003-DWQ) is hereby amended as shown in Attachment A and shall be effective on September 9, 2013.

8/6/13

Date



Thomas Howard
Executive Director

³ California Integrated Water Quality System (CIWQS) publicly available at <http://www.waterboards.ca.gov/ciwqs/publicreports.shtml>

⁴ Statewide Sanitary Sewer Overflow Reduction Program information is available at: http://www.waterboards.ca.gov/water_issues/programs/ssor/

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ATTACHMENT A

STATE WATER RESOURCES CONTROL BOARD ORDER NO. WQ 2013-0058-EXEC

AMENDING MONITORING AND REPORTING PROGRAM FOR STATEWIDE GENERAL WASTE DISCHARGE REQUIREMENTS FOR SANITARY SEWER SYSTEMS

This Monitoring and Reporting Program (MRP) establishes monitoring, record keeping, reporting and public notification requirements for Order 2006-0003-DWQ, "Statewide General Waste Discharge Requirements for Sanitary Sewer Systems" (SSS WDRs). This MRP shall be effective from September 9, 2013 until it is rescinded. The Executive Director may make revisions to this MRP at any time. These revisions may include a reduction or increase in the monitoring and reporting requirements. All site specific records and data developed pursuant to the SSS WDRs and this MRP shall be complete, accurate, and justified by evidence maintained by the enrollee. Failure to comply with this MRP may subject an enrollee to civil liabilities of up to \$5,000 a day per violation pursuant to Water Code section 13350; up to \$1,000 a day per violation pursuant to Water Code section 13268; or referral to the Attorney General for judicial civil enforcement. The State Water Resources Control Board (State Water Board) reserves the right to take any further enforcement action authorized by law.

A. SUMMARY OF MRP REQUIREMENTS

Table 1 – Spill Categories and Definitions

CATEGORIES	DEFINITIONS [see Section A on page 5 of Order 2006-0003-DWQ, for Sanitary Sewer Overflow (SSO) definition]
CATEGORY 1	Discharges of untreated or partially treated wastewater of any volume resulting from an enrollee's sanitary sewer system failure or flow condition that: <ul style="list-style-type: none">Reach surface water and/or reach a drainage channel tributary to a surface water; orReach a Municipal Separate Storm Sewer System (MS4) and are not fully captured and returned to the sanitary sewer system or not otherwise captured and disposed of properly. Any volume of wastewater not recovered from the MS4 is considered to have reached surface water unless the storm drain system discharges to a dedicated storm water or groundwater infiltration basin (e.g., infiltration pit, percolation pond).
CATEGORY 2	Discharges of untreated or partially treated wastewater of 1,000 gallons or greater resulting from an enrollee's sanitary sewer system failure or flow condition that do not reach surface water, a drainage channel, or a MS4 unless the entire SSO discharged to the storm drain system is fully recovered and disposed of properly.
CATEGORY 3	All other discharges of untreated or partially treated wastewater resulting from an enrollee's sanitary sewer system failure or flow condition.
PRIVATE LATERAL SEWAGE DISCHARGE (PLSD)	Discharges of untreated or partially treated wastewater resulting from blockages or other problems within a privately owned sewer lateral connected to the enrollee's sanitary sewer system or from other private sewer assets. PLSDs that the enrollee becomes aware of may be voluntarily reported to the California Integrated Water Quality System (CIWQS) Online SSO Database.

Table 2 – Notification, Reporting, Monitoring, and Record Keeping Requirements

ELEMENT	REQUIREMENT	METHOD
NOTIFICATION (see section B of MRP)	<ul style="list-style-type: none"> • Within two hours of becoming aware of any Category 1 SSO greater than or equal to 1,000 gallons discharged to surface water or spilled in a location where it probably will be discharged to surface water, notify the California Office of Emergency Services (Cal OES) and obtain a notification control number. 	Call Cal OES at: (800) 852-7550
REPORTING (see section C of MRP)	<ul style="list-style-type: none"> • Category 1 SSO: Submit draft report within three business days of becoming aware of the SSO and certify within 15 calendar days of SSO end date. • Category 2 SSO: Submit draft report within 3 business days of becoming aware of the SSO and certify within 15 calendar days of the SSO end date. • Category 3 SSO: Submit certified report within 30 calendar days of the end of month in which SSO the occurred. • SSO Technical Report: Submit within 45 calendar days after the end date of any Category 1 SSO in which 50,000 gallons or greater are spilled to surface waters. • “No Spill” Certification: Certify that no SSOs occurred within 30 calendar days of the end of the month or, if reporting quarterly, the quarter in which no SSOs occurred. • Collection System Questionnaire: Update and certify every 12 months. 	Enter data into the CIWQS Online SSO Database (http://ciwqs.waterboards.ca.gov/), certified by enrollee’s Legally Responsible Official(s).
WATER QUALITY MONITORING (see section D of MRP)	<ul style="list-style-type: none"> • Conduct water quality sampling within 48 hours after initial SSO notification for Category 1 SSOs in which 50,000 gallons or greater are spilled to surface waters. 	Water quality results are required to be uploaded into CIWQS for Category 1 SSOs in which 50,000 gallons or greater are spilled to surface waters.
RECORD KEEPING (see section E of MRP)	<ul style="list-style-type: none"> • SSO event records. • Records documenting Sanitary Sewer Management Plan (SSMP) implementation and changes/updates to the SSMP. • Records to document Water Quality Monitoring for SSOs of 50,000 gallons or greater spilled to surface waters. • Collection system telemetry records if relied upon to document and/or estimate SSO Volume. 	Self-maintained records shall be available during inspections or upon request.

B. NOTIFICATION REQUIREMENTS

Although Regional Water Quality Control Boards (Regional Water Boards) and the State Water Board (collectively, the Water Boards) staff do not have duties as first responders, this MRP is an appropriate mechanism to ensure that the agencies that have first responder duties are notified in a timely manner in order to protect public health and beneficial uses.

1. For any Category 1 SSO greater than or equal to 1,000 gallons that results in a discharge to a surface water or spilled in a location where it probably will be discharged to surface water, either directly or by way of a drainage channel or MS4, the enrollee shall, as soon as possible, but not later than two (2) hours after (A) the enrollee has knowledge of the discharge, (B) notification is possible, and (C) notification can be provided without substantially impeding cleanup or other emergency measures, notify the Cal OES and obtain a notification control number.
2. To satisfy notification requirements for each applicable SSO, the enrollee shall provide the information requested by Cal OES before receiving a control number. Spill information requested by Cal OES may include:
 - i. Name of person notifying Cal OES and direct return phone number.
 - ii. Estimated SSO volume discharged (gallons).
 - iii. If ongoing, estimated SSO discharge rate (gallons per minute).
 - iv. SSO Incident Description:
 - a. Brief narrative.
 - b. On-scene point of contact for additional information (name and cell phone number).
 - c. Date and time enrollee became aware of the SSO.
 - d. Name of sanitary sewer system agency causing the SSO.
 - e. SSO cause (if known).
 - v. Indication of whether the SSO has been contained.
 - vi. Indication of whether surface water is impacted.
 - vii. Name of surface water impacted by the SSO, if applicable.
 - viii. Indication of whether a drinking water supply is or may be impacted by the SSO.
 - ix. Any other known SSO impacts.
 - x. SSO incident location (address, city, state, and zip code).
3. Following the initial notification to Cal OES and until such time that an enrollee certifies the SSO report in the CIWQS Online SSO Database, the enrollee shall provide updates to Cal OES regarding substantial changes to the estimated volume of untreated or partially treated sewage discharged and any substantial change(s) to known impact(s).
4. PLSDs: The enrollee is strongly encouraged to notify Cal OES of discharges greater than or equal to 1,000 gallons of untreated or partially treated wastewater that result or may result in a discharge to surface water resulting from failures or flow conditions within a privately owned sewer lateral or from other private sewer asset(s) if the enrollee becomes aware of the PLSD.

C. REPORTING REQUIREMENTS

1. **CIWQS Online SSO Database Account:** All enrollees shall obtain a CIWQS Online SSO Database account and receive a “Username” and “Password” by registering through CIWQS. These accounts allow controlled and secure entry into the CIWQS Online SSO Database.
2. **SSO Mandatory Reporting Information:** For reporting purposes, if one SSO event results in multiple appearance points in a sewer system asset, the enrollee shall complete one SSO report in the CIWQS Online SSO Database which includes the GPS coordinates for the location of the SSO appearance point closest to the failure point, blockage or location of the flow condition that caused the SSO, and provide descriptions of the locations of all other discharge points associated with the SSO event.
3. **SSO Categories**
 - i. **Category 1** – Discharges of untreated or partially treated wastewater of any volume resulting from an enrollee’s sanitary sewer system failure or flow condition that:
 - a. Reach surface water and/or reach a drainage channel tributary to a surface water; or
 - b. Reach a MS4 and are not fully captured and returned to the sanitary sewer system or not otherwise captured and disposed of properly. Any volume of wastewater not recovered from the MS4 is considered to have reached surface water unless the storm drain system discharges to a dedicated storm water or groundwater infiltration basin (e.g., infiltration pit, percolation pond).
 - ii. **Category 2** – Discharges of untreated or partially treated wastewater greater than or equal to 1,000 gallons resulting from an enrollee’s sanitary sewer system failure or flow condition that does not reach a surface water, a drainage channel, or the MS4 unless the entire SSO volume discharged to the storm drain system is fully recovered and disposed of properly.
 - iii. **Category 3** – All other discharges of untreated or partially treated wastewater resulting from an enrollee’s sanitary sewer system failure or flow condition.
4. **Sanitary Sewer Overflow Reporting to CIWQS - Timeframes**
 - i. **Category 1 and Category 2 SSOs** – All SSOs that meet the above criteria for Category 1 or Category 2 SSOs shall be reported to the CIWQS Online SSO Database:
 - a. Draft reports for Category 1 and Category 2 SSOs shall be submitted to the CIWQS Online SSO Database within three (3) business days of the enrollee becoming aware of the SSO. Minimum information that shall be reported in a draft Category 1 SSO report shall include all information identified in section 8.i.a. below. Minimum information that shall be reported in a Category 2 SSO draft report shall include all information identified in section 8.i.c below.
 - b. A final Category 1 or Category 2 SSO report shall be certified through the CIWQS Online SSO Database within 15 calendar days of the end date of the SSO. Minimum information that shall be certified in the final Category 1 SSO report shall include all information identified in section 8.i.b below. Minimum information that shall be certified in a final Category 2 SSO report shall include all information identified in section 8.i.d below.

- ii. **Category 3 SSOs** – All SSOs that meet the above criteria for Category 3 SSOs shall be reported to the CIWQS Online SSO Database and certified within 30 calendar days after the end of the calendar month in which the SSO occurs (e.g., all Category 3 SSOs occurring in the month of February shall be entered into the database and certified by March 30). Minimum information that shall be certified in a final Category 3 SSO report shall include all information identified in section 8.i.e below.
- iii. **“No Spill” Certification** – If there are no SSOs during the calendar month, the enrollee shall either 1) certify, within 30 calendar days after the end of each calendar month, a “No Spill” certification statement in the CIWQS Online SSO Database certifying that there were no SSOs for the designated month, or 2) certify, quarterly within 30 calendar days after the end of each quarter, “No Spill” certification statements in the CIWQS Online SSO Database certifying that there were no SSOs for each month in the quarter being reported on. For quarterly reporting, the quarters are Q1 - January/ February/ March, Q2 - April/May/June, Q3 - July/August/September, and Q4 - October/November/December.

If there are no SSOs during a calendar month but the enrollee reported a PLSD, the enrollee shall still certify a “No Spill” certification statement for that month.
- iv. **Amended SSO Reports** – The enrollee may update or add additional information to a certified SSO report within 120 calendar days after the SSO end date by amending the report or by adding an attachment to the SSO report in the CIWQS Online SSO Database. SSO reports certified in the CIWQS Online SSO Database prior to the adoption date of this MRP may only be amended up to 120 days after the effective date of this MRP. After 120 days, the enrollee may contact the SSO Program Manager to request to amend an SSO report if the enrollee also submits justification for why the additional information was not available prior to the end of the 120 days.

5. **SSO Technical Report**

The enrollee shall submit an SSO Technical Report in the CIWQS Online SSO Database within 45 calendar days of the SSO end date for any SSO in which 50,000 gallons or greater are spilled to surface waters. This report, which does not preclude the Water Boards from requiring more detailed analyses if requested, shall include at a minimum, the following:

- i. **Causes and Circumstances of the SSO:**
 - a. Complete and detailed explanation of how and when the SSO was discovered.
 - b. Diagram showing the SSO failure point, appearance point(s), and final destination(s).
 - c. Detailed description of the methodology employed and available data used to calculate the volume of the SSO and, if applicable, the SSO volume recovered.
 - d. Detailed description of the cause(s) of the SSO.
 - e. Copies of original field crew records used to document the SSO.
 - f. Historical maintenance records for the failure location.
- ii. **Enrollee’s Response to SSO:**
 - a. Chronological narrative description of all actions taken by enrollee to terminate the spill.
 - b. Explanation of how the SSMP Overflow Emergency Response plan was implemented to respond to and mitigate the SSO.

- c. Final corrective action(s) completed and/or planned to be completed, including a schedule for actions not yet completed.

iii. **Water Quality Monitoring:**

- a. Description of all water quality sampling activities conducted including analytical results and evaluation of the results.
- b. Detailed location map illustrating all water quality sampling points.

6. **PLSDs**

Discharges of untreated or partially treated wastewater resulting from blockages or other problems within a privately owned sewer lateral connected to the enrollee's sanitary sewer system or from other private sanitary sewer system assets may be voluntarily reported to the CIWQS Online SSO Database.

- i. The enrollee is also encouraged to provide notification to Cal OES per section B above when a PLSD greater than or equal to 1,000 gallons has or may result in a discharge to surface water. For any PLSD greater than or equal to 1,000 gallons regardless of the spill destination, the enrollee is also encouraged to file a spill report as required by Health and Safety Code section 5410 et. seq. and Water Code section 13271, or notify the responsible party that notification and reporting should be completed as specified above and required by State law.
- ii. If a PLSD is recorded in the CIWQS Online SSO Database, the enrollee must identify the sewage discharge as occurring and caused by a private sanitary sewer system asset and should identify a responsible party (other than the enrollee), if known. Certification of PLSD reports by enrollees is not required.

7. **CIWQS Online SSO Database Unavailability**

In the event that the CIWQS Online SSO Database is not available, the enrollee must fax or e-mail all required information to the appropriate Regional Water Board office in accordance with the time schedules identified herein. In such event, the enrollee must also enter all required information into the CIWQS Online SSO Database when the database becomes available.

8. **Mandatory Information to be Included in CIWQS Online SSO Reporting**

All enrollees shall obtain a CIWQS Online SSO Database account and receive a "Username" and "Password" by registering through CIWQS which can be reached at CIWQS@waterboards.ca.gov or by calling (866) 792-4977, M-F, 8 A.M. to 5 P.M. These accounts will allow controlled and secure entry into the CIWQS Online SSO Database. Additionally, within thirty (30) days of initial enrollment and prior to recording SSOs into the CIWQS Online SSO Database, all enrollees must complete a Collection System Questionnaire (Questionnaire). The Questionnaire shall be updated at least once every 12 months.

i. **SSO Reports**

At a minimum, the following mandatory information shall be reported prior to finalizing and certifying an SSO report for each category of SSO:

- a. **Draft Category 1 SSOs**: At a minimum, the following mandatory information shall be reported for a draft Category 1 SSO report:
1. SSO Contact Information: Name and telephone number of enrollee contact person who can answer specific questions about the SSO being reported.
 2. SSO Location Name.
 3. Location of the overflow event (SSO) by entering GPS coordinates. If a single overflow event results in multiple appearance points, provide GPS coordinates for the appearance point closest to the failure point and describe each additional appearance point in the SSO appearance point explanation field.
 4. Whether or not the SSO reached surface water, a drainage channel, or entered and was discharged from a drainage structure.
 5. Whether or not the SSO reached a municipal separate storm drain system.
 6. Whether or not the total SSO volume that reached a municipal separate storm drain system was fully recovered.
 7. Estimate of the SSO volume, inclusive of all discharge point(s).
 8. Estimate of the SSO volume that reached surface water, a drainage channel, or was not recovered from a storm drain.
 9. Estimate of the SSO volume recovered (if applicable).
 10. Number of SSO appearance point(s).
 11. Description and location of SSO appearance point(s). If a single sanitary sewer system failure results in multiple SSO appearance points, each appearance point must be described.
 12. SSO start date and time.
 13. Date and time the enrollee was notified of, or self-discovered, the SSO.
 14. Estimated operator arrival time.
 15. For spills greater than or equal to 1,000 gallons, the date and time Cal OES was called.
 16. For spills greater than or equal to 1,000 gallons, the Cal OES control number.
- b. **Certified Category 1 SSOs**: At a minimum, the following mandatory information shall be reported for a certified Category 1 SSO report, in addition to all fields in section 8.i.a :
1. Description of SSO destination(s).
 2. SSO end date and time.
 3. SSO causes (mainline blockage, roots, etc.).
 4. SSO failure point (main, lateral, etc.).
 5. Whether or not the spill was associated with a storm event.
 6. Description of spill corrective action, including steps planned or taken to reduce, eliminate, and prevent reoccurrence of the overflow; and a schedule of major milestones for those steps.
 7. Description of spill response activities.
 8. Spill response completion date.
 9. Whether or not there is an ongoing investigation, the reasons for the investigation and the expected date of completion.

10. Whether or not a beach closure occurred or may have occurred as a result of the SSO.
 11. Whether or not health warnings were posted as a result of the SSO.
 12. Name of beach(es) closed and/or impacted. If no beach was impacted, NA shall be selected.
 13. Name of surface water(s) impacted.
 14. If water quality samples were collected, identify parameters the water quality samples were analyzed for. If no samples were taken, NA shall be selected.
 15. If water quality samples were taken, identify which regulatory agencies received sample results (if applicable). If no samples were taken, NA shall be selected.
 16. Description of methodology(ies) and type of data relied upon for estimations of the SSO volume discharged and recovered.
 17. SSO Certification: Upon SSO Certification, the CIWQS Online SSO Database will issue a final SSO identification (ID) number.
- c. **Draft Category 2 SSOs**: At a minimum, the following mandatory information shall be reported for a draft Category 2 SSO report:
1. Items 1-14 in section 8.i.a above for Draft Category 1 SSO.
- d. **Certified Category 2 SSOs**: At a minimum, the following mandatory information shall be reported for a certified Category 2 SSO report:
1. Items 1-14 in section 8.i.a above for Draft Category 1 SSO and Items 1-9, and 17 in section 8.i.b above for Certified Category 1 SSO.
- e. **Certified Category 3 SSOs**: At a minimum, the following mandatory information shall be reported for a certified Category 3 SSO report:
1. Items 1-14 in section 8.i.a above for Draft Category 1 SSO and Items 1-5, and 17 in section 8.i.b above for Certified Category 1 SSO.

ii. **Reporting SSOs to Other Regulatory Agencies**

These reporting requirements do not preclude an enrollee from reporting SSOs to other regulatory agencies pursuant to state law. In addition, these reporting requirements do not replace other Regional Water Board notification and reporting requirements for SSOs.

iii. **Collection System Questionnaire**

The required Questionnaire (see subsection G of the SSS WDRs) provides the Water Boards with site-specific information related to the enrollee's sanitary sewer system. The enrollee shall complete and certify the Questionnaire at least every 12 months to facilitate program implementation, compliance assessment, and enforcement response.

iv. **SSMP Availability**

The enrollee shall provide the publicly available internet web site address to the CIWQS Online SSO Database where a downloadable copy of the enrollee's approved SSMP, critical supporting documents referenced in the SSMP, and proof of local governing board approval of the SSMP is posted. If all of the SSMP documentation listed in this subsection is not publicly available on the Internet, the enrollee shall comply with the following procedure:

- a. Submit an **electronic** copy of the enrollee's approved SSMP, critical supporting documents referenced in the SSMP, and proof of local governing board approval of the SSMP to the State Water Board, within 30 days of that approval and within 30 days of any subsequent SSMP re-certifications, to the following mailing address:

State Water Resources Control Board
Division of Water Quality
Attn: SSO Program Manager
1001 I Street, 15th Floor, Sacramento, CA 95814

D. WATER QUALITY MONITORING REQUIREMENTS:

To comply with subsection D.7(v) of the SSS WDRs, the enrollee shall develop and implement an SSO Water Quality Monitoring Program to assess impacts from SSOs to surface waters in which 50,000 gallons or greater are spilled to surface waters. The SSO Water Quality Monitoring Program, shall, at a minimum:

1. Contain protocols for water quality monitoring.
2. Account for spill travel time in the surface water and scenarios where monitoring may not be possible (e.g. safety, access restrictions, etc.).
3. Require water quality analyses for ammonia and bacterial indicators to be performed by an accredited or certified laboratory.
4. Require monitoring instruments and devices used to implement the SSO Water Quality Monitoring Program to be properly maintained and calibrated, including any records to document maintenance and calibration, as necessary, to ensure their continued accuracy.
5. Within 48 hours of the enrollee becoming aware of the SSO, require water quality sampling for, at a minimum, the following constituents:
 - i. Ammonia
 - ii. Appropriate Bacterial indicator(s) per the applicable Basin Plan water quality objective or Regional Board direction which may include total and fecal coliform, enterococcus, and e-coli.

E. RECORD KEEPING REQUIREMENTS:

The following records shall be maintained by the enrollee for a minimum of five (5) years and shall be made available for review by the Water Boards during an onsite inspection or through an information request:

1. General Records: The enrollee shall maintain records to document compliance with all provisions of the SSS WDRs and this MRP for each sanitary sewer system owned including any required records generated by an enrollee's sanitary sewer system contractor(s).
2. SSO Records: The enrollee shall maintain records for each SSO event, including but not limited to:
 - i. Complaint records documenting how the enrollee responded to all notifications of possible or actual SSOs, both during and after business hours, including complaints that do not

result in SSOs. Each complaint record shall, at a minimum, include the following information:

- a. Date, time, and method of notification.
 - b. Date and time the complainant or informant first noticed the SSO.
 - c. Narrative description of the complaint, including any information the caller can provide regarding whether or not the complainant or informant reporting the potential SSO knows if the SSO has reached surface waters, drainage channels or storm drains.
 - d. Follow-up return contact information for complainant or informant for each complaint received, if not reported anonymously.
 - e. Final resolution of the complaint.
- ii. Records documenting steps and/or remedial actions undertaken by enrollee, using all available information, to comply with section D.7 of the SSS WDRs.
 - iii. Records documenting how all estimate(s) of volume(s) discharged and, if applicable, volume(s) recovered were calculated.
3. Records documenting all changes made to the SSMP since its last certification indicating when a subsection(s) of the SSMP was changed and/or updated and who authorized the change or update. These records shall be attached to the SSMP.
 4. Electronic monitoring records relied upon for documenting SSO events and/or estimating the SSO volume discharged, including, but not limited to records from:
 - i. Supervisory Control and Data Acquisition (SCADA) systems
 - ii. Alarm system(s)
 - iii. Flow monitoring device(s) or other instrument(s) used to estimate wastewater levels, flow rates and/or volumes.

F. CERTIFICATION

1. All information required to be reported into the CIWQS Online SSO Database shall be certified by a person designated as described in subsection J of the SSS WDRs. This designated person is also known as a Legally Responsible Official (LRO). An enrollee may have more than one LRO.
2. Any designated person (i.e. an LRO) shall be registered with the State Water Board to certify reports in accordance with the CIWQS protocols for reporting.
3. Data Submitter (DS): Any enrollee employee or contractor may enter draft data into the CIWQS Online SSO Database on behalf of the enrollee if authorized by the LRO and registered with the State Water Board. However, only LROs may certify reports in CIWQS.
4. The enrollee shall maintain continuous coverage by an LRO. Any change of a registered LRO or DS (e.g., retired staff), including deactivation or a change to the LRO's or DS's contact information, shall be submitted by the enrollee to the State Water Board within 30 days of the change by calling (866) 792-4977 or e-mailing help@ciwqs.waterboards.ca.gov.

5. A registered designated person (i.e., an LRO) shall certify all required reports under penalty of perjury laws of the state as stated in the CIWQS Online SSO Database at the time of certification.

CERTIFICATION

The undersigned Clerk to the Board does hereby certify that the foregoing is a full, true, and correct copy of an order amended by the Executive Director of the State Water Resources Control Board.

7/30/13

Date



Jeanine Townsend
Clerk to the Board

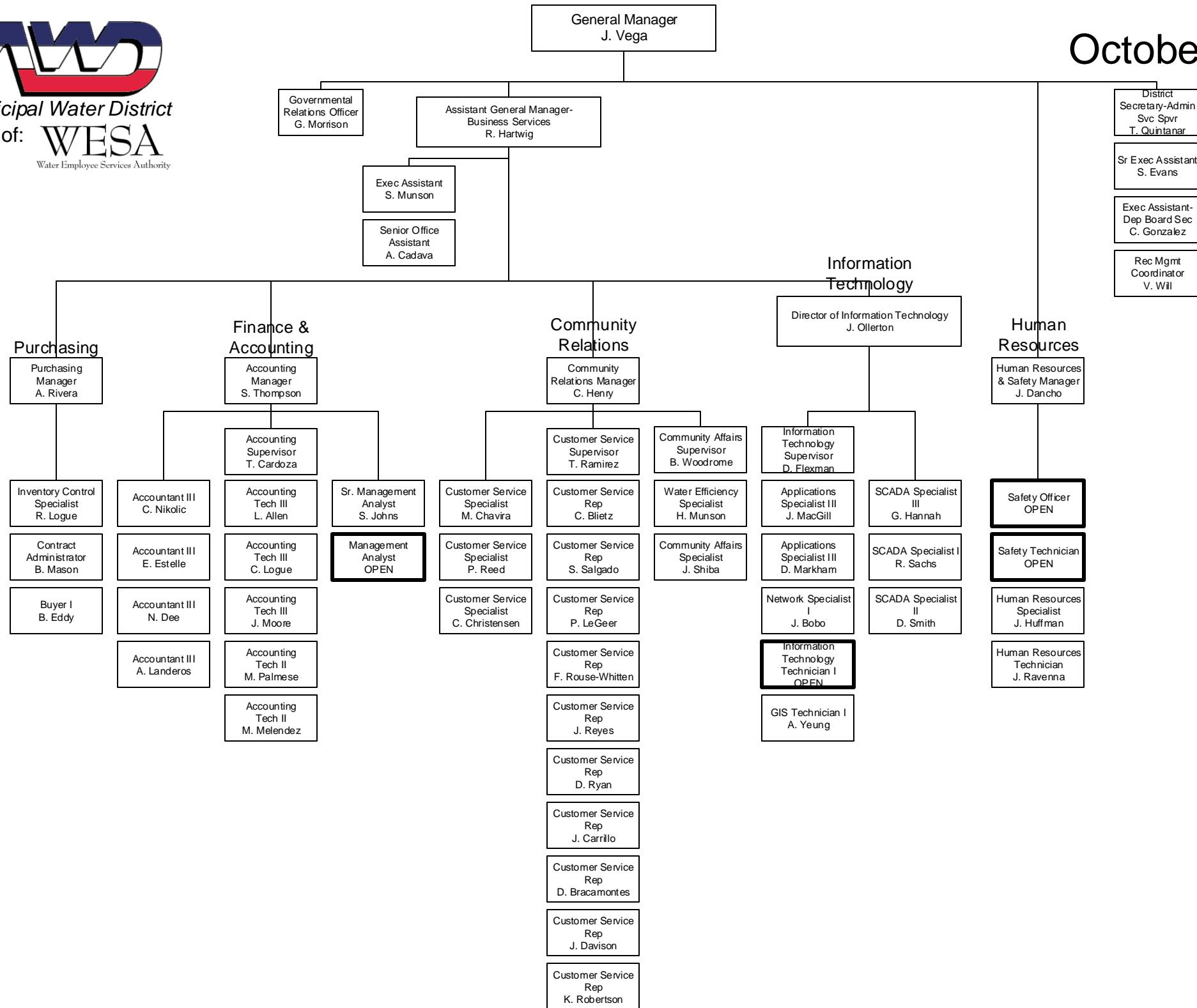
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Elsinore Valley Municipal Water District

**APPENDIX C – ORGANIZATIONAL CHART AND
CONTACT INFORMATION**



October 1, 2018



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Elsinore Valley Municipal Water District
APPENDIX D – JOB DESCRIPTIONS

1. General Manager
2. Assistant General Manager-Engineering & Operations
3. Director of Engineering and Water Resources
4. Director of Operations
5. Engineering Manager
6. Sr. Civil Engineer (Wastewater)
7. Electromechanical Technician
8. Environmental Compliance Inspector
9. Pretreatment Program Coordinator
10. Water Resource Manager
11. Water Quality Supervisor
12. Water Quality Technician
13. Water Quality Analyst
14. Wastewater Operations Manager
15. Wastewater Collections System Superintendent
16. Collection System Maintenance Worker III
17. Collection System Maintenance Worker II
18. Collection System Maintenance Worker I
19. Lift Station Technician
20. Maintenance Manager
21. Mechanical Maintenance Superintendent
22. Mechanical Technician III
23. Mechanical Technician II
24. Mechanical Technician I
25. SCADA Specialist I/II/III

Water Employee Services Authority

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 Authority including Engineering, Finance, Human Resources, Operations, and Public Affairs; serves as chief executive officer of the Authority 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 Authority 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 Water Employee Services Authority; assumes full management responsibility for all Authority operations, services, and activities; plans, directs, manages, and oversees the activities and operations of the Authority including Engineering, Finance, Human Resources, Operations, and Public Affairs.
- Provides general direction to the design, construction, operation, and maintenance of Authority 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 Authority 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 Authority'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 Authority 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 Authority; assigns projects and programmatic areas of responsibility; reviews and evaluates work methods and procedures; ensures that the Authority is being operated in compliance with applicable regulations and laws, that the Authority'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 Authority; 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 Authority to all departments, regulatory agencies, customers, businesses, and other individuals, groups, and outside agencies having an interest or potential interest in affairs of the Authority's concern; coordinates Authority 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 Authority'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 Authority personnel on issues regarding Authority 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 Authority 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 Authority in emergency circumstances.
- Establishes and complies with the Authority'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 Water Employee Services Authority.
- 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 Authority-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.
- 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 Authority including legislative bodies.
- Exercise tact and diplomacy in dealing with sensitive, complex and confidential issues and situations.
- Effectively represent the Authority 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, Authority officials, and outside agencies.

General Manager (continued)**Ability to:**

- 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 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.
- Negotiating 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.

General Manager (continued)

ENVIRONMENT

Standard office setting; frequent interaction with Authority 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: Compensation determined by contract.

(GM)

Water Employee Services Authority

Assistant General Manager-Engineering and 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 direction of the General Manager, the Assistant General Manager-Engineering and Operations plans, directs, manages and oversees the functions, programs, and operations of the Water Resources, Engineering, and Operations Divisions, including Water Operations, Wastewater Operations, and Maintenance; and provides highly responsible and complex administrative support to the General Manager. The Assistant General Manager also 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 Authority policy; ensures timely completion of a variety of projects; develops and implements Authority'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.
- Assumes full management responsibility for all Water Resources, Engineering and Operations division functions, programs, and operations, including planning, design, and construction of all infrastructure, operation of the water system, the District's water resources planning, water systems engineering, wastewater systems engineering, water operations, wastewater operations, and maintenance.
- Provides executive analysis of Authority policies and practices and leads improvement teams in areas of asset management, water rights and resources master planning.
- Plans, directs, and coordinates through division managers and subordinate staff, the work plan of the Water Resources, Engineering, and Operations divisions; assigns projects and programmatic areas of responsibility; reviews and evaluates work methods and procedures; meets with key staff to identify and resolve problems.
- Facilitates the development, implementation, and administration of goals and objectives for assigned divisions; 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 division manager cooperation, in the development and administration of the Department'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.
- Plans and directs research to develop solutions for the District's current and future water issues.
- Provides staff assistance to the General Manager; prepares, submits, and presents staff reports and other necessary correspondence and recommendations to the Board of Directors on issues for its consideration and action; assists in the preparation and administration of Board agendas; keeps Board of Directors advised of financial conditions, program progress, and present and future needs of assigned divisions; prepares recommendations and advises the Board of Directors on matters requiring legislative action.
- Prepares reports and correspondence and makes presentations to legislative bodies, other agencies, the Board of Directors, the general public, and Authority personnel on issues regarding Authority administrative activities and functions.
- 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.
- Interrelates effectively and diplomatically with management and coworkers.
- Performs other related duties as assigned.

Assistant General Manager- Engineering and Operations (continued)**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.
- Oversee, direct, and coordinate the work of lower level staff.
- Select, train, and evaluate staff.
- Manage and direct the management of a comprehensive water resources program.
- Manage and direct the management of a comprehensive engineering program
- Prepare and administer large and complex budgets.
- Oversee and participate in the development and administration of division goals, objectives, and procedures.
- Ensure compliance with regulatory agency testing and reporting for both water and wastewater operations.
- Read and interpret maps, plans, sketches, schematics, diagrams, and blueprints; manage engineering projects or studies for capital improvement planning of the water system, wastewater system or recycled water system or related facilities.
- Manage projects or studies for capital improvement of the water/wastewater systems or related facilities.
- Perform analysis of water demands and balance water sources.
- Develop, review, and modify engineering and construction drawings, plans, and specifications.
- Delegate authority and responsibility.
- Operate office equipment including computers and supporting word processing, spreadsheet, presentation, business graphics, 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.
- Prepare clear and concise administrative and financial reports.
- Establish and maintain effective working relationships with those contacted in the course of work.
- Accept constructive criticism.
- Ability to lead and manage others.

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

- A Bachelor's degree from an accredited college or university with major course work in civil engineering or a related field with advanced courses in water resources, water and wastewater processes, and environmental engineering.
- A Master's degree in a related field is highly desirable.

Experience

- At least ten years of increasingly responsible experience in public administration, process design, project management, construction inspection, and general engineering related to the water and wastewater field, including five years of management and administrative responsibility.

Assistant General Manager- Engineering and Operations (continued)**License/Certification**

- Must possess and maintain a valid California Driver License, provide proof thereof and maintain a driving record acceptable to the Authority's automobile insurance carrier.
- Valid registration as a professional Civil Engineer in the State of California is required.

Knowledge

- Operational characteristics, services, and activities of a water quality and engineering program.
- Principles and practices of program development and administration.
- Advanced principles and practices of capital improvement program development and administration.

Knowledge

- Advanced concepts, theories, principles and practices of engineering, including engineering knowledge of water and wastewater systems.
- Knowledge of analytical procedures used in a water quality program.
- Principles and practices of contract administration.
- Mathematical principles as applied to civil engineering work.
- 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.
- Principles of hydraulics and computer modeling of water distribution system, storage and pumping and wastewater collection and sampling.
- Occupational hazards and standard safety practices.
- Principles and practices of budget preparation and administration.
- Principles and procedures of record keeping.

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 Authority 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: Executive/Confidential

SALARY RANGE: 46

(AGM)

Water Employee Services Authority

Director of Engineering & Water Resources

Job descriptions are intended to represent a description 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, organizes, directs, manages, and oversees the functions, programs, and operations of the Engineering and Water Resources Departments; coordinates assigned activities with other departments and outside agencies; and provides highly responsible and complex administrative support to the Assistant 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.

- Plan, organize, direct and supervise the efficient operation of the Engineering and Water Resources Departments.
- Manages the development and implementation of department goals, objectives, and priorities for each assigned service area; recommends and administers policies and procedures.
- Establishes, within Authority 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 and support systems, and internal reporting relationships; identifies opportunities for improvement; directs and implements changes.
- Plans, directs, and coordinates, through subordinate level staff, the Engineering and Water Resources Department's work plans; assigns projects and programmatic areas of responsibility; reviews and evaluates work methods and procedures; meets with key 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 department budget; approves the forecast of funds needed for staffing, equipment, materials, and supplies; approves expenditures and implements budgetary adjustments as appropriate and necessary.
- Assumes overall management responsibility of all planning, design, construction and inspection activities of District projects and developer projects.
- Assumes overall management of the Water Resources Department.
- Assumes overall management responsibility of the water and wastewater labs.
- Assumes responsibility for implementing long-range and immediate plans and objectives of the District and formulating those objectives into specific capital improvement plans; assumes responsibility for continuous evaluation of plans to ensure plans are meeting planned scope of work, schedule, and budget.
- Assumes responsibility for maintaining the District-wide capital improvement program schedule; performs field reviews of project activities; participates in conferences and discussions with various field representatives for the purpose of reviewing potential problem areas.
- Assumes responsibility for ensuring operational and administrative completion before the transfer of projects from the construction phase to operations and maintenance status; participates in examinations and field reviews of existing features with the Operations Department; keeps management advised of design deficiencies noted during both construction and operation phases and makes design recommendations, as required.
- Negotiates a variety of contracts and agreements; negotiates, in conjunction with other Authority management, developer agreements and reimbursement agreements.
- Manages District real estate.

Director of Engineering & Water Resources (continued)

- Provides staff assistance to the Assistant General Manager and/or the General Manager; prepares and presents staff reports and other necessary correspondence; provides technical support to other departments, the Assistant General Manager, the General Manager, and the Board of Directors.
- Represents the Engineering and Water Resources Departments to other departments, elected officials, and outside agencies; coordinates assigned activities with those of other departments and outside agencies and organizations including regulatory agencies; coordinates the implementation of new programs, the resolution of problems of mutual concern, and the resolution of operational problems.
- 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 engineering; 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 Authority's Safety Manual; attends safety meetings as required; reports all accidents, violations and infractions as required; ensures that departmental functions are carried out in a safe and efficient manner.
- Performs related duties as required.

QUALIFICATIONS

The following generally describe 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 engineering 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.
- Perform engineering economic and financial analyses.
- Develop, review, and modify engineering and construction drawings, plans and specifications.
- 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.
- Operate office equipment including computers and supporting word processing, spreadsheet and database applications.
- 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.

Ability to:

- Communicate clearly and concisely, both orally and in writing.
- Establish and maintain effective working relationships with those contacted in the course of work.

Director of Engineering & Water Resources (continued)**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 a Bachelor's degree from an accredited college or university with major course work in civil engineering or a related field with advanced courses in water resources, water and wastewater processes, and environmental engineering. A Master's degree in a related field is highly desirable.

Experience

- Ten years of increasingly responsible experience in process design, project management, construction inspection, and general engineering related to the water and wastewater field, including five years of management and administrative responsibility.

Knowledge

- Operational characteristics, services, and activities of a comprehensive engineering program.
- Principles and practices of program development and administration.
- Advanced principles and practices of capital improvement project management and coordination.
- Advanced concepts, theories, principles, and practices of engineering, including engineering knowledge of water and wastewater systems.
- Principles and practices of contract administration.
- Mathematical principles as applied to civil engineering work.
- Principles and practices of budget preparation and administration.
- Principles of leadership, 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.
- Possession of valid registration as a Professional Civil Engineer in the State of California.

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 the 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.

Director of Engineering & Water Resources (continued)

Hearing

Hear in the normal audio range with or without correction.

JOB STATUS: Exempt: Executive/Confidential

SALARY RANGE: 44

(DIREWR)

Water Employee Services Authority

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.

REPRESENTATIVE DUTIES

- 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/Training

- 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.
- Possession of a California Water Environment Certification in the disciplines of Mechanical Technology, Electrical, and/or Wastewater Collection Systems is desirable.
- Possession of a valid, appropriate Grade V CWEA Certification is desirable.
- Possession of a valid, Grade 5 Water Distribution Operator Certification, issued by the California State Water Resources Control Board, is highly desirable.
- Possession of a valid, Grade 4 Water Treatment Operator Certification, issued by the California State Water Resources Control Board, is highly desirable.
- Possession of a valid, appropriate Grade IV Wastewater Treatment Operator Certificate issued by the California State Water Resources Control Board 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: Executive/Confidential

SALARY RANGE: 44

(DIRO)

Water Employee Services Authority

Engineering 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 administrative direction, plans, directs, manages, and oversees the functions, programs, and operations of the Engineering Division, including planning, design, and construction of all District facilities; coordinates assigned activities with other departments and outside agencies; and provides highly responsible and complex administrative support to the Assistant 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 Engineering Division functions, programs, and operations including planning, design, and construction of all infrastructure, operation of the water system, and information technology and document management services and activities.
- 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 and support systems, and internal reporting relationships; identifies opportunities for improvement; directs and implements changes.
- Plans, directs, and coordinates, through subordinate level staff, the Engineering Division'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.
- 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 Division budget; approves the forecast of funds needed for staffing, equipment, materials, and supplies; approves expenditures and implements budgetary adjustments as appropriate and necessary.
- Assumes overall management responsibility of all planning, design, construction, and inspection activities of District public works projects and private developer projects.
- Assumes responsibility for implementing long-range and immediate plans and objectives of the District and formulating those objectives into specific capital improvement plans; assumes responsibility for continuous evaluation of plans to ensure plans are meeting planned scope of work, schedule, and budget.
- Assumes responsibility for maintaining the capital improvement program schedule; performs field reviews of project activities; participates in conferences and discussions with various field representatives for the purpose of reviewing potential problem areas.
- Assumes responsibility for insuring operational and administrative completion before the transfer of projects from the construction phase to operation and maintenance status; participates in examinations and field reviews of existing features with the Operations Department; keeps management advised of design deficiencies noted during both construction and operation phases and makes design recommendations, as required.
- Negotiates a variety of contracts and agreements; negotiates, in conjunction with other District management, developer agreements and reimbursement agreements.
- Manages District real estate.
- Provides staff assistance to the Assistant General Manager; prepares and presents staff reports and other necessary correspondence; provides technical support to other departments, the General Manager, and the Board of Directors.
- Represents the Engineering Division to other departments, elected officials, and outside agencies; coordinates assigned activities with those of other departments and outside agencies and organizations including regulatory agencies; coordinates the implementation of new programs, the resolution of problems of mutual concern, and the resolution of operational problems.

Engineering Manager (continued)

- 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 engineering; 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 as required; 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 engineering 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.
- Perform engineering economic and financial analyses.
- Develop, review, and modify engineering and construction drawings, plans, and specifications.
- 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.
- Operate office equipment including computers and supporting word processing, spreadsheet and database applications.
- 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/Training

- Equivalent to a Bachelor's degree from an accredited college or university with major course work in civil engineering or a related field with advanced courses in water resources, water and wastewater processes, and environmental engineering. A Master's degree in a related field is highly desirable.

Experience

- Ten years of increasingly responsible experience in process design, project management, construction inspection, and general engineering related to the water and wastewater field including five years of management and administrative responsibility.

Knowledge

- Operational characteristics, services, and activities of a comprehensive engineering program.
- Principles and practices of program development and administration.
- Advanced principles and practices of capital improvement project management and coordination.
- Advanced concepts, theories, principles and practices of engineering including engineering knowledge of water and wastewater systems.
- Principles and practices of contract administration.
- Mathematical principles as applied to civil engineering work.
- 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.
- Possession of valid Registration as a Professional Civil Engineer in the State of California.

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: Executive/Confidential

SALARY RANGE: 42

(EM)

Water Employee Services Authority

Senior Civil Engineer (Wastewater)

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, manages the District's Publicly Owned Treatment Works (POTW) pretreatment program; performs complex wastewater analyses and management duties within the Water Resources Division to ensure that the District complies with all NPDES requirements including U.S. Environmental Protection Agency and Regional Water Quality Control Board wastewater quality regulations and programs; analyses facility capacity needs, treatment processes, and bio solids management options to ensure that all future wastewater treatment needs, regulatory compliance and permitting requirements are met; ensures work quality and adherence to professional engineering standards; and responds to questions and inquiries from the general public, developers, contractors, engineering professionals, and Authority staff; performs related duties as required.

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.

- Oversees present and future requirements of the pretreatment program; researches, compiles and analyzes information pertaining to various pretreatment program issues.
- Collect historical water use and wastewater flow information to develop trends for future planning of sources of water and necessary wastewater treatment facilities.
- Ensure that current federal and state wastewater permitting and discharge requirements are met including timely completion of water quality reports and regulatory documentation.
- Work with the wastewater operations manager and operators to identify potential problems and develop solutions.
- Work with Operations to develop a yearly budget so that the cost of service is kept to a minimum; analyze methods for improving treatment techniques to minimize costs.
- Assists with wastewater treatment engineering plans and specification development; provides input and guidance to consultants.
- Coordinates projects and related processes with other District staff and departments as well as outside agencies and regulatory agencies.
- Provides engineering support to the Engineering, Operations and Maintenance Departments; performs engineering analysis and calculations.
- Prepares staff reports for approval by the Board of Directors and committees.
- Prepares a variety of reports including progress reports, proposals and engineering activity report; present project updates to community interest groups; assists in the development and coordination of related record keeping systems.
- Represents the District at meetings and participates on a variety of committees as necessary.
- Attends and participates in professional group meetings; stays abreast of new trends and innovations in the field of engineering; directs the incorporation of new developments into program areas, as appropriate.
- As assigned, supervises and trains lower level engineering staff.
- Assumes responsibility for ensuring operational and administrative completion before the transferring of projects from the construction phase to operation and maintenance status; participates in examinations and field reviews of existing features with the Operations Department; keeps management advised of design deficiencies noted during both construction and operation phases and makes design recommendations, as required.
- Ensures project compliance with District safety requirements.
- Reads, understands, and ensures compliance with the District's Safety Manual; attends safety meetings, as required; reports all accidents, violations, or infractions as required.
- Performs related duties as required.

Senior Civil Engineer (Wastewater) (continued)**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 advanced level professional engineering duties involved in the design, development, and construction management of a variety of construction/capital improvement projects.
- Serve as project engineer on assigned projects.
- Prepare, review, interpret, analyze, and modify complex engineering plans, drawings, specifications, contract documents, and engineering reports for conformance to professional standards and approved budgets.
- Collect, assimilate, and evaluate data and prepare recommendations related to civil engineering projects.
- Perform complex engineering analysis, computations, and calculations.
- Prepare clear and concise administrative and technical reports.
- Interpret, apply, and ensure compliance with pertinent federal, state, and local laws, codes, and regulations.
- Interpret, explain and enforce department policies and procedures.
- Oversee the work of assigned staff, professional consultants, and contractors.
- Respond to questions and inquiries from a variety of sources regarding engineering and development projects.
- Coordinate activities with internal and external agencies and individuals.
- Use and care for engineering and drafting instruments and equipment.
- Analyze data and information using established criteria, in order to determine consequences and to identify and select alternatives.
- 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 a Bachelor's degree from an accredited college or university with major course work in civil engineering or a related field. Advanced courses in water resources, water and wastewater processes, and environmental engineering is desirable.

Experience

- Five years of increasingly responsible experience as a Professional Engineer that includes water utility engineering and project management experience.

Knowledge

- Operations, services, and activities of an engineering and construction program.
- Complex principles and practices of civil engineering with particular emphasis on the planning, design, and construction of water and wastewater facilities.
- Principles and practices of complex project management and administration.
- Methods and techniques of complex contract negotiations and administration.
- Principles and practices of project budget preparation and control including project budgeting tools and financing issues.
- Construction methods and procedures.
- Engineering consulting services and methods.
- Construction bidding requirements.

Senior Civil Engineer (Wastewater) (continued)**Knowledge**

- Contractual methods and legal issues.
- Operational and maintenance issues related to water and wastewater facilities.
- Recent developments, current literature, and sources of information related to innovations and trends in civil engineering design and development.
- Principles and practices of business correspondence and technical report preparation.
- Pertinent federal, state, and local codes, laws, and regulations including regulatory requirements as they pertain to the water and wastewater industry.
- Modern office procedures, methods, and equipment including computers and supporting word processing, spreadsheet applications, and specialized engineering software programs.
- Computer drafting, GIS, database manipulation, and hydraulic analysis.

License/Certification

- Possession of an appropriate, valid driver's license.
- Possession of valid Registration as a Professional Civil Engineer in the State of California.

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; some exposure to temperature variations, noise, fumes, toxic agents, dust, and traffic hazards may occur while at construction sites

PHYSICAL

- Level One

Incumbents require sufficient mobility to work in an office setting; stand or sit for prolonged periods of time; push, pull, lift and/or carry light amounts of weight; bend, stoop, and kneel; operate office equipment including use of a computer keyboard; 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: 38

(SCEWR)

Water Employee Services Authority

Electromechanical Technician I

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 wide variety of skilled duties in the design, construction, installation, maintenance and repair of industrial electrical and electronic control systems and process control instrumentation used in the operation of municipal water, wastewater and agricultural water systems; performs predictive, preventative, and corrective maintenance as assigned; troubleshoots, diagnoses, and calibrates electrical and electronic equipment and systems; and assists contractors as necessary.

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, repairs, modifies, tests, troubleshoots, calibrates, and performs preventive maintenance on a variety of industrial electrical and electronic systems, components and devices associated with municipal water, wastewater and agricultural water systems.
- Uses standard and specialized testing equipment such as voltmeters, multimeters, logic analyzers, meggers, amp meters, infrared pyrometers, digital analyzers, frequency generators, oscilloscopes and other specialized test equipment.
- Installs, troubleshoots, repairs, programs, calibrates, tests and maintains various types of electrical and mechanical equipment; including motor control centers, stand-by generators, electric motors, emergency transfer switches, switchboards, panel boards, transformers, breakers, lighting fixtures, receptacles, switches, and other industrial electrical, pneumatic, and hydraulic equipment.
- Installs and bends conduit; may install mechanical equipment such as pumps, motors, valves, piping and other supporting equipment.
- Designs and modifies motor control equipment circuits, sizes equipment and services, does load calculations, planning, laying out and wiring the work; reads and interprets blueprints, schematics and wiring diagrams; upon completion, draws modifications made to the system.
- Plans and lays out work from instructions and/or work orders, using blueprints, sketches and drawings.
- Performs preventive maintenance and repair of building, treatment plant and pumping station electrical and electronic systems, components, devices and equipment.
- Installs, troubleshoots, repairs, programs, calibrates, tests and maintains various types of analog and digital systems, such as variable frequency drives, , solid-state starters, electric valve actuators, chlorination lead and residual instruments, 4-20 mA loop controllers and sensors, ultrasonic level controllers, liquid level, and bubbler controls.
- Performs bench repairs at the component level in shop and field settings.
- Inspects and oversees equipment installation and electrical work performed by Contractors and District personnel; may lead the work of others as a project leader; ensures timely and accurate completion of preventive maintenance activities; schedules and coordinates activities with contractors and District personnel.
- Participates in developing the annual budget for electrical and instrumentation needs; requisitions necessary parts, tools, equipment and supplies; researches new and existing operational methods, techniques and equipment and recommends their application.
- May train or instruct others in electrical work and safety.
- Responds to emergency situations as necessary; participates in stand by or on-call duty as required.
- Reads, understands, and ensures compliance with the District Safety Manual; attends safety meetings, as required; reports all accidents, violations, or infractions to supervisor.

- 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 related duties as required.

Electromechanical Technician (continued)

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 installation, repair, and maintenance duties on electrical equipment and systems.
- Inspect, troubleshoot, diagnose, and repair electrical and electronic malfunctions.
- Operate a variety of electrical testing, maintenance, repair, and installation equipment in a safe and effective manner.
- Use electrical test equipment.
- Bend and install conduit, pull wire and work on control wiring and equipment.
- Perform accurate mathematical calculations.
- Read, interpret, and work from blueprints, electrical diagrams and schematics, manufacturer instructions and directions.
- 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 records in the form of blueprints, plans and specifications for industrial electrical and instrumentation, equipment and devices.
- Communicate clearly and concisely, both orally and in writing.
- Use a computerized maintenance management system for scheduling, tracking and analyzing all work performed on equipment.
- Establish and maintain effective working relationships with those contacted in the course of work.
- Comply with Cal-OSHA respirator facemask fit test requirements.
- 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.
- Use Self Contained Breathing Apparatus (SCBA).

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 or trade school training in electrical technology or a related field.

Experience

- Four years of full-time on-the-job (hands on) electrical/electronics and instrumentation training in the industrial field, preferably in domestic, reclaimed, and agricultural water distribution, wastewater treatment facilities, or other related fields.

Knowledge

- Operational characteristics of electrical systems and internal components.
- Principles, methods, materials, and tools used in the construction, maintenance, and troubleshooting of electric systems.
- Principles of electrical theory as applied to electrical circuits and wiring systems.
- Methods and techniques of maintaining, installing and repairing electrical systems and equipment.
- Operating characteristics and application of electrical test equipment.
- Methods and techniques of troubleshooting and calibrating electric and electronic systems and components.
- Instrumentation equipment and precision tools.
- Preventive and corrective maintenance techniques.
- Precautions necessary for working with high voltage.

Knowledge

- Office procedures, methods, and equipment including computers.
- Mathematical principles.
- Principles and procedures of record keeping.
- The use of hand tools and safety gear.
- Occupational hazards and standard safety practices.
- Pertinent federal, state and local codes, laws and regulations.

License/Certification

- Possession of an appropriate, valid driver’s license.
- Certification required in District provided CPR/First Aid training.
- Possession of a valid Grade II Electrical/Instrumentation Certificate issued by the California Water Environment Association within 24 months of employment.

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

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

PHYSICAL

- Level Three
- NIDA
- 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 information.

WATER EMPLOYEE SERVICES AUTHORITY

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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: Employees Association

SALARY RANGE: 28

(ET)

Water Employee Services Authority

Environmental Compliance Inspector

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, assist with implementing and enforcing the POTW (Publicly Owned Treatment Works) pretreatment program; perform a variety of field and office duties associated with the interpretation, applications and enforcement of Federal, State and local regulations, including the Districts Sewer Use Ordinance regulating the discharge of commercial and industrial wastewater. Inspects industrial and commercial businesses in order to determine compliance with established ordinances and other regulatory guidelines.

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.

- Must be able to respond to emergency call-out situations.
- Assists in the preparation of the programs budget.
- Consults with wastewater treatment plant personnel concerning impacts of commercial and industrial dischargers as they relate to operating efficiencies and discharge compliance with existing and proposed wastewater discharge orders and NPDES permits
- Performs the duties related to enforcement, monitoring, inspection, and as assigned assist with the plan check process
- Performs various field chemical tests, flow-monitoring, and collects appropriate wastewater samples.
- As assigned classify and draft waste discharge permits.
- Assist with updating, manipulating, and maintaining databases and files, providing a synthesis of information.
- Respond to industrial/commercial waste spills, and wastewater treatment plant upsets.
- Evaluate Industrial/Commercial dischargers for compliance with waste discharge regulations.
- Inspect, sample, and monitor a variety of commercial and industrial businesses to ensure compliance with District policies, procedures, standards, and regulatory requirements.
- Performs other job-related duties as assigned.
- Perform 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 pre-entry checklists, perform atmospheric testing and evaluation of various entry conditions and situations as outlined in Appendix C to the above referenced regulations.
- Assists with preparing various letters, correspondence, memos, reports, and other written materials.
- Reads, understands, and ensures compliance with Districts Safety Manual; has proper knowledge of use of power operated and hand tools and safety gear; attends safety meetings, as required; reports all accidents, violations or infractions to supervisor.
- Determine and assist with appropriate enforcement actions against pretreatment program violators.
- Assist with preparing periodic reports to the Environmental Protection Agency (EPA) and the California Regional Water Quality Control Board (CRWQCB) as they pertain to the Districts pretreatment program.
- As assigned meet with California Regional Water Quality Control Board (CRWQCB) and Environmental Protection Agency (EPA) staff pertaining to the Districts pretreatment program.
- Assists with the implementation of a Fats, Oil, and Grease (FOG) Abatement Program requiring installation, maintenance, and/or upgrading and retrofitting of various types of gravity interceptor systems.
- Meet with industrial discharges regarding industrial wastewater problems and complaints.

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.

Environmental Compliance Inspector**Ability to:**

- Prepare clear and concise reports.
- Work cooperatively with other departments, District officials, and outside agencies.
- Respond tactfully, clearly, concisely, and appropriately to inquires from the public, District staff, or other agencies on sensitive issues in area of responsibility.
- Communicate clearly and concisely both orally and in writing.
- Establish and maintain effective working relationships with those contacted in the course of work.
- Determine quality and quantity of industrial waste discharge.
- Inspect industrial waste treatment equipment for compliance with permit requirements.
- Prepare and submit wastewater samples for laboratory analysis.
- Evaluate laboratory reports on individual industrial/commercial businesses for compliance with regulations.
- Enforce necessary regulations with firmness and tact.
- Maintain and update records and files.
- Read and interpret drawings, specifications, and technical manuals.
- Respond to complaints regarding illicit dischargers, odors, and hazardous materials in the public and private sector.
- Must be able to respond within thirty (30) minutes time period to the Districts corporate yard during an emergency situation.
- Prepare and submit wastewater samples for laboratory analysis.
- Understand and carry out oral and written instructions.
- Perform confined space and permit required confined space entries and work in areas containing chemicals, dust, fumes, vapors, gases, exhaust, raw sewage, and solvents.
- Operate office equipment including computers and supporting software applications.

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 chemistry, biology, environmental science or a related field.

Experience

- Two (2) years of experience in the field of environmental compliance inspection or a related field.

Knowledge

- Federal, state, and local regulations as they relate to industrial waste discharges.
- Ability to use computerized software applications.

License/Certification

- Possession of an appropriate, valid driver's license.
- Possession of a valid Grade I Environmental Compliance Inspector Certification issued by the C.W.E.A. is required within eighteen (18) months of employment.
- Possession of a valid Grade II Environmental Compliance Inspector Certification issued by the C.W.E.A. is desirable.
- Certification required in District provided CPR/First Aid training.

Environmental Compliance Inspector

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

Field and office 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

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: Employees Association

SALARY RANGE: 27

(91ECD)

ELSINORE VALLEY MUNICIPAL WATER DISTRICT

Pretreatment Program Coordinator

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, develops, organizes, coordinates and enforces the District's Publicly Owned Treatment Works (POTW) pretreatment program; performs a wide variety of complex field and office duties associated with the interpretation, applications and enforcement of federal, state and local regulations, including the District's Sewer Use Ordinance, regulating the discharge of commercial and industrial wastewater; schedules and performs permit renewal and routine industrial waste inspection to insure compliance with the District's Sewer Use Ordinance; assists in developing and recommending pretreatment program policies and procedures; performs various types of program management activities; and prepares and maintains a variety of letters, correspondence, memos and reports.

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.

- Inspects a variety of industrial and commercial businesses, including the most complex, to determine compliance with established ordinances and other regulatory guidelines.
- Coordinates pretreatment program activities with customers, District personnel and other public agencies.
- Assists management staff in determining present and future requirements of the pretreatment program including staffing, training, inventory and equipment; assist in the preparation of the program budget.
- 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 pre-entry checklists, perform atmospheric testing and evaluation of various entry conditions and situations as outlined in Appendix C to the above referenced regulations.
- Coordinate formal enforcement activities; prepare enforcement documentation and recommend appropriate enforcement action.
- Research and monitor technical developments in areas related to the District's pretreatment program as necessary.
- Serves as project leader on assigned special projects; works with management, co-workers, contractors, consultants and engineers in completing assigned projects.
- Consults with wastewater treatment plant personnel concerning impacts of commercial and industrial dischargers as they relate to operating efficiencies and discharge compliance with existing and proposed wastewater discharge orders and NPDES permits.
- Researches, compiles and analyzes information pertaining to various pretreatment program issues; performs some of the more complex and specialized duties associated with the District's pretreatment program, including sample collection and field chemical tests; determines and assists with coordinating appropriate enforcement actions against pretreatment program violators.
- Prepare and submit annual and quarterly reports to the Environmental Protection Agency (EPA) and the California Regional Water Quality Control Board (CRWQCB) as they pertain to the District's pretreatment program.
- Classifies, develops, writes and issues waste discharge permits; updates, manipulates, and maintains databases and files.
- Prepares various letters, correspondence, memos, reports and other written materials; reviews and evaluates monitoring reports submitted by wastewater dischargers.
- Inspects various types of existing pretreatment systems; inspects and approves newly installed pretreatment system; implements a Fats, Oils, and Grease (FOG) Abatement Program requiring installation, maintenance, and/or upgrading and retrofitting of various types of gravity interceptor systems.
- Respond to complaints regarding commercial/industrial waste dischargers.
- Represents the District to federal, state, and local regulatory agencies during audits and other pretreatment program review procedures.

Pretreatment Program Coordinator (continued)

- Performs stand-by duty as assigned and must be able to respond to emergency call-out situations; respond to commercial/industrial wastewater spills and wastewater treatment plant upsets during normal work shift and after hours.
- As assigned, assists and/or performs the duties of the Lift Station Maintenance Technicians.
- 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:

- Determine quality and quantity of industrial waste discharge.
- Inspect industrial waste treatment equipment for compliance with permit requirements.
- Interpret and apply applicable federal, state, and local laws, codes and regulations.
- Prepare and submit wastewater samples for laboratory analysis.
- Evaluate laboratory reports on individual industrial/commercial businesses for compliance with regulations.
- Enforce necessary regulations with firmness and tact.
- Maintain and update accurate records and files.
- Read and interpret drawings, specifications, and technical manuals.
- Respond to complaints regarding illicit discharges, odors, and hazardous materials in the public and private sectors.
- Perform confined space and permit required confined space entries and work in areas containing chemicals, dust fumes, vapors, gases, exhaust, raw sewage and solvents.
- Must be able to respond within a thirty (30) minute time period to the District's corporate yard during an emergency situation and perform stand-by duties as assigned.
- Operate office equipment including computers and supporting software applications.
- Work independently in the absence of supervision
- Understand and carry out oral and written instructions.
- 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 the completion of the twelfth grade supplemented by college level course work in chemistry, biology, environmental science or a related field.

Experience

- Four years of increasingly responsible pretreatment/source control program experience.

Knowledge

- Industrial processes and manufacturing techniques and processes relative to wastewater management.
- Wastewater and industrial wastewater treatment and monitoring technology.
- Principles and procedures of record keeping and reporting.
- Methods, techniques, materials, equipment, and tools used in field monitoring and sampling.
- Basic principles of chemistry and POTW pretreatment operations.
- Methods and techniques of investigation and enforcement.
- Impact of industrial discharges on wastewater treatment operations and public safety.
- Collection, preparation, and preservation techniques for a variety of wastewater constituents.
- Office procedures, methods, and equipment including computers and applicable software applications.

Knowledge

- Occupational hazards and standard safety practices.
- Pertinent federal, state, and local codes, laws, and regulations.

License/Certification

- Possession of an appropriate, valid driver's license.
- Certification required in District provided CPR/First Aid training.
- Possession of a valid Grade II Environmental Compliance Inspector Certification issued by the C.W.E.A.
- Possession of a valid Grade III Environmental Compliance Inspector Certification issued by the C.W.E.A is desirable.
- Possession of valid Grade II Certification in Environmental Compliance Inspection, Collection System Maintenance, Plant Maintenance Mechanical Technologist and Plant Maintenance Electrical/Instrumentation are 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

Field and office 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 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 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: Employees Association

SALARY RANGE: 29

(91PPC)

Water Employee Services Authority

Water Resources 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 administrative direction from the Assistant General Manager and through subordinate supervisors, directs, manages, supervises, and coordinates the activities and operation of the Water Resources Division through three functional sections: water resources planning, water systems engineering and wastewater systems engineering. Water resources planning is responsible for forward planning to ensure adequate supplies and facilities are provided to ensure water and wastewater services remain reliable, cost effective and high quality. Water systems engineering is responsible for all regulatory reporting and providing technical support to the Operations Department related to the water system. The cross connection control and onsite recycled water regulatory functions are within the water systems engineering section. Likewise, wastewater systems engineering is responsible for all regulatory reporting and providing technical support related to the wastewater system. The industrial waste monitoring and pretreatment functions are within the wastewater systems engineering section. The Water Resources Division maintains up-to-date knowledge of all relevant water quality regulations and ensures current and future District compliance with all local, state, and federal regulations; coordinates assigned activities with other divisions, departments, and outside agencies; and provides highly responsible and complex administrative support to the Assistant 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 management responsibility for assigned services and activities of the Water Resources Division including the District's water resources planning, water systems engineering, and wastewater systems engineering.
- Provides all analysis and reporting required to obtain and maintain the District's water rights for both surface and ground water.
- Conducts analysis and prepares planning studies of various water and wastewater issues such as facilities planning, water supply and demand, energy usage, wastewater generation and treatment, biosolids management, and air quality management; such analysis and studies include, but are not limited to, consideration of cost effectiveness, level of service, life cycle costs, and growth projections.
- Oversees preparation of state and federally required planning analyses, such as the Urban Water Management Plan (UWMP) and Water Supply Assessments (WSA's).
- Oversees the District's grant and loan application program, monitoring the availability of state and federal project financing programs.
- Provides technical support related to the Meeks & Daley Mutual Water Company.
- Prepares and presents various water quality and planning reports to the District Board of Directors and its Committees.
- Manage the preparation of documents required for compliance with the California Environmental Quality Act (CEQA).
- When called upon to do so, acts as the District's liaison to the Santa Ana River and Santa Margarita River Watermasters, providing whatever reports and records are required in that function.
- 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 Water Resources Division's annual budget; participates in the forecast of funds needed for staffing, equipment, materials, and supplies; monitors and approves expenditures; implements adjustments.

Water Resources Manager (continued)

- Organizes, schedules, assigns, and supervises directly, and through subordinates, the daily operation of the District's water resources planning, water systems engineering, wastewater systems engineering, the cross connection control program, the wastewater industrial waste and pretreatment program, and the recycled water onsite supervision program.
- Develops and administers ongoing programs in areas such as improving reliability and quality of the domestic water supply, plant optimization, regulatory compliance, and plant upgrades for the domestic water system, the wastewater collection and treatment system and the recycled water distribution system.
- Identifies, plans, organizes, schedules, and supervises the daily and long-term activities as related to the four functional areas of the Water Resources Division.
- Reviews water quality data and manages the submission of the necessary reports to the California Department of Public Health (CDPH) confirming compliance with all necessary water laws, regulations, and standards.
- Reviews wastewater quality data and manages the submission of the necessary reports to the State Water Resources Control Board (SWRCB) and Regional Water Quality Control Boards (RWQCB) confirming compliance with all necessary water laws, regulations, and standards.
- Negotiates regulatory permits with regulatory agencies on behalf of the District and prepares necessary studies and recommendations for staff and Board of Directors approvals of those permits.
- Works with the various regulators to ensure the District's groundwater resources are protected from potential contamination and tracks any existing contamination sources to ensure they are eliminated.
- Provides technical review and assistance to District staff and consulting professionals where water production and water quality issues are being evaluated; makes comments and recommendations related to planning, design, construction, and operation of capital improvement projects.
- Develops, implements, maintains, and monitors all water quality monitoring and testing programs to comply with governmental regulations; prepares and submits, in a timely manner, all required reports to various regulatory agencies; produces reports for use by the District, other public agencies, and consultants on water quality, ground water, dam surveys, water production, wastewater collection and treatment, and recycled water use.
- Establishes and maintains contact with appropriate governmental and regulatory agencies; coordinates with contractors, developers, and other public agencies on projects related to water quality.
- Participates in the resolution of potable and non-potable water quality issues, and in Lake Elsinore, Canyon Lake, Lee Lake, and related watershed issues pertaining to water quality.
- Manages and coordinates the monitoring and inspection activities for the Railroad Canyon Dam and the Lee Lake Dam; serves as contact person for the California Department of Safety of Dams.
- Monitors and reviews lake morphology and limnology to the extent necessary to anticipate and ameliorate potential water quality problems in water supplies for potable and non-potable uses.
- Investigates water contamination, wastewater spills, and other related problems to identify sources of pollution; recommends corrective actions to mitigate the situation.
- Conducts research to develop solutions for the District's current and future water issues.
- 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 responsible staff assistance to the Assistant General Manager; conducts a variety of organizational studies, investigations, and operational studies; recommends modifications to water, wastewater and recycled water programs, policies, and procedures as appropriate.
- Coordinates the work of the Water Resources Division with other divisions, departments, and outside agencies; negotiates and 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; provides presentations to the Board, staff, and public on various water resources issues.
- Attends and participates in professional group meetings; stays abreast of new trends and innovations in the field of water quality and planning; directs the incorporation of new developments into program areas, as appropriate.
- Responds to and resolves difficult and sensitive resident and regulatory agency inquiries and complaints related to water quality and resources issues.
- 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 water resources 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 written and verbal reports including administrative and financial reports.
- Read and interpret blueprints, schematics, plans, and drawings.
- Manage multiple tasks and projects.
- Prioritize workloads and goals.
- Ensure compliance with regulatory agency testing and reporting for both water and wastewater operations.
- Read and interpret maps, plans, sketches, schematics, diagrams, and blueprints; manage engineering projects or studies for capital improvement planning of the water system, wastewater system or recycled water system or related facilities.
- Manage projects or studies for capital improvement of the water/wastewater systems or related facilities.
- Perform analysis of water demands and balance water sources.
- Operate office equipment including computers and supporting word processing, spreadsheet, presentation, business graphics, 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/Training

Equivalent to a Bachelor's Degree from an accredited college or university with major course work in planning, environmental studies, chemistry, microbiology, civil/environmental engineering, or a related field.

Experience

Seven years of increasingly responsible experience in water resources planning, water/wastewater engineering, or water quality management, including four years of administrative and supervisory responsibility experience managing a minimum staff of five or more technicians and/or engineers.

Knowledge

- Operational characteristics, services, and activities of a water quality program.
- Environmental issues affecting water quality and wastewater treatment quality.
- Working knowledge of the California Environmental Quality Act (CEQA).
- Basic principles, standards, practices, trends, and information sources in the area of water quality management.
- Basic principles and methods of water quality testing, treatment, and standards.
- Basic principles of chemistry as they apply to water and wastewater.
- Basic knowledge of analytical procedures used in a water quality program.
- Techniques for gathering and reporting information.
- Basic principles and practices of backflow prevention, cross connection control and wastewater pretreatment regulation related to potable water, non-potable water, and wastewater collection and treatment services.
- Principles of hydraulics and computer modeling of water distribution system, storage and pumping and wastewater collection and pumping.
- Operational characteristics of equipment and tools used in the area of assignment including specialized sampling equipment and laboratory analytical equipment.
- Occupational hazards and standard safety practices.
- 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 including industry safety procedures and regulations as well as potential new regulations applicable to water quality and the water industry.
- Principles and procedures of record keeping.
- Principles of business letter writing and report preparation.
- 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 T3 Water Treatment Operator Certificate issued by the State of California, Department of Public Health is desirable.
- Possession of a valid D5 Water Distribution Operator Certificate issued by the State of California, Department of Public Health is desirable.
- Registration as a Professional Engineer in the State of California is required.
- American Institute of Certified Planners (AICP, as administered by the American Planning Association) certification is highly 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 with some travel to various locations to attend meetings or to inspect job sites; occasional exposure to noise, dust, grease, smoke, fumes, noxious odors, gases, vibrations, and all types of weather and temperature conditions.

Physical:

- Level One

Water Resources Manager (continued)

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.

JOB STATUS: Exempt: Executive/Confidential

SALARY RANGE: 42

(WRM)

Water Employee Services Authority

Water Quality Supervisor

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, supervises, assigns, reviews, and participates in the work of staff responsible for performing a variety of tasks associated with the planning and operation of the District's extensive water quality and related technical programs for water treatment and distribution and wastewater collection and treatment processes; oversees and participates in maintaining and operating Elsinore Valley Municipal Water District's (EVMWD's) Water Quality Laboratory for microbiological and chemical analysis to ensure water and wastewater system regulatory compliance; assists in developing and operating on-going programs in water treatment evaluation and plant optimization, pilot plant studies, source water monitoring programs, sampling and laboratory analysis protocol development, contaminant monitoring and response, and engineering design projects; ensures work quality and adherence to established policies and procedures; and performs the more technical and complex tasks relative to assigned area of responsibility. EVMWD's Water Quality Laboratory is certified by the State of California as an Environmental Laboratory Accreditation Program (ELAP). It performs sampling and/or analysis for water, wastewater, recycled water, groundwater and biosolids samples annually. This position is designated as Laboratory Director as defined in Title 22, section 64817 of the California Code of Regulations. The Water Quality Supervisor ensures federal, state and WESA/EVMWD regulations and guidelines relating to ELAP, National Pollutant Discharge Elimination System Permits (NPDES) and other directive documents are fulfilled and that sampling, analysis and laboratory procedures conform to state and federal standards to maintain state certification.

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, prioritizes, assigns, supervises, reviews, and participates in the work of staff responsible for performing a variety of tasks associated with the planning and operation of the District's extensive water quality and related technical programs for water treatment and distribution and wastewater collection and treatment.
- Establishes schedules and methods for providing water quality services; identifies resource needs; reviews needs with appropriate management staff; allocates resources accordingly.
- Oversees the Laboratory Information Management System (LIMS), providing a robust database for use by lab personnel, operators, and others for compliance reporting, research, and other water quality related issues.
- 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.
- Participates in the selection of assigned personnel; provides or coordinates staff training; works with employees to correct deficiencies; implements discipline procedures.
- Participates in the preparation and administration of the assigned program budget; submits budget recommendations; monitors expenditures.
- Provides water quality analytical support as an internal consultant for Operations and Engineering staff preparing studies and plans.
- Maintains records concerning operations and programs; prepares reports on operations and activities.
- Performs the more technical and complex tasks of the work unit including identifying, planning, organizing and scheduling the daily and long-term water quality activities as related to monitoring source waters, reservoirs, treatment plants, distribution systems, ground water sources, wastewater collection systems, and wastewater treatment plants.
- Oversees and participates in coordinating the implementation and maintenance of water quality monitoring and testing programs to comply with federal and local regulatory requirements; prepares reports for EVMWD, various regulatory agencies, consultants, and other public agencies, on water quality, dam operations, and water production.
- Oversees and participates in performing complex microbiological, chemical, and water quality tests to control treatment processes, determine plant efficiencies, and ensure compliance with regulatory requirements.
- Oversees and participates in performing bacteriological tests on potable water to assure safety, quality, and regulatory compliance; conducts special tests and analyses as needed.
- Oversees and participates in performing various physical, chemical and biological tests on water, wastewater, and recycled water samples; processes chain of custody forms; performs other laboratory analysis as needed.

REPRESENTATIVE DUTIES

- Schedules and implements sampling events of all systems including reservoirs, treatment plants, distribution systems, collection systems, and groundwater sources.
- Oversees and participates in interpreting data obtained from tests; enters laboratory results into LIMS; maintains a written record of lab results and activities; prepares reports as necessary.
- Oversees the results of the quality assurance/control program; analyzes laboratory data and recommends treatment modifications; presents data analysis.
- Assists in evaluation of water treatment and distribution facilities; participates in design and operation of pilot water treatment equipment to verify design parameters and collect necessary operating data.
- Oversees and participates in investigating water quality problems, wastewater spills, customer complaints, and related problems, to resolve the issues; recommends corrective action(s) to mitigate the situation.
- Assists Operations with chloramination monitoring of sites disinfected with chloramines.
- Repairs, cleans and maintains equipment associated with the operation of a water quality laboratory.
- Estimates time, materials, and equipment required for jobs assigned; requisitions chemicals, supplies, and equipment as required.
- Coordinates with outside laboratories for special regulatory compliance sampling.
- Attends and participates in professional group meetings; maintains awareness of new trends and innovations in the field of water quality; incorporates new developments into program areas, as directed.
- Responds to and resolves public inquiries and complaints.
- 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:

- Serve in the capacity of Laboratory Director, as defined in Title 22, section 64817 of the California Code of Regulations.
- Coordinate and direct water quality program activities and operations.
- Supervise, organize, and review the work of assigned staff.
- Plan and organize work to meet changing priorities and deadlines.
- Participate in the selection, training, and evaluation of assigned staff.
- Perform a full range of professional duties to ensure safe water is served to the public.
- Operate equipment and machinery that may require complex and rapid adjustments, such as laboratory analytical equipment, a motor vehicle, computer terminal, and telephone.
- Coordinate and participate in water quality testing and analysis.
- Review a variety of written reports and documentation including test results.
- Coordinate all sampling, testing, and results for outside agencies.
- Ensure compliance with regulatory agency testing and reporting requirements.
- Adjust testing schedule according to test results and make recommendations to District personnel regarding treatment adjustments.
- Calibrate, clean, and perform minor repairs on assigned equipment and apparatus including laboratory analytical equipment.
- Accurately maintain and update manual and automated records and logs.
- Respond to requests and inquiries.
- Ensure adherence to safe work practices and procedures.
- Recommend and implement goals, objectives, policies and procedures for providing water quality program activities and operations.

Ability to:

- 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.
- 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.
- 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 a Bachelor's Degree from an accredited college or university in chemistry, biochemistry, biology, microbiology, environmental, sanitary or public health engineering, natural or physical science.

Experience

- Four years of responsible water quality testing laboratory, field sampling, and/or water treatment plant or water distribution system including two years of lead supervisory and administrative responsibility.

Knowledge

- Operations, services, and activities of a water quality program.
- Advanced principles and methods of water quality testing, treatment, and standards.
- Advanced principles of chemistry as they apply to water and wastewater.
- Principles of supervision, training, and performance evaluation.
- Principles of LIMS, including data entry, database management, analysis using LIMS, and report writing to produce technical reports for those requesting test results.
- Basic principles and practices of budget preparation and administration.
- Analytical procedures used in a water quality program.
- Techniques for gathering and reporting information.
- Operational characteristics of equipment and tools used in the area of assignment including specialized sampling equipment and laboratory analytical equipment.
- Occupational hazards and standard safety practices related to work performed by lab personnel.
- Mathematical principles.
- Pertinent federal, state, and local codes, laws, and regulations.
- Principles and procedures of record keeping.
- Principles of business letter writing and basic report preparation.
- Office procedures, methods, and equipment including computers and applicable software.
- Use of currently available software packages used for laboratory and supervisory work, including Microsoft Office products (WORD, EXCEL, ACCESS, VISIO, OUTLOOK, POWERPOINT), LIMS software, and report-writing software (like Crystal Reports).

License/Certification

- Possession of a valid California Class C driver's license.

License/Certification

- Possession of a Grade III Certificate in Laboratory Technology issued by the CWEA or AWWA.
- Possession of a T2 Water Treatment Operator or D2 Water Distribution Operator Certificate issued by the State of California Department of Public Health.

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 and indoor environment; travel from site to site; exposure to noise and all types of weather and temperature conditions; work with or in water and wastewater; work and/or walk on various surfaces including slippery or uneven surfaces; work on ladders/scaffolds; some tasks may risk exposure to toxic materials.

PHYSICAL

- Level Three

Incumbents require sufficient mobility to work in an office, laboratory, and field environment; travel to various locations to take samples; exert moderate but not constant physical effort, typically involving some combination of climbing and balancing, stooping, kneeling, crouching, lifting, carrying, pushing and pulling; walk, stand, and sit for prolonged periods of time; operate assigned equipment and vehicles; operate office equipment including use of a computer keyboard; 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: 33

(WQSPV)

Water Employee Services Authority

Water Quality 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, assists with performing water quality department daily work duties including wastewater and potable laboratory testing, environmental field sampling, research and testing, responding to customer complaints and report preparation. Incumbents may be required to work evenings, nights, and weekends.

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 in identifying, planning and scheduling the daily and long-term water quality activities as related to monitoring source waters, reservoirs, treatment plant, distribution system, and groundwater sources.
- Conducts laboratory and monitoring testing of water/wastewater samples associated with the operation of a water treatment plant, distribution system and wastewater plants.
- Performs QA and QC checks on lab incubators, water baths and pH meters.
- Assists lab personnel with the QA and QC for microbiological analysis; records microbiological analysis and notifies appropriate personnel with results.
- Investigates water quality problems, customer complaints, waste spills and other related problems to identify source of pollution; assists in developing corrective actions to mitigate the situation.
- Collects samples from distribution system, leak repairs, wells, reservoirs, and related locations, for non-regulatory monitoring or required monitoring.
- Assist Lab personnel with laboratory information system maintenance, data entry, and data retrieval.
- Repairs, cleans and maintains facilities associated with the operation of a water and wastewater laboratory; cleans laboratory equipment and performs quality control procedures per standard protocol.
- Requisitions materials, supplies, and equipment to perform assigned tasks, as needed.
- Maintains laboratory testing records and inputs data into District computer data acquisition system; assists lab personnel with data collection and entry for regulatory reporting.
- Responds to public inquiries in a courteous manner; provides information within the area of assignment.
- Reads, understands, and ensures compliance with the District Safety Manual; attends safety meetings, as required; reports all accidents, violations, or infractions to supervisor.
- Assist Lab personnel with the operation of an ion instrument and a total organic carbon instrument.
- 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:

- Collect, label, and preserve samples.
- Make and record observations.
- Operate equipment and machinery that may require complex and rapid adjustments, such as specialized sampling equipment, laboratory analytical equipment, a motor vehicle, computer terminal, and telephone.
- Calibrate, clean, and perform minor repairs on assigned equipment and apparatus including samplers.

Water Quality Technician (continued)**Ability to:**

- Accurately maintain and update manual and automated records and logs.
- Generate a variety of written reports and documentation.
- Respond to routine requests and inquiries.
- Enter data at a speed necessary for successful job performance.
- Ensure adherence to safe work practices and procedures.
- Understand and follow oral and written instructions.
- 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

- One year experience in wastewater collection, wastewater treatment, water treatment or distribution operations.
- One year experience in certified laboratory procedures and analysis, preferably in water or wastewater quality field.

Knowledge

- Basic techniques for gathering and reporting information.
- Basic theoretical knowledge and current experience of laboratory equipment and testing methods for coli form bacteria and general chemistry.
- Operational characteristics of equipment and tools used in the area of assignment including specialized sampling equipment and laboratory analytical equipment.
- Occupational hazards and standard safety practices.
- Pertinent federal, state, and local codes, laws and regulations.
- Principles and procedures of record keeping and filing.
- Office procedures, methods, and equipment including computers and applicable software applications such as word processing, spreadsheets, and databases.
- Water utility operations.
- Basic principles and methods of water quality testing, treatment, and standards.
- Basic water chemistry principles.
- Basic analytical procedures used in a water quality program.

License/Certification

- Certification required in District-provided CPR/First Aid training.
- Possession of an appropriate, valid driver's license.
- Possession of a Grade I Laboratory Analyst Certificate issued by the AWWA or CWEA is desirable.

Water Quality Technician (continued)

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 and indoor environment; travel from site to site; exposure to noise and all types of weather and temperature conditions; work with or in water; work and/or walk on various surfaces including slippery or uneven surfaces; work on ladders/scaffolds; some tasks may risk exposure to toxic materials.

PHYSICAL • Level Three

Incumbents require sufficient mobility to work in an office, laboratory, and field environment; travel to various locations to take samples; exert moderate but not constant physical effort, typically involving some combination of climbing and balancing, stooping, kneeling, crouching, lifting, carrying, pushing and pulling; walk, stand, and sit for prolonged periods of time; operate assigned equipment and vehicles; operate office equipment including use of a computer keyboard; 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: Employees Association

SALARY RANGE: 27

(WQT)

Water Employee Services Authority

Water Quality Analyst

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 tests and analyses on raw and potable water, wastewater, and biosolids associated with the District's extensive water quality and related technical programs; maintains and operates the District's water/wastewater laboratory for microbiological and chemical analysis in compliance with federal, state, and local requirements; performs professional and scientific work associated with regulatory oversight for District's Laboratory. The position is designated as Laboratory Quality Assurance (QA) officer with responsibility for developing, implementing, coordinating, and managing field and laboratory QA and safety programs; plans and develops a QA program that are vital to the integrity of District's water quality monitoring programs. Achievements expected include compliance with applicable SWRCB Laboratory certification requirements, such as ELAP and NELAP; and OSHA mandates. Ensures data is of highest quality and is collected and analyzed in a timely, efficient, and cost-effective manner; performs non routine investigations and analyses as directed and performs related duties as assigned.

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.

- Receives and logs samples into LIMS and Water Trax. Splits, preserves and prepares samples as required for laboratory analyses to include work sent to contract laboratories; records operations field data into LIMS/WaterTrax; prepares bottles and coolers for sampling events; schedules pickup of bottles and/or samples from Operations and Contract Lab; receives and inputs analytical data into LIMS and WaterTrax from District Laboratory and contract laboratories as needed.
- Prepares and mixes standard reagents, titrants, and solutions used in chemical testing; prepares microbiological media for use in bacteriological testing/analysis.
- Performs a variety of standard laboratory tests, using basic to sophisticated equipment on water samples collected from various areas within the District's water distribution and wastewater treatment systems; performs biological, chemical, microbiological and other physical analyses of water, wastewater and biosolids; calculates and interprets test results; conducts special tests and analyses as directed.
- Performs complex microbiological and chemical water/wastewater quality tests to control treatment processes, determine plant efficiencies and ensure regulatory compliance as well as conduct special tests and analyses as needed.
- Summarizes data and checks for completeness of analysis; performs chemical balance and checks correctness of analysis; re-assigns testing as necessary; checks backlog to meet hold-time and turn-around time requirements.
- Disposes daily process control samples; disposes autoclaved bacteriological samples; stores and maintains samples in refrigerator.
- Assists in identifying, planning, organizing and scheduling the daily and long-term water quality activities and sample events as related to monitoring source waters, reservoirs, treatment plant, distribution system, and ground water sources.
- Coordinates the implementation and maintenance of water/wastewater quality monitoring and testing programs to comply with federal and local regulatory requirements; prepare water quality reports for EVMWD, various regulatory agencies, consultants, and other public agencies.
- Interprets data obtained from tests; enters laboratory results into computer database; maintains a written record of lab results and activities; prepares reports as necessary.
- Generates chain of custody forms in the lab database, ensures sample procedures are followed, reviews chain of custody signature at delivery and oversees filing procedure of compliance paperwork.
- Calculates and compiles test data using spreadsheet applications; summarizes QC data utilizing District software; maintains a written record of laboratory results for review by senior staff; records data in an accurate manner that conforms with department procedures; enters laboratory and QC test results into LIMS; develops spreadsheet applications of calculating results; utilizes District and laboratory software to summarize, track, and report analytical results.
- Enters laboratory test results into LIMS; maintains a written record of lab results and activities; compiles equipment maintenance logs and updates references materials; prepares various technical reports.

REPRESENTATIVE DUTIES

- Calibrate, repairs, cleans and maintains equipment associated with the operation of a water treatment plant and laboratory.
- Receives, organizes and maintains the inventory of laboratory chemicals, supplies, and equipment.
- Coordinates with outside laboratories for special regulatory compliance sampling.
- Assist in Investigating water quality problems, waste spills, and other related problems, including customer complaints, to resolve the issues; assists in recommending corrective action(s) to mitigate the situation; notifies operations staff of unusual field results; works with the public in matters concerning water quality; recognizes customer complaints and collects samples in a professional and tactful manner in order to enhance customer relations.
- As laboratory QA officer plans, organizes, directs, and controls field and laboratory QA activities for projects, coordinates/maintains laboratory certifications. Participates in Environmental Laboratory Accreditation Program and other compliance/certification audits.
- Oversees the implementation of District's safety program for field and laboratory units including updating safety manual, chemical hygiene plan, and Laboratory Quality Assurance Manual (QAM) as needed.
- Develops quality assurance plans and participates in new and existing water quality monitoring programs by reviewing SOPs, QAPPs, and QA needs.
- Responsible for conducting lab audits, reviewing data, requesting reworks, resolving data problems, and assisting in the selection of contract labs.
- Conducts internal and external audits and provides detailed reports to management. Makes recommendations for correction and improvement as necessary.
- Advises management on reviewing technology, methods, and equity with respect to QA aspects.
- Updates methodologies to comply with current EPA, RWQCB, OSHA and other applicable guidelines; prepares and maintains QAM current, writes and modifies SOPs and QA plans according to applicable guidelines.
- Coordinates and/or conducts quality problem investigations.
- Oversees purchases as to the quality of lab equipment, materials, and chemicals.
- Performs investigations, develops, perfects and recommends new water and wastewater test methods and procedures to improve the laboratory's versatility and efficiency.
- Oversees the disposal of organic, inorganic, and biohazard waste material.
- Reads, understands, and ensures compliance with the District Safety Manual; attends safety meetings, as required; reports all accidents, violations, or infractions to supervisor.
- Conducts research projects; investigates, develops, perfects, and recommends new water chemistry methods and procedures to improve the laboratory's versatility and efficiency.
- May be assigned to work independently on weekend and holidays performing routine process control testing.
- 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 full range of professional Perform a full range of professional duties to ensure safe water is served to the public.
- Operate equipment and machinery that may require complex and rapid adjustments, such as laboratory analytical equipment, a motor vehicle, computer terminal, and telephone.
- Develop, modify, implement, and train staff to carryout SOPs.
- Analyze and solve problems.
- Observe and interpret data or information.
- Use math and mathematical and scientific reasoning.
- Learn and apply new information or skills.
- Perform highly detailed and precise work.
- Meet time-sensitive deadlines.
- Coordinate and participate in water quality testing and analysis.
- Review a variety of written reports and documentation including test results.
- Coordinate all sampling, testing, and results for outside agencies.
- Calibrate, clean, and perform minor repairs on assigned equipment and apparatus including laboratory analytical equipment.
- Accurately maintain and update manual and automated records and logs.

Ability to:

- Respond to requests and inquiries and meet time sensitive deadlines.
- Prepare accurate reports and records of test results and special statistical analyses.
- Enter data at a speed and accuracy necessary for successful job performance.
- Ensure adherence to safe work practices and procedures.
- Develop, follow and apply written and oral lab work instructions.
- Communicate effectively orally and in writing.
- Establish and maintain effective working relationships with those contacted in the course of work.
- Make sound independent judgements within established guidelines
- Utilize computers and standard software packages, and specialized Lab software including LIMS and WaterTrax.
- Develop, modifying and institute effective, efficient, and safe analytical procedures.
- Perform laboratory techniques and follow and adopt safe scientific methods and procedures.
- Operating, calibrating, and maintaining a variety of manual and automated laboratory instruments.
- Design and manage mandated QA programs.
- Interpret test results and generate reports.
- Perform research in the chemistry, biology and bacteriology of water and wastewater.
- Work effectively with co-workers, managers, District staff, and as required with governmental agencies and the public.
- Clearly present general, technical, and diagnostic information and ideas, both orally and in writing.
- Train staff in analytical methods, laboratory procedures, and instrument operation.
- Evaluate latest technology available for sample collection or analyses and adapt or develop new analytical methodology.
- Work with or near a wide variety of bases, acids, and other reagents used in cleaning glassware and bottles, and for the testing of trace metals, organics, anions, nutrients, cations, physical parameters, and solids.

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 a Bachelor's Degree from an accredited college or university with major course work in chemistry, microbiology, environmental science, environmental engineering, or a related field.

Experience

- Four (4) years of experience in a certified drinking water or environmental laboratory including two (2) years developing and applying quality assurance criteria and procedures for environmental monitoring or water/wastewater laboratories; or any satisfactory equivalent combination of training and experience.

Knowledge

- Theory, principles, practices, methods, chemicals, and agents used in trace metals, chemical, and physical and biological analyses of environmental samples.
- Water sampling techniques, Operational characteristics of equipment and tools used in the area of assignment including specialized sampling equipment and laboratory analytical equipment.
- Laboratory procedures for water and wastewater analyses.
- Principles of chemistry and mathematics as they apply to water and wastewater analyses.
- Techniques for gathering and reporting data for water quality parameters
- Occupational hazards and standard safety practices.
- Pertinent federal, state, and local codes, laws, and regulations.
- Principles and procedures of electronic and hard copy record keeping and filing.
- Office procedures, methods, and equipment including computers and applicable software applications such as word processing, spreadsheets, and LIMS and WaterTrax databases.
- Technical expertise to plan and develop QA programs that ensure validity of data collected.
- Advanced knowledge of applicable Laboratory QA rules, state and federal QA/QC protocols, OSHA, and ELAP/NELAP guidelines.
- Advanced skills in critically evaluating and validating analytical methodology and data; developing highly complex QA/QC criteria and procedures for laboratory and field section.
- Thorough knowledge of principles, practices, and techniques of chemistry, biology and bacteriology.

Knowledge

- Thorough knowledge of the function, and use of modern testing equipment used in a water/wastewater plant laboratory.
- Considerable knowledge of the methods of testing and treatment of water and wastewater.

License/Certification

- Possession of an appropriate, valid driver's license.
- Certification required in District-provided CPR/First Aid training.
- Possession of valid Laboratory Analyst Grade I Certificate issued by the California Water Environment Association (CWEA).
- Possession of a valid Laboratory Analyst Grade II Certificate issued by the California Water Environment Association (CWEA) within twelve (12) months of hire.

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 and indoor environment; travel from site to site; exposure to noise and all types of weather and temperature conditions; work with or in water; work and/or walk on various surfaces including slippery or uneven surfaces; work on ladders/scaffolds; some tasks may risk exposure to toxic materials.

PHYSICAL

- Level Three

Incumbents require sufficient mobility to work in an office, laboratory, and field environment; travel to various locations to take samples; exert moderate but not constant physical effort, typically involving some combination of climbing and balancing, stooping, kneeling, crouching, lifting, carrying, pushing and pulling; walk, stand, and sit for prolonged periods of time; operate assigned equipment and vehicles; operate office equipment including use of a computer keyboard; 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: Employees Association

SALARY RANGE: 30

(WQA)

Water Employee Services Authority

Wastewater Operations 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 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 liftstations, forcemains 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 waste 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.
- 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 workloads 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.

Wastewater Operations Manager (continued)**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

- Bachelor's degree from an accredited college or university with major course work in wastewater operations and water distribution, business management, business administration, public administration 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.
- Principles of business letter writing and report preparation.
- 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 IV Wastewater Treatment Operator Certificate issued by the California State Water Resources Control Board.
- Possession of a valid Grade V Wastewater Treatment Operator Certificate issued by the California State Water Resources Control Board is desirable.
- Possession of a valid Wastewater Collection Systems Certification issued by the California Water 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.

Wastewater Operations Manager (continued)

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.

JOB STATUS: Exempt: Executive/Confidential

SALARY RANGE: 40

(WWOM)

Water Employee Services Authority

Wastewater Collections System Superintendent

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 Hazwopper 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 CFR1910.146. 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.

- 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 inquiries 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.
- Principles of business letter writing and report preparation.
- 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 California Class B commercial driver's license with tank and air brake endorsements.
- 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.

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: Exempt: Management Team Association

SALARY RANGE: 33

(WWCSS)

Water Employee Services Authority

Collection Systems Maintenance Worker III

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 Hydrojet units and suction tubing on vacuum units; cleans assigned vehicles and equipment.
- Works at wastewater treatment plants under direct supervision of licensed operators.
- Assists Lift station 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 Lift station 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.

Collection Systems Maintenance Worker III

- 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.
- 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 Lift station Maintenance Technician diagnoses and repairs of sewage lift station 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.
- 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 California Class B commercial driver's license with air brake and tank endorsements.
- Possession of a Grade II Collection System Maintenance Technologist Certification issued by the CWEA.
- 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.

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 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

(SCSMW)

Water Employee Services Authority

Collections Systems Maintenance Worker I/II

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.

DISTINGUISHING CHARACTERISTICS

Collections Systems Maintenance Worker I is the entry-level class in the Collections Systems Maintenance Series. Initially under direct supervision, incumbents perform the more routine duties while learning District policies and procedures and becoming familiar with the variety of departmental systems and practices. As experience is gained, duties become more diversified and are performed under more general supervision. This class is alternately staffed with the Collections Systems Maintenance Worker II, and incumbents may advance to the higher level after gaining experience and demonstrating proficiency which meet the qualifications of the higher level.

Collections Systems Maintenance Worker II is the experienced level class in the series, with the ability to independently perform duties. This class is distinguished from the lower classification of Collections Systems Worker I by advanced level skill sets and the relative independence with which duties are performed. The Collections Systems Worker II is further distinguished from the Collections Systems Worker III in that the latter serves as the advanced/journey level in the series, and has regular lead responsibility.

Employees in this classification are subject to on-call, which may include rotating-duty schedule, weekends and 24-hour emergency call out with little or no notice.

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.
- Performs minor lift station maintenance and repair work; assists Mechanical Maintenance Technicians with major repairs.
- 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 under the direction of a CSMW II/III.
- 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.
- 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.

Collections Systems Maintenance Worker I/II (continued)

- Performs related duties as required.

The following duties are typical for a Collections Systems Maintenance Worker II. The incumbent must proficient in the above duties in addition to the following:

- Supervises the use, care, and operation of collection systems equipment including Hydrojet, vacuum and mechanical line cleaning equipment.
- 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.
- Works at wastewater treatment plants under direct supervision of licensed operators.
- 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.
- 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.
-

QUALIFICATIONS

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

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/Training

- Equivalent to the completion of the twelfth grade.

Collections Systems Maintenance Worker I/II (continued)**Experience****When assigned to Collections Systems Maintenance Worker I Classification:**

- Some general maintenance and repair experience is desirable.

When assigned to Collections Systems Maintenance Worker II Classification:

- Two years' experience in the operation, maintenance, installation, and repair of the Collections System.

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

- Certification required in District provided CPR/First Aid training.

When assigned to Collections System Maintenance Worker I Classification:

- Possession of a valid Collections Grade I Certificate issued by the California Water Environment Association.
- Obtain a Class B California Driver's License with tanker endorsement with 18 months of hire.

When assigned to Collections System Maintenance Worker II Classification:

- Possession of a valid Collections Grade II Certificate issued by the California Water Environment Association.
- Possession of a valid Class B California Driver's License with tanker endorsement.

CLASS ADVANCEMENT REQUIREMENTS

Typically, Collections System Maintenance Worker I may be considered for advancement to the Collections System Maintenance Worker II classification after demonstrating proficiency to perform all the major duties assigned to the class.

- Minimum 12-24 months of experience as a Collections Systems Maintenance Worker I
- Must possess a Collections Systems Maintenance Grade II or higher Certificate issued by the California Water Environment Association.
- The incumbents must receive an overall performance rating of "exceeds standards" or better on their most recent annual performance evaluation in order to migrate to the higher class.

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.

Collections Systems Maintenance Worker I/II (continued)

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
- 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; must maintain a body weight of less than 350 pounds which will allow them to safely enter confined space adhering to the equipment’s limitations; 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:	Collections System Maintenance Worker I	22
	Collections System Maintenance Worker II	24

Water Employee Services Authority

Lift Station 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, participates in the operation of the District's sewage lift stations and related support equipment; ensures compliance with the general waste discharge orders issued by the California Water Quality Board. Identifies preventive and corrective maintenance on a wide variety of pumps, valves, check-valves, air compressors, blowers, generators and other equipment related to wastewater lift stations and inputs to a computerized maintenance program. Participates in the development and utilization of District Safety programs. Operates and maintains a variety of light and heavy equipment as well as hand and power 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 daily lift station checks of grounds and equipment, including but not limited to building, pumps, air compressors, air blowers, generators, fuel storage tanks, chemical storage tanks and related controls.
- Observes the integrity and functional operation of all lift station systems and determines the need for repair or replacement of pumps, check valves, digital or analog meters, pressure gauges, electrical switches and indicators and other equipment.
- Performs monthly lift station checks on eyewash stations, fire extinguishers, automatic transfer switch operation, generator operation, and emergency high level float switch operation.
- Provides supervisor with precise description of potential problems and specifications for required equipment and materials and inputs into a computerized maintenance management system.
- Analyzes and records each lift station's operational data. Prepares written reports and documentation on unusual operating incidents.
- Serves as a member of the confined space entry team.
- Fields emergency calls and SCADA alarms during business hours regarding equipment failures or line breaks relating to lift stations and dispatches appropriate personnel.
- Utilizes district SCADA system to operate lift stations, acknowledge alarms, and use trends to identify maintenance needs.
- Performs general cleaning of lift stations; sweeps and washes floors, cleans bathrooms, dusts equipment, empties trash and stocks bathroom supplies.
- Responds to public inquiries in a courteous manner; provides information in accordance with district policies.
- 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:

- Operate light and heavy vehicles and equipment.
- Operate hand and power tools.
- Read and understand technical manuals, blueprints, electrical diagrams and schematics, shop drawings, and sketches.
- Perform heavy manual labor.
- Perform assigned work in accordance with appropriate safety practices and regulations.
- Maintain daily lift station operation logs.
- Perform accurate mathematical calculations.

Lift Station Technician

- Work independently in the absence of supervision.
- Understand and follow oral and written instructions.
- Communicate clearly and concisely, both orally and in writing.
- Establish and maintain effective working relationships with those contacted in the course of work.
- Operate a personal computer.
- Use a computerized maintenance management system for scheduling, tracking and analyzing all work performed.
- Use SCADA to operate, troubleshoot and identify potential problems regarding lift stations.
- Comply with Cal-OSHA respirator facemask fit test requirements.
- Use Self Contained Breathing Apparatus (SCBA).
- Interpret, explain, and enforce department policies and procedures.

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 experience or college level coursework or trade school training in construction and operation of water distribution, wastewater collection system, water treatment plant or wastewater treatment plant.

Experience

- Two years of increasingly responsible experience in the operation and maintenance of municipal wastewater lift stations.

Knowledge

- Operations and maintenance of lift stations.
- Basic electrical and mechanical practices.
- Principles of preventive and predictive maintenance programs.
- Methods and techniques of performing diagnostic troubleshooting services.
- Operational characteristics of tools and equipment used in lift station maintenance activities.
- Proper procedures used in the maintenance and repair of hand and power tools.
- Mathematical principles.
- Operating characteristics of computers and applicable software applications.
- Principles and practices of record keeping.
- Precautions necessary for working with voltages up to 480 volts.
- Occupational hazards and standard safety practices.
- Pertinent federal, state, and local laws, codes, and regulations.

Licenses and Certifications

- Maintain a valid California Class C Driver's License. Driver must maintain a clean driving record and must remain insurable under district's liability insurance policy. Class B with tank endorsement is desirable.
- Obtain district provided CPR/First Aid and Blood Borne Pathogen Certification.
- Possess or obtain a valid Grade I Water Distribution Operator License issued by the California Department of Public Health within 18 months of employment.
- Possess or obtain a valid Grade I Collections System Maintenance License issued by the California Water Environment Association within 12 months of employment.
- Be willing to be trained for (and maintain) 8 hour First Responder level certification 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

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

PHYSICAL

- Level Three
- NIDA
- Pulmonary

Incumbents require sufficient mobility to 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 100lbs, exposure to harsh weather, hazardous chemicals, confined spaces, respirator. Use of large mechanical tools, electrical parts and frequent exposure to extended periods of noise; 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:Employees Association

SALARY RANGE: 24

(LST)

Water Employee Services Authority

Maintenance 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 administrative direction, directs, manages, supervises, and coordinates the activities and operations of the Maintenance Division, one of three Divisions within the Operations Department. The other two divisions are Water Operations and Wastewater Operations. The Maintenance Division provides services to the other two divisions related to the preventive, predictive, and reactive maintenance and repair of water and wastewater systems. The three sections within the Maintenance Division are Facilities Maintenance, Electrical Maintenance, and Mechanical Maintenance. The Maintenance Manager oversees the work of these three sections as they maintain facilities, electrical, and mechanical aspects of water wells, booster pump stations, reservoirs (tanks and open water), water treatment facilities, wastewater treatment facilities, and headquarters buildings. The Maintenance Manager formulates and implements operations/maintenance policies and procedures within administrative guidelines; oversees preventive/predictive maintenance planning, scheduling and repair; 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 Maintenance Division in the disciplines of facilities maintenance, electrical maintenance, and mechanical maintenance.
- 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 Maintenance Division's annual budget; participates in the forecast of funds needed for staffing, equipment, materials, and supplies; monitors and approves expenditures; implements adjustments.
- Administers general and skilled preventive, predictive and planned maintenance and reactive repair work; schedules and assigns work projects to subordinate supervisors; coordinates and prioritizes work assignments of supervisors; ensures that operational checks and preventive maintenance programs are properly and effectively performed and directs inspection of assigned water operations facilities to determine planned operation and maintenance needs.
- Evaluates division activities, analyzes problems; recommends and implements improvements; interprets, coordinates, develops and enforces maintenance methods and procedures to achieve and maintain the efficient, consistent performance of preventive maintenance and repair operations.
- Reviews and studies maintenance and operation procedures to improve efficiency and reduce costs; monitors developments in the maintenance and operation field through attendance of appropriate seminars, workshops and conferences.
- Researches and keeps abreast of technological changes/advancements through trade journals, publications and examination of similar municipal water utility operations, and by interaction with other municipal/industry utility professionals; recommends and initiates improved work methods procedures; recommends upgrades to District specifications and new products relating to the maintenance and operation of the District's water utility system.

Maintenance Manager (continued)

- Plans and directs facilities, electrical, and mechanical maintenance functions in accordance with manufacturers recommendations or industry standards to minimize breakdowns and provide optimum performance in a cost effective manner; schedules and coordinates planned maintenance projects and sets priorities for water operations and maintenance division work orders in cases where equipment problems, reliability of operation or water operations safety is involved; participates in District-level planning in matters which affect maintenance operations; reviews plans of system and equipment design or modification for maintenance implications and recommends improvements if appropriate.
- Reviews and approves paperwork including work order requests, confined space entry permits, purchase requisitions, personnel time sheets and overtime usage; reviews, implements and manages job plans.
- Assists the Water and Wastewater Divisions with the administration of reactive and preventative maintenance activities for the water and wastewater utility system.
- 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 responsible staff assistance to the Director of Operations; conducts a variety of organizational studies, investigations, and operational studies; recommends modifications to maintenance programs, policies, and procedures as appropriate.
- Serves as the liaison for the Maintenance Division to other divisions, departments, and outside agencies; negotiates and 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 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 ensures compliance with the WESA 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 maintenance 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.

Maintenance Manager (continued)**Ability to:**

- 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/Training

- Equivalent to a Bachelor's degree from an accredited college or university with major course work in science or business related fields. In lieu of degree, 7 years managerial experience will be accepted.

Experience

- Seven years of increasingly responsible experience in utility related maintenance, operation and construction such as: water pumping and distribution systems, water/wastewater treatment plant maintenance, collection system/lift stations maintenance, water booster pump/well maintenance, mechanical equipment maintenance and municipal infrastructure construction; including four years of administrative and supervisory responsibility.

Knowledge

- Operational characteristics, services, and activities of a maintenance program.
- Advanced principles and practices of water distribution systems, including wells and booster stations and related operational and preventive maintenance methods, techniques, tools and equipment.
- Water treatment, wastewater treatment/collection system principles.
- Construction management practices specific to the building trade (i.e., building construction, concrete, masonry).
- Automotive and construction machinery mechanical maintenance and repair practices.
- Methods and techniques of welding & fabrication.
- Occupational hazards and standard safety practices.
- 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.
- Principles of business letter writing and report preparation.
- 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 California Water Environment Certification in Collection Systems Maintenance is desirable.
- Possession of a State of California Certification in Water or Wastewater Treatment Plant Operations is desirable.

Maintenance Manager (continued)

License/Certification

- Possession of a Grade V Water Distribution Operator Certificate (D5) issued by the State of California Department of Public Health.

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 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: Executive/Confidential

SALARY RANGE: 40

(MM)

Water Employee Services Authority

Mechanical Maintenance Superintendent

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, plans, assigns, directs and inspects the work of field service crews and personnel involved in the installation, maintenance, repair and servicing of mechanical equipment and machinery used in the production, treatment, storage, transmission and distribution of potable, non-potable, and reclaimed water, and the treatment and collection of wastewater.

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.

- Directs, coordinates, and reviews the work plan for assigned maintenance 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.
- Inspects work sites before, during and after completion to assure work is completed in a satisfactory and thorough manner; ensures the adherence to safe work practices by field maintenance personnel; participates in work activities as necessary.
- Plans the timely requisition of supplies, materials, and equipment needed to perform assigned tasks; checks equipment for proper and safe operation; communicates any inefficiencies to immediate supervisor.
- Reviews vendor and/or contractor invoices and proposals and recommends payment upon receipt of material or completion of work.
- Provides staff assistance to the Maintenance Manager; conducts a variety of studies and investigations; develops and recommends modifications to assigned maintenance programs, policies, and procedures as appropriate.
- Maintains records concerning operations and programs; prepares reports on operations and activities.
- Coordinates assigned 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 maintenance and operations; directs and participates in the incorporation of new developments into program areas, as appropriate.
- Responds to and resolves citizen inquiries and complaints.
- Responds to emergency call out situations and performs standby duty for emergency response on weekends and holidays according to predetermined schedule.
- 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.

- Organizes, supervises, schedules, assigns, participates in, and evaluates the work of skilled and unskilled workers engaged in various activities associated with the installation, maintenance, and repair of domestic, reclaimed, agricultural water, and wastewater pumps, motors, and other related equipment.
- Organizes, schedules, assigns, coordinates and supervises directly and through subordinate technical staff, the corrective, preventive and predictive maintenance and repair of a wide variety of pumps, valves, engines, motors, and other machinery and mechanical equipment associated with any of the District's water and wastewater facilities.
- Recommends, prepares, implements, and supervises a preventive/predictive maintenance repair and replacement program for the District's various mechanical equipment; utilizes maintenance computer applications to increase efficiency and reliability of recurring predictive maintenance tasks.
- Reviews project plans and drawings with the Engineering Division project managers and crew supervisors; inspects and supervises construction, rehabilitation, and repair of District's water wells, pumping systems and other projects, as necessary; makes recommendations based on field observation and operational experience.
- Plans upgrades of various mechanical equipment, including pumps and motors.

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:

- 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.
- Read and interpret blueprints, schematics, plans, and drawings.
- 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.
- Operate office equipment including computers and supporting word processing, spreadsheet, and database applications.
- 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/Training

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

Experience

- Six years of responsible experience in the Mechanical Maintenance and repair of water and wastewater systems, including three years of administrative and supervisory responsibility.

Knowledge

- Principles, methods, tools, equipment, safety procedures and regulatory requirements related to area of assignment.
- Materials, methods, practices and equipment used in maintenance and repair programs.
- Methods and techniques of conducting on-site work inspections.
- Mandated rules, regulations, and standards in assigned areas.
- Principles and practices of general construction.
- Operational characteristics of a variety of maintenance and repair tools and equipment.
- Principles of basic report preparation.
- Modern and complex principles and practices of preventive maintenance.
- Occupational safety hazards and safe work practices.
- 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.
- Principles of business letter writing and report preparation.
- Office procedures, methods, and equipment including computers and applicable software applications such as word processing, spreadsheets, and databases.

Licenses & Certification

- Possession of a valid Class "B" California driver's license is desirable.
- Possession of a valid Grade IV Mechanical Technologist Certificate issued by the California Water Environment Association is desirable.
- Possession of a confined space entry supervisor certificate.
- Certification required in District provided CPR/First Aid training within twelve (12) months from date of hire.
- Possession of an appropriate, valid California 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 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: Exempt: Management Team Association

SALARY RANGE: 33

(FMSPTMM)

Water Employee Services Authority

Mechanical Technician III

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, participates in the more complex and difficult work of staff responsible for the installation, maintenance, inspection and servicing of mechanical equipment, components, machinery and facilities associated with the production, pumping storage and delivery of potable, agricultural, reclaimed and wastewater; oversees and participates in performing preventive and predictive maintenance on assigned equipment; diagnoses, 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; repairs and replaces a wide variety of mechanical equipment, systems and machinery such as pumps, motors, valves and other equipment common to a large wastewater and waterworks system. Performs preventive and corrective maintenance on a wide variety of pumps, engines and other equipment related to wastewater treatment plants, water treatment plants, wells, booster stations and sewer lift stations; obtains, analyzes and inputs to a computer program the preventive maintenance information on the maintenance and repair of a wide variety of pumps, valves, check-valves, engines and other equipment at any of the District's water and wastewater facilities; participates in the development of District Safety programs; and operates and maintains a variety of light and heavy equipment as well as hand and power 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.

- Plans, leads, and reviews the work of staff responsible for the maintenance, operation, diagnostic testing, installation and repair of technical maintenance and repair involved in the District's wells, boosters, water and wastewater treatment plants, sewage lift stations, wastewater collection systems and related support equipment.
- Trains assigned employees in their areas of work including wells, boosters, water and wastewater treatment plants, sewage lift stations, wastewater collection systems maintenance methods, procedures, and techniques.
- Supervises the use, care, and operation of wells, boosters, water and wastewater treatment plants, sewage lift stations and wastewater collection systems maintenance equipment including crane truck, multi-meters, megometers, ammeters, and loop calibrator.
- Leads and performs the installation of electrical and mechanical equipment including pumps, motors, valves, solenoids, timers; installs and maintains mechanical seals, seal fluid filters, lighting fixtures, receptacles, switches, fuses, bearings and gaskets.
- Oversees and participates in diagnosing and performing corrective action involving wells, boosters, water and wastewater treatment plants, sewage lift stations, and wastewater collection systems malfunctions using a variety of specialized tools and testing/diagnostic instrumentation.
- Maintains, and performs repairs at all District wells, boosters, water and wastewater treatment plants, sewage lift stations, wastewater collection systems; 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.
- Responsible for preventive/predictive maintenance program functions including the maintenance, repair service and overhaul activities on wells, pumping stations, water/wastewater treatment plants and other equipment related to the production, pumping, storage and delivery of potable, agricultural, reclaimed water and wastewater; ensures maximum performance and efficiency of equipment.
- Understands care and operation of assigned maintenance light and heavy equipment and tools including service trucks mobile knuckle crane, dump trucks, forklifts, portable/stationary generators, pressure washers, air compressors, jack hammers, pneumatic, hydraulic and electric tools and other equipment as assigned; sets up and uses rigging equipment to move pumps, motors and other heavy parts or equipment; uses diagnostic, analytical and measurement instrumentation/tools.
- 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.
- Operates a large knuckle boom crane to install new pumps and motors on booster pumps and wells.

Mechanical Technician III (continued)

- Diagnoses well and booster pumping station operation using specialized tools and testing/diagnostic instrumentation; troubleshoots pumps and motors and makes appropriate adjustments and repairs; inspects, maintains and repairs hydraulic and pneumatic systems; installs, modifies, inspects and maintains piping associated with wells and water pumping stations.
- Assists in maintaining and repairing dam hydraulic gate systems.
- Reads, understands, interprets and works from blueprints, plans, schematics, diagrams and maps as related to wells, pumping stations and hydraulic control equipment.
- Schedules, coordinates and performs activities with other sections and divisions; operates crane for all departments within the District as necessary; assists with installation of valves; assists with fire flow tests.
- Inspects and monitors contractor performance and reports on contractor operations including pumping station and well rehabilitation projects.
- Maintains accurate, up to date records on all maintenance repair and service activity; requisitions materials and keeps inventory of replacement parts and equipment; prepares reports related to wells, boosters, water and wastewater treatment plants, sewage lift stations, wastewater collection systems maintenance and repair; may assist supervisor in department budget preparation.
- Performs mechanical work in the maintenance, repair, overhauling, and/or rebuilding of equipment, components, pumps, valves, electrical motors, and engines associated with and used in wells, boosters, water and wastewater treatment plants, sewage lift stations, and wastewater collection systems.
- 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.
- Performs preventative mechanical maintenance by inspecting and cleaning equipment, changing out lubricating fluids, repacking bearings, adjusting and replacing belts, gear boxes, pistons, filters, valves, gaskets, and other related parts.
- Conducts equipment evaluation using diagnostic monitors such as alignment gauges, megger and vibration monitoring equipment and infrared thermal imaging devices.
- Performs corrective mechanical maintenance by troubleshooting cause of malfunction using visual inspection and precision measuring and testing instruments and replacing or repairing broken parts such as gauges, gaskets, plugs, coils, wires, bearings, valves, pistons, rings, crankshafts, and pumps.
- Rebuilds equipment by disassembling, cleaning, and repairing mechanical malfunctions; reassembles and tests equipment to ensure that it is in proper working condition.
- Installs and troubleshoots new electromechanical equipment and tests for proper operation.
- Responds to plant emergencies and problems as required; makes emergency field repairs; responds to after hour emergencies when called upon to do so.
- Operates and maintains a variety of hand tools, power tools, pneumatic tools, and other equipment in the performance of assigned mechanical duties.
- Defines and enters into a computer program the scheduled maintenance and repair task descriptions on horizontal, centrifugal and deep well type turbine pumps, engines, motors and other mechanical or electrical equipment.
- Works with other wastewater staff and sub-contractors in performing maintenance duties as necessary including electrical and electronic repairs and maintenance.
- Orders replacement parts to perform maintenance and repairs as necessary; performs field inventories and verifies equipment nameplate date.
- Provides as-built changes on plans for records.
- 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 material as required.
- 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:

- Independently perform the most difficult maintenance and repair activities on pump maintenance equipment.
- Interpret, explain, and enforce department policies and procedures.
- Perform a variety of tasks involving the installation, construction, maintenance and repair associated with booster pumps, pumping stations, sewer lift stations, reservoirs, and domestic, reclaimed, and agricultural water wells.
- Troubleshoot, repair, and maintain a variety of electro/ mechanical equipment in the water/wastewater treatment plants.
- Accurately diagnose mechanical repair needs.
- Operate a variety of maintenance and repair equipment in a safe and effective manner.
- Test, make repairs to, and perform preventive maintenance on motors, pumps, valves and other equipment used in wastewater and water treatment plants.
- Read and understand technical manuals, blueprints, electrical diagrams and schematics, shop drawings, and sketches.
- Perform heavy manual labor.
- Perform assigned work in accordance with appropriate safety practices and regulations.
- Maintain a variety of repair records.
- Work independently in the absence of supervision.
- Understand and follow oral and written instructions.
- Communicate clearly and concisely, both orally and in writing.
- Establish and maintain effective working relationships with those contacted in the course of work.
- Use a computerized maintenance management system for scheduling, tracking and analyzing all work performed on equipment.
- Comply with Cal-OSHA respirator facemask fit test requirements.
- Use Self Contained Breathing Apparatus (SCBA).
- 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.

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 additional courses or training in a maintenance related field required.

Experience

- Five years of increasingly responsible experience in the installation, maintenance and repair of wells, pumps and other equipment common to a large water/wastewater system.

Knowledge

- Operations, services, and activities of both a water and wastewater maintenance and repair program.
- Principles of lead supervision and training.
- Basic electrical and mechanical practices.
- Advanced principles of preventive and predictive maintenance programs.
- Principles, methods, materials, tools and equipment required for installation, maintenance, diagnoses, and repair of domestic, reclaimed, and agricultural water pumps, and operation and maintenance of booster pumping stations and domestic, reclaimed, and agricultural water wells.
- Principles, methods, materials, tools and equipment used in the maintenance and repair of pumps, valves, pump drive gear heads, gear reduction boxes, engines, and motors.
- Operational characteristics of both water and wastewater treatment plant systems and equipment.
- Advanced methods and techniques of performing diagnostic troubleshooting services.
- Operational characteristics of tools and equipment used in pump maintenance activities.
- Proper procedures used in the maintenance and repair of hand and power tools.
- Operating characteristics of computers and applicable software applications.
- Principles and practices of record keeping.
- Occupational hazards and standard safety practices.
- Pertinent federal, state, and local laws, codes, and regulations.

Licenses

- Possession of an appropriate, valid California Class B Driver's License w/ Air Brakes and Tank endorsements.
- Possession of a valid D2 Water Distribution Certificate issued by the State of California, Department of Public Health.
- Possession of a Grade III Plant Maintenance Technologist issued by the CWEA.
- Possession of a Grade I Collection Systems Maintenance Technologist certification issued by the CWEA.
- Plant Maintenance Electrical/Instrumentation Certification is desirable.
- Be willing to be trained to (and maintain) 8 hour First Responder level certification 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

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

Mechanical Technician III (continued)

PHYSICAL

- Level Three
- NIDA
- Pulmonary

Incumbents require sufficient mobility to 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: Non-Exempt: Employees Association

SALARY RANGE: Mechanical Technician III - RANGE 29
(MTIII)

Water Employee Services Authority

Mechanical Technician II

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, participates in the more complex and difficult work of staff responsible for the installation, maintenance, inspection and servicing of mechanical equipment, components, machinery and facilities associated with the production, pumping storage and delivery of potable, agricultural, reclaimed and wastewater; oversees and participates in performing preventive and predictive maintenance on assigned equipment; diagnoses, 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; repairs and replaces a wide variety of mechanical equipment, systems and machinery such as pumps, motors, valves and other equipment common to a large wastewater and waterworks system. Performs preventive and corrective maintenance on a wide variety of pumps, engines and other equipment related to wastewater treatment plants, water treatment plants, wells, booster stations and sewer lift stations; obtains, analyzes and inputs to a computer program the preventive maintenance information on the maintenance and repair of a wide variety of pumps, valves, check-valves, engines and other equipment at any of the District's water and wastewater facilities; participates in the development of District Safety programs; and operates and maintains a variety of light and heavy equipment as well as hand and power 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.

- Responsible for preventive/predictive maintenance program functions including the maintenance, repair service and overhaul activities on wells, pumping stations, water/wastewater treatment plants and other equipment related to the production, pumping, storage and delivery of potable, agricultural, reclaimed and wastewater; ensures maximum performance and efficiency of equipment.
- Understands care and operation of assigned maintenance light and heavy equipment and tools including service trucks mobile knuckle crane, dump trucks, forklifts, portable/stationary generators, pressure washers, air compressors, jack hammers, pneumatic, hydraulic and electric tools and other equipment as assigned; sets up and uses rigging equipment to move pumps, motors and other heavy parts or equipment; uses diagnostic, analytical and measurement instrumentation/tools.
- 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.
- Operates a large knuckle boom crane to install new pumps and motors on booster pumps and wells.
- Diagnoses well and booster pumping stations and sewer lift station operation using specialized tools and testing/diagnostic instrumentation; troubleshoots pumps and motors and makes appropriate adjustments and repairs; inspects, maintains and repairs hydraulic and pneumatic systems; installs, modifies, inspects and maintains piping associated with wells, water and wastewater pumping stations.
- Assists in maintaining and repairing dam hydraulic gate systems.
- Reads, understands, interprets and works from blueprints, plans, schematics, diagrams and maps as related to wells, water and wastewater pumping stations and hydraulic control equipment.
- Schedules, coordinates and performs activities with other sections and divisions; operates crane for all departments within the District as necessary; assists with installation of valves; assists with fire flow tests.
- Inspects and monitors contractor performance and reports on contractor operations including pumping station and well rehabilitation projects.
- Maintains accurate, up to date records on all maintenance repair and service activity; requisitions materials and keeps inventory of replacement parts and equipment; prepares reports related to wells and booster pumping station maintenance and repair; may assist supervisor in department budget preparation.
- Performs mechanical work in the maintenance, repair, overhauling, and/or rebuilding of equipment, components, pumps, valves, electrical motors, and engines associated with and used in water and wastewater treatment plants.

Mechanical Technician II (continued)

- 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 checklists, 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 related duties as required.

QUALIFICATIONS- II

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:

- Independently perform the most difficult maintenance and repair activities on pump maintenance equipment.
- Interpret, explain, and enforce department policies and procedures.
- Perform a variety of tasks involving the installation, construction, maintenance and repair associated with booster pumps, pumping stations, sewer lift stations, reservoirs, and domestic, reclaimed, and agricultural water wells.
- Troubleshoot, repair, and maintain a variety of electro/ mechanical equipment in the water/wastewater treatment plants.
- Accurately diagnose mechanical repair needs.
- Operate a variety of maintenance and repair equipment in a safe and effective manner.
- Test, make repairs to, and perform preventive maintenance on motors, pumps, valves and other equipment used in wastewater and water treatment plants.
- Read and understand technical manuals, blueprints, electrical diagrams and schematics, shop drawings, and sketches.
- Perform heavy manual labor.
- Perform assigned work in accordance with appropriate safety practices and regulations.
- Maintain a variety of repair records.
- Work independently in the absence of supervision.
- Understand and follow oral and written instructions.
- Communicate clearly and concisely, both orally and in writing.
- Establish and maintain effective working relationships with those contacted in the course of work.
- Use a computerized maintenance management system for scheduling, tracking and analyzing all work performed on equipment.
- Comply with Cal-OSHA respirator facemask fit test requirements.
- 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.
- Use Self Contained Breathing Apparatus (SCBA).

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 additional courses or training in a maintenance related field required.

Mechanical Technician II**Experience**

- Three years of increasingly responsible experience in the installation, maintenance and repair of wells, pumps and other equipment common to a large water/wastewater system.

Knowledge

- Operations, services, and activities of both a water and wastewater maintenance and repair program.
- Principles of lead supervision and training.
- Basic electrical and mechanical practices.
- Advanced principles of preventive and predictive maintenance programs.
- Principles, methods, materials, tools and equipment required for installation, maintenance, diagnoses, and repair of domestic, reclaimed, and agricultural water pumps, and operation and maintenance of booster pumping stations and domestic, reclaimed, and agricultural water wells.
- Principles, methods, materials, tools and equipment used in the maintenance and repair of pumps, valves, pump drive gear heads, gear reduction boxes, engines, and motors.
- Operational characteristics of both water and wastewater treatment plant systems and equipment.
- Advanced methods and techniques of performing diagnostic troubleshooting services.
- Operational characteristics of tools and equipment used in pump maintenance activities.
- Proper procedures used in the maintenance and repair of hand and power tools.
- Operating characteristics of computers and applicable software applications.
- Principles and practices of record keeping.
- Occupational hazards and standard safety practices.
- Pertinent federal, state, and local laws, codes, and regulations.

Licenses

- Possession of a valid D2 Water Distribution Certificate issued by the State of California, Department of Public Health.
- Possession of a valid Grade II Mechanical Technology Certificate issued by the California Water Environment Association.
- Must hold or be willing to be trained to 8 hour First Responder level for disaster preparedness and emergency response purposes.
- Possession of an appropriate, valid California Class B Driver's License w/ Air Brakes and Tank endorsements.
- Possession of a valid Grade I Collection System Maintenance certification issued by the California Water 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

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

Mechanical Technician II (continued)

PHYSICAL

- Level Three
- NIDA
- Pulmonary

Incumbents require sufficient mobility to 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: Non-Exempt: Employees Association

SALARY RANGE: Mechanical Technician II - RANGE 27

(MTII)

Elsinore Valley Municipal Water District

Mechanical Technician I

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, participates in the more complex and difficult work of staff responsible for the installation, maintenance, inspection and servicing of mechanical equipment, components, machinery and facilities associated with the production, pumping storage and delivery of potable, agricultural, reclaimed and wastewater; oversees and participates in performing preventive and predictive maintenance on assigned equipment; diagnoses, 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; repairs and replaces a wide variety of mechanical equipment, systems and machinery such as pumps, motors, valves and other equipment common to a large wastewater and waterworks system. Performs preventive and corrective maintenance on a wide variety of pumps, engines and other equipment related to wastewater treatment plants, water treatment plants, wells, booster stations and sewer lift stations; obtains, analyzes and inputs to a computer program the preventive maintenance information on the maintenance and repair of a wide variety of pumps, valves, check-valves, engines and other equipment at any of the District's water and wastewater facilities; participates in the development of District Safety programs; and operates and maintains a variety of light and heavy equipment as well as hand and power 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.

- Responsible for preventive/predictive maintenance program functions including the maintenance, repair service and overhaul activities on wells, pumping stations, water/wastewater treatment plants, lift stations and other equipment related to the production, pumping, storage and delivery of potable, agricultural, reclaimed and wastewater; ensures maximum performance and efficiency of equipment.
- Understands care and operation of assigned maintenance light and heavy equipment and tools including service trucks mobile knuckle crane, dump trucks, forklifts, portable/stationary generators, pressure washers, air compressors, jack hammers, pneumatic, hydraulic and electric tools and other equipment as assigned; sets up and uses rigging equipment to move pumps, motors and other heavy parts or equipment; uses diagnostic, analytical and measurement instrumentation/tools.
- Operates a large knuckle boom crane to install new pumps and motors on booster pumps and wells.
- Diagnoses well and booster pumping station operation using specialized tools and testing/diagnostic instrumentation; troubleshoots pumps and motors and makes appropriate adjustments and repairs; inspects, maintains and repairs hydraulic and pneumatic systems; installs, modifies, inspects and maintains piping associated with wells and water pumping stations.
- Assists in maintaining and repairing dam hydraulic gate systems.
- Reads, understands, interprets and works from blueprints, plans, schematics, diagrams and maps as related to wells, pumping stations and hydraulic control equipment.
- Maintains accurate, up to date records on all maintenance repair and service activity; requisitions materials and keeps inventory of replacement parts and equipment.
- Performs mechanical work in the maintenance, repair, overhauling, and/or rebuilding of equipment, components, pumps, valves, electrical motors, and engines associated with and used in lift station and wastewater treatment plants.
- Performs preventative mechanical maintenance by inspecting and cleaning equipment, changing out lubricating fluids, repacking bearings, adjusting and replacing belts, gear boxes, pistons, filters, valves, gaskets, and other related parts.
- Conducts equipment evaluation using diagnostic monitors such as alignment gauges, megor and vibration monitoring equipment and infrared thermal imaging devices.
- Performs corrective mechanical maintenance by troubleshooting cause of malfunction using visual inspection and precision measuring and testing instruments and replacing or repairing broken parts such as gauges, gaskets, plugs, coils, wires, bearings, valves, pistons, rings, crankshafts, and pumps.

REPRESENTATIVE DUTIES

- Rebuilds equipment by disassembling, cleaning, and repairing mechanical malfunctions; reassembles and tests equipment to ensure that it is in proper working condition.
- Installs and troubleshoots new electromechanical equipment and tests for proper operation.
- Responds to plant and lift station emergencies and problems as required; makes emergency field repairs; responds to after hour emergencies when called upon to do so.
- Operates and maintains a variety of hand tools, power tools, pneumatic tools, and other equipment in the performance of assigned mechanical duties.
- Works with other water/wastewater staff and sub-contractors in performing maintenance duties as necessary including electrical and electronic repairs and maintenance.
- Orders replacement parts to perform maintenance and repairs as necessary; performs field inventories and verifies equipment nameplate date.
- Provides as-built changes on plans for records.
- Responds to public inquiries in a courteous manner; provides information within the area of assignment; resolves complaints in an efficient and timely manner.
- Reads, understands, and ensures compliance with the District Safety Manual; attends safety meetings, as required; reports all accidents, violations, or infractions to supervisor.
- 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 preventative mechanical maintenance by inspecting and cleaning equipment, changing out lubricating fluids, repacking bearings, adjusting and replacing belts, gear boxes, pistons, filters, valves, gaskets, and other related parts.
- Conducts equipment evaluation using diagnostic monitors such as alignment gauges, megor and vibration monitoring equipment and infrared thermal imaging devices.
- Performs corrective mechanical maintenance by troubleshooting cause of malfunction using visual inspection and precision measuring and testing instruments and replacing or repairing broken parts such as gauges, gaskets, plugs, coils, wires, bearings, valves, pistons, rings, crankshafts, and pumps.
- Rebuilds equipment by disassembling, cleaning, and repairing mechanical malfunctions; reassembles and tests equipment to ensure that it is in proper working condition.
- Installs and troubleshoots new electromechanical equipment and tests for proper operation.
- Responds to plant emergencies and problems as required; makes emergency field repairs; responds to after hour emergencies when called upon to do so.
- Operates and maintains a variety of hand tools, power tools, pneumatic tools, and other equipment in the performance of assigned mechanical duties.
- Defines and enters into a computer program the scheduled maintenance and repair task descriptions on horizontal, centrifugal and deep well type turbine pumps, engines, motors and other mechanical or electrical equipment.
- Works with other wastewater staff and sub-contractors in performing maintenance duties as necessary including electrical and electronic repairs and maintenance.
- Orders replacement parts to perform maintenance and repairs as necessary; performs field inventories and verifies equipment nameplate date.
- Provides as-built changes on plans for records.
- 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 material as required.
- 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:

- Independently perform the most difficult maintenance and repair activities on pump maintenance equipment.
- Interpret, explain, and enforce department policies and procedures.
- Perform a variety of tasks involving the installation, construction, maintenance and repair associated with booster pumps, pumping stations, sewer lift stations, reservoirs, and domestic, reclaimed, and agricultural water wells.
- Troubleshoot, repair, and maintain a variety of electro/ mechanical equipment in the water/wastewater treatment plants.
- Accurately diagnose mechanical repair needs.
- Operate a variety of maintenance and repair equipment in a safe and effective manner.
- Test, make repairs to, and perform preventive maintenance on motors, pumps, valves and other equipment used in wastewater and water treatment plants.
- Read and understand technical manuals, blueprints, electrical diagrams and schematics, shop drawings, and sketches.
- Perform heavy manual labor.
- Perform assigned work in accordance with appropriate safety practices and regulations.
- Maintain a variety of repair records.
- Work independently in the absence of supervision.
- Understand and follow oral and written instructions.
- Communicate clearly and concisely, both orally and in writing.
- Establish and maintain effective working relationships with those contacted in the course of work.
- Use a computerized maintenance management system for scheduling, tracking and analyzing all work performed on equipment.
- Comply with Cal-OSHA respirator facemask fit test requirements.
- 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.
- Use Self Contained Breathing Apparatus (SCBA).

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 additional courses or training in a maintenance related field required.

Experience

- Two years of increasingly responsible experience in the maintenance and mechanical repair of equipment used in the collection and treatment of water or wastewater systems.

Knowledge

- Operations, services, and activities of both a water and wastewater maintenance and repair program.
- Principles of lead supervision and training.
- Basic electrical and mechanical practices.

Knowledge

- Principles of preventive and predictive maintenance programs.
- Principles, methods, materials, tools and equipment required for installation, maintenance, diagnoses, and repair of domestic, reclaimed, and agricultural water pumps, and operation and maintenance of booster pumping stations and domestic, reclaimed, and agricultural water wells.
- Principles, methods, materials, tools and equipment used in the maintenance and repair of pumps, valves, pump drive gear heads, gear reduction boxes, engines, and motors.
- Operational characteristics of both water and wastewater treatment plant systems and equipment.
- Methods and techniques of performing diagnostic troubleshooting services.
- Operational characteristics of tools and equipment used in pump maintenance activities.
- Proper procedures used in the maintenance and repair of hand and power tools.
- Operating characteristics of computers and applicable software applications.
- Principles and practices of record keeping.
- Occupational hazards and standard safety practices.
- Pertinent federal, state, and local laws, codes, and regulations.

Licenses

- Possession of an appropriate, valid California Class B Driver's License with Air Brakes and Tank endorsements within 12 months of employment.
- Possession of a valid Grade I Mechanical Technology Certificate issued by the California Water Environment Association within 18 months of employment.
- Possess or obtain a valid Grade I Water Distribution Operator License issued by the California State Water Resources Control Board within 18 months of employment.
- Possess or obtain a valid Grade I Collection System Maintenance Certificate issued by the California Water Environment Association within 18 months of employment.
- Certification required in District provided CPR/First Aid and Bloodborne Pathogen training.
- Be willing to be trained to (and maintain) 8 hour First Responder level certification 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

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

PHYSICAL

- Level Three
- NIDA
- Pulmonary

Incumbents require sufficient mobility to 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: Non-Exempt: Employees Association

SALARY RANGE: 26

(MTI)

Elsinore Valley Municipal Water District

SCADA Specialist I/II/III

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, plans, organizes and participates in a wide variety of advanced professional and technical duties related to the construction, maintenance and repair of SCADA (Supervisory Control and Data Acquisition), telemetry, instrumentation, motor control centers, process control systems and numerous other types of electronic and electrical equipment and machinery associated with municipal pumping, storage and distribution of potable, reclaimed and agricultural water systems and municipal water and wastewater treatment plants.

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.

- Participates in the design, management, planning, operation, integration, maintenance, repair, installation and modification of telemetry, process, and equipment control and monitoring systems, operator interface graphics, ladder
- logic control, communication equipment, application programs and system support programming; reviews, and participates with technical staff in monitoring the database for the SCADA system to display and archive accurate information; researches and evaluates new and existing operational methods, software, techniques and equipment and recommends their application.
- Plans, directs, inspects, participates, schedules and coordinates with other District staff and contractors in the development and installation of systems and equipment used in the automation/upgrading of District facilities.
- Represents the District and acts as liaison between the District and outside professional consultants in relation to the planning, construction, and implementation of District SCADA and control systems.
- Troubleshoots, repairs, programs, configures, tests, and performs maintenance on a variety of industrial electrical and electronic systems, components and equipment relating to municipal pumping, storage and distribution of potable, reclaimed and agricultural water systems and municipal water and wastewater treatment plants. Performs bench repairs at the component level in shop and field settings.
- Requisitions necessary parts, tools, equipment & supplies; participates in developing annual budget for SCADA and instrumentation needs.
- Uses standard and specialized testing equipment such as voltmeters, multimeters, logic analyzers, megohm meters, amp meters, infrared pyrometers, digital analyzers, frequency generators, oscilloscopes and other specialized test equipment.
- Maintains, reviews, and records a variety of reports, including daily activity reports, work orders, work requests, monthly statistical reports, and other reports and records as required. Reviews vendor/contractor invoices and proposals and recommends payment upon receipt of material/completion of work.
- Ability to read, interpret, plan and lay out jobs from blueprints, electrical diagrams, schematics, manufacturer instructions, directions and verbal instruction; maintains records in the form of blueprints, plans and specifications for industrial electrical and instrumentation, equipment and devices. Upon completion of in-house projects produces drawings of modifications made.
- Trains and instructs other staff in the operation and maintenance and safe work practices concerning SCADA and related equipment.
- Must be able to respond to emergency callout situations as necessary and participate in standby or on-call duty including emergency response during after hours, weekends and holidays according to predetermined schedules.
- Investigates and resolves complaints related to municipal utility maintenance and repair.
- Works with and in areas containing chemicals, dust, fumes, vapors, gases, exhaust, raw sewage, grease and solvents, may carry heavy materials and equipment over uneven terrain.
- Reads, understands, and complies with the District Safety Manual; has proper knowledge of use of power operated and hand tools and safety gear; attend safety meetings as required; reports all accidents, violations, or infractions to supervisor.

REPRESENTATIVE DUTIES

- 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.
- 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 for work on time.
- Interact effectively with co-workers.
- Understand & follow work rules and procedures.
- Accept constructive criticism.
- Lead and manage others.

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

- Graduation from high school or equivalent required.
- Proof of technical schooling, shop courses and electrical/electronics training to provide the desired knowledge
- Additional job-related education may be required to keep pace with updated technology and merit advancement.

Experience

- Five or more years, or the equivalent of full-time, on-the-job (hands on) SCADA and instrumentation experience,
- preferably in domestic, reclaimed and agricultural water distribution, water or wastewater treatment facilities, or
- other related fields.

License/Certification

- Grade I Certified Control Systems Specialist issued by Instrumentation, Systems and Automation Society within 18 months of employment.
- 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.
- Certification required in District provided CPR/First Aid training.

DISTINGUISHING CHARACTERISTICS BETWEEN I/II/III

SCADA Specialist I - is the trainee level in the series. Incumbent initially works under close supervision learning and performing various functions related to supporting the SCADA system, and related systems; tasks will require knowledge of the technical issues and will have a solid understanding of the following; Electrical troubleshooting – MCC related equipment, electrical controls – relay logic, Instrumentation – 4-20mA, flowmeter, pressure gages, analyzers, transducers, replace PLC, Onsite – add, modify and delete function blocks, understand & configure Basic controls strategies, collect/grab data for basic reports, Radios – perform software configuration, modify software configuration, perform hardware installation & troubleshoot minor communications issues, Computer laptop/workstation onsite setup and troubleshooting, install and configure software, Windows office application – Word, Excel, Power Point, Outlook, Networking – Understand and troubleshoot connectivity issues related to unmanaged switches Basic understanding and configuration of onsite Client applications, layout and wire panels, terminate cables/wiring, labeling. Understanding of TCP IP and the OSI model.

SCADA Specialist II - is the first working level in the series. In addition to the characteristics of the I level, incumbent works with minimal supervision and performs a wide range of work assignments related to the support of the SCADA system, and related systems; tasks will require knowledge of the technical issues and will have a solid understanding of the following, Upgrade PLC's firmware, upload and download PLC's, understand & configure intermediate control strategies, collect/grab data for intermediate reports, troubleshoot problems using trending, logging & audit trail data, PLC ladder logic

programming – decipher and modify existing control strategies to add features, PLC structured text programming – decipher and modify existing control strategies to add features, radios – troubleshoot intermediate communications issues, plan and perform new installations, troubleshoot system wide SCADA problems, SCADA server – startup and shutdown, intermediate understanding and configuration of onsite client applications, process graphics programming – decipher and modify existing drawings and sub-drawings to add features to user interface .

SCADA Specialist III - is the full journey level in the series. In addition to the characteristics of the I and II levels, incumbent possess a strong understanding of the SCADA system, and related systems; tasks will require knowledge of the technical issues and will have a solid understanding of the following; Understand & configure advanced control strategies, Collect/grab data for advances reports, PLC ladder logic programming – Design new control strategies to add SCADA system functionality, Network – understand and troubleshoot connectivity issues related to routers, firewalls while addressing system security concerns, SCADA server administration tasks, knowledge of Linux, Oracle, SQL, Windows Server, shared storage, Network infrastructure configuration, planning and setup, VMware – installation, configuration, management, HMI programming – upload/download applications, modify and create new applications using vendor programming tools, Interface with contractors to insure their system being delivered meets our requirements and performs to our expectation, Advanced understanding and configuration of SCADA integrator client applications.

CLASS ADVANCEMENT REQUIREMENTS

Length of Time Required

A SCADA Specialist I may advance to the SCADA Specialist II class or the SCADA Specialist III class after 12-24 months of experience in the SCADA Specialist I or II class.

Performance Rating

The incumbents must receive an overall performance rating of "exceeds standards" or better on their most recent annual performance evaluation in order to migrate to the higher class.

Comments

In addition to the performance rating requirements, the incumbent must competently be able to meet or exceed the distinguishing characteristics for the particular class. Advancement will need to be correlated with the current budget process. Supervisor will incorporate class change in next labor budget or at the time of performance evaluation.

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
- 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 the 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: Employees Association

SALARY RANGE: SCADA Specialist I 29

SCADA Specialist II 31

SCADA Specialist III 33

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Elsinore Valley Municipal Water District

**ELSINORE VALLEY MUNICIPAL WATER DISTRICT
APPENDIX E - SEWAGE SPILL RESPONSE PLAN**

REVISION DATE: OCTOBER 29, 2018



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

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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 (1.3 MGD, tertiary treatment)
- Horsethief Canyon Wastewater Reclamation Plant (0.50 MGD, tertiary treatment)

The District's sanitary wastewater collection system consists of three separate collection system areas:

- The Regional Collection System, which serves portions of the City of Lake Elsinore, Canyon Lake and City of Wildomar and the unincorporated areas of Lakeland Village and Sedco Hills. The Canyon Lake Collection System which serves the City of Canyon Lake which has a treatment plant to trim the flow and pump recycled water back into Canyon Lake and Canyon Hills.
- The Southern California Oaks Collection System which serves a portion of the City of Murrieta.
- The Horsethief Canyon Collection System serves home community in the Temescal Canyon area of Riverside County.

These three areas contain more than 399 miles of sanitary sewer pipeline ranging from 4 to 54 inches in diameter and a total of 37 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, Assistant General Managers or the Director of Operations will assume the role of overall authority.

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

Responding Staff Responsibilities

The responding personnel have 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 the On-Scene Supervisor, the roll of the On-Scene can be delegated up the chain of command as additional personnel arrives on scene.

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 Community Affairs Supervisor.
- 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. Community Affairs Supervisor

- 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 a work order and dispatch a District service crew to the location of the reported problem.

Upon arrival, the responding service crew will report their findings to Dispatch. If a spill is involved the Wastewater Superintendent and or Wastewater Operations Manager shall be notified and respond.

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, 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. Upon verification of a spill, the Wastewater Superintendent and Wastewater Operations Manager shall be notified and respond if necessary.

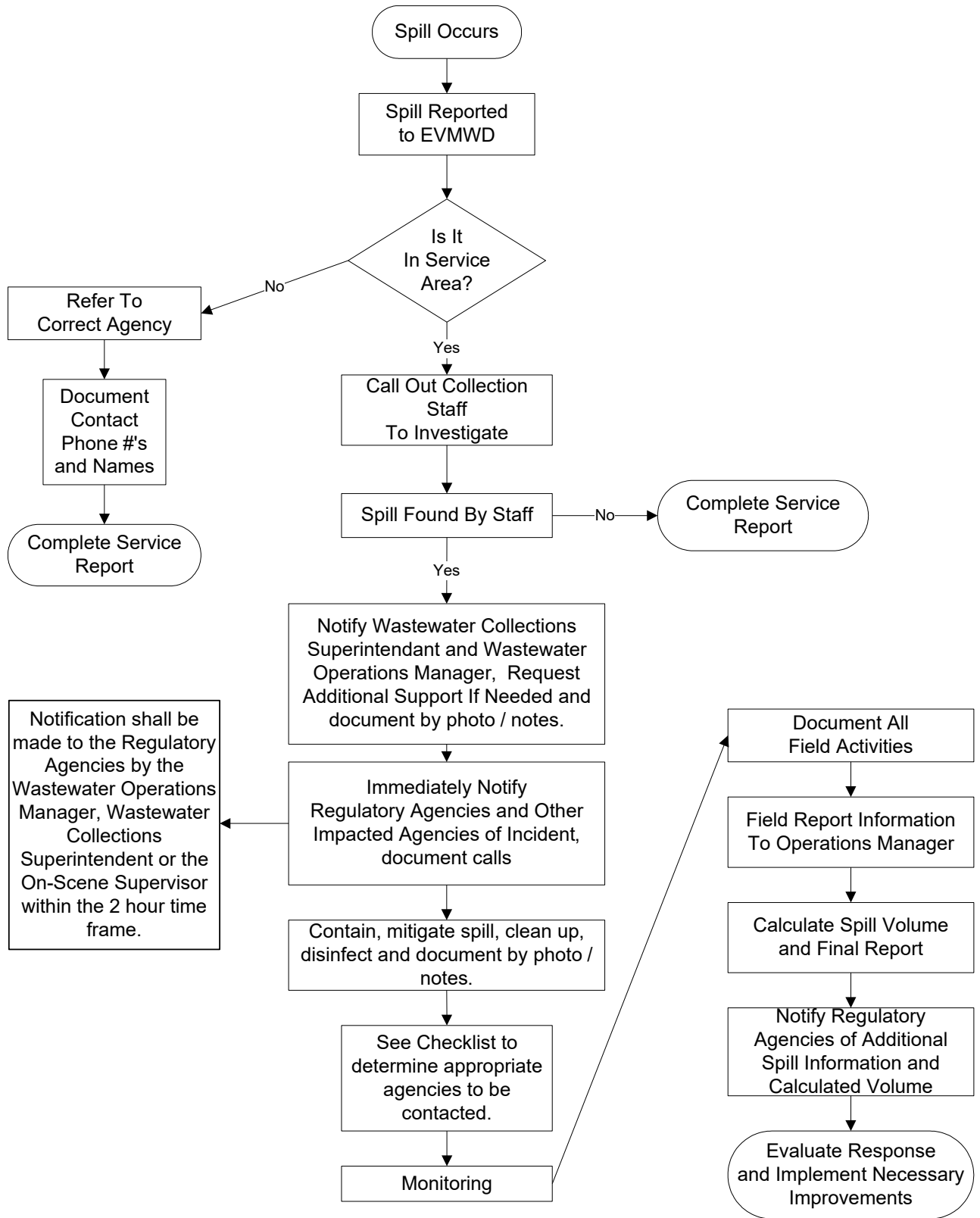
State Water Resources Control Board Notification Requirements:

The notification requirements for the State Office of Emergency Services vary depending on the type of spill. There are three types of spills that require notification to the State Office of Emergency Services. See the District SSMP for a description of each spill category, section 4 and section 8 for contact numbers.

Section 4

Field Activities

Sewer Spill Response Plan Flowchart



FIELD ACTIVITIES

Spill categories are defined as follows:

Category 1 – All discharges of sewage resulting from a failure in the Enrollee’s (District’s) sanitary sewer system that:

- A. Results in a discharge to a drainage channel and/or surface water; or
- B. Discharge to a separate storm drain system that was not fully captured and returned to the sanitary sewer system

Category 2 - A discharge that Equals or exceeds 1000 gallons that:

- A. **Did not** result in a discharge to a drainage channel and/or surface water; or
- B. **Did not** discharge to a separate storm drain system that was not fully captured and returned to the sanitary sewer system.

Category 3 – All other discharges of the sewage resulting from a failure in the enrollee’s (District’s) sanitary sewer system.

Private Lateral Sewage Discharge (PLSD) – Sewage discharges that are caused by blockages or other problems within a privately owned lateral or collection system.

A. In the Event of a District 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 the Wastewater Collection Superintendent and or the Wastewater Operations Manager 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 the combination unit and begin hydrojetting operation.
 - (4) Relieve blockage.
- b) Sewage Lift Stations
 - (1) Trouble shoots the cause of the failure and take corrective actions.

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 the combination unit 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 combination unit 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.
- h) Provide accurate quantities of sewage recovered and returned to the collection system.
- i) Use the information collected to complete the In-house Spill Report.

Field Sewage / Reclaimed Spill Report

Responding Unit #(s)	Emp. Name(s) & #(s)
Address/Location:	Date call received: _____

City:	Time: AM <input type="checkbox"/> PM <input type="checkbox"/>
	Date of arrival: _____ Time: AM <input type="checkbox"/> PM <input type="checkbox"/>
Sewage spill: Yes <input type="checkbox"/> No <input type="checkbox"/> Reclaimed Water: Yes <input type="checkbox"/> No <input type="checkbox"/> Estimated gallons spilled: _____ Spill Category* (check box below) <input type="checkbox"/> Category 1: Entered a receiving waters or storm drains and not returned to the sewer system. <input type="checkbox"/> Category 2: Equal or greater than 1000 gallons. <input type="checkbox"/> Category 3: All other District spills. <input type="checkbox"/> Private Lateral Sewage Discharge.	Gallons Recovered: _____ Cause: Roots <input type="checkbox"/> Grease <input type="checkbox"/> Other <input type="checkbox"/> (specify below) _____
Date spill stopped: _____ Time: AM <input type="checkbox"/> PM <input type="checkbox"/>	Date cleanup completed: _____ Time: AM <input type="checkbox"/> PM <input type="checkbox"/>

Line size where stoppage occurred (if applicable): 4" <input type="checkbox"/> 6" <input type="checkbox"/> 8" <input type="checkbox"/> 10" <input type="checkbox"/> 12" <input type="checkbox"/> Other _____	
Type of disinfectant : Lysol	Quantity used: _____

Receiving Water: Creek <input type="checkbox"/> River <input type="checkbox"/> Flood Control Channel <input type="checkbox"/> Lake <input type="checkbox"/> Storm Drain System <input type="checkbox"/>
<u>2 Hour Notification Required for Category 1 & 2</u>
Identify Receiving Water: _____ Office Of Emergency Services/ CalEma: Time Notified: _____ Person Notified: _____ (800) 852-7550 Regional Board Notification: Time Notified: _____ Person Notified: _____ Method: _____ Santa Ana Region: Najah Amin (951) 320-6362 Fax (951) 781-6288 After Hours (951) 782-4130 e-mail: WB-RB8-santana@waterboards.ca.gov San Diego Region: Mark Aloert (858) 467-2963 Fax (858) 571-6972 Department of County Health Notification 2hour Required: Y <input type="checkbox"/> N <input type="checkbox"/> Time Notified: _____ Jim Gillis (951) 955-8928 Chuck Stray (951) 955-8982 After Hours (951) 782-2973

Operations dispatch (Base 2) notified of a confirmed spill: Yes <input type="checkbox"/> No <input type="checkbox"/> Time AM <input type="checkbox"/> PM <input type="checkbox"/>
Corrective Action Taken: _____

Supervisory Follow Up: _____	
Supervisor: _____	Date & Time _____

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).

Section 5

Calculating Spills

CALCULATING SPILLS

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.

The equation is $Q = C_a \sqrt{2gh}$

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

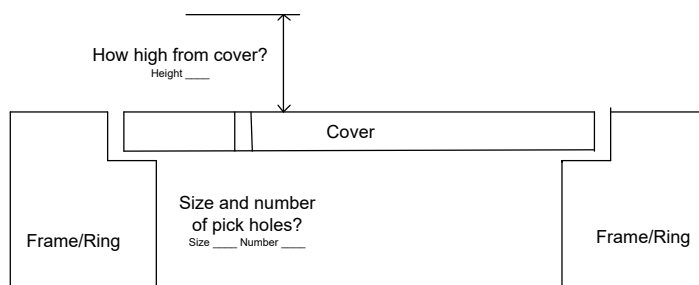
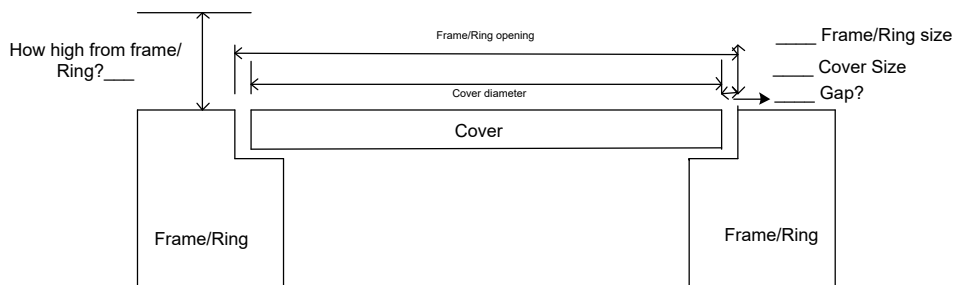
h = height of the fluid above the cover (measured in ft.)

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 ¾ inch orifices to 0.991 for 2.5-inch orifices. The values for C_c have been found to vary from 0.67 for ¾ inch orifices to 0.614 for 2.5-inch orifices.

The orifice equation has been re-created in an excel document;

G:\shared\sewage spills\calculations of spill from pic and F and C

Information required for all calculations, see below:



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 $\frac{3}{4}$ 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 - $\frac{3}{4}$ inch pick holes.
The area of each $\frac{3}{4}$ 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, $C = C_v \times C_c$. For a $\frac{3}{4}$ inch hole
 $C_v = 0.954$, $C_c = 0.67$.

Therefore, $C = 0.954 \times 0.67 = 0.639$

5. Using the orifice equation $Q_h = C_a \sqrt{2gh}$ the flow from each hole is:

$$\begin{aligned} Q_h &= 0.639 \{ (0.0031 \text{ ft}^2) \sqrt{2(32.2 \text{ ft}/\text{sec}^2)(0.33 \text{ ft})} \\ &= 0.009 \text{ ft}^3/\text{sec} \times 448.831 \text{ gpm}/\text{ft}^3/\text{sec} = 4.099 \text{ gpm}/\text{hole} \end{aligned}$$

6. Total flow, $Q_t = Q_h \times \text{number of holes} \times \text{length of spill (minutes)}$

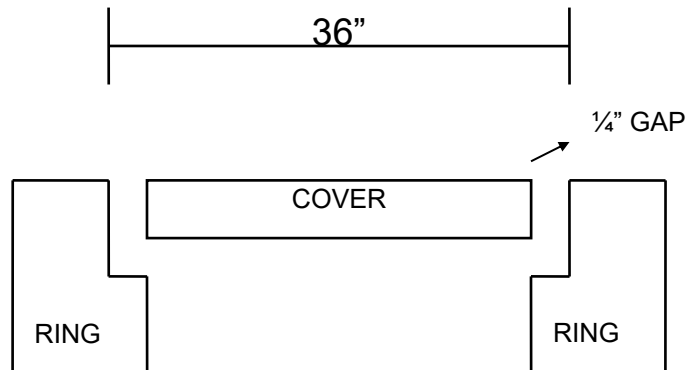
$$Q_t = 4.099 \text{ gpm}/\text{hole} \times 2 \text{ holes} \times 150 \text{ minutes} = 1230 \text{ gallons.}$$

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.

- 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:



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;

$$\begin{aligned}
 A &= A_{\text{ring}} - A_{\text{cover}} \\
 &= [\pi (36/2)^2] - [\pi (35.5/2)^2] \quad \pi = 3.1416 \\
 &= [3.1416 (324)] - [3.1416 (315.1)] \\
 &= 1017.9 - 989.8 \\
 &= 28.1 \text{ in}^2 \times 0.006944 = 0.195 \text{ ft}^2
 \end{aligned}$$

- From example 1; $H = 0.33 \text{ ft}$, $g = 32.2 \text{ ft/sec}$, $C = 0.639$

- Using orifice equation $Q = Ca \sqrt{2gh}$

$$\begin{aligned}
 Q &= 0.639 \{(0.195 \text{ ft}^2) \sqrt{2(32.2 \text{ ft/sec}^2)(0.33 \text{ ft})}\} \\
 &= 0.574 \text{ ft/sec} = 257.82 \text{ gpm} \\
 &= 257.82 \text{ gpm} \times 150 \text{ min} = 38,673 \text{ gallons}
 \end{aligned}$$

- 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:

$$\begin{aligned}
 QT &= 1230 \text{ gallons} + 38,673 \text{ gallons} \\
 &= 39,903 \text{ gallons}
 \end{aligned}$$

Overflow Volumes

Flow Ht in Inches	1/2" PH GPM	5/8" PH GPM	3/4" PH GPM
0.25	0.47	0.67	1.03
0.5	0.66	0.95	1.46
0.75	0.81	1.17	1.78
1	0.94	1.35	2.06
1.25	1.05	1.51	2.3
1.5	1.15	1.65	2.52
1.75	1.24	1.77	2.72
2	1.32	1.91	2.91
2.25	1.4	2.03	3.09
2.5	1.48	2.13	3.26
2.75	1.55	2.24	3.42
3	1.62	2.34	3.57
3.25	1.69	2.43	3.71
3.5	1.75	2.53	3.85
3.75	1.81	2.61	3.99
4	1.87	2.7	4.12
4.25	1.93	2.78	4.25
4.5	1.98	2.86	4.37
4.75	2.04	2.94	4.49
5	2.09	3.02	4.6
5.25	2.14	3.09	4.72
5.5	2.19	3.17	4.83
5.75	2.24	3.24	4.94
6	2.29	3.31	5.04
6.25	2.34	3.38	5.15
6.5	2.39	3.44	5.25
6.75	2.43	3.51	5.35
7	2.48	3.57	5.45

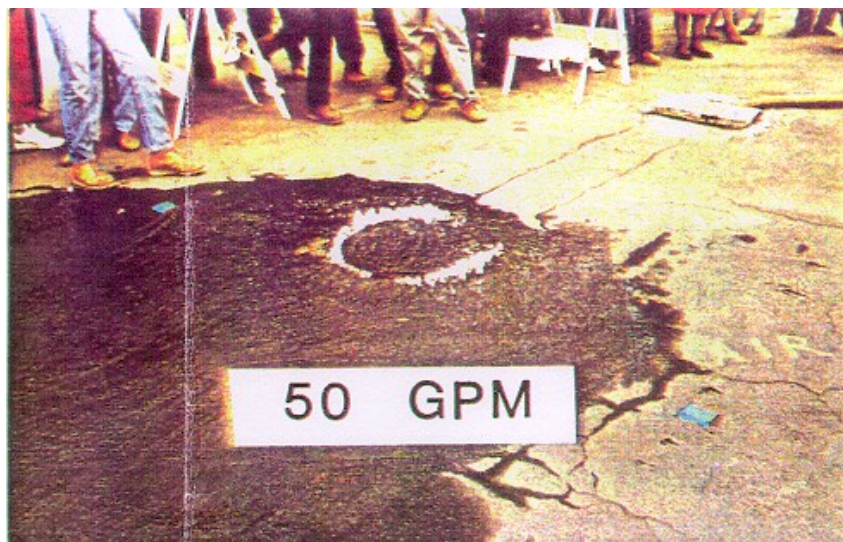
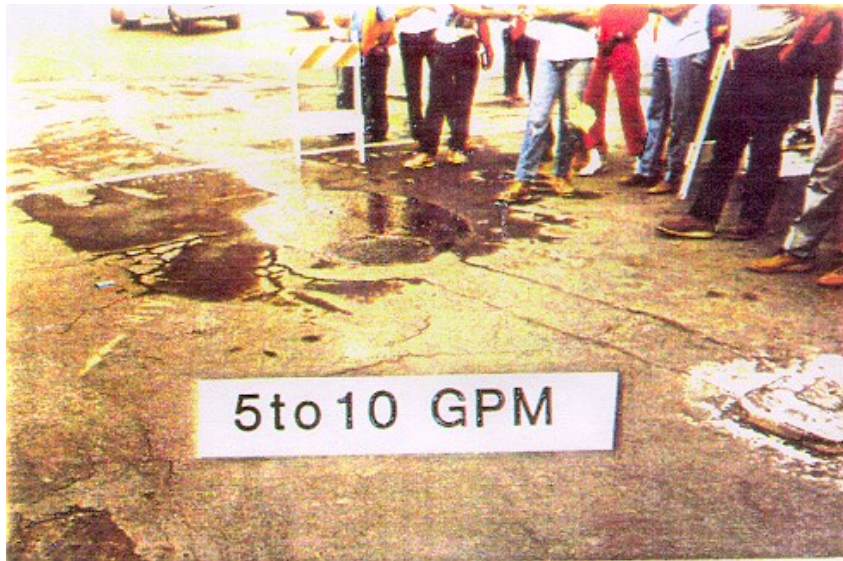
Sewer Overflow Volumes

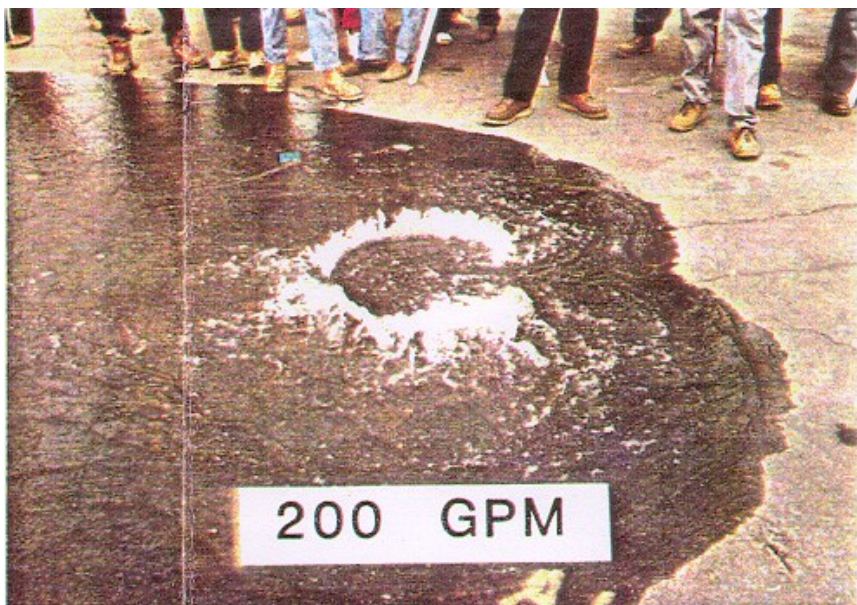
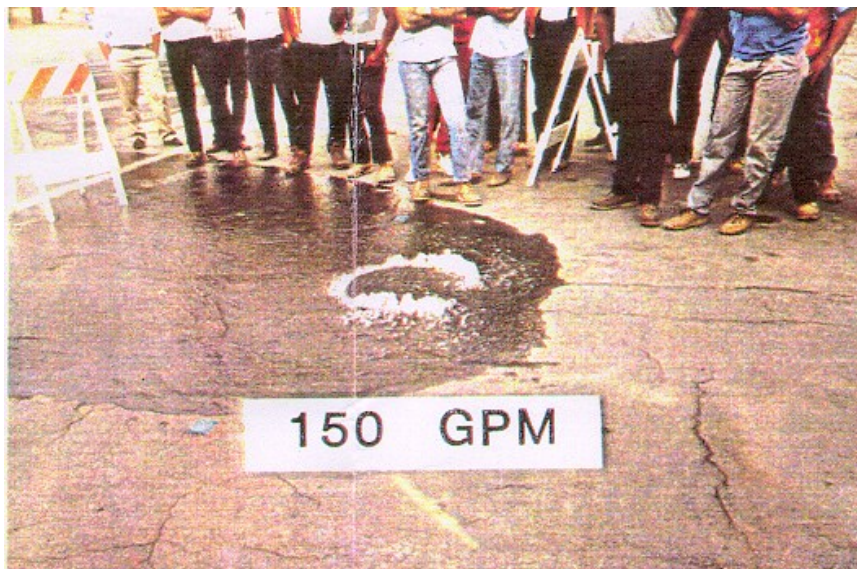
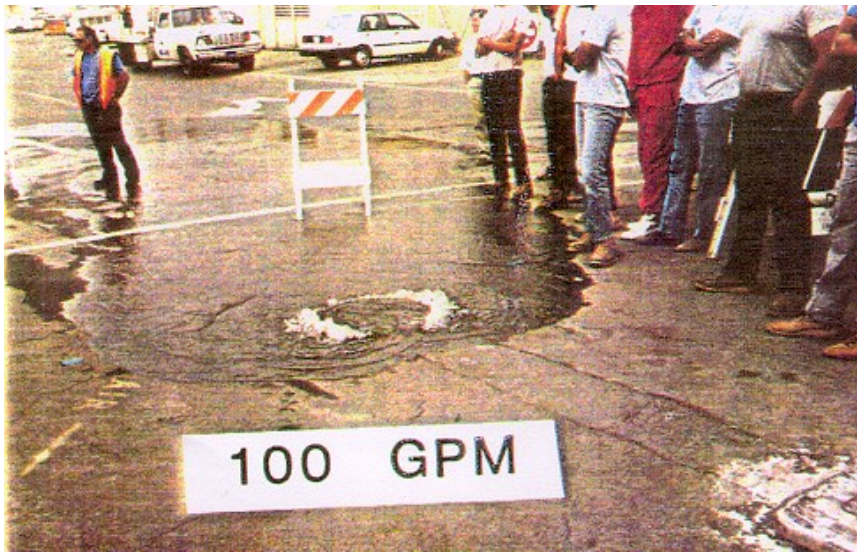
Flow Ht in Inches	1/2" PH GPM	5/8" PH GPM	3/4" PH GPM
7.25	2.44	3.81	5.49
7.5	2.48	3.87	5.58
7.75	2.52	3.93	5.67
8	2.56	4	5.76
8.25	2.6	4.06	5.85
8.5	2.64	4.12	5.94
8.75	2.68	4.18	6.03
9	2.72	4.24	6.11
9.25	2.75	4.3	6.2
9.5	2.79	4.36	6.28
9.75	2.82	4.41	6.36
10	2.86	4.47	6.45
10.25	2.9	4.53	6.53
10.5	2.93	4.58	6.61
10.75	2.97	4.63	6.68
11	3	4.69	6.76
11.25	3.04	4.74	6.83
11.5	3.07	4.79	6.91
11.75	3.1	4.84	9.98
12	3.13	4.89	7.06
12.25	3.17	4.95	7.14
12.5	3.2	5	7.2
12.75	3.23	5.05	7.27
13	3.26	5.09	7.34
13.25	3.29	5.14	7.42
13.5	3.33	5.19	7.49
13.75	3.36	5.24	7.56
14	3.39	5.29	7.63

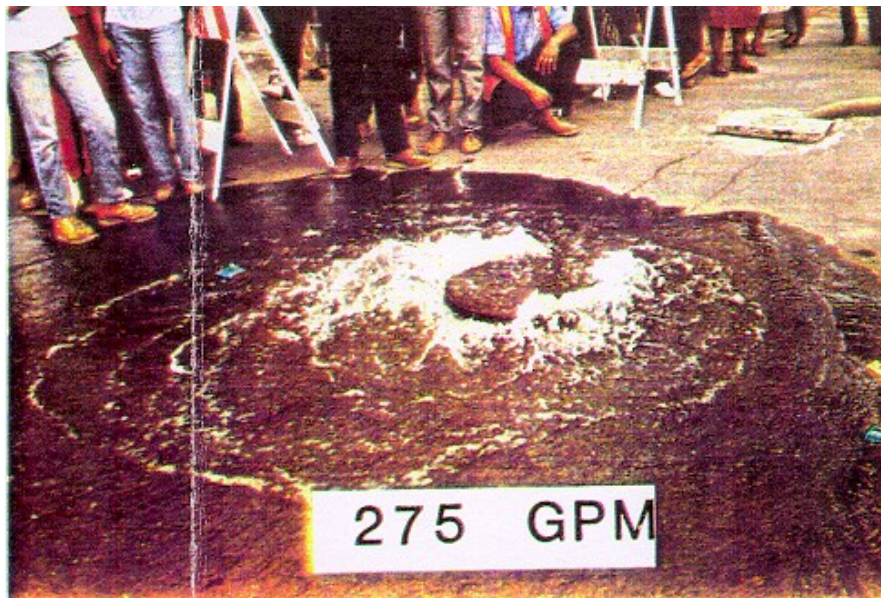
Alternative Method: Visual

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.







Section 6

Monitoring

□ **MONITORING**

After the SSO is verified, the On Scene Supervisor shall make the necessary notifications to Management.

In the event of a Sanitary Sewer Overflow (SSO), it is important to limit the liability, damages, protect human health and the environment.

In the event the SSO is a Category 1, within 2 hours of the SSO verification, CalEMA (Formerly the State Office of Emergency Services), Riverside County Department of Health and the local State Water Resources Control Board (Regional Board 8-Santa Anna, Region 9-San Diego) must be notified, the On Scene Supervisor or Management shall make notifications or designate an individual to make the notifications. The respective cities, agencies or organizations shall be notified as well.

Document date, times, agency and who you spoke with as well as any information given to you by the called agency.

Sample Collection

Samples are required to be taken in the event that a discharge reaches a drainage channel and/or surface waters that can be classified as Rec1 or Rec2 waters of the State.

Rec1 waters are defined as body contact or when ingestion is likely such as swimming, wading, water-skiing, skin and scuba diving, fishing from in the water or use of natural hot springs.

Rec2 is defined as secondary contact recreation where ingestion is not likely such as fishing from a boat or from shore or where there is brief incidental or accidental body contact that is limited to body extremities, examples are hands and/or feet.

Bacteria water quality standards

The indicator for safe body contact shall be a result of less than 235 MPN/100 ml E. Coli as specified by the water quality control board for Rec1 and Rec2 waters of the state.

Sampling locations

In the event a spill enters receiving water such as a lake, samples should be taken at the spill entry point and at approximately 50 feet, 100 feet 200 feet both sides of the spill entry point. The On Scene Supervisor or Management shall determine if additional sample points are needed. Additional sampling may be needed to determine the extent of the contamination if the spill has been entering the receiving water for a long period of time, the volume of the spill, the flow of the receiving water or the shore line configuration. Using the spill duration, the volume of the spill, the flow of the receiving water and/or the shore line configuration additional sampling may need to be taken off shore by drawing samples from a boat or the end of docks.

As a guide line, if the spill enters receiving water way such a stream, samples should be taken at the point where the spill entered into the receiving waters way, approximately 50 feet upstream of the spill entry point and 300 feet down stream of the spill entry point. Additional downstream sampling may be needed to determine the extent of the contamination if the spill has been entering the receiving water way for a long period of time, the volume of the spill or the flow of the receiving water.

Sampling frequency

Sampling will occur after a sewage spill enters receiving waters and on a daily basis. Sampling shall be discontinued after the E. Coli results of less than 235 MPN/100 ml is obtained and Management has given direction to remove the signs opening the receiving waters area.

Sampling procedures

The holding time for source water sampling for bacteria testing is 6 hours. The sampler should deliver the samples to the laboratory as soon as possible, preferably less than one (1) hour before the expiration of the holding time limit.

1. Fill the supplied bottles at each sample location.
 - a. Sample bottles and required paperwork are located in the Regional WWTP's Office.
 - b. Open the security seal and cap immediately prior to sampling.
 - c. Lower the bottles to six (6) inches below the water surface.
 - d. Fill the bottle to the 100ml line or above and replace the cap immediately.
 - e. Label the bottle with the sample location and collection date/time.
 - f. Store the bottle in a cooler with "blue ice"
2. Complete the provided Chain of Custody form by entering the following information.
 - a. Location, date and time.
 - b. Name and signature of the person collecting the samples.
 - c. Name and signature of the person delivering the samples.
 - d. Date and time of delivery.

Sample delivery

1. The holding time for source water sampling for bacteria testing is 6 hours. The sampler should deliver the samples to the laboratory as soon as possible, preferably less than one (1) hour before the expiration of the holding time limit.
2. Please call the lab field technician to let them know you have samples for delivery.
 - a. Laboratory 951-674-3146 x8316
 - b. Lab Field Technician (cell) 951-903-9815
 - c. Lab Field Technician (cell) 951-544-5077
 - d. Ops Dispatch 951-674-3146 x8305
3. Deliver the samples to the Regional WWTP Laboratory. The laboratory is staffed during the work hours of 7am to 4:30pm seven (7) days a week.
4. A Wastewater Operator or Laboratory Staff will accept the samples and sign the Chain of Custody form.
5. If new sample bottles or Chain of Custody forms are needed, pick them up at this time.

Test methods

The sample will be tested for E. Coli. The upper limit for the test will be 2,420 MPN/100ml. Results above this will be reported as >2,420 NPM/100 ml. The test method used will be:

Total Coliform Colilert, Quantitray (index) Standard Method 9223

The method employed by EVMWD is approved by the USEPA for analysis of source water samples. The test is capable of producing quantitative results (in MPN/100 ml) in 24 hours. The E. Coli test is approved by the California Department of Public Health (DPH) Laboratory Accreditation Program for source water testing of regulatory samples collected under Surface Water Treatment Rule (SWTR). Approval would be required before results obtained for the purpose other than the SWTR could be submitted to the Regional Water Quality Control Board or the DPH to fulfill non-SWTR regulatory reporting requirements. However, it should be noted that the results can be used for the purposes of this protocol without such approval.

Reporting

Results will be reported on later than 10:00 am on the second after sample collection. A certified sample report will be distributed to:

1. Collections System Superintendent
2. Wastewater Operations Manager
3. Operations Manager

Section 7

Record Keeping And Reporting

RECORD KEEPING AND REPORTING

Record Keeping

The Wastewater Collection Superintendent and/or the Wastewater Operations Manager will maintain a system file on all sewage spills. All documentation shall be scanned and placed in the appropriate folder maintained in one of the Districts server. Required retention is 5 yrs.

Reporting

Category 1 Within 2 hours of spill confirmation, the office of Emergency Services, County Health Department and local California Regional Water Quality Control Board shall be notified.

Within 3 calendar days the online reporting through **California Integrated Water Quality System (CIWQS)** a draft shall be submitted and certified within 15 calendar days.

All affected cities and agencies shall be notified as soon as possible.

Category 2 Within 2 hours of spill confirmation, the office of Emergency Services, County Health Department and local California Regional Water Quality Control Board shall be notified.

Within 3 calendar days the online reporting through **California Integrated Water Quality System (CIWQS)** a draft shall be submitted and certified within 15 calendar days.

All affected cities and agencies shall be notified as soon as possible.

Category 3 Within 30 days after the end of the calendar month, the online reporting through **California Integrated Water Quality System (CIWQS)** shall be submitted and certified.

Private Lateral

Sewage Spill
(PLSD)

Online reporting is at the Enrollees (Districts) discretion, Elsinore Valley Municipal Water District has chosen to report Private Lateral Sewage Spills.

Within 30 days after the end of the calendar month, the online reporting through **California Integrated Water Quality System (CIWQS)** shall be submitted and certified.

Section 8

Training

TRAINING

Appropriate District personnel (i.e. Management, Collection Systems, Wastewater Treatment, Engineering and Community Affairs) 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 9

Emergency Contact Lists

Management:	Name	Contact Numbers	
Director of Operations	Jase Warner	951-213-0838	Cell
Director of IT	Jim Ollerton	951-663-2107	Cell
Wastewater Ops Manager	Dennis McBride	951-295-3282	Cell
Water Ops Manager	Tim Collie	760-715-7790	Cell
Maintenance Manager	John Manhard	951-258-7863 951-674-4357	Cell Home
Collections Superintendent	Ponce Navarro IV	951-409-4840	Cell
Mechanical Maint. Superintendent	Bill Graham	760-788-2771 951-970-4294	Home Cell
Collections System:	Standby Cell	951-250-4384	
Collection Syst. Worker III	Jesus Barron	951-333-6300	Cell
Collection Syst. Worker III	Shawn Moore	951-313-1969	Cell
Collection Syst. Worker III	Danny VerPlank	951-616-8241	Cell
Collection Syst. Worker I	Brandon Bowman	951-265-1680	Cell
Collection Syst. Worker II	Jose Garcia	562-977-7906	Cell
Collection Syst. Worker II	Pedro Magadan	760-415-0746	Cell
Mechanical Maintenance:	Lifts Station Standby Cell	951-258-9323	
Mech. Tech. III	Marcos Dillaway	951-816-2425	Cell
Mech. Tech. II	Eric Laidlaw	951-609-9685 951-973-2880	Home Cell
Mech. Tech. I	Matthew Elek	951-214-9049	Cell
Mech. Tech. I	Armando Diaz	951-505-3988	Cell
Mech. Tech. I	Mike Betzer	951-852-5163	Cell
Mech. Tech. I	Keith Ray	951-265-1680	Cell
Mech. Tech. I	Danny Littleton	951-551-6899	Cell
Mech. Tech. I	Mick Smith	619-534-3409	Cell
Electromech. Tech. I	John Branch	760-458-2531	Cell
Electromech. Tech. I	Jeff Tober	951-515-9406	Cell
Lift Station Tech.	Chato Stuart	951-663-1099	Cell
SCADA:			
SCADA Specialist III	Gerald Hannah	951-378-0516	Cell
SCADA Specialist II	David Smith	951-245-9615	Home
SCADA Specialist I	Robert Sachs	951-678-1878	Home

CITY OF CANYON LAKE
City Manager

Office
951-244-2955

CANYON LAKE POA

After Hours Emergency Pager951-270-4950

Operations 951-244-6841 x510 Direct Line 951-246-1751

Lake Superintendent 951-897-8871 cell

Landscape/Irrigation 951-757-0710 cell

CITY OF LAKE ELSINORE

City Hall: 951-674-3124

City Manager, Grant Yates gyates@lake-elsinore.org 951-674-3124 ext. 361

Emergency After Hours StandbyCell: 951-232-4884

Director Public Works, Jason Simpson jsimpson@lake-elsinore.org 951-674-3124 ext. 362

Code Enforcement..... Cell: 951-232-7490

Community Development, Grant Taylor gtaylor@lake-elsinore.org 951-674-3124 ext. 270

CITY OF MURRIETA

Emergency Police Dispatch (After hours City Dispatch).....951-696-3615

	<u>Office</u>	<u>Email</u>
City Manager, Kim Summers	951-461-6010	KSummers@MurrietaCA.gov
City Engineer, Bob Moehling	951-461-6036	bmoehling@MurrietaCA.gov
Public Works Manager, Jeff Hitch	951-461-6076	JHitch@MurrietaCA.gov

CITY OF WILDOMAR

Emergency Contact, Les Chapman.....951-990-3600

Emergency Police Dispatch (After hours City Dispatch).....800-950-2444

	<u>Office</u>	<u>Email</u>
City Manager, Gary Nordquist.....	951-677-7751	gnordquist@cityofwildomar.org
Public Works Director, Dan York	951-677-7751	dyork@cityofwildomar.org

**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**

Riverside County

Emergency Contact Numbers.....760-863-7000

Riverside County Flood Control & Conservation District

During Business Hours:

David Ortega..... 951-961-9574 djortega@rivico.org
Jason Uhley 951-955-1250 juhley@rivico.org

After Hours:

Mark Luna, Operations & Maintenance SupervisorCell: 951-452-9673
Bob Cullem, Assistant Engineer 951-955-1275

California Department of Fish and Game (Dispatch)

Emergency:..... 800-952-5400

San Diego Regional Water Control Board Region 9

**Office:.....619-516-1990
Dat Quach.....619-521-5899
Leave Message Time: _____**

Public Schools

Canyon Lake Middle	244-2123
Cottonwood Cyn. Elementary	244-2585
David A Brown Middle School	253-7430
Donald Graham Elementary	678-8450
Earl Warren Elementary	253-7810
Elsinore Elementary	253-7615
Elsinore High	253-7200
Elsinore Middle	674-2118
Head Start Program	245-6790
Lake Elsinore USD	253-7000
Lakeland Village Middle	253-7400
Lakeside High	253-7300
Luiseno Elementary	253-7480
Machado Elementary	253-7500
Ortega High	253-7065
Rice Cyn Elementary	471-2184
Ronald Reagan Elementary	253-7650

Private Schools

A Small World	674-5520
Anne Sullivan Nursery	678-3557
Beginning Concepts	674-2010
Bundy Canyon Christian	674-1254
Canyon Lake Christian Sch.	244-1790
Elsinore Naval & Military	678-1433
Faith Baptist Academy	245-8748
Kid's In Action	674-5437
L.E. Senior Center	674-2526
Lakeland Child Care Center	678-0130
Ortega Trail Rec. & Park Dist.	
Children Center	674-6941
Rancho Valley Christian	245-1020
Wildomar Christian School	678-4434

Area Emergency Health
Care Providers

Family Health Care	674-7811
Inland Valley Med. Center	677-1111
Menifee Valley Med. Center	679-8888
Rancho Canyon Med. Corp.	674-3155
Rancho Cyn Ind. Medicine	694-8700
Rancho Urgent Care	676-6668
Sharp Health Care	696-6000

Section 10

Summarized SSO Action Plan

SUMMARIZED SSO ACTION PLAN

FIRST RESPONDER

- Determine cause of failure and call for immediate assistance:
 - Lift Stations - Call Mechanical Maintenance Superintendent (Bill Graham)
 - Collections System - (Vacant)
 - Electrical/SCADA - (Jim Ollerton)
- Promptly notify the Wastewater Collection Superintendent and the Wastewater Operations Manager of preliminary spill information and potential impacts.
- Establish perimeters and control zones with cones, barricades, vehicles, or terrain.
- Contain the sewage discharge to the maximum extent possible. Every effort must be made to prevent the discharge of sewage into surface waters.

COLLECTION SYSTEM RESPONDER

- Determine section of line containing the blockage.
- Go to the downstream manhole (where possible) and set up traffic control, as needed.
- Position combination unit and begin hydrojetting operation; Relieve blockage.

SPILL CONTAINMENT AND RECOVERY METHODS

- Plug, block, divert around (sand bag) storm drains whenever appropriate to contain the spill.
- Divert spill by building a small berm to change direction of flow back to sewer.
- Divert spill by pumping around overflow and return to sewer.
- Retain spill by letting it collect in a natural low area and recover sewage when time permits.
- Dike/dam spill by building berm to collect spill.

CLEAN UP AND DISINFECTION METHODS

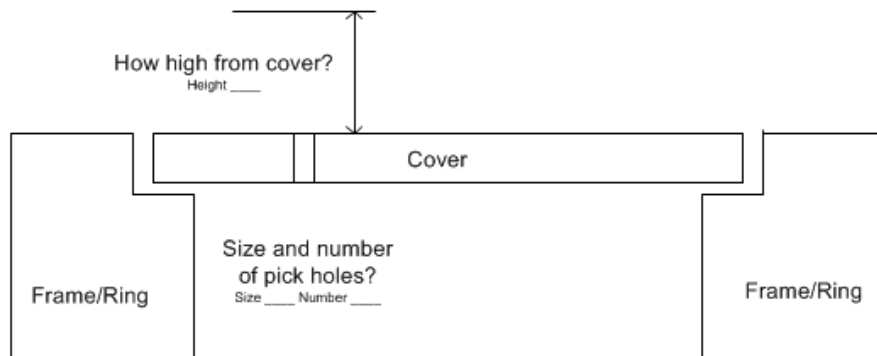
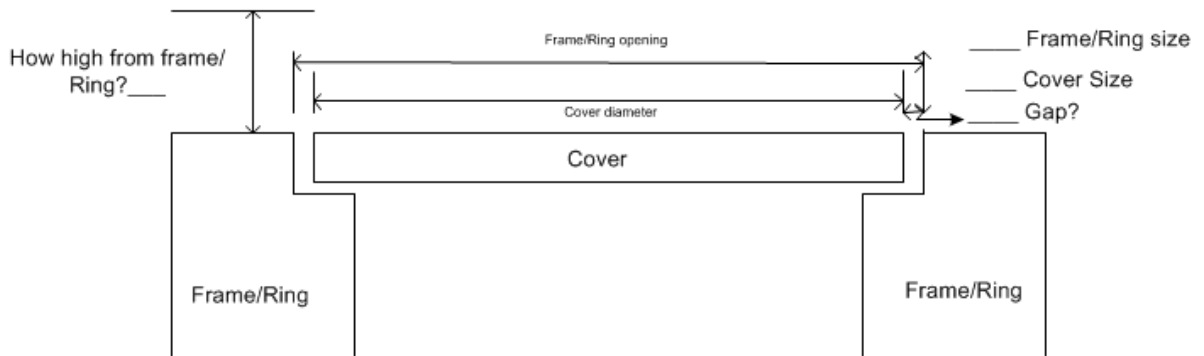
- Apply Lysol disinfectant concentrate or liquid chlorine solution where practicable, using necessary personal protective equipment. Do not over broadcast or over apply.
- Wash down and vacuum up residual as necessary, using combination unit or contract vacuum dump trucks. Return residual to sewer system.
- Utilize the District water tank trailer or Combination unit for cleanup of large pavement/hard surface areas. Contain and vacuum residual returning it to sewer.

SPILL DOCUMENTATION – KEY POINTS

Most important is documenting photos, timelines, photos, volume, photos.

- **PHOTOS, PHOTOS, PHOTOS**

- When crew was on site, when spill was stopped and when cleanup was completed.
- Accurate flow measurements and duration of the spill (times, start – stop)
- Flow calculations, information required, see below:
- Map of problem location showing manhole(s) involved and where the spill discharged to (i.e. storm drain, field, stream, etc.)
- Identify cause of spill (i.e. Liftstation problem; blockage: roots, grease; line break/damage)
- Document type and quantity of disinfectant used.
- Document amount of sewage recovered and returned to the collection system.



SEWER SPILL CATEGORIES & REGULATORY NOTIFICATIONS

CATEGORY 1 SEWER SPILL:

- a) Equal or exceeds **1,000 gallons**; or
- b) Result in a **discharge to a drainage channel and/or surface water**; or
- c) **Discharge to a storm drain pipe that was not fully captured and returned** to the sanitary sewer system.

CATEGORY 1 NOTIFICATION

Within 2 hours of spill confirmation, notify:

- 1-800-852-7550 Office of Emergency Services (aka - CalEMA)**. The OES will issue you a control number for further reference of the subject spill.

Time: _____ **Name:** _____

- 951-940-6949 (24 hr) Riverside County – Fire Office of the OES** (need to call both State & Local)

Time: _____ **Name:** _____

- 888-722-4234 Riverside County Dept. Environmental Health**
951-782-2973 Emergency After Hours

Time: _____ **Name:** _____ **Method:** _____

- 951-782-4130 Regional Water Quality Control Board**. If after hours, leave a message. OES will make any necessary after hours contact with Regional Board staff, or email: WB-RB8-santana@waterboards.ca.gov and write SPILL in subject line.

Time: _____ **Name:** _____ **Method:** _____

- 619-525-4159 CA Dept. of Public Health CDPH** (if discharge reaches Canyon Lake)
619-525-4159 Main Telephone No.
619-938-2661 Steve Williams, District 20 Engineer – after hours
213-440-0074 Jing Chao, after hours

Time: _____ **Name:** _____ **Method:** _____

- 800-506-2555 Riverside County Flood Control**

Time: _____ **Name:** _____ **Method:** _____

- Appropriate City Office (see list)

Time: _____ **Name:** _____ **Method:** _____

For all other discharges of sewage including private lateral discharge, notifications & reporting will be done by a “certified” staff member (usually a Superintendent).

TELEPHONE / CONTACT INFORMATION

Reporting to RWQCB – Santa Ana Region, Riverside

Report a Spill

If you are reporting an emergency, call **911** or the local emergency response agency.

Then contact the Governor's Office of Emergency Services, State Warning Center at **1-800-852-7550** or **1-916-845-8911**

To report a spill directly to the Santa Ana Regional Board, please contact us:

Telephone:

Main number: **951-782-4130**
Fax: **951-781-6288**

Email:

region8info@waterboards.ca.gov

The word "spill" must be in the subject line for proper routing.

You may also use the [Cal/EPA Environmental Complaint Form](#)

Reporting to Riverside County Environmental Health

Riverside County Community Health Agency Home | Frequently Asked Questions | Contact Us

Department of Environmental Health

- Home
- Programs and Services
- Forms and Guidelines
- Public Information
- Office Locations
- Contact Us
- Body Art
- Restaurant/Market Grading
- Make the Smart Choice
- Food Worker Cards
- Holiday Food Safety
- Food Safety Videos
- Tobacco Permits

Home » Office Locations

Office Locations
For more information call us toll free at **888-722-4234**

All Environmental Health offices are open Monday through Thursday from 7:00am to 5:00pm and closed on Fridays and these holidays.

For a listing of contact e-mails check out our [Contacts Page](#).

Riverside Main Office
(Services Provided - [Food Facilities](#), [Food Worker Cards](#), [Haz Mat](#), [Pools](#))

4065 County Circle Drive Room 104, Riverside, CA 92503
(951) 358-5172 - District Environmental Services
(951) 358-5055 - Hazardous Materials
FAX: (951) 358-5017
TDD: (951) 358-5396
Emergency After Hours: (951) 782-2973

Household Hazardous Waste Hotline Information (951) 358-5256
Click here for a map to the [Environmental Health Administration](#) from Google Maps

EVMWD Staff

Telephone numbers and positions as of July 28, 2017

Management:	Name	Contact Numbers	
Director of Operations	Jase Warner	951-213-0838	Cell
Director of IT	Jim Ollerton	951-663-2107	Cell
Wastewater Ops Manager	Dennis McBride	951-295-3282	Cell
Water Ops Manager	Tim Collie	760-715-7790	Cell
Maintenance Manager	John Manhard	951-258-7863 951-674-4357	Cell Home
Collections Superintendent	Ponce Navarro IV	951-409-4840	Cell
Mechanical Maint. Superintendent	Bill Graham	760-788-2771 951-970-4294	Home Cell
Collections System:	Standby Cell	951-250-4384	
Collection Syst. Worker III	Jesus Barron	951-333-6300	Cell
Collection Syst. Worker III	Shawn Moore	951-313-1969	Cell
Collection Syst. Worker III	Danny VerPlank	951-616-8241	Cell
Collection Syst. Worker I	Brandon Bowman	951-265-1680	Cell
Collection Syst. Worker II	Jose Garcia	562-977-7906	Cell
Collection Syst. Worker II	Pedro Magadan	760-415-0746	Cell
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Mech. Tech. III	Marcos Dillaway	951-816-2425	Cell
Mech. Tech. II	Eric Laidlaw	951-609-9685 951-973-2880	Home Cell
Mech. Tech. I	Matthew Elek	951-214-9049	Cell
Mech. Tech. I	Armando Diaz	951-505-3988	Cell
Mech. Tech. I	Mike Betzer	951-852-5163	Cell
Mech. Tech. I	Keith Ray	951-265-1680	Cell
Mech. Tech. I	Danny Littleton	951-551-6899	Cell
Mech. Tech. I	Mick Smith	619-534-3409	Cell
Electromech. Tech. I	John Branch	760-458-2531	Cell
Electromech. Tech. I	Jeff Tober	951-515-9406	Cell
Lift Station Tech.	Chato Stuart	951-663-1099	Cell
SCADA:			
SCADA Specialist III	Gerald Hannah	951-378-0516	Cell
SCADA Specialist II	David Smith	951-245-9615	Home
SCADA Specialist I	Robert Sachs	951-678-1878	Home

CITY OF CANYON LAKE
City Manager

Office
951-244-2955

CANYON LAKE POA

After Hours Emergency Pager 951-270-4950

Operations..... 951-244-6841 x510 Direct Line 951-246-1751
Lake Superintendent..... 951-897-8871 cell
Landscape/Irrigation 951-757-0710 cell

CITY OF LAKE ELSINORE

City Hall: 951-674-3124

City Manager, Grant Yates gyates@lake-elsinore.org 951-674-3124 ext. 361

Emergency After Hours Standby Cell: 951-232-4884

Director Public Works, Jason Simpson jsimpson@lake-elsinore.org 951-674-3124 ext. 362
Code Enforcement Cell: 951-232-7490
Community Development, Grant Taylor gtaylor@lake-elsinore.org 951-674-3124 ext. 270

CITY OF MURRIETA

Emergency Police Dispatch (After hours City Dispatch).....951-696-3615

	<u>Office</u>	<u>Email</u>
City Manager, Kim Summers.....	951-461-6010	KSummers@MurrietaCA.gov
City Engineer, Bob Moehling.....	951-461-6036	bmoehling@MurrietaCA.gov
Public Works Manager, Jeff Hitch.....	951-461-6076	JHitch@MurrietaCA.gov

CITY OF WILDOMAR

Emergency Contact, Les Chapman.....951-990-3600

Emergency Police Dispatch (After hours City Dispatch).....800-950-2444

	<u>Office</u>	<u>Email</u>
City Manager, Gary Nordquist	951-677-7751	gnordquist@cityofwildomar.org
Public Works Director, Dan York.....	951-677-7751	dyork@cityofwildomar.org

**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**

Riverside County

Emergency Contact Numbers.....760-863-7000

Riverside County Flood Control & Conservation District

During Business Hours:

David Ortega..... 951-961-9574 djortega@rivico.org
Jason Uhley 951-955-1250 juhley@rivico.org

After Hours:

Mark Luna, Operations & Maintenance SupervisorCell: 951-452-9673
Bob Cullem, Assistant Engineer 951-955-1275

California Department of Fish and Game (Dispatch)

Emergency:..... 800-952-5400

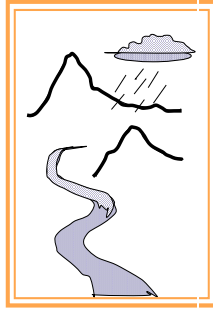
San Diego Regional Water Control Board Region 9

**Office:.....619-516-1990
Dat Quach.....619-521-5899
Leave Message Time:_____**

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Elsinore Valley Municipal Water District

**APPENDIX F – UNIFIED SANITARY SEWER
SPILL RESPONSE PROCEDURE**



Unified Sanitary Sewer Spill Response Procedure

Submitted to the
SANTA ANA REGIONAL WATER QUALITY CONTROL BOARD

(SARWQCB ORDER NO. R8-2010-0033)

July 15, 2013

BY THE RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT,
COUNTY OF RIVERSIDE, AND CITIES OF RIVERSIDE COUNTY (SANTA ANA REGION)

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Unified Sanitary Sewer Spill Response Procedure

1.0 Background

On January 29, 2010, the California Regional Water Quality Control Board – Santa Ana River Region (Regional Board) issued an area-wide Municipal Separate Storm Sewer System (MS4) National Pollutant Discharge Elimination System (NPDES) Permit (2010 MS4 Permit) to the Riverside County Flood Control and Water Conservation District (District), the County of Riverside (County), and the incorporated cities of Riverside County within the Santa Ana Region (collectively, Permittees).

The 2010 MS4 Permit requires the Permittees to control the discharge of Pollutants from the MS4s to Waters of the United States. Sewering agencies that own or operate sanitary sewer collection systems greater than one mile in length are regulated under State Water Resources Control Board Water Quality Order No. 2006-0003 and the accompanying amendment to its monitoring and reporting program (WQ 2008-0002-EXEC). This order, known as the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (Sanitary Sewer Order) serves, among other purposes, to prevent and minimize Potential Pollutants from sanitary sewer overflows (SSOs) originating from these sewer collection systems from entering surface waters. Permittees that own or operate applicable sanitary sewer collection systems are required to obtain coverage under the Sanitary Sewer Order.

The Regional Board has found that effluent from SSOs that may enter the MS4 can ultimately have a negative impact on Beneficial Uses of Receiving Waters. The Permittees have developed this Sanitary Sewer Spill Response Procedure for containing and cleaning up effluent from SSOs that have or could impact an MS4.

2.0 Purpose

Sewering agencies, including Permittees that own or operate a sanitary sewer, are required to provide notification, documentation, spill response and reporting of SSOs from their sanitary sewer collection systems pursuant to established federal and state regulations (including the Sanitary Sewer Order), and individual NPDES permits. This Sanitary Sewer Spill Response Procedure provides a mechanism to ensure effective coordination between sewerage agencies and the Permittees in the event that an SSO threatens to impact, or impacts, the MS4. This procedure will:

- ◆ Enhance communication between the Permittees, sewerage agencies and the Regional Board;
- ◆ Clarify and streamline interagency SSO response procedures; and
- ◆ Provide additional protection of Receiving Waters.

This procedure incorporates elements of the Sanitary Sewer Order requirements and spill release notification guidance published by the California Emergency Management Agency (EMA) Hazardous

Materials Unit. As these documents are updated, this procedure will be revised to conform. This procedure is intended to address occurring or impending SSOs that may enter the MS4.

3.0 SSO Response Procedure

Upon determination by a sewerage agency or Permittee, persons in charge, contractor or field crew that an SSO has occurred that may impact the MS4, the following notification, reporting, response, and sampling procedures will be implemented.

3.1 Notifications

3.1.1 Notification Requirements Applicable to Sewering Agencies:

In compliance with the Sanitary Sewer Order, the following notification requirements are applicable to sanitary sewer collection systems and other facilities owned or operated by sewerage agencies:

- ◆ For any discharges of sewage that result in a discharge to a drainage channel or surface water, the sewerage agency will as soon as possible, but not later than two (2) hours after becoming aware of the discharge, notify the EMA, the County Department of Environmental Health, and the Regional Board.
- ◆ As soon as possible, but no later than twenty-four (24) hours after becoming aware of a discharge to a drainage channel or a surface water, the sewerage agency will submit to the Regional Board a certification that the EMA and the County Department of Environmental Health have been notified of the discharge.

In compliance with the 2010 MS4 Permit, the sewerage agency with jurisdiction for the spill will provide notification immediately (within 24 hours of becoming aware of the circumstances) for all discharges that endanger human health or the environment as follows:

- ◆ By phone to the EMA at 800-852-7550 and to the Regional Board at 951-782-4130
- ◆ At a minimum:
 - Any sewage spill greater than 1,000 gallons
 - Any sewage spill that could impact water contact recreation
 - Any discharge of sewage into or on any Waters of the State (reportable to EMA¹)

In addition, the sewerage agency will notify the Highway Patrol of SSOs affecting a State Highway in accordance with EMA guidance².

1 "California Hazardous Material Spill/Release Notification Guidance." February 2012. California EMA. <http://www.calema.ca.gov/HazardousMaterials/Pages/Spill-Release-Reporting.aspx>

2 "California Hazardous Material Spill/Release Notification Guidance." February 2012. California EMA. <http://www.calema.ca.gov/HazardousMaterials/Pages/Spill-Release-Reporting.aspx>

Other spill incidents, including any unauthorized discharges that are not reportable to the EMA, are reported to the Regional Board's Executive Officer as part of the Annual Report as described in Section 3.3.

3.1.2 Notification Requirements Applicable to Permittees Not Owning or Operating a Sanitary Sewer Collection System

Should a Permittee discover an SSO or determine that sewage is entering the MS4, the Permittee shall immediately notify the appropriate sewerage agency.

1. Where the sewerage agency determines that the SSO originates from its sewer collection system or facilities, the sewerage agency will follow the notification procedures described in Section 3.1.1 and established reporting procedures. No further notification or reporting is required by the Permittee.
2. Where the sewerage agency determines that the SSO originates from a private lateral or private property, the sewerage agency will contact the property owner for clean up responsibility and will contact the Permittee with jurisdiction of the spill. For more information on private property SSOs, see Section 6.0. The Permittee with jurisdiction for the spill will provide notification immediately (within 24 hours of becoming aware of the circumstances) for all discharges that endanger human health or the environment as follows:
 - By phone to the EMA at 800-852-7550 and to the Regional Board at 951-782-4130
 - At a minimum:
 - Any sewage spill greater than 1,000 gallons
 - Any sewage spill that could impact water contact recreation
 - Any discharge of sewage into or on any Waters of the State (reportable to EMA³)
 - In addition, the Permittee with jurisdiction for the spill will notify the Highway Patrol of SSOs affecting a State Highway in accordance with EMA guidance⁴.

Should a Permittee discover discharges of sewage in an area not served by a sewerage agency, the Permittee with jurisdiction for the spill will follow the notification requirements described above for SSOs originating from a private lateral or private property.

Other spill incidents, including any unauthorized discharges that are not reportable to the EMA, are reported to the Regional Board's Executive Officer as part of the Annual Report as described in Section 3.3.

3 "California Hazardous Material Spill/Release Notification Guidance." February 2012. California EMA.
<http://www.calema.ca.gov/HazardousMaterials/Pages/Spill-Release-Reporting.aspx>

4 "California Hazardous Material Spill/Release Notification Guidance." February 2012. California EMA.
<http://www.calema.ca.gov/HazardousMaterials/Pages/Spill-Release-Reporting.aspx>

3.1.3 Agency Contact Information

To identify sewerage agency with jurisdiction in the spill area, **see Attachment A**. A list of the current contact phone numbers for various agencies is provided below:

CONTACT:	PHONE NUMBER:
County Department of Environmental Health / Environmental Resources Management	951-955-8980
Governor's Emergency Management Agency (EMA)	800-852-7550
Permittee Staff (whose MS4 may be affected by spill)	See Attachment C
Regional Water Quality Control Board: Santa Ana Region	951-782-4130
District NPDES Section	951-955-1200
Sewerage agency with jurisdiction in spill area	See Attachment A
California Highway Patrol (if highway affected by spill)	911

3.2 Minimum Information for Notification

Permittee staff providing notice should make reasonable attempts to reach sewerage agency contacts during and after normal working hours. In cases where sewerage agency contacts are not available, messages shall be left. The following minimum information should be conveyed by Permittee staff as appropriate:

- ◆ Identity of caller
- ◆ Location, date and time of SSO, status of the SSO (actual or threatened release)
- ◆ Quantity of sewage released (estimate of flow or volume)
- ◆ Need for public safety or traffic control measures
- ◆ Cause of the SSO, if known
- ◆ 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 Attachment A**)
- ◆ Determination if SSO reached a state highway

A copy of a sample SSO reporting form is included in **Attachment D**.

3.3 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 Region.

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

3.4 Response Requirements

Responsible sewerage 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 up 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 not be sanitized with disinfectant where not immediately impacting public health (i.e. no chlorine shall be used when discharge is within 1,500 feet 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.

3.5 Sampling/Monitoring

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

4.0 Training Requirements

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

5.0 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 sewerage agency (**see Attachment A**) to coordinate a response.

6.0 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.

Glossary

MS4 (Municipal Separate Storm Sewer System) - An 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, stormwater, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an 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 or conveying stormwater;
- (iii) Which is not a combined sewer; and
- (iv) Which is not part of the POTW as defined at 40 CFR 122.2.

Receiving Waters – The Waters of the United States within the Santa Ana Region.

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 U.S.;
- (ii) Overflows or releases of wastewater that do not reach Waters of the U.S.; 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 an SSO when sewage is discharged off private property into streets, stormdrains, or Waters of the U.S.

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 sewage to a treatment facility. 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 into these temporary storage facilities are not SSOs.

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

Waters of the State – Any water, surface or underground, including saline waters within the boundaries of the State.

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 Waters of the United States. See 40 CFR 122.2 for a more expansive definition.

Attachment A

Sewering Agency Contact Roster

Unified Sanitary Sewer Spill Response Procedure

Attachment A (Sewering Agency Contact Roster)

City of Beaumont/Utility Partners

Mr. Dan Friou
715 W. 4th Street
Beaumont, CA 92223
951.769.8534, After Hours: 951.531.3923
Fax: 951.769.0914
dfriou@utilitypartnersllc.com

Eastern Municipal Water District

Integrated Operations Center or
Mr. Mark Chamberlin
Post Office Box 8300
Perris, CA 92572
951.928.3777 ext. 6265 (During & After Work Hours)
Fax: 951.928.6177
chamberm@emwd.org

Elsinore Valley Municipal Water District

Mr. Dennis McBride
Post Office Box 3000
Lake Elsinore, CA 92531-3000
951.674.3146 ext. 8203, After Hours:
Fax: 951.245.5946
dmcbride@evmwd.net

Jurupa Community Services District

Mr. Steve Jaynes
11201 Harrel Street
Mira Loma, CA 91752
951.681.1482 ext.136, Cell: 951.830.1517
Fax: 951.685.1153
info@jcsd.org OR sjaynes@jcsd.us

Lee Lake Water District

Mr. Ken Codwell (Plant Super.) 951.277.1414
Mr. Jeff Pape (GM) 951.277.1414
After Hours: 951.830.3651; 760.473.4120; 760.250.9658
22646 Temescal Canyon Road
Corona, CA 91719
Fax 951.277.1419
jp@llwd.org

Rubidoux Community Services District

Mr. Dan Ballow
Post Office Box 3098
Riverside, CA 92519
951.684.7580, After Hours: 951.684.7580
Fax: 951.369.4061
dballow@rcsd.org

Western Municipal Water District

Mr. Greg Snyder
14205 Meridian Parkway
Riverside, CA 92518
951.789.5131, After Hours: 951.789.5109
Fax: 951.780.0272
gsnyder@wmwd.com

City of Corona

Department of Water and Power
Mr. Ed Lockhart 951.736.2443, After Hours: 951.736.2330
400 S. Vicentia Avenue
Corona, CA 92882
Fax: 951.735.3786
ed.lockhart@ci.corona.ca.us

Edgemont Community Services District

Mr. Joe Teague 951.653.5120, 951.233.8860 cell
After Hours: 951.656.1234 home
Post Office Box 2024
Riverside, CA 92516-2024
Sam.Gershon@webbassociates.com

City of Hemet Water/Wastewater Dept.

Mr. Ron Proze
3777 Industrial Avenue
Hemet, CA 92545
951.765.3710, Cell: 951.634.3103, Police Dispatch: 951.765.2400
Fax: 951.765.2493
rproze@cityofhemet.org

Lake Hemet Municipal Water District

Mr. Mitch Freeman (Sr. W. Operator) 951.658.3241 ext. 247
Mr. Mike Gow (Chief Engineer) 951.658.3241 ext. 238
After Hours: 951.956.4836; 951.230.5491
Post Office Box 5039
Hemet, CA 92544
Fax 951.766.7031
mfreeman@lhmwd.org

City of Riverside – Waste Water Operations Dispatch

5950 Acorn Street
Riverside, CA 92504
951.826.5311, (Call Center)
callcenter@riversideca.gov

Santa Ana Watershed Project Authority

Mr. Rich Haller
11615 Sterling Avenue
Riverside, CA 92503
951.354.4240
Fax: 951.785.7076
rhaller@sawpa.org

Yucaipa Valley Water District

Mr. John Wrobel
12770 Second Street
Yucaipa, CA 92399
909.797.5117, After Hours: 909.208.6347
Fax: 909.797.5937
jwrobel@yvwd.dst.ca.us

Attachment B

Wastewater Treatment Plants and Service Area

Attachment C

MS4 Permittee Contact Roster

Unified Sanitary Sewer Spill Response Procedure

Attachment C (MS4 Permittee Contact Roster)

City of Beaumont

Mr. Kishen Prathivadi
550 E. 6th Street
Beaumont, CA 92223
951.769.8520, Fax: 951.676.2054
kprathivadi@urbanlogicgroup.com

City of Canyon Lake

Mr. Richard Rowe 31516 Railroad Canyon Road
Canyon Lake, CA 92587
951.244.2955, Fax: 951.246.2022
rowe@cityofcanyonlake.com

City of Eastvale

Mr. Jon Crawford
6080 Hamner Avenue Ste., 103
Eastvale, CA 91752
951.505.1068
jcrawford@ci.eastvale.ca.us

City of Jurupa Valley

Mr. Don Allison
8304 Limonite Avenue, Suite M
Jurupa Valley, CA 92509
Dallison@jurupavalley.org

City of Menifee

Ms. Lori Wolf
29683 New Hub Drive, Suite C
Menifee, CA 92586
951.672.6777
lwolfe@cityofmenifee.us

City of Murrieta

Mr. Bill Woolsey
1 Town Center
Murrieta, CA 92562 Direct 951.461.6073,
Main (951)304-2489
Fax: 951.698.3416
wwoolsey@murrieta.org

City of Perris

Mr. Daryl Hartwill
101 N. "D" Street
Perris, CA 92570
951.657.3280, Fax: 951.943.1871, After Hours: 951.359.2987
dhartwill@cityofperris.org

Riverside County Environmental Health

Mr. John Watkins
4065 County Circle Drive Riverside, CA 92503
951.358.5055, Fax: 951.358-5017
JWatkins@rivcocha.org

Riverside County Flood Control District

951-955-1200
Mr. David Ortega, Senior Engineering Technician
1995 Market Street

City of Calimesa

Mr. Bob French
908 Park Avenue
Calimesa, CA 92320
909.795.9801, Fax: 909.795.4399
bfrench@cityofcalimesa.net

City of Corona

Ms. Michelle Hindersinn
400S. Vicentia Avenue
Corona, CA 92882
951.736.2248, Fax: 951.736-2496
Michele.Hindersinn@ci.corona.ca.us
After Hours:
(951)736-2330

City of Hemet

Ms. Linda Nixon
3777 Industrial Avenue
Hemet, CA 92545
951.765.3880, Fax: 951.765.2493
lnixon@cityofhemet.org

City of Lake Elsinore

Ms. Nicole McCalmont or Mr. Ken Seumalo
130 South Main Street
Lake Elsinore, CA 92530
951.674.3124 ext. 244, Fax: 951.674.8761
nmccalmont@lake-elsinore.org OR kseumalo@lake-elsinore.org

City of Moreno Valley

Mr. Kent Wegelin
14177 Frederick Street
Moreno Valley, CA 92552-0805
951.413.3120, Fax: 951.413.3158
After Hours: Emergency Stand-by group
Cell: 951.442.5208
kentw@moval.org

City of Norco

Mr. William Thompson
1281 Fifth Street
Norco, CA 92860
951.270.5607, Fax: 951.270.5619
Emergency: 951.371.1143
bthompson@ci.norco.ca.us

City of Riverside

Mr. Kevin Street
5950 Acorn Street
Riverside, CA 92504
951.351.6140, Fax: 951.351.6267
Alternate/after Hours-
WQCP Dispatch: 951-351-6280
City Call Center: 951-826-5311
kstreet@riversideca.gov

Riverside County Executive Office

Mr. Steven Horn
4080 Lemon Street, 4th Floor
Riverside, CA 92501
951.955.1110, Fax: 951.955.1105
schorn@rceo.org

City of San Jacinto

Mr. Mike Emberton, Assistant City Manager
Mr. Dan Mudrovich, Utilities Super.
201 E. Main Street
San Jacinto, CA 92583

Riverside, CA 92501
951.955.4390, Cell: 951-961-9574 Fax:
951.788.9965

DavidJOrtega@rcflood.org

After Hours:

Mark Biloki, Maintenance Superintendent,
mbiloki@rcflood.org

951.955.1310, Cell: 951.288.5254

City of Temecula

Mr. Aldo Licitra

43200 Business Park Drive, Temecula, CA 92589-9033

951.308.6387, Field: 951.541.7850, Fax: 951.694.6475

Aldo.licitra@cityoftemecula.org

After Hours: Rodney Tidwell, Public Works Maint. Supervisor

951.302.4102, Field: 951.303.5497

Rodney.tidwell@cityoftemecula.org

951.453.7381, After Hours: 951.453.5318, Pager: 951.765.8197

Fax: 951.487.7382

Memberton@sanjacintoca.us OR Dmudrovich@sanjacintoca.us

City of Wildomar

Mr. Tim D'Zmura

23873 Clinton Keith Road, Suite 201

Wildomar, CA 92595

951.677.7751, Fax: 951.698.1463

tdzmura@cityofwildomar.org

Attachment D

Sample SSO Reporting Form

SANITARY SEWER OVERFLOW REPORT FORM

This report is: Preliminary Final Revised Final

Sanitary Sewer Overflow Sequential Tracking Number: _____

Reported to: _____
(Enter Fax #, Voicemail #, 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) Overflow Start Time: _____ (24 Hour Clock)

Overflow End Date: ____/____/____ (MM/DD/YY) Overflow End 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 Address _____
(or Cross Streets)

City: _____ Zip Code: _____

County: Riverside

Sanitary Sewer Overflow Structure ID: _____

Overflow Cause - - Short Description (Check as applicable)

- | | | | |
|---------------------------------|------------------------------------|--|---|
| <input type="checkbox"/> Roots | <input type="checkbox"/> Grease | <input type="checkbox"/> Line Break | <input type="checkbox"/> Infiltration |
| <input type="checkbox"/> Rocks | <input type="checkbox"/> Blockage | <input type="checkbox"/> Power Failure | <input type="checkbox"/> Pump Station Failure |
| <input type="checkbox"/> Debris | <input type="checkbox"/> Vandalism | <input type="checkbox"/> Flood Damage | <input type="checkbox"/> Manhole Failure |
| <input type="checkbox"/> Other | <input type="checkbox"/> Unknown | <input type="checkbox"/> Construction | <input type="checkbox"/> Private Property |

Overflow Cause - - Detailed Description:

SANITARY SEWER OVERFLOW REPORT FORM

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?

Yes No

Initial and Secondary Receiving Waters:

Did the sanitary sewer overflow enter a storm drain?

Yes No

Did the sanitary sewer overflow reach surface waters other than a storm drain?

Yes No

Name or description of secondary receiving waters. (If none, state such)

If the sanitary sewer overflow did not reach surface waters, describe the final destination of sewage.

Notification:

Was the local health services agency notified?

Yes No

If the overflow was over 1,000 gallons, was the Office of Emergency Services (OES) notified?

Yes No Not applicable

Affected Area Posting:

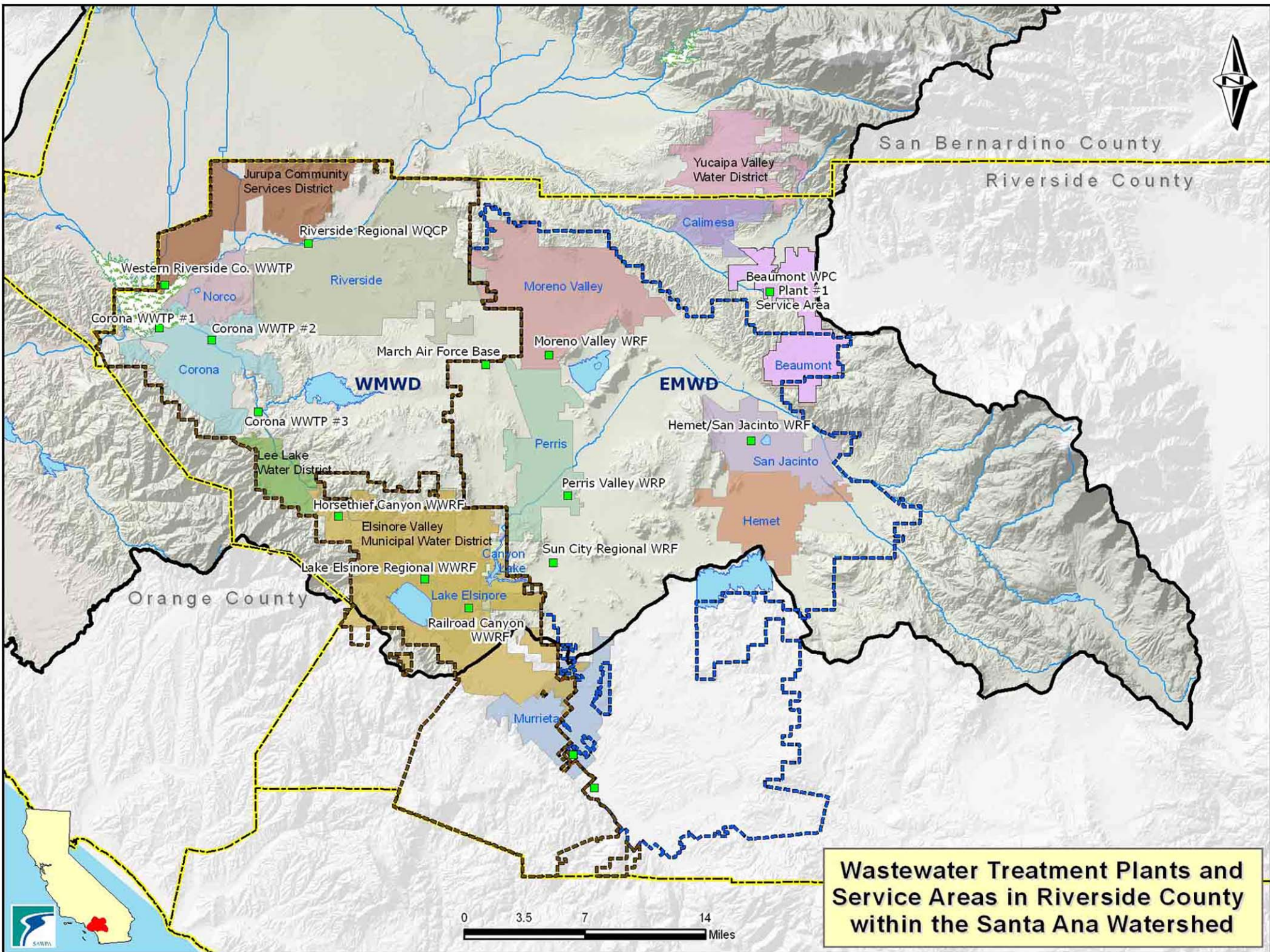
Were signs posted to warn of contamination?

Yes No

Location of Posting (if Posted): _____

How many days were the warning signs posted?: _____

Remarks:

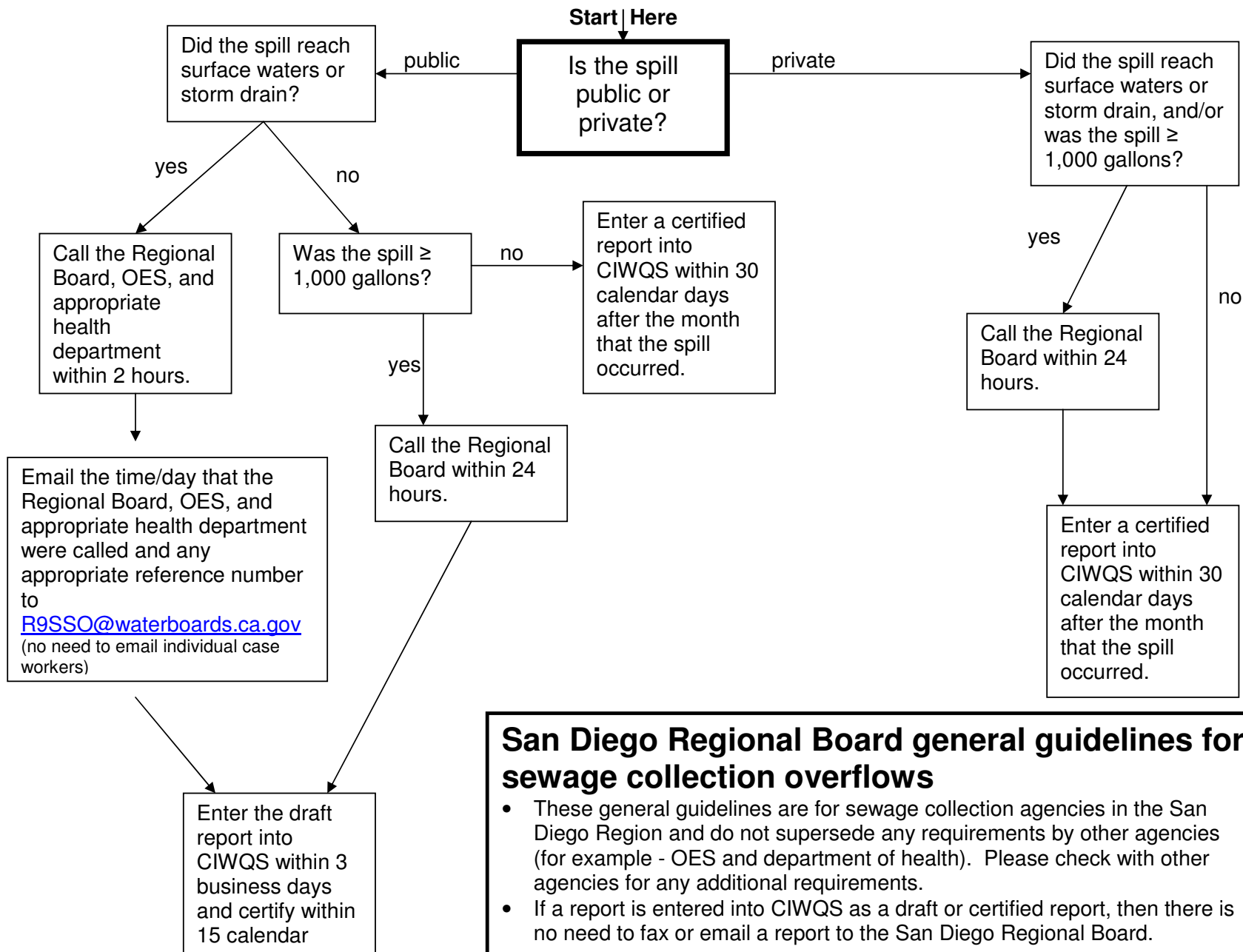


Wastewater Treatment Plants and Service Areas in Riverside County within the Santa Ana Watershed

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Elsinore Valley Municipal Water District

**APPENDIX G – SAN DIEGO REGIONAL BOARD
SSO GUIDELINES FLOW CHART**



San Diego Regional Board general guidelines for sewage collection overflows

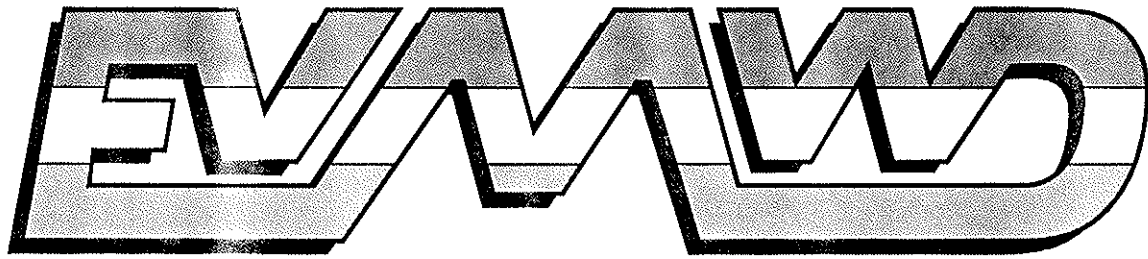
- These general guidelines are for sewage collection agencies in the San Diego Region and do not supersede any requirements by other agencies (for example - OES and department of health). Please check with other agencies for any additional requirements.
- If a report is entered into CIWQS as a draft 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



Elsinore Valley Municipal Water District

**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

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 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 17).
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 main

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.
52. RCRA shall mean Resource Conservation and Recovery Act of 1976 Public Law (PI) 94-580 and amendments thereto.
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 recover 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^oF (60^oC) 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^oF (60^oC), 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^oF (40^oC);
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 RWRP 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, algacides, 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, Endosufan (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: Arochlors 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.
- 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 Districts 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 permitted 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 RWRP. 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 Districts 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 RWRP, 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 EQUIPEMENT 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 Districts collection system or POTW.

- B. Any person who discharges or causes the discharge of wastewater or materials, which cause detrimental effects on the Districts 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 Districts 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 USER COSTS

The discharger at his sole expense shall accomplish all construction, reconstruction or maintenance of a building sewer.

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, a 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 Districts 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).
 5. Measurement of Pollutants.
 - 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

of 1976 (42 U.S.C.A. Section 6901 et seq.); and (5) California Government Code, Sections 54739-54740.

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 \$300.00. 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 ad judicatory 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 General Manager 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).

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.

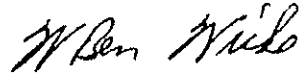
ARTICLE 9

Effective Date

9.100 EFFECTIVE DATE

The effective date of this Ordinance shall be December 20, 2004.

ADOPTED, SIGNED AND APPROVED this 20th day of December,
2004.



W. Ben Wicke, President of the
Board of Directors of
Elsinore Valley Municipal Water District

ATTEST:




Terese Quintanar, Secretary of the
Board of Directors of
Elsinore Valley Municipal Water District

STATE OF CALIFORNIA)
) ss:
COUNTY OF RIVERSIDE)

I, Terese Quintanar, Board Secretary of the Board of Directors of the Elsinore Valley Municipal Water District, do hereby certify that the foregoing Ordinance No. 160, was duly adopted by said Board at its Special Meeting held on December 20, 2004, and that it was so adopted by the following roll call vote:

AYES: Alongi, Anderson, Hyland, Wicke, Williams
NOES: None
ABSENT: None
ABSTAIN: None



Terese Quintanar, Secretary of the
Board of Directors of the
Elsinore Valley Municipal Water District

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Elsinore Valley Municipal Water District

**APPENDIX I - High Frequency Maintenance Lines
(Hot Spots)**

High Frequency Maintenance lines (Hot Spot) Calendar

Date and initial each box indicating cleaned. Turn into Supervisor when complete.

January _____ Revised: 1/11/17

Wastewater Hot Spots Description SEE MAPS	Footage to be cleaned	Location Map #	Date / Initials	Check if Super Jet used
Canyon Lake				
Village Way Dr boat ramp	1,298	CL-01		<input type="checkbox"/>
Old Wrangler to Big Range, Vent MH on property	881	CL-02		
Skylink Dr. to Railroad Canyon Rd to golf course	687	CL-03		
Easement from Cove View to CLDN	318	CL-04		
Lighthouse Dr into condos	674	CL-05		
Lighthouse Dr from club house thru condos to old liftstation site	1,279	CL-06		<input type="checkbox"/>
Point Marina, check manholes at end of culdesac	3 manholes	CL-07		
Longhorn from Happy Camp to Strawberry Ln.	825	CL-08		
Longhorn from Little Pony to liftstation Before cleaning Notify Mr/Mrs Branch 30345 Longhorn	845	CL-09		
Remove Grease from MH-9821 and Clean Section through Easement	203'			<input type="checkbox"/>
Canyon Hills				
Baywood St. to Poppy Way MH-6182 to MH-6189	187'			<input type="checkbox"/>
Downtown Lake Elsinore				
Sumner btwn Davis and Townsend, low pressure	361	DE-01		
Alley behind SCE substation from Pottery	485	DE-02		<input type="checkbox"/>
Main St and Heald to Franklin	700	DE-04		<input type="checkbox"/>
Main St and Sumner, east 6" to 4" outside MH - low pressure	219	DE-05		<input type="checkbox"/>
Heald and Matich, west, low pressure	264	DE-06		<input type="checkbox"/>
Heald & Mohr, west	191	DE-07		
Lake Elsinore				
B-8 Liftstation Wet Well (clean & degrease)	1 wet well	E-01		<input type="checkbox"/>
Harbor Grand Apts to Riverside Dr	1115	E-02		
Machado School to Quail	2030	E-03		
Laurwood Ct. to Terra Cotta, Terra Cotta - St Clair Ave to Braodway Ave	941	E-04		<input type="checkbox"/>
Stadium Villas Liftstation to 2 manholes out of station	40	E-05		<input type="checkbox"/>
Lincoln from A-3 to Robin	2276	E-06		<input type="checkbox"/>
Nashland to parking lot	372	E-07		<input type="checkbox"/>
Riverside Drive from Lake Crest to Corner of Sears Plaza, one segment up Eisenhower and Lake Crest.	1535	E-08		<input type="checkbox"/>
Lake Crest Dr to Mari & dolly St.	166	E-09		
Outrigger from Edgewater to Spyglass	295	E-10		
Wildomar				
Navut from Pashal to Gatu	491	W-01		<input type="checkbox"/>
Wanki & Woshka	802	W-02		<input type="checkbox"/>
Twinflower from Larkspur to Aster	272	W-03		<input type="checkbox"/>
Cashew from Wesley to Mission Trail	3561	W-04		
Woodmor booster Drain	75'	W-05		<input type="checkbox"/>
Murrieta				
Check the manhole are secure in the easement off Manresa Ct	3 manholes	M-01		<input type="checkbox"/>
Cal Oaks fm Saradella to the Colony	383'	M-02		<input type="checkbox"/>
Monroe Ave. & Sunflower St.	443'	M-03		<input type="checkbox"/>
Horsethief				
Mountain View	1 manhole	H-01		
Tuscany				
Ck manholes from Summerhill Dr, 3manholes up Villa Milano and 1 manhole down Villa Ravenna, clean if needed.	4 manholes	T-01		<input type="checkbox"/>

High Frequency Maintenance lines (Hot Spot) Calendar

Date and initial each box indicating cleaned. Turn into Supervisor when complete.

February _____ Revised: 1/11/17

Wastewater Hot Spots Description SEE MAPS	Footage to be cleaned	Location Map #	Date / Initials	Check if Super Jet used
Canyon Lake				
Village Way Dr boat ramp	1,298'	CL-01		<input type="checkbox"/>
Old Wrangler to Big Range, Vent MH on property	881'	CL-02		<input type="checkbox"/>
Skylink Dr. to Railroad Canyon Rd to golf course	687'	CL-03		
Easement from Cove View to CLDN	318'	CL-04		
Lighthouse Dr into condos	674'	CL-05		
Lighthouse Dr from club house thru condos to old liftstation site	1,279'	CL-06		
Point Marina, check manholes at end of culdesac	3 manholes	CL-07		
Longhorn from Happy Camp to Strawberry Ln.	825'	CL-08		
Longhorn from Little Pony to liftstation Before cleaning Notify Mr/Mrs Branch 30345 Longhorn	845'	CL-09		
Remove Grease from MH-9821 and Clean Section through Easement	203'			<input type="checkbox"/>
Canyon Hills				
Baywood St. to Poppy Way MH-6182 to MH-6189	187'			<input type="checkbox"/>
Downtown Lake Elsinore				
Sumner btwn Davis and Townsend, low pressure	361'	DE-01		<input type="checkbox"/>
Alley behind SCE substation from Pottery	485'	DE-02		
Main St and Heald to Franklin	700'	DE-04		
Main St and Sumner, east 6" to 4" outside MH - low pressure	219'	DE-05		
Heald and Matich, west, low pressure	264'	DE-06		
Heald & Mohr, west	191'	DE-07		
Lake Elsinore				
B-8 Liftstation Wet Well (clean & degrease)	1 wet well	E-01		<input type="checkbox"/>
Harbor Grand Apts to Riverside Dr	1115'	E-02		<input type="checkbox"/>
Machado School to Quail	2030'	E-03		<input type="checkbox"/>
Laurwood Ct. to Terra Cotta, Terra Cotta - St Clair Ave to Braodway Ave	941'	E-04		
Stadium Villas Liftstation to 2 manholes out of station	40'	E-05		
Lincoln from A-3 to Robin	2276'	E-06		
Nashland to parking lot	372'	E-07		
Riverside Drive from Lake Crest to Corner of Sears Plaza, one segment up Eisenhower and Lake Crest.	1535'	E-08		
Lake Crest Dr to Mari & dolly St.	166'	E-09		
Outrigger from Edgewater to Spyglass	295'	E-10		
Wildomar				
Navut from Pashal to Gatu	491'	W-01		
Wanki & Woshka	802'	W-02		
Twinflower from Larkspur to Aster	272'	W-03		
Cashew from Wesley to Mission Trail	3561'	W-04		
Woodmor Booster Drain	75'	W-05		
Murrieta				
Check the manhole are secure in the easement off Manresa Ct	3 manholes	M-01		<input type="checkbox"/>
Cal Oaks fm Saradella to the Colony	383'	M-02		
Monroe Ave. & Sunflower St.	443'	M-03		
Horsethief				
Mountain View	1 manhole	H-01		
Tuscany				
Ck manholes from Summerhill Dr, 3manholes up Villa Milano and 1 manhole down Villa Ravenna, clean if needed.	4 manholes	T-01		<input type="checkbox"/>

High Frequency Maintenance lines (Hot Spot) Calendar

Date and initial each box indicating cleaned. Turn into Supervisor when complete.

March ____ Revised: 1/11/17

Wastewater Hot Spots Description SEE MAPS	Footage to be cleaned	Location Map #	Date / Initials	Check if Super Jet used
Canyon Lake				
Village Way Dr boat ramp	1,298'	CL-01		<input type="checkbox"/>
Old Wrangler to Big Range, Vent MH on property	881'	CL-02		
Skylink Dr. to Railroad Canyon Rd to golf course	687'	CL-03		
Easement from Cove View to CLDN	318'	CL-04		
Lighthouse Dr into condos	674'	CL-05		
Lighthouse Dr from club house thru condos to old liftstation site	1,279'	CL-06		
Point Marina, check manholes at end of culdesac	3 manholes	CL-07		
Longhorn from Happy Camp to Strawberry Ln.	825'	CL-08		
Longhorn from Little Pony to liftstation Before cleaning Notify Mr/Mrs Branch 30345 Longhorn	845'	CL-09		
Remove Grease from MH-9821 and Clean Section through Easement	203'			<input type="checkbox"/>
Canyon Hills				
Baywood St. to Poppy Way MH-6182 to MH-6189	187'			<input type="checkbox"/>
Downtown Lake Elsinore				
Sumner btwn Davis and Townsend, low pressure	361'	DE-01		
Alley behind SCE substation from Pottery	485'	DE-02		
Main St and Heald to Franklin	700'	DE-04		
Main St and Sumner, east 6" to 4" outside MH - low pressure	219'	DE-05		
Heald and Matich, west, low pressure	264'	DE-06		
Heald & Mohr, west	191'	DE-07		
Lake Elsinore				
B-8 Liftstation Wet Well (clean & degrease)	1 wet well	E-01		<input type="checkbox"/>
Harbor Grand Apts to Riverside Dr	1115'	E-02		
Machado School to Quail	2030'	E-03		
Laurwood Ct. to Terra Cotta, Terra Cotta - St Clair Ave to Braodway Ave	941'	E-04		
Stadium Villas Liftstation to 2 manholes out of station	40'	E-05		
Lincoln from A-3 to Robin	2276'	E-06		
Nashland to parking lot	372'	E-07		
Riverside Drive from Lake Crest to Corner of Sears Plaza, one segment up Eisenhower and Lake Crest.	1535'	E-08		
Lake Crest Dr to Mari & dolly St.	166'	E-09		
Outrigger from Edgewater to Spyglass	295'	E-10		
Wildomar				
Navut from Pashal to Gatu	491'	W-01		
Wanki & Woshka	802'	W-02		
Twinflower from Larkspur to Aster	272'	W-03		
Cashew from Wesley to Mission Trail	3561'	W-04		
Woodmor Booster Drain	75'	W-05		<input type="checkbox"/>
Murrieta				
Check the manhole are secure in the easement off Manresa Ct	3 manholes	M-01		<input type="checkbox"/>
Cal Oaks fm Saradella to the Colony	383'	M-02		
Monroe Ave. & Sunflower St.	443'	M-03		
Horsethief				
Mountain View	1 manhole	H-01		
Tuscany				
Ck manholes from Summerhill Dr, 3manholes up Villa Milano and 1 manhole down Villa Ravenna, clean if needed.	4 manholes	T-01		<input type="checkbox"/>

High Frequency Maintenance lines (Hot Spot) Calendar

Date and initial each box indicating cleaned. Turn into Supervisor when complete.

April _____ Revised: 1/11/17

Wastewater Hot Spots Description SEE MAPS	Footage to be cleaned	Location Map #	Date / Initials	Check if Super Jet used
Canyon Lake				
Village Way Dr boat ramp Notify Mr. Alan 22050 Village 951-244-0786	1,298'	CL-01		<input type="checkbox"/>
Old Wrangler to Big Range, Vent MH on property	881'	CL-02		<input type="checkbox"/>
Skylink Dr. to Railroad Canyon Rd to golf course	687'	CL-03		<input type="checkbox"/>
Easement from Cove View to CLDN	318'	CL-04		<input type="checkbox"/>
Lighthouse Dr into condos	674'	CL-05		<input type="checkbox"/>
Lighthouse Dr from club house thru condos to old liftstation site	1,279'	CL-06		
Point Marina, check manholes at end of culdesac	3 manholes	CL-07		<input type="checkbox"/>
Longhorn from Happy Camp to Strawberry Ln.	825'	CL-08		<input type="checkbox"/>
Longhorn from Little Pony to liftstation Before cleaning Notify Mr/Mrs Branch 30345 Longhorn	845'	CL-09		
Remove Grease from MH-9821 and Clean Section through Easement	203'			<input type="checkbox"/>
Canyon Hills				
Baywood St. to Poppy Way MH-6182 to MH-6189	187'			<input type="checkbox"/>
Downtown Lake Elsinore				
Sumner btwn Davis and Townsend, low pressure	361'	DE-01		<input type="checkbox"/>
Alley behind SCE substation from Pottery	485'	DE-02		<input type="checkbox"/>
Main St and Heald to Franklin	700'	DE-04		<input type="checkbox"/>
Main St and Sumner, east 6" to 4" outside MH - low pressure	219'	DE-05		<input type="checkbox"/>
Heald and Matich, west, low pressure	264'	DE-06		<input type="checkbox"/>
Heald & Mohr, west	191'	DE-07		<input type="checkbox"/>
Lake Elsinore				
B-8 Liftstation Wet Well (clean & degrease)	1 wet well	E-01		<input type="checkbox"/>
Harbor Grand Apts to Riverside Dr	1115'	E-02		<input type="checkbox"/>
Machado School to Quail	2030'	E-03		<input type="checkbox"/>
Laurwood Ct. to Terra Cotta, Terra Cotta - St Clair Ave to Braodway Ave	941'	E-04		<input type="checkbox"/>
Stadium Villas Liftstation to 2 manholes out of station	40'	E-05		<input type="checkbox"/>
Lincoln from A-3 to Robin	2276'	E-06		<input type="checkbox"/>
Nashland to parking lot	372'	E-07		<input type="checkbox"/>
Riverside Drive from Lake Crest to Corner of Sears Plaza, one segment up Eisenhower and Lake Crest.	1535'	E-08		<input type="checkbox"/>
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Cashew from Wesley to Mission Trail	3561'	W-04		<input type="checkbox"/>
Woodmor Booster Drain	75'	W-05		
Murrieta				
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Cal Oaks fm Saradella to the Colony	383'	M-02		<input type="checkbox"/>
Monroe Ave. & Sunflower St.	443'	M-03		<input type="checkbox"/>
Horsethief				
Mountain View	1 manhole	H-01		<input type="checkbox"/>
Tuscany				
Ck manholes from Summerhill Dr, 3manholes up Villa Milano and 1 manhole down Villa Ravenna, clean if needed.	4 manholes	T-01		<input type="checkbox"/>

High Frequency Maintenance lines (Hot Spot) Calendar

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Lake Elsinore				
B-8 Liftstation Wet Well (clean & degrease)	1 wet well	E-01		<input type="checkbox"/>
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Murrieta				
Check the manhole are secure in the easement off Manresa Ct	3 manholes	M-01		<input type="checkbox"/>
Cal Oaks fm Saradella to the Colony	383'	M-02		
Monroe Ave. & Sunflower St.	443'	M-03		
Horsethief				
Mountain View	1 manhole	H-01		
Tuscany				
Ck manholes from Summerhill Dr, 3manholes up Villa Milano and 1 manhole down Villa Ravenna, clean if needed.	4 manholes	T-01		<input type="checkbox"/>

High Frequency Maintenance lines (Hot Spot) Calendar

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June _____ Revised: 1/11/17

Wastewater Hot Spots Description SEE MAPS	Footage to be cleaned	Location Map #	Date / Initials	Super Jet used
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Village Way Dr boat ramp Notify Mr. Alan 22050 Village 951-244-0786	1,298'	CL-01		<input type="checkbox"/>
Old Wrangler to Big Range, Vent MH on property	881'	CL-02		<input type="checkbox"/>
Skylink Dr. to Railroad Canyon Rd to golf course	687'	CL-03		
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Canyon Hills				
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Downtown Lake Elsinore				
Sumner btwn Davis and Townsend, low pressure	361'	DE-01		<input type="checkbox"/>
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Lake Elsinore				
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Harbor Grand Apts to Riverside Dr	1115'	E-02		<input type="checkbox"/>
Machado School to Quail	2030'	E-03		<input type="checkbox"/>
Laurwood Ct. to Terra Cotta, Terra Cotta - St Clair Ave to Braodway Ave	941'	E-04		
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Lincoln from A-3 to Robin	2276'	E-06		
Nashland to parking lot	372'	E-07		
Riverside Drive from Lake Crest to Corner of Sears Plaza, one segment up Eisenhower and Lake Crest.	1535'	E-08		
Lake Crest Dr to Mari & dolly St.	166'	E-09		
Outrigger from Edgewater to Spyglass	295'	E-10		
Wildomar				
Navut from Pashal to Gatu	491'	W-01		
Wanki & Woshka	802'	W-02		
Twinflower from Larkspur to Aster	272'	W-03		
Cashew from Wesley to Mission Trail	3561'	W-04		
Woodmor Booster Drain	75'	W-05		
Murrieta				
Check the manhole are secure in the easement off Manresa Ct	3 manholes	M-01		<input type="checkbox"/>
Cal Oaks fm Saradella to the Colony	383'	M-02		
Monroe Ave. & Sunflower St.	443'	M-03		
Horsethief				
Mountain View	1 manhole	H-01		
Tuscany				
Ck manholes from Summerhill Dr, 3manholes up Villa Milano and 1 manhole down Villa Ravenna, clean if needed.	4 manholes	T-01		<input type="checkbox"/>

High Frequency Maintenance lines (Hot Spot) Calendar

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July _____ Revised: 1/11/17

Wastewater Hot Spots Description SEE MAPS	Footage to be cleaned	Location Map #	Date / Initials	Check if Super Jet used
Canyon Lake				
Village Way Dr boat ramp Notify Mr. Alan 22050 Village 951-244-0786	1,298'	CL-01		<input type="checkbox"/>
Old Wrangler to Big Range, Vent MH on property	881'	CL-02		
Skylink Dr. to Railroad Canyon Rd to golf course	687'	CL-03		
Easement from Cove View to CLDN	318'	CL-04		
Lighthouse Dr into condos	674'	CL-05		
Lighthouse Dr from club house thru condos to old liftstation site	1,279'	CL-06		<input type="checkbox"/>
Point Marina, check manholes at end of culdesac	3 manholes	CL-07		
Longhorn from Happy Camp to Strawberry Ln.	825'	CL-08		
Longhorn from Little Pony to liftstation Before cleaning Notify Mr/Mrs Branch 30345 Longhorn	845'	CL-09		
Remove Grease from MH-9821 and Clean Section through Easement	203'			<input type="checkbox"/>
Canyon Hills				
Baywood St. to Poppy Way MH-6182 to MH-6189	187'			<input type="checkbox"/>
Downtown Lake Elsinore				
Sumner btwn Davis and Townsend, low pressure	361'	DE-01		
Alley behind SCE substation from Pottery	485'	DE-02		<input type="checkbox"/>
Main St and Heald to Franklin	700'	DE-04		<input type="checkbox"/>
Main St and Sumner, east 6" to 4" outside MH - low pressure	219'	DE-05		<input type="checkbox"/>
Heald and Matich, west, low pressure	264'	DE-06		<input type="checkbox"/>
Heald & Mohr, west	191'	DE-07		
Lake Elsinore				
B-8 Liftstation Wet Well (clean & degrease)	1 wet well	E-01		<input type="checkbox"/>
Harbor Grand Apts to Riverside Dr	1115'	E-02		
Machado School to Quail	2030'	E-03		
Laurwood Ct. to Terra Cotta, Terra Cotta - St Clair Ave to Braodway Ave	941'	E-04		<input type="checkbox"/>
Stadium Villas Liftstation to 2 manholes out of station	40'	E-05		<input type="checkbox"/>
Lincoln from A-3 to Robin	2276'	E-06		<input type="checkbox"/>
Nashland to parking lot	372'	E-07		<input type="checkbox"/>
Riverside Drive from Lake Crest to Corner of Sears Plaza, one segment up Eisenhower and Lake Crest.	1535'	E-08		<input type="checkbox"/>
Lake Crest Dr to Mari & dolly St.	166'	E-09		
Outrigger from Edgewater to Spyglass	295'	E-10		
Wildomar				
Navut from Pashal to Gatu	491'	W-01		<input type="checkbox"/>
Wanki & Woshka	802'	W-02		<input type="checkbox"/>
Twinflower from Larkspur to Aster	272'	W-03		<input type="checkbox"/>
Cashew from Wesley to Mission Trail	3561'	W-04		
Woodmor Booster Drain	75'	W-05		<input type="checkbox"/>
Murrieta				
Check the manhole are secure in the easement off Manresa Ct	3 manholes	M-01		<input type="checkbox"/>
Cal Oaks fm Saradella to the Colony	383'	M-02		<input type="checkbox"/>
Monroe Ave. & Sunflower St.	443'	M-03		<input type="checkbox"/>
Horsethief				
Mountain View	1 manhole	H-01		<input type="checkbox"/>
Tuscany				
Ck manholes from Summerhill Dr, 3manholes up Villa Milano and 1 manhole down Villa Ravenna, clean if needed.	4 manholes	T-01		<input type="checkbox"/>

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Village Way Dr boat ramp Notify Mr. Alan 22050 Village 951-244-0786	1,298'	CL-01		<input type="checkbox"/>
Old Wrangler to Big Range, Vent MH on property	881'	CL-02		<input type="checkbox"/>
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Baywood St. to Poppy Way MH-6182 to MH-6189	187'			<input type="checkbox"/>
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Sumner btwn Davis and Townsend, low pressure	361'	DE-01		<input type="checkbox"/>
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Heald and Matich, west, low pressure	264'	DE-06		
Heald & Mohr, west	191'	DE-07		
Lake Elsinore				
B-8 Liftstation Wet Well (clean & degrease)	1 wet well	E-01		<input type="checkbox"/>
Harbor Grand Apts to Riverside Dr	1115'	E-02		<input type="checkbox"/>
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Mountain View	1 manhole	H-01		
Tuscany				
Ck manholes from Summerhill Dr, 3manholes up Villa Milano and 1 manhole down Villa Ravenna, clean if needed.	4 manholes	T-01		<input type="checkbox"/>

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Lake Elsinore				
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Ck manholes from Summerhill Dr, 3manholes up Villa Milano and 1 manhole down Villa Ravenna, clean if needed.	4 manholes	T-01		<input type="checkbox"/>

High Frequency Maintenance lines (Hot Spot) Calendar

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High Frequency Maintenance lines (Hot Spot) Calendar

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Elsinore Valley Municipal Water District

**APPENDIX J – EQUIPMENT AND
REPLACEMENT PARTS INVENTORY**

Appendix J Inventory Parts and Equipment List

Submersible Pumps and Motors

FRAME	MAKE	HP	RPM	ID
X320TY	RELIANCE/ESSCO	25	875	1YLE62247A1
X320TY	RELIANCE/ESSCO	25	875	1YLE62247A2
X250TY	RELIANCE/ESSCO	15	1160	P25027070
X250TY (9)	RELIANCE/ESSCO	25		

Spare Pump Parts

PART DESCRIPTION	QUANTITY
TY210 POTHEAD AND CABLE USED	1
TY250 POTHEAD AND CABLE USED	1
TY320 POTHEAD AND CABLE USED	1
TY320 POTHEAD AND CABLE NEW FOR NEW LONGHORN	2
TY320 POTHEAD AND CABLE NEW FOR MCVICAR	2
IMPELLAR FOR NEW LONGHORN	1
IMPELLAR FOR WASHINGTON	2
IMPELLAR FOR LIGHHOUSE	2
IMPELLAR FOR CONTINENTAL	3
IMPELLAR FOR Horsethief	1
PUMP FRAMES AND VOLUTES WITH 90 DEGREE SUCTION FLANGE FOR A-3	1
1 3/8" OD SHAFT BY 10" OD LENGTH	2
4" WEAR PLATE TO FLANGE ADAPTOR	2
TY250 CLAW ASSEMBLY	3
TY320 LIFTING BAIL	12
TY250 LIFTING BAIL	4
12" OD x 2.5" ID IMPELLAR	2
13.5" OD x 1.75" ID IMPELLAR	1

Other Related Parts

PART DESCRIPTION	QUANTITY
KENNEDY 3" CHECK VALVE NEW	1
APCD 8" CHECK VALVE USED	2
500FT SPOOL 1/4" STAINLESS CABLE	1
6" CHECK VALVE FOR PORTABLE LIFTSTATION	1

Electrical Parts

Due to controls and communication standardization district wide, the need to house spare electrical and electronic parts for 3 years or more is a big expense and is not needed due to mainly electrical and electronic parts that become obsolete within the first three years after purchase. Parts for emergency repairs are always available at any of our Boosters, Wells and Reservoirs sites with redundant equipment. When a part is needed and taken from another site the part is purchased the next day and replaced on the same day in order to keep site equipment redundancy at 100% and operational 100% of the time. The district vendors will also exclusively have parts on hand ready for delivery and expedite if need be.

Equipment	
EQUIPMENT DESCRIPTION	QUANTITY
ON SITE STANDBY GENERATORS	34 of 35 Liftstation sites
PORTABLE GENERATORS	5
DUMP TRUCKS	4
BACK HOES	4
SERVICE TRUCKS	9
SUPPORT VEHICLES	2
COMBINATION SEWER LINE CLEANING UNITS	2
TRAILER MOUNTED HYDRO JETTING UNIT	1
SECTIONAL RODDER WITH 300 FEET OF ROD	1
Equipment Continued	
CCTV VAN	1
MOBILE CRANES	4
PORTABLE LIFT STATION/PUMP	1
TRAILER MOUNTED HOSE REEL WITH 1,950 FEET OF LAY FLAT HOSE	1
Source: Data Provided by District Staff	

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Elsinore Valley Municipal Water District

**APPENDIX K – EXCERPTS OF DISTRICT STANDARD
SPECIFICATIONS AND DRAWINGS**



Elsinore Valley Municipal Water District

**DESIGN STANDARDS
AND STANDARD DRAWINGS**

**FOR THE DESIGN AND CONSTRUCTION OF POTABLE WATER,
RECYCLED WATER AND SEWER FACILITIES**

VOLUME 1

MAY 2013

Version 2.0

ELSINORE VALLEY MUNICIPAL WATER DISTRICT
DESIGN STANDARDS AND STANDARD DRAWINGS
FOR THE DESIGN AND CONSTRUCTION OF
POTABLE WATER, RECYCLED WATER AND SEWER FACILITIES

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ELSINORE VALLEY MUNICIPAL WATER DISTRICT
DESIGN STANDARDS AND STANDARD DRAWINGS
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ELSINORE VALLEY MUNICIPAL WATER DISTRICT
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SECTION 2

STANDARD REQUIREMENTS FOR DESIGN OF POTABLE WATER, RECYCLED WATER AND SANITARY SEWER FACILITIES

2.01 GENERAL

These guidelines have been developed to assist consulting engineers and developers of planned unit development type of projects, as well as any type of developments or improvements, which require the design of water or sewer systems with preparing construction plans that are acceptable to the District and will require the least amount of time for plan checking.

- A. All proposed work shown on plans submitted for District review shall be designed according to these standards. In matters of engineering judgment the District decision will be final.
- B. While these criteria may not readily adapt to a given situation, the private engineer's ultimate aim should be directed toward providing:
 - 1. An adequate water system for both domestic and fire flow purposes.
 - 2. A recycled water system capable of delivering an adequate supply and pressure for irrigation purposes.
 - 3. A sewer system to adequately accommodate the waste flows adhering to all of the following planned criteria to the extent practicable.
 - 4. Design water, recycled water and sewer systems to minimize the requirements of future system maintenance.
- C. All plans showing potable water, recycled water or sewer systems shall be subject to review by the District. The water, recycled water or sewer system for the development shall meet the requirements of these Standards and as further clarified by these guidelines.
- D. Design data shall be submitted to the District for review.
- E. The District may grant exceptions to the Standards, providing such exceptions will substantially conform to the intent of these Standards. No exceptions will be granted without the express written consent of the District.
- F. All materials incorporated into the design and construction of facilities to be owned and operated by the District shall be in accordance with the District's Approved Material List.
- G. For design criteria for water booster pump stations, water wells and wellhead facilities, sewage lift stations, force mains or reservoirs refer to the District's Supplemental Design Standards and Standard Drawings, Volume II for these facilities. For criteria related to siphons, industrial waste treatment facilities, etc., consult the District for general requirements.
- H. Any deviation from the general design requirements as stated in the paragraphs to follow, shall be discussed in a Pre-Design Plan Preparation meeting attended by the developer and his civil engineering consultant and documented as indicated in Section 1.06 of the General Conditions.

V. Vertical Alignment

Invert elevations of recycled water mains shall be such as to provide minimum and maximum cover requirements as specified below and also to assure proper clearance between top of valves and valve box covers as provided in the section on Main Valves. The requirements of Section 2.02 V, Items 1 through 8 shall apply to recycled water in addition to the following:

1. Recycled water mains shall have an invert elevation such that the top of the recycled water pipe is 1-foot lower than the bottom of the potable water main when installed parallel to each other.
2. Recycled water mains shall be designed to a 1-foot clearance below the outside of potable water main pipe where crossings occur. All other design criteria shall conform to the requirements for potable water mains except as noted in the Standard Specifications and Drawings. A casing around the recycled water main will be required at crossings with a potable water main if the recycled water main is above the potable water main, unless the District determines otherwise.
3. Recycled pipe sections that dip under storm drain, sewer or potable water should be avoided whenever possible. When it has been determined that a dip section cannot be avoided, it shall be designed and constructed using ductile iron 45 degree bend restrained joint pipe with polyethylene encasement.
4. Recycled water mains shall be designed to be at a higher elevation, with appropriate clearances, than storm drain piping. **Failure to consider the design criteria while designing the storm drain system may result in redesigning the storm drain system after County/City approval or reinstallation of new storm drain piping.**

V. Double Detector Check

The requirements of Section 2.02 W will be applicable.

W. Hot Taps

The requirements of Section 2.02 X will be applicable.

X. Easements

The requirements of Section 2.02 Y will be applicable.

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 people per dwelling unit
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 ½ full.
6. For other sewer flow factors, use the water requirement table (Section 2.02 A). For average daily sewer flow factors, divide the water demand factors 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:

<u>Sewer Size, inches</u>	<u>Minimum Percent Grade</u>	<u>Pipe Material</u>
4	2.0	SDR-35 PVC
6	1.0	SDR-35 PVC
8	0.4	SDR-35 PVC
10	0.32	SDR-35 PVC
12	0.24	SDR-35 PVC
15	0.15	SDR-35 PVC
18	0.12	SDR-35 PVC
21	0.09	Vylon
24	0.08	Vylon
27	0.06	Vylon
Greater than 27		RCP w/ T-Lock Liner

4. For pipes 4 inches through 12 inches in diameter with depths of cover in excess of 15 feet over the top of the sewer, the pipe material shall be C900 PVC Class 100 (DR 25). For pipes 15 inches and 18 inches in diameter with depths of cover greater than 15 feet, and 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:

Drop in feet = $2(S_1 + S_2) \times (D_1 + D_2)/2$, for sizes up to and including 15 inches where,

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 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. They shall be spray lined with an approved coating system.

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. They shall be PVC lined.

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. Manholes 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**

Sewers 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 SDR 35 PVC 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

SECTION 3

STANDARD DRAWINGS

1. All work shall conform to the Elsinore Valley Municipal Water District (EVMWD) design and construction standards for water, recycled water and sanitary sewer facilities.
2. Construction materials testing and inspection shall comply with standards and specifications and shall meet or exceed the requirements of the governing agency, the Standard Specifications for Public Works Construction ("Green Book") and the American Society for Testing and Materials (ASTM) standards. Failure to meet any of the above requirements shall be cause for rejection.
3. The contractor shall notify EVMWD (5) five working days prior to beginning work (951) 674-3146.
4. Depth and location of existing underground facilities shall be determined by the contractor by potholing and a field survey of elevations and shall be given to the inspector prior to trenching. The contractor shall also contact Underground Service Alert (811) prior to any excavation work.
5. All construction and operations by the contractor shall be in accordance with Cal-OSHA requirements.
6. The contractor shall keep a complete record of all construction changes and shall make information available to the inspector for preparation of "As Built" drawings. The "As Built" drawings shall be submitted to EVMWD for review prior to final review and acceptance of the project.
7. Where the water main and sewer cross storm drains, other pipelines, telephone and electric ducts, or similar installations, a minimum of 12 inches of vertical clearance shall be provided between the main or sewer and other installations unless otherwise directed by EVMWD personnel.
8. Separation of sewer and water lines must comply with EVMWD standard plans S-3 or W-2 and shall meet or exceed the requirements of the State of California, Department of Public Health Title 22, Chapter 16, Article 4, Section 64572.
9. Connections to existing EVMWD sewer or water lines shall be in accordance with standard EVMWD procedures and shall not be made unless EVMWD inspector is present.
10. Unless waived by EVMWD an insulated copper solid core 10 gage tracer wire shall be placed with each sewer main to assist with future location. Warning tape shall be placed at least 6" above sewer main & sewer laterals, but not deeper than 24" below the existing finished grade. Water mains shall also have tracer wire and warning tape installed in the trench.

REVISION	BY	APPR	DATE



EVMWD
Elsinore Valley Municipal Water District

Paul S. Carver 11/7/12
Paul S. Carver R.C.E. 31518 DATE

GENERAL NOTES

STD. DWG. NO.
GN-1

11. The length of open trench at any one time shall be limited to 600 feet along road right-of-way unless otherwise agreed to in writing by EVMWD. Trench shall be backfilled and compacted at the conclusion of each day. Open trench limits are subject to city requirements.
12. Surface improvements damaged or removed as a result of the contractor's operations shall be reconstructed by the contractor to the local governing agency's requirements at the contractor's expense.
13. All revisions to these drawings must be approved by EVMWD Director of Engineering.
14. It is the project engineer's responsibility to tie out any existing street monumentation either visible or buried, prior to construction.
15. It is the contractor's responsibility to protect any street monumentation in place. If any monument is disturbed or destroyed, the contractor will be required to contract with a registered land surveyor for the re-establishment and mapping of the destroyed monument at the contractor's expense.
16. The existence and location of any underground utility pipes or structures shown on these plans were obtained by a search of the available records. To the best of EVMWD knowledge there are no existing utilities except as shown on these plans. The contractor is required to take due precautionary measures to protect the utility lines shown and any other lines not on record or not shown on these plans or marked on the ground by Underground Service Alert.
17. It shall be the responsibility of the developer or contractor to apply for any necessary encroachment permit from all governing agencies.
18. It shall be the responsibility of the contractor/developer to stamp a 2" high "S" "W" or "IW" on the curb face for all sewer, water, and irrigation laterals at the location where the lateral passes beneath the curb. A "V" shall be stamped on the curb face at all valves.
19. A steel rod or stake 6" above the ground or 10 gage copper wire with 2" copper tag, shall be installed at the end of each sewer lateral to assist in locating at a later date. In new tract development a 3"x8' PVC pipe or 2"x4"x8' board shall be used to mark the ends of laterals.
20. All sewers shall be balled, air tested, mandrel tested and CCTV inspected prior to acceptance by the district. Air test shall be per UNI-B-6; mandrel test shall be in accordance with section 306-1.2.12 of the standard specification for Public Works construction and closed circuit television inspection per District Standards.

REVISION	BY	APPR	DATE




Paul S. Carver 11/7/12
 Paul S. Carver R.C.E. 31516 DATE

GENERAL NOTES

STD. DWG. NO.
 GN-2

21. A property line cleanout will be installed, 5½' deep minimum, outside of right-of-way line. The 1/8 bend and 45° wye connection shall be Polyvinyl Chloride (PVC) or Acrylonitrile Butadiene Styrene (ABS).
22. Protect pipe, joints, lining and coating, and bed pipe carefully to provide continuous bearing and prevent uneven settlement. Pipe shall be protected against flotation at all times. Open ends of the installed sewer pipe shall be sealed at all times when construction is not in process.
23. Pipe joints shall not be deflected greater than 80% of the maximum angle recommended by the pipe manufacturer.
24. Sewer and water pipe trench backfill shall be in accordance with EVMWD standard drawings S-1 & W-3 and the governing agency. A full time soils technician must be onsite during backfilling and compaction.
25. All service laterals shall be located at right angles to the main unless otherwise indicated on the plans and accepted by EVMWD. Materials for laterals shall meet EVMWD specifications. Sewer elevations shown are flowline (conduit invert).
26. Minimum cover for all water mains less than 12 inches in diameter shall be 3.5 feet. water mains 12 inches and greater shall have a minimum cover of 4 feet. maximum cover for water mains shall be 8 feet, unless accepted by the EVMWD Director of Engineering.
27. Wherever valves are to be installed, the invert slope of the main shall not exceed six percent. Valves shall be located so that there will be a minimum clearance of 6 inches between the top of the valve and the bottom of the valve box cover at street sections.
28. The minimum clearance between fire hydrants and utility poles, light standards and sign posts shall be 3 feet.
29. No water meter boxes shall be installed in driveways or sidewalks. Meter boxes shall be set at high grade to eliminate water runoff. install reduced pressure principle or back flow device after irrigation meter. Install a pressure regulator on homes or business if the pressure is over 80 PSI. A pressure regulator shall be installed prior to entering the house/building plumbing.
30. Any change in flow direction (bends, tees, fire hydrants, etc.) shall utilize restrained ductile iron pipe and fittings, in lieu of thrust blocks.
31. Air valves shall be installed at high points and blowoffs at all low points on the line as per EVMWD standard drawings W-16, W-17, and W-19.

REVISION	BY	APPR	DATE



Elsinore Valley Municipal Water District


Paul S. Conner 11/7/12
Paul S. Conner R.C.E. 31516 DATE

GENERAL NOTES

STD. DWG. NO.
 GN-3

32. If required, a reservoir and booster pump station will have to be constructed and in service before any service can be provided to the units constructed within this subdivision.
33. Prior to paving the street section, all underground facilities with laterals, including but not limited to sewer, water, telephone, electric power, gas, cable television and drainage facilities shall be in place, tested and accepted by the responsible utility/agency.
34. House slab elevations that are lower than the upstream manhole rim elevation shall be equipped with backwater valves. The project engineer shall indicate on the sewer lateral table which lots are involved.
35. Prior to the construction of any backflow protection device, the contractor shall notify the district backflow assembly inspector 24 hours prior to the construction of assembly. The district backflow inspector shall provide final inspection, testing and acceptance prior to turning on the water supply.
36. Survey staking for water pipelines is at 50-foot intervals plus all appurtenances, horizontal alignment changes and vertical alignment changes. Survey staking for sewer pipelines is at 25-foot intervals plus all laterals, manholes in and out, appurtenances, cleanouts, horizontal & vertical alignment changes, beginning of curves, and end of curves.
37. All water valves in unpaved areas shall be surrounded by an asphalt pad installed in accordance with EVMWD standard drawing W-27. A valve marker shall be installed in unpaved areas in accordance with EVMWD standard drawing W-28.
38. All manholes installed in unpaved areas shall be surrounded by an asphalt pad installed in accordance with EVMWD standard drawing S-10.
39. All facilities located downstream of the water meter and fire detector check meter are private and are to be maintained by the owner.

REVISION	BY	APPR	DATE



EVMWD
Elsinore Valley Municipal Water District

Paul S. Carver 11/7/12
Paul S. Carver R.C.E. 31516 DATE

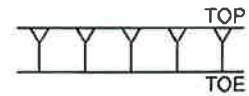
GENERAL NOTES

STD. DWG. NO.
GN-4

SHRUB (LANDSCAPING)



SLOPE



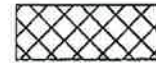
TELEPHONE, POWER OR LIGHT POLE



TREE (LANDSCAPING)



TILE



TRAFFIC SIGNAL



UTILITIES

GAS



ELECTRIC



CABLE TV



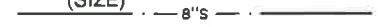
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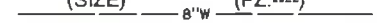
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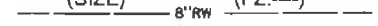
SEWER FORCE MAIN



WATER



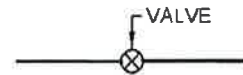
RECYCLED WATER



VALVE



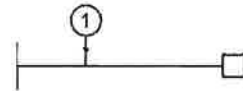
WATER MAIN TO BE CONSTRUCTED



WATER METER



WATER SERVICE



WEIGHT OF LINES

A. EASEMENT



B. PAVEMENT EDGE, EDGE OF ROAD



C. EXISTING UTILITIES



D. NEW WATER MAIN OR OTHER PIPE LINES



E. R.O.W.



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Paul S. Carver 11/7/12
 Paul S. Carver R.C.E. 31516 DATE

DRAFTING SYMBOLS
(CONTINUED)

STD. DWG. NO.
G-2

AC	ASPHALTIC CONCRETE
AV	AIR RELEASE & VACUUM RELIEF VALVE ASSEMBLY
BC	BEGIN CURVE
BP	BACKFLOW PREVENTER
BV	BUTTERFLY VALVE
BO	BLOW OFF
CML&C OR CMLC	CEMENT MORTAR LINED & COATED
DI	DUCTILE IRON
E, OR T	ELECTRICAL & TELEPHONE CONDUIT
(E)	EAST
EC	END CURVE
ELEV.	ELEVATION
EVMWD	ELSINORE VALLEY MUNICIPAL WATER DISTRICT
FF	FINISHED FLOOR
FH	FIRE HYDRANT
FL	FLOWLINE
FLG	FLANGE
G	GAS LINE
GB	GRADE BREAK
GV	GATE VALVE
INV.	INVERT
MH	MANHOLE
MJ	MECHANICAL JOINT
NIC	NOT IN CONTRACT
(N)	NORTH
PAD ELEV.	PAD ELEVATION
PO	PUSH ON
PVC	POLYVINYL CHLORIDE
ROW OR RW	RIGHT OF WAY
RW	RECYCLED WATER
RPP	REDUCED PRESSURE PRINCIPLE BACKFLOW DEVICE
S	SEWER LINE
(S)	SOUTH
W	WATER LINE
(W)	WEST

REVISION	BY	APPR	DATE



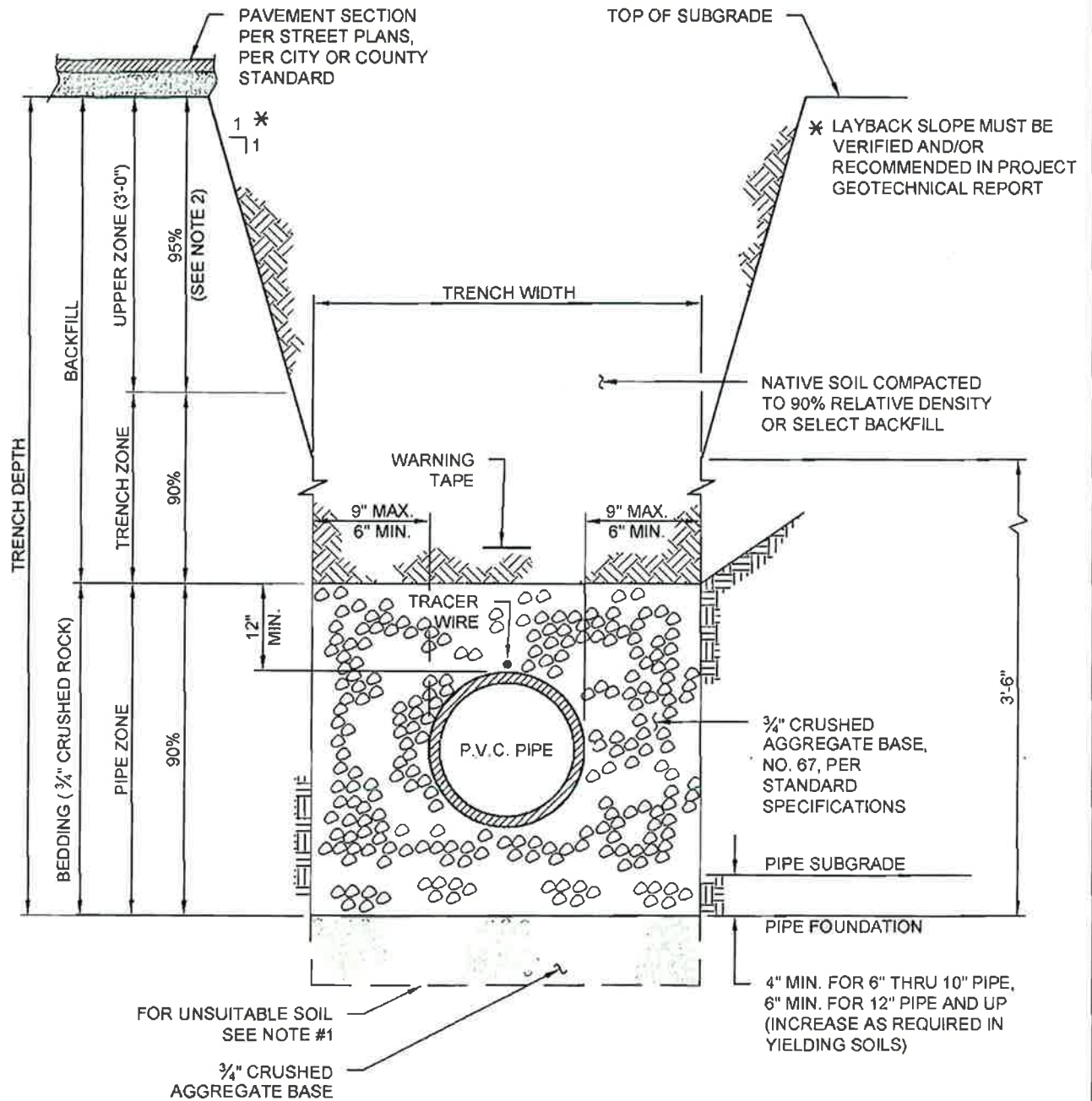
EVMWD
Elsinore Valley Municipal Water District

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ABBREVIATIONS

STD. DWG. NO.

G-3



NOTES:

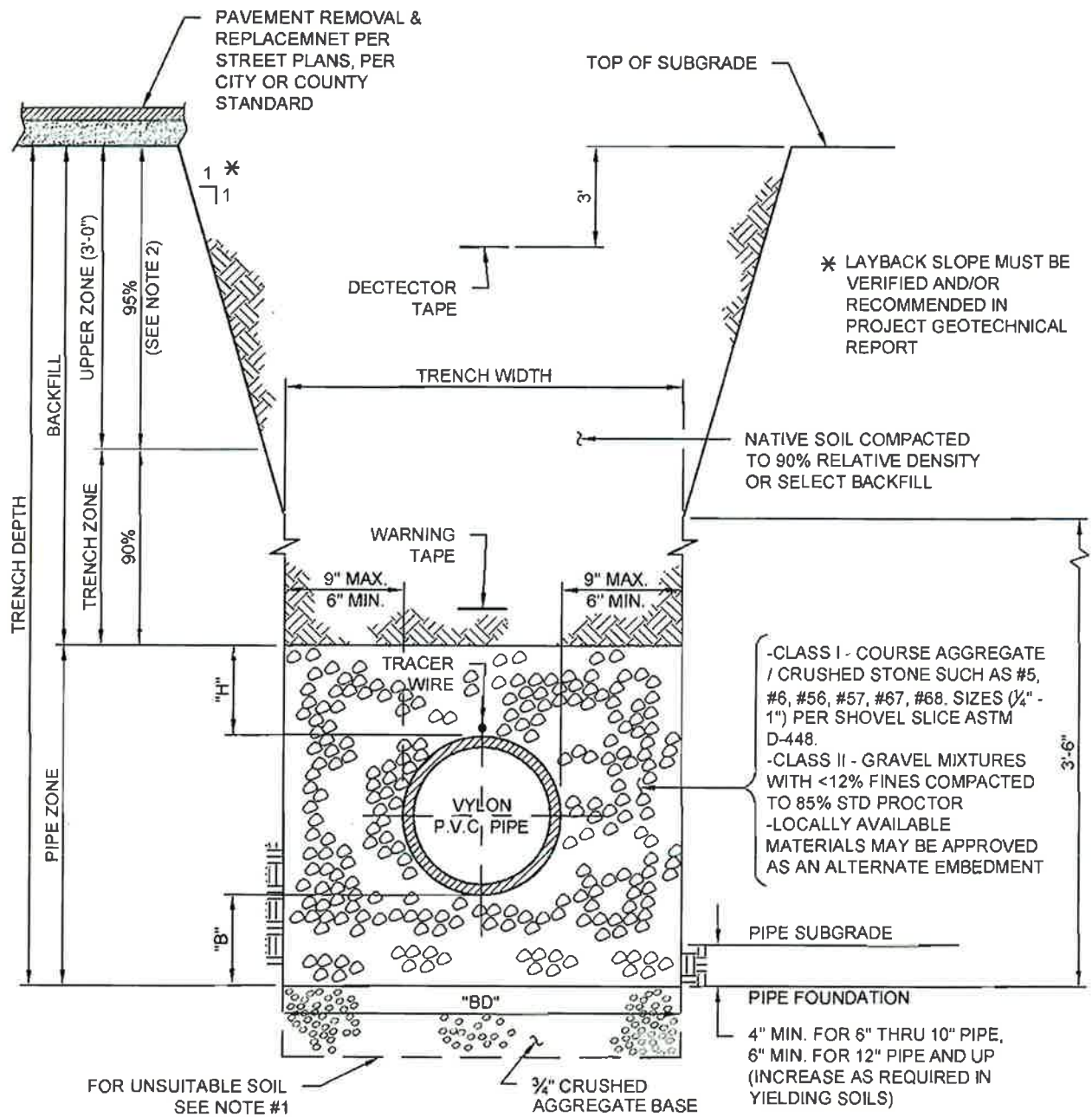
1. IF UNSUITABLE SOIL IS ENCOUNTERED, DEPTH OF REMOVAL AND SIZE OF FOUNDATION ROCK WILL BE PER THE SOILS REPORT OR 3/4" AGGREGATE IF NOT STATED.
2. EXCAVATION, BACKFILL AND COMPACTION TO BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

REVISION	BY	APPR	DATE

Elkhorn Valley Municipal Water District
Paul S. Carver 11/7/12
 Paul S. Carver R.C.E. 31516 DATE

**STANDARD SEWER
 PIPE BEDDING FOR PVC
 UP TO 18-INCHES IN DIAMETER**

STD. DWG. NO.
S-1a
 1 OF 3



* LAYBACK SLOPE MUST BE VERIFIED AND/OR RECOMMENDED IN PROJECT GEOTECHNICAL REPORT

-CLASS I - COURSE AGGREGATE / CRUSHED STONE SUCH AS #5, #6, #56, #57, #67, #68. SIZES (1/4" - 1") PER SHOVEL SLICE ASTM D-448.
 -CLASS II - GRAVEL MIXTURES WITH <12% FINES COMPACTED TO 85% STD PROCTOR
 -LOCALLY AVAILABLE MATERIALS MAY BE APPROVED AS AN ALTERNATE EMBEDMENT

FOR UNSUITABLE SOIL SEE NOTE #1

3/4" CRUSHED AGGREGATE BASE

NOTES:

1. IF UNSUITABLE SOIL IS ENCOUNTERED, DEPTH OF REMOVAL AND SIZE OF FOUNDATION ROCK WILL BE PER THE SOILS REPORT OR 3/4" AGGREGATE IF NOT STATED.
2. EXCAVATION, BACKFILL AND COMPACTION TO BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

TYPES OF INSTALLATION:

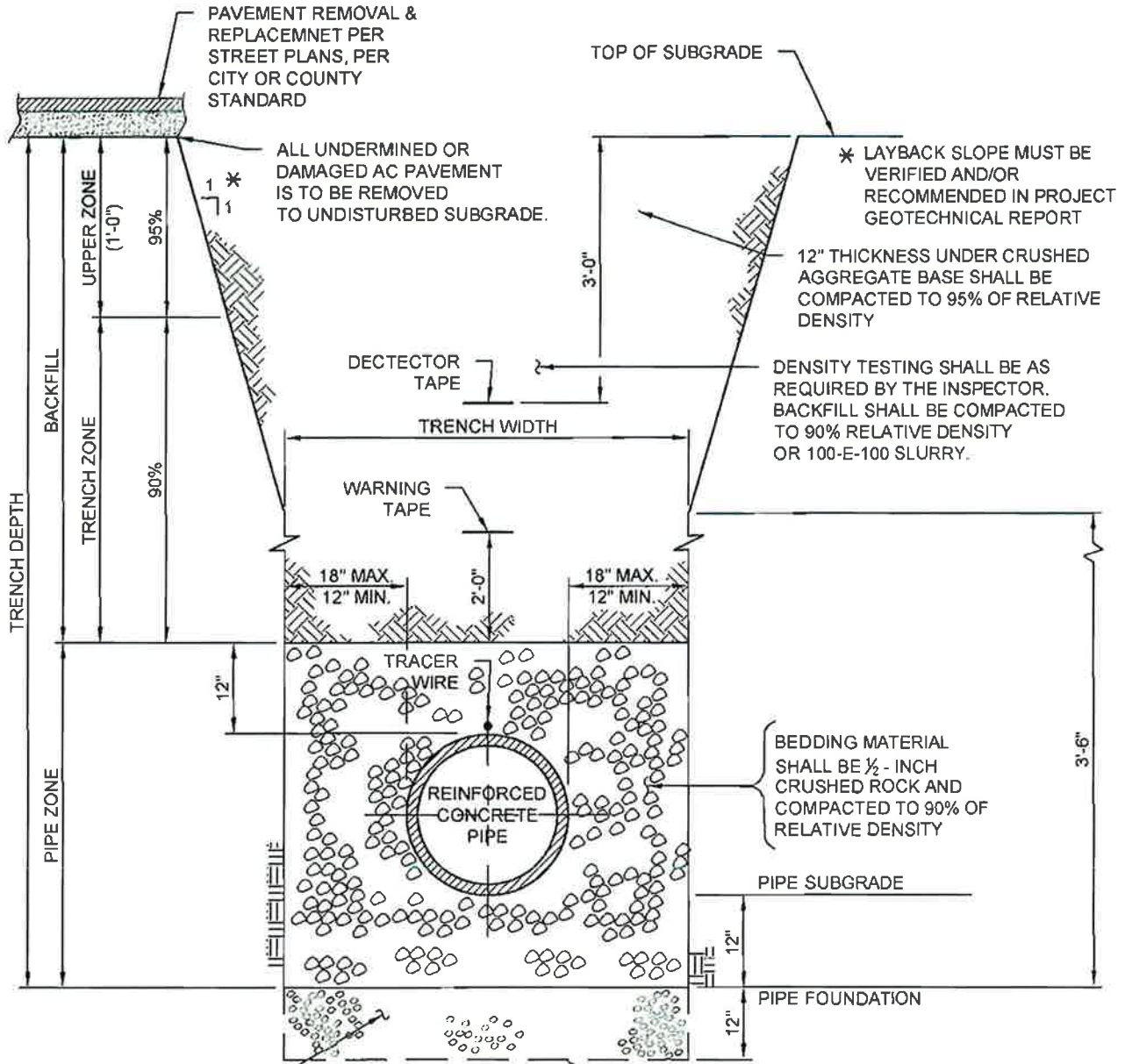
- A. SHALLOW (LESS THAN 25FT OF COVER)
 1. SHOVEL SLICE OR COMPACT EMBEDMENT IN HAUNCHES TO SPRINGLINE.
 2. "H" (HEIGHT OF COVER) IS 6" FOR 21" - 54" VYLON PIPE.
 3. "BD" (MIN. TRENCH WIDTH) IS THE PIPE OD + 18" FOR 21" - 54" VYLON PIPE.
 4. "B" (PIPE BEDDING) IS 4" FOR 21" - 54" VYLON PIPE.
- B. DEEP (25FT TO 50FT COVER)
 1. SHOVEL SLICE STONE OR COMPACT GRAVEL-SAND MIXTURE IN HAUNCHES THROUGH SPRINGLINE IN LIFTS UNTIL PIPE IS COVERED.
 2. "H" (HEIGHT OF COVER) IS 6" FOR 21" - 54" VYLON PIPE.
 3. "BD" (MIN. TRENCH WIDTH) IS THE PIPE OD + 18" FOR 21" - 54" VYLON PIPE.
 4. "B" (PIPE BEDDING) IS 4" FOR 21" - 54" VYLON PIPE.
 5. TO OBTAIN LATERAL SUPPORT FOR VYLON PIPE WHERE AN UNSTABLE SOIL CONDITION IS ENCOUNTERED. USE A MINIMUM TRENCH WIDTH OF TWO PIPE DIAMETERS.

REVISION	BY	APPR	DATE

Elipare Valley Municipal Water District
 Paul S. Coever 11/7/12
 R.C.E. 31516 DATE

STANDARD PIPE BEDDING FOR VYLON PVC GRAVITY SEWER 21 - 54 INCHES IN DIAMETER

STD. DWG. NO.
S-1b
 2 OF 3



ROCK STABILIZATION REQUIRED IN UNSUITABLE SOIL AS DETERMINED BY THE ENGINEER. REPLACE WITH 1/2" CRUSHED ROCK IN AND COMPACT TO 95% OF RELATIVE DENSITY.

PLACE A LAYER OF GEOTEXTILE, MIRAFI 500X, OR EQUAL, THE FULL WIDTH OF TRENCH AT ANY OVER EXCAVATION OF UNSUITABLE MATERIAL.

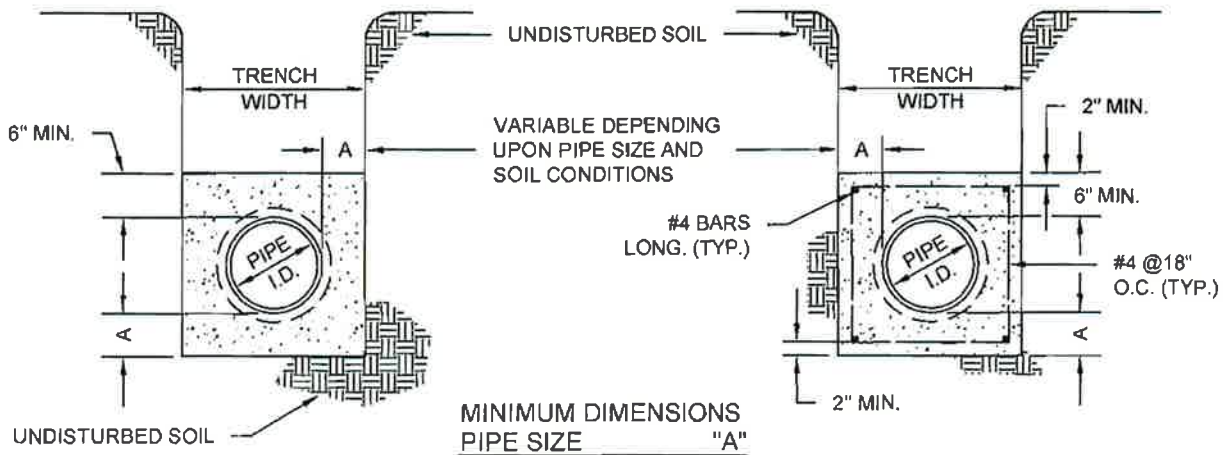
NOTES:

1. JETTING NOT PERMITTING
2. SHORING REQUIRED PER CAL-OSHA
3. BACKFILL SHALL BE IN ACCORDANCE WITH THIS DETAIL
4. ALL PAVEMENT CUTS SHALL BE SAWCUTS.

REVISION	BY	APPR	DATE

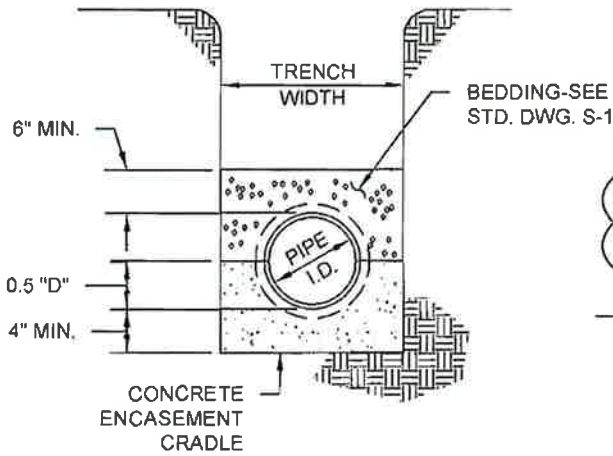
STANDARD PIPE BEDDING FOR REINFORCED CONCRETE PIPE GRAVITY SEWER

STD. DWG. NO.
S-1c
3 OF 3

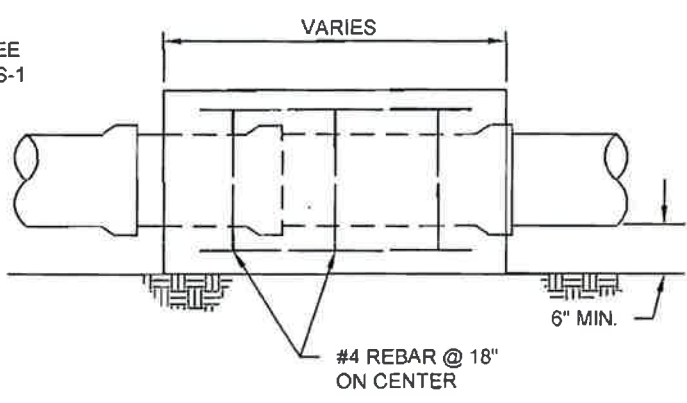


MINIMUM DIMENSIONS
PIPE SIZE "A"

≤24"	6"
27"	7"
30"-33"	8"
36"-39"	9"
>39"	PER DISTRICT AUTHORIZATION



TYPE "C"



SECTION

NOTES:

1. CONCRETE ENCASEMENT SHALL BE USED WHEN COVER IS UNDER 4' OR OVER 20', OR WHERE REQUIRED 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, PER SSPWC, UNLESS A DIFFERING RECOMMENDATION IS GIVEN BY GEOTECHNICAL INSPECTOR AND ACCEPTED BY ENGINEER 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.

REVISION	BY	APPR	DATE

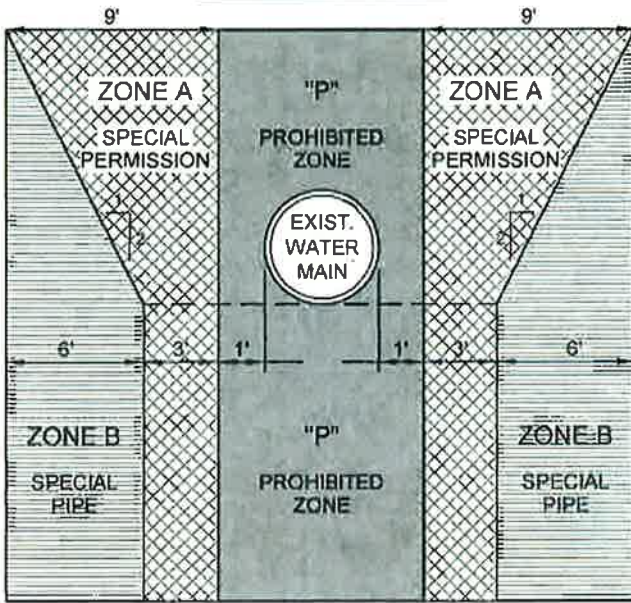
Elmore Valley Municipal Water District
Paul S. Carter 11/7/12
R.C.E. 31516 DATE

CONCRETE CRADLE AND ENCASEMENT

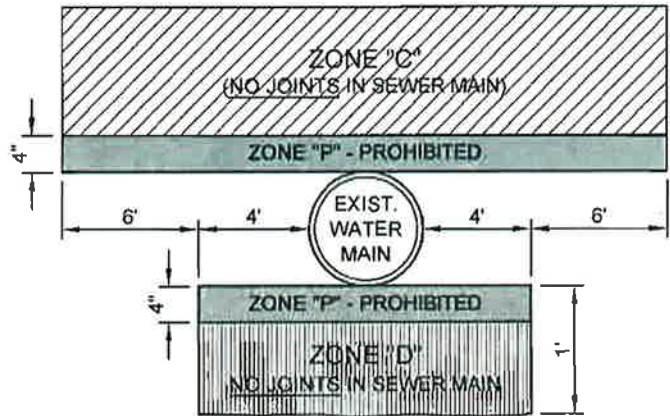
STD. DWG. NO.

S-2

PARALLEL
CONSTRUCTION



PERPENDICULAR
CONSTRUCTION



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 OR UPDATES TO MEMOS.
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.

ZONE SPECIAL WATER CONSTRUCTION REQUIREMENTS



NO SANITARY SEWER MAINS PARALLEL TO WATER OR RECYCLED WATER MAIN SHALL BE CONSTRUCTED WITHOUT PRIOR WRITTEN APPROVAL FROM THE CALIFORNIA DEPARTMENT OF PUBLIC HEALTH.



SPECIAL SEWER PIPE - RUBBER GASKETED PVC SEWER PIPE (ASTM 3034) OR EQUIVALENT; OR HDPE PIPE WITH FUSION WELDED JOINTS.



NO JOINTS IN SEWER MAIN - SPECIAL SEWER PIPE MAY BE REQUIRED.



NO JOINTS IN SEWER MAIN - USE PIPE MATERIALS DESCRIBED IN ZONE B.



CONSTRUCTION PROHIBITED IN THIS AREA.

REVISION	BY	APPR	DATE

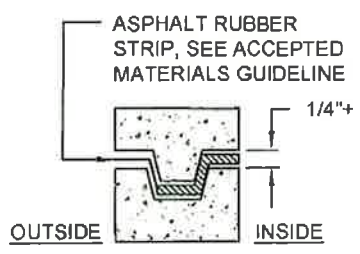
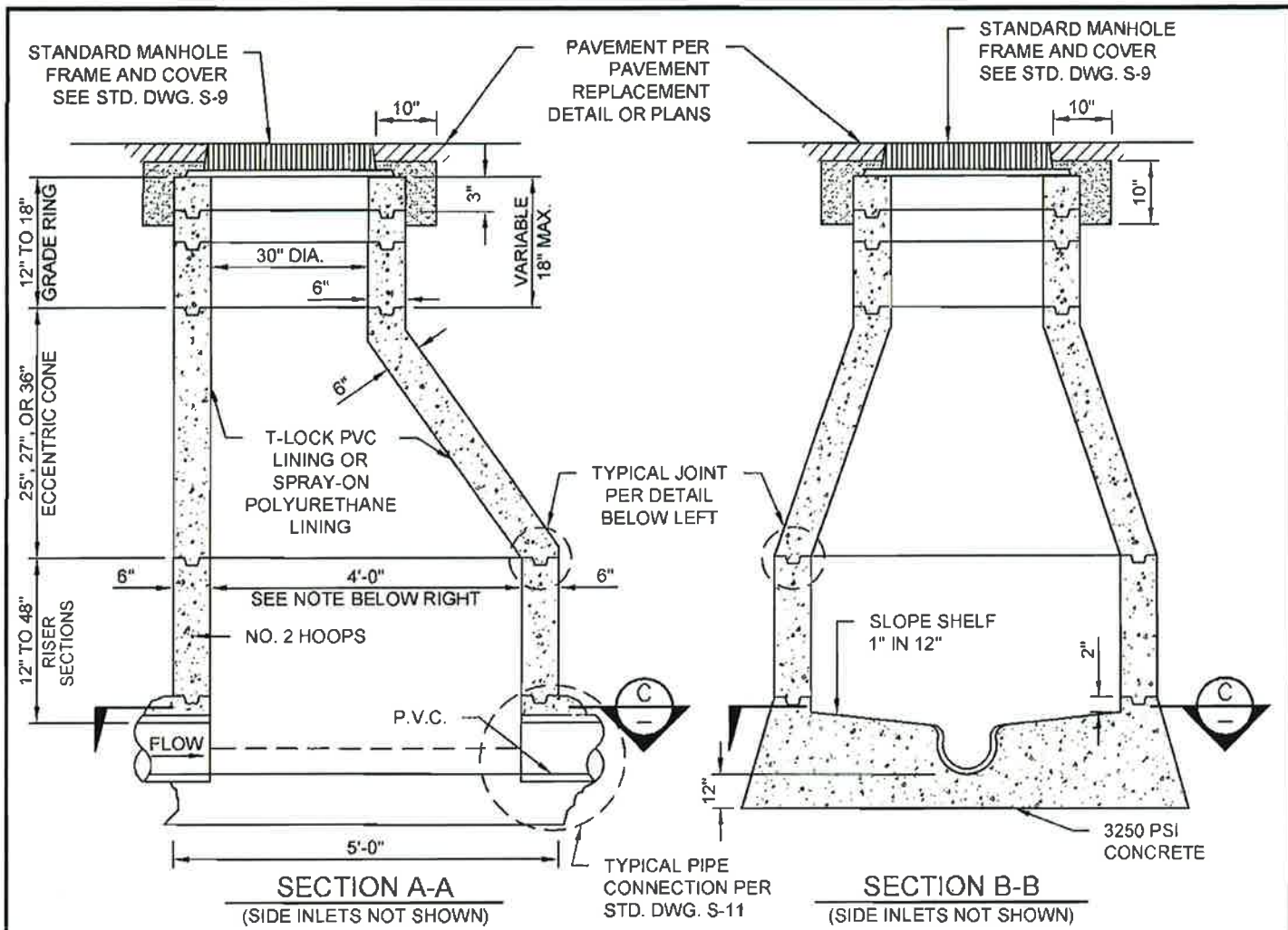
EVMWD
Elsinore Valley Municipal Water District

Paul A. Carver 11/7/12
Paul A. Carver R.C.E. 31516 DATE

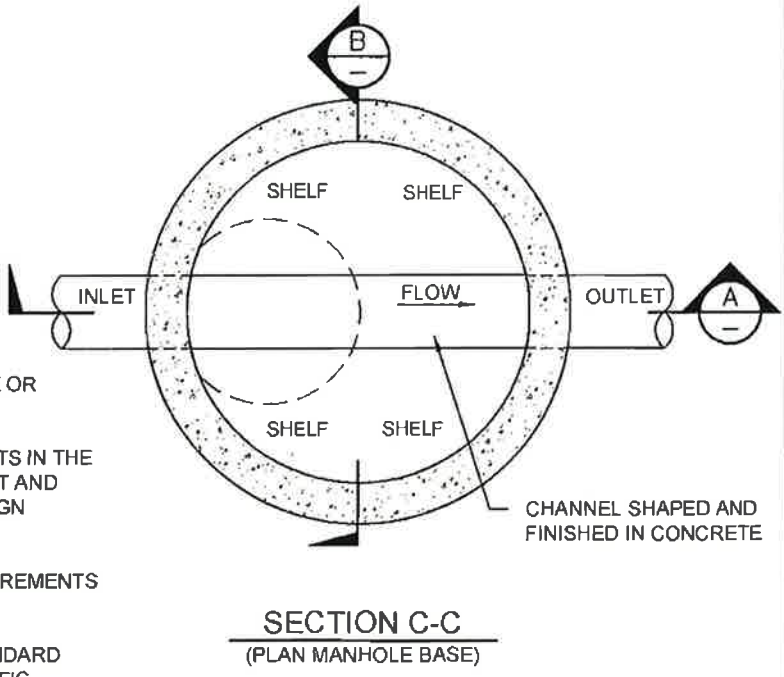
**PIPELINE SEPARATION
REQUIREMENTS**

STD. DWG. NO.

S-3



- NOTES:**
- FOR SEWER GREATER THAN 12' DEEP OR 18" DIA. PIPE OR GREATER, USE 5' DIA. MANHOLE PER STD. DWG. S-5.
 - MANHOLES AT INTERSECTIONS SHALL HAVE STUB OUTS IN THE OTHER TWO DIRECTIONS WITH RESPECT TO THE INLET AND OUTLET. SEE SECTION 2.04B OF THE STANDARD DESIGN REQUIREMENTS.
 - SEE SECTION 2.04B OF THE STANDARD DESIGN REQUIREMENTS FOR INLET AND OUTLET PIPE OF DIFFERENT SIZES.
 - DROP ACROSS MANHOLE SHALL BE 0.1' MIN. SEE STANDARD DESIGN REQUIREMENTS SECTION 2.04B-5b FOR SPECIFIC DIRECTIONS.

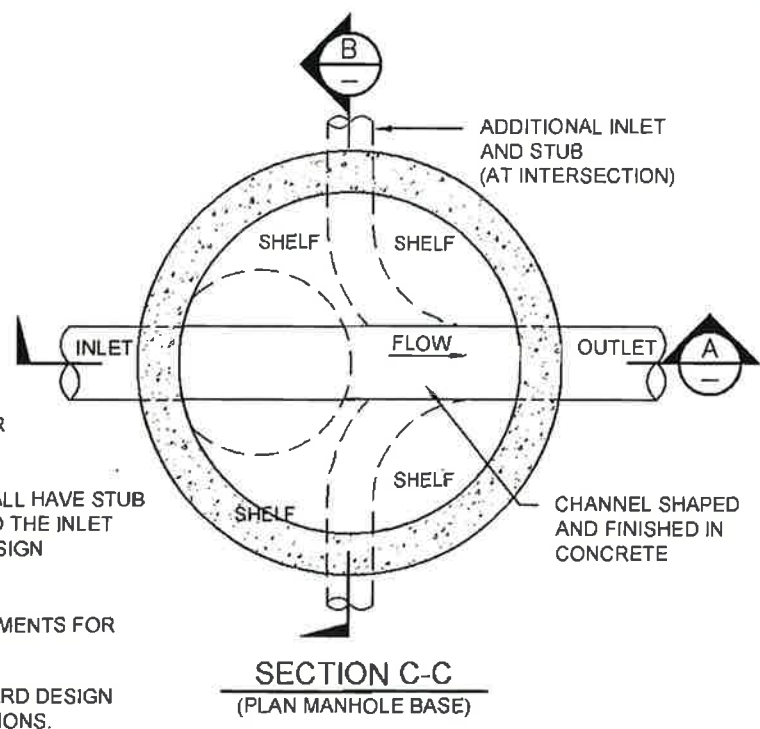
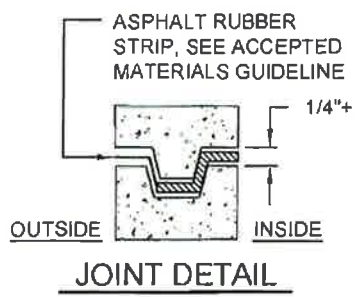
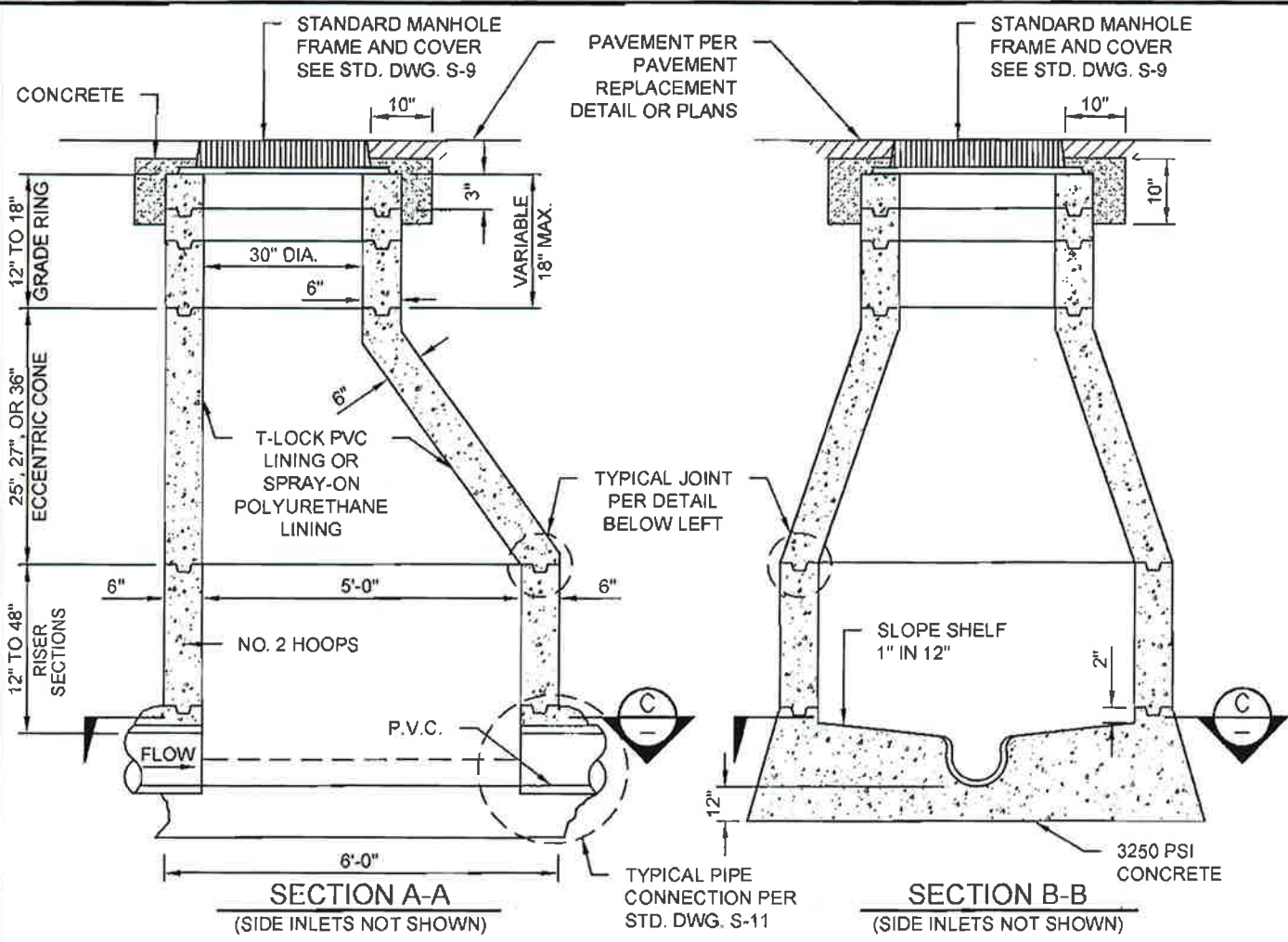


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Paul S. Carver 11/7/12
 R.C.E. 31516 DATE

**4' DIA. MANHOLE
 WITH CAST IN PLACE BASE**

STD. DWG. NO.
S-4



NOTES:

1. FOR SEWER GREATER THAN 12' DEEP OR 18" DIA. PIPE 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 2.04B OF THE STANDARD DESIGN REQUIREMENTS.
3. SEE SECTION 2.04B OF THE STANDARD DESIGN REQUIREMENTS FOR INLET AND OUTLET PIPE OF DIFFERENT SIZES.
4. DROP ACROSS MANHOLE SHALL BE 0.1' MIN. SEE STANDARD DESIGN REQUIREMENTS SECTION 2.04B-5b FOR SPECIFIC DIRECTIONS.

REVISION	BY	APPR	DATE

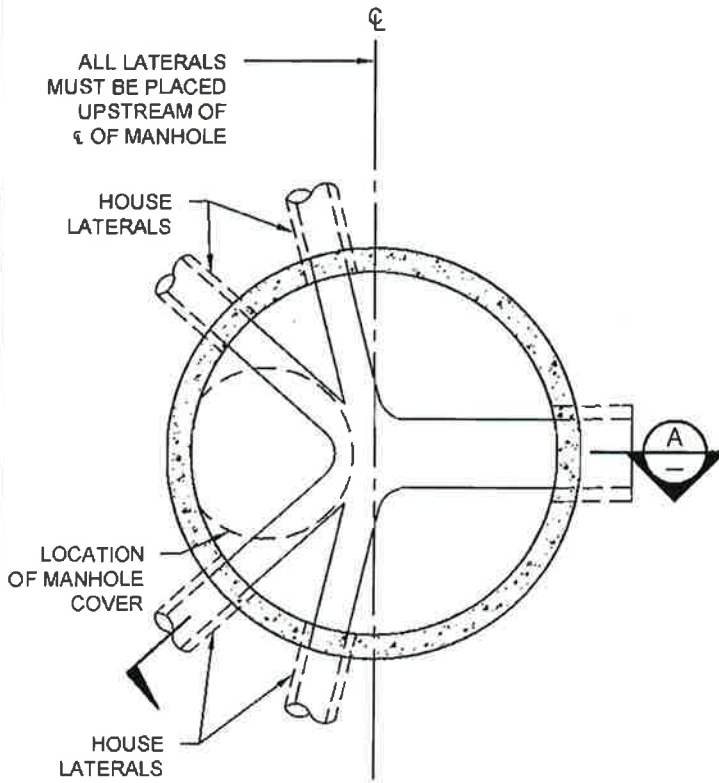
EVMWD
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Paul S. Carver 11/7/12
Paul S. Carver R.C.E. 31516 DATE

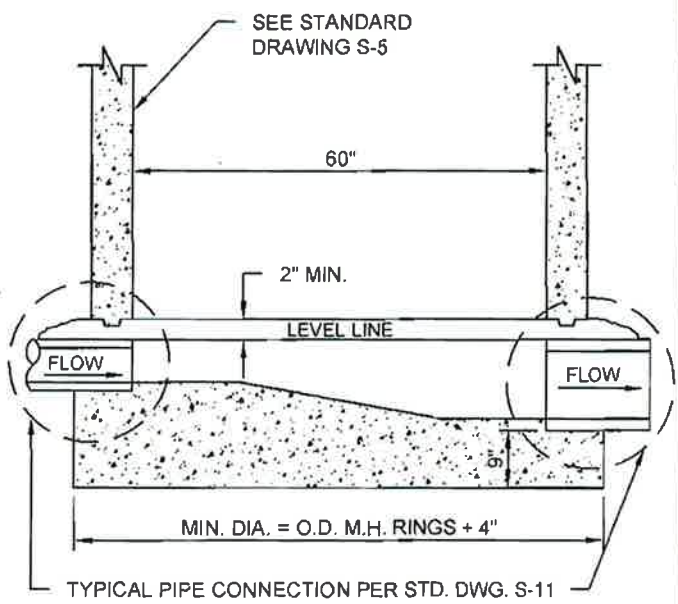
5' DIA. MANHOLE WITH CAST IN PLACE BASE

STD. DWG. NO.

S-5



PLAN
TERMINUS MANHOLE
WITH HOUSE LATERALS



SECTION A-A

NOTES:

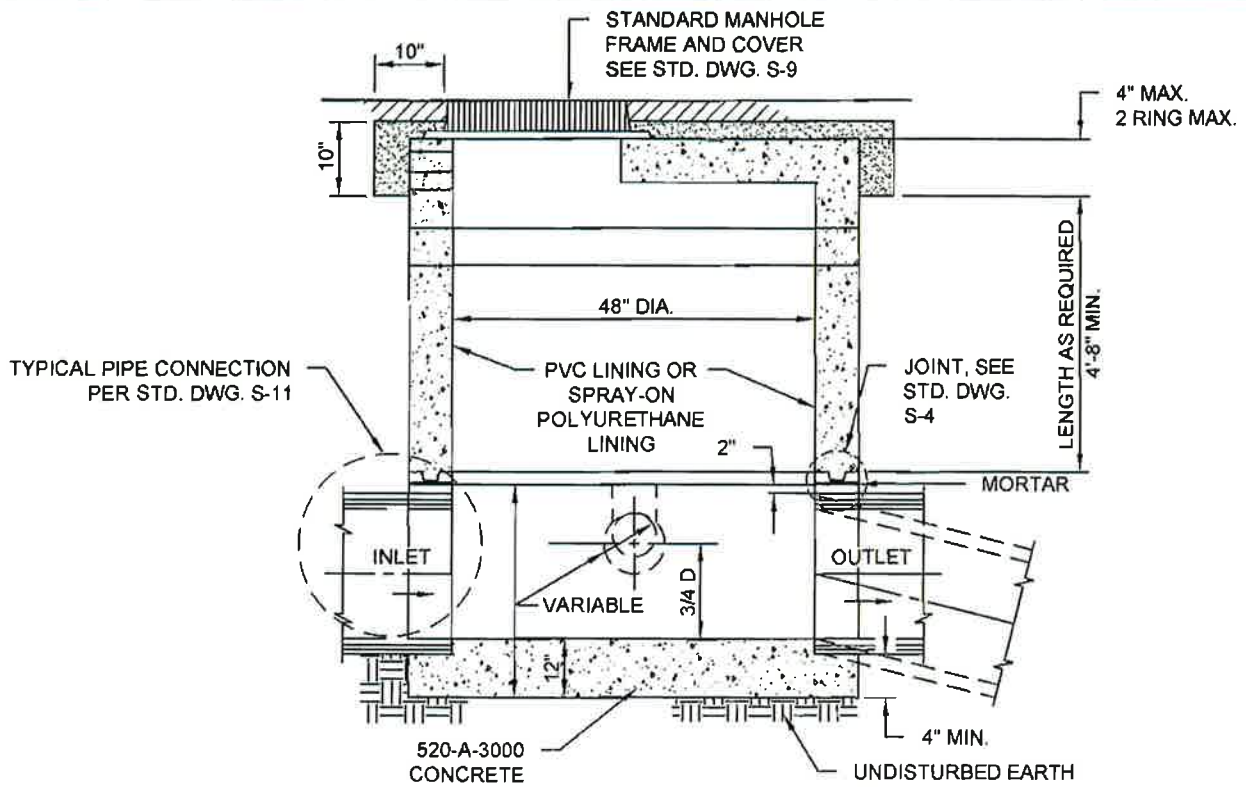
1. REFER TO STANDARD DRAWINGS OF MANHOLES FOR DETAILS PERTAINING TO MANHOLES ONLY.
2. THE MAXIMUM NUMBER OF LATERALS INTO A TERMINUS MANHOLE SHALL BE LIMITED TO FOUR.
3. THE MAXIMUM NUMBER OF LATERALS INTO A KNUCKLE MANHOLE SHALL BE LIMITED TO TWO.
4. ALL LATERAL CONNECTIONS SHALL BE ORIENTED SUCH THAT 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.
7. REFER TO STD DWG S-5 & S-4 FOR MANHOLE DETAILS.

REVISION	BY	APPR	DATE

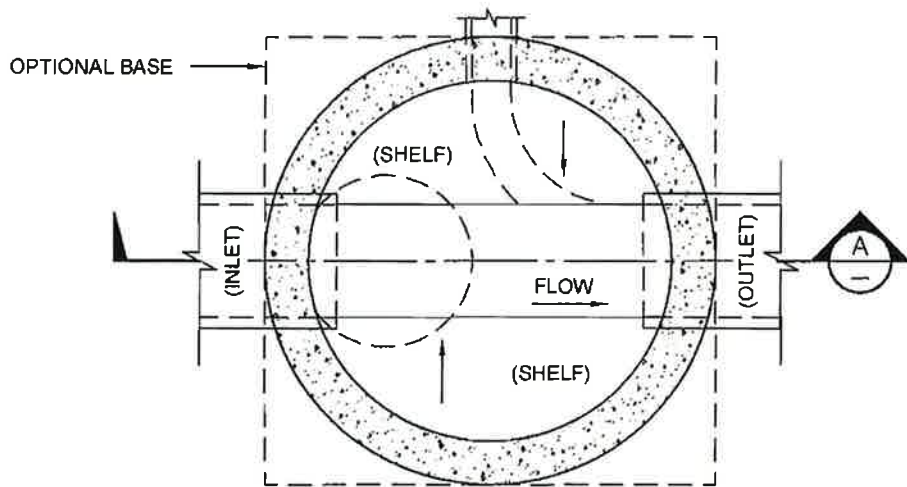
Paul S. Carver 11/7/12
R.C.E. 31518 DATE

MANHOLES AT
STREET KNUCKLE OR
END OF CUL-DE-SAC

STD. DWG. NO.
S-6



SECTION A-A



PLAN

NOTES:

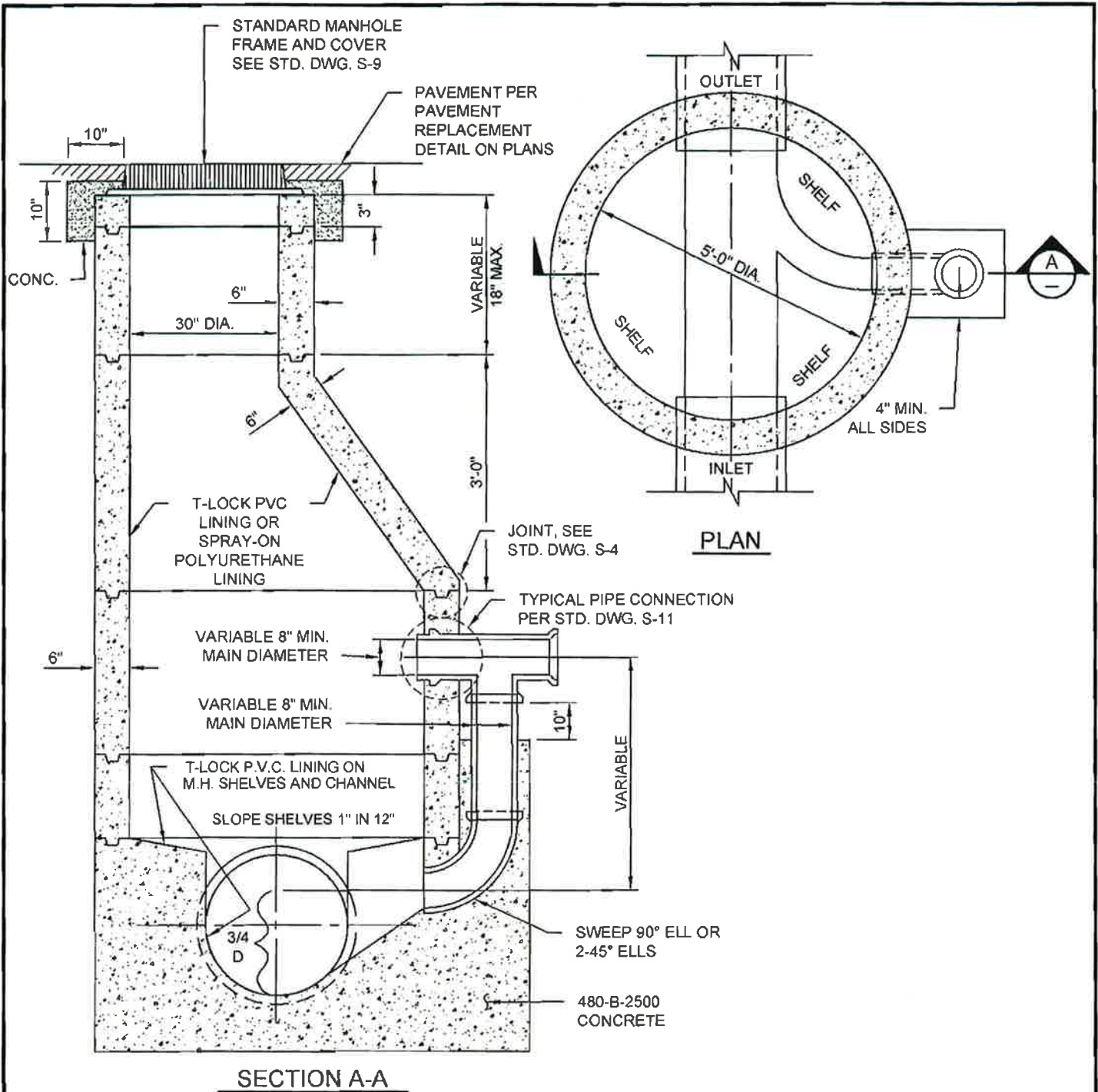
1. EXCEPT AS INDICATED HEREON OR ON THE PROJECT PLANS, MANHOLES SHALL CONFORM TO STD. DWG. S-4 PRECAST CONCRETE MANHOLE.
2. IN UNPAVED TRAFFIC AREAS FORM A CONCRETE COLLAR 10" WIDE AND 10" DEEP AROUND MANHOLE FRAME.
3. MAXIMUM DEPTH SHALL BE 6 FEET.
4. DROP ACROSS MANHOLE SHALL BE 0.1' MIN. SEE STANDARD SPECIFICATIONS FOR SPECIFIC DIRECTIONS.
5. SEE STANDARD SPECIFICATIONS FOR INLET AND OUTLET PIPE OF DIFFERENT SPECIFICATIONS.

REVISION	BY	APPR	DATE

SHALLOW MANHOLE

STD. DWG. NO.

S-7



SECTION A-A

NOTE:

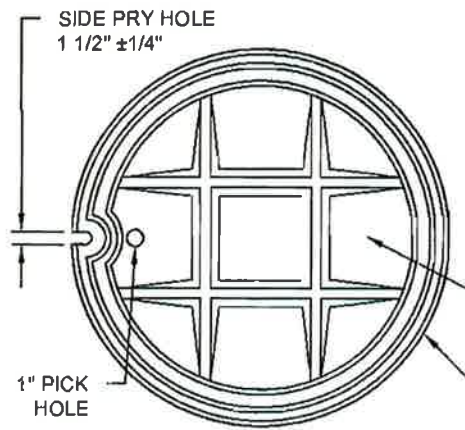
1. THIS STD. DWG. TO BE USED ONLY WITH WRITTEN APPROVAL FROM EVMWD ENGINEERING DEPARTMENT.
2. MANHOLES AT INTERSECTIONS SHALL HAVE STUB OUTS IN THE OTHER TWO DIRECTIONS WITH RESPECT TO THE INLET AND OUTLET. SEE SECTION 2.04B OF THE STANDARD DESIGN REQUIREMENTS.
3. SEE SECTION 2.04B OF THE STANDARD DESIGN REQUIREMENTS FOR INLET AND OUTLET PIPE OF DIFFERENT SIZES.
4. DROP ACROSS MANHOLE SHALL BE 0.1' MIN. SEE STANDARD DESIGN REQUIREMENTS SECTION 2.04B-5B FOR SPECIFIC DIRECTIONS.

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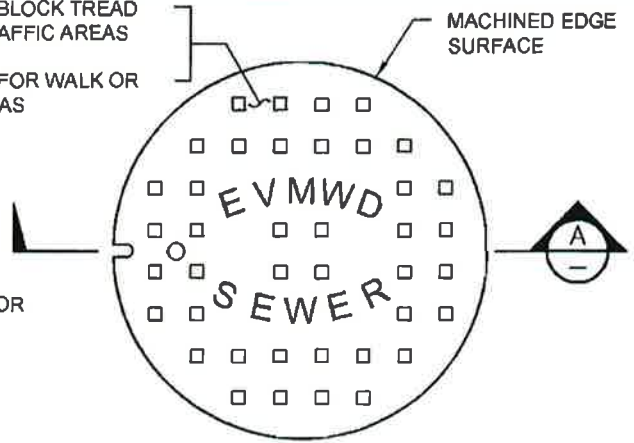
**PRECAST CONCRETE
 DROP MANHOLE**

STD. DWG. NO.
S-8

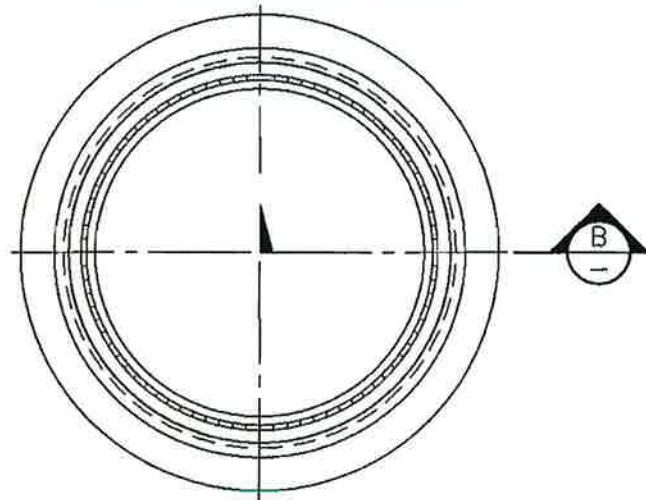


COVER-BOTTOM VIEW

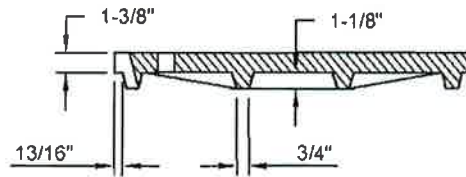
RAISED SQUARE BLOCK TREAD FOR ASPHALT TRAFFIC AREAS
 DIAMOND TREAD FOR WALK OR PEDESTRIAN AREAS



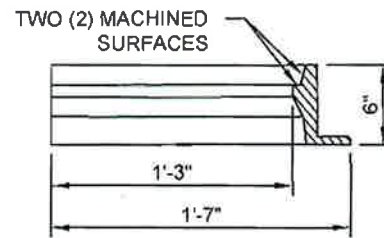
COVER-TOP VIEW



RING PLAN



SECTION A-A



SECTION B-B

TYPICAL INSTALLATION NOTES:

1. FRAME AND COVER SHALL BE MACHINED TO PROVIDE A NON-ROCKING SURFACE. MACHINED TOLERANCE BETWEEN FRAME AND COVER SHALL BE $\pm 1/8$ " TOTAL. FRAME AND COVER TO BE SELECTED FROM ACCEPTED MATERIALS GUIDELINE.
2. GRAY CAST IRON SHALL CONFORM TO A.S.T.M. A48, CLASS 30B.
3. MANHOLE COVERS 36" DIAMETER AND GREATER SHALL BE OF 2-PIECE CONSTRUCTION WITH INSERT NOT SMALLER THAN 24" IN DIAMETER.
4. THE 30" MANHOLE FRAME AND COVER WEIGHT SHALL CONFORM TO A.S.T.M. A48, CLASS 30B.
5. THE MARKING LETTERS SHALL BE CAST IN THE COVER AND SHALL BE A MINIMUM 2 1/2" HIGH.
6. CASTINGS TO BE ASPHALT DIPPED PRIOR TO INSTALLATION.

BOLT-DOWN COVER INSTALLATION NOTES:

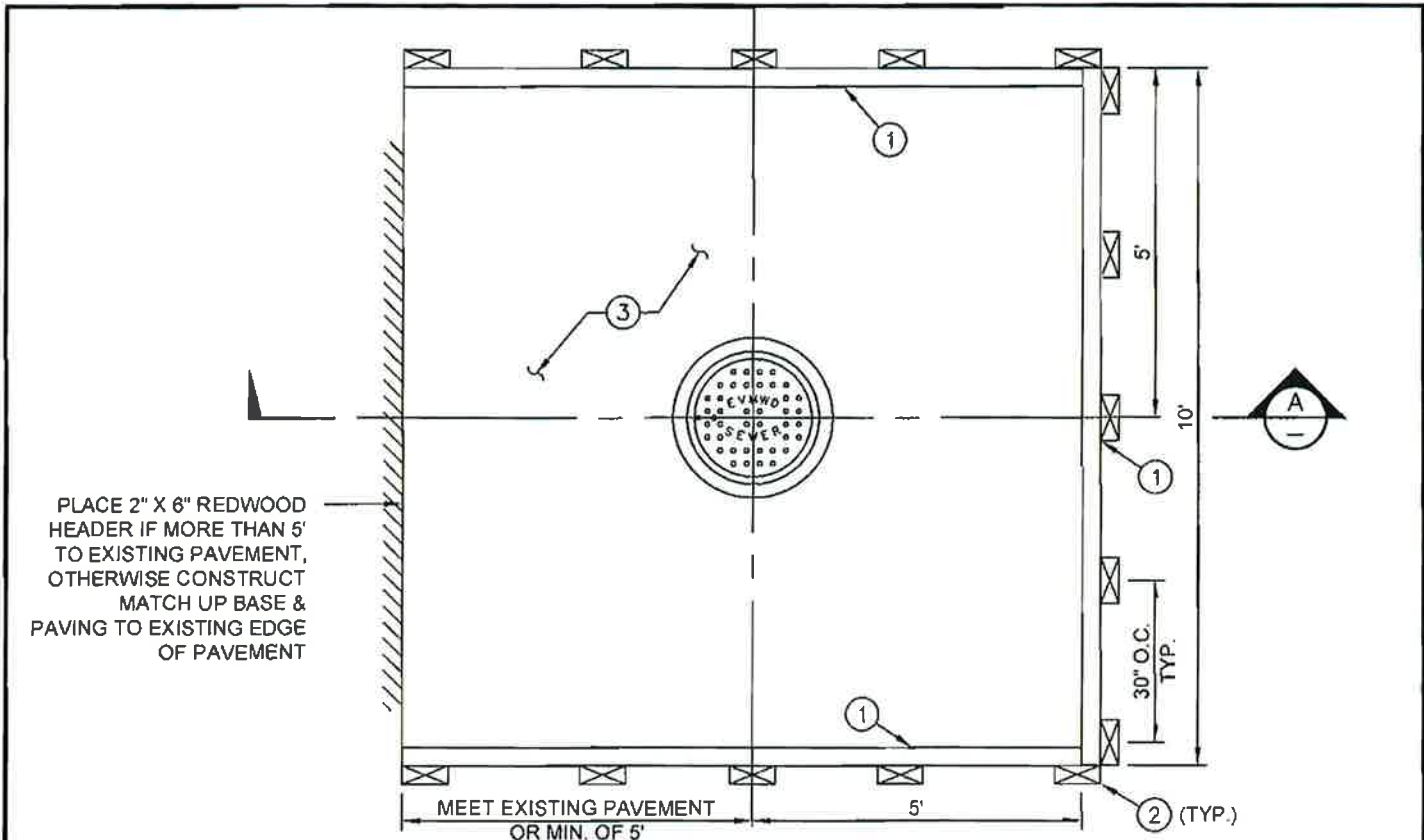
1. WATER PROOF, BOLT DOWN LIDS WITH S.S. BOLTS REQUIRED FOR COVERS NOT IN PUBLIC STREETS/ALLEYS.
 - A. SIDE PLY AND PICK HOLE SHALL BE REPLACED WITH A CLOSED PICK HOLE.
 - B. GASKET MATERIAL SHALL BE 1/2" x 1/2" NEOPRENE GASKET.
 - C. BOLTS SHALL BE 1 1/2" x 1/2" S.S. TYPE 307, SIX EQUALLY SPACED.
 - D. BOLT DOWN LIDS SHALL BE SELECTED FROM APPROVED MATERIALS LIST.

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Paul S. Carver 11/7/12
 Paul S. Carver R.C.E. 31516 DATE

MANHOLE FRAME AND COVER

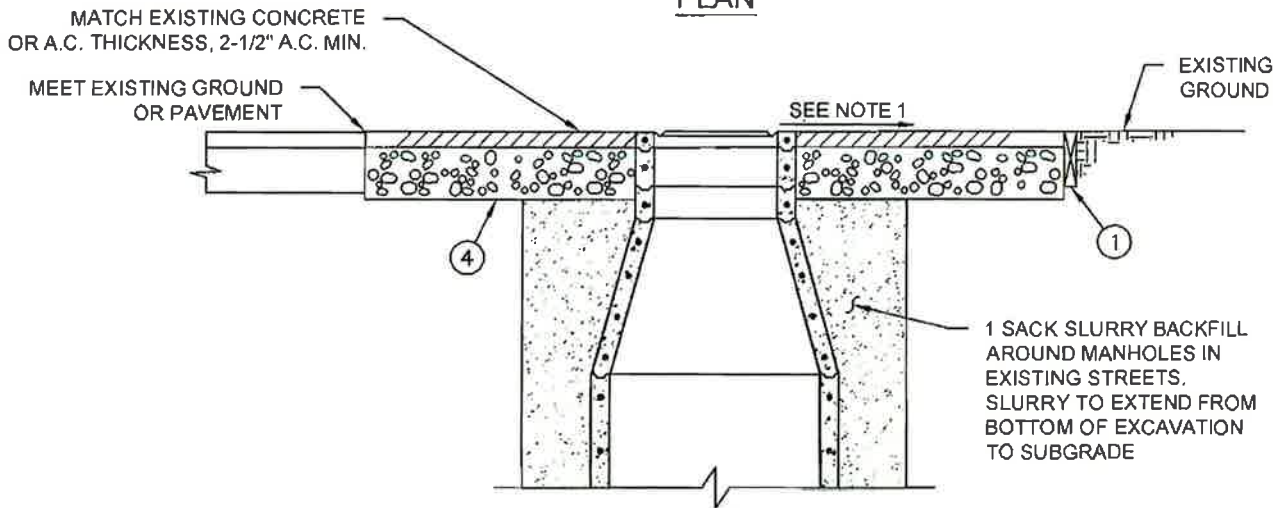
STD. DWG. NO.
S-9



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' 5' (TYP.)

PLAN



MATCH EXISTING CONCRETE
OR A.C. THICKNESS, 2-1/2" A.C. MIN.
MEET EXISTING GROUND
OR PAVEMENT

SEE NOTE 1

1 SACK SLURRY BACKFILL
AROUND MANHOLES IN
EXISTING STREETS.
SLURRY TO EXTEND FROM
BOTTOM OF EXCAVATION
TO SUBGRADE

SECTION A-A

NOTES:

1. SLOPE WILL CONFORM TO RIVERSIDE COUNTY ROAD IMPROVEMENTS STANDARDS AND SPECIFICATIONS, OR MEET EXISTING CONDITIONS AS DIRECTED BY ENGINEER.
2. VALVES LOCATED IN LANDSCAPED AREAS SHALL HAVE A 2'x2' CONCRETE PAD INSTALLED.
3. MATERIALS SHALL BE SELECTED FROM THE ACCEPTED MATERIALS GUIDELINE.

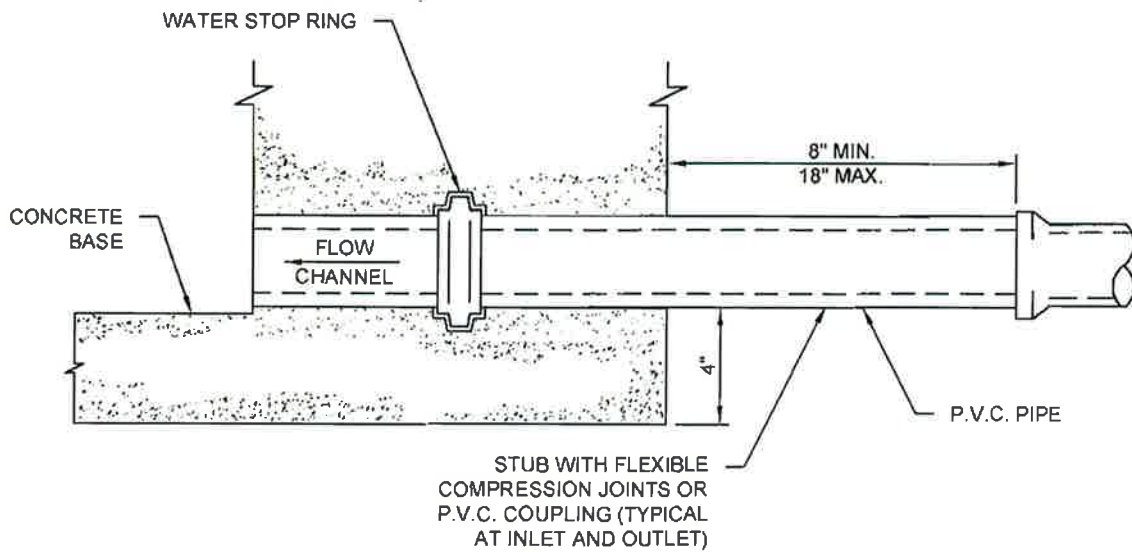
ITEM	DESCRIPTION
(1)	2"x6" REDWOOD HEADERS IF REQUIRED BY ENGINEER OR AS DIRECTED
(2)	2"x4"x18" STAKES (3 PER SIDE) AT 30" O.C.
(3)	AREA TO BE PAVED
(4)	6" OF 3/4" CLASS 2 CRUSHED AGGREGATE BASE

REVISION	BY	APPR	DATE

EVMWD
Elsinore Valley Municipal Water District
Paul S. Carver 11/7/12
Paul S. Carver R.C.E. 31516 DATE

PAVING DETAIL
AROUND MANHOLES

STD. DWG. NO.
S-10



NOTE:

1. SEE STD. NO. S-4 OR S-5 FOR MANHOLE.
2. SEE ACCEPTED MATERIALS GUIDELINE FOR WATER STOP.
3. SIKAFLEX ADHESIVE MAY BE USED WITH WRITTEN APPROVAL.

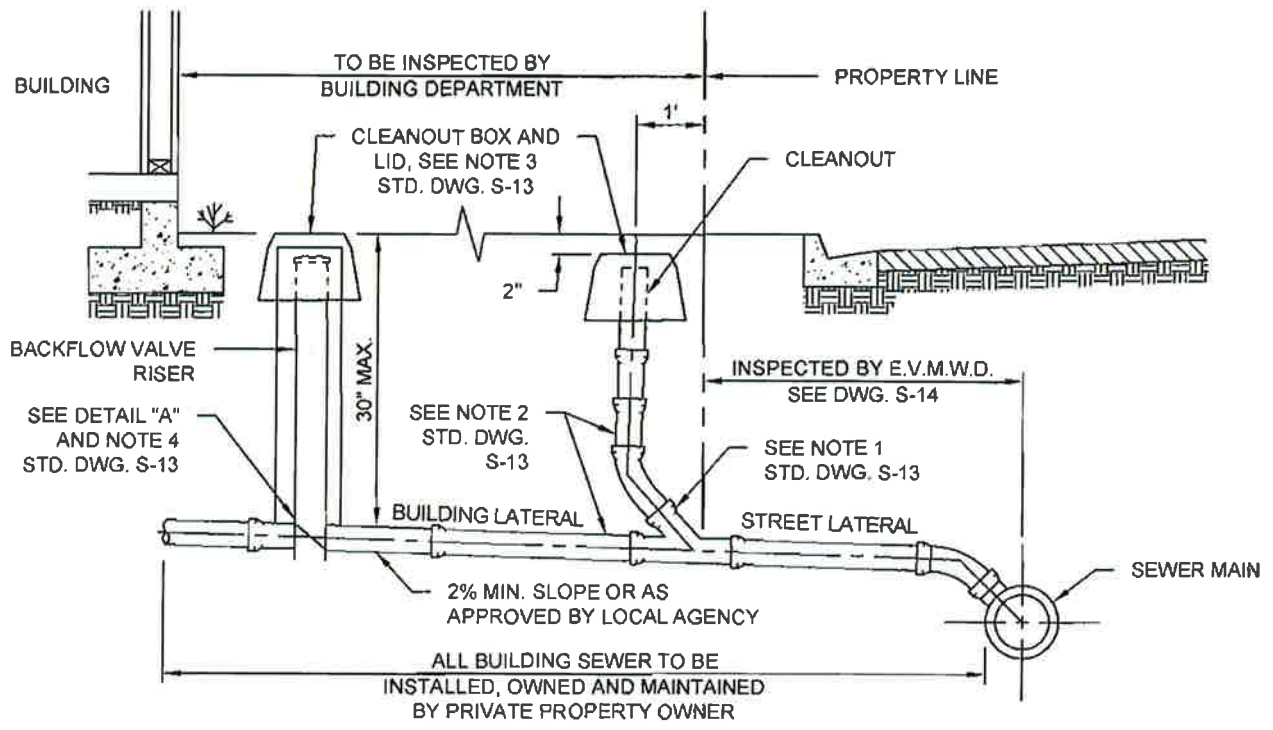
DETAIL OF WATER STOP RING WITH P.V.C. PIPE

REVISION	BY	APPR	DATE

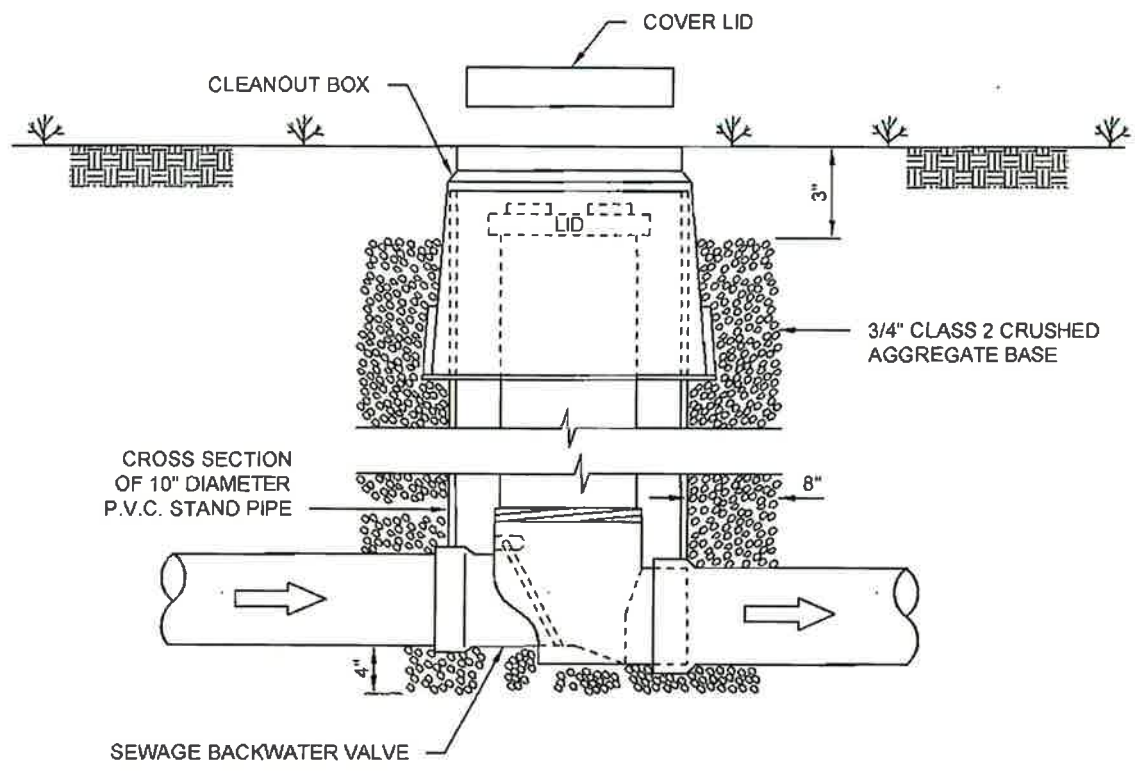
EVMWD
Elmore Valley Municipal Water District
Paul S. Cover 11/7/12
Paul S. Cover R.C.E. 31516 DATE

PIPE CONNECTION DETAILS
FOR CAST-IN-PLACE
CONCRETE BASE

STD. DWG. NO.
S-11



TYPICAL LATERAL ASSEMBLY



DETAIL "A" - SEWAGE BACKFLOW VALVE ASSEMBLY

REVISION	BY	APPR	DATE

E.V.M.W.D.
Elsinore Valley Municipal Water District

Paul S. Carver 11/7/12
Paul S. Carver R.C.E. 31518 DATE

TYPICAL LATERAL ASSEMBLY

STD. DWG. NO.

S-12

NOTES:

1. A 45 DEGREE BEND AND STANDARD WYE BRANCH CONNECTION SHALL BE USED. THE 45 DEGREE BEND AND WYE BRANCH CONNECTION SHALL BE THE SAME DIAMETER AS THE SEWER LATERAL ENTERING FROM THE STREET AND SHALL BE SUPPORTED BY THE RECOMPACTION OF THE EXISTING SOIL IN THE TRENCH. DUCTILE IRON FITTINGS MAY BE USED IF AUTHORIZED BY THE DISTRICT.
2. THE BUILDING LATERAL SHALL BE CONSTRUCTED USING IAPMO LISTED MATERIALS (I.E. A.B.S. OR PVC PIPE). THE MINIMUM DIAMETER SHALL BE PER PLUMBING CODE STANDARDS, THE CLEANOUT STAND PIPE (4" DIA. MIN.) SHALL BE THE SAME DIAMETER AS THE LATERAL ENTERING FROM THE STREET. THE STAND PIPE SHALL BE CONSTRUCTED USING IAPMO LISTED MATERIALS (I.E. A.B.S. OR PVC PIPE). THE MINIMUM SLOPE OF THE LATERAL SHALL BE 2% OR AS PERMITTED BY LOCAL AGENCY.
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 ACCEPTABLE 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 ACCEPTED MATERIALS GUIDELINE.

REVISION	BY	APPR	DATE

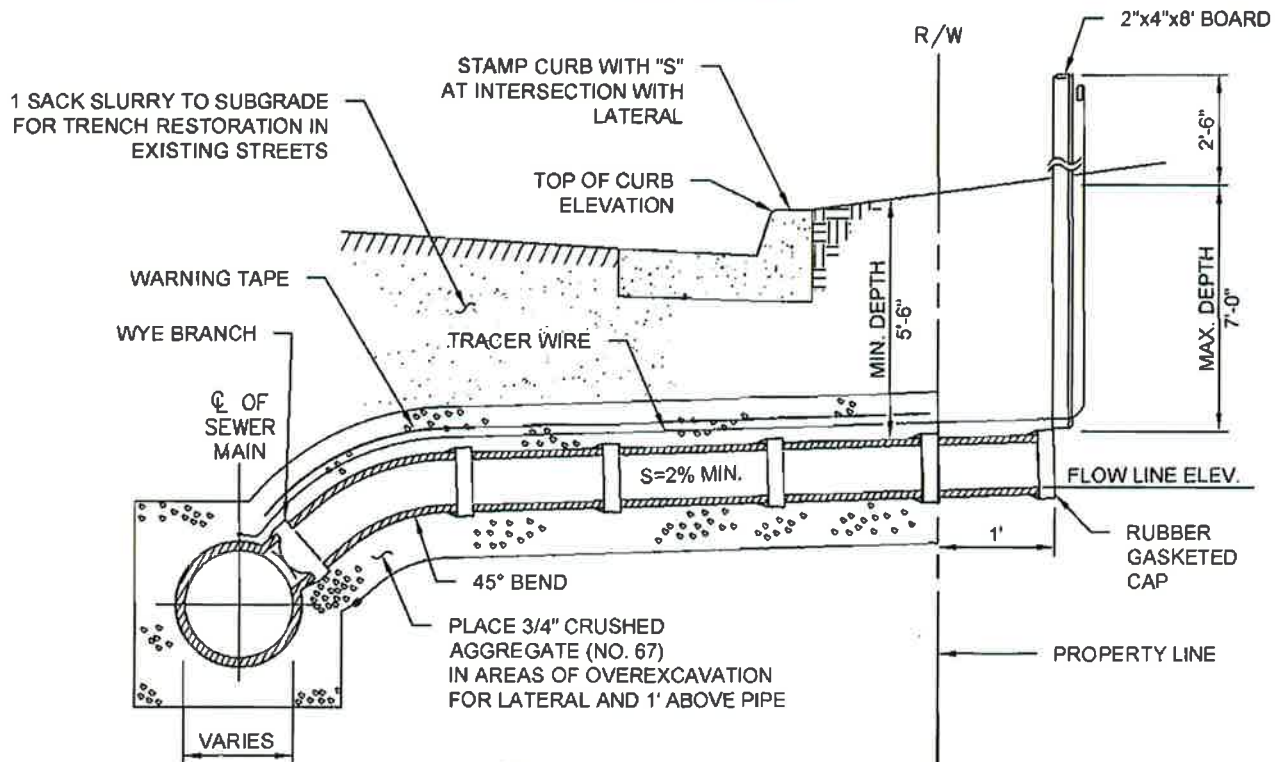


EVMWD
Eggenore Valley Municipal Water District

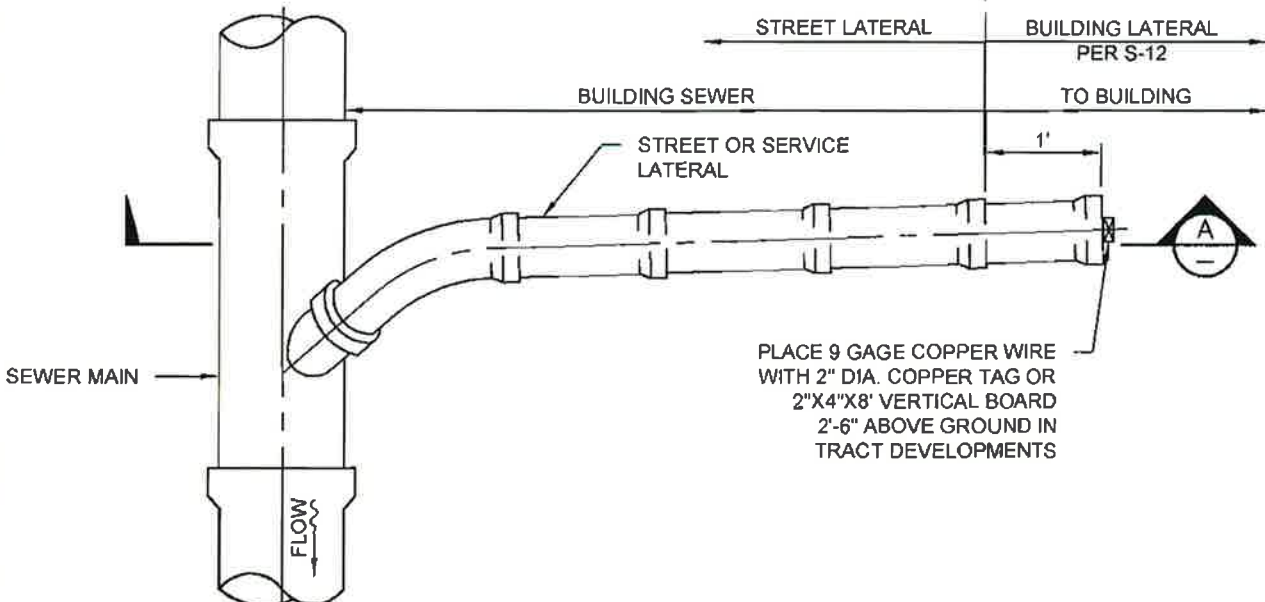
Paul S. Carver 11/7/12
Paul S. Carver R.C.E. 31516 DATE

TYPICAL LATERAL ASSEMBLY NOTES

STD. DWG. NO.
S-13



SECTION A-A



PLAN

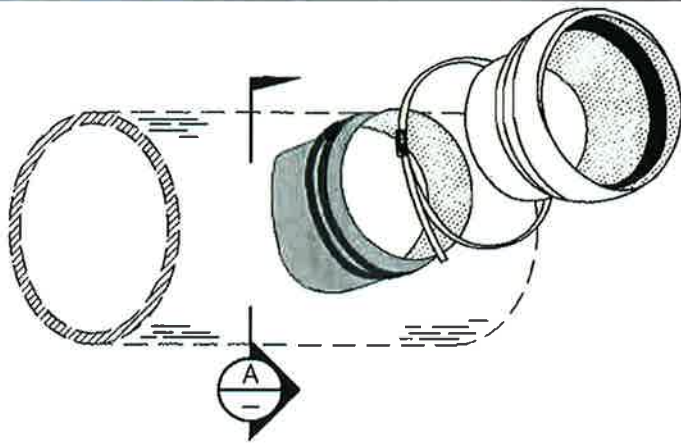
NOTES:

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 STANDARD SPECIFICATIONS FOR 3/4" CRUSHED AGGREGATE NO. 67.

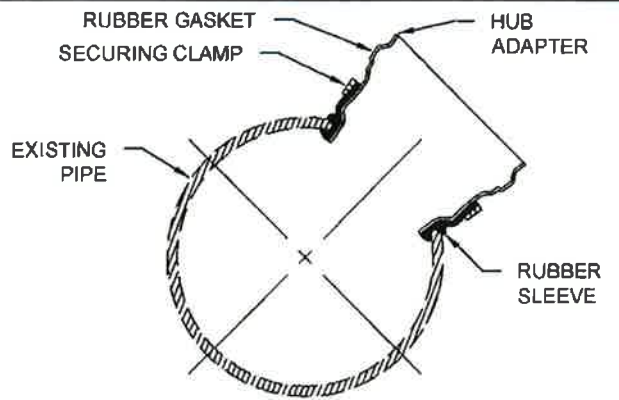
REVISION	BY	APPR	DATE

STREET SEWER LATERAL

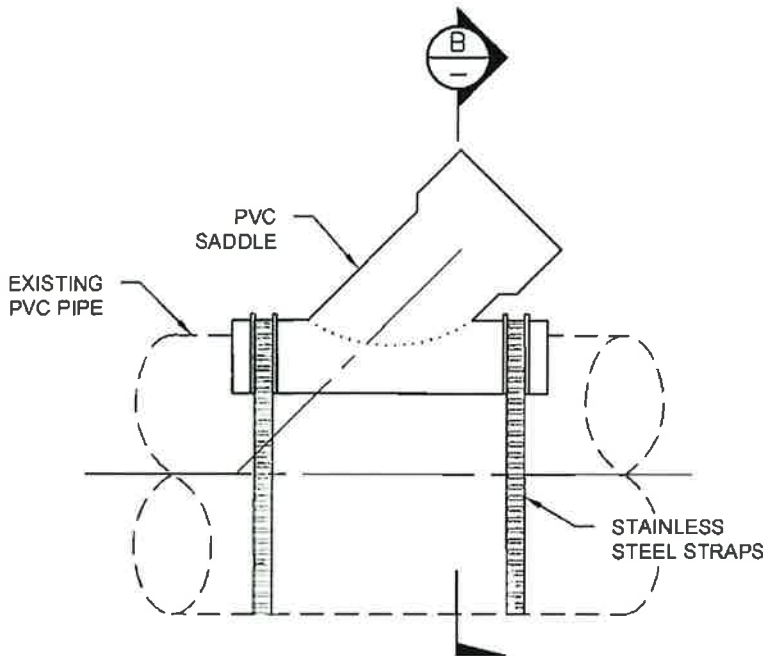
STD. DWG. NO.
S-14



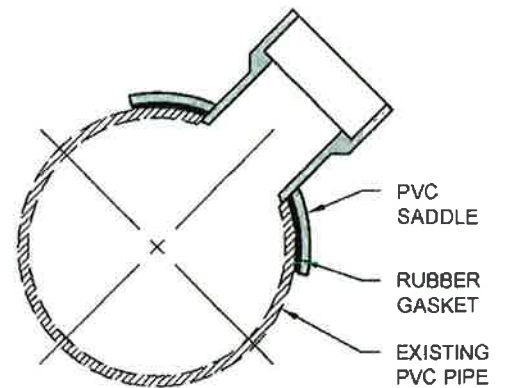
INSERT STYLE DETAIL



SECTION A-A



WYE STYLE DETAIL



SECTION B-B

NOTES:

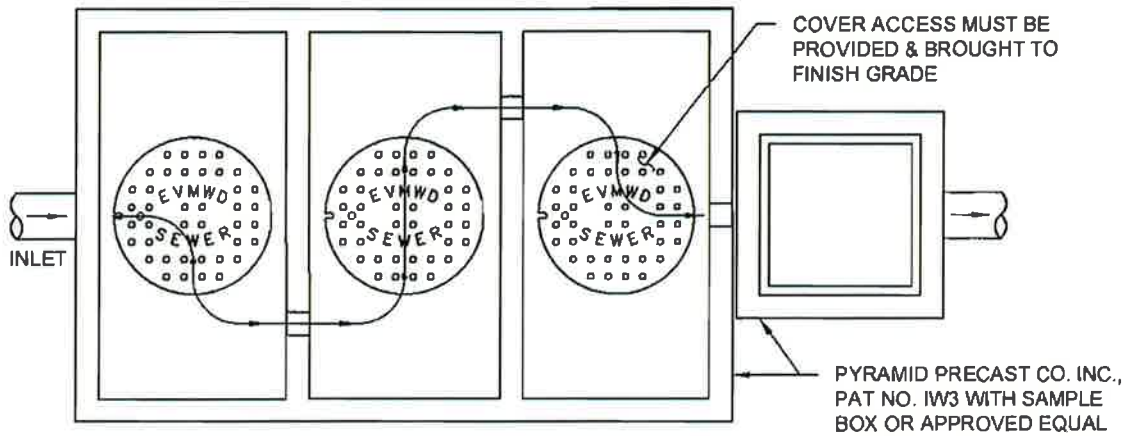
1. GASKETED BELL SHALL BE IN ACCORDANCE WITH ACCEPTED MATERIALS GUIDELINE.
2. THE INSTALLATION OF GASKETED BELLS SHALL COMPLY WITH THE MANUFACTURER'S INSTALLATION GUIDELINES.
3. THE HOLE FOR THE GASKETED BELL FITTING SHALL BE MADE WITH A TAPPING MACHINE OR PROPERLY SIZED CORE DRILL. THE HOLE SHALL BE 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 CONTRACTOR 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 CONTRACTOR SHALL REPAIR OR REPLACE ANY DAMAGED PIPE AS DIRECTED BY THE INSPECTOR AT CONTRACTOR'S COST.
6. THE CONTRACTOR SHALL CONTACT THE GASKETED BELL MANUFACTURER AND SPECIFY THE SEWER MAIN SIZE AND MATERIAL FOR THE CORRECT SEWER PIPE CONNECTION MODEL..
7. WHEN INSTALLING LATERALS ON 10" AND SMALLER SEWER PIPE USE MANUFACTURED PVC SADDLE WITH INTEGRAL GASKETS & STAINLESS STEEL STRAPS.

REVISION	BY	APPR	DATE

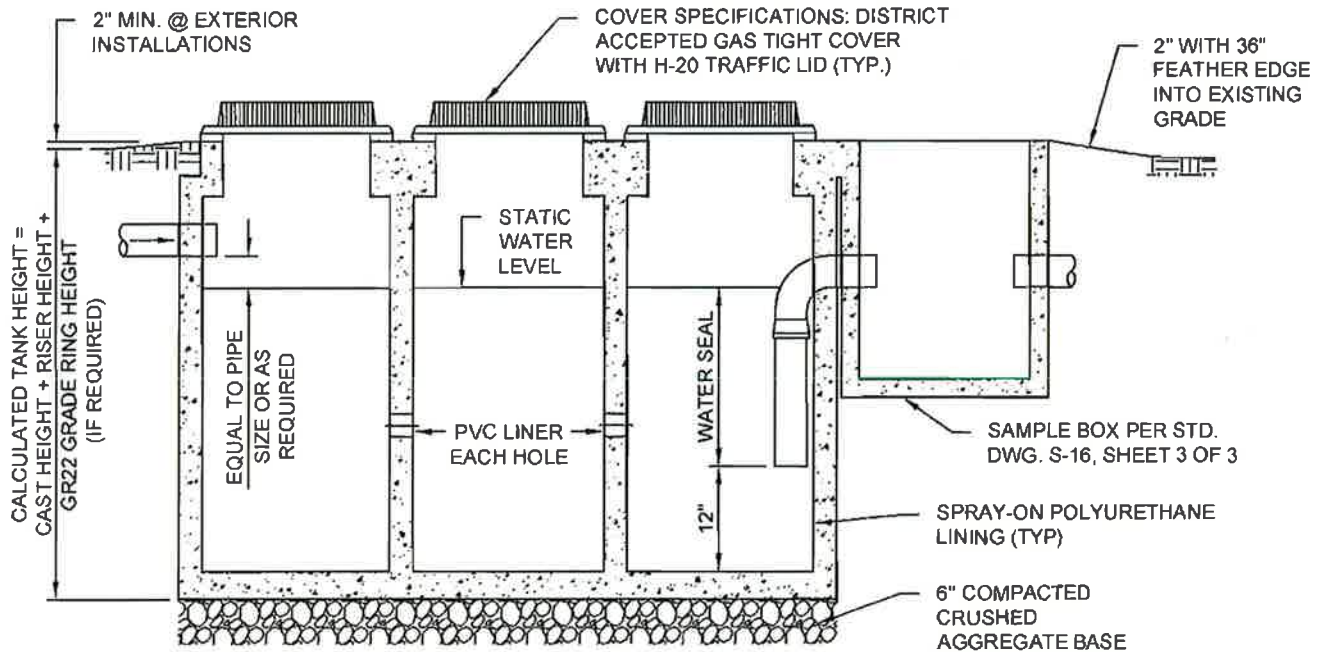
EVMWD
Elsinore Valley Municipal Water District
Paul S. Conner 11/7/12
Paul S. Conner R.C.E. 31518 DATE

TYPICAL SEWER LATERAL CONNECTION TO EXISTING SEWER MAIN

STD. DWG. NO.
S-15



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. EXTERNAL PLUMBING PER LOCAL PLUMBING CODE.

REVISION	BY	APPR	DATE

Paul S. Carver 11/7/12
 Paul S. Carver R.C.E. 31516 DATE

SAND/OIL SEPARATOR

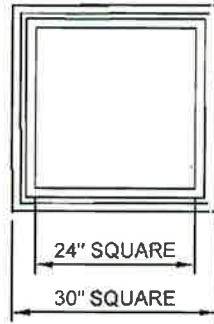
STD. DWG. NO.
S-16
1 OF 3

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 DEFORMED STEEL BARS CONFORMING TO ASTM SPEC. A615 GRADE 60. ALL CONTINUOUS MONOLITHIC CONST.
3. INTERIOR OF INTERCEPTOR TO BE CONCRETE WITH SPRAY-ON POLYURETHANE.
4. COMPONENTS SHALL BE IN ACCORDANCE WITH ACCEPTED MATERIALS GUIDELINE.

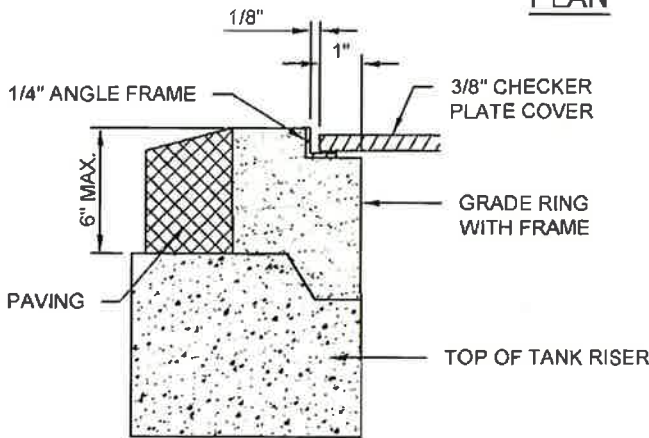
INSTALLATION NOTES

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 (6" CRUSHED AGGREGATE BASE) 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 ASPHALT COATED COVERS.

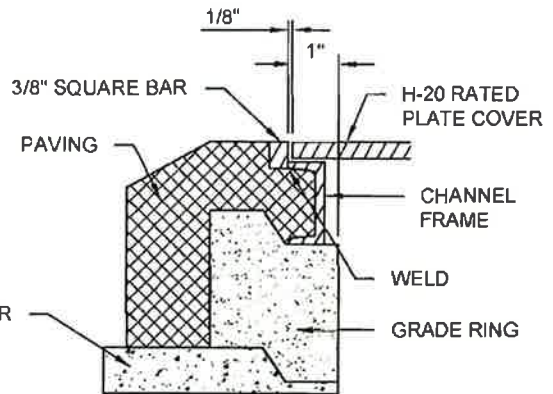


GR-22 GRADE RING
 WITH OR WITHOUT STEEL FRAME.
 SIZES 3", 4", 5", 6" (HIGH) SPECIAL
 AND FOUNDRY COVERS AVAILABLE
 ON REQUEST.

PLAN



NOT SUBJECT TO VEHICULAR TRAFFIC AREAS



TRAFFIC AREA

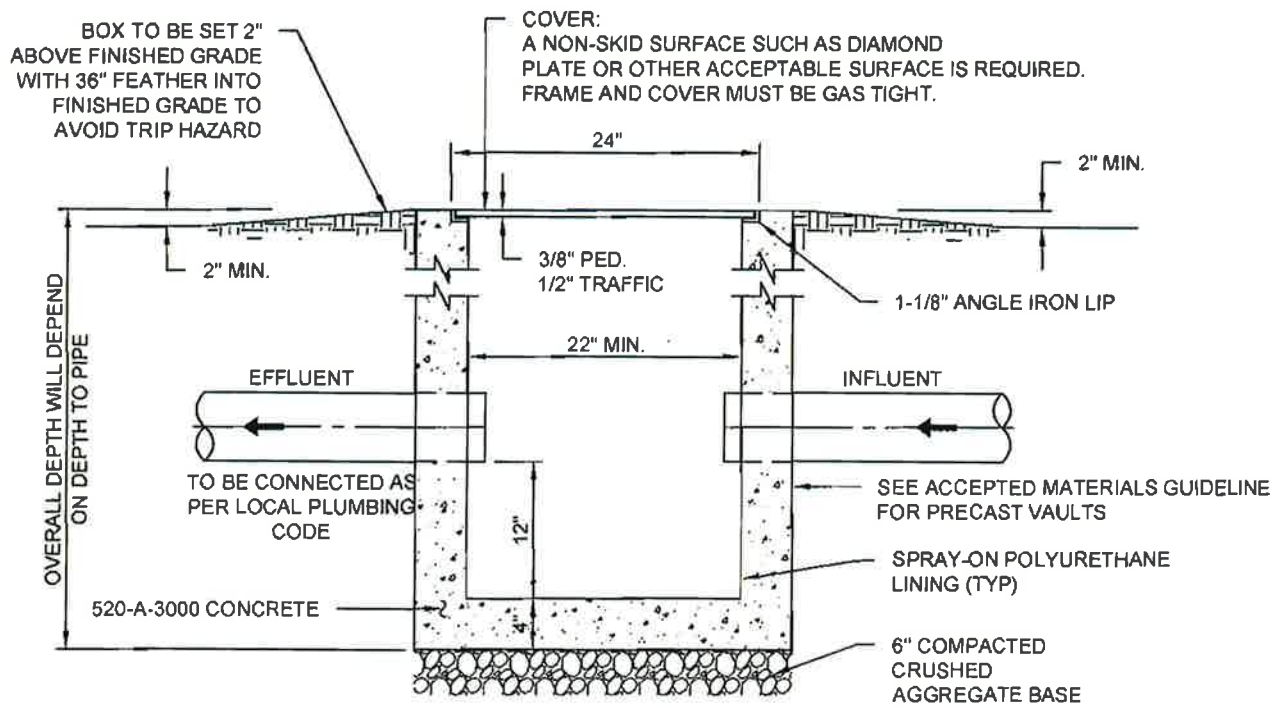
TYPICAL MANHOLE DETAILS

REVISION	BY	APPR	DATE

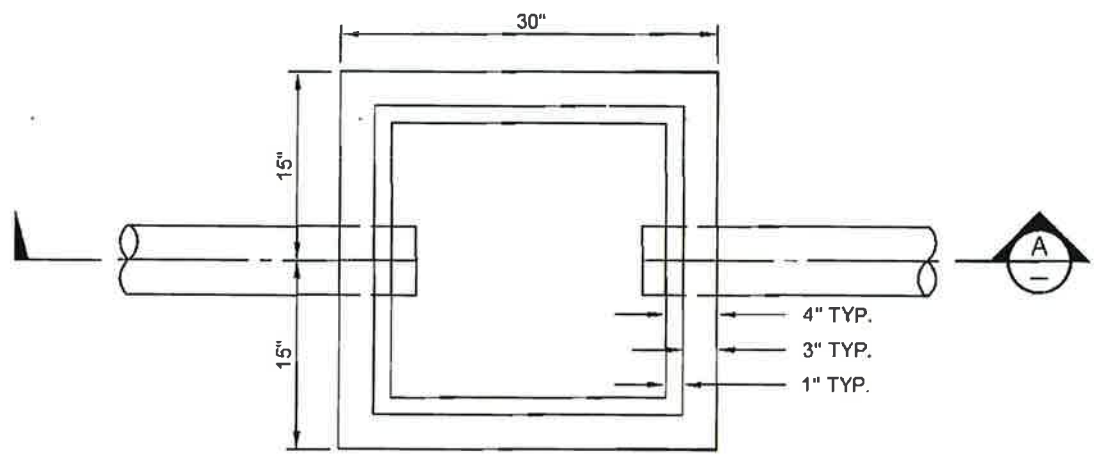
Elsinore Valley Municipal Water District
Paul S. Carver 11/7/12
 Paul S. Carver R.C.E. 31518 DATE

**SAND/OIL SEPARATOR
 AND SAMPLE BOX
 COVER PLATE DETAIL**

STD. DWG. NO.
S-16
 2 OF 3



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 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.

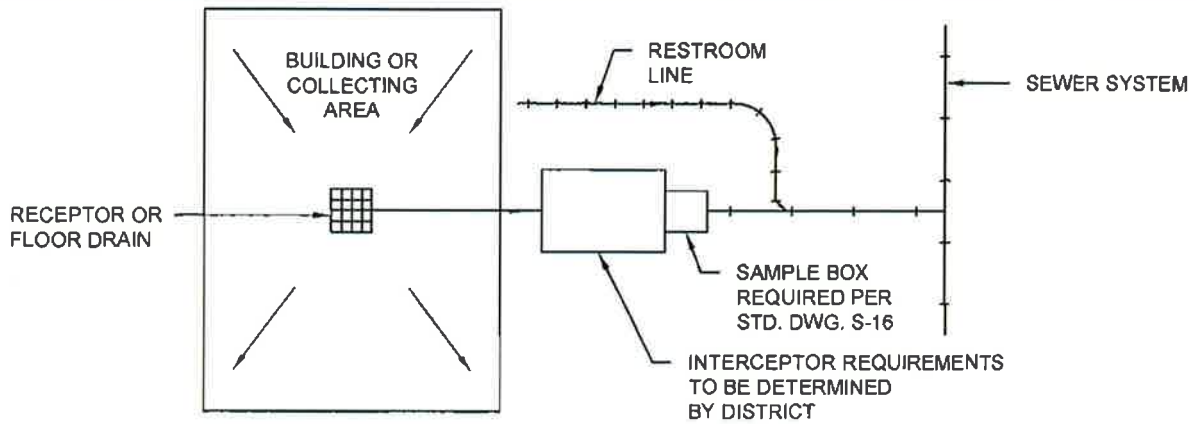
REVISION	BY	APPR	DATE

Elmore Valley Municipal Water District

Paul S. Caser 11/7/12
 Paul S. Caser R.C.E. 31518 DATE

**SAND/OIL SEPARATOR
AND SAMPLE BOX**

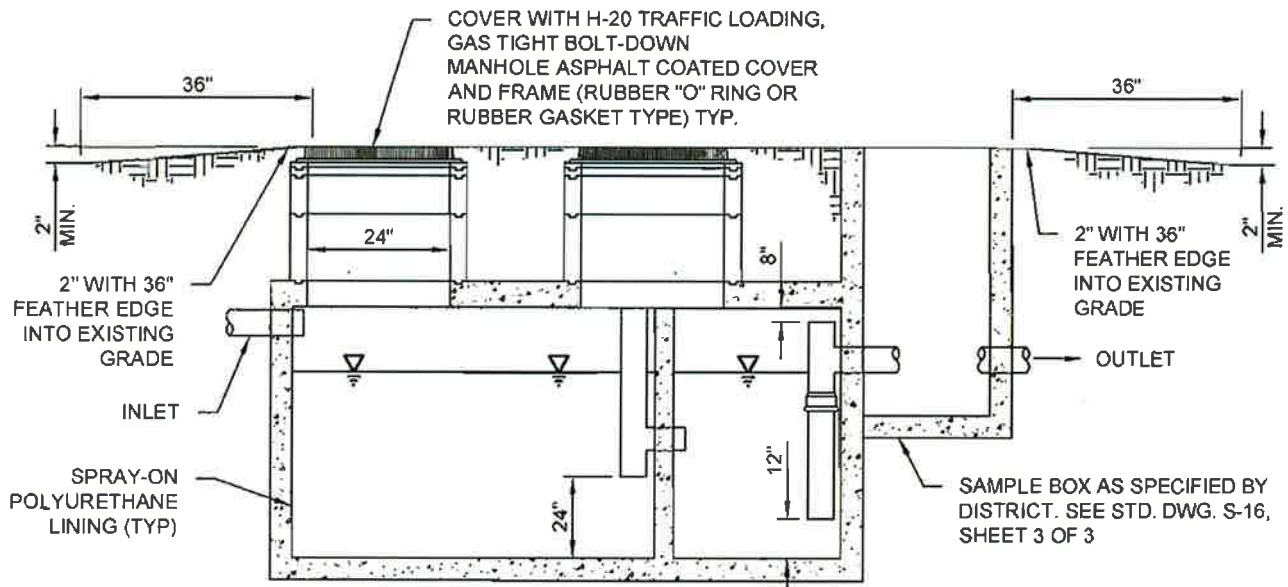
STD. DWG. NO.
S-16
3 OF 3



NOTE:

1. SPACING OF SURFACE ACCESS POINTS TO INTERCEPTOR (RAISED MANHOLE COVERS) SHALL BE PROVIDED AT NOT LESS THAN 15' INTERVALS.

TYPICAL INSTALLATION



2 CHAMBER INTERCEPTOR

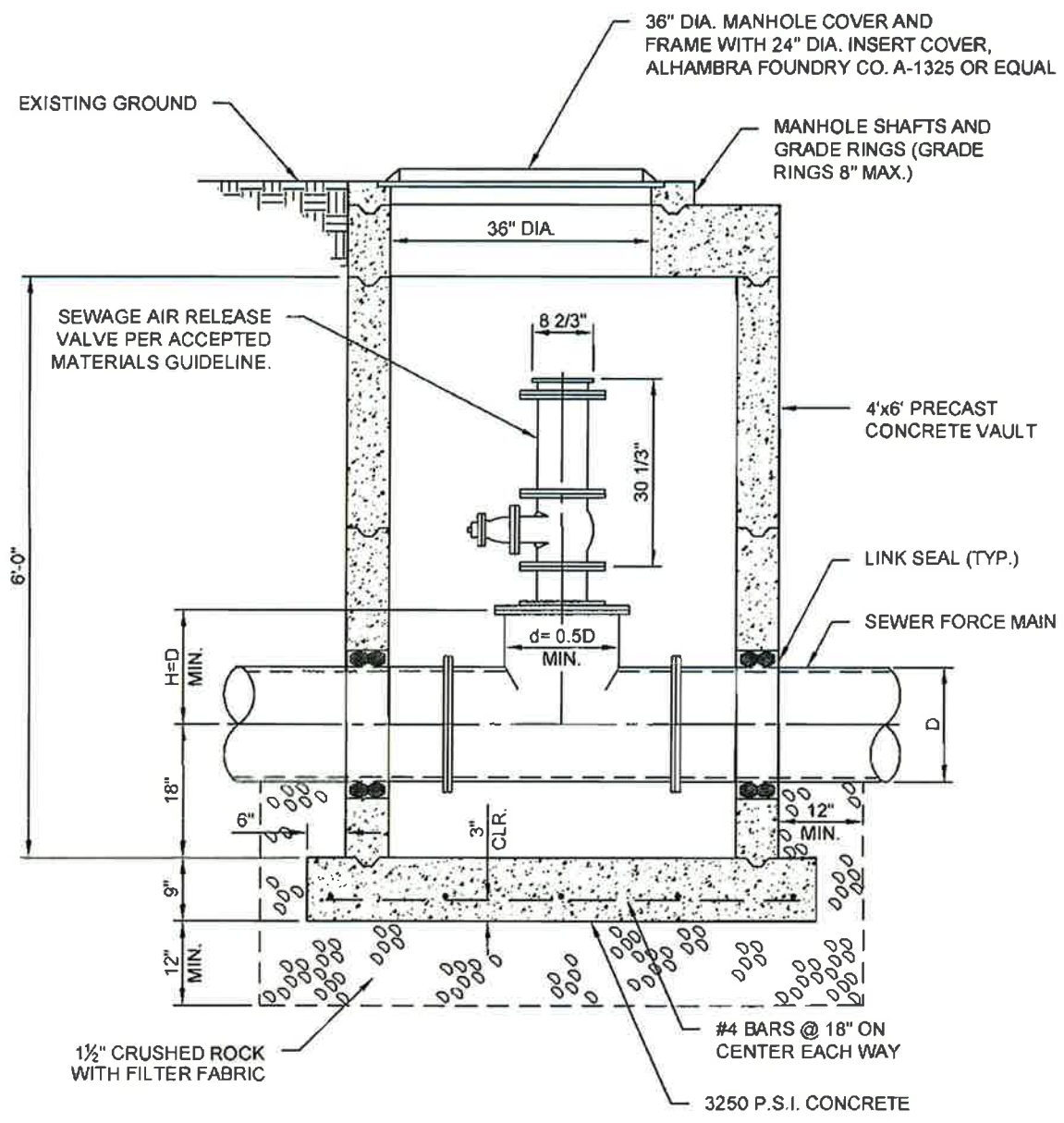
NOTES:

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. EXTERNAL PLUMBING PER LOCAL PLUMBING CODE.

REVISION	BY	APPR	DATE

GREASE INTERCEPTOR

STD. DWG. NO.
S-17



PROFILE

NOTE:

1. SEE ACCEPTED MATERIALS GUIDELINE FOR MATERIALS AND EQUIPMENT MANUFACTURERS.

REVISION	BY	APPR	DATE

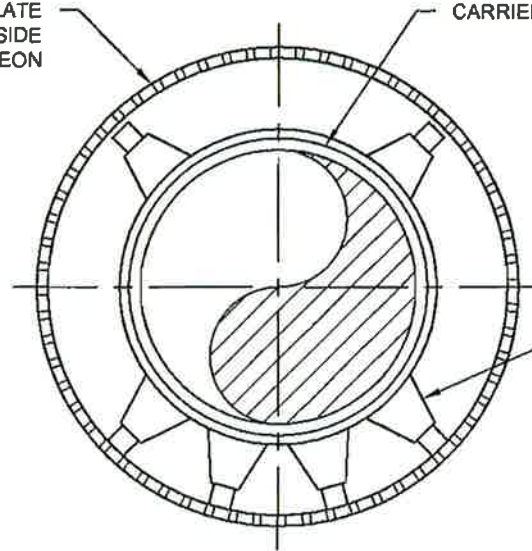
SEWAGE AIR RELEASE
AND VAULT DETAIL

STD. DWG. NO.

S-18

STEEL PIPE WITH MINIMUM PLATE THICKNESS AND MINIMUM INSIDE DIAMETER PER SCHEDULE HEREON

CARRIER PIPE CENTERED IN CASING



1. FOR PVC CARRIER PIPE, USE POLYETHYLENE CASING INSULATORS WITH POLYETHYLENE SKIDS.
2. FOR DUCTILE IRON CARRIER PIPE, USE STAINLESS STEEL BAND SPACERS AND INSULATORS WITH GLASS FILLED POLYMER PLASTIC RUNNERS.
3. ALL CASING INSULATORS SHALL BE DESIGNED BY THE MANUFACTURER FOR APPLICATION GIVEN THE PARTICULAR CARRIER PIPE O.D. AND CASING PIPE I.D.
4. ALL BOLTS AND BANDS SHALL BE TYPE 304 STAINLESS STEEL.

CASING SCHEDULE

NOMINAL PIPE SIZE	MINIMUM CASING SIZE	MIN. WALL
8"	16" I.D.	1/4"
10"	18" I.D.	1/4"
12"	20" I.D.	5/16"
15"	24" I.D.	5/16"
18"	30" I.D.	3/8"
21"	33" I.D.	3/8"
24"	36" I.D.	3/8"
27"	39" I.D.	1/2"
30"	42" I.D.	1/2"
36"	48" I.D.	5/8"
42"	54" I.D.	3/4"

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 ACCEPTED MATERIALS GUIDELINE. 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 STANDARD SPECIFICATION.
5. HDPE CASING MAY BE USED IF MEETS ADEQUATE STRENGTH FOR GEOTECHNICAL CONDITIONS AND WITH WRITTEN APPROVAL FROM THE DIRECTOR OF ENGINEERING.

REVISION	BY	APPR	DATE

Elmore Valley Municipal Water District

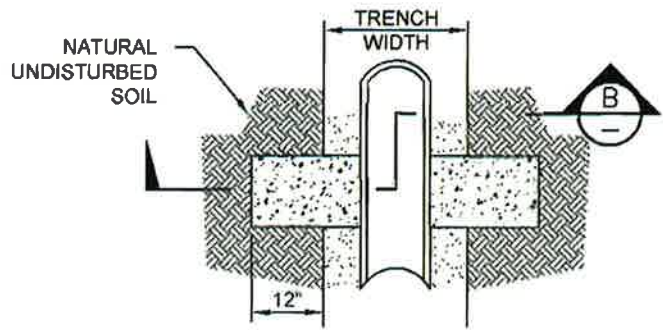
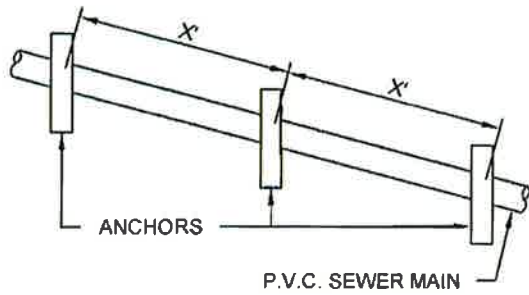
Paul S. Carver 11/7/12

Paul S. Carver R.C.E. 31598 DATE

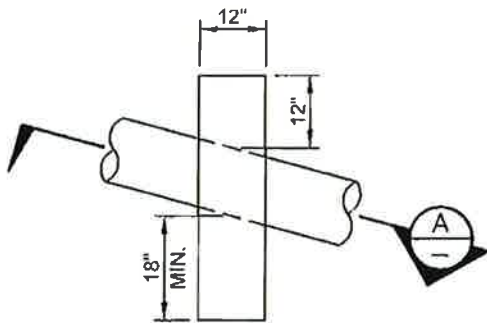
STEEL CASING FOR SEWER MAINS

STD. DWG. NO.

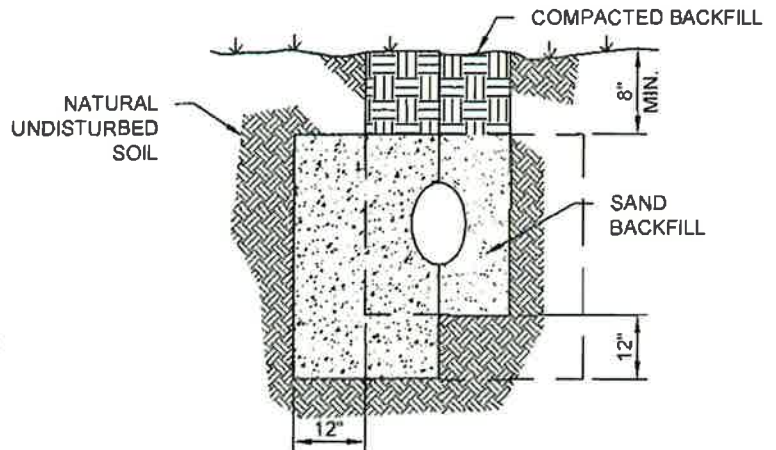
S-19



SECTION A-A

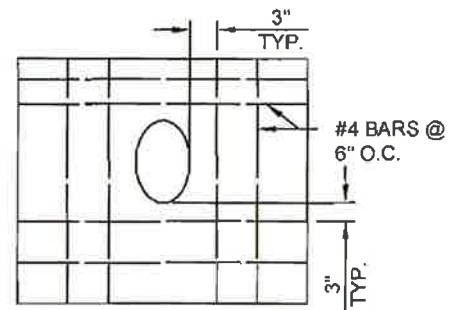


ANCHOR DETAIL



SECTION B-B

PIPE SLOPE	PIPE SLOPE	X DISTANCE
100%	1:1	12'
66.6%	1-1/2:1	14'
50%	2:1	16'
40%	2-1/2:1	18'
33.3%	3:1	20'



REINFORCING STEEL PATTERN

NOTES:

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 PER SSPWC.
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.

REVISION	BY	APPR	DATE

CONCRETE SLOPE ANCHORS

STD. DWG. NO.
S-20

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**APPENDIX L - 2016 WASTEWATER MASTER PLAN
EXECUTIVE SUMMARY**

The Elsinore Valley Municipal Water District Sewer System Master Plan was updated in August 2016. The 2016 Sewer System Master Plan was prepared and completed by MWH America's Inc. and approved by the District's Board of Director's on September 16, 2016. The objective of the Master Plan update is to develop a Capital Improvement Plan (CIP) that identifies short-term and long-term infrastructure needs to accommodate future growth.

The below Executive Summary in Appendix L is excerpted from pages ES-1 to ES-20 in the 2016 Sewer System Master Plan.

Executive Summary

The primary objective of the Elsinore Valley Municipal Water District's (EVMWD) 2015 Sewer System Master Plan (Master Plan) is to provide cost-effective and fiscally responsible sewer collection services that meet the capacity and reliability requirements of its customers. This Master Plan has a planning horizon up to the year 2040. This report is prepared as an update to EVMWD's previous Sewer Master Plan completed in 2008. This evaluation includes determining needs to address existing system deficiencies and facility requirements to meet rising demands over the next 25 years. The report also provides details for a proposed Capital Improvement Program (CIP) for the sewer collection system, including prioritization and construction cost estimates.

ES-1 EXISTING SEWER COLLECTION SYSTEM

The existing wastewater collection system consists of over 406 miles of pipes (force mains and gravity), 38 active lift stations, and three Water Reclamation Facilities (WRFs). The collection system is comprised primarily of polyvinyl chloride (PVC) and vitrified clay pipe (VCP). Over half of the EVMWD pipes have been built within the last 25 years. The location of the existing sewer facilities is shown on **Figure ES-1**.

ES-1.1 Reclamation Facilities

The EVMWD sewer system collects flows for four WRFs: Regional WRF, Railroad Canyon WRF, Horsethief Canyon WRF, and Rancho California Water District (RCWD) Santa Rosa WRF. Of these four facilities, EVMWD owns and operates all but the Santa Rosa WRF. EVMWD only collects some of the flows that eventually get treated at the RCWD Santa Rosa WRF, while all flow treated by the other three WRFs are collected by the EVMWD sewer system. **Table ES-1** shows the breakdown of the length of pipeline that collects flow for each of the four WRFs.

Table ES-1
Length of Pipe per WRF

WRF	Length of Gravity Pipe (ft.)	Length of Force Main (ft.)	Total Length (ft.)	Total Length (mi)	Percentage of System (%)	Area (acres)
Regional WRF	1,511,325	70,887	1,582,212	299.7	73.7	56,670
Horsethief Canyon WRF	95,800	2,941	98,741	18.7	4.6	940
Railroad Canyon WRF	246,678	23,796	270,474	51.2	12.6	2,040
Santa Rosa WRF ⁽¹⁾	195,733	0	195,733	37.1	9.1	1,510
Total	2,049,537	97,623	2,147,160	406.7	100	61,160

¹) Rancho California Water District (RCWD) owns and operates the Santa Rosa WRF, but the EVMWD system does collect some flow that is delivered to the plant.

Executive Summary

ES-2 MODEL UPDATE

EVMWD's previous model was created by Carollo Engineers for the November 2008 EVMWD Wastewater Master Plan. According to the previous report, the collection system model was created from "...GIS [Geographic Information System] data, as well as relevant reports and data sources." EVMWD supplied these records, as well as facilities built subsequent to the previous master plan, to MWH Americas, Inc. (MWH) for the purposes of updating and validating the previous model. Discussions with EVMWD supplemented these materials to ensure an accurate model. Part of the update included transferring the previous model from H2OMap modelling software to Innovyze InfoSWMM Suite 12.0 (InfoSWMM) software.

ES-3 WASTEWATER DEMANDS AND FLOW PROJECTIONS

Future flows are projected for each of the five planning horizons (2020, 2025, 2030, 2035, and 2040). Since this is a multiple system master plan (water, wastewater, and recycled water), the wastewater flow projections are developed closely with the water and recycled water flow projections. This ensures consistency between the different planning documents, and also allows engineers to do independent calculations for each system and compare them as verification of projected flows.








ES-3.1 Dry Weather Flow Projections

For future flows in the EVMWD system, it is necessary to estimate the future wastewater contributions from population growth, conversion of existing septic systems to sewer, and infill within the service area. For the EVMWD model, these future contributions were all separately analyzed and summed in order to estimate the overall new flows in the system for the 2020, 2025, 2030, 2035, and 2040 planning horizons. These future flows were also compared to the water projections to compare wastewater generation to water demand over the planning horizons.

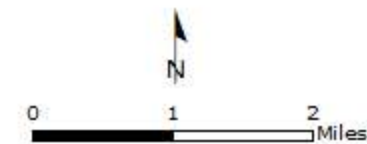
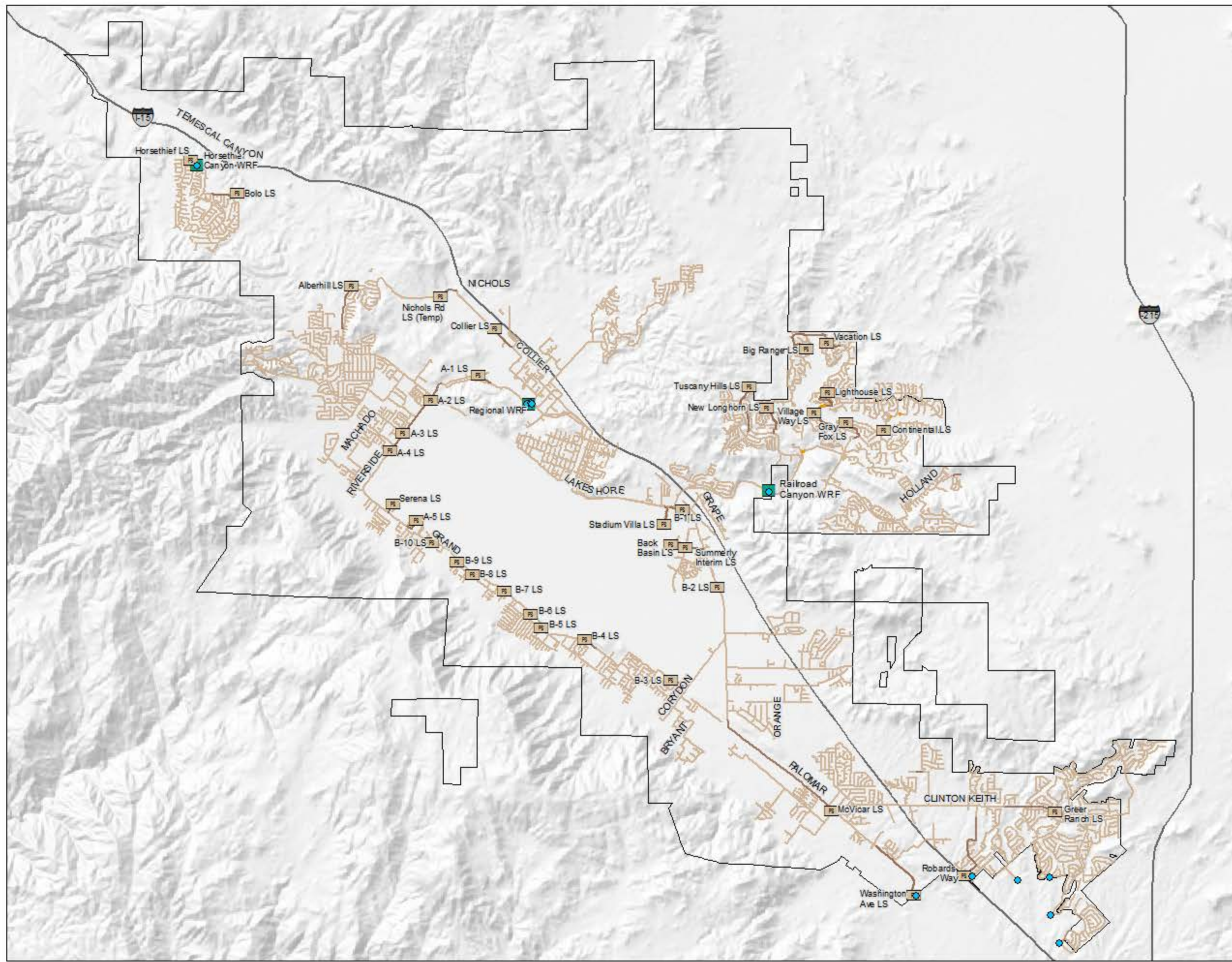
Figure ES-2 shows a comparison of the water and wastewater demands in the EVMWD system for future planning horizons, as well as the Wastewater Generation to Water Demand Factors (WGWDF), which varies between 33 percent and 43 percent over the length of the study. The main driver for the steadily increasing ratio is the steady conversion of septic customers to the collection system, which currently consume water but do not contribute to the sewer collection system flows.

Existing Wastewater Facility Map Elsinore Valley MWD

Legend

-  Outfalls
-  Lift Stations
-  Water Reclamation Facilities
-  Sewer Siphons
-  Force Mains
-  Gravity Mains
-  EVMWD Service Boundary

Basemap Source: ESRI



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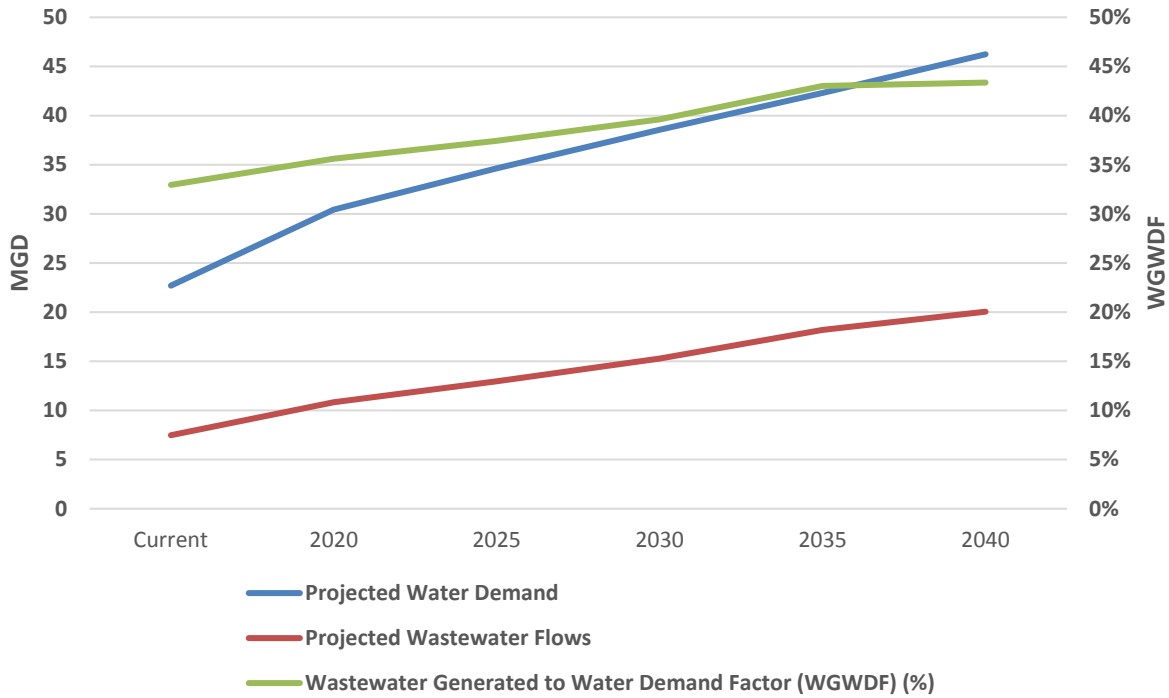


Figure ES-2
Water and Wastewater Demand Projections

Future wastewater flows for the EVMWD system were quantified from three different sources: Future infill of existing areas of contribution that had not been fully built out; conversion of current septic customers to collection system customers; and known developments identified by developers and submitted to EVMWD. These three contributions were assessed individually and then summed in the future planning horizons of the model in order to project future wastewater flows. **Table ES-2** summarizes the additional wastewater contribution from each source, as well as a total expected flow for each horizon based on an initial average dry weather flow (ADWF) of 7.48 million gallons per day (mgd).

Table ES-2
Total Projected Future Wastewater Flows for EVMWD Model

	Existing (mgd)	2020 (mgd)	2025 (mgd)	2030 (mgd)	2035 (mgd)	2040 (mgd)	Total Flow by Source (mgd)
Base ADWF Demand	7.48						7.48
Septic Contribution				0.66	1.30	0.50	2.46
Known Developments		2.06	2.13	0.86	1.00	0.00	6.05
Infill		1.30	0.00	0.79	0.62	1.35	4.06
Total Added Flow (MGD)	7.48	3.36	2.13	2.31	2.92	1.85	
Total Flow (MGD)	7.5	10.8	13.0	15.3	18.2	20.0	

Executive Summary

ES-4 DESIGN AND PLANNING CRITERIA

The Design Criteria used for this Master Plan is summarized in **Table ES-3** below.

**Table ES-3
Gravity Sewer Design Criteria**

Design Criteria	Value
Per Capita Flow	
Flow Generation Rate	Based on Population and Land Use
Velocity	
Minimum Velocity	2 fps
Maximum Velocity	10 fps
d/D Ratio	
For all sewers less than 18-inch in diameter	0.5
For all sewers greater than or equal to 18-inch in diameter	0.75
Manning's n (gravity mains)	0.013
Hazen-Williams C-factor (force mains)	120
Average Manhole Losses	0.1 feet
Peak Manhole Losses	0.5 feet

ES-5 SYSTEM EVALUATION

ES-5.1 Existing System Evaluation

The EVMWD collection system model was used to evaluate the existing system deficiencies. In order to evaluate the system, the model was run under the known existing conditions and flows, as calibrated to the flow monitoring data. Once the model was run, the maximum depth over diameter (d/D) for each pipe in the system that received flow was analyzed, and any pipes that exceeded design capacity were identified. Furthermore, any pipes with a d/D greater than 0.85 were identified for immediate replacement, and any pipes with a d/D above 1.0, with the exception of force mains, were identified as surcharged pipes. **Table ES-4** shows the results of this analysis for the existing system analysis.

**Table ES-4
Summary of Surcharged and Deficient Pipes in Existing System**

	Number of Pipes ¹	Length of Pipe (mi.)
Surcharged Pipes	132	9.8
Pipes above 0.85 d/D (inclusive of surcharged)	145	11.0
Pipes above Design Capacity (inclusive of surcharged)	230	22.6
Total of EVMWD Modeled Pipes	1,805	97.0
% of Surcharged Pipes	7.3%	10.1%
% of Pipes over 0.85 d/D (inclusive of surcharged)	8.0%	11.4%
% of Pipes above Design Capacity (inclusive of surcharged)	12.7%	23.3%

1) Shown as numerical value, unless noted as a percentage where indicated by “%”

Surcharged and over capacity areas were investigated to determine the significance of the overrun. Some surcharged areas reported in the model may have been artificial due to insufficient data in an area or assumptions made during the model development process. These areas were reviewed and removed from the above totals.

ES-5.2 Future System Evaluation

The CIP for this Master Plan provides improvements based on age-based replacements, known issues, and capacity deficiencies.

ES-5.2.1 Age-Based Analysis

The existing system was analyzed based on the age of the facilities in order to assess the cost of replacement, or the Rehabilitation and Replacement (R&R) Cost. A useful life of 20 years for pumps, 75 years for lift stations, and 50 years for force mains and gravity mains was used as the criteria for when a facility may need to be replaced or rehabilitated. **Figure ES-3** shows the length of pipe in feet, categorized by diameter, for any pipe where the useful life has been met or exceeded in 2015. In addition to these gravity mains, 43 pumps and 1,570 ft. of 6-in. force main have also reached the end of their useful life in 2015. Costs to replace these facilities are accounted for in the CIP section of this Master Plan (**Section 8**).

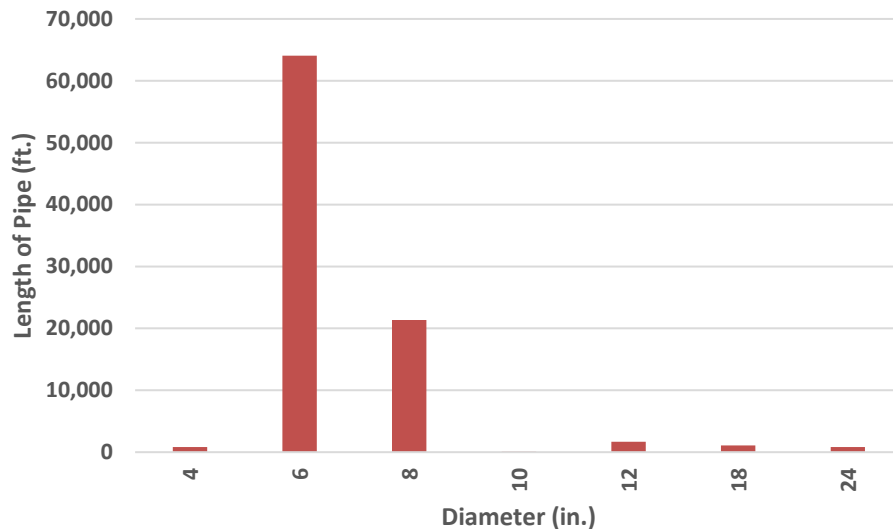


Figure ES-3
Length of Pipe Meeting or Exceeding Useful Life – Existing Gravity Mains

ES-5.2.2 Known Issues

In addition to the hydraulic model, known issues with lift stations (LSs) in the collection system were compiled through conversations with EVMWD staff and operators. **Table ES-5** below lists these issues for each facility identified by EVMWD, as well as the action taken for inclusion into the CIP.

Executive Summary

**Table ES-5
Known Lift Station Issues**

Facility	Issue	Action
A-2 LS	Hole in the discharge piping, corrosion issues, leaking valve after header	Upgrade is already in 2015-2020 (Phase 1) Capacity CIP list.
B-Series LSs	Generally in older condition and in need of maintenance	B-9 and B-10 upgrades are addressed in Phase 2 improvements based on capacity. B-3 recommended for improvement in 2020-2025 (Phase 2). Other B-Series stations will be added to the capacity CIP list based on useful life, with the exception of B-1 and B-2, which are being upgraded currently.
A-4 LS	Odor problems, large drop off at the end of the force main (14 ft.)	A-4 Upgrade already scheduled for Phase 1, will add FM replacement for Phase 1.
Serena LS	Electrical is a 230V single phase, would prefer 460V, 3 phase and new pumps	Will add electrical upgrade to Phase 1
A-5 LS	Currently using Smith and loveless vacuum type pumps, would prefer submersible pumps for reliable operation	Will add pump upgrade to Phase 1
Longhorn LS	Some corrosion on the lids	No change to CIP as this is a new station, but will note it in the report
McVicar LS	Force main inadequate for current flow and for the pump capacity	Force main replacement is already scheduled for Phase 1 due to capacity
A-3 LS	In need of wet well repair and should replace pumps with a different type	Will add a pump upgrade to Phase 2
Horsethief LS	Site is run down and could use attention, wet well needs maintenance	Will add wet well upgrade to Phase 2

1) Phase 1 = 2015-2020, Phase 2 = 2021-2025

ES-5.2.3 Future System Capacity Analysis

For the future system, deficiencies in capacity were evaluated by running the collection system model once recommendations from the previous planning horizon had been incorporated. Capacity deficiencies in the planning horizon being evaluated were addressed with new infrastructure improvements. If new improvements were needed in an area where previous improvements were recommended, these were often grouped together in the earlier planning horizon to make a group of projects. All capacity deficiencies and age-based deficiencies identified in this section are addressed by improvements and projects presented in the CIP (Section 8).

ES-6 CAPITAL IMPROVEMENT PROGRAM

ES-6.1 Age-Based Analysis

Before analyzing deficiencies in the hydraulic model, the EVMWD collection system was analyzed based on the age of the facilities in order to assess the cost of replacement, or the R&R Cost. It is important to note that this age-based replacement analysis does not consider capacity or the hydraulic model. Facilities are assessed solely on age which allows EVMWD to:

- Analyze budget based solely on the maintenance and upkeep of their current system; and
- Plan a Closed Circuit Television (CCTV) assessment protocol that focuses on pipes most likely to have age-based deficiencies or failures.

Though some facilities will be replaced due to capacity deficiencies, they may also be listed here and priced into both analyses. **This means that the age-based CIP costs and the capacity-based CIP costs cannot be added for a total CIP cost, they are not mutually exclusive, and serve separate purposes.** The age-based analysis represents anticipated costs to maintain the system in its current state while the capacity CIP costs represent the cost to address any facility with a capacity deficiency and to serve future customers.

It is also noted that the age-based replacement analysis looks at all facilities in EVMWD's GIS database, while the capacity based improvements consider only the trunk collection or skeletonized system as described in **Section 4**. The analysis of age-based improvements shows that roughly 41 percent of all active pipes in the EVMWD system are in need of replacement before 2040 based on useful life, or 166.5 miles out of roughly 406.7 miles of total force main and gravity pipes. By comparison, roughly 97 miles of pipeline are considered in the skeletonized model, or roughly 24 percent of the entire system. Therefore, these analyses of infrastructure needs are kept separate not only since they address different needs in the EVMWD system, but also because they are based on different extents of available data.

Table ES-6 below shows the cost to replace gravity mains, force mains, lift stations, and pumps based on their installation date, as delineated in the GIS information provided by EVMWD and the useful life of that facility. The costs in **Table ES-6** assume a useful life of 20 years for pumps, 75 years for lift stations (building and equipment other than pumps), and 50 years for force mains and gravity mains. This analysis also assumes that each facility is only replaced once during the study period. This assumption is made due to changes in longevity for pipe materials and pumps over time, and since most of these facilities will perform and be used beyond their useful lives. **Figure ES-4** shows the costs in **Table ES-6** by facility type for each planning horizon.

In addition to analyzing the cost to replace each asset at the end of its useful life, **Table ES-7** presents the R&R cost projection of replacing the entire EVMWD system. This analysis assumes the same useful life as mentioned above, but extends the period considered to 50 years, the useful life of the pipe and pump assets. This table is presented to show the yearly budgeted amount that is recommended to be set aside for each facility type, and to demonstrate the cost of replacing the entire EVMWD system.

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Table ES-6
Age-Based R&R Costs by Planning Horizon, 2015-2040 (2015 Dollars)

R&R Period	Sewer Pumps	Sewer Lift Station Buildings	Gravity Mains	Force Mains	Total
Useful life (years)	20	75	50	50	
Before 2015	\$4,701,400	\$0	\$17,346,000	\$281,100	\$22,328,500
2015 - 2019	\$1,115,900	\$0	\$14,633,000	\$0	\$15,748,800
2020 - 2024	\$618,900	\$0	\$51,300,500	\$619,200	\$52,538,600
2025 - 2029	\$2,254,000	\$0	\$4,807,100	\$0	\$7,061,100
2030 - 2034	\$4,926,400	\$0	\$48,137,900	\$950,900	\$54,015,100
2035 - 2039	\$1,115,900	\$1,080,000	\$78,882,700	\$3,019,700	\$84,098,300
Total Cost	\$14,732,500	\$1,080,000	\$215,107,200	\$4,870,900	\$235,790,400

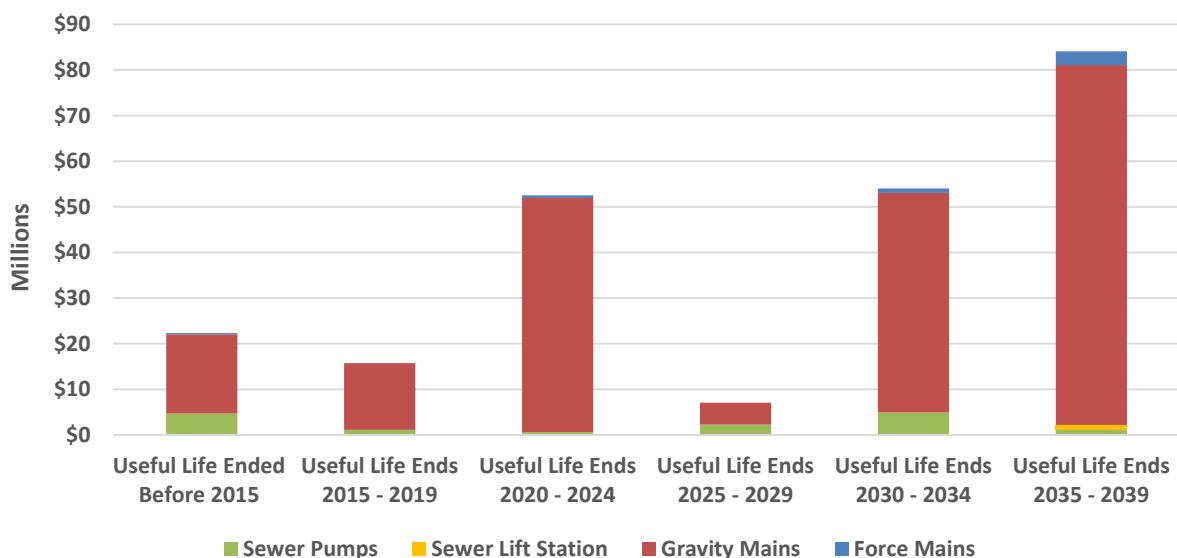


Figure ES-4
Age-Based Replacement Costs (2015 Dollars)

Table ES-7
Total System Replacement Costs Over 50 Years (2015 Dollars)

Facility Type	Cost to Replace All Current Facilities (\$)	Annual Cost ⁽¹⁾ (\$)	5-Year Cost (\$)
Sewer Pumps	\$8,915,000	\$446,000	\$2,229,000
Sewer Lift Station Buildings	\$24,078,000	\$344,000	\$1,720,000
Gravity Mains	\$531,269,000	\$10,625,000	\$53,127,000
Force Mains	\$18,493,000	\$370,000	\$1,849,000
Total	\$582,756,000	\$11,785,000	\$58,925,000

1) Assumes one replacement of each facility in a 50 year time span, including lift station buildings which have a 75-year useful life and sewer pumps which have a useful life of 20 years

As the above table demonstrates, the yearly projected cost to upkeep the collection system varies depending on the period considered. **Table ES-8** below shows the projected cost to replace facilities that will reach the end of their useful life in the next 10 years, 20 years, and 25 years. These projections are all presented as an annual and five-year budget to compare them more accurately.

**Table ES-8
Annual and 5-Year R&R Costs (2015 Dollars)**

Year Range when Useful Life is Exceeded	Age-Based Replacement based on Install Date in GIS		
	Total Cost	5-Year Cost	Annual Cost
2015 – 2025	\$90,615,900	\$45,308,000	\$9,062,000
2015 – 2035	\$151,692,100	\$37,923,000	\$7,585,000
2015 – 2040 ⁽¹⁾	\$235,790,400	\$47,158,000	\$9,432,000
2015 – 2065 ⁽²⁾	\$582,755,500	\$58,924,900	\$11,785,000

1) Assumes two replacements of pumps if the pump exceeded its useful life before 2020.

2) Assumes one replacement of each facility in a 50-year time span, including lift station buildings which have a 75-year useful life and sewer pumps which have a useful life of 20 years

Age-based analysis also provides an indication of where EVMWD should focus their CCTV efforts. CCTV recording of EVMWD pipes allows staff to assess the condition of the pipes by watching video from the inside of the pipes. By focusing on pipes with known installation dates that are at the end of their useful life, EVMWD is more likely to identify pipes in need of replacement and thus is a better expenditure of funds.

ES-6.2 Capacity Based Improvements

Separate from the age-based analysis, a CIP project list was developed for the EVMWD system using the hydraulic model. As discussed in the Design Criteria section, a d/D depth of greater than 0.85 at any point during the hydraulic model run for Peak Design Flow would trigger an improvement for that planning horizon. These improvements were assessed separately from the age-based analysis presented earlier in this section, and some facilities may be recommended for both a capacity and age-based replacement. As discussed earlier, the costs presented in each section represents different, non-exclusive totals. The costs presented in this section are meant to show the cost of replacing all facilities that show deficiency in the hydraulic model at any of the planning horizons. While addressing these improvements, EVMWD will also likely be addressing many of the age-based replacement recommendations presented previously.

Table ES-9 and **Figure ES-5** below shows the total costs associated with the capacity-based improvements recommended in this section. The improvements are categorized as gravity main improvements, force main improvements, new lift station, or existing pump replacement. These costs are also phased by planning horizon. **Table ES-10** presents the summary table of the capacity based improvements for the 2015 to 2014 planning horizon.

Executive Summary

Table ES-9
Capacity Based Improvements by Facility Type and Phase (2015 Dollars)

Facility Type	Capacity Based Improvement Costs (\$ Million)					
	Existing System	2020-2025	2025-2030	2030-2035	2035-2040	Total Cost (\$)
Gravity Main Cost (\$)	\$48.8	\$10.1	\$10.8	\$0.9	\$1.9	\$72.6
Force Main Cost (\$)	\$18.5	\$1.2	\$1.5	\$0.5	\$1.1	\$22.9
New Lift Station Cost (\$)	\$15.3	\$0.5	\$0	\$0	\$0	\$15.8
Pump Replacement Cost (\$)	\$4.9	\$1.7	\$0	\$0.2	\$0	\$6.7
Total Cost (\$)	\$87.5	\$13.5	\$12.3	\$1.6	\$3.0	\$117.9

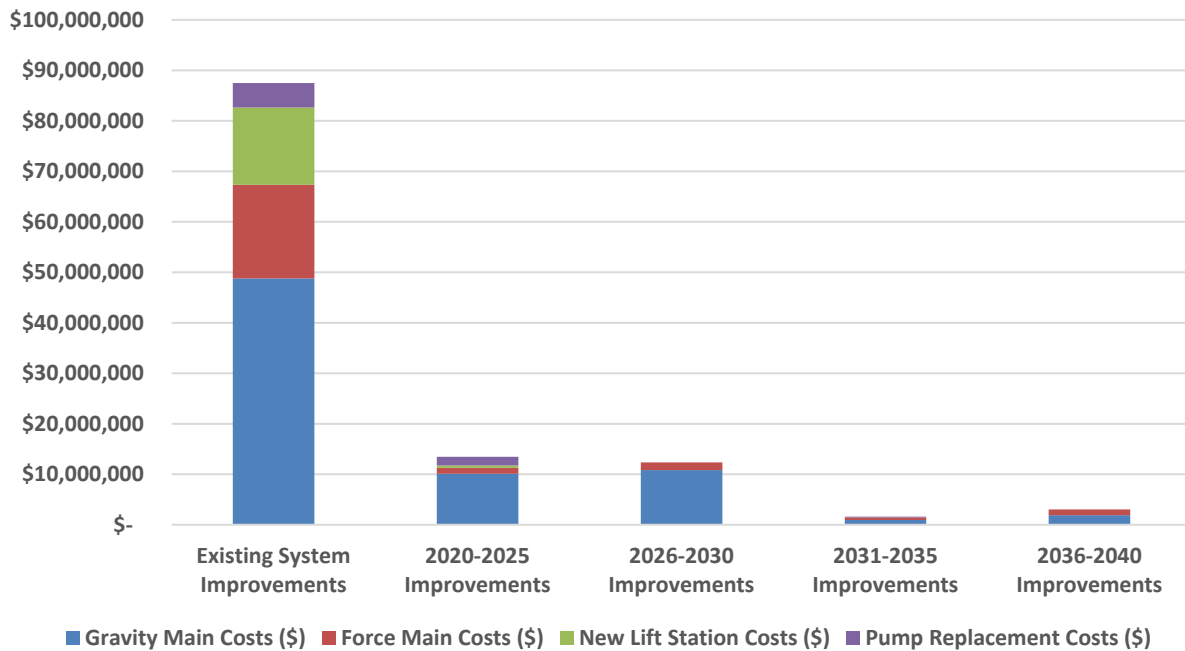


Figure ES-5
Capacity Based CIP Cost in Planning Period 2015-2040 (2015 Dollars)

Table ES-10
Summary of Wastewater Conveyance CIP Estimated Costs – 2015 – 2040 (2015 Dollars)⁽¹⁾

Description of CIP Item												CIP Costs (Rounded) (\$)			
Project ID	Type of Improvement	Description/ Street	Description/ Limits	Sewer Trunk/ Planned Trunk Name	Reference Figure Name (See Appendix A)	Deficiency	CIP Sizes					Pipe Costs	Manhole Costs	Lift Station Costs	Total Capital Improvement Cost
							Existing Diameter (in.)	New Diameter (in.)	Parallel/ Replace/ New/ Upsize	Length (ft.)	HP				
2015-2020 Improvements (Phase 1)												SUBTOTAL		\$125,557,600	
Alberhill Projects												SUBTOTAL		\$41,139,900	
AFM-01	Force Main	I-15	Horsethief Canyon Rd. to Temescal Canyon Rd.	Alberhill	A-1	No	-	12	New	6,537	-	\$1,830,400	-	-	\$1,830,400
AFM-02	Force Main	Temescal Canyon Rd.	Lester Circle to Lake St.	Alberhill	A-2, A-3	No	-	24	New	9,004	-	\$3,151,400	-	-	\$3,151,400
AFM-03	Force Main	Lake St.	Temescal Canyon Rd. to Coal Rd.	Alberhill	A-3, A-4	No	-	24	New	9,116	-	\$3,190,600	-	-	\$3,190,600
AP-01	Pipe	Horsethief Canyon Rd. and Temescal Canyon Rd.	Horsethief Canyon Rd. and De Palma Rd to Temescal Canyon Rd. and Larson St.	Alberhill	A-1, A-2, A-3	No	-	12/15/27/30	New	9,655	-	\$4,858,300	\$387,000	-	\$5,245,300
AP-03	Pipe	Lake St. and I-15	Larson Rd. and Temescal Canyon Rd. to Lake Street and Coal Rd. and to I-15 at the end of Big Canyon Rd.	Alberhill	A-3, A-4	No	-	18/24/27/30	New	14,506	-	\$6,051,800	\$725,300	-	\$6,777,100
AP-05	Pipe	Glen Eden Rd. and Temescal Canyon Rd.	Glen Eden Rd. 1,200 ft sw/o De Palma Rd. to New Glen Eden LS	Alberhill	A-1	No	-	12	New	2,302	-	\$1,128,000	\$115,000	-	\$1,243,000
ALS-01	Lift Station	Glen Eden Rd.	New Glen Eden LS	Alberhill	A-1	No	-	-	New	-	50	-	-	\$1,125,000	\$1,125,000
ALS-02	Lift Station	Lester Cir.	New Alberhill LS	Alberhill	A-2	No	-	-	New	-	760	-	-	\$5,472,000	\$5,472,000
RFM-09	Force Main	Baker Street	Nichols Rd. to Turnbull Ave.	Regional/ Nichols	A-5, A-26	No	-	24	New	6,674	-	\$2,369,000	-	-	\$2,369,000
RP-43	Pipe	Coal Rd. and Nichols Rd.	Alberhill Ranch Rd. and Coal Rd. to Nichols Rd. and Baker St.	Regional/ Nichols	A-4, A-5	No	15/16	24	Parallel	5,382	-	\$1,883,700	\$269,000	-	\$2,152,700
RLS-16	Pumps	Nichols Rd	Nichols LS upgrade	Regional/ Nichols	A-4, A-5	Yes	-	-	Upsize	-	310	-	-	\$1,466,300	\$1,466,300
RP-05	Pipe	Turnbull Ave. to Gunnerson St.	Baker Street to Regional Trunk Line LS	Regional/ Nichols	A-5, A-26	No	-	30/36	New	5,657	-	\$3,238,500	\$209,300	-	\$3,447,800
RP-31	Pipe	Off Road	Illinois St. to Strickland Av	Regional	A-26, A-27	Yes	24	36/42	Replacement	2,034	-	\$1,138,900	\$75,300	-	\$1,214,200
RP-16	Pipe	Strickland Ave.	Foster St. to 600 ft se/o Reid St.	Regional/ Nichols	A-26, A-27	Yes	24	36	Replacement	2,484	-	\$1,372,800	\$92,000	-	\$1,464,800
RP-08	Pipe	Regional WRF intake parallel to Strickland Ave	Strickland Ave. and Foster St. to Regional WRF	Regional	A-26, A-27	Yes	36	36	Replacement	1,634	-	\$929,700	\$60,600	-	\$990,300
Lakeshore Regional/ Back Basin Projects												SUBTOTAL		\$26,493,600	
RFM-03	Force Main	Diamond Cir.	Lakeshore Regional LS to E. Lakeshore Dr. and Elm St.	Regional/ Lakeshore Regional	A-17	Yes	-	Parallel 24, 30 connector	New	8,706	-	\$2,919,900	-	-	\$2,919,900
RP-23	Pipe	Corydon Rd.	Short connector (60 ft.) to Back Basin Interceptor	Regional/ Back Basin Interceptor	A-15	Yes	-	18	New	62	-	\$29,100	\$3,100	-	\$32,200
RP-34	Pipe	Back Basin Area	Palomar St. and Mission Trl. to Lakeshore Regional LS.	Regional/ Back Basin	A-14, A-15, A-16, A-17	Yes	18	12/30/36/42/48	Parallel/New	23,019	-	\$15,275,200	\$887,200	-	\$16,162,400
RP-45	Pipe	Off Road	Stadium Viila LS to Regional LS gravity main	Regional/ Back Basin	A-15, A-16	Yes	-	8	New	1,093	-	\$524,500	\$54,600	-	\$579,100

Executive Summary

Description of CIP Item												CIP Costs (Rounded) (\$)			
Project ID	Type of Improvement	Description/ Street	Description/ Limits	Sewer Trunk/ Planned Trunk Name	Reference Figure Name (See Appendix A)	Deficiency	CIP Sizes					Pipe Costs	Manhole Costs	Lift Station Costs	Total Capital Improvement Cost
							Existing Diameter (in.)	New Diameter (in.)	Parallel/ Replace/ New/ Upsize	Length (ft.)	HP				
RLS-15	Lift Station	Diamond Circle	New Lakeshore Regional LS	Regional/ Back Basin	A-18	Yes	-	-	New	-	210	-	-	\$6,800,000	\$6,800,000
Bundy Canyon/ Oak Creek Projects												SUBTOTAL		\$3,529,000	
RP-30	Pipe	Bundy Canyon Rd.	Large Extension	Regional/ Bundy	A-10, A-12	No	-	10	New	7,113	-	\$1,701,000	\$355,600	-	\$2,056,600
RFM-30	Force Main	Bundy Canyon Rd.	New Oak Street Lift Station Force Main	Regional	A-10, A-12	No	-	6	New	3,202	-	\$797,400	-	-	\$797,400
RLS-27	Lift Station	Bundy Canyon Rd.	New Oak Creek LS	Regional	A-12	No	-	-	New	-	20	-	-	\$675,000	\$675,000
A-Train Lift Stations Projects												SUBTOTAL		\$4,038,400	
RP-01	Pipe	Grand Ave. and Riverside Dr.	Grand Ave. and Bonnie Lee Dr. to Riverside Dr. and Eisenhower Dr.	Regional/ A-Trunk	A-8, A-24	Yes	10	18	Replacement	5,550	-	\$1,882,500	\$277,500	-	\$2,160,000
RLS-07	Pump	Riverside Dr.	A-2 LS	Regional/ A-Trunk	A-25	Yes	-	-	Upsize	-	170	-	-	\$957,100	\$957,100
RLS-08	Pump	Riverside Dr.	A-4 LS	Regional/ A-Trunk	A-24	Yes	-	-	Upsize	-	85	-	-	\$765,000	\$765,000
RLS-24	Pump	Oleander Dr.	A-5 LS	Regional/ A-Series	A-23	No	-	-	Replacement	-	10	-	-	\$56,300	\$56,300
RLS-25	Electrical	Serena Way	Serena LS	Regional/ A-Series	A-23, A-24	No	-	-	Replacement	-	-	-	-	\$100,000	\$100,000
Sunset Ridge Projects												SUBTOTAL		\$7,678,000	
RFM-08	Force Main	Sunset Ave.	Sunset Ridge LS extending roughly 5,000 ft north	Regional/ Sunset Ridge Extension	A-10,A-11	No	-	4	New	7,063	-	\$1,271,300	-	-	\$1,271,300
RLS-01	Lift Station	Sunset Ridge	New Sunset Ridge LS	Regional	A-11	No	-	-	New	-	50	-	-	\$1,125,000	\$1,125,000
RP-04	Pipe	Sunset Ave.	Sunset Ridge LS to Cottonwood Canyon Rd. b/w Cedar Mesa Dr. and Treetop Ln.	Regional/ Sunset Ridge Extension	A-9, A-10, A-11	No	-	8/12	New	16,004	-	\$4,481,600	\$800,100	-	\$5,281,700
Southern Sewershed Projects												SUBTOTAL		\$4,601,300	
RFM-10	Force Main	Palomar St.	Palomar St. and McVicar St. to Palomar St. and Mission Trl.	Regional/ McVicar	A-13, A-14	Yes	12	18	Replacement	10,548	-	\$2,953,300	-	-	\$2,953,300
RFM-97	Force Main	Palomar St.	Washington LS Force Main to RCWD	RCWD	A-21	No	10	12	New	153	-	\$55,000	-	-	\$55,000
RLS-09	Pump	Clinton Kieth Rd and Ashland Way	Greer Ranch LS	Regional/ Cal Oaks	A-19	Yes	-	-	Upsize	-	30	-	-	\$405,000	\$405,000
RLS-10	Pump	Palomar St. and McVicar St.	McVicar LS	Regional	A-13, A-14	Yes	-	-	Upsize	-	220	-	-	\$1,188,000	\$1,188,000
Age Based Replacement Pipes												SUBTOTAL		\$38,077,400	
ABR-20	All Infrastructure	Age-Based Replacements	Various	Various		No	Various	Various	Replacement	-	-	-	-	-	\$38,077,400
2020-2025 Improvements (Phase 2)												SUBTOTAL		\$66,010,800	
RFM-11	Force Main	Lakeshore Dr.	Chaney St. to Townsend St.	Regional/ Lakeshore North	A-27	No	-	4	New	1,018	-	\$448,100	-	-	\$448,100

Executive Summary

Description of CIP Item												CIP Costs (Rounded) (\$)			
Project ID	Type of Improvement	Description/ Street	Description/ Limits	Sewer Trunk/ Planned Trunk Name	Reference Figure Name (See Appendix A)	Deficiency	CIP Sizes					Pipe Costs	Manhole Costs	Lift Station Costs	Total Capital Improvement Cost
							Existing Diameter (in.)	New Diameter (in.)	Parallel/ Replace/ New/ Upsize	Length (ft.)	HP				
RFM-18	Force Main	Off Road	Force Main for New Tuscany Hills LS	Regional	A-7	Yes	-	Parallel 8	Replacement	3,835	-	\$728,600	-	-	\$728,600
RP-07	Pipe	Riverside St.	Steele Valley Rd. to 350 ft. e/o Ambridge St.	Regional	A-6	Yes	8	16	Replacement	358	-	\$157,700	\$17,900	-	\$175,600
RP-10	Pipe	Wesley St.	Grand Ave. to Union St.	Regional	A-14, A-15, A-16, A-17	No	-	8	New	1,351	-	\$391,700	\$67,600	-	\$459,300
RP-11	Pipe	Orange St. and Gruwell St.	Laguna Rd. to Front St.	Regional	A-13, A-14	No	-	8	New	3,619	-	\$1,181,000	\$181,000	-	\$1,362,000
RP-12	Pipe	Harwood Ln to Palomar St.	205 ft ne/o Harwood Ln and Wing Elm Cir. To 700 ft se/o Robin Scott St and Palomar St.	Regional/ Washington	A-21	Yes	8/10/12/15	15	Replacement	1,291	-	\$361,800	\$64,600	-	\$426,400
RP-13	Pipe	Via Graziana	Via Llanio to 130 e/o	Southern	A-20	Yes	8	12	Replacement	492	-	\$275,300	\$24,500	-	\$299,800
RP-24	Pipe	Grennwald Ave. and Theda St.	Large Extension spanning many streets	Regional	A-6, A-7	No	-	12	New	9,771	-	\$3,661,500	\$488,700	-	\$4,150,200
RP-41	Pipe	Lakeshore Dr. and W Heald Ave.	Lakeshore Dr. and Cowell St. to W. Heald Ave. and Chaney St.	Regional/ N. Lakeshore	A-27	No	-	12	New	3,814	-	\$1,639,400	\$190,600	-	\$1,830,000
RP-44	Pipe	Palm Dr.	Palm Dr. and Canyon Dr. to Regional WRF	Regional/ N. Lakeshore	A-26, A-27	No	-	12	New	2,308	-	\$1,292,200	\$115,300	-	\$1,407,500
RLS-03	Lift Station	Chaney St.	New Heald LS	Regional/ N. Lakeshore	A-27	No	-	-	New	-	5	-	-	\$168,750	\$168,750
RLS-17	Pumps	Grand Ave	B-9 LS	Regional/ B-Series	A-23	No	-	-	Replacement	-	5	-	-	\$28,150	\$28,150
RLS-18	Pumps	Grand Ave	B-10 LS	Regional/ B-Series	A-23	No	-	-	Replacement	-	5	-	-	\$28,150	\$28,150
RLS-19	Pump	Grand Ave.	B-4 LS	Regional/ B-Series	A-22	No	-	-	Replacement	-	25	-	-	\$112,500	\$112,500
RLS-20	Pump	Russel St.	B-5 LS	Regional/ B-Series	A-22	No	-	-	Replacement	-	10	-	-	\$56,300	\$56,300
RLS-21	Pump	Churchill St.	B-6 LS	Regional/ B-Series	A-22	No	-	-	Replacement	-	10	-	-	\$56,300	\$56,300
RLS-22	Pump	Arch Way	B-7 LS	Regional/ B-Series	A-22	No	-	-	Replacement	-	10	-	-	\$56,300	\$56,300
RLS-23	Pump	Grand Ave.	B-8 LS	Regional/ B-Series	A-23	No	-	-	Replacement	-	10	-	-	\$56,300	\$56,300
RLS-26	Pumps	Riverside Dr.	A-3 LS	Regional/ A-Series	A-25	No	-	-	Replacement	-	15	-	-	\$84,450	\$84,450
RLS-13	Pump	Palomar St. and Cape Cod Dr.	B-3 LS	Regional	A-15	Yes	-	-	Upsize	-	50	-	-	\$562,500	\$562,500
RLS-06	Pump	Off Road	New Tuscany Hills LS	Regional	A-7	Yes	-	-	Upsize	-	60	-	-	\$675,000	\$675,000
ALS-03	Wet Well	Horsethief Canyon Rd.	Horsethief LS	Alberhill/ Horsethief	A-2	No	-	-	Replacement	-	-	-	-	\$300,000	\$300,000
ABR-25	All Infrastructure	Age-Based Replacements	Various	Various		No	Various	Various	Replacement	-	-	-	-	-	\$52,538,600
2025-2030 Improvements (Phase 3)													SUBTOTAL		\$19,400,100
RFM-01	Force Main	Grand Ave.	B-10 LS to Grand Ave. and Bonnie Lee Dr.	Regional	A-23	No	-	6	New	2,417	-	\$483,400		-	\$483,400

Executive Summary

Description of CIP Item												CIP Costs (Rounded) (\$)			
Project ID	Type of Improvement	Description/ Street	Description/ Limits	Sewer Trunk/ Planned Trunk Name	Reference Figure Name (See Appendix A)	Deficiency	CIP Sizes					Pipe Costs	Manhole Costs	Lift Station Costs	Total Capital Improvement Cost
							Existing Diameter (in.)	New Diameter (in.)	Parallel/ Replace/ New/ Upsize	Length (ft.)	HP				
RFM-02	Force Main	Grand Ave.	B-9 LS to B-10 LS	Regional/ A-Trunk	A-23	No	-	6	New	2,884	-	\$519,100	-	-	\$519,100
RFM-12	Force Main	Riverside Dr.	A-2 LS	Regional/ A-Trunk	A-25	Yes	14	21	Replacement	1,720	-	\$516,100	-	-	\$516,100
RP-14	Pipe	Coal Rd. and Nichols Rd.	Alberhill Ranch Rd. to Lake St.	Regional, Nichols	A-3, A-4	No	-	12	New	1,142	-	\$340,600	\$57,200	-	\$397,800
RP-15	Pipe	Sugarpine St. to Knollwood St. to Teakwood St.	Sugarpine St. and Amarosa St. to Teakwood St. and Terra Cotta St.	Regional	A-25	Yes	8/10	10	New	266	-	\$125,100	\$13,300	-	\$138,400
RP-17	Pipe	Robards Way	Intake to Robards Way LS	Southern	A-21	Yes	8	12	Replacement	121	-	\$37,600	\$6,100	-	\$43,700
RP-18	Pipe	Palomar St.	Roughly 1,000 ft n/o Washington LS	Regional/ Washington	A-21	Yes	12	18	Replacement	294	-	\$91,300	\$14,700	-	\$106,000
RP-19	Pipe	Wanki Ave	Akipa Ct. and Supa Ct.	Regional/ McVicar	A-13, A-14	Yes	8	8	Replacement	711	-	\$156,500	\$35,600	-	\$192,100
RP-20	Pipe	Crab Hollow Cir., Lost Rd., Lemon St.	Lemon St. and Blondon Ct. to Crab Hollow Cir. and Crooked Arrow Dr.	Regional/ Mission Trail	A-28	No	-	12	New	6,405	-	\$1,793,400	\$320,300	-	\$2,113,700
RP-27	Pipe	Macy St.	Lake Terrace Dr. and Grand Ave.	Regional/ A-Trunk	A-24	Yes	8	10	Replacement	1,022	-	\$245,300	\$51,100	-	\$296,400
RP-36	Pipe	Grand Ave.	Grand Ave. and Via Lakistas to Tiller Ln. and Machado St.	Regional	A-24	Yes	8	12	Replacement	2,418	-	\$749,500	\$120,900	-	\$870,400
RP-37	Pipe	Tiller Ln	Keel Dr. to Machado St.	Regional	A-24	Yes	8	12	Replacement	708	-	\$184,000	\$35,400	-	\$219,400
RP-38	Pipe	Off Road	Extension of Back Basin/ Lakeshore Regional Collection adjacent to Lake Elsinore	Regional/ Back Basin	A-18	No	-	15	New	5,907	-	\$1,939,000	\$295,200	-	\$2,234,200
RP-39	Pipe	Garden St.	Mission Trail and Corydon Rd.	Regional/ Back Basin Interceptor	A-15, A-16	No	-	18	New	2,317	-	\$1,320,700	\$115,800	-	\$1,436,500
RP-42	Pipe	Grand Ave.	Trubutary of Riverside Dr. and A-Train	Regional/ A-Trunk	A-24	Yes	8	12	Replacement	2,842	-	\$881,100	\$142,100	-	\$1,023,200
RP-50	Pipe	Bryant St.	Connection to Back Basin Interceptor	Regional/ Back Basin	A-14, A-15	No	-	15	New	1,500	-	\$764,800	\$75,000	-	\$839,800
RP-55	Pipe	Grand Ave.	Connection of B-9 and B-10 to A-Train	Regional/ A-Trunk	A-23, A-24	No	-	18	New	2,524	-	\$782,600	\$126,200	-	\$908,800
ABR-30	Pipe and Force Main, And Lift Stations	Age-Based Replacements	Various	Various		No	Various	Various	Replacement	-	-	-	-	-	\$7,061,100
2030-2035 Improvements (Phase 4)												SUBTOTAL		\$55,632,600	
RP-33	Pipe	Toft Dr. and Grand Ave.	Toft Dr. and Rockridge Rd. to Grand Ave. and Via Lakistas	Regional	A-24	No	-	8/12	New	3,236	-	\$782,100	\$161,700	-	\$943,800
RFM-12	Force Main	Riverside Dr.	A-2 LS	Regional/ A-Trunk	A-25	Yes	14	21	Replacement	1,720	-	\$516,100	-	-	\$516,100
RLS-14	Pump	Palomar St./Washington Ave.	Washington LS	Regional/ Washington	A-21	Yes	-	-	Upsize	-	35	-	-	\$157,500	\$157,500
ABR-35	All Infrastructure	Age-Based Replacements	Various	Various		No	Various	Various	Replacement	-	-	-	-	-	\$54,015,200

Executive Summary

Description of CIP Item											CIP Costs (Rounded) (\$)				
Project ID	Type of Improvement	Description/ Street	Description/ Limits	Sewer Trunk/ Planned Trunk Name	Reference Figure Name (See Appendix A)	Deficiency	CIP Sizes					Pipe Costs	Manhole Costs	Lift Station Costs	Total Capital Improvement Cost
							Existing Diameter (in.)	New Diameter (in.)	Parallel/ Replace/ New/ Upsize	Length (ft.)	HP				
2035-2040 Improvements (Phase 5)											SUBTOTAL			\$87,118,900	
RFM-13	Force Main	Cathy Lane	B-3 LS	Regional/ B-Trunk	A-15	Yes	10	12	Replacement	1,378	-	\$344,600	-	-	\$344,600
RFM-14	Force Main	Clinton Keith Rd.	Greer Ranch LS	Regional/ McVicar	A-19	Yes	6	8	Replacement	4,184	-	\$794,900	-	-	\$794,900
RP-25	Pipe	Nichols Rd	New Intake for Nichols LS	Regional/ Nichols	A-4	Yes	16	24	Replacement	72	-	\$25,300	\$3,600	-	\$28,900
RP-28	Pipe	Grand Ave.	Wood St. and Tettersington St.	Regional/ A-Trunk	A-22	Yes	8	12	Replacement	1,671	-	\$468,000	\$83,600	-	\$551,600
RP-29	Pipe	Palomar St.	Robin Scott St. to Washington LS	Regional/ Washington	A-21	Yes	15	18	Replacement	2,070	-	\$680,200	\$103,500	-	\$783,700
RRP-01	Pipe	Off Road	Railroad Canyon Road, n/o Skylink Dr.	Railroad Canyon	A-8	Yes	15	18	Replacement	510	-	\$235,800	\$25,600	-	\$261,400
RRP-02	Pipe	Redwood Rd.	Boating Way	Railroad Canyon	A-7	Yes	8	12	Replacement	495	-	\$230,700	\$24,800	-	\$255,500
ABR-40	All Infrastructure	Age--Based Replacements	Various	Various		No	Various	Various	Replacement	-	-	-	-	-	\$84,098,300
TOTAL														\$353,720,000	

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ES-6.3 Alberhill Phasing

EVMWD has expressed a desire to possibly phase the improvements for the Alberhill area as shown on **Table ES-10**. The CIP as presented in this Master Plan report shows all improvements for the Alberhill area recommended for the first planning horizon (2015-2020). However, due to the large area these improvements and uncertainty with the timing of the developments slated for the Alberhill area, future phasing was considered. Because the first improvements in the Alberhill area is at the far upstream end of the recommended improvements, many of the infrastructure would need to be built at once in order to convey wastewater flow from the developments to the lift station. However, the lift station could be built in stages in order to accommodate smaller short term flows.

One of the suggestions for phasing the Alberhill improvements was to employ parallel force mains for the Alberhill LS in order to minimize upfront costs. Upon further evaluation, it is not recommended for EVMWD to use a parallel pipe strategy to serve the Alberhill LS. The cost to put in a 16 and 18 inch parallel pipe, which would be necessary to supplant the 24-in. pipe recommended for AFM-2 and AFM-3, would be roughly 50% more than putting in a single 24-in. pipe. There may be a possibility that a 21-in. pipe, or 18-in. pipe may be able to replace the 24" pipe and still serve the 760 HP lift station, but the differential cost for an 18 inch pipe versus a 24 inch pipe would be roughly \$180,000 out of the \$6.34M estimated in the CIP, well within the margin of error for a planning level cost. Exact sizing for the force main should be determined during pre-design for that facility.

The infrastructure that was able to be phased for the Alberhill area was ALS-02 and AP-03; ALS-02 could be built with 450 hp pumps in the first planning horizon with an upgrade to 760 hp as shown in the CIP delayed for a later horizon, while AP-03 could be built when a specific development in that area is ready for construction. The offset costs for the smaller pumps at ALS-02 and section of pipe for AP-3 that is pushed into the later planning horizon for further analysis is roughly \$4.7M. The CIP is presented without this offset cost as a conservative recommendation, but this phasing is possible in order to build out the Alberhill area incrementally.

ES-6.4 Funding Source Analysis

In addition to analyzing the CIP costs by type (capacity versus age-based), infrastructure category (gravity main, force main, lift station, and pump), horizon (2020, 2025, 2030, 2035, and 2040), the costs were also examined by existing and future customers. This exercise was done at the request of EVMWD to estimate how to assign costs to current ratepayers and new customers to the system. In this exercise, all age-based replacement costs were assigned to existing rate payers, while future ratepayers were assigned costs based on the capacity of new and replacement infrastructure that was intended to serve additional customers. These costs are summarized in **Table ES-11** below.

Executive Summary

Table ES-11
CIP Allocation by Funding Source (2015 Dollars)

Phase	Existing	Future	Total Cost
2015-2020	\$52,583,300	\$72,974,000	\$125,557,300
2020-2025	\$54,257,600	\$11,753,000	\$66,010,600
2025-2030	\$11,081,100	\$8,319,000	\$19,400,100
2030-2035	\$54,354,100	\$1,279,000	\$55,633,100
2030-2040	\$85,874,300	\$1,245,000	\$87,119,300
Total	\$258,150,400	\$95,570,000	\$353,720,400
Average per phase	\$51,630,080	\$19,114,000	\$70,744,080

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Elsinore Valley Municipal Water District

APPENDIX M – SSMP BOARD APPROVAL

**MINUTES
SPECIAL MEETING OF THE BOARD
OF DIRECTORS OF ELSINORE VALLEY
MUNICIPAL WATER DISTRICT**

MONDAY, NOVEMBER 19, 2018

The Special Meeting of the Board of Directors of Elsinore Valley Municipal Water District was held at its principal offices at 31315 Chaney Street, Lake Elsinore, California.

Directors Present

Harvey Ryan, President
Andy Morris, Vice President
Phil Williams, Treasurer
George Cambero

Directors Absent

Nancy Horton

Staff Present

John Vega, General Manager
Steve Anderson, General Counsel
Christy Gonzalez, Executive Assistant/Deputy Board Secretary
Susie Evans, Sr. Executive Assistant
Brian Macy, Assistant General Manager, Engineering & Operations
Robert Hartwig, Assistant General Manager – Business Services
Margie Armstrong, Director of Strategic Planning
Jason Dafforn, Director of Engineering and Operations
Jase Warner, Director of Operations
Greg Morrison, Government Relations Officer
James Ollerton, Director of Information Technology
Jennifer Dancho, Human Resources & Safety Manager
Parag Kalaria, Water Resources Manager
John Manhard, Facilities Manager
Matthew Bates, Engineering Manager
Tim Collie, Water Operations Manager
Scott Thompson, Accounting Manager
Haley Munson, Water Efficiency Specialist
Jacob Shiba, Community Affairs Specialist

Others Present

Robert DeLoach, DeLoach and Associates
Marsha Swanson, City of Wildomar Mayor Pro Tem

CALL TO ORDER

The meeting was called to order by Director Ryan at 4:01 p.m.

APPROVAL OF AGENDA

A motion was made by Director Williams, seconded by Director Morris and carried unanimously to approve the Agenda as presented.

PUBLIC COMMENTS

The meeting was opened to public comments and there were none.

Item I.0 - Consent Calendar

Minute Order #5371-5374

Resolution No. 18-11-04

- A. APPROVAL OF:
1. Minutes of the Regular Board Meeting of November 8, 2018
 2. Minutes of the Regular Engineering and Operations Committee Meeting of November 5, 2018
 3. Demands
 4. Investment Report, Receive and File
 5. Sewer System Management Plan Update (*MO #5371*)
 6. Cal OES Form 130 - Designation of Applicant's Agent for Non-State Agencies (*MO #5372*)
 7. Adoption of a Resolution Recognizing Thomas P. Evans for his Service to the Western Municipal Water District Board of Directors and Western Riverside County (*Reso. No. 18-11-04*)
 8. Amendment No. 3 to the Professional Services Agreement for Construction and Inspection Management Services With HDR, Inc. for the Lake Street Reservoir Project (*MO #5373*)
 9. Three-Year Contract Services Agreement with South Coast Water for Exchange of Portable Water Softeners and Deionization Units (*MO #5374*)

Director Williams pulled Consent Calendar Item A.3 Nos. 238804 and 238805.

Director Ryan abstained on Consent Calendar Item A.3, Nos. 4600, 4603, 238843, 238852, 238853, and 238857 for source of income.

A motion was made by Director Morris, seconded by Director Cambero and carried unanimously to:

1. ***Approve the Consent Calendar for non-pulled items (as presented).***

A motion was made by Director Cambero, seconded by Director Williams and carried unanimously with Director Ryan abstaining to:

- 1. Approve the Consent Calendar Item A.3, Nos. 4600, 4603, 238843, 238852, 238853, and 238857.**

Director Williams requested that payments for the second Horsethief CFD Formation be named differently for clarification to homeowners in the area. Ms. Armstrong responded that this can be done.

A motion was made by Director Williams, seconded by Director Cambero and carried unanimously to:

- 1. Approve the Consent Calendar Item A.3, Nos. 238804 and 238805.**

Item II.0 BUSINESS ITEMS

<p>Item II.A - CONSIDER APPROVAL OF A PUBLIC WORKS CONTRACT WITH SCW CONTRACTING CORPORATION FOR THE RAILROAD CANYON WATER RECLAMATION FACILITY YARD PIPING MODIFICATION PROJECT</p> <p><i>Minute Order #5375</i></p>
--

Mr. Dafforn reported on the Railroad Canyon Water Reclamation Facility (RRCWRF), one of three wastewater treatment facilities within the EVMWD system. The Project was advertised for bid starting September 12, 2018 through PlanetBids. On October 16, 2018, 3 prequalified bidders submitted bids by the deadline.

Staff performed a detailed review of the bid documents and determined SCW Contracting Corporation to be the lowest, responsive, and responsible bidder.

Staff presented this item at the November 5, 2018 Engineering and Operations Committee Meeting and now recommends award of a Public Works Contract with SCW Contracting Corporation in the base bid amount of \$1,644,316.00 and the filing of a Notice of Exemption with the Riverside County Clerk's Office in the amount of \$50. This item, including overhead of \$64,502.00, consulting management (45 hours) of \$5,700.00, as well as staff time (270 hours) & fringe benefits of \$62,893.00, totals \$1,777,461.00.

A motion was made by Director Williams, seconded by Director Cambero, and carried unanimously to:

- 1. Approve a Public Works Contract with SCW Contracting Corporation in the amount of \$1,644,316.00;**
- 2. Approve the filing of a Notice of Exemption in the amount of \$50 with the Riverside County Clerk's Office;**

3. **Authorize \$64,502.00 for overhead, \$5,700.00 for consulting management, and \$62,893.00 for staff time;**
4. **Authorize the total expenditure in the amount of \$1,777,461.00 to the Capital Improvement Program 490, with funding provided from the Wastewater Replacement Program 333; and,**
5. **Authorize the General Manager to execute the appropriate documents on behalf of EVMWD.**

Item II.B - CONSIDER ADOPTION OF A RESOLUTION OF APPRECIATION OF GEORGE CAMBERO'S YEARS OF SERVICE

Resolution No. 18-11-05

George Cambero was elected to serve on the Board of Directors with Elsinore Valley Municipal Water District in November 2014. He has served a four-year term that is set to come to an end on December 7, 2018. This being George Cambero's last attendance of an EVMWD Board Meeting, a resolution of appreciation was presented for the Board's consideration. Director Ryan read into record Resolution No. 18-11-05.

Marsha Swanson, Mayor Pro Tem with the City of Wildomar, presented a proclamation from the City of Wildomar for his service.

President Ryan commented that Director Cambero provided a lot of history and he appreciated the depth and character that Director Cambero brought to the Board.

Director Cambero thanked the Board for the time they have worked together. He commented that in the last four years he has seen nothing but improvements. He has enjoyed his time here working with the Board and the staff.

Director Morris commented that they had a long-standing relationship being from the same City. They have worked hard and well together representing the City. He hopes that George comes back as a public citizen to provide his comments and knowledge when there are items that are important and controversial.

Director Williams commented that he thinks Director Cambero should write a book with the large amount of knowledge he has, from the beginning of his work history to all his experiences with the District.

The Board took a photo together along with several other photos with staff.

A motion was made by Director Morris, seconded by Director Williams, and carried unanimously to:

1. **Adopt a Resolution of Appreciation of George Cambero's Years of Service**

Item III.A GENERAL MANAGER'S REPORT

General Manager Vega reported on a letter from MWD General Manager Jeff Kightlinger to Chair Randy Fiorini (Delta Stewardship Council) about Metropolitan Water District's disagreement with the Delta Stewardship Council staff determination regarding appeals of the Certification of Consistency by the California Department of Water Resources for California WaterFix (Draft Determination). He opined that this will drive the project further down the road. A copy of the letter was distributed to the Board.

He next reported on the emergency funding recently requested to repair some wells. The Mayhew Well and Summerly Well are now operational. He thanked the Board for their foresight which allowed staff to get this project done quickly.

He provided an update from NOAA about rain coming this Wednesday and Thursday. He asked Mr. Warner to report on what preparations have been made in anticipation of the upcoming weather.

Mr. Warner reported that supplemental erosion controls at sites affected by the fire have been done. Also, staff investigated how our infrastructure would be affected by debris flow. Plans were created on how to take certain facilities out of service in the event. This information will be shared with the City. The District has also been working with local agencies to help clear storm drains. The County Flood Control has requested installation of cameras on some of our tanks to see if debris occurs in certain areas and we've allowed that. We have informed the local agencies that we are available to help. We believe we are in good shape and could sustain uninterrupted water and wastewater operations during any unforeseeable condition.

Director Ryan asked what the chances of rain are. Mr. Vega responded that there is a 20-30 percent chance of rain.

Director Cambero offered concern about Leech Canyon Tank. Mr. Warner indicated it is permanently out of service, so it is not a concern.

President Ryan asked if we supply any sandbags to any customers. The City of Lake Elsinore provides sand and sandbags, located at fire stations for the public.

Mr. Vega reported on the latest National Weather Forecast. It is showing 70 percent chance of light rain on Wednesday evening with 50 percent chance of showers on Thursday.

Regarding Mr. Vega's report on the Summerly and Mayhew Wells, Director Cambero suggested to put some of the other wells such as Barney Lee and Palomar Well on fast track because we know the water is there. He opined that these wells will at least give some relief.

Mr. Vega thanked Director Cambero, not only as a boss, but also as a friend. He thought he did a fantastic job. He thanked him for his support and dedication.

Item III.B LEGAL COUNSEL'S REPORT

Steve Anderson reported that the Department of Water Resources and the State Board released a conservation pamphlet and summary on the water conservation legislation recently passed, which can be downloaded from their website.

A new decision by US Supreme Court about age discrimination laws applied equally to private employers as well as State and local government and to all sizes of government. The court ruled that it applies to all.

He also reported to the Board on two webinars coming up provided by BB&K. The first is next week titled Emergency Procurement and Contracting Essentials about accessing FEMA funds. The other is the annual Labor & Employment Update being provided on December 13, 2018.

Item III.C BOARD COMMITTEE REPORTS

There were no reports.

Item IV.0 DIRECTORS' COMMENTS AND REQUESTS

Director Cambero thanked everyone for all the comments.

President Ryan expressed concern about how the person who won the election ran on false statements. He was hoping to have the Director-Elect here at this meeting.

Item V.0 CLOSED SESSION

The Board adjourned to Closed Session at 4:35 p.m. to discuss:

- A. CONFERENCE WITH LEGAL COUNSEL ANTICIPATED LITIGATION
Significant exposure to litigation pursuant to subdivision (d) of Section 54956.9 of the Government Code (1 or more potential cases)

The Board reconvened to open session at 5:17 p.m. and no reportable action was taken.

Item VI.0 ADJOURNMENT

There being no further business, the meeting was adjourned at 5:17 p.m.

Harvey R. Ryan, President of the
Board of Directors of the
Elsinore Valley Municipal Water District

ATTEST:

Christy Gonzalez, Deputy Board Secretary
to the Board of Directors of
Elsinore Valley Municipal Water District

DRAFT



Elsinore Valley Municipal Water District

Our Mission...

EVMWD will provide reliable, cost-effective, high quality water and wastewater services that are dedicated to the people we serve.

EVMWD BOARD ACTION:

- APPROVED
- APPROVED AS AMENDED
- DENIED
- CONTINUED

40 Christy [Signature] 11-19-18

DATE: November 19, 2018
TO: Board of Directors
FROM: General Manager
SUBJECT: SEWER SYSTEM MANAGEMENT PLAN UPDATE

PURPOSE

EVMWD is required by the Regional Water Quality Control Board to conduct regular audits and updates of the SSMP.

RECOMMENDATION

The General Manager and staff recommend that the Board of Directors:

1. Approve the 2018 updates to the Sewer System Management Plan; and,
2. Authorize the General Manager to execute the appropriate documents on behalf of EVMWD.

BACKGROUND

The District's Sewer System Management Plan (SSMP) was approved by the Board on November 25, 2013. The SSMP is a regulatory document that the District is required to develop as part of the Regional Water Quality Control Board's (RWQCB) General Collection System Waste Discharge Requirements (General WDR). The District is further required by the General WDR to conduct regular audits and updates of the SSMP. In particular, the District is required to update the plan within five years of the last approval.

Due to the volume of the Plan, it is incorporated by reference. However, the complete Plan will be made available for review upon request and a copy was placed in the District lobby for public inspection on November 6, 2018.

Staff presented this item at the November 14, 2018 Study Session and recommends Board approval of the updated Sewer System Management Plan. The Notice of Intent to Adopt the Sewer System Management Plan Update was published in the Press Enterprise.

ENVIRONMENTAL WORK STATUS

Not applicable.

FISCAL IMPACT

None

STRATEGIC GOAL

Organizational Development

Originated by: Jase Warner – Operations

Reviewed by: Terese Quintanar – Administration

Attachments:

Sections 1-2 of the SSMP for 2018

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Elsinore Valley Municipal Water District

APPENDIX N – NOTICE OF PUBLIC HEARING

Advertising Order Confirmation

The Press Enterprise

11/02/18 1:00:23PM

Page 1

<u>Ad Order Number</u> 0011197321	<u>Customer</u> ELSINORE VALLEY MWD	<u>Payor Customer</u> ELSINORE VALLEY MWD	<u>PO Number</u>
<u>Sales Representative</u> Nick Eller	<u>Customer Account</u> 5209159	<u>Payor Account</u> 5209159	<u>Ordered By</u> Terese Quintanar
<u>Order Taker</u> Nick Eller	<u>Customer Address</u> PO BOX 3000 LAKE ELSINORE, CA 92531	<u>Payor Address</u> PO BOX 3000 LAKE ELSINORE, CA 92531	<u>Customer Fax</u>
<u>Order Source</u> Select Source	<u>Customer Phone</u> 951-674-3146	<u>Payor Phone</u> 951-674-3146	<u>Customer EMail</u> ap@evmwd.net
<u>Current Queue</u> Ready	<u>Invoice Text</u> NOTICE OF INTENT TO APPROVE Sewer management plan		
<u>Tear Sheets</u> 0	<u>Affidavits</u> 0	<u>Blind Box</u>	<u>Materials</u>
		<u>Promo Type</u>	<u>Special Pricing</u>

<u>Ad Number</u> 0011197321-01	<u>Ad Size</u> 3 X 16 Li	<u>Color</u>	<u>Production Color</u>	<u>Ad Attributes</u>	<u>Production Method</u> AdBooker	<u>Production Notes</u>
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<u>External Ad Number</u>	<u>Pick Up</u>	<u>Ad Type</u> Legal Liner	<u>Released for Publication</u>
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NOTICE OF INTENT TO APPROVE
SEWER SYSTEM MANAGEMENT PLAN

NOTICE IS HEREBY GIVEN THAT the Board of Directors of the Elsinore Valley Municipal Water District will consider approval of its Sewer System Management Plan on Monday, November 19, 2018, at 4:00 p.m., in the Boardroom of its headquarters, located at 31315 Chaney Street, Lake Elsinore, California.

A draft Sewer System Management Plan has been prepared and is on file with the District Secretary and is available for inspection at the office of the District, at 31315 Chaney Street, Lake Elsinore, California.

11/7, 11/14

<u>Product</u> PE Riverside:Full Run	<u>Requested Placement</u> Legals CLS	<u>Requested Position</u> General - 1076~	<u>Run Dates</u> 11/07/18, 11/14/18	<u># Inserts</u> 2
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Order Charges:

<u>Net Amount</u>	<u>Tax Amount</u>	<u>Total Amount</u>	<u>Payment Amount</u>	<u>Amount Due</u>
172.80	0.00	172.80	0.00	\$172.80

If this confirmation includes an advertising proof, please check your proof carefully for errors, spelling, and/or typos. Errors not marked on the returned proof are not subject to credit or refunds.

Please note: To meet our printer's deadline, we must have your proof returned by the published deadline, and as indicated by your sales rep.

Please note: If you pay by bank card, your card statement will show the merchant as "SoCal Newspaper Group".

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Elsinore Valley Municipal Water District

APPENDIX O – SWRCB SSMP CERTIFICATION FORM

Board of Directors
Harvey R. Ryan, President
Andy Morris, Vice President
Phil Williams, Treasurer
George Cambero, Director
Nancy Horton, Director



General Manager
John D. Vega
District Secretary
Terese Quintanar
Legal Counsel
Best Best & Krieger

Our Mission...

**EVMWD will provide reliable, cost-effective, high quality water and wastewater services
that are dedicated to the people we serve.**

November 27, 2018

CERTIFIED MAIL

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

**SUBJECT: SUBMITTAL OF THE FORM NOTIFYING COMPLETION OF THE UPDATE TO
SEWER SYSTEM MANAGEMENT PLAN**

Dear Sir or Ma'am:

Elsinore Valley Municipal Water District (EVMWD) prepared a Sewer System Management Plan (SSMP) in December 2008. As per Section D-14 (page 15 of 20) of the State Water Resources Control Board (SWRCB) Order No. 2006-0003 issued on May 2, 2006, EVMWD is required to update the SSMP every five years and notify the SWRCB after completion of the certification process in the Online SSO Database (CIWQS).

This purpose of this letter is to notify the SWRCB that the District has completed the update of its SSMP in November 2018. The updated SSMP is in compliance with the requirements set forth in the SWRCB Order No. 2006-0003 and it was approved by the EVMWD governing Board in a public meeting on November 19, 2018. All necessary data has been entered into in the Online SSO Database (CIWQS) for the following three EVMWD collection systems (CS):

- EVMWD Regional Plant CS (WDID: 8SSO10620)
- STP, Horsethief Canyon Plant CS (WDID: 8SSO10613)
- Southern Section CS (WDID: 9SSO11530)

Signed and printed copies of the submittal of the automated forms are enclosed with this letter. If any further information is required in this regard, please do not hesitate to contact me at 951-674-3146 ext 8203 or email dmcbride@evmwd.net.

Sincerely,

Dennis J. McBride
Wastewater Operations Manager
Elsinore Valley Municipal Water District
Water Employee Services Authority



SSO - Sewer System Management Plan (SSMP) ?

[SSO Menu](#)

Regional Water Board: Region 8 - Santa Ana
Agency: Elsinore Valley Municipal Water Dist
Sanitary Sewer System: STP,Horsethief Canyon Plant CS
WDID: 8SSO10613

Last Updated:

SSMP Upload:

File *	Document Type *	File Description	
<input type="button" value="Choose File"/> No file chosen	<input type="text"/>	<input type="text"/>	<input type="button" value="Upload File"/>

File Name	Document Type	File Description	Date/Time Uploaded	Status	
11-19-18 SSMP Update - BOD Approved Staff Report.pdf	Other	Board Approval 11/19/2018	11/27/2018 - 15:28:16	OK	delete
11-25-13 SSMP 2013 Updates-BOD Approved.pdf	Binary Large Object	Board Approval 11/25/13	11/27/2013 - 11:02:47	OK	delete

SSMP Element

Development Plan and Schedule	<input type="text" value="10/23/2007"/> (Date Format: MM/DD/YYYY)
Section I - Goal	<input type="text" value="10/28/2007"/> (Date Format: MM/DD/YYYY)
Section II - Organization	<input type="text" value="10/28/2007"/> (Date Format: MM/DD/YYYY)
Section III - Legal Authority	<input type="text" value="10/21/2007"/> (Date Format: MM/DD/YYYY)
Section IV - Operation Maintenance Program	<input type="text" value="04/06/2009"/> (Date Format: MM/DD/YYYY)
Section V - Design Performance Provisions	<input type="text" value="10/21/2008"/> (Date Format: MM/DD/YYYY)
Section VI - Overflow Emergency Response Plan	<input type="text" value="10/21/2008"/> (Date Format: MM/DD/YYYY)
Section VII - FOG Control Program	<input type="text" value="04/06/2009"/> (Date Format: MM/DD/YYYY)
Section VIII - System Evaluation Capacity Assurance Plan	<input type="text" value="04/06/2009"/> (Date Format: MM/DD/YYYY)
Section IX - Monitoring, Measurement, and Program Modifications	<input type="text" value="04/06/2009"/> (Date Format: MM/DD/YYYY)
Section X - SSMP Program Audits	<input type="text" value="04/06/2009"/> (Date Format: MM/DD/YYYY)
Section XI - Communication Program	<input type="text" value="04/06/2009"/> (Date Format: MM/DD/YYYY)
Complete SSMP Implementation	<input type="text" value="04/06/2009"/> (Date Format: MM/DD/YYYY)

Note: 'Complete SSMP Implementation' is only available for input only if all its above sections filled.

Note: The Certification Note and Certified By fields disappear after certifying your SSMP. Previous entries can be seen on the Historic SSMP information screen.

Certification Note:

5-Year Update (Date Format: MM/DD/YYYY)

SSMP Uri:

* **Certified by:**

Note: Questions with "*" are required to be answered before CERTIFY.



SSO - Sewer System Management Plan (SSMP) ?

[SSO Menu](#)

Regional Water Board: Region 9 - San Diego
Agency: Elsinore Valley Municipal Water Dist
Sanitary Sewer System: Southern Section CS
WDID: 9SSO11530

Last Updated: 2013-11-27 11:02:12.093732

SSMP Upload:

File *	Document Type *	File Description			
<input type="button" value="Choose File"/> No file chosen	[dropdown]	[input]	<input type="button" value="Upload File"/>		
File Name	Document Type	File Description	Date/Time Uploaded	Status	
11-19-18 SSMP Update - BOD Approved Staff Report.pdf	Other	Board Approval 11/19/2018	11/27/2018 - 15:27:00	OK	delete
11-25-13 SSMP 2013 Updates-BOD Approved.pdf	Binary Large Object	Board approval 11/25/13	11/27/2013 - 11:00:47	OK	delete

SSMP Element

Development Plan and Schedule	<input type="text" value="10/23/2007"/> (Date Format: MM/DD/YYYY)
Section I - Goal	<input type="text" value="10/28/2007"/> (Date Format: MM/DD/YYYY)
Section II - Organization	<input type="text" value="10/28/2007"/> (Date Format: MM/DD/YYYY)
Section III - Legal Authority	<input type="text" value="10/21/2008"/> (Date Format: MM/DD/YYYY)
Section IV - Operation Maintenance Program	<input type="text" value="04/06/2009"/> (Date Format: MM/DD/YYYY)
Section V - Design Performance Provisions	<input type="text" value="10/21/2008"/> (Date Format: MM/DD/YYYY)
Section VI - Overflow Emergency Response Plan	<input type="text" value="10/21/2008"/> (Date Format: MM/DD/YYYY)
Section VII - FOG Control Program	<input type="text" value="04/06/2009"/> (Date Format: MM/DD/YYYY)
Section VIII - System Evaluation Capacity Assurance Plan	<input type="text" value="04/06/2009"/> (Date Format: MM/DD/YYYY)
Section IX - Monitoring, Measurement, and Program Modifications	<input type="text" value="04/06/2009"/> (Date Format: MM/DD/YYYY)
Section X - SSMP Program Audits	<input type="text" value="04/06/2009"/> (Date Format: MM/DD/YYYY)
Section XI - Communication Program	<input type="text" value="04/06/2009"/> (Date Format: MM/DD/YYYY)
Complete SSMP Implementation	<input type="text" value="04/06/2009"/> (Date Format: MM/DD/YYYY)

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Certification Note:

5-Year Update (Date Format: MM/DD/YYYY)

SSMP Url:

*** Certified by:**

Note: Questions with "*" are required to be answered before CERTIFY.



SSO - Sewer System Management Plan (SSMP) [?](#) [SSO Menu](#)

Regional Water Board: Region 8 - Santa Ana
 Agency: Elsinore Valley Municipal Water Dist
 Sanitary Sewer System: EVMWD Regional Plant CS
 WDID: 8SSO10620

Last Updated:

File *	Document Type *	File Description			
<input type="button" value="Choose File"/> No file chosen	<input type="text"/>	<input type="text"/>	<input type="button" value="Upload File"/>		
File Name	Document Type	File Description	Date/Time Uploaded	Status	
11-19-18 SSMP Update - BOD Approved Staff Report.pdf	Other	Board Approval 11/19/2018	11/27/2018 - 15:21:27	OK	delete
11-25-13 SSMP 2013 Updates-BOD Approved.pdf	Binary Large Object	Board Approval 11/25/13	11/27/2013 - 10:55:26	OK	delete

SSMP Element

Development Plan and Schedule	<input type="text" value="10/23/2007"/> <input type="button" value="Calendar"/> (Date Format: MM/DD/YYYY)
Section I - Goal	<input type="text" value="10/28/2007"/> <input type="button" value="Calendar"/> (Date Format: MM/DD/YYYY)
Section II - Organization	<input type="text" value="10/28/2007"/> <input type="button" value="Calendar"/> (Date Format: MM/DD/YYYY)
Section III - Legal Authority	<input type="text" value="10/21/2008"/> <input type="button" value="Calendar"/> (Date Format: MM/DD/YYYY)
Section IV - Operation Maintenance Program	<input type="text" value="10/21/2008"/> <input type="button" value="Calendar"/> (Date Format: MM/DD/YYYY)
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Complete SSMP Implementation	<input type="text" value="04/06/2009"/> <input type="button" value="Calendar"/> (Date Format: MM/DD/YYYY)
<p>Note: 'Complete SSMP Implementation' is only available for input only if all its above sections filled.</p> <p>Note: The Certification Note and Certified By fields disappear after certifying your SSMP. Previous entries can be seen on the Historic SSMP information screen.</p>	
Certification Note:	<input type="text"/>
5-Year Update	<input type="text" value="11/27/2018"/> <input type="button" value="Calendar"/> (Date Format: MM/DD/YYYY)
SSMP Uri:	<input type="text"/>
* Certified by:	<input type="text" value="Lenai Hunter"/>
<p>Note: Questions with "*" are required to be answered before CERTIFY.</p> <p><input type="button" value="Certify"/></p> <p><i>Lenai Hunter</i></p>	

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