

Service Beyond Expectation

Sanitary Sewer Management Plan 2020 Update



Originally Certified: April 28, 2009

Readopted: February, 2020

Resolution No: 2020-2-2

District WDID #8SSO11383

Certification

I certify under penalty of law that this Sewer System Management Plan, and the subparts contained herein, comply with the requirements set forth in the General Waste Discharge Requirements (WDRs) for Sanitary Sewer Systems, Order No. 2006-0003 within the time frames identified in the schedule provided in WDRs and as amended by a Memorandum of Agreement executed on June 27, 2006 between the Executive Director of the SWRCB and the California Water Environment Association. I further certify that this document and all attachments were prepared under the District's direction and supervision in accordance with its policies and procedures to assure that qualified personnel properly provided, evaluated, and incorporated the information reflected in this document, that the information included in this document is, to the best of my knowledge and belief, true accurate, and complete, and that this document has been duly presented to and approved by the District's Board of Directors on the 25th day of February, 2020.



Rob Hills
Director of Operations

2/26/2020

Date

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1.0 Introduction

1.1. Sewer System Management Plan

This Sewer System Management Plan (SSMP) has been prepared by the Water Resources and Planning Division of CVWD with the assistance of Causey Consulting, Walnut Creek, CA. It is a compendium of the policies, procedures, and activities that are included in the planning, management, operation, and maintenance of CVWD’s sanitary sewer system. CVWD Board adopted the original SSMP on April 28, 2009 as required by the Sanitary Sewer Waste Discharge Requirements (WDR).

The State Water Resources Control Board (SWRCB) has issued statewide waste discharge requirements for sanitary sewer systems, which include requirements for development of an SSMP. The State Water Board requirements are outlined in Order No. 2006-0003-DWQ, Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, dated May 2, 2006 (WDR), and Order No. WQ-2008-0002-EXEC, dated February 20, 2008, which was amended by Order No. 2013-0058-EXEC, effective September 9, 2013, which changed the Monitoring and Reporting Program (MRP) requirements. This SSMP is intended to comply with the WDR and MRP revised requirements.

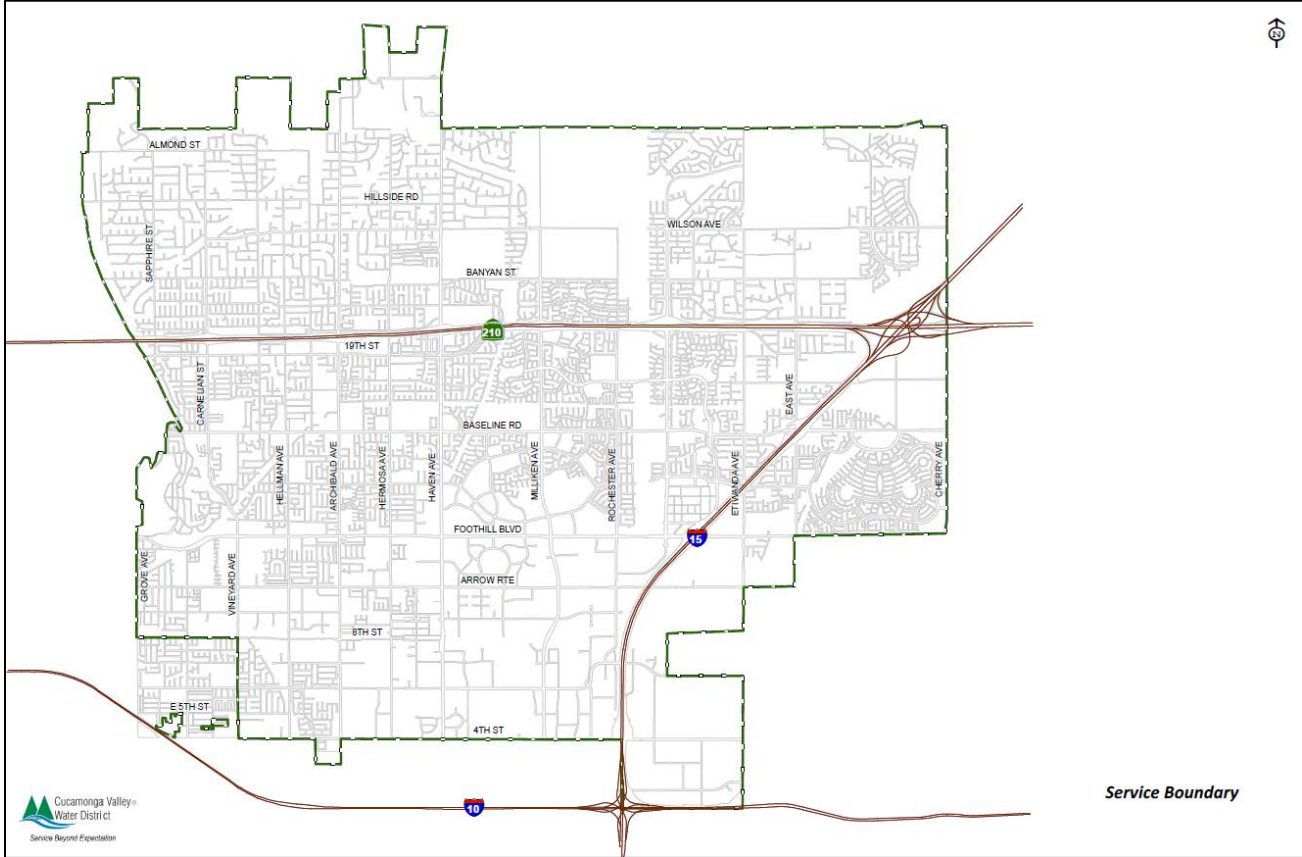
The structure (section numbering and nomenclature) of this SSMP follows the above referenced WDR Section D13. This SSMP is organized by the SWRCB outline of elements; and contains language taken from the WDR at that beginning of each element. The WDR uses the term “Enrollee” to mean each individual municipal wastewater collection system that has completed and submitted the required application for coverage under the WDR (in this case, the Enrollee is CVWD. CVWD’s waste discharger identification number (WDID) in the California Integrated Water Quality System (CIWQS) is 8SSO11383.

1.2. Sanitary Sewer System Facilities

CVWD operates a sanitary sewer system that serves a population of 179,390 in a 40.6 square mile service area. The sewer system serves 37,553 service connections as of November 14, 2019. The sewer system consists of 420 miles of gravity sewers (approximately 9576 line segments), 8324 manholes, 0.83 miles of force mains, and four (4) pump stations. The sewer lines range in size from four (4) inches to thirty (30) inches in diameter and the piping system includes twelve (12) siphons with a total length of 0.38 miles of the gravity system. The property owner is fully responsible for installation, maintenance and repair of the private sewer lateral(s).

Figure 1 contains an overview map of CVWD’s sanitary sewer service area.

Figure 1: CVWD Sewer System Area Map



Intro Table 1 provides the composition of the gravity sewer system size distribution.

Intro Table 1: Gravity Sewer System Size Distribution

Diameter, Inches	Number of Line Segments	Pipe Linear Feet	Length, Portion of Sewer System, %
4	5	217	<1%
6	75	8,220	<1%
8	8264	1,876,500	85%
10	393	102,582	5%
12	269	65,800	3%
14	5	964	<1%
15	347	101,844	5%
16	6	1,894	<1%
18	41	9,305	<1%
20	7	477	<1%
21	50	16,495	1%
24	50	12,422	1%
27	31	10,151	<1%
30	30	8,089	<1%
Unknown	3	643	<1%
Total	9576	2,215,608	100%
Total, miles		420	

Source: District Staff Infrastructure Spreadsheet June 2019

Intro Table 2 provides the composition of the gravity sewer piping by size and material of construction.

Intro Table 2: Gravity Sewer System Materials of Construction

Material	Number of Line Segments	Pipe LF	Length, Percent of Sewer System
VCP	8799	2,030,608	92%
PVC	377	99,512	4%
RPM	19	6,463	<1%
ACP	210	53,121	2%
DIP	125	21,171	1%
CIP	33	2,805	<1%
TRA	3	834	<1%
Total		2,215,608	100%
Total, Miles		420	

Source: District Staff Infrastructure Spreadsheet June 2019

Intro Table 3 provides the installation age distribution of CVWD's collection system.

Intro Table 3: Gravity Sewer System Inventory of Sewer Lines by Pipe Age

Age in Years	Construction Period	Linear Feet of Gravity Sewers	Miles of Gravity Sewer	Percent of System
0-15	2000 - current	460,725	80.63	21%
16 – 35	1980 – 1999	919,727	174.19	42%
36 – 55	1960 – 1979	709,919	134.45	32%
56 – 75	1940 – 1959	0	0	0%
76 – 95	1920 – 1939	0	0	0%
95 – 115	1900 – 1919	0	0	0%
>115	Before 1900	0	0	0%
Unknown		125,197	23.71	6%
Total. LF		2,215,608	420	100%
Total Miles:				

Source: District Staff Infrastructure Spreadsheet June 2019

Intro Table 4 provides the system information of all siphons in the collection system.

Intro Table 4: Gravity Sewer System Inventory of Siphons in System

Siphon Number	Siphon Title/Name	Number of Pipes	Length Linear Feet (ea.)	Size Inches	Material	Date of Construction
1	Center Ave between Indiana Ct & Philadelphia Ct (AB2164)	2	85+85	6 & 8	CIP	12/1/65
2	8 th St & Cottage Ave (AB2840)	2	28+28	6 & 8	CIP	6/10/68
3	Foothill Blvd East of Center Ave (AB2873)	2	144+144	6 & 8	VCP	8/31/71
4	Charles Smith Ave & Rochester Ave (AB2880)	2	106+106	8 & 12	CIP	9/1/71
5	Haven Ave South of Church St (AB7057)	2	170+170	18	DIP	3/10/94
6	Pittsburgh Ave & Newport Dr (AB6001)	2	60+60	8	CIP	3/1/83
7	4 th St West of Hellman Ave (AB6797)	2	168+168	6 & 8	VCP	7/23/70
8	Archibald Ave South of 4 th St (AB6988)	1	101	24	DIP	12/1/81
9	4 th St & Hermosa Ave (AB7022)	1	68	20	DIP	12/1/81
10	7 th St between Center Ave & Hermosa Ave (AB7048)	1	104	10	CIP	12/1/82
11	8 th St & Vineyard Ave (AB7054)	2	186+186	6 & 8	CIP	11/30/82
12	Banyan St & Sapphire St (AB7056)	2	60+60	8	CIP	11/22/78
	Total Linear Feet of Siphon		2,287			

Source: 2017 Sewer Master Plan, Pages 27, 29

1.3. Definitions, Acronyms, and Abbreviations

Asbestos Cement Pipe (ACP)

Best Management Practices (BMP)

Refers to the procedures employed in commercial kitchens to minimize the quantity of grease that is discharged to the sanitary sewer system. Examples include scraping food scraps into a garbage can and dry wiping dishes and utensils prior to washing.

Calendar Year (CY)

Capital Improvement Plan (CIP)

Refers to the document that identifies future capital improvements to CVWD's sanitary sewer system.

Cast Iron Pipe (CIP)

California Integrated Water Quality System (CIWQS)

Refers to the State Water Resources Control Board online electronic reporting system that is used to report SSOs, certify completion of the SSMP, and provide information on the sanitary sewer system.

Chief Executive Officer (CEO)

Clean Water Act (CWA)

California Water Environment Association (CWEA)

Closed Circuit Television (CCTV)

Refers to the process and equipment that is used to internally inspect the condition of gravity sewers.

Computerized Maintenance Management System (CMMS)

Refers to the computerized maintenance management system that is used by CVWD to plan, dispatch, and record the work on its sanitary sewer system. SEDARU is the propriety software CVWD uses for workflow management.

Cucamonga Valley Water District (CVWD or District)

District Code (DC)

Ductile Iron Pipe (DIP)

Division of Water Quality (DWQ)

Refers to the State of California Division of Water Quality of the State Water Resources Control Board.

Environmental Protection Agency (EPA)

Fats, Roots, Oils, and Grease (FROG)

Refers to fats, oils, and grease typically associated with food preparation and cooking activities that can cause blockages in the sanitary sewer system. Roots are associated with typical urban development.

First Responder

Refers to the field crew or the On-Call personnel that are CVWD's initial response to an SSO event or other sewer system emergency.

Fiscal Year (FY)

Means a 12-month periods beginning July 1st and ending June 30th.

Food Service Establishment (FSE)

Refers to commercial or industrial facilities where food is handled/prepared/served that discharge to the sanitary sewer system.

General Waste Discharge Requirements (WDR)

Refers to the State Water Resources Control Board Order No. 2006-0003, Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, dated 5/2/2006.

Geographical Information System (GIS)

Refers to CVWD's data management system utilized to capture, store, analyze, and manage geospatial data associated with CVWD's sanitary sewer system assets.

Global Positioning System (GPS)

Refers to a field device it that is recommended to determine the longitude and latitude of sanitary sewer overflows for use in meeting CIWQS reporting requirements.

Grease Removal Device (GRD)

Refers to grease traps and grease interceptors that are installed to remove FROG from the wastewater flow at food service establishments.

International Association of Plumbing and Mechanical Officials (IAPMO)**Inland Empire Utility Agency (IEUA)****Infiltration/Inflow (I/I)**

Refers to water that enters the sanitary sewer system from storm water and groundwater.

- Infiltration enters through defects in the sanitary sewer system after flowing through the soil.
- Inflow enters the sanitary sewer without flowing through the soil. Typical points of inflow are holes in manhole lids and direct connections to the sanitary sewer (e.g. storm drains, area drains, and roof leaders).

Joint Powers Agreement (JPA)

Lateral

See Private Sewer Lateral

Legally Responsible Official (LRO)

Person(s) formally designated by CVWD to be responsible for formal reporting and certifying of all reports submitted to the CIWQS.

Lift Station (LS)

A facility that lifts sewage into CVWD gravity sanitary sewer collection system.

Manhole (MH)

Refers to an engineered structure that is intended to provide access to a sanitary sewer for maintenance and inspection.

Mainline Sewer

Refers to CVWD publicly owned wastewater collection system piping that is not a private lateral connection to a user.

Monitoring, Measurement, and Plan Modifications (MMPM), SSMP Element IX

Monitoring and Reporting Program (MRP)

State Water Resources Control Board WQ-2013-0058-EXEC effective September 9, 2013.

National Association of Sewer Service Companies (NASSCO)

Notification of an SSO

Refers to the time at which CVWD becomes aware of an SSO event through observation or notification by the public or other source.

National Pollutant Discharge Elimination System (NPDES)

Nuisance

California Water Code section 13050, subdivision (m), defines nuisance as anything that meets all 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.

Office of Emergency Services (OES or Cal OES)

Refers to the California State Office of Emergency Services.

Operations and Maintenance (O&M)**Overflow Emergency Response Plan (OERP or SSOERP)****Pipeline Assessment and Certification Program (PACP)**

Refers to the NASSCO certification program that is used for the evaluation and condition assessment of sewer lines and appurtenances from closed circuit televising of the lines and appurtenances.

Polyvinylchloride Pipe (PVC)**Preventive Maintenance (PM)**

Refers to maintenance activities intended to prevent failures of the sanitary sewer system facilities (e.g., cleaning, CCTV, repair, etc.).

Private Sewer Lateral (PSL)

The sewer pipeline from the plumbing of a building to a CVWD collection line, including portions that extend across public rights-of-way and the saddle, wye or other physical connection to the collection line. Private sewer laterals are privately owned and maintained.

Private Lateral Sewage Discharges (PLSD)

Sewage discharges that are caused by blockages or other problems within a privately-owned sewer service lateral.

Property Damage Overflow

Refers to a sewer overflow or backup that damages a private property owner's premises.

Public Owned Treatment Works (POTW)**Reinforced Plastic Mortar Pipe (RPM)****Sanitary Sewer Backup (Backup)**

A wastewater backup into a building and/or on private property caused by blockages or flow conditions within the publicly owned portion of a sanitary sewer system.

Sanitary Sewer Overflows (SSO)

Any overflow, spill, release, discharge or diversion of untreated or partially treated wastewater from a sanitary sewer system. SSOs include:

- a. Overflows or releases of untreated or partially treated wastewater that reach waters of the United States;
- b. Overflows or releases of untreated or partially treated wastewater that do not reach waters of the United States; and
- c. 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.

SSOs that include multiple appearance points resulting from a single cause will be considered one SSO for documentation and reporting purposes in CIWQS.

NOTE: Wastewater backups into buildings caused by a blockage or other malfunction of a private sewer lateral are not SSOs.

SSO Categories:

Category 1: Discharge of untreated or partially treated wastewater of any volume resulting from a sanitary sewer system failure or flow condition that either:

- Reaches surface water and/or drainage channel tributary to a surface water; or
- Reaches a Municipal Separate Storm Sewer System (MS4) and was not fully captured and returned to the sanitary sewer system or otherwise captured and disposed of properly.

Category 2: Discharge of untreated or partially treated wastewater greater than or equal to 1,000 gallons resulting from a sanitary sewer system failure or flow condition that either:

- Does not reach surface water, a drainage channel, or an MS4, or
- The entire SSO discharged to the storm drain system was fully recovered and disposed of properly.

Category 3: All other discharges of untreated or partially treated wastewater resulting from a sanitary sewer system failure or flow condition.

Sanitary Sewer System or Sewer System

Refers to the sanitary sewer facilities that are owned and operated by CVWD

Santa Ana Regional Water Quality Control Board (SARWQCB)

Sensitive Areas

Refers to areas where an SSO could result in a fish kill or pose an imminent or substantial danger to human health.

Sewer Master Plan (SMP)

Sewer Service Lateral

Refers to the piping that conveys sewage from the building to the sanitary sewer system

Sewer System Management Plan (SSMP)

Standard Operating Procedures (SOP)

Refers to written procedures that pertain to specific activities employed in the operation and maintenance of the Sanitary Sewer System.

Standard Specifications

Refers to the latest edition of the CVWD Design Standards and Standard Details for Construction.

State Water Resources Control Board (SWRCB)

Refers to the California Environmental Protection Agency, State Water Resources Control Board.

Note: The State Board is a separate entity from the Santa Ana Regional Water Quality Control Board, although the agencies are closely connected.

Supervisory Control and Data Acquisition (SCADA)

Refers to the system that is employed by CVWD to monitor the performance of its lift stations and to notify the operating staff when there is an alarm condition that requires attention.

System Evaluation and Capacity Assurance Plan (SECAP) SSMP Element VIII**Underground Services Alert (USA)****Untreated or Partially Treated Wastewater**

Any volume of waste discharged from the sanitary sewer system upstream of a wastewater treatment plant headworks.

Vitrified Clay Pipe (VCP)**Waste Discharge Identification Number (WDID)**

A unique identification number for the certification and reporting of collection system related actions and overflows in the CIWQS System. The CVWD WDID is 3SSO10340

Water Body

Any stream, creek, river, pond, impoundment, lagoon, wetland, or bay.

Water of the State

Refers to “any surface water, including saline waters, within the boundaries of the state.” (California Water Code § 13050(e)).

Water Quality Monitoring Plan (WQMP)**Work Order (WO)**

Refers to a document (paper or electronic) that is used to assign work and to record the results of the work.

1.4. References

- State of California Water Resources Control Board Order No. 2006-0003-DWQ, Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, California State Water Resources Control Board, May 2, 2006.
- State of California 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 dated February 20, 2008
- State of California Water Resources Control Board Order No. Order No. 2013-0058-EXEC, Amending Monitoring and Reporting Program for Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, September 9, 2013.
- 2017 Cucamonga Valley Water District Sewer Master Plan

Element I: Goals

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.

I-1: SSMP Goals

The overarching goal of this SSMP is to provide safe, effective, and efficient operation of CVWD's sanitary sewer collection and conveyance system through:

- Proper management, operation, and maintenance of all parts of the system
- Reduced occurrences of and potential for SSOs
- An effective FROG Control Program
- Assurance of adequate capacity to convey peak wastewater flows
- A current long-range planning and improvement program
- Compliance with all regulatory requirements
- Protection of the public's health and safety
- Effective public information and education efforts

I-2: References

None.

Element II: Organization

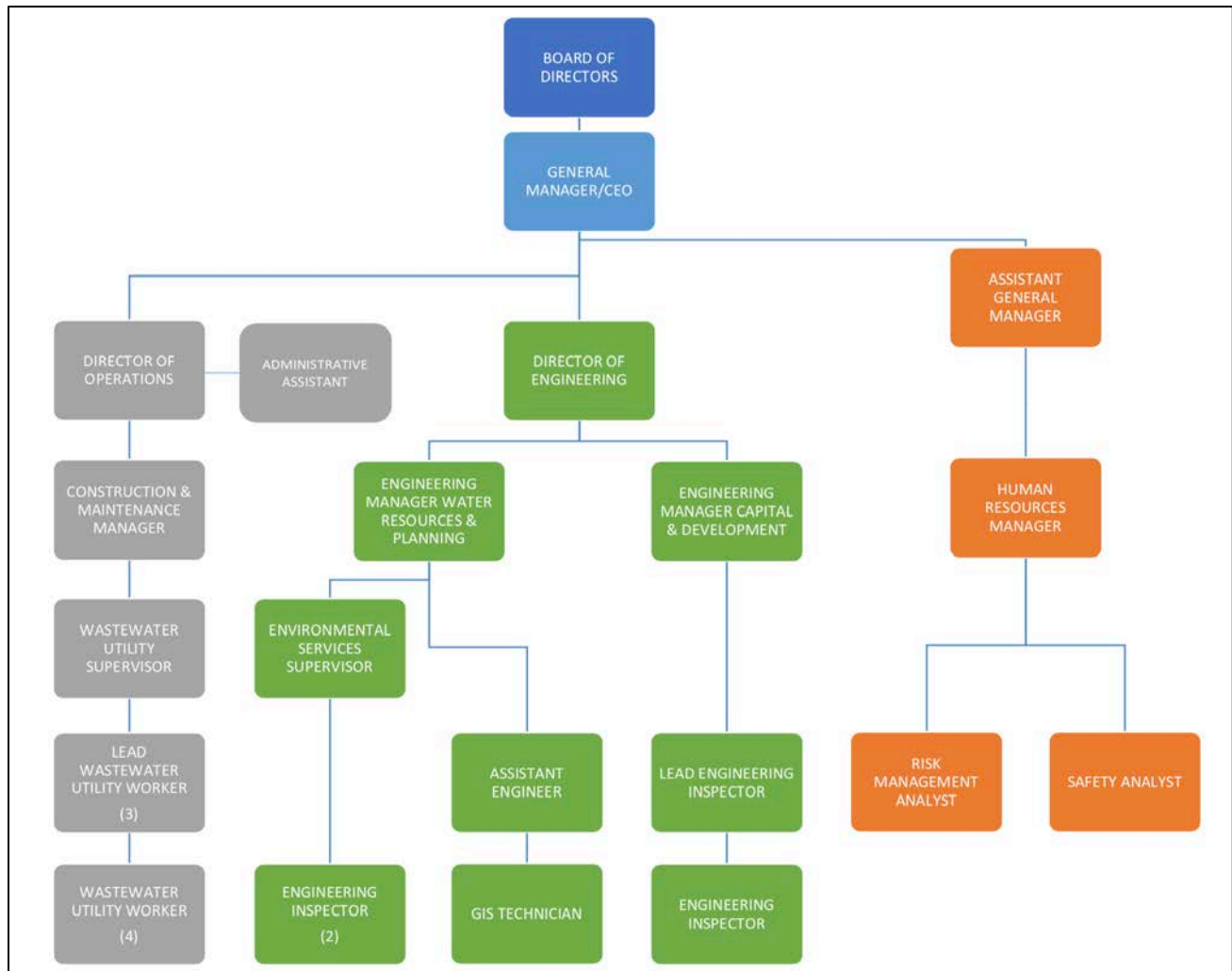
Organization: The SSMP must identify:

- (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)).

II-1: Organizational Structure

The sanitary sewer collection system is operated and maintained by CVWD Operations Department with the direct assistance of the Engineering Department for long range planning and capital program management. In addition, it is also supported by District Risk Management, Building Division and Environmental Services Division. The organization chart for the management, operation, and maintenance of CVWD's wastewater collection system is shown on the next page.

Figure II – 1: District Sewer Program Organization Chart



II-2: Authorized Representatives

CVWD’s *Legally Responsible Official(s)* (LRO) for wastewater collection system matters are identified below along with their roles and responsibilities for the collection system operations. They are CVWD’s legally responsible officials who are authorized to certify electronic spill reports and other required submittals to the SWRCB, the Office of Emergency Services (OES) and/or the CIWQS System.

General Manager/CEO – Under general policy guidance from the Board of Directors, plans, organizes, integrates, fiscally controls, directs, administers, reviews and evaluates the activities, operations, and services of the CVWD; ensures execution of short- and long-term goals and objectives consistent with the strategic plan; ensures District operations and functions effectively serve the needs of customers/rate payers throughout CVWD’s service area, while complying with applicable laws and regulations; and performs related duties as assigned.

Director of Operations (LRO) – Under general administrative direction directs, manages, supervises, and coordinates the activities and operations of the Water Distribution and Wastewater

Collection, Production, Telemetry, Facilities Maintenance, Vehicle Maintenance and Water Treatment Divisions; provides highly responsible and complex assistance to the General Manager/CEO.

Administrative Assistant – Under general supervision, performs a wide variety of responsible and complex administrative and technical duties in support of assigned departments; prepares a variety of fiscal, administrative, operational reports, and provides a variety of information to other agencies, District staff, and the general public. Incumbents perform a wide variety of specialized clerical duties, communications, and other functions within the assigned department. Incumbents are expected to independently perform a full range of duties with only occasional instruction or assistance and usually exercise some independent initiative, discretion, and judgment in matters related to work procedures and methods.

Construction & Maintenance Manager (LRO) – Under general administrative direction, plans, organizes and directs the work of crews and personnel engaged in the installation, maintenance and repair of water mains, sewer mains, services and related appurtenances to supply residential, commercial and industrial water and sewer, facilities and fleet maintenance; Plans and evaluates staff performance; established performance requirements and personal development targets; provides leadership and works with supervisors and staff to develop and retain competent staff through selection, compensation, training, and day-to-day management practices that support CVWD’s mission and values.

Wastewater Utility Supervisor (LRO) – Under general direction supervises, assigns, reviews, and participates in the work of staff responsible for the wastewater collection systems, water distribution systems, service, repair and preventative maintenance.

Lead Wastewater Utility Worker (DS) – Under supervision performs a variety of semi-skilled and skilled duties in wastewater collection system cleaning and obstacle clearing work; to participate in construction, maintenance, service and repair of wastewater collection systems; to assist in maintenance tasks associated with the water distribution system; and performs a variety of tasks relative to assigned area of responsibility.

Wastewater Utility Worker – Under supervision, performs a variety of semi-skilled and skilled duties in wastewater collection system cleaning and obstacle clearing work; participates in construction, maintenance, service, and repair of wastewater collection systems; assists in maintenance tasks associated with the water distribution system; and performs a variety of tasks relative to assigned area of responsibility.

Director of Engineering – Under general administrative direction directs, manages, supervises, and coordinates the activities and operations within the Department of Engineering. Provides highly responsible and complex assistance to the Assistance General Manager and other internal departments.

Engineering Manager – Water Resources & Planning – Under general direction, supervises and participates in the conduct of water resources studies, long-term programs regarding water resources planning and projects and programs, environmental compliance; provides expert

professional assistance and guidance to management on capital improvement planning and water resource planning; and performs related duties as assigned.

Environmental Services Supervisor – Under general direction supervises, assigns, reviews, and participates in the work of personnel engaged in compliance for the recycled water, cross connection, source control programs; directs and performs field inspections of construction work for developer and capital improvement projects related to water, recycled water and industrial waste; ensures work quality and adherence to established policies and procedures.

Assistant Engineer – Under supervision, performs professional engineering work and administrative tasks associated with the planning, design, and construction of engineering projects; and performs a variety of tasks relative to the assigned area of responsibility.

GIS Analyst – A skilled experienced, journey-level in the GIS Analyst series reporting to the Engineering Manager. Under general supervision GIS Analyst II inputs, updates and maintains GIS databases, layers, create maps and performs routine GIS operations to support District systems. This class differs from the lower-level class in the skill level required and the complexity of assigned projects based on knowledge of CVWD’s equipment, systems, standards, and procedures. Assignments vary, may encompass a variety of tasks, seldom require detailed instructions, and necessitate making sound judgments.

Engineering Manager – Capital & Development – Under general direction, supervises and participates in the conduct of complex engineering projects, engineering analyses, research, planning and design for a variety of water and wastewater capital construction programs and/or maintenance/improvement programs; plans, organizes, directs and reviews the work of professional and technical staff; and performs related duties as assigned.

Lead Engineering Inspector – Under general supervision, performs a variety of quality control, compliance and safety inspection duties of water, sewer and recycled water systems ensures compliance to District’s Construction Standards; inspections of industrial users to ensures compliance with CVWD’s Pretreatment/Source Control Program and inspection to ensure compliance to CVWD’s Cross-Connection Control Program in accordance with Title 17 and 22 of the California Code of Regulations.

Engineering Inspector – Under general supervision, incumbents perform the full range of assigned duties, while exercising discretion and independent judgment within established guidelines. Incumbents shall be knowledgeable and proficient in two or more of the inspection disciplines (Sewer Construction, Industrial Waste, Recycled Water, or Cross-Connection).

Risk Management Analyst – Under general supervision coordinates, organizes and implements the risk and safety management and loss control programs for CVWD; develops and implements a total safety risk exposure; examines and recommends safety and risk management techniques including the assumption of risk, elimination, reduction and transfer of risk through self-insured programs and the purchase of insurance coverage; implements and coordinates the safety, workers compensation, and emergency preparedness programs.

Safety Analyst – Under general direction, performs a variety of duties in the implementation and coordination of CVWD’s safety and safety training programs in compliance with federal, state and local safety, health and environmental laws and regulations; performs field inspections of all District facilities, equipment, and job sites to ensure compliance with regulations’ coordinates loss prevention duties including identifying, evaluating, controlling, and minimizing potential hazards and injuries to District employees and property; administers and coordinates CVWD’s Injury and Illness Prevention Program (IIPP); assists with CVWD’s Emergency Response Programs; maintains and coordinates on-going programs to provide training for employees on safety procedures.

Contracted Service Providers – CVWD does not rely on outside service contractors for normal sewer system maintenance and operations with the exception of annual root foaming.

II-3: Responsibility for SSMP Implementation and Maintenance

The Director of Operations shall have the overall responsibility for, implementing, periodically auditing, and maintaining CVWD’s SSMP. He/she may delegate these responsibilities to his/her staff.

Other District Staff responsible for developing, implementing, and maintaining specific elements of CVWD’s SSMP, along with their job titles and contact information, are shown in **Table II – 1** on the next page.

Table II – 1: Responsible Officials for SSMP Elements

Element	Element Name	Responsible District Official	Phone	Email
0	Introduction	Rob Hills	909-987-2591	robh@cvwdwater.com
1	Goals	Rob Hills	909-987-2591	robh@cvwdwater.com
2	Organization	Justin Martinez	909-483-7440	justinm@cvwdwatwr.com
3	Legal Authority	Best, Best & Krieger	916-325-4000	www.bbklaw.com
4	O & M Program	Robert Koczko	909-483-7400	robertk@cvwdwater.com
5	Design and Performance Provisions	Tuan Truong	909-483-7472	tuant@cvwdwater.com
6	OERP	Shawn Spromberg	909-483-7413	shawns@cvwdwater.com
7	Fats, Roots, Oils and Grease (FROG) Control Program	Shane Stevens	909-483-7446	shanes@cvwdwater.com
8	System Evaluation and Capacity Assurance Plan	Praseetha Krishnan	909-483-7313	praseethak@cvwdwater.com

Element	Element Name	Responsible District Official	Phone	Email
9	Monitoring, Measurement and Program Modifications	Shawn Spromberg	909-483-7413	shawns@cvwdwater.com
10	Program Audits	Praseetha Krishnan	909-483-7313	praseethaK@cvwdwater.com
11	Communications Program	Erin Morales	909-483-7462	erinm@cvwdwater.com
App A	SSMP Board Adoption Documents	Rob Hills	909-987-2591	robh@cvwdwater.com
App B	SSMP Audit Reports	Rob Hills	909-987-2591	robh@cvwdwater.com
App C	SSMP Audit Checklist	Robert Koczko	909-483-7400	robertk@cvwdwater.com
App D	SSMP Change Log	Robert Koczko	909-483-7400	robertk@cvwdwater.com
App E	OERP	Shawn Spromberg	909-483-7413	shawns@cvwdwater.com
App F	Water Quality Monitoring Plan	Shawn Spromberg	909-483-7413	shawns@cvwdwater.com

II-4: SSO Reporting Chain of Communication

The SSO Reporting Chain of Communications follows the Organization Chart shown above in

Figure II – 1: . The SSO Reporting process and responsibilities are described in the Overflow Emergency Response Plan in Appendix D Table B-1.

II-5: References

None.

Element III: Legal Authority

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.

III-1: District Summary and Evaluation of Legal Authority

The California Water Code of the California Code of Regulations, the Federal Clean Water Act of the United States Code, and the California Waste Discharge Requirements grant CVWD the authority to establish codes, agreements, policies, and procedures for the construction, operation, and maintenance of a wastewater collection system, and the ability to enforce the necessary requirements. Below is a discussion of the relevant sections granting this authority.

California Water Code Section 30000 et. seq., California Code of Regulations: Pursuant to the provisions of Division 12 of the State Water Code, the people of San Bernardino County formed the CVWD in March 1955. Section 31000 allows CVWD to provide wastewater collection, treatment, and disposal services. The powers afforded water districts formed under this code are broad as noted in Section 35506 which states “In order to carry out the powers and purposes granted under this article a district may exercise or use any of the powers or procedures otherwise granted to a district.”

California Water Code Section 13271, California Code of Regulations: Section 13271 of the California Water Code, Title 23 of the California Code of Regulations, prohibits the discharge of sewage and hazardous material into the waters of the State and requires the proper notification of authorized agencies in the event of an SSO. Entities which do not properly follow the requirements of this section may be found guilty of a misdemeanor and punished by fine, imprisonment, or both.

Clean Water Act, Section 1251 of Chapter 33 of the United States Code: In 1972, the federal Congress enacted the Federal Water Pollution Control Act, commonly known as the Clean Water Act (CWA). The CWA prohibits the discharge of pollutants, including sewage, into public waters of the United States. The federal government has the authority to enforce compliance with the CWA

via specific permits, such as National Pollutant Discharge Elimination System (NPDES) permits, as well as court action such as administrative orders and consent decrees.

Code of Federal Regulations, Title 40, Protection of the Environment: The Environmental Protection Agency (EPA), in its general pretreatment regulations (40 CFR Part 403), and CVWD, in its District Ordinance 28-D, prohibit any user from discharging solid or viscous pollutants, such as fats, roots, oils, and grease (FROG) wastes, in amounts which will cause obstructions (blockages) to the flow in the wastewater system and interfere with the operation of the wastewater system.

Regional Pretreatment Agreement (IEUA, Regional Wastewater Ordinance No. 82): On December 7th, 2005, IEUA adopted the Regional Ordinance No. 82. The ordinance recognizes IEUA as the primary control authority over wastewater discharges within its service area including the Cities of Chino, Chino Hills, Fontana, Montclair, Ontario, Upland, and CVWD. The agreement grants IEUA the authority to regulate the industrial users within the boundaries of CVWD whose facilities are tributary to the Regional Sewerage System. Additionally, IEUA has full enforceable legal authority as a Publicly Owned Treatment Works (POTW) to inspect, permit, and control indirect discharges of non-domestic waste by industrial users within CVWD of the Regional System.

California Waste Discharge Requirements: On May 2, 2006, the SWRCB adopted the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, WDR Order No. 2006-0003. The WDRs are applicable to 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 publicly owned treatment facilities in the state of California. Specifically, the WDRs require all affected agencies, municipalities, counties, districts, and other public entities to take a proactive approach to ensure a system-wide operation, maintenance, and management plan is established to effectively reduce the potential, quantity, and frequency of SSOs that may occur and impact surface waters, threaten public health, adversely affect aquatic life, and impair the recreational use and aesthetic enjoyment of surface waters.

Cucamonga Valley Water District Code: The CVWD Board of Directors has established a Code of Ordinances (District Code) that establishes and includes all ordinances adopted and enacted by the Board of Directors for the operation of the CVWD. This code is modified and altered by various District ordinances adopted by the Board of Directors as needed. Table III-1: Summary of Legal Authorities provides the existing legal authorities required by the WDR as detailed in the regulatory requirements at the beginning of this Element.

Table III – 1: Summary of Legal Authorities

Requirement	District Code Reference
Prevent illicit discharges into the wastewater collection system	3.08.010
Limit the discharge of fats, oils, and grease and other debris that may cause blockages	6.08.010
Require that sewers and connections be properly designed and constructed	4.04.030
Require proper installation, testing, and inspection of new and rehabilitated sewers	N/A
Clearly define District responsibility and policies	N/A
Control infiltration and inflow (I/I) from private service laterals	N/A
Requirements to install grease removal devices (such as traps or interceptors), design standards for the grease removal devices, maintenance requirements, BMP requirements, record keeping and reporting requirements	6.08.020 G. 1. 6.12.010 E. 6.12.040
Authority to inspect grease producing facilities	6.12.020
Enforce any violation of its sewer ordinances	6.16.030; .040

III-2: Agreements with Other Agencies

On July 31, 1972, the Cucamonga Valley Water District entered into the Regional Sewage Service Contract with the Inland Empire Utilities Agency (IEUA). Under the agreement, CVWD wastewater generated within the CVWD service area is transported to the IEUA treatment facilities where it is processed into recycled water.

III-3: References

The data used in this section were taken from the following references:

- Cucamonga Valley Water District Code

Element IV: Operations and Maintenance Program

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.

IV-1: Collection System Mapping

CVWD has a Geographic Information System (GIS) that includes the information for its wastewater collection system assets including all gravity lines and manholes, lift stations, pressure pipe, siphons and other appurtenances. The GIS maps include basic asset information of size, material, age and flow direction; specific asset identification numbers for each asset and operational elevations and GPS coordinates. The current GIS mapping system includes a storm water pipe system layer available with similar asset information which may be used during SSO emergency responses.

The GIS Analyst maintains all District mapping and regularly updates changes as received from field crews and engineering. All changes are immediately available to District employees. These

maps are available to the field crews during the course of their work on tablet computers that are in the District vehicles.

CVWD maintains record drawings of its sewer facilities. These plans are stored in the fireproof vault at CVWD's main office. The record drawing information is captured into a Geographical Information System (GIS) using ESRI's ArcGIS software. The GIS system utilizes a sequential numbering system to identify sewer facilities such as manholes, pipes (gravity & force mains), laterals, cleanout and lift stations and pertinent facility attributes are recorded. Atlas maps are printed into a map book based on atlas grid for use by operations and engineering staff. Electronic format of atlas maps are maintained which are updated on monthly basis. The atlas maps show facility ID, record drawing index number, pipe length, size, slope along with base map reference parcels and street names.

When a new development is constructed or in the event any material changes to the existing sewer infrastructure are implemented, the new assets are captured or updated in the GIS system. Updates to the GIS information are also generated by the sewer maintenance crew while performing routine operation and maintenance activities. Discrepancies between information contained on the GIS and field conditions are redlined in the field and forwarded to the GIS staff for correction. CVWD has also developed a SOP for capturing and updating the GIS information.

CVWD has also created a layer of the storm drainage system maps for the City of Rancho Cucamonga used during emergency response sewage overflows. These maps are available to the field crews during the emergency response. CVWD is working with the other cities and the county to assure a complete storm drainage layer is available in the CVWD GIS system.

IV-2: Computer Asset Maintenance Management System (CMMS)

Sewer maintenance division responsibilities include the maintenance and repair of CVWD's sanitary sewer collection system and implementation of preventative maintenance programs to monitor flows and clean the system. Sewer maintenance teams use GIS based Nobel System's GeoViewer Online and Mobile application to access the GIS data for day-to-day operations, analysis and decision-making purposed. Field tablets are issued to each maintenance vehicle to access and use the mobile application. The integration of a CMMS within GeoViewer enables the sewer crew to view the pipeline data and create/update work orders (WO) and preventive maintenance. These updated WO are then be sent back to the GeoViewer Online and managed accordingly by the supervisors. This product comes with built in GIS analysis tools: a buffer tool, facilities construction notification, Google Street View interface (with reference to our GIS assets), integrated GPS and camera, etc. This GIS software provides field staff with a powerful tool that can be used in the field to make effective and timely decisions. GeoViewer supports calendar-based preventive maintenance, with various inspection frequencies based on type and condition of the asset; it also supports tracking the maintenance history for each asset. Further, the application also keeps track of the high maintenance areas and can create work order from the field.

The GeoViewer is comprised of two different Nobel Systems applications that are currently used by CVWD: 1) GeoViewer Online application with GeoViewer CMMS hosted on Nobel's servers, 2) CMMS widget in GeoViewer Mobile applications. Typical workflow is as follows:

1. Create Work Orders in GeoViewer Online application using GeoViewer CMMS. This application has the ability to update the inventory list of material and notify the supervisors when stock goes below normal levels.
2. Receive the WO in mobile devices based on the assigned/opened WOs for the particular field crew member to complete.
3. When field crews complete the work, the completed WO is deleted from the iPad devices and sent to data servers. The GeoViewer Online application is updated with the status and comments.
4. All the history of completed WO can be accessed through GeoViewer Online application with the reporting capability.
 - On the main screen of GeoViewer Mobile, the user is able to see the WO, which are assigned to them.
 - GeoViewer Mobile automatically sorts WOs by Priority, the priorities and assignments are setup by the CVWD staff.
 - By default, the users sees the WOs assigned to them, but they can also switch to see all the WOs depending on their access permission.
 - If the user selects on the Work Order, then GeoViewer will zoom to the area of the map where the WO is located.
 - If the user sees a WO on the map, in which they would like to get more information on, then they are able to select the WO on the map directly and open that WO to see more information.
 - The WO screen allows the field personnel to add their comments and any other required information to the WO and complete the WO. In addition, they are able to enter the labor hours and costs, equipment and materials together with costs.

GeoViewer also assists with the tracking of high maintenance areas within the sewer system and is capable of generating alerts on overdue tasks.

IV-3: Preventive Operation and Maintenance

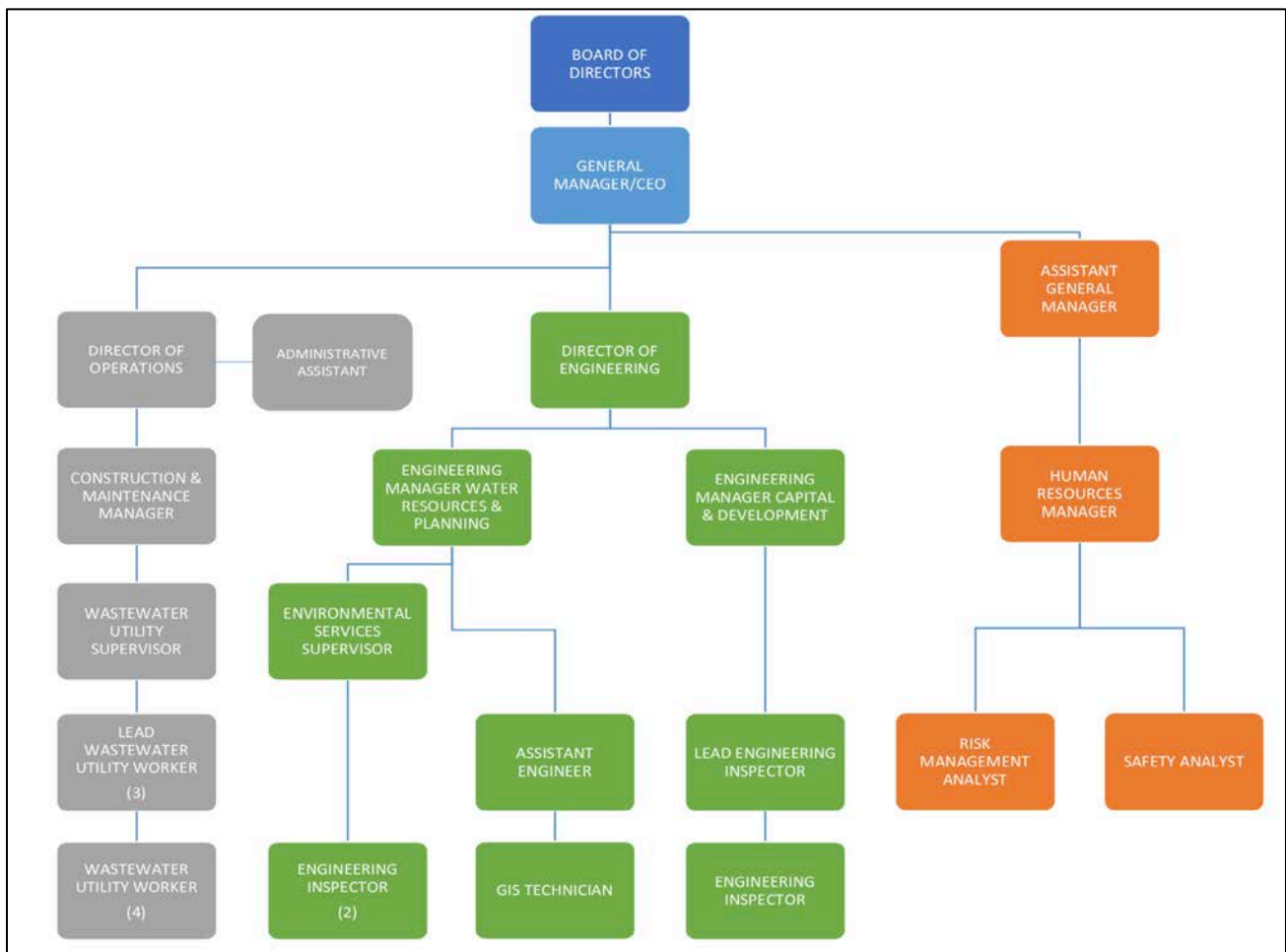
The elements of CVWD's sewer system O&M program include:

- Proactive, preventive, and corrective maintenance of gravity sewers;
- Ongoing CCTV inspection program to determine the condition of the gravity sewers;
- Periodic inspection and preventive maintenance for the lift stations and force mains;

- Rehabilitation and replacement of sewers that are in poor condition; and
- Proper training for District employees and contractors to assure proper operations and maintenance of the collection system facilities.

CVWD’s Operations Department identified below in **Figure IV-1 Organization Chart** is responsible for the normal maintenance and operations of the sanitary sewer collection system and the proper planning and emergency response. The Engineering Department, in conjunction with Operations, is responsible for capital renewal, replacement planning and construction activities. The Environmental Service Division coordinates and manages the fats, roots, oils and grease (FROG) program for all food service establishments (FSE) in the service area.

Figure IV – 1: District Sewer Program Organization Chart



IV-3.1: Gravity Sewer Maintenance

CVWD proactively flushes its Sanitary Sewer System main lines of ten (10”) inches and smaller in two manners – high frequency (routine) cleaning and system wide cleaning. High frequency cleaning is conducted either monthly or every four (4) months on lines requiring regular maintenance. The smaller lines total 130.77 miles of the 163.13 miles of gravity lines owned by CVWD. System wide cleaning is conducted on the remaining 31.9 miles approximately every 4.4

years. All cleaning is conducted in six (6) sewer sheds as shown on **Figure IV-1** below in approximately 18 months currently.

The historical line cleaning results for both routine and system wide cleaning are shown in

Table IV – 2: Historical Total Cleaning Results High Frequency Line Cleaning Results. Large diameter pipes are cleaned routinely in the course of the District’s annual cleaning cycle, frequency is increased where appropriate. CVWD will be evaluating the cleaning program and frequency in the future once the CCTV condition assessment of all lines is completed. The evaluation of maintenance for these large lines will include an evaluation of how and when maintenance should be done either by District staff or service contractors.



Table IV – 1: Routine Cleaning (High Frequency) Lines

Frequency	Pipe Segments	Linear Feet	Annual Cleaning, Linear Feet	Annual Cleaning, miles	Percent of System
Monthly	7	1,710	20,520	3.89	0.93
Quarterly Cycle	33	7,365	29,460	5.58	1.31
Totals	40	9,075	49,980	9.52	2.38

Source: Martinez Email November 13, 2019

Figure IV – 2: CVWD Sewer Sheds

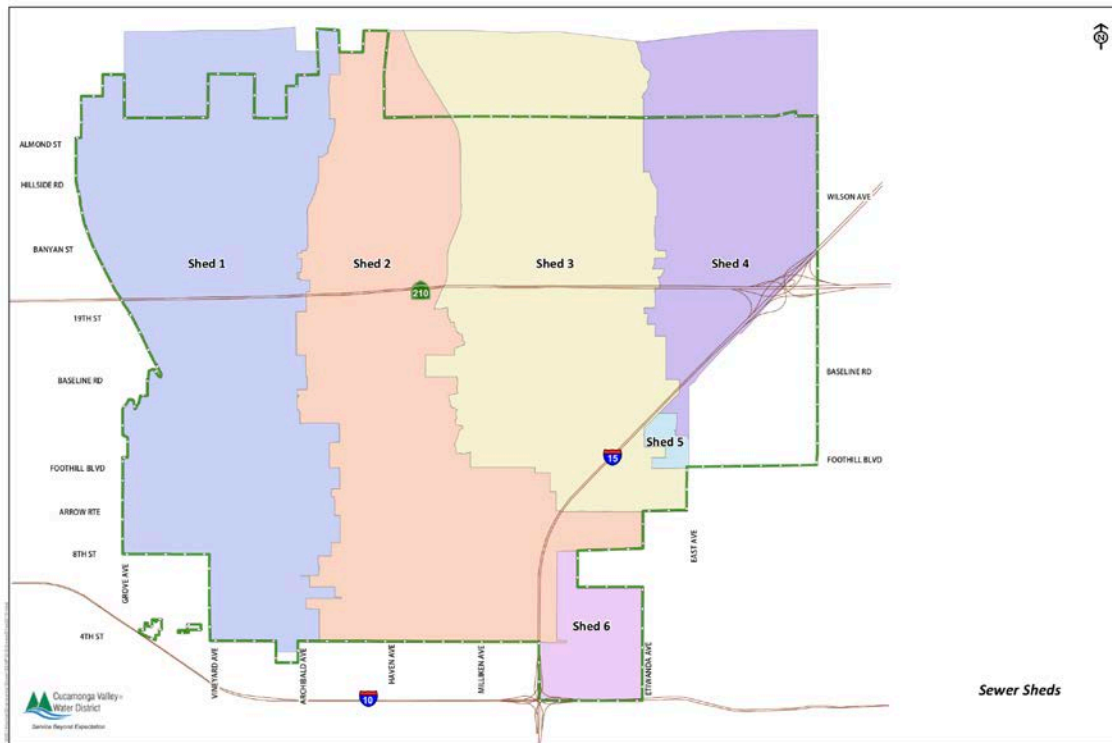


Table IV – 2: Historical Total Cleaning Results

Calendar Year	Line Cleaning Results, linear feet	Line Cleaning Results, miles	Percent of System Pipes < 12 inch (130.77 miles)
2014	1,847,472	349.9	83.3
2015	2,148,960	407.0	96.9
2016	2,155,296	408.2	97.2
2017	2,178,000	412.5	98.2
2018	2,131,536	403.7	96.1
Average per Year	2,092,464	396.3	94.3

Source: Martinez Email November 13, 2019

CVWD currently employs two cleaning crews, one for high frequency and one assigned system wide cleaning in the six sewer sheds cleaning the small lines approximately every 18 months. In addition, one crew is assigned the responsibility for general sewer system complaint response and for the marking of utilities for underground services alert (USA) and other Public Works related activities.

The line cleaning crews in the future will be required to evaluate cleaning results based upon the Standard Sewer Cleaning Results derived from CVWD’s **Standard Measures of Observed Results Collection System Line Cleaning** shown in **Figure IV-2** on the following page. The use of these new Standard Methods along with the new CCTV crew will allow CVWD to develop new need-based cleaning schedules changing many of the high frequency lines to a more needs-based program. Staff will place line segments on a higher or lower frequency schedule based upon past cleaning results, history of SSO events, history of cleaning results, video inspections and professional judgment. The current high frequency maintenance schedule only adds lines and very seldom remove line segments. Currently there are 40 pipe segments on the high frequency program totaling 9,075 linear feet. Summary statistics for the high frequency lines are shown in **Table IV-2: High Frequency Lines**.

CVWD staff will be working to develop additional sewer system standard operating procedures for the addition and removal of lines from the high frequency program in the next two years. This will assure proper cleaning efficiencies and will assist with a better understanding of the requirements for high frequency maintenance activities and may lead to repair or pipe rehabilitations or more aggressive discharger enforcement from the dischargers of fats, roots, oils and grease.

Table IV – 3: Standard Measures of Observed Results for Collection System Line Cleaning

Category	None	Low	Medium	High
Debris / Grit	Code: CL No observable debris or grit	Code: DL Minor amount of debris 15 minutes or less to clean 1 Pass	Code: DM Less than 5 gallons of debris 15-30 minutes to clean 2-3 passes required Requires cleaning twice or less per year Only fine grit	Code: DH More than 5 gallons of debris More than 30 minutes to clean More than 4 passes required Requires cleaning four times per year Operator concern for future stoppage
Grease	Code: CL No observable grease	Code: GL Minor amounts of grease 15 minutes or less to clean 1 pass	Code: GM Small chunks / no "logs" 15-30 minutes to clean 2-3 passes required Requires cleaning twice or less per year	Code: GH Big chunks / "Logs" More than 30 minutes to clean More than 4 passes required Operator concern for future stoppage
Roots	Code: CL No observable roots	Code: RL Minor amounts of roots 15 minutes or less to clean 1 pass	Code: RM Thin / Stringy roots present No large "clumps" 15-30 minutes to clean 2-3 passes required	Code: RH Thick roots present Large "clumps" More than 30 minutes to clean More than 4 passes required Operator concern for future stoppage
Other	Code: CL No observable materials	Code: OL Specify material Minor amounts of material	Code: OM Specify material Less than 5 gallons of material	Code: OH Specify material More than 5 gallons of material Operator concern for future stoppage

Footnote: (a) Times shown are typical manhole to manhole distance of 250 feet. Longer runs will require longer cleaning times. Judgement will need to be applied by the field crews for varying lengths and pipe diameters.

IV-3.1.1: Pipe Condition Assessment

CVWD plans to implement a comprehensive program for the condition assessment of the entire sanitary sewer system utilizing its newly acquired CCTV vehicle. The program will include a full condition assessment of all pipes ten inches or smaller and the associated manholes. In addition, all pipes within 200 feet of waterway will also be inspected and condition assessed. The assessments will follow the NASSCO standard rating systems for pipes (PACP) and manholes (MACP). CVWD will be developing a full system condition assessment program with CCTV return frequencies based upon the CCTV Return Frequency Flow Chart in Figure IV-3. The frequencies will be based upon the PACP condition of the pipe segment learned from the CCTV inspection targeting an overall ten (10) year frequency for most sewer line Inspections.

CVWD has historically evaluated sewer lines on an as needed basis following problems in the field or following sewer system overflows. The Historical CCTV assessments by calendar year are stated in Table IV-4 below. Going forward, CVWD plans to utilize the Return Frequency Flow Chart in Figure IV-3 below, as recommended. CVWD will also evaluate the use of the CCTV program to evaluate crew cleaning effectiveness through a QA/QC Program for up to 1% of the lines cleaned

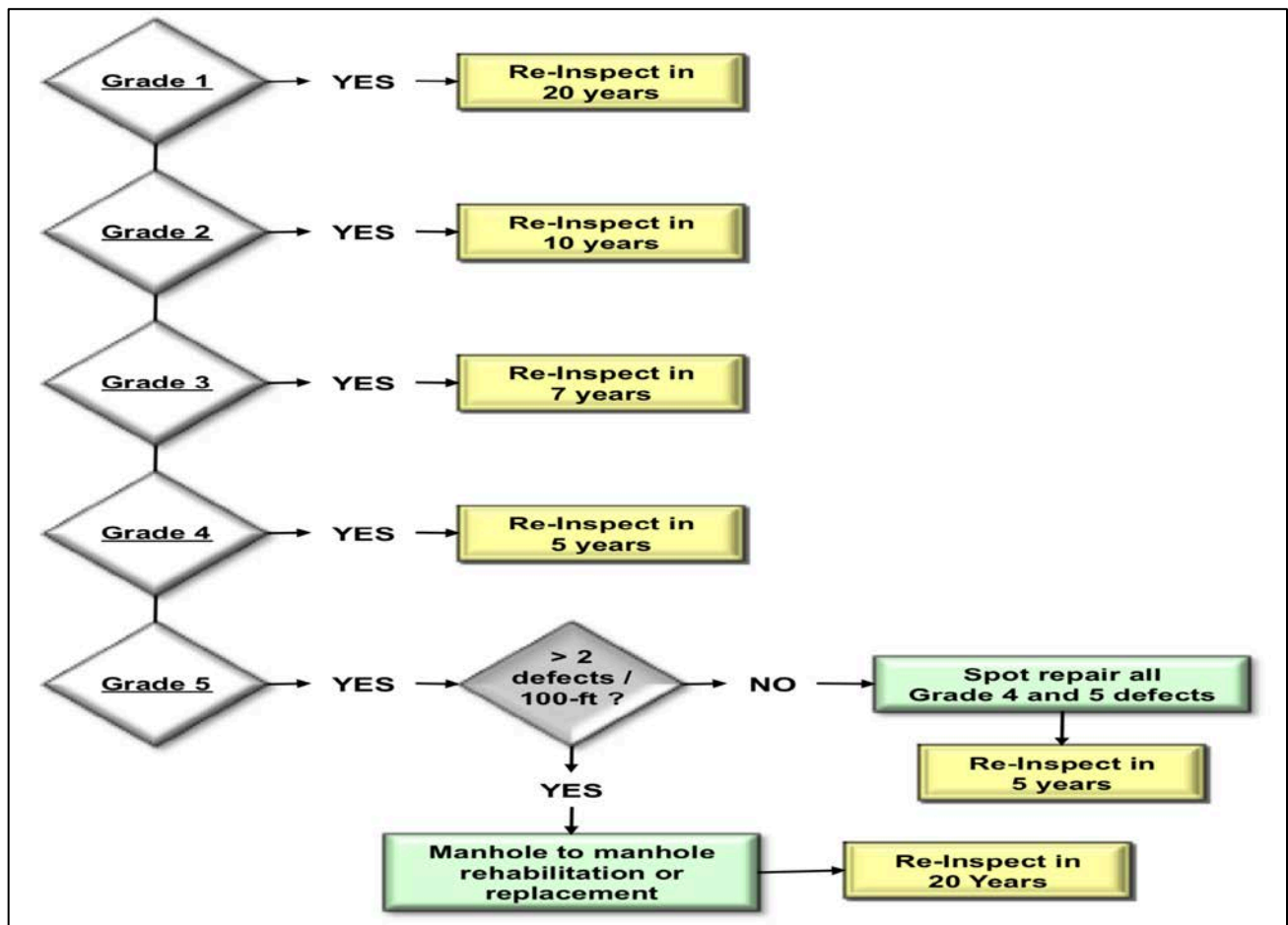
per year. This program may be used for training and to assure consistency in cleaning techniques across all sewer system cleaning activities.

Table IV – 4: Historical Closed-Circuit Television by Calendar Year*

Calendar Year	CCTV, Linear Feet	CCTV, miles	Percent of the System
2014	175,296	33.2	7.9
2015	113,520	21.5	5.1
2016	223,872	42.4	10.1
2017	221,760	42.0	10.0
2018	62,472	12.4	3.0

*Source email from Martinez 11/13/19

Figure IV – 3: CCTV Return Frequency Flow Chart



IV-3.1.2: Manhole Inspection and Maintenance Program

CVWD currently monitors and inspects monthly a select list of manholes that are known to historically create potential operations and maintenance issues. If the manhole is not found to be flowing freely during an inspection, then additional maintenance in and around the pipe segments connected to the manhole is conducted to assure that these manholes do not create sanitary sewer overflows or operational problems.

CVWD will be defining and implementing a formal manhole inspection program based upon the NASSCO manhole rating system (MACP) as part of the regular cleaning operations. All problem conditions noticed during cleaning will be reported and appropriate repairs initiated. This is a high priority for CVWD and will be fully implemented by the time of the next SSMP audit.

Additionally, CVWD staff regularly treats manholes to control infestations of insects and for the removal of roach contamination utilizing outside service contactors. The historical calendar year results of this program are stated in Table IV-5: Historical Summary of Roach Treatment. Figure IV-4 Roach Treatment Locations identifies typically where these treatments are conducted.

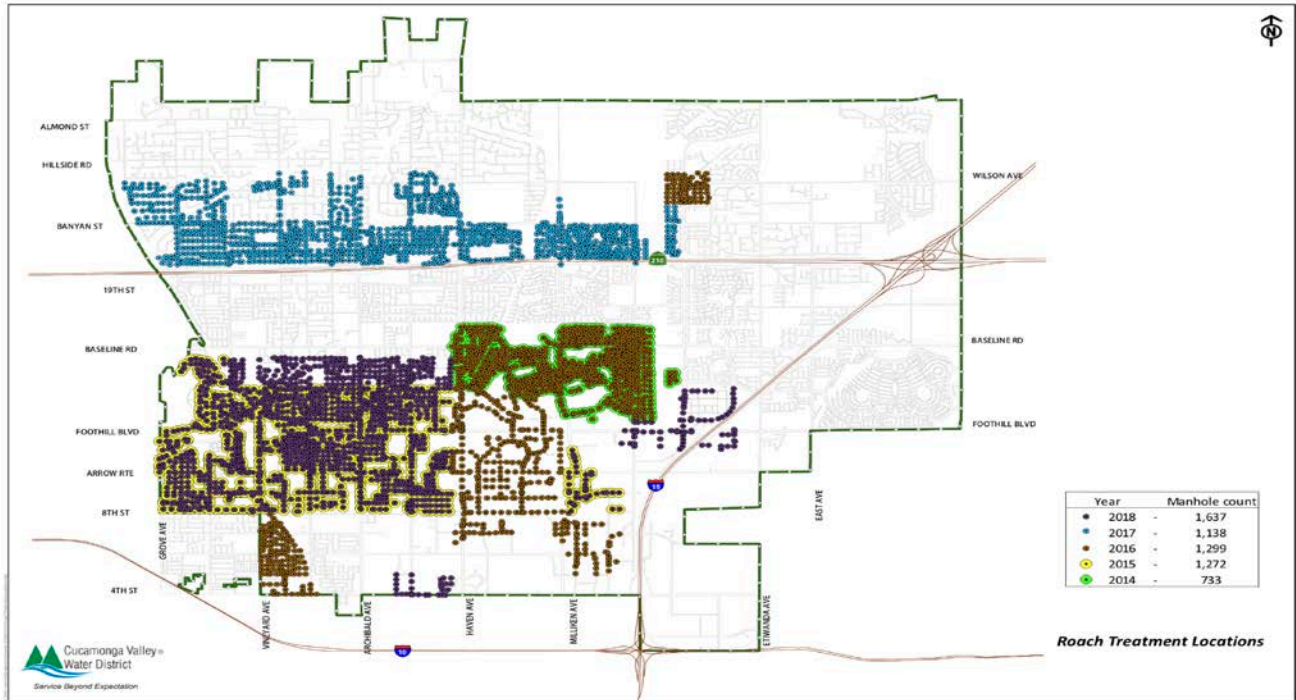
Table IV – 5: Historical Summary of Roach Treatment*

Calendar Year	Manhole Treated	Percentage of the System**
2014	733	0.14
2015	1272	0.24
2016	1299	0.25
2017	1138	0.22
2018	1637	0.31
Average per year	1216	0.23

* Source Martinez email 11/13/19

**Source Based on 8324 in the system as of 11/14/19

Figure IV – 4: Roach Treatment Locations



IV-3.2: Lift Station Maintenance

CVWD owns, operates and maintains two small package lift stations servicing very small neighborhoods within the CVWD service area. The Lift Station Asset Information is identified in Table IV-6 below. The Almond station serves twenty-six (26) homes and the Cerrito Rojo station services twenty-one households. CVWD provides minor maintenance, wet well inspections and cleaning and operations of these two stations as needed. In times of emergencies or failure of the stations, CVWD staff would manage flows to the station utilizing CVWD cleaning equipment until such time as pumping is reestablished.

Additionally, CVWD annually evaluates each Lift Station and Force Main Assessment Checklist included in Supplement IV-1 at the end of the Element. The information collected is used to regularly determine the needs for renewal and replacement of these assets.

Table IV – 6: Lift Station Locations and Asset Information

Pump Station Name	Structural Rehab Date	No. Pumps	Pump GPM	Pump Manufacturer	Pump HP	Standby Generation-KW
Almond	17/18	2	100	Xylem-Flygt	4	None
Cerrito Rojo	15/16	2	80	WEMCO – Torque Flow	5	None

IV-3.3: Force Mains

Each of the lift stations described in Section 3.2 above discharge through pressure force mains to the CVWD sewer collection system as described in Table IV-7 below. These small force main alignments are inspected annually and the discharge manholes into the collection system are inspected for concrete corrosion regularly. CVWD does not currently have a formal force main condition assessment and/or replacement program.

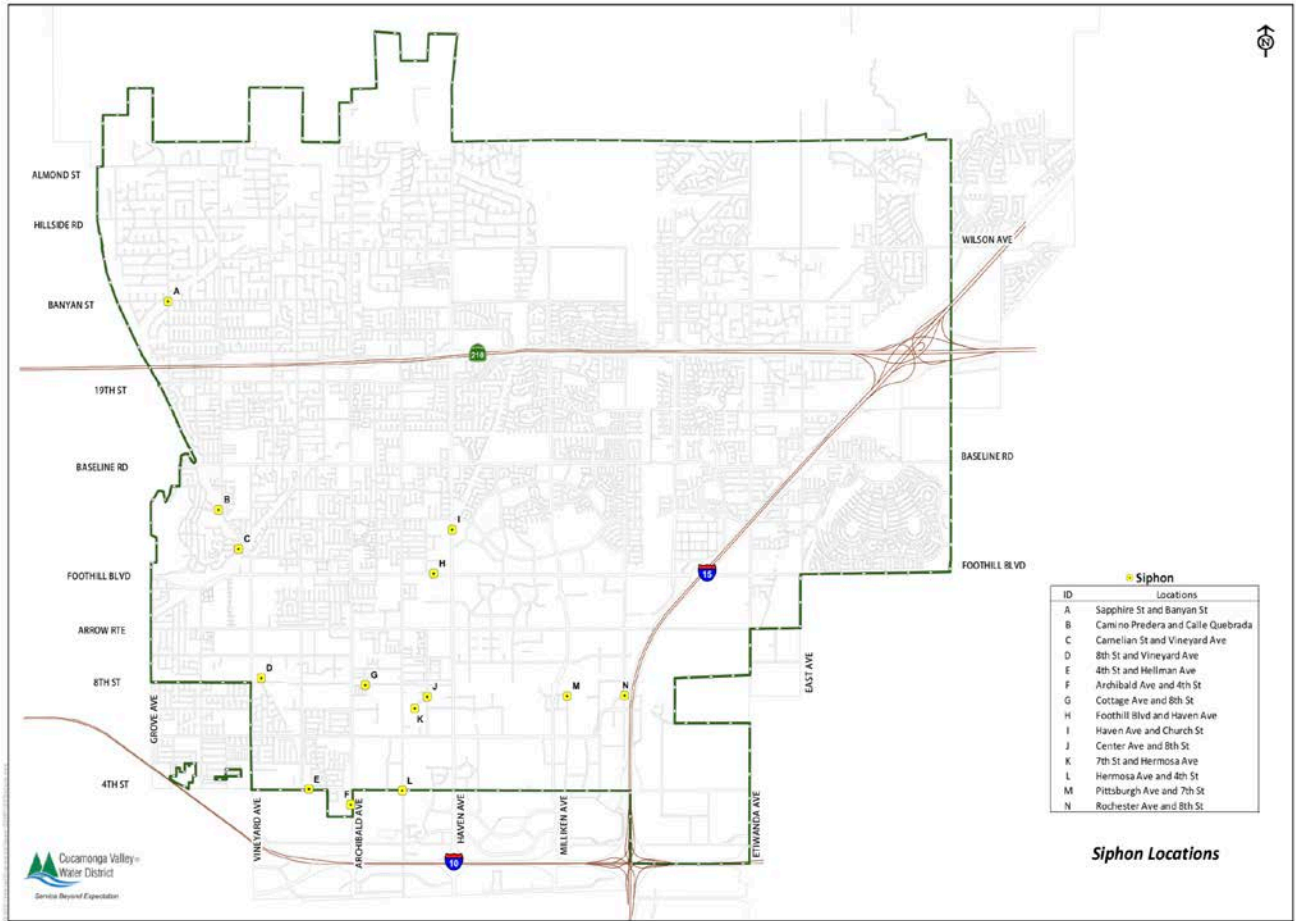
Table IV – 7: Force Main Locations and Descriptions

Name of Lift Station Associated with Force Main	Year Constructed	Force Main Asset Information		
		Length (linear feet)	Size (inches)	Material Type*
Almond	11/19/87	771	4	CIP
Cerrito Rojo (AB6983)	10/14/87	1132	4	CIP
Total, Linear Feet		1903		
Total, Miles		0.36		

IV-3.4: Collection System Siphons

As described in Intro Table 4, CVWD also maintains twelve (12) inverted siphons throughout the collection system (see Intro Table 4 and Figure IV-5: Siphon Locations below). All siphons are cleaned at least monthly or as needed by CVWD staff. CVWD has evaluated all of the siphons in the 2017 Sewer Master Plan and has developed a replacement schedule, where appropriate.

Figure IV – 5: CVWD Siphon Locations



IV-3.5: Root Foaming

CVWD has recently utilized chemical root control service contractors to address root issues as summarized in Table IV-8. These service contractors supplement CVWD cleaning efforts including jet-rodder/vactor to cut and remove roots found in the system.

Table IV – 8: Historical Root Foaming Results*

Calendar Year	Linear Feet	Miles	Percent of System
2016	4889	.93	0.22
2017	6111	1.16	0.28
2018	7259	1.37	0.33
Average	6086	1.15	0.27

Source: Martinez Email November 13, 2019

IV-4: Private Sewer Laterals

CVWD staff is concerned with the lower portions of private sewer laterals totaling approximately 274 miles of additional pipes in the service area. These laterals are proactively evaluated and cleaned as required to deal with roots especially or as a result of overflows caused from the laterals. Staff proactively assists with any overflows from private laterals.

IV-5: Rehabilitation and Replacement Program

CVWD's Capital Improvement Plan (CIP) for the next five (5) years was developed during the preparation of the 2017 Sewer Master Plan which evaluated pipelines, siphons, lift stations, defective and deficient sewer installations and septic system neighborhoods in the service area. The renewal and replacement projects identified were prioritized based upon results of the hydraulic model, field information and velocity information used in the model. In addition, the prioritization also takes into account CVWD maintenance activities in the service area. CVWD annually evaluates the CIP for new information and input from the field crews.

The projects currently identified are included in CVWD's Capital Improvement Program through 2023 are listed in Supplement IV-2. The funds that support the Capital Improvement Program come from CVWD's sewer service charges that are based upon regular sewer service charge rate analyses and revisions.

IV-6: Training

CVWD uses a combination of in-house classes, tailgate sessions and field exercises; on the job training; conferences, seminars, OSHA classes and other training opportunities in southern California. CVWD requires its Maintenance Worker II to be certified in Collection System Maintenance by the California Water Environment Association. The certification process requires employees to demonstrate that they have participated in 12 hours of training every two (2) years in order to renew their certificates. Currently 100% of the sewer system employees hold certifications from Grade I to Grade IV.

CVWD will conduct regular training sessions for its collection system employees on both the SSMP and OERP including the WQMP annually including volume estimation and SSO start time determinations. This training includes field exercises in the estimation of SSO volumes (spill and recovered) and SSO containment.

In addition, CVWD conducts annual safety and confined space entry and certification for appropriate personnel as required.

CVWD standard service and construction contract language requires all contractors working in the sanitary sewer collection system to provide training for their employees on the CVWD's Sanitary Sewer Overflow Emergency Response Plan or demonstrate they have been trained on an equivalent emergency response plan of their own.

IV-7: Equipment and Replacement Parts

The list of the major equipment that CVWD uses in the operation and maintenance of its sewer system is included in **Supplement IV-3: Major Sewer System Equipment Inventory**.

CVWD has developed a Critical Replacement Parts List included in **Supplement IV-4: Critical Sewer System Replacement Parts Inventory**. CVWD keeps replacement pumps on the shelf for both lift stations at the Maintenance Yard.

IV-8: Outreach to Sewer Service Contractors

CVWD requires all service contractors to be aware of emergency response requirements for sanitary sewer overflows and provides necessary reporting information for all sewer related problems and emergency response requirements.

IV-9: References

The data used in this section were taken from the following references:

- Cucamonga Valley Water District, 2017 Sewer Master Plan dated March 2017

Supplement IV-1: Lift Station and Force Main Assessment Checklist

Inspection Information	
Inspection date	
Inspection participants	
Facility name	
Facility address	
Comments	

Background Information (Prior 12 Months)	
SSOs	
Equipment failures	
Alarm history (attach copy)	
Major maintenance activities (attach list if applicable)	
Pending work orders (attach copies)	
Operating problems (attach copy of operating log)	
Comments	

Security Features	
Fence and gate	
External lighting	
Visibility from street	
Doors and locks	
Intrusion alarm(s)	
Signs with emergency contact information	
Other security features	
Comments	

Safety Features and Equipment	
Signage (confined space, automatic equipment, hearing protection, etc.)	
Fall protection	
Emergency communication	
Equipment hand guards	
Handrails and kickboards	
Platforms and grating	
Tag out and lock out equipment	
Hearing protection	
Eye wash	
Chemical storage	
Comments	

External Appearance	
Fence	
Landscaping	
Building	
Control panels	
Other external features	
Comments	

Building/Structure	
Lift Station building	
Control room	
Dry well	
Wet well	
Other structures	
Comments	

Instrumentation and Controls (including SCADA Facilities)	
Control panel	
Run time meters	
Flow meter	
Wet well level	
Alarms	
SCADA HMI/PLC	
Other instrumentation & controls	
Comments	

Electrical and Switch Gear	
Power drop	
Transformers	
Transfer switches	
Emergency generator and generator connection	
Starters	
Variable frequency drives	
Electrical cabinets	
Conduit and wireways	
Other electrical	
Comments	

Motors	
Lubrication	
Insulation	
Operating current	
Vibration and alignment	
Other	
Comments	

Pumps	
Lubrication	
Vibration and alignment	
Seals	
Indicated flow and discharge pressure	
Shutoff head	
Corrosion and leakage evidence	
Drive shaft	
Other	
Comments	

Valves and Piping	
Valve operation	
Valve condition	
Pipe condition	
Pipe support	
Other	
Comments	

Other	
Lighting	
Ventilation	
Support systems (air, water, etc.)	
Signage	
Employee facilities	
Sump pump	
Overhead crane	
Portable pump connections	
Portable pumps	
Comments	

Supplement IV-2: Capital Improvement Program (in thousands of dollars)

Project Title	2019	2020	2021	2022	2023
Sewer Line Rochester North of 6 th Street	1,200	0	0	0	0
Sewer Line – Archibald Ave – Main to Acacia	30	0	781	0	0
Sewer Line – Arrow Rt – Oakwood to Milliken	30	570	0	0	0
Sewer Line – Church St – Archibald to Paradise	325	0	0	0	0
Sewer Line – Haven Ave – Foothill to Jersey	0	25	2,800	0	0
Sewer Line – Utica Ave – Humboldt to Jersey	550	0	0	0	0
Sewer Line – Vineyard Ave – 9 th to Foothill	0	0	50	1,400	900
Sewer Line – 4 th Street and Santa Anita	100	0	0	0	0
Sewer Line – 8 th Street and I-5 Freeway	25	1,050	0	0	0
Sewer Line – Milliken Avenue and 4 th Street	30	435	0	0	0
Replace Siphon – 8 th Street and Vineyard	0	50	50	1,400	0
Replace Siphon – Sapphire Ave and Banyan Street	50	50	750	0	0
Sewer Relining and Manhole Rehabilitation	150	150	150	150	150
Total Sewer Fund	2,510	2,360	4,581	2,950	1,050

Supplement IV-3: Major System Equipment Inventory*

Equipment Number	Equipment Description
271	Vactor combination jetting/suction truck
335	Vactor combination jetting/suction truck
379	Vactor combination jetting/suction truck
314	CCTV inspection truck - Cues
363	CCTV inspection truck - Envirosight
322	Sewer lateral response/confined space entry van
2015	Wastewater utility 6"bypass pump trailer mounted – combo-bypass pump and hose ferris wheel
2038	Wastewater utility 6"bypass pump trailer mounted – Thompson bypass pump (blue)
2054	Wastewater utility 6"bypass pump trailer mounted – Godwin/Xylem bypass pump (orange)
2017	Wastewater easement jet rodding machine
2028	Wastewater mechanical rodding machine
325	Wastewater utility traffic control truck

*Source: Martinez email dated 9/26/19

Supplement IV-4: Critical System Replacement Parts Inventory*

Part Description	Location
VCP Pipe 8" to 30"	District Yard
PVC Pipe 8" to 30"	District Yard
Couplings Clay to Clay 4" to 30"	District Yard
Couplings Clay to Plastic 4" to 12"	District Yard
Manholes	
Sewer Plugs	
Pump Station Boards	

*Source: Martinez email dated 9/26/19

Element V: Design and Performance Provisions

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.

V-1: Design Criteria for Installation, Rehabilitation and Repair

CVWD Wastewater Collection System Design Criteria are administered by the Engineering and Planning Division. CVWD uses the latest version of the Standard Specifications for Public Works Construction (Green Book) latest version as well as the CVWD Standard Drawings for Construction of System Facilities, Sewer Drawings.

V-1.1: New Pipe and Appurtenances

CVWD has established standards for both new construction and renewal and replacement work associated with the collection system infrastructure. These standards include design standards for pipes, manholes, laterals, materials and placement of pipes and manholes into the sewer system.

Requests for modification or relief from the CVWD standards can only be considered and ultimately approved by the Director of Engineering.

V-1.2: Lift Station and Force Mains

CVWD requires that all new or rehabilitated lift stations be designed by a registered engineer and approved by CVWD before construction.

V-1.3: Private Sewer Systems and Private Laterals

All private sewer systems and private sewer laterals are required to be designed, installed, inspected and accepted by the local City or County Building Division in the service area.

V-2: Inspection and Testing Criteria

CVWD's Wastewater Collection System Inspection and Testing Criteria for pipelines are defined in the Green Book. All testing must be approved by the Director of Engineering prior to consideration for acceptance for operation and maintenance by the Board.

V-2.1: New and Rehabilitated Lift stations

Construction standards and acceptance provisions for new and rehabilitated lift stations are established through the design process and are part of the approval of the plans and specifications for the new or rehabilitated lift station.

V-3: References

The data used in this section were taken from the following references:

- Standard Specifications for Public Works Construction (Green Book) latest version
- CVWD Standard Drawings for Construction of System Facilities, Sewer Drawings

Element VI: Overflow Emergency Response Plan

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.

Sanitary Sewer Overflow Emergency Response Plan

VI-1: Purpose

The purpose of the Cucamonga Valley Water District's Overflow Emergency Response Plan (OERP) is to support an orderly and effective response to Sanitary Sewer Overflows (SSOs). The OERP provides guidelines for District personnel to follow in responding to, cleaning up, and reporting SSOs that may occur within CVWD's service area. This OERP satisfies the SWRCB Statewide General Waste Discharge Requirements (WDR), which require wastewater collection agencies to have an Overflow Emergency Response Plan.

VI-2: Policy

CVWD's employees are required to report all wastewater overflows from public sewer infrastructure and to take the appropriate action to secure the wastewater overflow area, properly

report to the appropriate regulatory agencies, relieve the cause of the overflow, and ensure that the affected area is cleaned as soon as possible to minimize health hazards to the public and protect the environment. CVWD's goal is to respond to sewer system overflows as soon as possible following notification. CVWD will follow reporting procedures in regard to sewer spills as set forth by the Santa Ana Regional Water Quality Control Board (*SARWQCB*) and the California State Water Resources Control Board (*SWRCB*).

VI-3: Goals

CVWD's goals with respect to responding to SSOs are:

- Work safely;
- Respond quickly to minimize the volume of the SSO;
- Eliminate the cause of the SSO;
- Prevent sewage system overflows or leaks from entering the storm drain system or receiving waters to the maximum extent practicable;
- Contain the spilled wastewater to the extent feasible;
- Minimize public contact with the spilled wastewater;
- Mitigate the impact of the SSO;
- Meet the regulatory reporting requirements;
- Evaluate the causes of failure related to certain SSOs; and
- Revise response procedures resulting from the debrief and failure analysis of certain SSOs.

VI-4: Full Overflow Emergency Response Plan

The full copy of CVWD Overflow Emergency Response Plan effective January 2019 can be found in Appendix E along with copies of all instructions and forms in response packets referred to below. All SSO sampling and testing shall be conducted per CVWD Water Quality Monitoring Plan (WQMP) which is included as Appendix F.

VI-5: Authority and References

- Health & Safety Code Sections 5410-5416
- CA Water Code Section 13271
- Fish & Wildlife Code Sections 5650-5656
- State Water Resources Control Board Order No. 2006-0003-DWQ
- State Water Resources Control Board Order 2013-009-DWQ effective September 9, 2013
- Cucamonga Valley Water District Overflow Emergency Response Plan November 2019

Element VII: Fats, Roots, Oils, and Grease (FROG) Control Program

FROG Control Program: Each Enrollee shall evaluate its service area to determine whether a FROG control program is needed. If an Enrollee determines that a FROG program is not needed, the Enrollee must provide justification for why it is not needed. If FROG is found to be a problem, the Enrollee must prepare and implement a FROG 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 FROG;
- (b) A plan and schedule for the disposal of FROG 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 FROG 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 FROG;
- (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 FROG ordinance;
- (f) An identification of sanitary sewer system sections subject to FROG blockages and establishment of a cleaning maintenance schedule for each section; and
- (g) Development and implementation of source control measures for all sources of FROG discharged to the sanitary sewer system for each section identified in (f) above.

VII-1: Nature and Extent of FROG Problem

District continuously works to reduce the impacts of FROG on the collection system. CVWD has developed a strong FROG program and has permitted on average 255 FSE each calendar year throughout CVWD. Figure VII-1 shows the locations of all FSEs as of November 13, 2019. CVWD permits for FSEs are issued for two years and each FSE is inspected up to three times per year. Permit renewals are staggered across the two years. CVWD staff proactively manages the enforcement of the FSE permits through field inspections, warning letters and notices of violation. Additional enforcement steps of administrative hearings, legal actions and disconnection are available, however due to the proactive inspection program that has yet to be required.

Tables VII-1 and VII-2 provides an historical summary of the FROG program activity and enforcement actions respectively. Vacant inspections are inspections conducted at locations with no completed tenant improvements or at locations where previous dischargers are no longer operating and discharging. These inspections are intended to assure that these locations have not reopened or changed ownership and begun operating. The District philosophy for FROG control relies on aggressive field contact with dischargers and only as a last resort the use of CVWD enforcement regulations believing that personnel contact results in better compliance than enforcement.

Figure VII – 1: Food Service Establishment Location Map

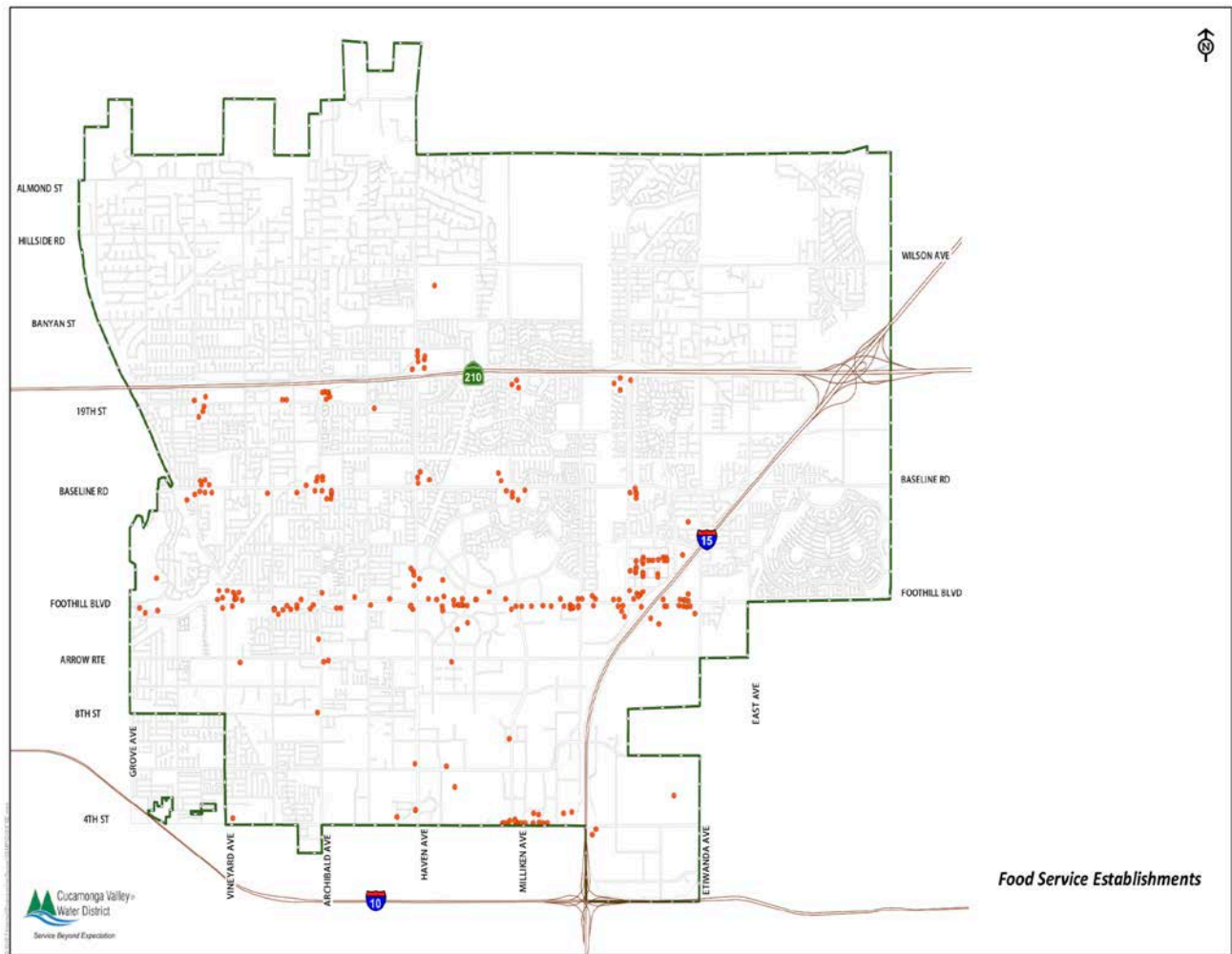


Table VII – 1: Historical Food Service Establishment Activity by Calendar year

Calendar Year	Number of FSEs	Total Inspections	Vacant FSEs, each	Vacant Inspections**	FSE
2010	375	380	0	0	
2011	258	619	42	1093	
2012	213	412	0	0	

Calendar Year	Number of FSEs	Total Inspections	Vacant FSEs, each	Vacant Inspections**	FSE
2013	251	781	56	1267	
2014	241	764	47	1301	
2015	241	768	36	968	
2016	230	714	28	864	
2017	231	736	26	678	
2018	254	825	30	924	
Totals	2,294	5,999	265	7,095	
Average/CY	255	667	38	1,014	

**Vacant FSEs inspected to verify no business is using the space.
 Source: Provided by CVWD Inspections 5/29/19

Table VII – 2: Summary of Calendar Year FSE Enforcement Actions

Calendar Year	Correction Letter	NOVs Issued	Hearings	Other
2012	1	0	0	0
2013	20	1	0	0
2014	14	0	0	0
2015	16	0	0	0
2016	6	0	0	0
2017	14	0	0	0
2018	26	0	0	0
Total	97	1	0	0
Average	14	0	0	0

Source: CVWD Inspections 5/29/19

VII-2: Response to WDR Requirements

Requirement (a):

An implementation plan and schedule for a public education outreach program should promote proper disposal of FROG.

Response:

CVWD, along with the regional waste water treatment agency IEUA, provides public information and outreach for the FROG Control Program. CVWD enhances the effort by providing bill stuffers regarding FROG and FROG controls.

Requirement (b):

A plan and schedule for the disposal of FROG 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 FROG generated within a sanitary sewer system service area.

Response:

CVWD has developed a list of businesses able to accept or haul FROG that is available from the Operations Division.

Requirement (c):

The legal authority to prohibit discharges to the system and identify measures to prevent SSOs and blockages caused by FROG.

Response:

The CVWD Code provides the legal basis and authority (see Element 3) for CVWD's FROG Control Program.

Requirement (d):

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

Response:

The CVWD District Code addresses requirements for grease removal devices. In addition, CVWD has adopted the California Plumbing Code, most current edition (See District Code Section 4.12.010) which also provides authority for grease removal devices. In addition, the local cities in the service area can require the installation of grease removal devices.

Requirement (e):

Authority to inspect grease producing facilities, enforcement authorities, and determination of whether the collection system has sufficient staff to inspect and enforce the FROG ordinance.

Response:

The inspection and enforcement for FROG related problems are included in Section 5, Enforcement of the Sewer Use Ordinance.

Requirement (f) and (g):

Requirement (f) is an identification of sewer system sections subject to FROG blockages and the establishment of a cleaning maintenance schedule for each section, and

Requirement (g) is the development and implementation of source control measures, for all sources of FROG discharged to the sewer system.

Response:

CVWD has identified and maintains collection system lines on the high frequency maintenance list. These lines have experienced grease accumulation in the past and are cleaned on varying frequencies based upon severity. The single largest area for high frequency maintenance is the downtown area with the highest concentration of restaurants. The high frequency program currently lists approximately 1.72 miles of collection system lines (0.41% of the collection system) that are cleaned on one of the following frequencies as stated in **Table IV-1 High Frequency Lines**:

- Monthly
- Quarterly

Cleaning frequencies depend on the history of stoppages or overflows on a line or from results of regular cleaning results and CCTV following blockages or overflows. CVWD will establish a process and procedure for the additional, and removal of lines from the high frequency list no later than the next SSMP Internal Audit.

VII-3: References

The data used in this section were taken from the following references:

- Cucamonga Valley Water District Code.

Element VIII: System Evaluation and District Assurance Plan

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.

VIII-1: System Evaluation - Collection System Master Plan

The 2017 Sewer Master Plan (SMP) is the 3rd update of the 2010 CVWD SMP. The original report was completed in 2010; previous updates were completed in 2012 and 2014. Findings and conclusions developed during the 2017 SMP update have been incorporated into the District's Capital Improvement Program. This report is as an update since CVWD recently acquired an increased model license that no longer limits the number of pipelines which can be analyzed. The existing model software had only the capability of analyzing up to a maximum of 2,000 pipelines. With the smaller model it is only possible to analyze a portion of sewer shed at a time and then try to match the boundary conditions of the adjacent portions so that the model has predictability for the system as a whole. With the new software, District staff will be able to run the model with all Sewer Sheds tied together and the boundary conditions of the adjoining Sewer Sheds will not need to be matched for compatibility since this function is incorporated in the new software. It is anticipated that CVWD would retain a consultant for a new version of the SMP which will be the

2020 Wastewater Collection System Master Plan. The purpose of the SMP was to assess the wastewater system performance under existing conditions and determine improvements needed to meet future conditions.²

The computer sewer model software used and referenced in this SMP is *H2OMap Sewer GIS Version 8.0* by MWH Soft, Inc. (now Innowyze, Inc.). This sewer model is capable of importing sewer infrastructure data from CVWD’s Geographical Information Systems (GIS) Division which currently utilizes *ArcView* software by Esri, Inc. Data was imported for sewer model use by staff. All sewer mains and manholes with attributes (invert elevations, rim elevations, lengths, and diameters), lift stations, force mains, and inverted siphons were imported into the sewer model.³

All imported data was carefully vetted through a thorough systematic review and all discrepancies were reconciled by record drawing review and field verification by staff. All corrections were communicated back to the GIS Division. The sewer model identifies any disconnected sewer mains, inverted or incorrect elevations, and facilitates data combing for anomalies and out-of-range data. This data review is an additional benefit for CVWD and for the GIS Division’s data validation process.

The hydraulic model includes both dry and wet weather conditions and utilizes exiting water demand as required by the Regional Equivalent Dwelling Unit formula modified based upon CVWD historical information and recognizing that I/I is minimal. The model includes projects to the “maximum future build-out loading”⁴ in the CVWD service area.

In addition to evaluation of the sanitary sewer piping system, the 2017 SMP also evaluated all sewer siphons, lift stations, defective and deficient sewer installations and existing septic system neighborhoods in Chapter 12.

VIII-2: Design Criteria

CVWD has established various design criteria for new and existing sanitary sewer collection system lines as identified and defined in previous Master Plan versions and the SMP Chapter 5. These criteria include:

- Sewer main hydraulic capacity as ratio of depth of flowing wastewater to diameter of the line.
- Required minimum and maximum velocities; and
- CVWD’s ability to video monitor and maintain the sewer lines.

CVWD has established these criteria and uses them to both expand and replace lines and siphons in the sanitary sewer system. In addition, they have excluded the use of lines smaller than six (6) inches and do not allow less than standard dimension manholes. The new hydraulic model is used to establish current and future capacity of the lines and to determine the need and priority for

² *Sewer Master Plan, March 2017, Page 4*

³ *Sewer Master Plan, March 2017, Page 25*

⁴ *Sewer Master Plan, March 2017, Page 49*

capacity enhancements for the CVWD capital improvement program. CVWD has established velocity criteria that allows the model to inform the size and slope of a line. The minimum velocity is 2 feet/second for gravity mains and the 3 feet/second for siphons. The maximum velocity allowed by CVWD is 10 feet/second.⁵

VIII-3: District Enhancement Measures – Capital Improvement Program

The SMP presents a prioritized schedule of capital improvement projects (CIP) in Chapters 13 and 14. These projects have been identified as necessary to restore and maintain the hydraulic capacity and the reliability of the public sewer collection system. Each of the recommended CIPs has been planned to accommodate wastewater flows from the maximum future build-out loading.

The recommended CIP projects were evaluated and developed with consideration of these key factors:

- required design and performance criteria,
- expected useful service life of existing facilities,
- other planned and desired system modifications, and
- economic analysis.⁶

The precise scheduling of construction and budgeting is also be conducted with respect to any City construction projects that might be planned in the future. This will help avoid disruption to the community and unnecessary delays due to street improvement moratoriums.

VIII-4: Schedule

The 2017 SMP included a Capital Improvement Plan schedule for sanitary sewer projects from 2017/18 through 29/30. These projects included pipeline capacity enhancements, renewal and replacements, siphon replacements, sewer repair and relining's and future sewer master planning. Supplement Table IV-2 CVWD Capital Improvement Program includes the first six years of the project capital needs in the sanitary sewer system. CVWD annually reviews and evaluates the sewer capital program and schedules along with CVWD budget making corrections as priorities change and as additional field information is available from District staff and the Cities in the service area that can impact the status of the capital projects. The CIP projects are funded from available sewer system reserves, municipal bonds

VIII-5: References

The data used in this section were taken from the following references:

- Cucamonga Valley Water District Sewer Master Plan, March 2017.

⁵ Sewer Master Plan, March 2017, Page 29

⁶ Sewer Master Plan, March 2017, Page 49

Element IX: Monitoring, Measurement, and Program Modifications

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.

IX-1: Performance Measures

The indicators that CVWD uses to measure the performance of its sanitary sewer collection system and the effectiveness of its SSMP are:

- Total number of sanitary sewer overflows (SSO);
- Number of SSOs for each cause (roots, grease debris, structural, capacity, lift station failures, and other);
- Portion of sewage recovered compared to total volume spilled for each event;
- SSOs by SWRCB Category;
- Volume of spilled sewage discharged to Waters of the United States; and
- Comparison of SSO Rate to State and SARWQCB

In addition, CVWD will also use performance measures from the operations and maintenance of the sewer collection system identified in Element IV to assist with the evaluation of program effectiveness.

IX-2: Baseline Performance

CVWD has performance measures in place and evaluates its performance annually following the fiscal year. The historical performance is shown below starting in fiscal 2006/2007 through 2018/2019. These performance results are used to assist in the evaluation of the effectiveness of the sewer collection system program as part of the biannual internal audit.

IX-3: Mains, Lift Stations, and Force Mains

The baseline performance and SSO trends for the CVWD sewer program are shown by fiscal year on the following pages and the data is from CIWQS for the CVWD WDID 8SSO11383.

Figure IX – 1: SSOs per Fiscal Year

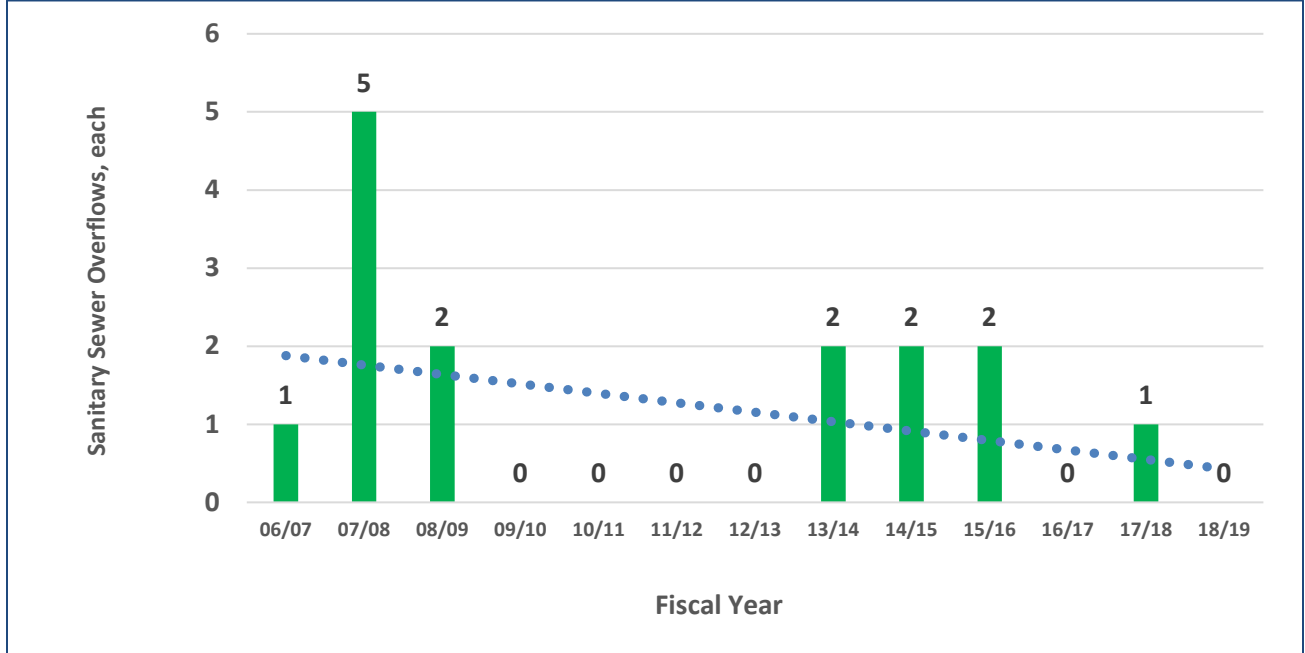


Figure IX – 2: Trend in SSOs by Cause

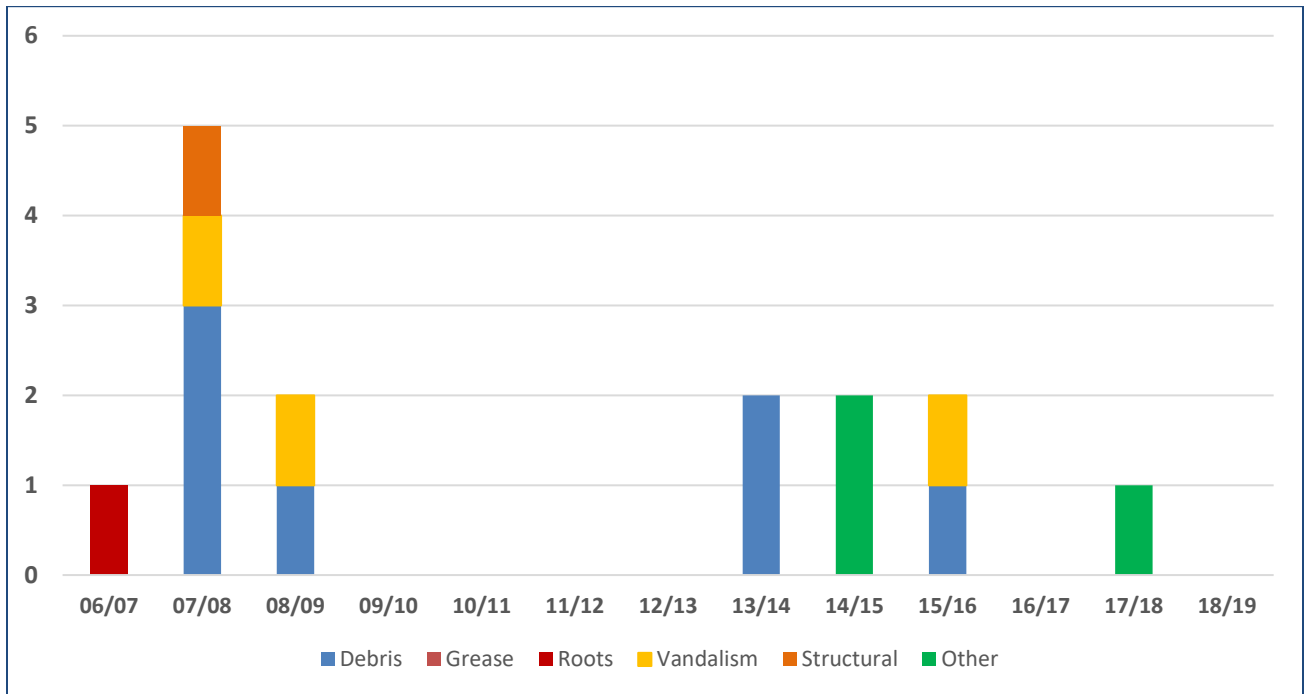


Figure IX – 3: Historical Spill and Recovered Volumes by Fiscal Year

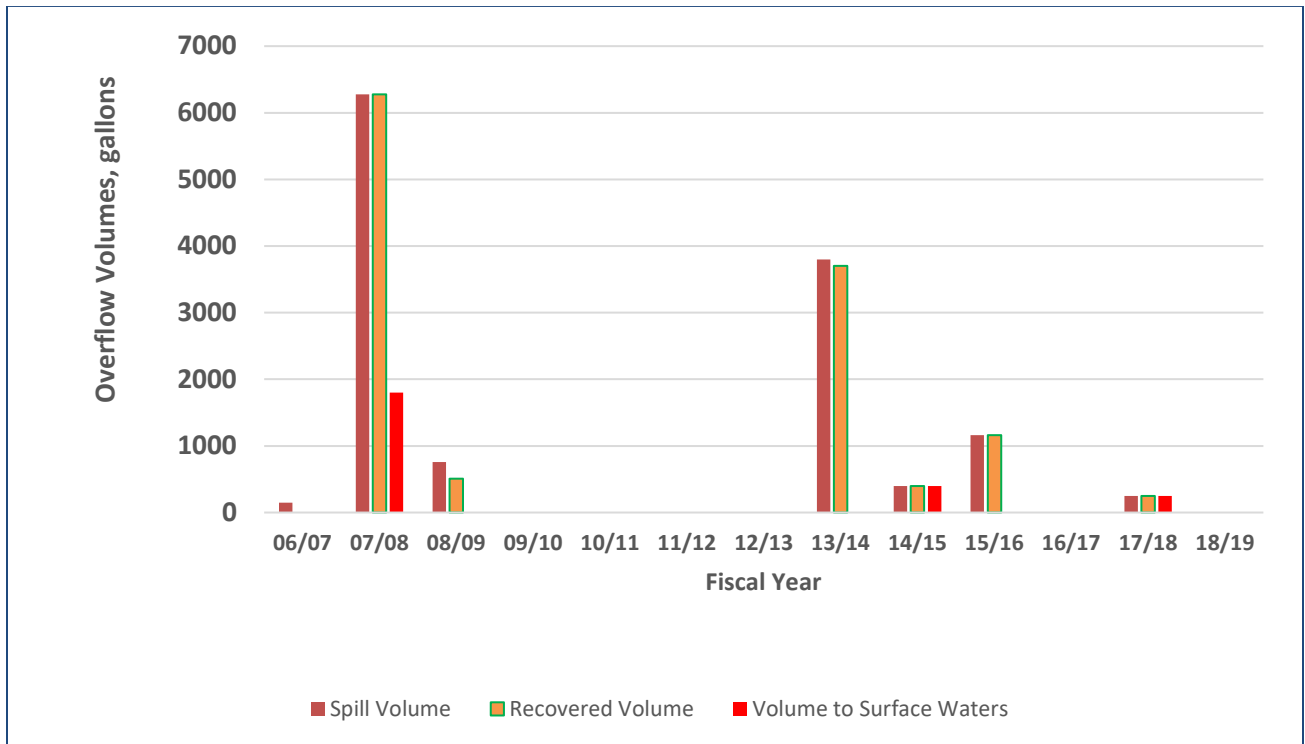


Figure IX – 4: Overflows by SWRCB Categories per Fiscal Year

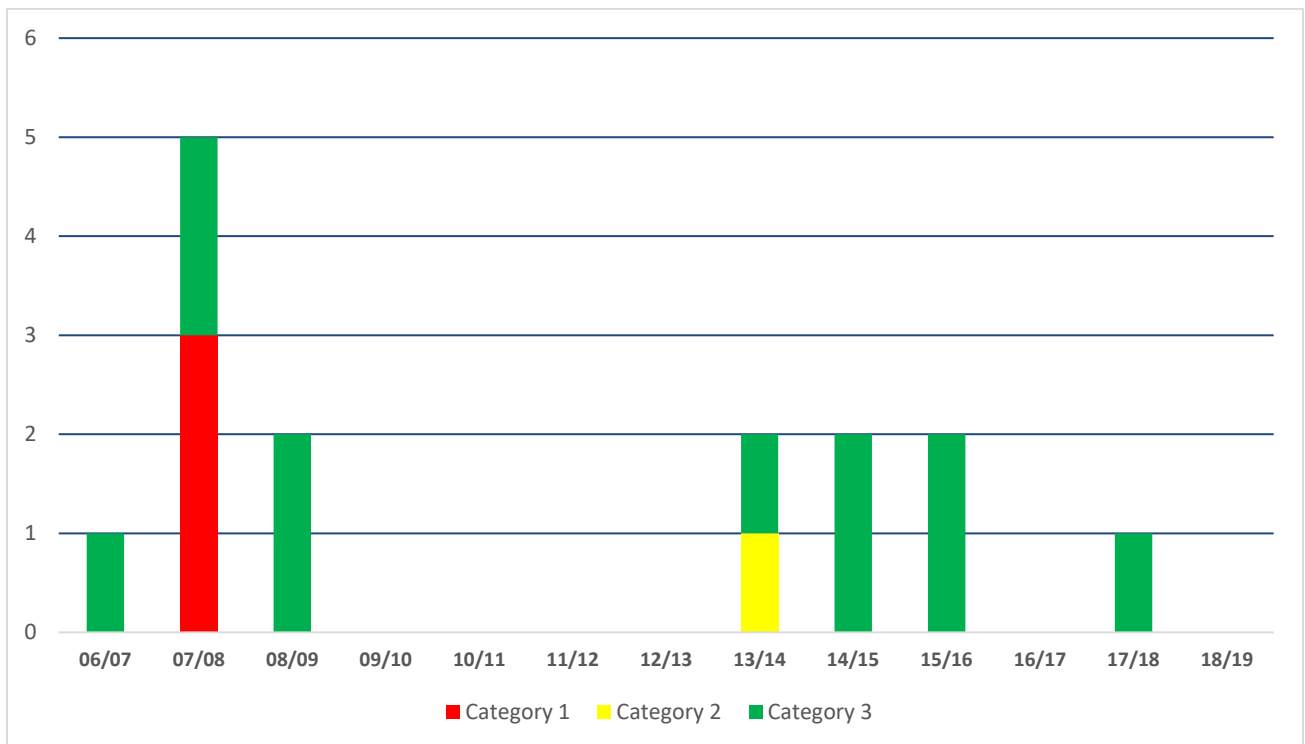


Figure IX – 5: Total Overflow Causes Since Inception of CIWQS Reporting

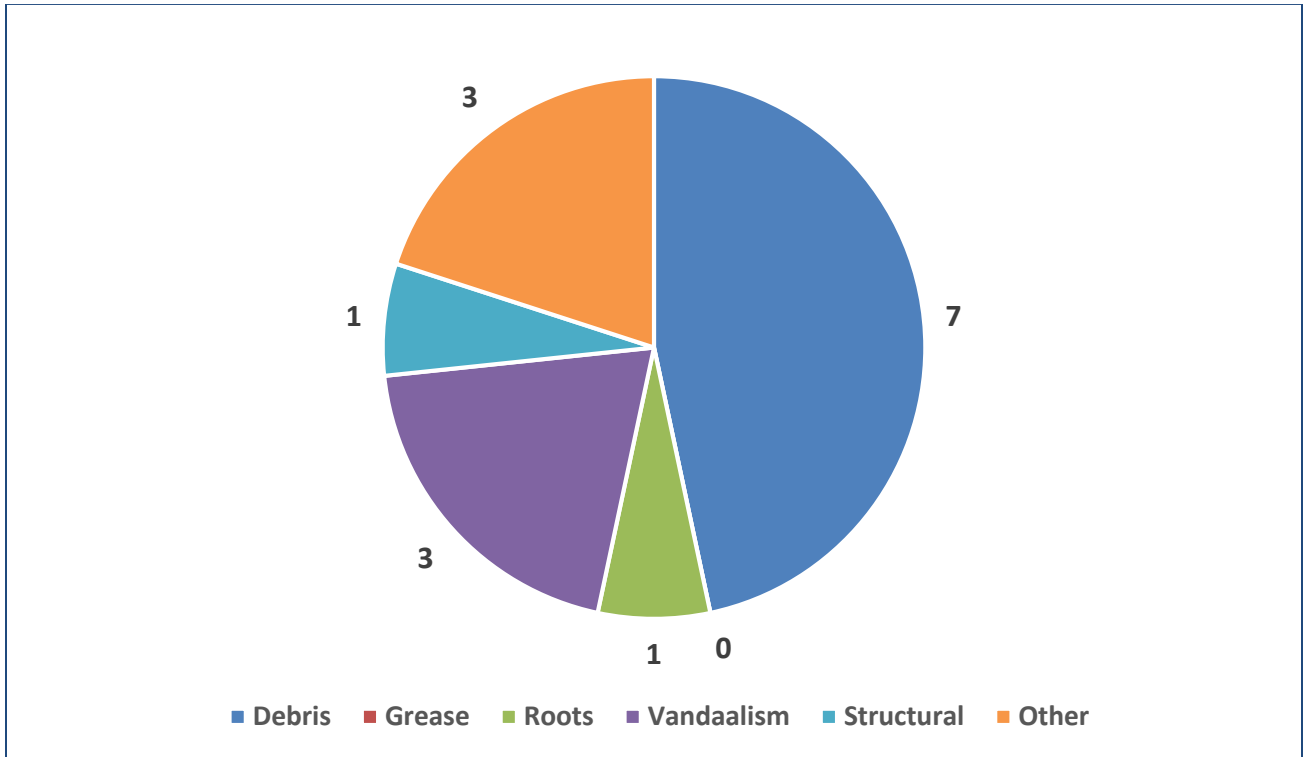
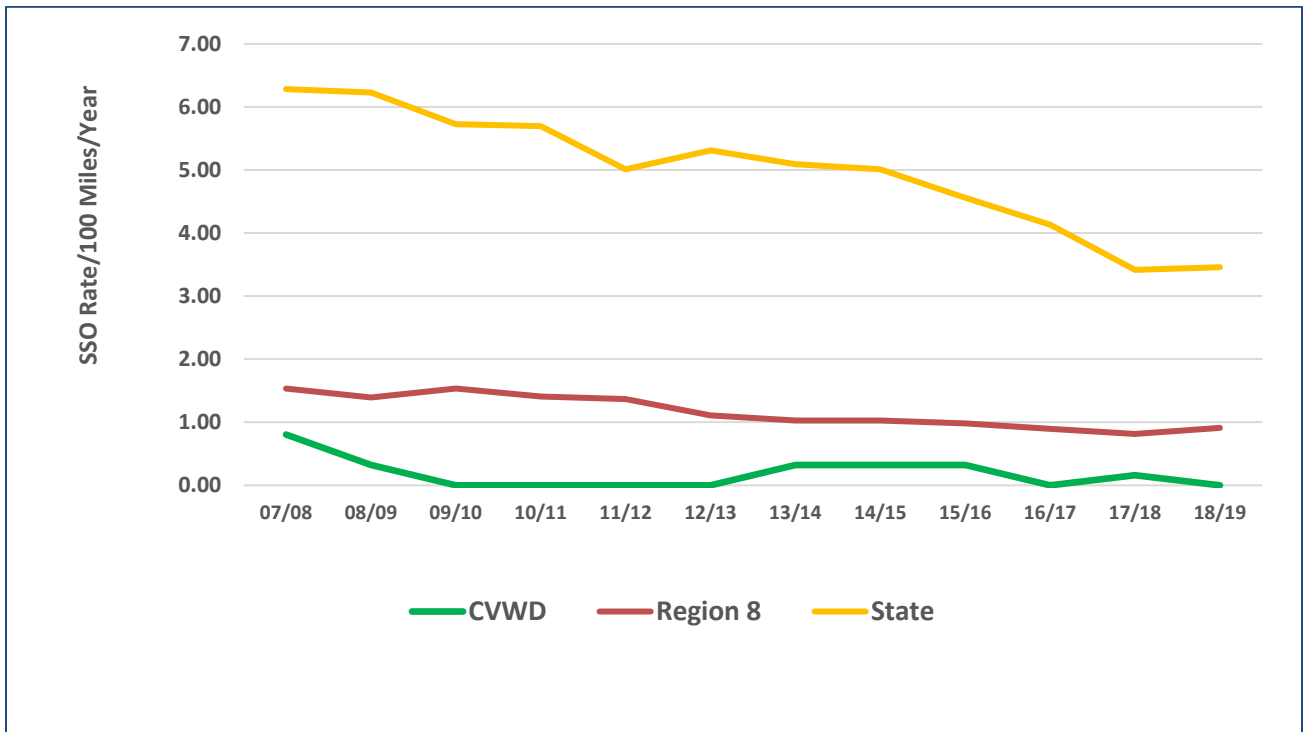


Figure IX – 6: Comparison of SSO Rate per 100 Miles of Sewers



IX-4: Performance Monitoring and Program Changes

CVWD will evaluate the performance of its sewer collection system at least annually using the performance measures identified in this Element. CVWD will update the data and analysis at the time of the annual evaluation and will place an Annual Performance Report on a Board agenda and after approval on the SSMP webpage.

CVWD may use other performance measures in its evaluations. CVWD will prioritize its actions and initiate changes to this SSMP, its operations and maintenance practices and procedures, and any related programs based on the results of these evaluations. This will be done as part of the biannual internal audit (see Element X).

IX-5: References

The data used in this section were taken from the following references:

- CIWQS SSO data as of September 9, 2019 for WDID 8SSO11383

Element X: SSMP Program Audits

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.

X-1: Audits

CVWD will audit the implementation and compliance with the provisions of the WDR and this SSMP every two years as required by the WDR. The next audit will be conducted and completed no later than November 2021. The audit will be conducted by a team consisting of District Staff selected from the Operations and Engineering Departments. The audit team may also include members from other outside sewer collection system agencies or professional consultants. During the SSMP audit, CVWD will conduct a record keeping audit of its SSO files supporting the CIWQS certified reports during the audit period to assure that the files are complete, contain all required records and documentation as stated in the MRP and OERP and that the files contain no extraneous or conflicting records or information.

The SSMP Audit Checklist (Appendix C) is used to inform the audit interview process and includes the WDR requirements for each SSMP element and the appendices. The results of the audit, including the identification of any deficiencies and the steps taken or planned to correct them will be included in a separate certified Internal Audit Report Action Plan. Upon completion of the audit report and certification by the LRO, CVWD will place a copy of the final Audit Report including the SSMP Audit Checklist in Appendix B, Sewer System Annual Audit Reports of the SSMP. Modifications and changes to the SSMP identified during the audit will be identified in Appendix D, SSMP Change Log.

The audit should contain information about successes in implementing the most recent version of the SSMP and identify revisions that may be needed for a continuously improving and effective program. Information collected will be used in preparing the Audit Report. Tables and figures or charts will be used to summarize information about performance results. An explanation of the SSMP development, and accomplishments in improving the sewer system, should be included in the audit report, including:

- How CVWD implemented the sewer system SSMP elements in the past year;
- The effectiveness of implementing each SSMP element;
- A description of the additions and improvements made to the sanitary sewer collection system in the audit period; and

- A description of the additions and improvements planned for the upcoming reporting year with an estimated schedule for implementation.
- Status of any deficiencies or corrective actions identified to improve program performance.

X-2: SSMP Updates

CVWD Board will recertify its SSMP at least every five years or when substantial changes are made to the SSMP. CVWD will determine the need to update its SSMP more frequently based on the results of the audits and the performance of its sanitary sewer collection system using information from the Monitoring and Measuring Program Element IX. In the event CVWD decides that an update is warranted, the process to complete the update will be identified. CVWD will complete the update and take the revisions to Board within one year of identifying the need for an update.

X-3: References

None.

Element XI: Communication Program

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.

XI-1: Communication during SSMP Development and Implementation

CVWD, at least annually, communicates with CVWD Board at public meetings that allow for input from the public regarding the implementation and results of the collection system operations. CVWD’s Sewer Maintenance Foreman and Public Affairs Officer are responsible to coordinate all communications activities and for all materials on CVWD SSMP webpage including the posting of the Board adopted SSMP and all critical supporting documents

Information provided upon request to interested parties includes: a copy of completed sections of the SSMP, brochures and materials regarding collection system operations and maintenance and contact information and/or opportunities for input into the development and implementation of the collection system operations.

An Annual Collection System Performance Report will be received and filed by the CVWD Board, at a regularly scheduled meeting. Receipt of the report will be documented in the minutes of that public meeting and placed on CVWD website. The performance information will include the performance measures listed in Element IX: Monitoring, Measurement, and Program Modifications, operations performance results and will be compiled following the end of the fiscal year in an Annual Collection System Performance Report.

XI-2: Communication with Regional and Joint Wastewater Collection Systems

CVWD regularly communicates with the IEUA on matters affecting the operations and maintenance of the sewers, FROG issues and treatment issues.

XI-3: References

None.

Appendices

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DRAFT

Appendix A: Sewer System Management Plan Adoption Documents

RESOLUTION NO. 2020-2-2

RESOLUTION OF THE BOARD OF DIRECTORS OF THE CUCAMONGA VALLEY WATER DISTRICT ADOPTING THE SEWER SYSTEM MANAGEMENT PLAN – 2020 UPDATE

WHEREAS, on May 2, 2006, the State Water Resource Control Board adopted Order No. 2006-0003-DWQ – Statewide General Waste Discharge Requirements requiring 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, to comply with the terms of said order to eliminate Sanitary Sewer Overflows; and

WHEREAS, on February 20, 2008, the State Water Resource Control Board issued Order No. WQ 2008-0002-EXEC amending the Monitoring and Reporting requirements set forth in Order No. 2006-0003-DWQ; and

WHEREAS, on July 30, 2013, the State Water Resource Control Board issued Order No. WQ 2013-0058-EXEC amending the requirements set forth in Order No. 2006-0003-DWQ and Order No. WQ 2008-0002-EXEC; and

WHEREAS, the terms of Order No. 2006-0003-DWQ require owners of sanitary sewer systems to develop and implement a system-specific Sewer System Management Plan; and

WHEREAS, the Sewer System Management Plan must include provisions to provide proper and efficient management, operation, and maintenance of sanitary sewer systems, and must contain a spill response plan that establishes standard procedures for immediate response to an Sanitary Sewer Overflow in a manner designed to minimize water quality impacts and potential nuisance conditions; and

WHEREAS, the Cucamonga Valley Water District (“District”) owns, operates and maintains a sanitary sewer system greater than 420 miles in length and is subject to such Orders; and

WHEREAS, the District developed and approved a Sewer System Management Plan on April 28, 2009 as required by Order No. 2006-0003-DWQ; and

WHEREAS, the District has prepared a comprehensive document titled Sewer System Management Plan – 2020 Update to reflect the District’s current sanitary sewer system management practices; and

WHEREAS, the Sewer System Management Plan – 2020 Update includes significant updates and therefore must be approved by the Board of Directors for re-certification with the State Water Resources Control Board.

RESOLUTION NO. 2020-2-2

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE CUCAMONGA VALLEY WATER DISTRICT that:

1. The above Recitals are true and correct and made an operative part of this Resolution.
2. The Board of Directors, in accordance with State Water Resource Control Board Order No. 2006-0003-DWQ, hereby approves the Sewer System Management Plan – 2020 Update, a copy of which is attached hereto and incorporated herein by reference.
3. The Legally Responsible Officer of the District, as defined and required by the Orders, is hereby authorized and directed, in accordance with State Water Resource Control Board Order No. 2006-0003-DWQ, to complete the re-certification process by entering the required data into the State Water Resource Control Board online database.
4. The Legally Responsible Officer is hereby authorized and directed, in accordance with State Water Resource Control Board Order No. 2006-0003-DWQ, to submit the original re-certification form to the State Water Resource Control Board, Division of Water Quality.

APPROVED, ADOPTED AND SIGNED this 25th day of February, 2020

CUCAMONGA VALLEY WATER DISTRICT



James V. Curatalo, Jr.
President

ATTEST:



John Bosler
Secretary and General Manager/CEO

APPROVED 5/12/09

**MINUTES OF A REGULAR MEETING
of the
CUCAMONGA VALLEY WATER DISTRICT
BOARD OF DIRECTORS**

April 28, 2009

A regular meeting of the Cucamonga Valley Water District Board of Directors was called to order at 6:02 p.m. by President Reed, who then led attendees in the Pledge of Allegiance.

CALL TO ORDER

In Attendance

Board Randall J. Reed, President
 Kathy Tiegs, Vice President
 Oscar Gonzalez, Director
 Henry L. Stoy, Director
 James V. Curatalo, Jr., Director

Staff Robert A. DeLoach, Secretary to the Board, General Manager/CEO
 Martin Zvirbulis , Deputy General Manager
 Jeff Ferre, BB&K District Legal Counsel

Rossana Ammari, Risk Management Officer
John Bosler, Director of Operations & Engineering
Chad Brantley, Sr. Accountant
Todd Corbin, Assistant General Manager
Carrie Corder, Director of Financial & Administrative Services
Ed Diggs, Water Production Superintendent
Betty Fien, Engineering Assistant
Rob Hills, Water Treatment Superintendent
Will Kolbow, Finance Officer
Rita Kurth, Water Resource Administrator
Kristeen Ramirez, Public Affairs Officer
George Rodriguez , Construction & Maintenance Superintendent
Jo Lynne Russo-Pereyra, Assistant General Manager /External Affairs
Shaun Stone, Sr. Engineer
Bonnie Tazza, Executive Assistant, General Manager/CEO
Braden Yu, Sr. Engineer

PRESENTATIONS

Ms. Kristeen Ramirez read a proclamation designating May 2009 as *California Water Awareness Month*. This month is dedicated for water agencies, cities , counties and organizations throughout the State to educate the public about water management efforts. The City of Rancho Cucamonga will be presenting a similar proclamation at their May 20, 2009 meeting. Ms. Ramirez and Director Curatalo will attend to accept the proclamation.

**PROCLAMATION
-MAY2009
CALIFORNIA
WATER
AWARENESS
MONTH**

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Page 2 of 10

Directors were asked to formally approve the proclamation. Vice President Tiegs motioned to designate May 2009 as California Water Awareness Month. The motion was seconded by Director Gonzalez and unanimously passed.

ADDITIONS/DELETIONS TO THE AGENDA

Mr. DeLoach stated that the presentation to Mr. Lloyd Michael is scheduled for the May 12, 2009 meeting, and will be removed from tonight's agenda.

DELETE
PRESENTATION
TO LLOYD
MICHAEL

PUBLIC COMMENT

There were no members of the public present.

NO PUBLIC
COMMENT

GENERAL MANAGER/CEO COMMUNICATIONS

Mr. DeLoach gave the following report:

GENERAL MGR/
CEO
COMMUNICATIONS

- The media projector is not working this evening, however, Directors can view PowerPoint presentations on their computer screens. Members of the audience were given copies of the presentations.
- The swine flu is a growing concern. The Center for Disease Control (CDC) has issued a public health emergency. The District is providing information and hygienic supplies to employees, and is taking precautions to ensure their health and the health of our customers.
- A letter was sent to approximately 12--15 of our high volume water users advising them of the MWD impending rate increase and drought allocation plan. If they have any questions, they were directed to contact Mr. Darron Poulsen, Customer Service Officer.
- We received a letter this week from Rancho Cucamonga City Manager Jack Lam. As a result of our meetings regarding water conservation Ordinances 47 and 48, and how the City could manage its water usage, the City discovered that although it has been available to them, they had not been utilizing the Interruptible Government Rate. Mr. Lam's letter requested that all parks, parkways, and open spaces not currently on the Interruptible Government Rate be transferred effective May 1, 2009. [In response to a question by Director Curatalo, Mr. DeLoach advised that the City has about 300-400 meters. Of that total, less than 30 were on the Interruptible Government Rate.
- CVWD and City staff held a second meeting today regarding conservation issues, and for the most part, all of the City's concerns have been addressed. The meeting was very positive, and concluded with an exchange of ideas for the joint Board/Council meeting in June. Mr. DeLoach will talk with President Reed and Directors regarding the agenda.

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- A Public Hearing regarding IEUA's pass-through sewer charge is set for June 9, 2009. In accordance with Proposition 218 requirements, notices were sent to all property owners. The notices contain all the correct and legal language. Mr. DeLoach pointed out two significant portions of the notice which differ from the standard rate increase notice: (1) The notice states that this is not a CVWD charge, but a pass-through of IEUA's charge. (2) A chart shows the current and proposed rate increase for IEUA's Treatment Charge. There is no change to the CVWD Local Service Charge.

Despite this specific information, we have received more e-mails, letters, and telephone calls than ever before protesting this increase. Most of the objections cite the economic situation and those on a fixed or low income.

In conversation with Richard Atwater of IEUA, Mr. Atwater commented that he has heard no concerns from other contracting agencies, and that CVWD is the only service area receiving protests. Despite the protests, Mr. DeLoach stated that the District takes a lot of time reaching out to customers, and communicating issues clearly. Mr. DeLoach wanted to advise the Board that we are receiving communications from customers who are unhappy.

- Mr. DeLoach invited Kristeen Ramirez to report on May's Water Awareness Month. Kristeen highlighted a few of the activities:
 - (1) Upgrades to the Lloyd Michael Treatment Plant Tour are complete. They include incorporating the Water Ranger™ family into the pre-tour video and in the new signage placed throughout the tour route. These improvements make the tour more interactive for students.
 - (2) Water Awareness Day is Saturday, May 9, 2009 from 11:00 a.m. to 2:00 p.m. This year there are 27 vendors participating (compared to 19 vendors last year). New vendors include the Rancho Cucamonga Animal Shelter, the Ontario Reign hockey club, and the Inland Empire Resource Conservation District. Give-aways will be re-usable grocery bags and water bottles.
 - (3) CVWD Public Affairs received an award of merit from the California Association of Public Information Officers (CAPIO). The award is for excellence in communications, and was granted for the Treatment Plant Tour upgrades. Cities, fire districts, and redevelopment agencies throughout the State compete for this award. The District is proud to have attained this prestigious award.
 - (4) Reminder to save the dates of May 9th for Water Awareness Day and May 15th for the Local Facilities Tour.

Vice President Tiegs asked if the students who were taking the tour asked about requirements for a career in the Water industry, and was advised that the tour guide does address this. Students also ask related questions to staff members

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working at the plant.

Director Curatalo thanked staff, stating that all of these " are aimed at the heart of what we want to do."

President Reed commented that the programs being developed are important outreach tools to get the word out on conservation, especially with the looming drought situation. He added that Water Awareness Day is a good time to highlight how precious water is, and what we can do to use it wisely.

Vice President Tiegs asked about an action item from the previous joint meeting with the Rancho Cucamonga City Council. Specifically, a request by Councilmember Diane Williams about developing a demonstration garden at a well site on Red Hill. Mr. DeLoach stated that he recalls all of the action items have been followed up on between himself and Mr. Lam. In regard to this piece of property, the City maintains and operates the lot. The District offered to partner with the City on a demonstration garden, however, the City cited maintenance and budget concerns. This was over a year ago, and with budgets being much tighter, it probably is not a priority.

CONSENT AGENDA

- (a) Approve Minutes of the March 10, 2009 regular meeting.
- (b) Approve Board Calendar of Events.
- (c) Approve Production report for the month ending March 31, 2009.
- (d) Approve the Cash and Investment Report for the month ending March 31, 2009.
- (e) Approve the Monthly Budget Report for the month ending February 28, 2009.

CONSENT
 AGENDA
 APPROVED

On a motion by Vice President Tiegs, and seconded by Director Stoy, the Consent Calendar was approved as submitted (5/0).

PUBLIC HEARING TO APPROVE CVWD' S SEWER SYSTEM MANAGEMENT PLAN(SSMP)

(Staff report by Mr. George Rodriguez, Construction & Maintenance Superintendent). On April 14, 2009 the Board of Directors set this evening as a public hearing date to receive public input and consider adoption of a proposed Sewer System Management Plan (SSMP). Staff considers the completeness and practicality of the plan as a critical component for its long range plans to comply with all applicable State and Federal requirements under the Clean Water Act and Santa Ana Regional Water Quality Control Board waste discharge requirements. On April 20, 2009 a *Notice of Public Hearing* was published in the local newspaper and posted on the District's public notice board. No comments have been received from the public. Staff is recommending adoption of the SSMP.

PUBLIC HEARING
 APPROVE SEWER
 SYSTEM
 MANAGEMENT
 PLAN (SSMP)
 APPROVED 5/0

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At 6:24 p.m. President Reed opened the public hearing, and asked for any comments from members of the public. There were no members of the public present and no comments. The public hearing was closed at 6:25 p.m.

Director Curatalo motioned to approve the District's Sewer System Management Plan. The motion was seconded by Director Tiegs. Director Curatalo complimented staff on an excellent job. He stated that the plan is very comprehensive, informative, and easy to understand. It is a very practical plan that can be implemented at the operational level, and is not just a 'cookie cutter' plan to satisfy a legal requirement. The motion passed 5/0.

ADOPT RESOLUTION 2009-4-8 APPROVE THE AGREEMENT TO PREFUND OTHER POST-EMPLOYMENT BENEFITS THROUGH CALPERS AND THE DELEGATION OF AUTHORITY TO REQUEST DISBURSEMENTS FROM THE OTHER POST-EMPLOYMENT PREFUNDING PLAN

(Staff report and PowerPoint presentation by Will Kolbow, Finance Officer).

Retirement benefits (pensions) have traditionally been accounted for as they are earned. The Government Accounting Standards Board Statement 45 (GASB 45) now requires the District to account for health benefits similar to pension benefit accounting. GASB 45 requires an actuarial valuation every three (3) years to calculate the value of benefits earned, and those benefits predicted to be earned in the future, for current and already retired employees. The valuations must be completed by June 30, 2009. The statement was originally released in 2005, but due to the complexity of the calculations, more time was allowed to implement it.

The valuation is outlined in three parts, and to illustrate the process, Mr. Kolbow cited a fictitious employee, Joe Cucamonga, age 36, hired in 1997.

1997-2008 Earned Benefits: Benefits earned from the time of his employment to the prior fiscal year.

2009 Annual Required Contribution: The benefits earned in the current fiscal year.

2010 - 2028 Future Benefits: Benefits up to projected retirement date.

The premise of GASB 45 is that as an employee is earning benefits and those expenses should be incurred by the District. The three elements added together are referred to as the present value of total benefits, which is basically the value of all the benefits he has, and will earn.

There are two (2) components of the annual required contribution. To avoid being hit with a large liability, GASB will allow us to phase-in the prior earned benefits over a 30 year period. The annual required contribution includes the amount earned in the current year and the amortization of the prior benefits earned from 1997 to now (the current year expense).

With this information, staff now looked at two funding options:

#1 - Not to fund [PAY-Go Only]. Continue paying retiree health care benefits as in the past, upon receipt of the bills. However, this results in a growing liability each

RESO. 2009-4-8
AGREEMENT TO
PREFUND OTHER
POST-
EMPLOYMENT
BENEFITS
THROUGH
CALPERS AND
DELEGATE
AUTHORITY TO
REQUEST
DISBURSEMENTS
FROM THE
OTHER POST-
EMPLOYMENT
PREFUNDING
PLAN

ADOPTED 5/0

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year. Furthermore, the bond agencies view this unfavorably because there isn't a plan to deal with ever rising health care costs.

#2 - Pay All of the Obligation [Full Funding]. This would require us to fund the obligation through a CalPERS Section 115 Trust Fund. (CalPERS earns the highest interest and has a solid reputation). The cost is higher initially, but there is no liability, and the District could earn interest at the highest rate of 7.75%.

Staff considered both options, either a high liability or a high cash outflow, with neither being favorable. So, a third option [Double PAY-Go Funding] was created. This would require paying the normal retiree benefit obligation, and pay the amount again toward the trust fund. Liability is lower, and this plan is viewed more favorably by the bond agencies. Interest rate is variable, starting at -0- and increases to 7.25%.

Mr. Kolbow showed a comparison of the options, explaining how each would affect the District:

	Option #1 PAY-Go Only Funding	Option #2 Full Funding	Option#3 Double PAY-Go Funding
Investment Return	4.25%	7.75%	4.25-7.75%
Earned Benefits as of 6/30/08	\$14,855,000	\$9,127,000	\$9,443,000
Present Value of Total Benefits	26,638,000	13,024,000	14,347,000
OPEB Liability in 10 Years	15,227,000	-0-	2,336,000
Annual Required Contribution	1,555,000	1,012,000	1,053,000
Annual Payment by CVWD	297,000	1,012,000	594,000

Option 3 is the most favorable for the District. It is a solid plan, and a good balance between the other two options. Therefore, staff is recommending that the board approve Option #3, the Double PAY-Go amount, and approve Resolution 2009-4-8 which Approves the Agreement and Election to Prefund Other Post-Employment Benefits through CalPERS and the Delegation of Authority to Request Disbursements from the Other Post-Employment Prefunding Plan.

Vice President Tieg asked Mr. Kolbow to expand on how this is accounted for, as this seems very difficult to track employees. He stated that every two years an actuary performs a study. The study is based on the employee population and different probabilities (not by individual employee), and results in one expense for the entire district. (GASB requires a study be done every three years; however, the retirement trust fund has stricter standards and requires a study every two years).

President Reed, as Chairman of the Finance Committee, stated that the Committee met twice: The first time to review options #1 and #2. Option #3 was presented at the second meeting. Option #3 is the best choice. Although the annual payment is higher, the 10-year liability is down to approximately \$2.3 million dollars.

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Director Stoy motioned to adopt Resolution 2009-4-8, Approving the Agreement to Prefund Other Post-Employment Benefits through CalPERS and the Delegation of Authority to Request Disbursements from the Other Post-Employment Prefunding Plan as recommended by staff. The motion was seconded by Director Curatalo and unanimously passed.

Director Gonzalez commended Mr. Kolbow on his presentation, and thanked staff for looking at other options, and making a complicated matter understandable.

RESOLUTION 2009-4-6 APPROVING THE ISSUANCE OF THE 2009 CLEAN RENEWABLE ENERGY BONDS

(Staff report by Assistant General Manager, Todd Corbin).

On April 15, 2009 the Finance Committee and this afternoon, the Cucamonga Public Facilities Corporation Board of Trustees approved a financing plan to issue bonds for construction of a solar energy recovery system at the Frontier Project. The bonds are called CREBS (Clean Renewable Energy Bonds). CREBS funds projects that generate electricity from clean or renewable energy sources, which means the solar panels on the south side of the FP building which convert energy into electricity would qualify. The benefit to the District is that this is an interest free loan (an interest free bond) which equates to \$200,000 savings over the life of the bonds. Lenders will receive a tax credit in the amount that they would ordinarily have received in interest payments.

Staff received notice last year that we were approved for issuing the CREBS bonds, and is now recommending to move forward to issue the Bonds. The repayment term is 14 years.

Mr. Corbin stated, that Director Gonzalez pointed out, that Stone & Youngberg donated their bond underwriting services, which equate to about \$15,000--\$20,000. This in-kind service contribution will further lower the cost of issuing the bonds.

Staff recommends that the Board of Directors approve Resolution 2009-4-6, to Initiate the Issuance of the CREBS, and Authorize the General Manager/CEO and Assistant General Manager to Execute the Required Documents.

President Reed stated that at their meeting earlier today, the Cucamonga Public Facilities Corporation approved the bonds. Most of the questions were already answered, since the same Directors serve on the Corporation Board and CVWD Board.

Vice President Tiegs motioned to adopt Resolution 2009-4-6, Approving the Issuance of the 2009 CREBs, and Authorize the General Manager/CEO and Assistant General Manager to Execute the Required Financing Documents and Agreements. Director Stoy seconded the motion, which passed unanimously.

RESO. 2009-4-6
ISSUANCE OF
THE 2009 CLEAN
RENEWABLE
ENERGY BONDS

ADOPTED 5/0

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BOARD COMMITTEE REPORTS

COMMITTEE
REPORTS

Finance Committee Meeting of April 15, 2009

(Report by Randall Reed, Finance Committee Chairman) Director Reed stated that several items have already been discussed: (1) The proposed MWD rate increase and AB 3030. AB 3030 would allow a pass-thru line on the water bill. This will be considered at a public hearing. Once this is approved, over the next two years, we will not need to hold a public hearing to approve additional pass-through increases by IEUA or MWD. (2) GASB 45 was already discussed, with the Committee recommending approval of Option #3. (3) The CREB's bonds were also discussed, and were just approved.

FINANCE COMM.
MTG OF 4-15-2009

BOARD MEMBER REPORTS

BOARD MEMBER
REPORTS

Director Gonzalez (no report)

Vice Chairman Tieg

- Participated in an ACWA Region 8, 9, 10 Planning Work Group meeting. Another joint work group meeting is tentatively scheduled October 8-9 in Lake Elsinore. Please reserve the date if you are interested.
- Last Thursday, she attended joint ACWA/Water Education workshop in Irvine. Reminders of the drought's impacts are, to name a few, mandatory rationing (21 agencies have implemented rationing) and voluntary conservation (implemented by 59 agencies). Also impacted are economic development, hydropower generation, recreation, air quality, and unfortunately, it is predicted that this year's fire season will be extremely bad.

There are 320 public and private water agencies within MWD's service area. CVWD is one of 320 agencies who have to pass along rate increases. Vice President Tieg stated that she came away with the need to ensure water resource diversity-which is being practiced here at the District: Rates and charges show that the commodity has been and is currently undervalued, so the cost of services will continue to increase. Water use efficiency is core, and it is important that CVWD continue taking advantage of every opportunity to teach our citizens, students, and everyone we come in contact with.

- Vice President Tieg asked what would be CVWD's percentage of water supply reliability after MWD's 10% reduction. Mr. DeLoach advised that the District's reliability would be 100%.

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Director Curatalo

- In response to the public's understanding of the pass thru charge, he received a comment from an individual regarding the District raising its sewer rates. There is still some misunderstanding of the information we provide to them.
- In the past, the District provided bottled water to *Run for the Wall*, a motorcycle group that rides from Rancho Cucamonga to Washington DC to benefit those service members missing in action. Director Curatalo was approached by Councilmember Sam Spagnolo and City Treasurer Jim Frost (who is a member of the organization) for bottled water. Director Curatalo referred them to Larry Lawrence of Arrowhead Water. Arrowhead Water agreed to provide about 2 pallets of water for the event. At the May 6, 2009 City Council meeting, the Council will recognize Arrowhead Water for their contribution. Director Curatalo will attend the meeting.

Director Stoy

- Kudos to the Public Affairs Staff upon receiving the CAPIO award.
- Directors received a new Customer Service Guide. It is very informative and customers will appreciate receiving it.
- He commended Mr. Rodriguez ("Chico") for his work on the Sewer System Management Plan. It is reassuring to know that many of the requirements were already in place.

President Reed

- Read that Monte Vista Water District has already implemented mandatory reduction in watering of lawns. As Vice President Tiegs stated, cities and water districts are becoming more proactive in conservation efforts.
- Congratulated the Public Affairs staff on the CAPIO award.
- Complimented staff on the revised Customer Service Guide. It was laid out very well, addresses commonly asked questions, and does a good job highlighting the Treatment Plant.
- Thanked staff. There's a huge mission before us this summer. There is no new water, and we have to get the message out on how we can best use what we have.
- In thinking about the rate payers, MWD is going to be asking for a 40% increase over the next two years, which we have to pay. He is concerned how an agency can ask for a 20% increase plus a surcharge given the current unemployment and the impacts to our community of the water usage.
- He is excited about May, because it is time to get the message out. There are many things staff is involved with, such as preparing the treatment plants for tours.

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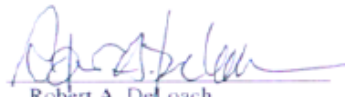
- President Reed thanked the maintenance crews for their hard work on the sewer system management plan.

ADJOURNMENT

Vice President Tiegs motioned to adjourn the meeting in honor of all staff at CVWD. The motion was seconded by Director Curatalo and unanimously passed.

Adjourned at
6:55 p.m.

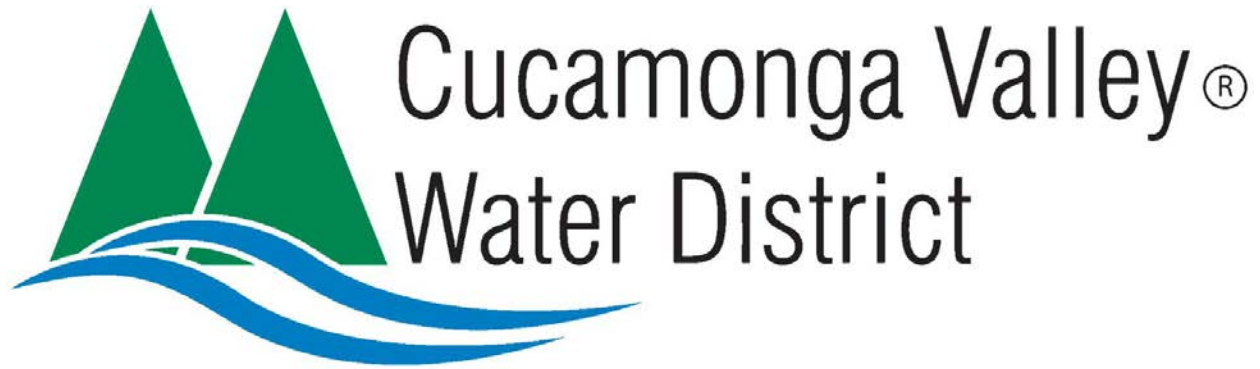
The meeting adjourned at 6:55 p.m.


Robert A. DeLoach
Secretary/General Manager

ATTEST:


Randall James Reed
President

Appendix B: Sewer System Management Audit Reports



Service Beyond Expectation

**Cucamonga Valley Water District
Sewer System Management Plan
Internal Audit Report
December 2019
WDID: 8SSO11383**

**Prepared By:
Causey Consulting
Walnut Creek, California 94598**

CERTIFICATION

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 who manage the system or those 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.



Rob Hills
Director of Operations

Acronym Listing Used in The Audit Report

CIP	Capital Improvement Program
CIWQS	California Integrated Water Quality System
CMMS	Computerized Maintenance Management System
CVWD	Cucamonga Valley Water District
DS	Data Submitter
FROG	Fats, Roots, Oils and Grease
FSE	Food Services Establishment
GIS	Geographic Information System
IEUA	Inland Empire Utilities Agency
LRO	Legally Responsible Official
MRP	Monitoring and Reporting Program
OERP	Overflow Emergency Response Plan
PS/FM	Pump Station/Force Main
SARWQCB	Santa Ana Regional Water Quality Control Board
SOP	Standard Operating Procedure
SSMP	Sewer System Management Plan
SSO	Sanitary Sewer Overflow
SSORP	Sanitary Sewer Overflow Response Plan
SWRCB	State Water Resources Control Board
WDID	Waste Discharge Identification Number 8SSO11383
WDR	Sanitary Sewer Waste Discharge Requirements
WQMP	Water Quality Monitoring Plan

1. SSMP Internal Audit

This internal audit reviews the Cucamonga Valley Water District (CVWD, District) draft Sewer System Management Plan dated September 9, 2012 (SSMP). The District originally adopted the District SSMP on April 30, 2009, in compliance with the State Water Board Order No. 2006-0003-DWQ General Sanitary Sewer Waste Discharge Requirements (WDR). This is the first audit that has been prepared by or for the District since the adoption of the original document date April 30, 2009.

The audit evaluates the documentation and implementation since the 2012 draft revision of the SSMP. The audit is intended to meet State Water Resources Control Board (SWRCB) 2006 WDR, for agencies that own or operate more than one mile of sanitary sewer collection systems discharging to a publicly owned treatment plant. It also evaluates compliance with the September 2013 Monitoring and Reporting Program (MRP) revised overflow event categories and recordkeeping requirements. Consequently, this audit assesses the current state of compliance with WDR and the MRP provisions including, effectiveness of program implementation, identifies "deficiencies" found, and recommends for corrective actions to remedy those deficiencies.

Causey Consulting performed this internal audit on behalf of the District through evaluation of SSMP documentation provided by the District, publicly available data sources such as the District website and California Integrated Water Quality System (CIWQS), and meetings and interviews with District staff involved in the implementation of the SSMP and the District sanitary sewer collection system operations. The following table lists the audit participants interviewed during August 2019.

Participant	Classification	Agency
Paul H. Causey	Lead Auditor	Causey Consulting
John Bosler	General Manager/CEO	CVWD
Robert Hills	Director of Operations	CVWD
Robert Koczko	Construction & Maintenance Manager	CVWD
Eduardo Espinoza	Director of Engineering	CVWD
Tuan Truong	Engineering Manager Capital & Development	CVWD
Praseetha Krishnan	Engineering Manager Water Resources & Planning	CVWD
Justin Martinez	Assistant Engineer	CVWD
Russel Silva	Project Coordinator	CVWD
Shawn Spromberg	Wastewater Utility Supervisor	CVWD
Gabriel Parisi	Lead Wastewater Utility Worker	CVWD
David Scott	Wastewater Utility Worker	CVWD
Brenda Watson	GIS Analyst	CVWD
Erin Morales	Government & Public Affairs Supervisor	CVWD
Eric Grubb	Government & Public Affairs Manager	CVWD
Rossana Ammari	Risk Management Analyst	CVWD
Robbie Victorino	Safety Analyst	CVWD
Randy Rockwell	Lead Engineering Inspector	CVWD
Jeff Guerin	Engineering Inspector	CVWD

Shane Stevens	Environmental Services Supervisor	CVWD
Eric Johnson	Engineering Inspector	CVWD
Tere Worsham	Engineering Inspector	CVWD
Adriana Vega	Administrative Assistant	CVWD
Shawn Haggerty	Legal Counsel	BBK

2. Audit Schedule

This audit of the SSMP was authorized pursuant to an agreement between the District and Causey Consulting dated April 25, 2019. Internal audits of an agency SSMP must be conducted every two years from the original adoption date of the SSMP by the governing board. This Audit Report covers the period from the draft in 2012 to August 2019. The audit included a review of the September 2012 Draft SSMP, all appendices, and other ancillary documents provided by the District staff. The audit began with a document request to the District staff for relevant documents supporting the SSMP and review of the SSMP revisions in 2012.

Actual field interviews of staff positions was conducted beginning with a kick-off meeting on August 12, 2019, with the District sewer system audit project sponsors. That was followed with two and a half days of interviews as listed on Attachment No. 1, Audit Interview Schedule. The purpose of the interviews was to gather information on the current operations and procedures of the District and to further determine compliance with the WDR and the 2013 MRP. Prior to the kick-off meeting and interviews, a comparison of the 2012 draft SSMP to the required WDR Elements and sub-Elements was prepared to evaluate the compliance of this draft document with the current regulations (See Attachment 2 below).

3. SSMP Effectiveness

It appears from the extensive interviews conducted with the District staff that the sanitary sewer program has been effective in complying with the WDR and most MRP requirements. The next section of the Audit provides historical visual evidence of the sewer program performance results. Total numbers of SSOs have always been very low since reporting to the State overflow database (CIWQS) began in 2007, and volumes of the overflows have typically been very small for a system of the Districts size. In addition, the District has only experienced two overflows (categories 1 and 2; see Figure 2 below) of the fifteen events in the twelve-year history of State reporting requirements. Both of these overflows were fully recovered and did not impact the public or the environment. They were properly handled in the field by the emergency response personnel.

Further evidence of the effectiveness of the maintenance program is seen by the fact that there is no one particular cause of overflows that raises a concern or would need to be addressed (See Figure 4 below). This overall program success is a result of the aggressive sewer line cleaning and fats, roots, oils, and grease (FROG) programs that indicates a strong commitment by the District to meeting the expressed goals and purposes of the WDR and MRP. In addition, the District's annual SSO rate per 100 miles per year is substantially below both the Santa Ana Regional Board SSO rate of 90 agencies served by the Board and the State of California's rate for all 1200 agencies enrolled under the WDR in the State of California (See Figure 5 below).

However, there are items that should receive additional emphasis to enhance the effectiveness of the program. For example, the 2012 draft SSMP states the District will prepare a Sewer Master Plan every five years. In practice, the District prepared updated master plans in 2003 and 2017. In the event of inspection or enforcement action, this inconsistency could be an area of liability for the District. It is recommended that any statements that may commit or impart requirements upon the District in excess of baseline regulatory requirements should not be included in the SSMP. The District should clearly track all requirements included in the SSMP to assure they are complied with and tracked during internal audit procedures.

Additionally, while the District’s programs have proven to be extraordinarily effective in preventing SSO events, staff may benefit from more frequent training and field exercises. The District has handled emergency response very effectively in the past, however given the very low occurrence of actual events, planned training exercise will enhance the District’s preparedness and account for staff attrition.

Some enhancement of the District overflow file documentation is necessary to further reduce potential liability following overflow events and to assure a complete record of actions and activities by the staff in response to these critical events. In many cases, the need for this documentation may not be of value for three to five years following the incident when memories have faded, or staff has left or retired from the organization.

Finally, sewer system outreach and annual performance information should be expanded to include an annual sewer system performance results to the Board and the addition of regular sewer-related information in quarterly newsletters and in the District Comprehensive Annual Financial Report (CAFR).

4. Historical Sanitary Sewer Overflow Performance

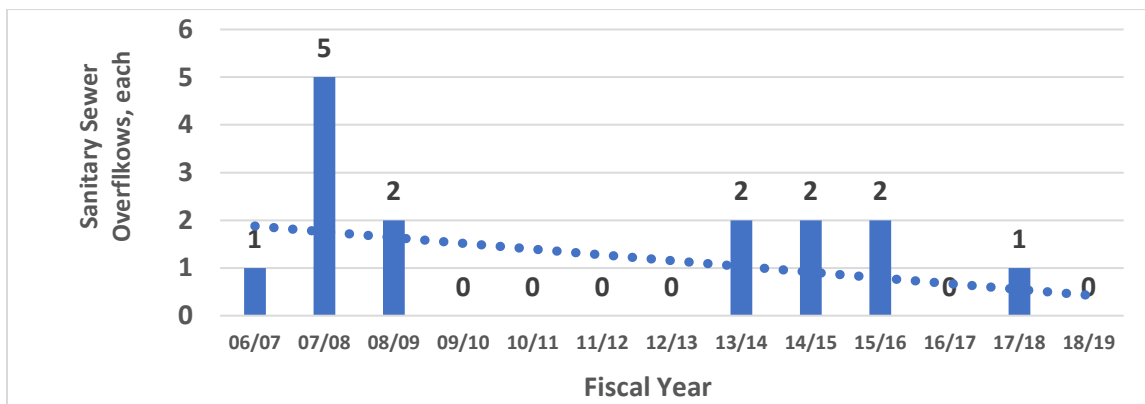


Figure 1: Sanitary Sewer Overflows by Fiscal Year

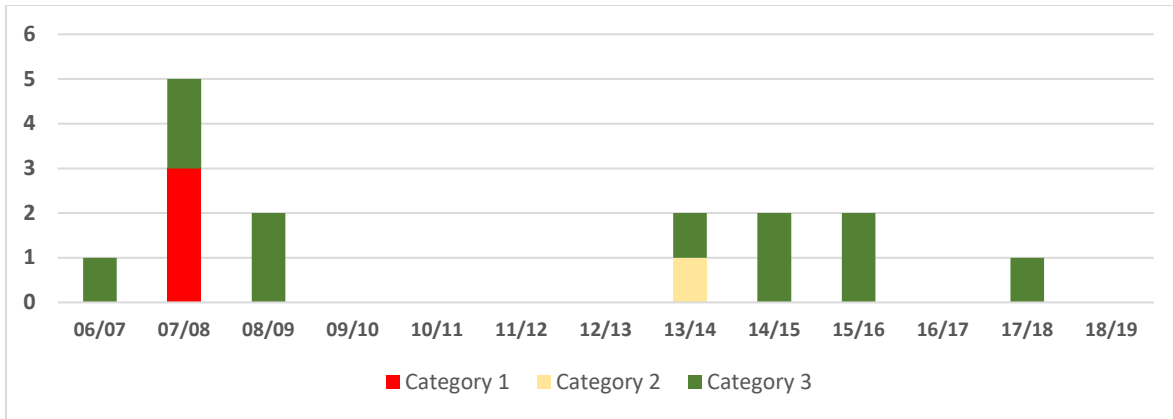


Figure 2: Sanitary Sewer Overflows by Overflow Category by Fiscal Year

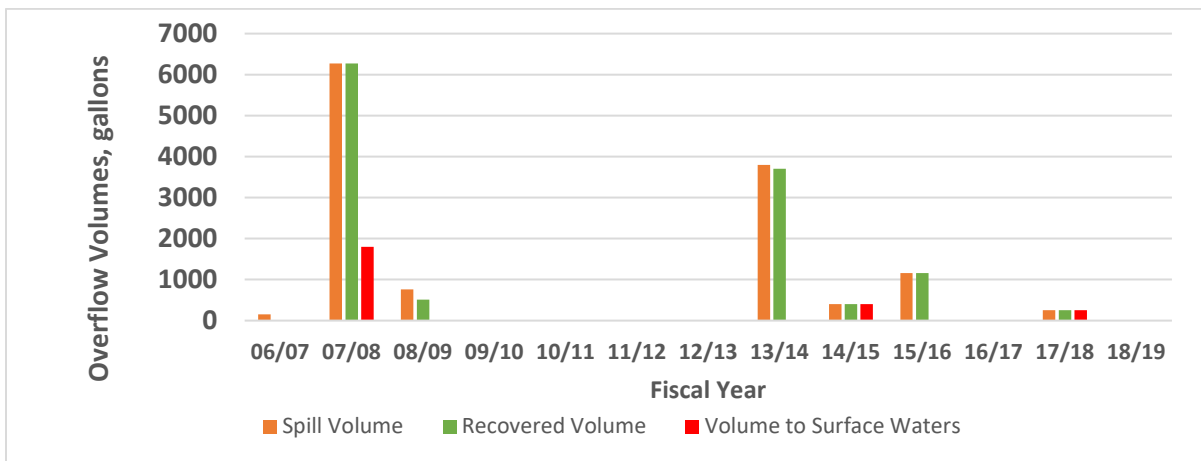


Figure 3: Annual Overflow Volumes by Fiscal Year

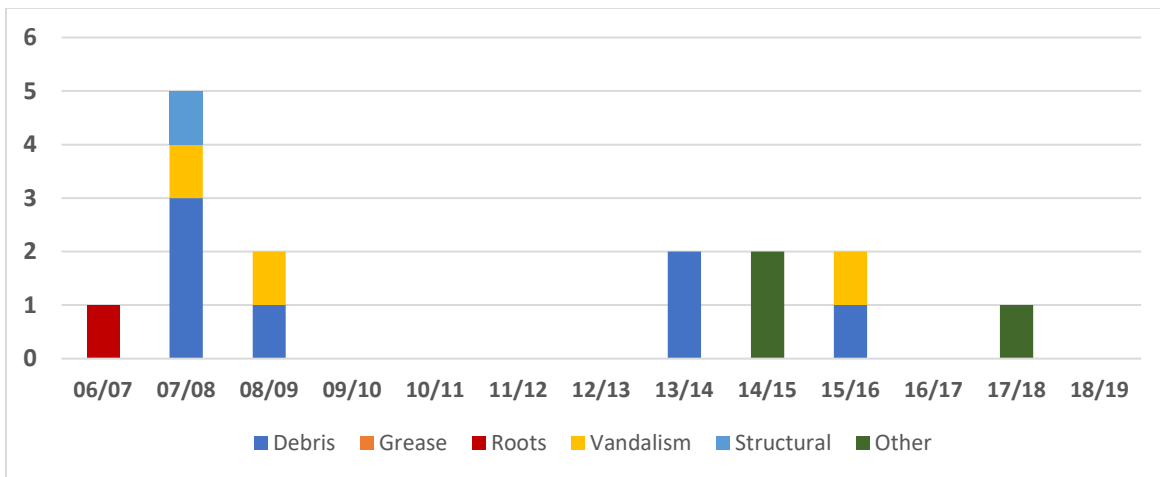


Figure 4: Sanitary Sewer Overflows. Causes by Fiscal Year

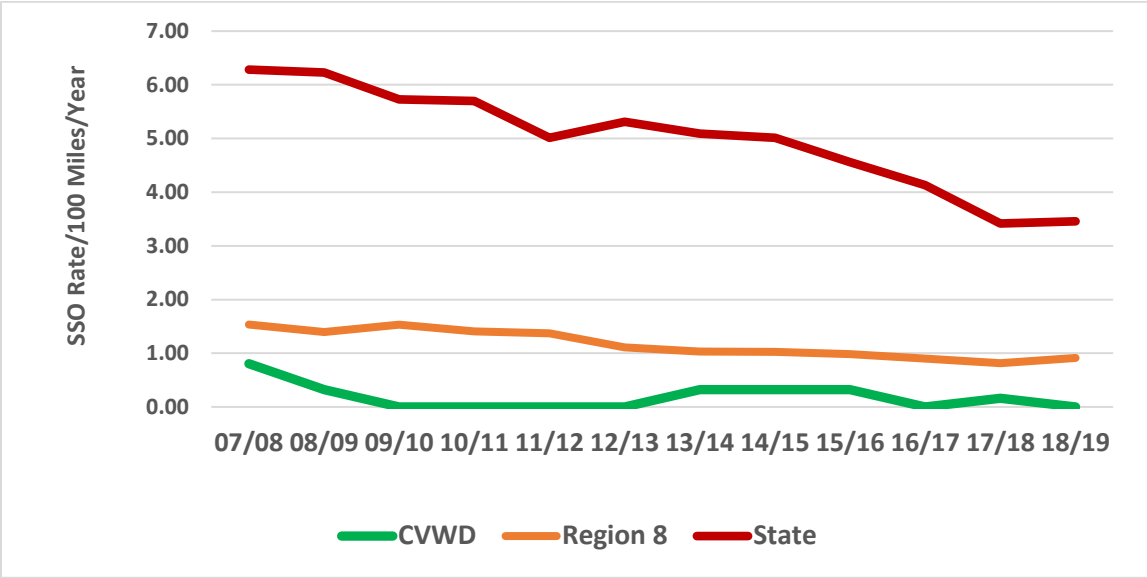


Figure 5: Comparison of District SSO Rate/100 miles/Year to Region 8/State

5. SSMP Findings

The purpose of the SSMP Audit is to evaluate the effectiveness of the District’s SSMP and sanitary sewer programs to identify the strengths and any areas for possible improvement. The information identified here will be used to inform the revisions to the SSMP and the findings to be evaluated during future biannual internal audits. The following findings and recommendations are broken into two categories, General and Element Specific.

Each of the 2012 Draft SSMP Elements were ranked in the attached tables against the WDR Section D13. Requirements utilizing the following sufficiency ranking system and considering both the findings and the associated recommendations:

- *Complies (C) – complies with all WDR objectives*
- *Substantially Complies (SC) – complies mostly with all WDR objectives*
- *Partially Complies (PC) – complies with basic WDR objectives*
- *Marginal Compliance (MC) – complies minimally with basic objectives of the WDR*
- *Does Not Comply – does not comply with WDR objectives*

5-1: General Findings and Recommendations

General Findings	General Recommendations
F1. The 2014 five year governing board SSMP review & adoption not completed. District board has not considered the SSMP since original adoption; five year re-adoption not completed as required.	R1. Schedule at least regular five-year Board adoptions for the SSMP from the original adoption date of 4/30/2009 – next due 2024. Board must review and approve SSMP at least every five years or when significant changes are made.
F2. OERP dated 2008 does not include 2013 MRP requirements and changes.	R2. Complete revision of OERP required.
F3. No District specific Water Quality Monitoring Plan per MRP Section D.	R3. Prepare WQMP specific to CVWD.
F4. Draft provided does not include most figures and appendices.	R4. Establish philosophy for use of figures and appendices – limit appendices.
F5. New MRP requires all identified references in the SSMP to be available or submitted along with the SSMP to the SWRCB – MRP Section C 8 iv.	R5. Add separate reference section to the end of each element; hyperlink all references from SSMP and District SSMP webpage or transmit to SWRCB.
F6. 2012 Draft SSMP does not follow the WDR Section D13 format.	R6. Revisions should follow the WDR SSMP format.
F7. Most appendices are no longer applicable or used.	R7. Consider removal or hyperlink appendices if to remain.

F8. Not all SSMP references available on website or mailed with adopted SSMP to SWRCB.	R8. Add references to SSMP webpage and as the last section of each SSMP Element for ease of management in the future.
F9. Extensive supporting documents to SSMP operations completed in 2009 should be evaluated as to use in current practices.	R9. Retain reference documents but determine if they are standard operating procedures or should be removed from use in the future.
F10. District CIWQS WDID not found in the draft SSMP.	R10. Add WDID in several appropriate places in the SSMP, especially Introduction and Elements VI and XI.
F11. No SSMP and references on webpage or mailed to SWRCB as required by MRP Section C 8 iv	R11. The District must both establish an SSMP webpage from “Wastewater” and include all SSMP references by hyperlink or mail copies of the adopted SSMP, all references, and the adoption resolution to the SWRCB within 30 days of adoptions. LRO must also certify the adoption of the SSMP in the CIWQS database.

5-2: Specific Element Findings and Recommendations

The specific findings and recommendations below follow the SSMP Elements stated in the WDR Section D13. The 2012 SSMP revisions did not follow the WDR format outline, as stated.

SSMP Element	Sufficiency Ranking	Finding	Recommendations
Cover Page	PC	F12. Does not include important information on District.	R12. Add original SSMP adoption date, revision dates, and WDID number.
Executive Summary	PC	F13. No reference to the 2013 MRP revisions F. Section 1.1 dated information	R13. Add information on revised regulations dating to September 2013 – MRP. R14. Include current sewer system asset information.
Introduction	PC	F14. All District information dated	R15. Update all asset information and add current service area map; add District WDID number.
I. Goals	C	F15. Current Goals are dated and not supported by performance metrics.	R16. Review and update goals; establish supporting metrics for new goals in Element IX.
II. Organization	SC	F16. Element title not consistent with WDR. F74. No organization chart included. F18. No list of responsible positions for each SSMP Element, including contact info. F19. Section 3.4 organization outdated and does not follow the current org chart.	R17. Revise title to Organization. R18. Add current org chart, including supporting departments and service contractors to sewers operation. R19. Add a new table of Element Responsibilities. R20. Revise the organization section.

		<p>F205. Current position classifications dated and non-existent.</p> <p>F21. LRO and DS not properly identified in SSMP.</p> <p>F22. No response flow chart and communications information or information is dated and not useful.</p>	<p>R21. Revise LRO and DS positions and narrative in Section 3.6.</p> <p>R22. Review and revise Response Flow Chart with the OERP revisions.</p>
III. Legal Authority	PC	<p>F23. Legal background is comprehensive and broad.</p> <p>F24. Legal authority narratives not necessarily required by regulations.</p> <p>F25. Recently adopted ordinances not included.</p> <p>F26. No references to the IEUA Agreement.</p> <p>No discussion of the 2013 MRP.</p> <p>F27. No discussion of satellite systems.</p>	<p>R23. Determine if the background should remain in the revised SSMP.</p> <p>R24. Add Table of legal authority and reduce the narratives on legal authority.</p> <p>R25. Add references to the 2013 MRP if narratives to remain.</p> <p>R26. Add references to new ordinances and hyperlink from SSMP webpage.</p> <p>R27. Add section describing IEUA agreement.</p>
IV. O&M Program	NC	<p>F28. CVWD 2009 O&M Program document still being utilize and needs to be streamlined into revised SSMP.</p> <p>F29. District SOPs not listed in this Element.</p> <p>F30. CMMS description was inadequate.</p> <p>F31. Limited discussion of storm drainage systems in the service area.</p> <p>F32. Description of map updating needs expansion.</p> <p>F33. Discussion of line cleaning requires expansion.</p> <p>F34. No discussion of pump stations or force mains O&M.</p> <p>F35. No force main condition assessment program.</p> <p>F36. No historical description of cleaning and condition assessment frequency.</p> <p>F37. Dated capital improvement program information including short and long term projects.</p> <p>F38. Training description does not include specifics or field exercises.</p> <p>F39. Tables of equipment and replacement parts dated or not included.</p>	<p>R28. Convert the O&M Program to Standard Operating Procedures and streamline this Element.</p> <p>R29. Expand CMMS narratives.</p> <p>R30. Add list of SOPs to Element.</p> <p>R31. Add current storm sewer layer to narratives.</p> <p>R32. Update work order and graphic mapping information to current status.</p> <p>R33. Expand narratives to cover the current program.</p> <p>R34. Add tables of historical performance results from maintenance program.</p> <p>R35. Develop program for condition assessment of District force mains.</p> <p>R36. Must include short and long term CIPs from the 2017 Sewer Master Plan.</p> <p>R37. Expand training discussion to include regular SSMP, OERP, WQMP, and regular field exercises, including start times and all volume estimation techniques.</p> <p>R38. Add two table of equipment and replacement parts as required.</p>
V. Design	C	<p>F40. Section 8 of the SSMP not Element V.</p> <p>F41. Sewer design standards dated July 2005.</p>	<p>R39. Reformat to Element V.</p> <p>R40. Add any changes in standards since 2005.</p>

			R41. Hyperlink all standards from SSMP webpage.
VI. OERP	PC	<p>F42. Section 7 should be Element 6.</p> <p>F43. 2008 SSORP dated and not revised per MRP changes.</p> <p>F44. SSORP forms not used as stated to document SSOs.</p> <p>F45. No agency-specific Water Quality Monitoring Plan.</p> <p>F46. SSORP recordkeeping requirements not conformed to MRP.</p> <p>F47. SSORP does not include new categories of SSO per MRP.</p> <p>F48. No requirement for sampling and technical report for SSOs > 50,000 gallons.</p> <p>F48. Notification requirements not consistent with MRP requirements.</p> <p>F50. No requirement for debrief and failure analysis in SSORP.</p> <p>F51. District overflow event files not complete and lacks adequate documentation.</p> <p>F52. No LRO approval and certification of all overflow event files.</p>	<p>R42. Reformat to Element 6.</p> <p>R43. Complete revision to SSORP required and renamed OERP to include 2013 MRP changes and record keeping requirements.</p> <p>R44. Add current SSO report form to the revised OERP and require use of all forms in OERP for an overflow event.</p> <p>R45. Develop and adopt an agency-specific WQMP per MRP Section D.</p> <p>R46. Add new overflow categories from 2013 MRP.</p> <p>R47. Add requirements for a Technical Report for overflows greater than 50,000 gallons per MRP Section C5.</p> <p>R48. Update all notification requirements.</p> <p>R49. Add debrief /failure analysis requirements for all overflows.</p> <p>R50. Add additional documentation of especially start times and volume estimation assumptions and calculations. Consider use of SSO File Checklist.</p>
VII. FOG Program	C	<p>F53. SSMP FOG is section 6 and should be Element VII.</p> <p>F54. Appendix D, FOG Control program still being pursued?</p> <p>F55. Current FSE permitting program aggressive and staff intensive but highly effective.</p> <p>F56. No reference to the uniform plumbing code.</p>	<p>R51. Reformat to Element VII.</p> <p>R52. Determine applicability of old 2009 program and streamline in revisions to SSMP.</p> <p>R53. Evaluate current staffing levels supporting the program and determine if adequate.</p> <p>R54. Add UPC reference for GRDs.</p>

VIII. SHECAP	C	<p>F57. SHECAP should be Element VIII.</p> <p>F58. Element describes only the 2003 sewer master plan by Montgomery Watson.</p> <p>F59. District has completed a 2017 Master Sewer Plan which is not included here or in the SSMP Change Log.</p> <p>F60. Waste generation section outdated.</p> <p>F61. Sewer system asset information outdated.</p> <p>F62. Hydraulic model information not consistent with revised master plan.</p> <p>F63. States master plan updates every 5 years.</p>	<p>R55. Reformat to Element VIII.</p> <p>R56. Update entire Element to be consistent with the new 2017 Master Plan.</p> <p>R57. Add table of short and long term capacity enhancement projects to Element IV CIP table.</p> <p>R58. Add discussion of future flow generation study being contemplated.</p> <p>R59. Add summary information of recently completed projects.</p> <p>R60. Update hydraulic model information in SSMP revisions.</p> <p>R61. Either revise the 5-year master plan schedule or remove from SSMP if will not comply with the schedule.</p>
IX. Monitoring, Measurement and Modification	NC	<p>F64. Section 11 not Element IX.</p> <p>F65. Performance parameters do not properly support Goals in Section 1.</p> <p>F66. District has not regularly tracked operational performance metrics in Element IX of the SSMP other than in the CMMS.</p> <p>F67. District has not identified and illustrated SSO trends as stated.</p>	<p>R62. Reformat to Element IX.</p> <p>R63. Recommend the District establish new performance metrics supporting established goals and regularly report to staff and elected officials.</p> <p>R64. Regularly update graphs and charts of metrics above for either fiscal or calendar year to assist evaluation of effectiveness of program implementation.</p> <p>R65. Consider annual report to Board with these trends and include in Audit Reports.</p>
X. SSMP Audit	NC	<p>F68. Sec. 12 should be Element X.</p> <p>F69. No internal audits completed or provided to Board.</p>	<p>R66. Reformat to Element X.</p> <p>R67. Conduct internal audits every two years from 2009 original adoption date and submit to Board on regular agenda and upon adoption, place on District website.</p> <p>R68. Consider adding most recent Audit Report to SSMP appendices for ease of locating during inspection or enforcement,</p>
XI. Communications	NC	<p>F70. Section title Public Education and Outreach retitle to Communications</p> <p>F71. SSMP/Audits not submitted to Board on regular agendas.</p> <p>F72. Communications with sister agencies limited.</p> <p>F73. District Annual CAFR does not include sewer statistics.</p>	<p>R69. Retitle section and reformat to Element 11.</p> <p>R70. Assure SSMP and Audits are provided to Board as required every 5 and 2 years.</p> <p>R71. Conduct and document regular meetings with Cities and IEUA.</p> <p>R72. Consider development of a Sewer System Annual Report to Board of Directors.</p>

			R73. Expand CAFR to include statistical information for sewer operations.
<u>Appendices</u>			
Appendix A: Letter from City of Fontana		F74. Not included or necessary.	R74. Eliminate from SSMP revisions.
Change Log	NC	F75. No SSMP Change Log available as required by MRP Section E3 or any changes delineated during the audit period.	R75. Include a change log and update at least annually with changes in District sewer system policies and procedures.
SSMP Adoption Documents	NC	F76. 2009 Board adoption action or resolution not included in SSMP.	R76. Add new appendices for adoption resolutions.
FOG Program/Literature	NC	F77. Not required.	R77. Consider elimination of these documents but add to SSMP webpage.
Internal Audit Reports	NC	F78. No Audit Reports.	R78. Add Audit Reports to a new appendix and to SSMP webpage.
OERP and WQMP	NC	F79. Documents not available in emergency response vehicles	R79. Create separate stand-alone documents, add as appendices to the SSMP and place copies in District emergency response vehicles for use during overflow events.

6. District Sewer System Strengths

The following District sanitary sewer system program strengths were identified during the internal audit and from the interviews of District staff in Section 2 above:

- District staff are very dedicated and committed to compliance with the WDR and MRP.
- Long career maintenance staff understand and conform to maintenance program expectations and are committed to exceptional customer service.
- Responsiveness to the customers' issues and concerns are a huge driver for the sewer operation, including assistance with private lateral concerns – “service beyond expectations.”
- Staff exudes great pride and dedication to workmanship and success of the sewer program.
- Excellent GIS mapping system and GeoViewer software provide support to sewer operations, maintenance, and management and provides timely and comprehensive support.

- SSO Rate per 100 miles per year is well below both the region and the state rates per year.
- Numbers of overflows and volumes since 2007 are exceptional for the size of sanitary sewer system.
- District response times to sanitary sewer issues is 30 minutes or less.
- Line cleaning program consistent with 2009 program definition and procedures.
- Few high-frequency main lines in the system – only 33 segments.
- FOG program staff conducts more than 1200 inspections annually of the 230 FSEs and seek compliance very proactively. No enforcement actions required to date due to aggressive compliance activity
- District has completed a 2017 Sewer Master Plan updating the 2003 Plan which includes both short and long term capital projects as required.
- New dynamic flow model developed and implemented replacing the old static model. Staff trained to be able to use the new dynamic model.
- Strong coordination between operations and engineering on sewer system needs and requirements.
- District has positively supported the equipment and facility needs of the sanitary sewer operations and maintenance program.
- District sewer maintenance staff has in the past cleaned all sewer lines including large diameter lines annually.
- Staff is considering an enhanced flow monitoring program to determine actual water consumption and discharge parameters for future pipeline designs and rate making.
- The District asset management program includes water, sewer, and storm water infrastructure. Information is available in the field and office and is regularly updated.
- District is pursuing siphon elimination program to deal with current high maintenance demands.
- The sewer fund is healthy and provides cost effective customer service rates.
- Recent engineering design staff expansion will assist future project execution.
- All District staff have become proficient with the CMMS, GIS and especially GeoViewer tools.

- Broad outreach on sewer programs through social media and other tools including the District Environmental Learning Center.
- District has removed almost all asbestos pipe in the sewer system.
- Very aggressive and proactive claims investigation – few sewer-related claims experienced.
- Excellent technology enhancements recently especially GeoViewer and utility layers in GIS.
- Tablets in the vehicles provide enhancement to work productivity and record keeping.

7. District Challenges/

- ◇ The District does not currently have a Board adopted Sewer System Management Plan available on the District website or submitted to the SWRCB as required by the MRP.
- ◇ District has not complied with the internal audit requirements in the WDR at least every two years from 2009.
- ◇ Regular sewer system performance results have not been conveyed to the District Board on Board agendas or made available to management staff.
- ◇ Some CCTV equipment problems.
- ◇ Growth issues are a challenge for the sewer system currently.
- ◇ The District SSO emergency response plan does not include the requirements from the 2013 MRP.
- ◇ The District has no agency-specific water quality monitoring plan (WQMP).
- ◇ The District operations and maintenance program requires expansion and enhanced details in the SSMP.
- ◇ Permitting issues with County Flood Control and Corps of Engineers are challenging and are delaying projects.
- ◇ Sewer siphon operations problematic and very time consuming for maintenance – large debris issues and frequent cleaning required.
- ◇ No current force main condition assessment evaluations program.

- ◇ Capital projects do not currently require end of warranty condition assessments before final contractor project releases. Warranty periods need enhanced management and oversight.
- ◇ Additional volume estimation training needed due to infrequent overflow events – more frequent field exercises should be scheduled regularly.
- ◇ Pool plaster and contractor debris discharges into the sanitary sewer system are creating large maintenance issues for the field crews and required closer coordination/assistance from local Cities in the service area.
- ◇ Additional information specifically on sewer system results for the Board and public warranted.
- ◇ ~~District CAFR should be expanded to include sewer system statistics similar to the water system.~~
- ◇ Workforce aging and succession planning for the future needs are becoming warranted.
- ◇ Current technical specifications and standard drawings require updating and/or expansion.

8. Conclusions

The District appears to have developed a well-operated sewer collection system operation and maintenance since the original consultant work on the 2009 SSMP and associated supporting documents. The sewer program efforts have been successful in keeping both the numbers and volumes of sanitary sewer overflows as detailed earlier in this Audit Report. This is in large part due to the very aggressive cleaning and FOG Control Program efforts by the District. In addition, capital planning and improvements have been implemented, recognizing the maintenance value and service life, even though challenging permitting has recently delayed several very important projects. Finally, it does appear that public outreach has been ongoing even if more emphasis has been placed on water system performance than sewer related performance. More frequent sewer articles in District newsletters should occur.

However, the District has not adopted SSMP revisions every five years and has not completed regular two-year internal audits or Audit Reports of program changes. In addition, the required certifications of these requirements to the SWRCB are currently outstanding. These actions place the District and their legally responsible officials in jeopardy during a State or Regional Board inspection or enforcement action. This deficiency exposes the District to potential liabilities in the event of a claim for loss. Accordingly, the District is working expeditiously to resolve this issue and adopt an updated SSMP. Reporting and certification of sewer overflows in CIWQS as required has been managed and executed effectively. The District files documenting the CIWQS certified reports could be enhanced to more completely support an overflow event and reduce potential liability. A separate letter report has been provided that outlines both the current strengths and areas for improvement in this important area of compliance with the WDR and the 2013 MRP revised recordkeeping requirements.

9. Recommendations

The following recommendations should be implemented as soon as possible, including the evaluation and/or implementation of the earlier recommendations in this Audit Report.

1. Complete the Audit Report and present it to the District Board of Directors along with the revised SSMP.
2. Complete revisions to the SSMP and OERP and present it to the Board of Directors for consideration and adoption.
3. Certify the Board adoption of the SSMP in the CIWQS database within 30 days of adoption.
4. Prepare and present an agency-specific Water Quality Monitoring Plan to the Board of Directors for adoption and insert into an appendix of the SSMP.
5. Provide training on the SSMP, OERP and WQMP upon adoption of the documents by the Board of Directors along with proper documentation of these events.
6. Enhance the overflow file documentation utilizing all forms from the OERP, including recommendations for improvement using the SSO Checklist and final sign-off of the file by the LRO.
7. Create a new SSMP webpage under Wastewater include hyperlinks to all SSMP references, audit reports and annual reports if prepared.
8. Expand communications and outreach efforts, especially in newsletters regarding the sewer system program.
9. Develop an annual (fiscal or calendar) Sewer System Performance Report and place on a regular Board agenda and consider adding to a District newsletter. Place these reports on the District SSMP website.
10. Annually update the sewer capital program for both short and long term capital and renewal and replacement needs as part of the annual District budget.
11. ~~Add sewer related statistical information to the Statistical Section of the District's Annual CAFR.~~
12. Establish standard operating procedures for regular internal audits and SSMP re-adoption as required by the ADR.
13. Use the SSMP Change Log to regularly record changes and modifications of District procedures to the SSMP, OERP, and WQMP.

Attachments

Attachment 1: CVWD SSMP Audit Interview Schedule

	<u>Engineering Department</u> 12-Aug Monday	<u>Finance Conference Room</u> 13-Aug Tuesday	<u>Engineering Conference Room</u> 14-Aug Wednesday
7:30:00 AM		7:30AM - 9:30AM	Open
8:00:00 AM		Shawn Spromberg, Gabe Parisi	7:30AM - 9:30AM
8:30:00 AM		David Scott	
9:00:00 AM		Finance Conference Room	
9:30:00 AM		9:30AM-10:30AM: Brenda Watson	9:30 AM-10:30AM: Randy Rockwell, Jeff Guerin
10:00:00 AM	10:00 AM - 11:30 AM SSMP Kick Off Meeting	Finance Conference Room	Eng Conference
10:30:00 AM	Engineering Conference Room	10:30AM-11:30AM: Erin Morales and Eric Grubb	Open
11:00:00 AM		Finance Conference Room	10:30AM - 11:30AM
11:30:00 AM	11:30 AM - 1:00 PM	11:30 AM - 1:00 PM	11:30 AM - 1:00 PM
12:00:00 PM	Break	Break	Break
12:30:00 PM			
1:00:00 PM	1:00 PM-3:00PM: Praseetha Krishnan, Justin Martinez, Russel Silva, Shawn Spromberg	1:00PM-2:00PM: Rossana Ammari and Robbie Victorino	Open
1:30:00 PM	Engineering Conference Room	Finance Conference Room	1:00PM - 2:00PM
2:00:00 PM		2:00PM-3:00PM: Shawn Hagerty	2:00 PM-3:00PM: Robert Koczko
2:30:00 PM		Conference Call 619-525-1327	Eng Conference
3:00:00 PM	3:00PM-4:00PM: Eduardo Espinoza	3:00 PM-3:30PM: John Bosler	Open
3:30:00 PM	Eduardo's office	Open	3:30 PM - 4:00 PM:
4:00:00 PM	4:00 PM-5:00PM: Tuan Truong	3:30PM - 5:30PM	Rob Hills, Eng Conference
4:30:00 AM	Tuan's Office		
5:00:00 PM			
5:30:00 PM			

Appendix C: Sewer System Management Audit Checklist

Cucamonga Valley Water District SSMP Audit Checklist

Report Form

The purpose of the SSMP Audit is to evaluate the effectiveness of the CVWD SSMP and sanitary sewer program and to identify any needed for improvement. The information identified here will be used to inform the possible findings and necessary information to be evaluated during the biannual Internal Audit of the CVWD SSMP.

Directions: Please rank each item below utilizing the following sufficiency ranking system and add any comments to explain the ranking to the Comment Section of each SSMP Element:

- *Complies (C) – complies with all WDR objectives*
- *Substantially Complies (SC) – complies mostly with all WDR objectives*
- *Partially Complies (PC) – complies with basic WDR objectives*
- *Marginal Compliance (MC) – complies minimally with basic objectives of the WDR*
- *Does Not Comply – does not comply with WDR objectives*

Element 0 – Introduction/Executive Summary	
A.	
B.	
C.	
D.	
Element I – Goals	Rating
A. Are the goals stated in the SSMP Element I still appropriate and accurate?	
Discussion:	
Element II – Organization	Rating
A. Is the List of Staff Responsible for SSMP Elements current?	
B. Is the Sanitary Sewer Overflow Responder List current?	
C. Is the Organization Chart current?	

D. Are the Staff position descriptions an accurate portrayal of staff responsibilities? Are the LRO and DSs properly identified in the position descriptions?	
E. Is the Chain of Communication for Reporting and Responding to SSOs section/flow chart accurate and up to date?	
Discussion:	
Element III – Legal Authority	Rating
Does the SSMP contain current references to the Gilroy Municipal Code documenting CVWD’s legal authority to:	
A. Prevent illicit discharges?	
B. Require proper design and construction of sewers and connections?	
C. Ensure access for maintenance, inspection, or repairs for portions of the lateral owned or maintained by the CVWD?	
D. Limit discharges of fats, oils and grease?	
E. Enforce any violation of its sewer ordinances?	
F. Were any changes or modifications made in the past year to Sewer Ordinances, Regulations or standards?	
Discussion:	
Element IV – Operations & Maintenance	
Collection System Maps	Rating
A. Does the SSMP reference the current process and procedures for maintaining CVWD’s wastewater collection system maps?	
B. Are the wastewater collection system maps complete, current and sufficiently detailed?	
C. Are storm drainage facilities of the City and County identified in the CVWD service area on the collection system maps? If not, are SSO responders able to determine locations of storm drainage inlets and pipes for possible discharge to waters of the state?	
Prioritized Preventive Maintenance	Rating
D. Does the SSMP describe current preventive maintenance activities and the system for prioritizing the cleaning of sewers?	

E. Based upon information in the Annual SSO Report, are the CVWD’s preventive maintenance activities sufficient and effective in minimizing SSOs and blockages?	
Scheduled Inspections and Condition Assessments	Rating
F. Is there an ongoing condition assessment program sufficient to develop a capital improvement plan addressing the proper management and protection of infrastructure assets? Are the current components of this program documented in the SSMP?	
Contingency Equipment and Replacement Inventory	Rating
G. Does the SSMP list the major equipment currently used in the operation and maintenance of the collection system and documents the procedures of inventory management?	
H. Are contingency and replacement parts sufficient to respond to emergencies and properly conduct regular maintenance?	
Training	Rating
I. Does the SSMP document current training expectations and programs for staff and contractors?	
Outreach to Plumbers and Building Contractors	Rating
J. Does the SSMP document current outreach efforts to plumbers and building contractors?	
Discussion:	
Element V – Design and Performance Standards	Rating
A. Does the SSMP reference current design and construction standards for the installation for new sanitary sewer systems, pump stations and other appurtenances and for the rehabilitation and repair of existing sanitary sewer systems?	
B. Does the SSMP document current procedures and standards for inspecting and testing the installation of new sewers, pumps, and other appurtenances and the rehabilitation and repair of existing sewer lines?	
Discussion:	
Element VI – Overflow and Emergency Response Plan	Rating
A. Does the CVWD Sanitary Sewer Overflow Emergency Response Plan establish procedures for the emergency response, notification, and reporting of SSOs?	

B.	Are staff and contractor personnel appropriately trained on the procedures of the Sanitary Sewer Overflow Emergency Response Plan?	
C.	Considering SSO performance data, is the Sanitary Sewer Overflow Emergency Response Plan effective in handling SSOs in order to safeguard public health and the environment?	
D.	Are all SSO and claims reporting forms current or do they require revisions or additions?	
E.	Does all SSO event recordkeeping meet the SSS WDR and MRP requirements? Are all SSO event files complete and certified in the CIWQS system?	
F.	Is all information in the CIWQS system current and correct? Have periodic reviews of the data been made during the year to assure compliance with SSS WDR? Have all Technical Report and Water Quality Sampling requirements been met and uploaded to the CIWQS data management system?	
Discussion:		
Element VII – Fats, Oils and Grease (FROG) Control Program		Rating
A.	Does the FROG Control Program include efforts to educate the public on proper handling and disposal of FROG?	
B.	Does the FROG Control Program identify sections of the collection system subject to FROG blockages, establish a cleaning schedule and address source control measures to minimize these blockages?	
C.	Are requirements for grease removal devices, best management practices (BMP), record keeping, and reporting established in the FROG Control Program?	
D.	Does CVWD have sufficient legal authority to implement and enforce the FROG Control Program?	
E.	Is the current FROG program effective in minimizing blockages of sewer lines resulting from discharges of FROG to the system?	
F.	Was required training on SSMP and OERP completed and documented? Were field exercises with field staff on SSO volume estimation conducted and documented?	
G.	Did all public improvement plans and specifications that could impact collection system operations include requirements for OERP training or were contractor OERP programs at least as stringent as the CVWD OERP? Were regular items included in project meeting agendas to discuss emergency response procedures and communications?	

Discussion:	
Element VIII – System Evaluation and Capacity Assurance Plan	Rating
A. Does the CVWD Sewer System Master Plan evaluate hydraulic deficiencies in the system, establish sufficient design criteria and recommend both short and long-term capacity enhancement and improvement projects?	
B. Does the CVWD Capital Improvement Plan (CIP) establish a schedule of approximate completion dates for both short and long- term capacity improvements and is the schedule reviewed and updated to reflect current budgetary capabilities and activity completed?	
Discussion:	
Element IX – Monitoring, Measurement and Program Modifications	Rating
A. Does the SSMP accurately portray the methods of tracking and reporting selected performance indicators?	
B. Is CVWD able to sufficiently evaluate the effectiveness of the SSMP elements based on relevant information?	
C. Do the performance metrics properly support the Goals in Element 1?	
Discussion:	
Element X – SSMP Audits	Rating
A. Will the SSMP Audit be completed, reviewed and filed in Appendix B based upon the required time intervals since the original SSMP adoption date?	
B. Was the last Audit Report certified by the CVWD LRO as required?	
C. Was the final Audit Report presented to the governing body at a publicly noticed meeting?	
D. Was the last Audit Report placed in the SSMP Appendix and added to the SWRCB SSMP webpage.	
Discussion:	
Element XI – Community Program	Rating

A. Does CVWD effectively communicate with the public and other agencies about the implementation of the SSMP and continue to address any feedback?	
B. Did the CVWD Board receive and review the Annual Sewer System Report?	
C. Was the annual report uploaded to the CVWD Sewer Section website and added to Appendix C?	
Discussion:	
Change Log	
A. Is the SSMP Change Log current and up to date?	Rating
Discussion:	

Audit Team: _____

Date: _____

Prepared By: _____

Date: _____

Reviewed By: _____

Date: _____

Certified By: _____

Date: _____

Approved for Filing On

Date: _____

Appendix E: Overflow Emergency Response Plan (OERP)

Cucamonga Valley Water District

Overflow Emergency Response Plan

Effective Date: _____

Revised Date: _____

Approved by: _____

Signature: _____

Date: _____

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Sanitary Sewer Overflow Emergency Response Plan

1. Purpose

The purpose of the Cucamonga Valley Water District's Overflow Emergency Response Plan (OERP) is to support an orderly and effective response to Sanitary Sewer Overflows (SSOs). The OERP provides guidelines for District personnel to follow in responding to, cleaning up, and reporting SSOs that may occur within the District's service area. This OERP satisfies the SWRCB Statewide General Waste Discharge Requirements (GWDR), which require wastewater collection agencies to have an Overflow Emergency Response Plan.

2. Policy

The District's employees are required to report all wastewater overflows found and take the appropriate action to secure the wastewater overflow area, properly report to the appropriate regulatory agencies, relieve the cause of the overflow, and ensure that the affected area is cleaned as soon as possible to minimize health hazards to the public and protect the environment. The District's goal is to respond to sewer system overflows as soon as possible following notification. The District will follow reporting procedures in regards to sewer spills as set forth by the Santa Ana Regional Water Quality Control Board (*RWQCB*) and the California State Water Resources Control Board (*SWRCB*).

3. Definitions as Used in This OERP

CALIFORNIA INTEGRATED WATER QUALITY SYSTEM (CIWQS): Refers to the State Water Resources Control Board online electronic reporting system that is used to report SSOs, certify completion of the SSMP, and provide information on the sanitary sewer system.

FROG – Fats, Roots, Oils, and Grease: Refers to fats, oils, and grease typically associated with food preparation and cooking activities that can cause blockages in the sanitary sewer system. These blockages can be exacerbated by tree and shrub roots entering through cracks in underground pipes.

LEGALLY RESPONSIBLE OFFICIAL (LRO): Refers to an individual who has the authority to certify reports and other actions that are submitted through CIWQS.

MAINLINE SEWER: Refers to District wastewater collection system piping that is not a private lateral connection to a user.

MAINTENANCE HOLE OR MANHOLE: Refers to an engineered structure that is intended to provide access to a sanitary sewer for maintenance and inspection.

MAJOR SPILL: A spill of whatever size that, based on a reasonable assessment of the spill size, location, and potential impacts, is deemed to pose an imminent and substantial endangerment to public health or the environment.

NOTIFICATION OF AN SSO: Refers to the time at which the District becomes aware of an SSO event through observation or notification by the public or other source.

NUISANCE - California Water Code section 13050, subdivision (m), defines nuisance as anything that 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.

PREVENTATIVE MAINTENANCE: Refers to maintenance activities intended to prevent failures of the wastewater collection system facilities (e.g. cleaning, CCTV, inspection).

PRIVATE LATERAL SEWAGE DISCHARGES – Sewage discharges that are caused by blockages or other problems within a privately-owned lateral.

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.

SSOs that include multiple appearance points resulting from a single cause will be considered one SSO for documentation and reporting purposes in CIWQS.

***NOTE:** Wastewater backups into buildings caused by a blockage or other malfunction of a building lateral that is privately owned are not SSOs.*

SSO Categories:

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:

- Reach surface water and/or reach a drainage channel tributary to a surface water; or
- Reach 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: Discharge of untreated or partially treated wastewater greater than or equal to 1,000 gallons resulting from a sanitary sewer system failure or flow condition that either:

- Does not reach surface water, a drainage channel, or an MS4, or
- The entire SSO discharged to the storm drain system was fully recovered and disposed of properly.

Category 3: All other discharges of untreated or partially treated wastewater resulting from a sanitary sewer system failure or flow condition.

SANITARY SEWER SYSTEM: Any publicly-owned 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.

SENSITIVE AREA: Refers to areas where an SSO could result in a fish kill or pose an imminent or substantial danger to human health (e.g. parks, aquatic habitats, etc.)

SEWER SERVICE LATERAL: Refers to the piping that conveys sewage from the building to the District's wastewater collection system.

UNTREATED OR PARTIALLY TREATED WASTEWATER: Any volume of waste discharged from the sanitary sewer system upstream of a wastewater treatment plant headworks.

WATERS OF THE STATE: Waters of the State (or waters of the United States) means any surface water, including saline waters, within the boundaries of California. In case of a sewage spill, storm drains are considered to be waters of the State unless the sewage is completely contained and returned to the wastewater collection system and that portion of the storm drain is cleaned.

4. State Regulatory Requirements for Element 6, Overflow Emergency Response Plan

GWDR Requirement

The collection system agency 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 appropriate response to all overflows;
- (c) Procedures to ensure prompt notification to appropriate regulatory agencies and other potentially affected entities (e.g. health agencies, regional water boards, water suppliers, etc.) of all SSOs that potentially affect public health or reach the waters of the State in accordance with the Monitoring and Reporting Program (MRP). All SSOs shall be reported in accordance with this MRP, the California Water Code, other State Law, and other applicable Regional Water Board Waste Discharge Requirements or National Pollutant Discharge Elimination System (NPDES) permit requirements. The Sewer System Management Plan 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 untreated wastewater and prevent discharge of untreated wastewater to Waters of the United States and minimize or correct any adverse impact on the environment resulting from the SSOs, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the discharge.

The Sewer System Management Plan and critical supporting documents are made available to the public via submission of an electronic copy to the State Water Resources Control Board.

5. Goals

The District's goals with respect to responding to SSOs are:

- Work safely;
- Respond quickly to minimize the volume of the SSO;
- Eliminate the cause of the SSO;
- Prevent sewage system overflows or leaks from entering the storm drain system or receiving waters to the maximum extent practicable;
- Contain the spilled wastewater to the extent feasible;
- Minimize public contact with the spilled wastewater;
- Mitigate the impact of the SSO;
- Meet the regulatory reporting requirements;
- Evaluate the causes of failure related to certain SSOs; and
- Revise response procedures resulting from the debrief and failure analysis of certain SSOs.

6. SSO Detection and Notification

ref. SWRCB Order No. 2006-0003-DWQ D.13vi(a)

The processes that are employed to notify the District of the occurrence of an SSO include: observation by the public, receipt of an alarm, or observation by District staff during the normal course of their work.

The District operates two wastewater lift stations. In the event of any pump failure, the high-level sensor activates the SCADA alarm system and the District is contacted. To prevent overflow, wastewater from the wet well can either be pumped into a vacuum truck for disposal to a nearby sanitary sewer manhole or bypassed around the station into the sanitary sewer system.

6.1 PUBLIC OBSERVATION

Public observation is the most common way that the District is notified of blockages and spills. Contact numbers and information for reporting sewer spills and backups are in the phone book and on the District's website: <https://www.cvwewater.com>.

The District's telephone number for reporting sewer problems is (909) 987-2591.

Normal Work Hours

During normal business hours, a Customer Service Representative will receive the call and then they will enter the caller's information into the District's work order system (NaviLine) and it will generate an email to the Wastewater Division. The Wastewater Division will then dispatch an available crew. The Crew will document findings and any actions taken, regardless of whether or not the service request was for a sanitary sewer overflow (SSO). The Wastewater Utility Supervisor will either send an email to the Customer Service Representative to enter the findings/actions into the Geoviewer work order system.

Alternatively, the Customer Service Representative will call the Wastewater Division directly via phone and relay the information. The Customer Service Representative will also enter this into the work order system.

After Hours

After hours service calls roll over to an answering service, which will contact the on-call person. If not available, they will go to the next on-call person on the list.

When calls are received, either during normal work hours or after hours, the individual receiving the call will collect the following information:

- Time and date of call

- Specific location of potential problem
- Nature of call
- In case of SSO, estimated start time of overflow
- Caller's name and telephone number
- Caller's observation (e.g., odor, duration, location on property, known impacts, indication if surface water impacted, appearance at cleanout or manhole)
- Other relevant information

If the overflow/backup is not in the District's service area they provide the customer with the contact information for the responsible agency, and then notify that agency.

If the overflow/backup is in the District's service area, a District Wastewater Crew is dispatched and instructed to complete the Sanitary Sewer Overflow/Backup Response Workbook.

6.2 DISTRICT STAFF OBSERVATION

District staff conducts periodic inspections of its sewer system facilities as part of their routine activities. Any problems noted with the sewer system facilities are reported to appropriate District staff that, in turn, responds to emergency situations. Work orders are issued to correct non-emergency conditions.

6.3 CONTRACTOR OBSERVATION

The following procedures are to be followed in the event that a contractor/plumber causes or witnesses a Sanitary Sewer Overflow. If the contractor/plumber causes or witnesses an SSO they should:

1. Immediately notify the District.
2. Protect storm drains.
3. Protect the public.
4. Provide information to the District Wastewater Crew such as start time, appearance point, suspected cause, weather conditions, etc.
5. Direct ALL media and public relations requests to the Government and Public Affairs Manager.

6.4 NO OBSERVATION

If there are no witnesses or no call was received for an SSO, the District staff will contact nearby residents or business owners in the vicinity of the SSO, in an attempt to obtain information that brackets a given start time that the SSO began. This information will be collected and placed with records for the specific SSO.

7. SSO Response Procedures

ref. SWRCB Order No. 2006-0003-DWQ D.13vi(b)

7.1 Sewer Overflow/Backup Response Summary

The District will respond to SSOs as soon as feasible following notification of an overflow/backup or unauthorized discharge.

If it is not possible that the overflow/backup is due to a failure in the District-owned/maintained sewer lines the Wastewater Crew performs the following:

- Follows the instructions in the Sanitary Sewer Overflow/Backup Response Workbook.
- If the customer is not home the Wastewater Crew completes the Door Hanger and leaves it on the customer's door.
- If the customer is home the Wastewater Crew:
 - Explains that the blockage is in the customer's lateral and the District does not have legal authority to maintain or perform work on privately owned laterals.
 - Recommends to the customer that they hire a contractor to clear their line.
 - Gives the customer the Sewer Spill Reference Guide pamphlet.

If it is possible that the overflow/backup is due to a failure in the District-owned/maintained sewer lines the Wastewater Crew:

- Follows the instructions in the Sanitary Sewer Overflow/Backup Workbook.
- Notifies Wastewater Utility Supervisor or designee of the incident.
- Relieves blockage and cleans impacted areas.
- Forwards the completed Sanitary Sewer Overflow Workbook to the Wastewater Utility Supervisor or designee.

The Wastewater Utility Supervisor, Construction and Maintenance Manager, or designee performs required regulatory reporting in accordance with the Sanitary Sewer Overflow/Backup Workbook's Regulatory Reporting section.

If the overflow has impacted private property, the Wastewater Crew:

- Follows the instructions in the Sanitary Sewer Overflow/Backup Workbook.
- Provides the customer with forms and information as indicated in the Sanitary Sewer Overflow/Backup Workbook.
- Forwards the completed Sanitary Sewer Overflow/Backup Workbook to the Wastewater Utility Supervisor or designee.

The Wastewater Utility Supervisor or designee notifies the HR/Risk Management Division of incident.

The HR/Risk Management Division or designee:

- Reviews incident reports, claim form and other incident information and forwards, as appropriate, to:

ACWA/Joint Powers Insurance Authority (ACWA/JPIA)
Property & Liability Claims Department
Tel: (800) 231-5742
Fax: (916) 786-0209
Claims@acwajpia.com

After 4:30 or on weekends/holidays, contact Sedgwick staff Jim Stewart at (916) 548-8283, or Casey McClintock at (916) 607-6360

- Communicates with claimant as appropriate.
- Communicates with ACWA-JPIA to adjust and administer the claim to closure.

7.2 First Responder Priorities

The first responder's priorities are:

- To follow safe work practices.
- To respond promptly with the appropriate and necessary equipment.
- To contain the spill wherever feasible.
- To restore the flow as soon as practicable.
- To minimize public access to and/or contact with the spilled sewage.
- To promptly notify the Wastewater Utility Supervisor in event of major SSO.
- To return the spilled sewage to the sewer system.
- To restore the area to its original condition (or as close as possible).

7.3 Safety

The first responder is responsible for following safety procedures at all times. Special safety precautions must be observed when performing sewer work. There may be times when District personnel responding to a sewer system event are not familiar with potential safety hazards peculiar to sewer work. In such cases it is appropriate to take the time to discuss safety issues, consider the order of work, and check safety equipment before starting the job.

7.4 Initial Response

The first responder must respond to the reporting party/problem site and visually check for potential sewer stoppages or overflows.

The first responder will:

- Note arrival time at the site of the overflow/backup.
- Verify the existence of a public sewer system spill or backup.
- Take photos of overflowing manhole(s)/cleanout(s).
- Determine if the overflow or blockage is from a public or private sewer.
- Identify and assess the affected area and extent of spill.
- Notify the Wastewater Supervisor. If unavailable, contact the Construction Maintenance Manager or delegated Wastewater Lead Worker.
- Contact caller if time permits.

- Document conditions upon arrival with photographs. Decide whether to proceed with clearing the blockage to restore the flow or to initiate containment measures. The guidance for this decision is:
 - Small spills (i.e., spills that are easily contained) – proceed with clearing the blockage.
 - Moderate or large spill where containment is anticipated to be simple – proceed with the containment measures.
 - Moderate or large spills where containment is anticipated to be difficult – proceed with clearing the blockage; however, whenever deemed necessary, call for additional assistance and implement containment measures.
- Take steps to contain the SSO. For procedures refer to the Sanitary Sewer Overflow/Backup Response Workbook.

7.5 Initiate Spill Containment Measures

The first responder will attempt to contain as much of the spilled sewage as possible using the following steps:

- Determine the immediate destination of the overflowing sewage.
- Plug storm drains using air plugs, sandbags, and/or plastic mats to contain the spill, whenever appropriate. If spilled sewage has made contact with the storm drainage system, attempt to contain the spilled sewage by plugging downstream storm drainage facilities.
- Contain/direct the spilled sewage using dike/dam or sandbags.
- Pump around the blockage/pipe failure.

For procedures refer to the Sanitary Sewer Overflow/Backup Response Workbook.

7.6 Restore Flow

Using the appropriate cleaning equipment, set up downstream of the blockage and hydro-clean upstream from a clear manhole. Attempt to remove the blockage from the system and observe the flows to ensure that the blockage does not reoccur downstream. If the blockage cannot be cleared within a reasonable time from arrival, or sewer requires construction repairs to restore flow, then initiate containment and/or bypass pumping. If other assistance is required, immediately contact the Wastewater Utility Supervisor. For procedures refer to the Sanitary Sewer Overflow/Backup Response Workbook.

7.7 Equipment

This section provides a list of specialized equipment that is required to support this Overflow Emergency Response Plan.

- *Closed Circuit Television (CCTV) Inspection Unit* – A CCTV Inspection Unit is required to determine the root cause for all SSOs from gravity sewers.
- *Camera* -- A digital or disposable camera is required to record the conditions upon arrival, during clean up, and upon departure.
- *Emergency Response Trucks* -- A utility body pickup truck, or open bed is required to store and transport the equipment needed to effectively respond to sewer emergencies. The equipment and tools will include containment and clean up materials.

- *Portable Generators, Portable Pumps, Piping, and Hoses* – Equipment used to bypass pump, divert, or power equipment to mitigate an SSO.
- *Combination Sewer Cleaning Trucks* -- Combination high velocity sewer cleaning trucks with vacuum tanks are required to clear blockages in gravity sewers, vacuum spilled sewage, and wash down the impacted area following the SSO event.
- *Air plugs, sandbags, plastic mats, and rubber barriers/dikes.*
- *SSO Sampling Kits*
- *Portable Lights*

Standard operating procedures for equipment that may be necessary in the event of a sanitary sewer overflow or backup can be found in the Wastewater Utility Supervisor's office.

8. Recovery and Cleanup

ref. SWRCB Order No. 2006-0003-DWQ D.13vi(e)

The recovery and cleanup phase begins immediately after the flow has been restored and the spilled sewage has been contained to the extent possible. The SSO recovery and cleanup procedures are:

8.1 Estimate the Flow and Volume of Spilled Sewage

To estimate the flow rate, crew members will use the SSCSC Manhole Overflow Gauge if the same style of manhole cover is observed overflowing. A variety of approaches exist for estimating the volume of a sanitary sewer spill. Crew members should use the method most appropriate to the sewer overflow in question and reference the Sanitary Sewer Overflow/Backup Response Workbook which provides three (3) methods:

- Eyeball Estimation Method
- Duration and Flow Rate Calculation Method
- Area/Volume Method

In addition, wherever and whenever possible, document the estimate using photos and/or video of the SSO site before and during the recovery operation.

8.2 Recovery of Spilled Sewage

Vacuum up and/or pump the spilled sewage and rinse water, and discharge it back into the sanitary sewer system.

8.3 Clean-up and Disinfection

Clean up and disinfection procedures will be implemented to reduce the potential for human health issues and adverse environmental impacts that are associated with an SSO event. The procedures described are for dry weather conditions and will be modified as required for wet weather conditions. Where cleanup is beyond the capabilities of District staff, a cleanup contractor will be used.

Private Property

District crews are responsible for the cleanup when the property damage is minor in nature and is outside of private building dwellings, such as in front, side and backyards, easements, etc. In

all other cases, affected property owners can call a water damage restoration contractor to complete the cleanup and restoration. If the overflow into property is the definite cause of District system failure, the property owner can call out a water damage restoration contractor to complete the cleanup and restoration. In both cases, property owners may submit a claim for damages to the HR/Risk Management Division.

Hard Surface Areas

Collect all signs of sewage solids and sewage-related material either by protected hand or with the use of rakes and brooms. Wash down the affected area with clean water and/or deozyme or similar non-toxic biodegradable surface disinfectant until the water runs clear. The flushing volume will be approximately three times the estimated volume of the spill. Take reasonable steps to contain and vacuum up the wastewater. Allow area to dry. Repeat the process if additional cleaning is required.

Landscaped and Unimproved Natural Vegetation

Collect all signs of sewage solids and sewage-related material either by protected hand or with the use of rakes and brooms. Wash down the affected area with clean water until the water runs clear. The flushing volume will be approximately three times the estimated volume of the spill. Either contain or vacuum up the wash water so that none is released. Allow the area to dry. Repeat the process if additional cleaning is required.

Natural Waterways

The Department of Fish and Wildlife will be notified by CalOES for SSOs greater than or equal to 1,000 gallons.

Wet Weather Modifications

Omit flushing and sampling during heavy storm events (i.e., sheet of rainwater across paved surfaces) with heavy runoff where flushing is not required and sampling would not provide meaningful results.

8.4 Public Notification

Signs will be posted and barricades put in place to keep vehicles and pedestrians away from contact with spilled sewage. San Bernardino County Division of Environmental Health Services (DEHS) instructions and directions regarding placement and language of public warnings will be followed. Additionally, the Wastewater Utility Supervisor will use their best judgment regarding supplemental sign placement in order to protect the public and local environment. Signs will not be removed until directed by San Bernardino County Division of Environmental Health Services (DEHS) or the Wastewater Utility Supervisor.

Creeks and streams that have been contaminated as a result of an SSO will be posted at visible access locations until the risk of contamination has subsided to acceptable background bacteria levels. The area and warning signs, once posted, will be checked every day to ensure that they are still in place. Photographs of sign placement will be taken.

In the event that an overflow occurs at night, the location will be inspected first thing the following day. The field crew will look for any signs of sewage solids and sewage-related material that may warrant additional cleanup activities.

When contact with the local media is deemed necessary, the Government and Public Affairs Manager will provide the media with all relevant information.

9. Water Quality

ref. SWRCB Order No. 2006-0003-DWQ D.13vi(f)

9.1 Water Quality Sampling and Testing

Water quality sampling and testing will be performed for Category 1 SSOs whenever there is a major spill to determine the extent and impact of the SSO. The water quality sampling procedures must be implemented within 48 hours and include the following:

- The first responders will collect samples as soon as possible after the discovery and mitigation of the SSO event.
- The water quality samples will be collected from upstream of the spill, from the spill area, and downstream of the spill in flowing water (e.g. creeks). The water quality samples will be collected near the point of entry of the spilled sewage.
- The samples shall then be brought to one of the following labs:

Weck Laboratories

14859 Clark Avenue
City of Industry, CA 91745
Telephone: (626) 336-2139
FAX: (626) 336-2634

Clinical Laboratory

21881 Barton Road
Grand Terrace, CA 92313
Telephone: (909) 825-7693

9.2 Water Quality Monitoring Plan

The District Water Quality Monitoring Plan will be implemented immediately upon discovery of any Category 1 SSO whenever there is a major spill in order to assess impacts from SSOs to surface waters. The SSO Water Quality Monitoring Program will:

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, legal right to access, 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 District becoming aware of the SSO, require water quality sampling for fecal coliform, E. Coli, biochemical oxygen demand (BOD), and ammonia.
6. Observe proper chain of custody procedures.
7. If the District's current standard operating procedures (SOP's) cannot fully mitigate an SSO and if it is determined that the SSO may pose an imminent and substantial endangerment to public health or the environment, the District shall consult a qualified biologist, health care specialist or equivalent professional to assist.

9.3 SSO Technical Report

The District will submit an SSO Technical Report to the CIWQS Online SSO Database within 45 calendar days of the SSO end date for any major SSO spilled to surface waters. The Wastewater Utility Supervisor will supervise the preparation of this report and will certify this report. This report, which does not preclude the Water Boards from requiring more detailed analyses if requested, shall include at a minimum, the following:

Causes and Circumstances of the SSO:

- Complete and detailed explanation of how and when the SSO was discovered.
- Diagram showing the SSO failure point, appearance point(s), and final destination(s).
- Detailed description of the methodology employed and available data used to calculate the volume of the SSO and, if applicable, the SSO volume recovered.
- Detailed description of the cause(s) of the SSO.
- Copies of original field crew records used to document the SSO.
- Historical maintenance records for the failure location.

District's Response to SSO:

- Chronological narrative description of all actions taken by the District to terminate the spill.
- Explanation of how the SSMP Overflow Emergency Response Plan was implemented to respond to and mitigate the SSO.
- Final corrective action(s) completed and/or planned to be completed, including a schedule for actions not yet completed.

Water Quality Monitoring:

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

10. Sewer Backup Into/Onto Private Property Claims Handling Policy

It is the policy of the District that a Standard Tort Claim Form (Claim Form) shall be offered to anyone wishing to file a claim. The following procedures will be observed for all sewer overflows/backups into/onto private property:

- District staff will offer a District claim form irrespective of fault whenever it is possible that the sanitary sewer backup may have resulted from an apparent blockage in the District-owned sewer lines or whenever a District customer requests a claim form. The claim may later be rejected if subsequent investigations into the cause of the loss indicate the District was not at fault.
- It is the responsibility of the Wastewater Crew to gather information regarding the incident and notify the Wastewater Utility Supervisor or his/her designee.
- It is the responsibility of the HR/Risk Management Division to review all claims and to oversee the adjustment and administration of the claim to closure.

11. Notification, Reporting, Monitoring and Recordkeeping Requirements

ref. SWRCB Order No. 2006-0003-DWQ D.13vi(c)

In accordance with the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (SSS GWDRs), the Cucamonga Valley Water District maintains records for each sanitary sewer overflow. Records include:

- Documentation of response steps and/or remedial actions

- Photographic evidence to document the extent of the SSO, field crew response operations, and site conditions after field crew SSO response operations have been completed. The date, time, location, and direction of photographs taken will be documented.
- Documentation of how any estimations of the volume of discharged and/or recovered volumes were calculated including all assumptions made.
- Regulator required notifications are outlined in Section 11.1 on the following page.

11.1 Regulator Required Notifications

ELEMENT	REQUIREMENT	METHOD
NOTIFICATION	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, the District will notify the California Office of Emergency Services (CalOES) and obtain a notification control number.	Call Cal OES at: (800) 852-7550
REPORTING	<ul style="list-style-type: none"> • Category 1 SSO: The District will 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: The District will 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: The District will submit certified report within 30 calendar days of the end of month in which SSO the occurred. • SSO Technical Report: The District will 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: The District will 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: The District will update and certify every 12 months 	Enter data into the CIWQS Online SSO Database ¹ (http://ciwqs.waterboards.ca.gov/) certified by the Legally Responsible Official(s) ² . All information required by CIWQS will be captured in the Sanitary Sewer Overflow Report. Certified SSO reports may be updated by amending the report or adding an attachment to the SSO report within 120 calendar days after the SSO end date. After 120 days, the State SSO Program Manager must be contacted to request to amend an SSO report along with a justification for why the additional information was not available prior to the end of the 120 days.
WATER QUALITY MONITORING	The District will 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 will be uploaded into CIWQS for Category 1 SSOs in which 50,000 gallons or greater are spilled to surface waters.
RECORD KEEPING	The District will maintain the following records: <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.

¹ In the event that the CIWQS online SSO database is not available, the Wastewater Utility Supervisor will notify SWRCB by phone and will fax or e-mail all required information to the RWQCB office at (510) 622-2460 in accordance with the time schedules identified above. In such an event, the District will submit the appropriate reports using the CIWQS online SSO database when the database becomes available. A copy of all documents that certify the submittal in fulfillment of this section shall be retained in the SSO file.

² The District always has at least one LRO. Any change in the LRO(s) including deactivation or a change to contact information, will be submitted to the SWRCB within 30 days of the change by calling (866) 792-4977 or emailing help@ciwqs.waterboards.ca.gov.

For reporting purposes, if one SSO event of whatever category results in multiple appearance points in a sewer system, a single SSO report is required in CIWQS that 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 cause the SSO, and descriptions of the locations of all other discharge points associated with the single SSO event.

11.2 Complaint Records

The District maintains records of all complaints received whether or not they result in sanitary sewer overflows. These complaint records include:

- Date, time, and method of notification
- Date and time the complainant or informant first noticed the SSO or occurrence related to the call
- Narrative description describing the complaint
- A statement from the complainant or informant, if they know, of whether or not the potential SSO may have reached waters of the state
- Name, address, and contact telephone number of the complainant or informant reporting the potential SSO (if not reported anonymously)
- Follow-up return contact information for each complaint received (if not reported anonymously)
- Final resolution of the complaint with the original complainant
- Work service request information used to document all feasible and remedial actions taken

All complaint records will be maintained for a minimum of five years whether or not they result in an SSO. SSO records are kept under the direction and control of the Wastewater Utility Supervisor.

12. Post SSO Event Debriefing

ref. SWRCB Order No. 2006-0003-DWQ D.13vi(d)

Every SSO event is an opportunity to evaluate the District response and reporting procedures. Each overflow event is unique, with its own elements and challenges including volume, cause, location, terrain, climate, and other parameters.

As soon as possible after Category 1 and Category 2 SSO events all of the participants, from the person who received the call to the last person to leave the site, will meet to review the procedures used and to discuss what worked and where improvements could be made in preventing or responding to and mitigating future SSO events. The results of the debriefing will be documented and tracked to ensure the action items are completed as scheduled.

13. Failure Analysis Investigation

ref. SWRCB Order No. 2006-0003-DWQ D.13vi(d)

The objective of the failure analysis investigation is to determine the “root cause” of the SSO and to identify corrective action(s) needed that will reduce or eliminate future potential for the SSO to recur or for other SSOs to occur.

The investigation will include reviewing all relevant data to determine appropriate corrective action(s) for the line segment. The investigation will include:

- Reviewing and completing the Sanitary Sewer Overflow Report and any other documents related to the incident

- Reviewing the incident timeline and other documentation regarding the incident
- Reviewing communications with the reporting party and witness
- Reviewing volume estimate, volume recovered estimate, volume estimation assumptions and associated drawings
- Reviewing available photographs
- Interviewing staff that responded to the spill
- Reviewing past maintenance records
- Reviewing past CCTV records,
- Conducting a CCTV inspection to determine the condition of all line segments immediately following the SSO and reviewing the video and logs,
- Reviewing any Fats, Oils, Roots and Grease (FROG) related information or results
- Post SSO debrief records
- Interviews with the public at the SSO location

The product of the failure analysis investigation will be the determination of the root cause and the identification and scheduling of the corrective actions. The Collection System Failure Analysis Form (in Sanitary Sewer Overflow/Backup Response Workbook) will be used to document the investigation.

14. SSO Response Training

ref. SWRCB Order No. 2006-0003-DWQ D.13vi(d)

This section provides information on the training that is required to support this Overflow Emergency Response Plan.

14.1 Initial and Annual Refresher Training

All District personnel who may have a role in responding to, reporting, and/or mitigating a sewer system overflow will receive training on the contents of this OERP. All new employees will receive training before they are placed in a position where they may have to respond. Current employees will receive annual refresher training on this plan and the procedures to be followed. The District will document all training.

Affected employees will receive annual training on the following topics by knowledgeable trainers:

- The District's Overflow Emergency Response Plan and Sanitary Sewer Management Plan
- Sanitary Sewer Overflow Volume Estimation Techniques
- Researching and documenting Sanitary Sewer Overflow Start Times
- Impacted Surface Waters: Response Procedures
- State Water Resources Control Board Employee Knowledge Expectations
- Employee Core Competency Evaluations on Sanitary Sewer Operations
- Water Quality Sampling Plan

The District will verify that annual safety training requirements are current for each employee, and that employees are competent in the performance of all core competencies. This will be verified through any of the following: electronic testing, interviews and/or observations. The District will address, through additional training/instruction, any identified gaps in required core competencies.

Through SWRCB Employee Knowledge Expectations training the employee will be able to answer the following:

1. Please briefly describe your name and job title.
2. Please describe for us approximately when you started in this field and how long you have worked for the District.

3. Please expand on your current position duties and role in responding in the field to any SSO complaints.
4. Please describe your SOPs used to respond/mitigate SSOs when they occur.
5. Describe any training the District provides or sends you to for conducting spill volume estimates.
6. We are interested in learning more about how your historical SSO response activities have worked in the field. We understand from discussions with management earlier that you use the OERP from the SSMP. Please elaborate on how you implement and utilize the procedures in the plan.
7. Historically, before any recent changes, can you please walk us through how you would typically receive and respond to any SSO complaints in the field?
8. Can you tell us who is responsible for estimating SSO volumes discharged? If it is you, please describe how you go about estimating the SSO volume that you record on the work order/service request forms?
9. What other information do you collect or record other than what is written on the work order form?
10. Describe if and when you ever talk with people that call in SSOs (either onsite or via telephone) to further check out when the SSO might have occurred based on what they or others know? If you do this, can you tell us where this information is recorded?
11. We understand you may be instructed to take pictures of some sewer spills/backups into structures. Other than these SSOs, when else would you typically take any pictures of an SSO?
12. Please walk us through anything else you'd like to add to help us better understand how your field crews respond and mitigate SSO complaints.

14.2 SSO Response Drills

Periodic training drills or field exercises will be held to ensure that employees are up to date on these procedures, equipment is in working order, and the required materials are readily available. The training drills will cover scenarios typically observed during sewer related emergencies (e.g. mainline blockage, mainline failure, and lateral blockage). The results and the observations during the drills will be recorded and action items will be tracked to ensure completion.

14.3 SSO Training Record Keeping

Records will be kept of all training that is provided in support of this plan. The records for all scheduled training courses and for each overflow emergency response training event will include date, time, place, content, name of trainer(s), and names and titles of attendees.

14.4 Contractors Working On District Sewer Facilities

All construction contractors working on District sewer facilities will be required to develop a project-specific OERP, will provide project personnel with training regarding the content of the contractor's OERP and their role in the event of an SSO, and to follow that OERP in the event that they cause or observe an SSO. Emergency response procedures shall be discussed at project pre-construction meetings, regular project meetings and after any contractor involved incidents.

All service contractors performing work on District sewer lines will be provided with Appendix D: Contractor Orientation and will be required to observe contractor procedures.

15. Authority

- Health & Safety Code Sections 5410-5416
- CA Water Code Section 13271
- Fish & Wildlife Code Sections 5650-5656
- State Water Resources Control Board Order No. 2006-0003-DWQ
- State Water Resources Control Board Order No. WQ 2013-0058-EXEC effective September 9, 2013

16. Appendices

- Appendix A: Sample Public Notification Sign
- Appendix B: Sewer Spill Reference Guide: Your Responsibilities as a Private Property Owner
- Appendix C: Door Hanger
- Appendix D: Sanitary Sewer Overflow and Backup Response Workbook

APPENDIX A:
Sample Public Notification Sign

Overflow Emergency Response Plan
Public Posting

DANGER

RAW SEWAGE • AVOID CONTACT



PELIGRO

AGUA CONTAMINADA • EVITE TODO CONTACTO

For more information:

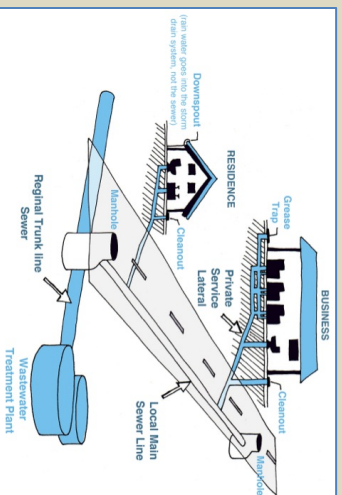
Cucamonga Valley Water District

(909) 987-2591

APPENDIX B:
Sewer Spill Reference Guide Pamphlet:
Your Responsibilities as a Private Property Owner

How a Sewer System Works

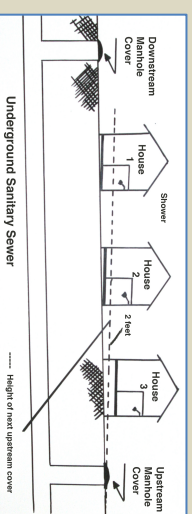
A property owner's sewer pipes are called **service laterals** and are connected to larger local main and regional trunk lines. Service laterals run from the connection at the home to the connection with the public sewer. These laterals are the responsibility of the property owner and must be maintained by the property owner.



Is my home required to have a backflow prevention device?

Section 710.1 of the Uniform Plumbing Code (U.P.C.) states: "Drainage piping serving fixtures which have flood level rims located below the elevation of the next upstream manhole cover or private sewer serving such drainage piping **shall** be protected from backflow of sewage by installing an approved type of backwater valve." The intent of Section 710.1 is to protect the building interior from mainline sewer overflows or surcharges.

Additionally, U.P.C. 710.6 states: "Backwater valves **shall** be located where they will be accessible for inspection and repair at all times and, unless continuously exposed, shall be enclosed in a masonry pit fitted with an adequately sized removable cover."



If you have a sewage spill from your private sewer line that impacts storm drains, waterways or public property, contact:

Cucamonga Valley Water District

(909) 987-2591

Discharge of untreated or partially treated sewage is prohibited by law. If you would like more information on this prohibition, please contact any of the following:

San Bernardino County Public Health

(800) 442-2283

California Health and Safety Code, Sections 5410-5416 requires:

- No person shall discharge raw or treated sewage or other waste in a manner that results in contamination, pollution, or a nuisance.
- Any person who causes or permits a sewage discharge to any state waters:
 - Must immediately notify the local health agency of the discharge.
 - Shall reimburse the local health agency for services that protect the public's health and safety.
 - Who fails to provide the required notice to the local health agency is guilty of a misdemeanor and shall be punished by a fine (between \$500-\$1,000) and/or imprisonment for less than one year.

Santa Ana Regional Water Quality Control Board: (951) 782-4130

Requires the prevention, mitigation, response to, and reporting of sewage spills.

California Governor's Office of Emergency Services (CalOES): (800) 852-7550

California Water Code, Article 4, Chapter 4, Sections 13268-13271 & California Code of Regulations, Title 23, Division 3, Chapter 9.2, Article 2, Sections 2250-2260 require:

- Any person who causes or permits sewage in excess of 1,000 gallons to be discharged to state waters shall immediately notify the Office of Emergency Services.
- Any person who fails to provide the notice required by this section is guilty of a misdemeanor and shall be punished by a fine (less than \$20,000) and/or imprisonment for not more than one year.

Sewer Spill Reference Guide



Your Responsibilities as a Private Property Owner

Provided to you by:

Cucamonga Valley Water District

10440 Ashford Street
Rancho Cucamonga, CA 91730

(909) 987-2591

How do sewage spills happen?

Sewage spills occur when the wastewater in underground pipes overflows through a manhole, cleanout, or broken pipe. Most spills are relatively small and can be stopped and cleaned up quickly, but left unattended they can cause health hazards, damage to homes and businesses, and threaten the environment, local waterways, and beaches.

CAUTION!

When trying to locate a sewer problem, never open manholes or other public sewer structures. Only our crews are allowed to open & inspect these structures.

Call for assistance: [(909) 987-2591]

Common causes of sewage spills

- Grease build-up
- Tree roots
- Broken/cracked pipes
- Missing or broken cleanout caps
- Undersized sewers
- Groundwater/rainwater entering the sewer system through pipe defects and illegal connections

Prevent most sewage backups with a Backflow Prevention Device

This type of device can help prevent sewage backups into homes and businesses. If you don't already have a Backflow Prevention Device, contact a professional plumber or contractor to install one as soon as possible.

Protect the environment!

If you let sewage from your property discharge to a gutter or storm drain, you may be subject to penalties and/or out-of-pocket costs for clean-up and enforcement efforts. A property owner may be charged for costs incurred by agencies responding to spills from private properties.

What to look for:

Sewage spills can be a very noticeable gushing of water from a manhole or a slow water leak that may take time to be noticed. Don't dismiss unaccounted-for wet areas. Look for:

- Drain backups inside the building.
- Wet ground and/or water leaking around manhole lids onto your street.
- Leaking water from cleanouts or outside drains
- Unusual odorous wet areas: sidewalks, external walls, ground/landscape around a building.

The following are indicators of a possible obstruction in your sewer line:

- Water comes up in floor drains, showers or toilets.
- Toilets, showers or floor drains below ground level drain very slowly.

What to do if there is a spill:

Immediately notify the District. Our crews locate the blockage and determine if it is in the public sewer; if it is the crew removes the blockage and arranges for cleanup. If the backup is in your private internal plumbing or in the private service laterals, you are required to immediately:

- Control and minimize the spill by shutting off or not using the water
- Keep sewage out of the storm drain system using sandbags, dirt and/or plastic sheeting
- Call a plumbing professional to clear blockages and make repairs as needed. Look in the yellow pages under "Plumbing Drain & Sewer Cleaning" or "Sewer Contractors."

- Always notify your sewer/public works department or public sewer district of sewage spills.

Spill cleanup inside the home:

For large clean ups, a professional cleaning firm should be contacted to clean up impacted areas. If you hire a contractor, it is recommended to get estimates from more than one company. Sometimes, homeowner's insurance will pay for the necessary cleaning due to sewer backups. Not all policies have this coverage, so check with your agent.

If you decide to clean up a small spill inside your home, protect yourself from contamination by observing the following safety measures. Those persons whose resistance to infection is compromised should not attempt this type of clean up.

Other Tips:

- Keep children and pets out of the affected area until cleanup has been completed.
- Turn off heating/air conditioning systems
- Wear rubber boots, rubber gloves, and goggles during cleanup of the affected area.
- Discard items that cannot be washed and disinfected (such as: mattresses, rugs, cosmetics, baby toys, etc.)
- Remove and discard drywall and insulation that has been contaminated with sewage or flood waters.
- Thoroughly clean all hard surfaces (such as flooring, concrete, molding, wood and metal furniture,

countertops, appliances, sinks and other plumbing fixtures) with hot water and laundry or dish detergent.

- Help the drying process with fans, air conditioning units, and dehumidifiers.

- After completing cleanup, wash your hands with soap and water. Use water that has been boiled for 1 minute (allow the water to cool before washing your hands) OR use water that has been disinfected (solution of 1/8 teaspoon of household bleach per 1 gallon of water). Let it stand for 30 min. If water is cloudy, use ¼ teaspoon of household bleach per 1 gallon of water.

- Wash clothes worn during cleanup in hot water and detergent (wash apart from uncontaminated clothes).
- Wash clothes contaminated with sewage in hot water and detergent. Consider using a Laundromat until your onsite wastewater system has been professionally inspected and serviced.
- Seek immediate attention if you become injured or ill.

Spill cleanup outside the home:

- Keep children and pets out of the affected area until cleanup has been completed.
- Wear rubber boots, rubber gloves, and goggles during cleanup of affected area.
- Clean up sewage solids (fecal material) and place in properly functioning toilet or double bag and place in garbage container.

- On hard surfaces areas such as asphalt or concrete, it is safe to use a 2% bleach solution, or ½ cup of bleach to 5 gallons of water, but don't allow it to reach a storm drain as the bleach can harm the environment.

- After cleanup, wash hands with soap and water. Use water that has been boiled for 1 minute (allow to cool before washing your hands) OR use water that has been disinfected (solution of 1/8 teaspoon of household bleach per 1 gallon of water). Let it stand for 30 min. If water is cloudy, use ¼ teaspoon of household bleach per 1 gallon of water.

- Wash clothes worn during cleanup in hot water and detergent (wash apart from uncontaminated clothes).
- Wash clothes contaminated with sewage in hot water and detergent. Consider using a Laundromat until your onsite wastewater system has been professionally inspected and serviced.
- Seek immediate attention if you become injured/ill.

APPENDIX C:
Door Hanger

Cucamonga Valley Water District

On (date) _____, at (location)

_____,
we responded to a reported blockage of the
sanitary sewer service to your property.

We discovered a blockage in:

- The sanitary sewer main and cleared the line
- Your sanitary sewer lateral, which is your responsibility to maintain.

If you require assistance to clear your portion of the lateral you can search the internet for “Sewer Contractors” or “Plumbing Drains & Sewer Cleaning.” If you plan to hire a contractor, we recommend getting estimates from more than one company.

CVWD representative notes: _____

CVWD representative: _____

For questions or comments, please call

**Cucamonga Valley Water District
(909) 987-2591**

Cucamonga Valley Water District

On (date) _____, at (location)

_____,
we responded to a reported blockage of the
sanitary sewer service to your property.

We discovered a blockage in:

- The sanitary sewer main and cleared the line
- Your sanitary sewer lateral, which is your responsibility to maintain.

If you require assistance to clear your portion of the lateral you can search the internet for “Sewer Contractors” or “Plumbing Drains & Sewer Cleaning.” If you plan to hire a contractor, we recommend getting estimates from more than one company.

CVWD representative notes: _____

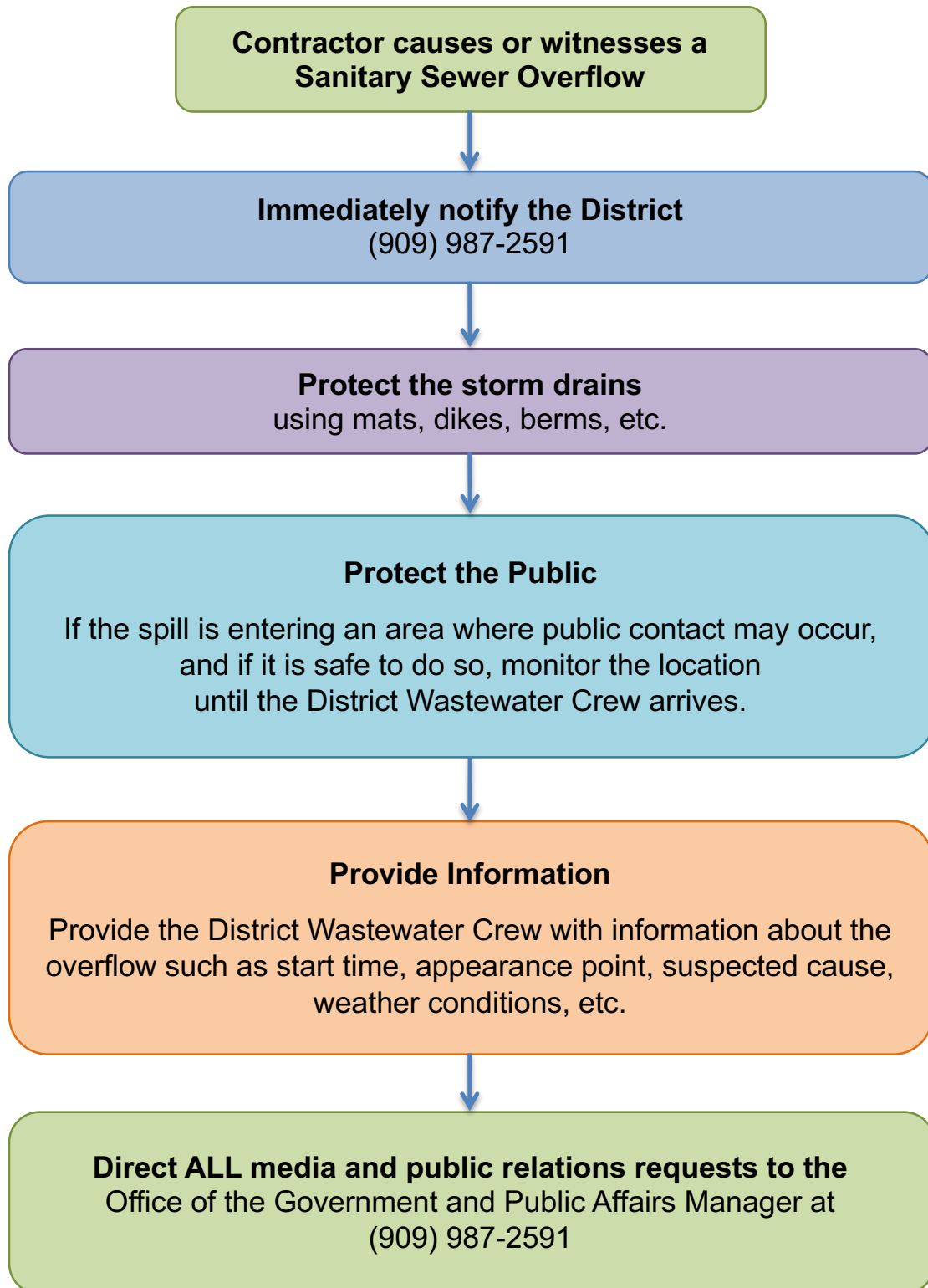
CVWD representative: _____

For questions or comments, please call

**Cucamonga Valley Water District
(909) 987-2591**

APPENDIX D:
Contractor Orientation

Contractor Orientation



APPENDIX E:
Sanitary Sewer Overflow/Backup Response Workbook

Cucamonga Valley Water District

Overflow Emergency Response Plan

Sanitary Sewer Overflow and Backup Response Workbook

Sanitary Sewer Overflow/Backup Response Workbook

- For **all** Sanitary Sewer Overflows, **immediately notify the Wastewater Utility Supervisor** at (909) 987-2591 to make the 2-hour notification to CALOES.
- Refer to the Regulatory Reporting Guide** for additional reporting requirements.
- If there is a backup into a residence or business:**
Contact HR/Risk Management Division at (909) 987-2591. If HR/Risk Management Division is unreachable, initiate contact with ACWA/JPIA or Sedgewick staff
 - ACWA/Joint Powers Insurance Authority (ACWA/JPIA), Property & Liability Claims Department: (800) 231-5742 or Claims@acwajpia.com
 - After 4:30 or on weekends/holidays, contact Sedgewick staff: Jim Stewart at (916) 548-8283, or Casey McClintock at (916) 607-636
- For Cleaning Services (Restoration/Remediation):**
Refer to the restoration/remediation firm contact list.
- For Water Sampling:** Water Quality Coordinator
- For any media inquiries/requests:** Government and Public Affairs Manager (909) 987-2591



Don't forget to take photos!

Wastewater Crew:

- Follow the instructions on the Overflow/Backup Response Flowchart and complete forms in this workbook as indicated.
- Complete the chain of custody record (to the right) and deliver this workbook to the Wastewater Utility Supervisor.

Print Name: _____

Initial: _____

Date: _____

Time: _____

Wastewater Utility Supervisor:

- Review the SSO Event Checklist and the forms in this booklet. Contact the Wastewater Crew for additional information if necessary.
- Confirm that all required regulatory notifications have been made.
- If this was a Sewer Backup, complete the Backup Forms Checklist (E-1).
- Complete the Collection System Failure Analysis Form (F-1).
- Enter data into CIWQS.
- Complete the Chain of Custody record (right) and file this booklet
- Complete District's Internal Incident Report

Print Name: _____

Initial: _____

Date: _____

Time: _____

SSO Event Checklist

Date of SSO: _____ SSO Location/Name: _____

CIWQS Event ID #: _____ Category? 1 2 3 OES#: _____

Property Damage? Yes No Service Request #: _____

- | | |
|---|---|
| <ul style="list-style-type: none"> <input type="checkbox"/> Effort made to contain and return a portion/all to the sanitary sewer <input type="checkbox"/> Pictures/video taken of overflow <input type="checkbox"/> Pictures taken of affected/unaffected area <input type="checkbox"/> If property damage, start that process <input type="checkbox"/> Pictures taken of containment efforts <input type="checkbox"/> If Cat 1 > 1000 gals:
OES Control # _____ <input type="checkbox"/> Impacted waters identified? <input type="checkbox"/> No impacted waters? <input type="checkbox"/> SSO Report Form Complete (includes fields for all required fields in CIWQS, and a sketch of SSO) <input type="checkbox"/> Volume Estimation Worksheet(s) done <input type="checkbox"/> Start Time Determination Form done <input type="checkbox"/> Initial review of forms is complete (ensure consistency with dates, times, volumes, and other data) <input type="checkbox"/> Review of photos and videos (label/date) <input type="checkbox"/> Start Folder for all documentation for this SSO event. Put everything in it (SSO Report, Worksheets/Forms, follow-up work orders, notes, pics, drawings, etc. CIWQS print outs and emails) <input type="checkbox"/> Failure Analysis <ul style="list-style-type: none"> <input type="checkbox"/> CCTV to determine cause <input type="checkbox"/> Review Asset History <input type="checkbox"/> Determine next steps to prevent recurrence <input type="checkbox"/> Document findings and next steps on SSO Report <input type="checkbox"/> Submit Draft in CIWQS w/in 3 business days (for Categories 1 and 2 only) <input type="checkbox"/> Print CIWQS Draft hard copy and email | <ul style="list-style-type: none"> <input type="checkbox"/> Review CIWQS, SSO Report, Worksheets, CMMS, and any other documentation to ensure data is consistent (e.g. dates, times, volumes, cause, follow-up action, etc.) <input type="checkbox"/> Attach photos, forms etc. to CIWQS <input type="checkbox"/> Submit Ready to Certify in CIWQS (with sufficient time for LRO review) <input type="checkbox"/> Print CIWQS Ready to Certify and email <input type="checkbox"/> Hand folder to LRO <input type="checkbox"/> LRO review folder and CIWQS verify accurate and consistent data <input type="checkbox"/> Certify in CIWQS (within 15 calendar days for Categories 1 & 2, 30 days after the month for Category 3) <input type="checkbox"/> Print Certified CIWQS and email <input type="checkbox"/> Any changes? Change in CIWQS and hard copies and explain changes, print our current version <input type="checkbox"/> Move completed folder to SSO Binder <input type="checkbox"/> For 50,000 gallons or larger <ul style="list-style-type: none"> <input type="checkbox"/> Follow Water Quality Monitoring and Sampling procedures <input type="checkbox"/> Map of where samples were taken <input type="checkbox"/> Sampling results <input type="checkbox"/> Write Technical Report <input type="checkbox"/> Attach to CIWQS <input type="checkbox"/> Add to SSO Folder/Binder <input type="checkbox"/> If any changes are made to SSMP <ul style="list-style-type: none"> <input type="checkbox"/> Update SSMP and link on CIWQS to SSMP <input type="checkbox"/> Add change to SSMP Change Log <input type="checkbox"/> If change is substantive, re-certify SSMP |
|---|---|

Deadline	Category 1 SSO	Category 2 SSO	Category 3 SSO	Private Lateral Sewage Discharge
2 hours after awareness of SSO	If the spill is greater than or equal to 1,000 gallons, call CalOES.	-	-	-
As soon as possible	If SSO impacts private property that may be a failure of the sewer main and/or if a claim for damages may be submitted against the District, notify the HR/Risk Management Division.			-
48 Hours after awareness of SSO	If 50,000 gal or more were not recovered, begin water quality sampling.	-	-	-
3 Business Days after awareness of SSO	Submit Draft Spill Report in the CIWQS database.	Submit Draft Spill Report in the CIWQS database.	-	-
15 Days after response conclusion	Certify Spill Report in CIWQS. Update as needed until 120 days after SSO end date.	Certify Spill Report in the CIWQS database. Update as needed until 120 days after SSO end time.	-	-
30 Days after end of calendar month in which SSO occurred	-	-	Certify Spill Report in CIWQS. Update as needed until 120 days after SSO end date.	(Voluntary) Certify Spill Report in CIWQS. Update as needed until 120 days after SSO end date.
45 days after SSO end date	If 50,000 gal or more were not recovered, submit SSO Technical Report in CIWQS.	-	-	-

Note: For reporting purposes, if one SSO event results in multiple appearance points, complete one SSO report in the CIWQS SSO Online Database, and report the location of the SSO failure point, blockage or location of the flow condition that caused the SSO, including all the discharge points associated with the SSO event.

Category	Definition
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; or Reach 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).
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.
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.

Authorized Personnel:

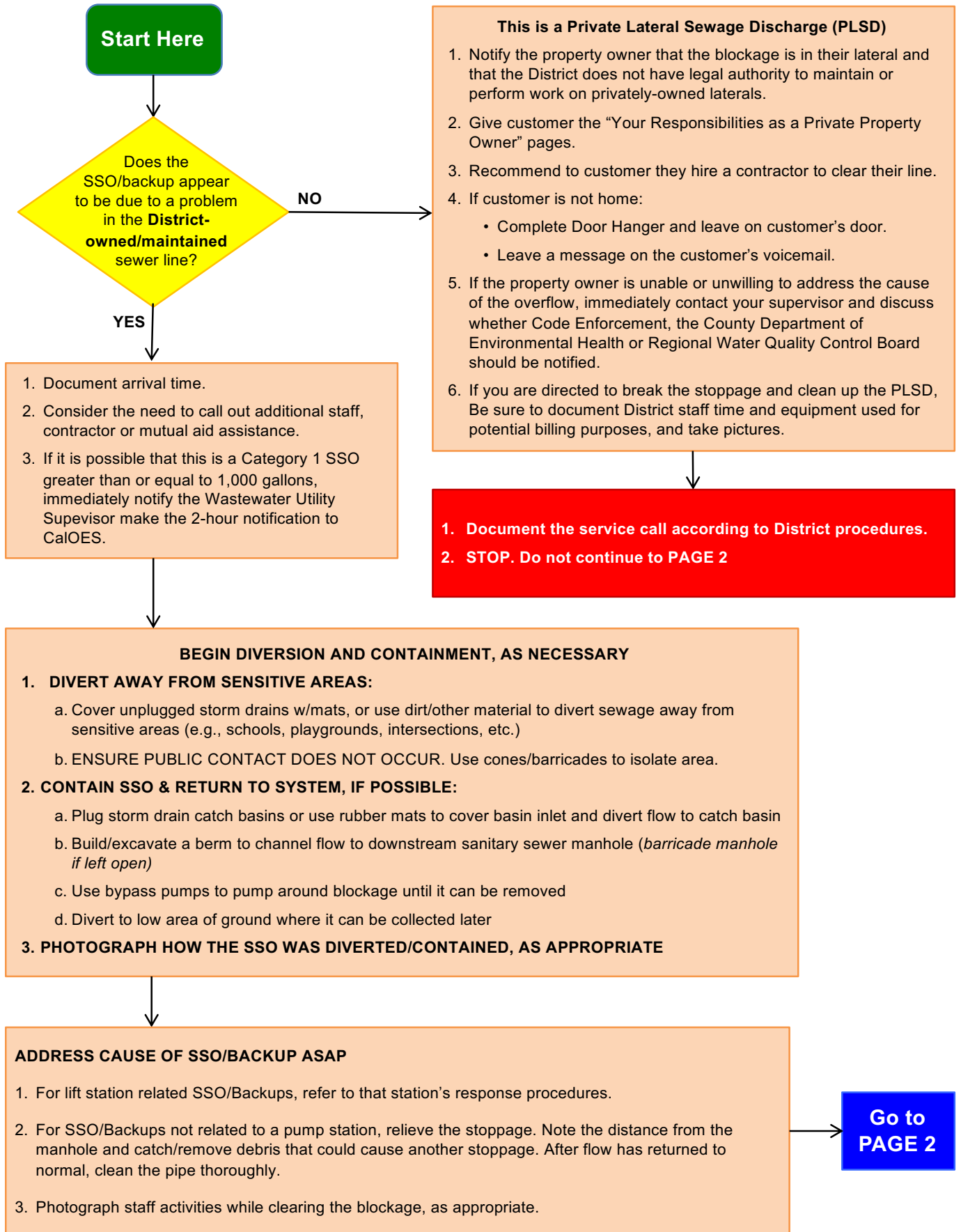
The following are the District’s Legally Responsible Officials (LROs) and are authorized to perform regulatory reporting of SSOs electronically sign and certify SSO reports in CIWQS:

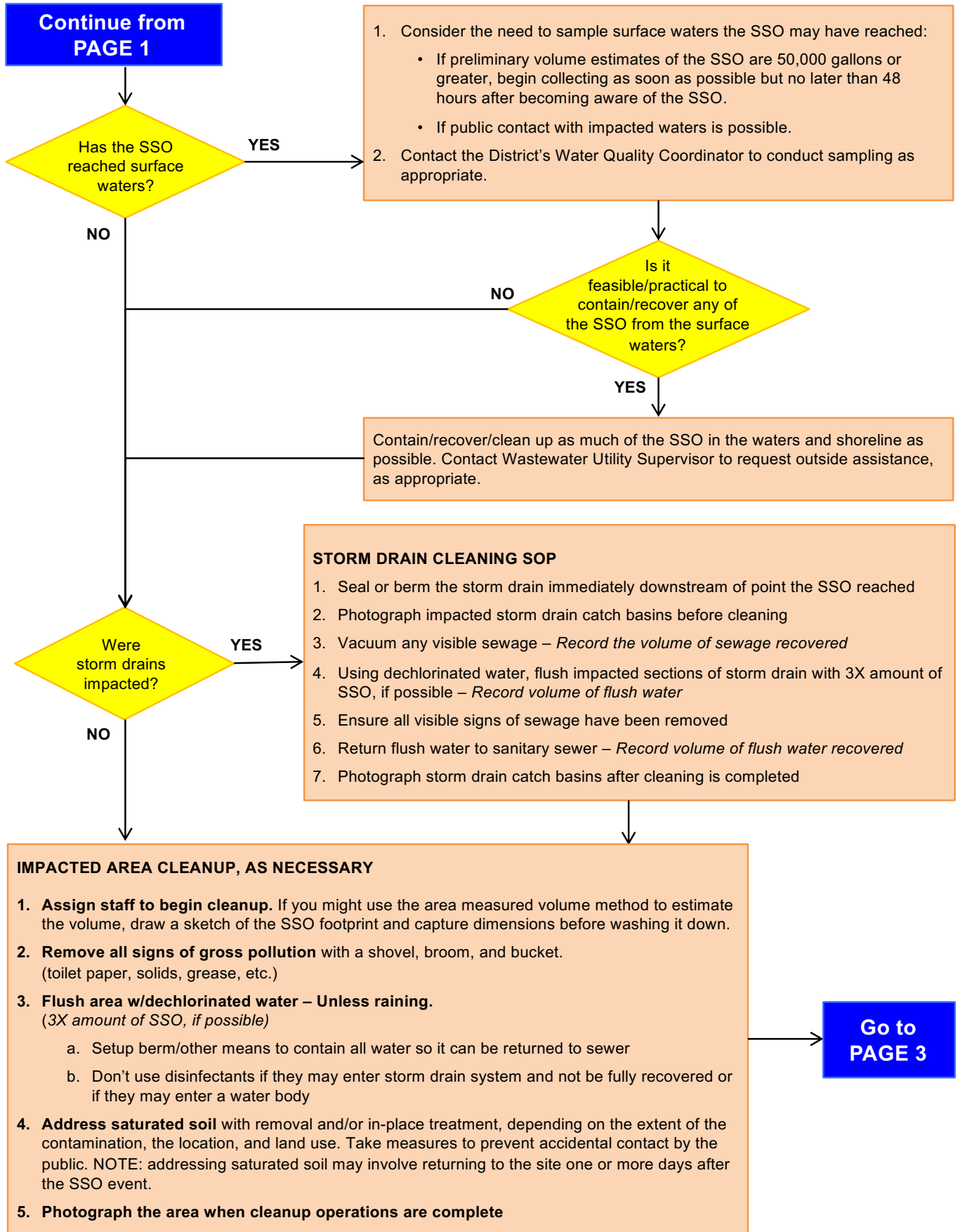
- Wastewater Utility Supervisor
- Construction and Maintenance Manager
- Director of Operations

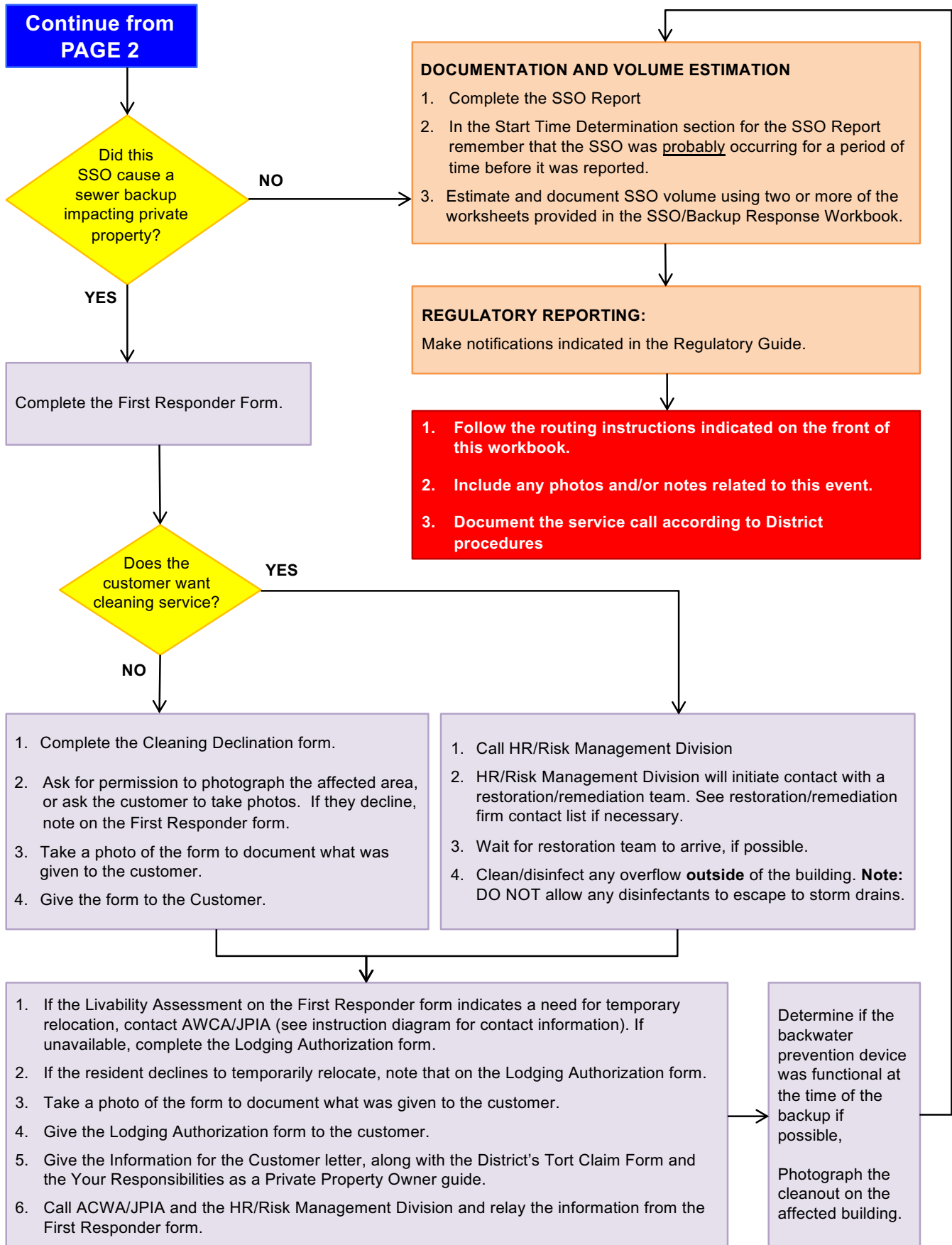
Contact	Telephone/Email
CAL OES	Tel: (800) 852-7550
HR/Risk Management Division	Email: HR@cvwdwater.com Tel: (909) 987-2591 Fax: (909) 586-3927
ACWA-JPIA	ACWA/Joint Powers Insurance Authority (ACWA/JPIA) Property & Liability Claims Department Tel: (800) 231-5742 Fax: (916) 786-0209 Email: Claims@acwajpia.com After 4:30 or on weekends/holidays, contact Sedgwick staff: Jim Stewart at (916) 548-8283, or Casey McClintock at (916) 607-636
Regional Water Quality Control Board	(951) 782-4130
State Water Resources Control Board Walter Mobley	(916) 323-0878 Walter.Mobley@waterboards.ca.gov

Regulatory Reporting Checklist

NOTIFICATIONS	
CAL OES (800) 852-7550	
Notification Date/Time:	
Name of Who You Spoke To:	
OES Control Number:	
HR/Risk Management Division, if applicable	
Notification Date/Time:	
Name of Who You Spoke To: Left Message: <input type="checkbox"/>	
ACWA/JPIA, if applicable	
Notification Date/Time:	
Name of Who You Spoke To: Left Message: <input type="checkbox"/>	
Regional Water Quality Control Board	
Notification Date/Time:	
Name of Who You Spoke To: Left Message: <input type="checkbox"/>	
State Water Resources Control Board	
Notification Date/Time:	
Name of Who You Spoke To: Left Message: <input type="checkbox"/>	







PHYSICAL LOCATION DETAILS		
Spill location name		
Latitude of spill location		
Longitude of spill location		
County		
Regional Water Quality Control Board		
VOLUMES BY DESTINATION	Volume Spilled (Gallons)	Volume Recovered (Gallons)
2.a/2.b Estimated spill volume that reached a separate storm drain that flows to a surface body of water? (If not all recovered, this is a Category 1)		
2.c/2d Estimated spill volume that directly reached a drainage channel that flows to a surface water body? (Any volume spilled is a Category 1)		
2.e/2.f Estimated spill volume discharged directly to a surface water body? (Any volume spilled is a Category 1)		
2.g/2.h Estimated spill volume discharged to land? (Includes discharges directly to land, and discharges to a storm drain system or drainage channel that flows to a storm water infiltration/retention structure, field, or other non-surface water location. Also, includes backups to building structures).		
	Volume Spilled	Volume Recovered
Total Volume Spilled (Verify this matches the table in between 2.h and 3 in CIWQS)		

DATE/TIME DETERMINATIONS		
	DATE	TIME
Start of SSO (Use Start Time Determination/Notes Below)		
District Notified		
Collection System Operator Dispatched		
Collection System Operator Arrived		
End of SSO		
End of Spill Response		

Start Time Determination/Notes



Caller Interview: Where did you see sewage spill from?

Manhole Inside Building Vent/Clean Out Catch Basin Wet Well/Lift Station

Other: _____

Comments: _____

Last Time Caller Observed **NO Spill** occurring: _____ AM / PM Date ____ / ____ / ____

Comments: _____

If the volume of the SSO and rate of flow are known, divide volume by rate of flow to get duration of SSO event.

_____ Gallons ÷ _____ GPM = Minutes (SSO Duration).

Subtract the Duration from the SSO End Date/Time to establish the SSO Start Date/Time.

Other Efforts to Determine Start Time: _____

Other Comments Regarding Spill Start Time: _____

Estimated SSO Start Time: _____ AM / PM Date: ____ / ____ / ____

SSO End Time: _____ AM / PM Date: ____ / ____ / ____

Duration: _____ minutes

SSO FIELD REPORT
Spill location description:
Number of appearance points:
Spill appearance points: (Check all that apply) <input type="checkbox"/> Backflow Prevention Device <input type="checkbox"/> Force Main <input type="checkbox"/> Gravity Mainline <input type="checkbox"/> Inside Building/Structure <input type="checkbox"/> Lateral Clean Out (Private/Public) <input type="checkbox"/> Lower Lateral (Private/Public) <input type="checkbox"/> Manhole Pump Station <input type="checkbox"/> Upper Lateral (Private/Public) <input type="checkbox"/> Other Sewer System Structure
Spill appearance point explanation. (Enter information here if "Other" or multiple appearance points were selected):
Final spill destination: (Check all that apply) <input type="checkbox"/> Building/Structure <input type="checkbox"/> Combined Storm Drain <input type="checkbox"/> Drainage Channel <input type="checkbox"/> Other (Specify Below) <input type="checkbox"/> Paved Surface <input type="checkbox"/> Separate Storm Drain <input type="checkbox"/> Street/Curb and Gutter <input type="checkbox"/> Surface Water <input type="checkbox"/> Unpaved Surface
Explanation of final spill destination. (Enter information if "Other" was selected.

SSO FIELD REPORT

Spill cause: (Check One)

- Air Relief Valve (ARV)/Blow Off Valve (BOV)/Backwater Valve Failure
- Construction Diversion Failure
- CS Maintenance Caused Spill/Damage
- Damage by Others Not Related to CS Construction/Maintenance (Specify Below)
- Debris from Construction
- Debris from Lateral
- Debris-General
- Debris-Rags
- Debris Wipes/Non-Dispersible
- Flow Exceeded Capacity (Separate CS Only)
- Grease Deposition (FOG)
- Inappropriate Discharge to CS
- Natural Disaster
- Operator Error
- Other (Specify Below)
- Pipe Structural Problem/Failure
- Pipe Structural Problem/Failure – Installation
- Pump Station Failure – Controls
- Pump Station Failure – Mechanical
- Pump Station Failure – Power
- Rainfall Exceeded Design, I and I (Separate CS Only)
- Root Intrusion
- Siphon Failure
- Surcharged Pipe (Combined CS Only)
- Vandalism

Spill cause explanation: (Required if Spill Cause is “Other”)

SSO FIELD REPORT		
Where did failure occur? <input type="checkbox"/> Air Relief Valve (ARV)/Blow Off Valve (BOV) Failure <input type="checkbox"/> Force Main <input type="checkbox"/> Gravity Mainline <input type="checkbox"/> Lower Lateral (Public) <input type="checkbox"/> Manhole <input type="checkbox"/> Other (Specify Below) <input type="checkbox"/> Pump Station Failure – Controls <input type="checkbox"/> Pump Station Failure – Mechanical <input type="checkbox"/> Pump Station Failure – Power <input type="checkbox"/> Siphon <input type="checkbox"/> Upper Lateral (Public)		
Explanation of where failure occurred: (Required if Where Failure Occurred is “Other”)		
Was spill associated with a storm event?	YES	NO
Diameter of sewer pipe at the point of blockage or failure:	inches	
Material of sewer pipe at the point of blockage or failure:		
Estimated age of sewer asset at the point of blockage or failure (if applicable):	years	
Spill Response Activities. (Check all that apply) <input type="checkbox"/> Cleaned-Up <input type="checkbox"/> Mitigated Effects of Spill <input type="checkbox"/> Contained All or Portion of Spill <input type="checkbox"/> Other (Specify Below) <input type="checkbox"/> Restored Flow <input type="checkbox"/> Returned All Spoil to Sanitary Sewer System <input type="checkbox"/> Property Owner Notified <input type="checkbox"/> Other Enforcement Agency Notified		
Explanation of spill response activities: (Required if spill response activities is “Other”):		

SSO FIELD REPORT		
Spill corrective action taken: (Check all that apply) <ul style="list-style-type: none"> <input type="checkbox"/> Add location to, or increase frequency check, in Preventive Maintenance Program <input type="checkbox"/> Adjusted Schedule/Method of Preventive Maintenance <input type="checkbox"/> Enforcement Action Against FOG Source <input type="checkbox"/> Inspected Sewer Using CCTV to Determine Cause <input type="checkbox"/> Other (Specify Below) <input type="checkbox"/> Plan Rehabilitation or Replacement of Sewer <input type="checkbox"/> Repaired Facilities or Replaced Defect 		
Explanation of corrective action taken: (Required if spill corrective action is "Other")		
Is there an ongoing investigation?	YES	NO
Health warnings posted?	YES	NO
Name of impacted surface waters, if any:		

SSO FIELD REPORT	
Water quality samples analyzed for: (Circle all that apply)	
<input type="checkbox"/> Dissolved Oxygen <input type="checkbox"/> Other Chemical Indicators(s) – Specify Below <input type="checkbox"/> Biological Indicator(s) – Specify Below <input type="checkbox"/> No Water Quality Samples Taken <input type="checkbox"/> Not Applicable to the Spill <input type="checkbox"/> Other (Specify Below)	
Explanation of water quality samples analyzed for: (Required if water quality samples analyzed for is "Other chemical indicator(s)", "Biological indicator(s)", or "Other")	
Water quality sample results reported to: (Check all that apply)	
<input type="checkbox"/> County DEHS <input type="checkbox"/> Regional Water Quality Control Board <input type="checkbox"/> Other (Specify below) <input type="checkbox"/> No Water Quality Samples Taken <input type="checkbox"/> Not Applicable to this Spill	
Explanation of water quality sample results reported to: (Required if water quality sample results reported to is "Other")	
Method and explanation of volume estimation methods used: (Check all that apply)	
<input type="checkbox"/> Eyeball Estimate <input type="checkbox"/> Measured Volume <input type="checkbox"/> Duration and Flow Rate <input type="checkbox"/> Counting Upstream Connections <input type="checkbox"/> Other (Explain):	

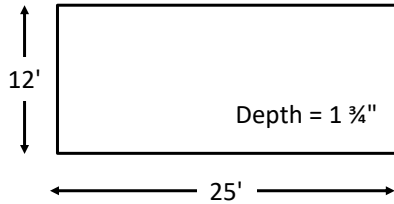
Miscellaneous Computations & Examples

To convert inches to feet (NOTE: for the purposes of this worksheet, the unit of measurement will be in feet for formula examples)	Divide the inches by 12 or use the chart on the right. Example 1: $27" \div 12 = 2.25'$ Example 2: $1\frac{3}{4}" = ?'$ $1" (0.08') + \frac{3}{4}" (0.06') = 0.14'$	Convert Inches to Feet			
		Inches	Feet		
Volume of one cubic foot	7.48 gallons of liquid	1/8"	0.01'		
		1/4"	0.02'		
Area: Two-dimensional measurement represented in square feet (SQ/FT or ft ²)	Square/rectangle: Area = Length x Width Circle: Area = $\pi \times r^2$ (where $\pi \approx 3.14$ and $r = \text{radius} = \frac{1}{2} \text{ diameter}$) Triangle: Area = $\frac{1}{2} (\text{Base} \times \text{Height})$	3/8"	0.03'		
		1/2"	0.04'		
		5/8"	0.05'		
		3/4"	0.06'		
		7/8"	0.07'		
		1"	0.08'		
		2"	0.17'		
		3"	0.25'		
		4"	0.33'		
		5"	0.42'		
Volume: Three-dimensional measurement represented in cubic feet (CU/FT or ft ³)	Rectangle/square footprint: Volume = Length x Width x Depth Circle footprint (cylinder): Volume = $\pi \times r^2 \times \text{Depth}$ (where $\pi \approx 3.14$ and $r = \text{radius} = \frac{1}{2} \text{ diameter}$) Triangle footprint: Volume = $\frac{1}{2} (\text{Base} \times \text{Height}) \times \text{Depth}$	6"	0.50'		
		7"	0.58'		
		8"	0.67'		
		9"	0.75'		
		10"	0.83'		
		11"	0.92'		
		12"	1.00'		
		Depth: Wet Stain on Concrete or asphalt surface	If the depth is not measurable because it is only a wet stain, use the following estimated depths: Depth of a wet stain on concrete surface: 0.0026' (1/32") Depth of a wet stain on asphalt surface: 0.0013' (1/64") These were determined to be a reasonable depth to use on the respective surfaces through a process of trial and error. One gallon of water was poured onto both asphalt and concrete surfaces. Once the area was determined as accurately as possible, different depths were used to determine the volume of the wetted footprint until the formula produced a result that (closely) matched the one gallon spilled. This process was repeated several times.		
		Depth: Contained or "Ponded" sewage	Measure actual depth of standing sewage whenever possible. When depth varies, measure several representative sample points and determine the average. Use that number in your formula to determine volume.		

Miscellaneous Computations & Examples (continued)

Area/Volume of a Rectangle or Square

Formula: Length x Width x Depth = Volume in **cubic feet**



$$\frac{25'}{\text{Length}} \times \frac{12'}{\text{Width}} \times \frac{0.14'}{\text{Depth}} = \underline{\underline{42 \text{ Cubic Feet}}}$$

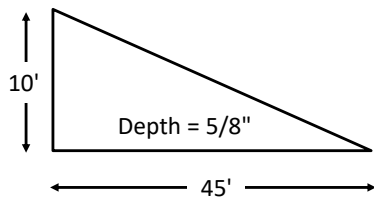
Multiply the volume by 7.48 gallons to determine the volume in **gallons**:

$$\frac{42 \text{ ft}^3}{\text{Volume}} \times \frac{7.48}{\text{gal/ft}^3} = \underline{\underline{314.16 \text{ gallons}}}$$

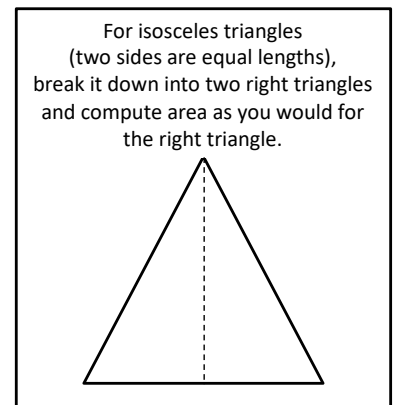
Convert Inches to Feet	
Inches	Feet
1/8"	0.01'
1/4"	0.02'
3/8"	0.03'
1/2"	0.04'
5/8"	0.05'
3/4"	0.06'
7/8"	0.07'
1"	0.08'
2"	0.17'
3"	0.25'
4"	0.33'
5"	0.42'
6"	0.50'
7"	0.58'
8"	0.67'
9"	0.75'
10"	0.83'
11"	0.92'
12"	1.00'

Area/Volume of a Right Triangle

Formula: Base x Height x Depth = Volume in **cubic feet**



$$\frac{45'}{\text{Base}} \times \frac{10'}{\text{Height}} \times 0.5 \times \frac{0.05'}{\text{Depth}} \times \frac{7.48}{\text{gal/ft}^3} = \underline{\underline{84.15 \text{ gallons}}}$$

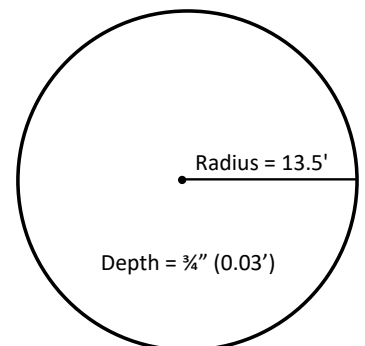


Area/Volume of a Circle

Formula: $\pi \times r^2 \times 0.785 \times \text{Depth} = \text{Volume in cubic feet}$

The diameter is a straight line passing from side to side through the center of a circle.

$$\frac{13.5'}{\text{Radius}} \times \frac{13.5'}{\text{Radius}} \times 3.14 \times \frac{0.03'}{\text{Depth}} \times \frac{7.48}{\text{gal/ft}^3} = \underline{\underline{128.42 \text{ gallons}}}$$



Volume Estimation: Eyeball Estimation Method (for ≤100 gallons)

STEP 1: Position yourself so that you have a vantage point where you can see the entire SSO.

STEP 2: Imagine one or more buckets or barrels of water tipped over. Depending on the size of the SSO, select a bucket or barrel size as a frame of reference. It may be necessary to use more than one bucket/barrel size.

STEP 3: Estimate how many of each size bucket or barrel it would take to make an equivalent spill. Enter those numbers in Column A of the row in the table below that corresponds to the bucket/barrel sizes you are using as a frame of reference.

STEP 4: Multiply the number in Column A by the multiplier in Column B. Enter the result in Column C.

	A	B	C
Size of bucket(s) or barrel(s)	How many of this size?	Multiplier	Estimated SSO Volume (gallons)
1 gallon water jug		x 1 gallons	
5 gallon bucket		x 5 gallons	
32 gallon trash can		x 32 gallons	
55 gallon drum		x 55 gallons	
Other: _____ gallons		x _____ gallons	
Estimated Total SSO Volume:			

STEP 5: Is rainfall a factor in the SSO? Yes No

If yes, what volume of the observed spill volume do you estimate is rainfall? _____ gallons
 If yes, describe how you determined the amount of rainfall in the observed spill?

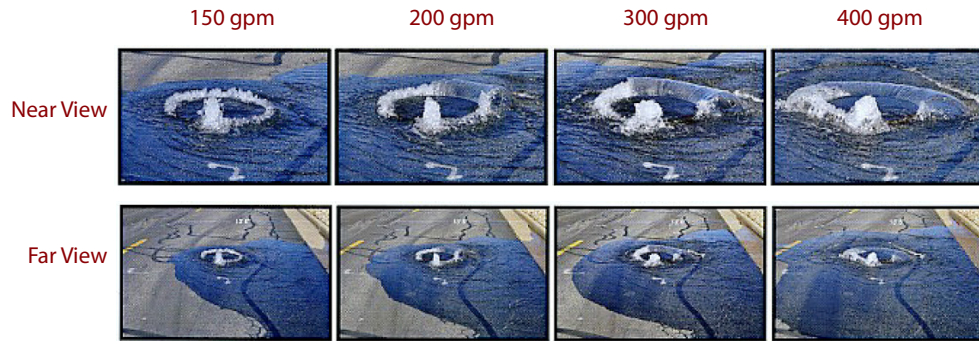
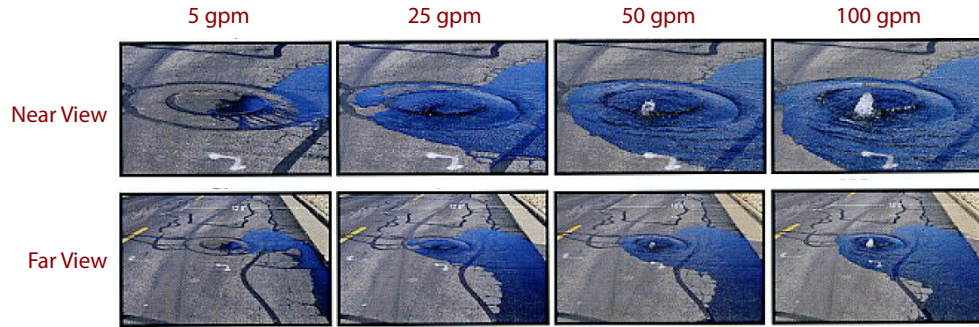
STEP 6: Calculate the estimated SSO volume by subtracting the rainfall from the SSO volume:

$$\frac{\text{_____ gallons}}{\text{Estimated SSO Volume}} - \frac{\text{_____ gallons}}{\text{Rainfall}} = \frac{\text{_____ gallons}}{\text{Total Estimated SSO Volume}}$$

Volume Estimation: Duration and Flow Rate Comparison Method

Compare the SSO to reference images below to estimate flow rate of the current overflow. **NOTE: If the manhole cover in your picture has vent holes or more than one pry hole, do not use these pictures for comparison.**

Describe which reference photo(s) were used and any additional factors that influenced applying the reference photo data to the actual SSO:



SSCSC Manhole Overflow Gauge: CWEA Southern Section Collections Systems Committee Overflow Simulation courtesy of Eastern Municipal Water District

Flow Rate Based on Photo Comparison: _____ gallons per minute (gpm)

Start Date and Time	1.
End Date and Time	2.
SSO Event Total Time Elapsed (subtract Line 1 from Line 2. Show in minutes.)	3.
Average Flow Rate GPM (Account for diurnal flow pattern)	4.
Total Volume Estimated Using Duration and Flow Method (Line 3 x Line 4)	5.

SSO Date: _____ Location: _____

STEP 1: Describe spill area surface: Asphalt Concrete Dirt Landscape Inside Building

Other: _____

STEP 2: Draw/sketch the outline (footprint) of the spill. Then break the footprint down into recognizable shapes. See example below.

1. Sketch the outline of the spill (black line)
2. Break the sketch down into recognizable shapes (circles, squares, etc.) as well as you can.
3. Determine the volume of each shape. (note: in this example, after the volume of the circle is determined, multiply it by approximately 65% so that the overlap area won't be counted twice.
4. If the spill is of varying depths, take several measurements at different depths and find the average. If the spill affects a dry unimproved area such as a field or dirt parking lot, determine the aread of the wetted ground in the same manner as you would on a hard surface. Using a round-point shovel, dig down into the soil until you find dry soil. Do this in several locations within the wetted area and measure the depth of the wet soil. Average the measurement/thicknes of the wet soil and determine the average depth of the wet soil.

Example (right): $2'' + 1.5'' + 1.25'' + 3'' + 5'' + 1.25'' = 14.0''$
 $14.0'' \div 6 \text{ measurements} = 2.33''$
 Average Depth = 2.33" (0.194')

STEP 3: Calculate the area of the footprint by completing the table below for each shape in Step 2.

If two shapes overlap, select one of the two shapes and estimate the percentage of that shape that does not overlap. Enter that percentage in the % Not Overlapping column. This will ensure that the overlap area is only counted once. Refer to the example on the previous page.

Rectangles	Length	X	Width	X	% Not Overlapping*	=	Area	X	Depth	=	Volume
	ft	X	ft	X	%	=	ft ²	X	ft	=	ft ³
	ft	X	ft	X	%	=	ft ²	X	ft	=	ft ³
	ft	X	ft	X	%	=	ft ²	X	ft	=	ft ³

Triangles	Base	X	Height	÷	X	% Not Overlapping*	=	Area	X	Depth	=	Volume
	ft	X	ft	÷ 2	X	%	=	ft ²	X	ft	=	ft ³
	ft	X	ft	÷ 2	X	%	=	ft ²	X	ft	=	ft ³
	ft	X	ft	÷ 2	X	%	=	ft ²	X	ft	=	ft ³

Circles	π	X	Radius	X	Radius	X	% Not Overlapping*	=	Area	X	Depth	=	Volume
	3.14	X	ft	X	ft	X	%	=	ft ²	X	ft	=	ft ³
	3.14	X	ft	X	ft	X	%	=	ft ²	X	ft	=	ft ³
	3.14	X	ft	X	ft	X	%	=	ft ²	X	ft	=	ft ³

Total Spill Volume (sum of all three tables above): _____ ft³

STEP 4: Convert from cubic feet to gallons by multiplying by 7.48.

_____ ft³ x 7.48 gallons = _____ gallons
 spill volume in cubic feet **Total estimated volume**

Volume Estimation: Upstream Connections Method

SSO Date: _____ Location: _____

STEP 1: Determine the number of Equivalent Dwelling Units (EDUs) for this SSO: _____ EDUs
 NOTE: A single-family residential home = 1 EDU. For commercial buildings, refer to District documentation.

STEP 2: This volume estimation method utilizes daily usage data based on flow rate studies of several jurisdictions in California. Column A shows how an average daily of usage of 180 gallons per day is distributed during each 6-hour period. Adjust the table as necessary to accurately represent the actual data.

Complete Column E by entering the number of minutes the SSO was active during each 6-hour time period. Multiply column D times Column E to calculate the gallons spilled during each time period. Add the numbers in Column F together for the Total Estimated SSO Volume per EDU.

Time Period	Flow Rate Per EDU				SSO	
	A	B	C	D	E	F
	Gallons per Period	Hours per period	A ÷ B = Gallons per Hour	C ÷ 60 = Gallons per Minute	Minutes SSO was active during period	D × E = Gallons spilled per period
6am-noon	72	6	12	0.20		
noon-6pm	36	6	6	0.10		
6pm-midnight	54	6	9	0.15		
midnight-6am	18	6	3	0.05		
Total Estimated SSO Volume per EDU:						

STEP 3: Multiply the Estimated SSO Volume per EDU from Step 2 by the number of EDUs from Step 1.

$$\frac{\text{_____ gallons}}{\text{Volume per EDU}} \times \frac{\text{_____}}{\text{\# of EDUs}} = \frac{\text{_____ gallons}}{\text{Estimated SSO Volume}}$$

STEP 4: Adjust SSO volume as necessary considering other factors, such as activity that would cause a fluctuating flow rate (doing laundry, taking showers, etc.). Explain rationale below and indicate adjusted SSO estimate (attach a separate page if necessary).

Total Estimated SSO Volume: _____ gallons

***** FOR DISTRICT USE ONLY *****

Complete this form only if there is a backup into a residence or business.

Instructions to Wastewater Crew:

1. Photograph each form before giving it to the customer for documentation.
2. Tear forms listed below out of this workbook and hand to customer. Keep the pages in this section of the Workbook that are labeled "FOR DISTRICT USE ONLY," which are for District use only: E-1 and E-2.
3. Check each item that was provided to the customer.
4. Have customer sign below.

Forms/Documents:

- Form E-3: Restoration/Remediation Firm Contact List
- Form E-4: Declination of Cleaning Services
- Form E-5: Lodging Authorization (if you were unable to reach ACWA/JPIA)
- Form E-6: Customer Information Letter
- Form E-7: Your Responsibilities as a Private Property Owner
- Form E-8: Standard Tort Claim Form, if applicable or requested

Forms Provided to: _____

Customer Name

Customer Signature

Date

Check here if customer declines to sign:

Forms Provided by: _____

Employee Name

Initial

Instruction to Wastewater Utility Supervisor:

Send photos, including the photo of the forms/documents,
and a copy of the First Responder form to the HR/Risk Management Division.

***** FOR DISTRICT USE ONLY *****

Complete this form only if there is a backup into a residence or business.

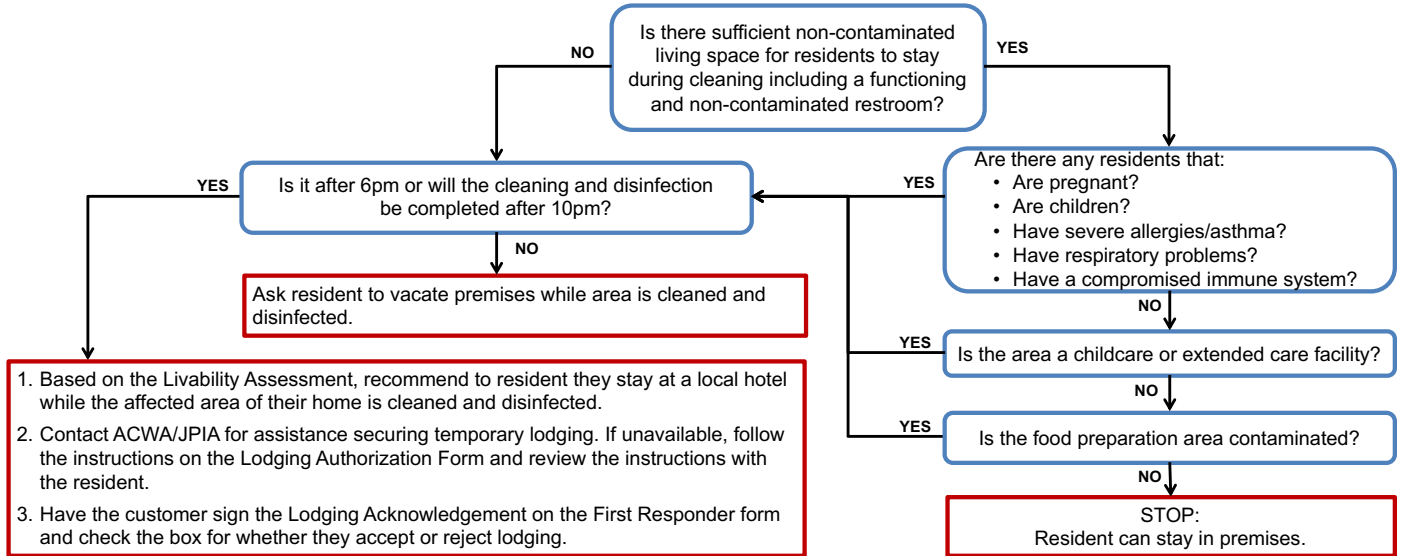
Fill out this form as completely as possible.
 Ask customer if you may enter the home. If so, take photos of all damaged and undamaged areas.

PERSON COMPLETING THIS FORM:		PHONE:
Name: _____		DATE:
Title: _____		TIME:
TIME STAFF ARRIVED ON-SITE:		
DOES THE CUSTOMER WANT THE DISTRICT TO CALL FOR CLEANING SERVICE? <input type="checkbox"/> Yes <input type="checkbox"/> No If no, give the customer the Cleaning Declination Form and have them sign here: _____ If customer called a cleaning contractor, provide name and contact number: _____		
RESIDENT NAME: <input type="checkbox"/> Owner <input type="checkbox"/> Renter ADDRESS: PHONE:	IF RENTER, PROPERTY MANAGER(S): OWNER: ADDRESS: PHONE:	
Location is <input type="checkbox"/> COMMERCIAL <input type="checkbox"/> RESIDENTIAL	# OF PEOPLE LIVING AT RESIDENCE:	
Approximate Age of Home/Building:	# of Restrooms:	# of Rooms Affected:
Numbers of Photographs or Videos Taken: <input type="checkbox"/> Photographs <input type="checkbox"/> Video <input type="checkbox"/> Customer did not provide or allow photographs	Where are photos/video stored?	
Is nearest upstream manhole visibly higher than the drain/fixture that overflowed? <input type="checkbox"/> Yes <input type="checkbox"/> No		
Does property have a Property Line Cleanout or BPD?		<input type="checkbox"/> Cleanout <input type="checkbox"/> BPD <input type="checkbox"/> Neither <input type="checkbox"/> Unknown
If yes, was the Property Line Cleanout/BPD operational at the time of the overflow?		<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown
Have there ever been any previous spills at this location?		<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown
Has the resident had any plumbing work done recently?		<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown
<i>If YES, please describe:</i>		

GO TO Page 2

***** FOR DISTRICT USE ONLY *****

LIVABILITY ASSESSMENT



Temporary lodging was offered by the District and either (check one): Accepted Rejected

SANITARY SEWER LINE BLOCKAGE LOCATION

PLEASE CHECK THE BOXES THAT DESCRIBE YOUR OBSERVATIONS:

Customer Cleanout Was: <input type="checkbox"/> Non-Existent <input type="checkbox"/> Full <input type="checkbox"/> Empty	District Owned/Maintained Cleanout was: <input type="checkbox"/> Non-Existent <input type="checkbox"/> Full <input type="checkbox"/> Empty
--	---

On the diagram below, indicate the location of the sewer line and where the problem occurred.



Recommended Follow-Up Action(s):

Did sewage go under buildings? Yes No Unsure

The following are local firms found on the internet that are certified by the Institute of Inspection Cleaning and Restoration (IICRC) and are licensed for Remediation/Restoration Services with the State. The District does not endorse nor have a preferred company on this list.

- Firm:** **SERVPRO of South Rancho Cucamonga**
Address: 7615 Etiwanda Avenue #118, Rancho Cucamonga, CA 91739
Phone: (909) 758-0189
Email: office@servpro10806.com
Fax: (909) 542-3103

- Firm:** **SERVPRO of Northwest Ontario**
Address: 8816 W Foothill Blvd. #103-330, Rancho Cucamonga, CA 91730
Phone: (909) 984-3544
Email: sp9854@hotmail.com
Fax: (909) 984-3566

- Firm:** **Cut n Dry Restoration**
Address: 9757 7th St. #809, Rancho Cucamonga, CA 91730
Phone: (909) 829-5002

- Firm:** **Total Cleaning & Restoration Services**
Address: 6874 Teak Way, Rancho Cucamonga, CA 91701
Phone: (909) 993-4296

- Firm:** **Wizard Restorations Inc**
Address: 10245 8th Street, Rancho Cucamonga, CA 91730
Phone: (877) 379-6889 or (909) 263-2165
Email: wizardrestorations@yahoo.com

- Firm:** **Haven Cleaning & Restoration**
Address: 9375 Feron Blvd, Unit #B, Rancho Cucamonga CA 91730
Phone: (909) 457-7475
Email: emergency@havencr.com

- Firm:** **Superior Restoration & Shamrock Cleaning**
Address: 10722 Arrow Route Suite 302, Rancho Cucamonga, CA 91730
Phone: (909) 260-3680

- Firm:** **DryWorks Restoration**
Address: 8401 White Oak Avenue, Rancho Cucamonga, CA 91730
Phone: (951) 208-9866

Declination of Cleaning Services (Backup Only)

Customer Information			
NAME:	ADDRESS:	TELEPHONE:	
ON (date)	AT (time)	Approximately (quantity)	GALLONS OF: <input type="checkbox"/> Sewage <input type="checkbox"/> Grey Water <input type="checkbox"/> Toilet Bowl Water <input type="checkbox"/> Odor <input type="checkbox"/> Other (describe):
Overflowed from (or odor emanating from) <input type="checkbox"/> Toilet <input type="checkbox"/> Shower/Tub <input type="checkbox"/> Washer <input type="checkbox"/> Other (describe):			The overflow affected the following areas (check one): <input type="checkbox"/> Restroom <input type="checkbox"/> Bedroom <input type="checkbox"/> Hallway <input type="checkbox"/> Garage <input type="checkbox"/> Kitchen <input type="checkbox"/> Crawlspace <input type="checkbox"/> Office <input type="checkbox"/> Lobby <input type="checkbox"/> Other (specify):
The overflow affected the following flooring: <input type="checkbox"/> Tile <input type="checkbox"/> Wood Flooring <input type="checkbox"/> Linoleum <input type="checkbox"/> Carpet <input type="checkbox"/> Other (specify):		and/or additional materials: <input type="checkbox"/> Area Rugs <input type="checkbox"/> Clothing <input type="checkbox"/> Towels <input type="checkbox"/> Other (specify):	For businesses: <input type="checkbox"/> Inventory <input type="checkbox"/> Equipment (specify): <input type="checkbox"/> Other (specify):
This Form Completed By: _____ (Write legibly)		Name: _____ Title: _____	Date: _____ Time: _____

CUSTOMER, please read the following and sign below. I/We acknowledge that Cucamonga Valley Water District (*District*) has offered to arrange for professional cleaning and decontamination services to remediate the sewage backup and/or overflow described above and that we declined the offer. We further understand and acknowledge that because we have declined, any necessary remediation activities will be conducted without District assistance, and that the District will not accept responsibility for work performed by persons other than those engaged by the District. The District will not accept any responsibility for any charges related to this incident that are not usual and customary.

Customer Signature*:	Date:	
The information above was explained to the customer by the following employee:	Name:	Title:
	Signature:	Date:

**Note to responders: if customer declines to sign this form, then have a co-worker sign here as a witness:*
 Name: _____ Signature: _____ Date: _____

Recommendations to customer to clean up the spill:

- Keep pets and children out of the affected area
- Turn off heating/air conditioning systems
- Wear rubber boots, rubber gloves, and goggles during cleanup of the affected area.
- Remove and discard items that cannot be washed and disinfected (such as: mattresses, rugs, cosmetics, baby toys, etc.)
- Remove and discard drywall and insulation that has been contaminated with sewage or flood waters.
- Thoroughly clean all hard surfaces (such as flooring, concrete, molding, wood and metal furniture, countertops, appliances, sinks and other plumbing fixtures) with hot water and laundry or dish detergent.
- Help the drying process with fans, air conditioning units, and dehumidifiers.
- After completing cleanup, wash your hands with soap and water. Use water that has been boiled for 1 minute (allow water to cool before washing your hands.) OR use water that has been disinfected (solution of 1/8 teaspoon of household bleach per 1 gallon of water). Let it stand for 30 min. If water is cloudy, use ¼ teaspoon of household bleach per 1 gallon of water.
- Wash all clothes worn during the cleanup in hot water and detergent (wash separately from uncontaminated clothes).
- Wash clothes contaminated with flood or sewage water in hot water and detergent. Use a laundromat for washing large quantities of clothes and linens until your onsite wastewater system has been professionally inspected and services.
- Seek immediate attention if you become injured or ill.

INSTRUCTIONS TO EMPLOYEE:

NOTE: Only complete this form if you were unable to reach ACWA-JPIA.

1. Complete this form if the Livability Assessment on the First Responder Form indicates a need for temporary relocation and the customer accepts the offer.
2. Notify the Wastewater Utility Supervisor or designee who will make arrangements via telephone and pay for the hotel with a credit card.
3. Complete the voucher as instructed by the Wastewater Utility Supervisor.
4. Take a photo of the form for records and then give it to the customer.
5. Have the customer sign the First Responder Form to indicate if they accept or reject the offer of temporary relocation.

INSTRUCTIONS TO RESIDENT:

Cucamonga Valley Water District recommends that you temporarily relocate to one of the hotels listed below for your safety and convenience while your residence is being cleaned. Please note that this emergency authorization is granted under the following conditions:

1. This authorization provides for one (1) night’s lodging at one of the hotels listed below.
2. The authorization is good for **room and tax ONLY**. Phone, food, mini-bar and other incidental charges will be your responsibility.
3. Additional nights and/or other allowances/incidentals may be discussed by contacting ACWA/Joint Powers Insurance Authority (ACWA/JPIA Property & Liability Claims Department):
 Tel: (800) 231-5742
 Fax: (916) 786-0209
 Email: Claims@acwajpia.com

After 4:30 or on weekends/holidays, contact Sedgwick staff Jim Stewart at (916) 548-8283, or Casey McClintock at (916) 607-636

Adjuster: _____ **Tel:** _____

Email: _____

VOUCHER

Good for one (1) night’s stay on (date): _____ Number of affected residents: _____

Customer’s Name: _____

Field Supervisor’s Name: _____ Phone Number: _____

Hotel 1

Name: Aloft Ontario-Rancho Cucamonga
 Address: 10480 4th St., Rancho Cucamonga, CA 91730
 Phone: (844) 782-1328
 Amenities include: Pet friendly, fitness center, pool, free high-speed internet, complimentary on-site parking, and on-site laundry.

Hotel 2

Name: Hyatt Place Ontario Rancho Cucamonga
 Address: 4760 Mills Circle, Ontario, Ca, 91764, Us
 Phone: (866) 238-4218
 Amenities include: Pet friendly, free internet access, complimentary on-site parking, and on-site restaurant.

Dear Property Owner:

We recognize that sewer backup incidents can be stressful and require immediate response while all facts concerning how an incident occurred are still unknown. Rest assured that we do all we can to prevent this type of event from occurring in the first place. Nevertheless, occasionally tree roots or other debris in the sewer lines causes a backup into homes immediately upstream of the blockage. At this time the District is investigating the cause of this incident.

If the District is found to be responsible for the incident, we are committed to cleaning and restoring your property, and to protecting the health of those affected during the remediation process.

The cleaning contractor contacted by the District has been selected because of their adherence to established protocols that are designed to assure to all parties thorough, cost-effective and expeditious cleaning services. You also have the right to select your own cleaning contractor, but the District does not guarantee payment of fees/expenses incurred and reserves the right to dispute fees/expenses deemed not usual and customary.

To discuss this matter, contact the Wastewater Utility Supervisor at (909) 987-2591. To submit a claim for damages, complete the Standard Tort Claim Form and contact the HR/Risk Management Division at (909) 987-2591.

Sincerely,
Cucamonga Valley Water District

What you need to do now:

- Minimize the impact of the loss by responding promptly to the situation.
- Do not attempt to clean the area yourself, let the cleaning and restoration company handle this.
- Keep people and pets away from the affected area(s) until cleanup has been completed.
- Turn off any appliances that use water.
- Turn off heating/air conditioning systems.
- Do not remove items from the area – the cleaning and restoration company will handle this.
- If you had recent plumbing work done, contact your plumber or contractor and inform them of this incident.

Estimado propietario:

Reconocemos que los incidentes de respaldo de alcantarillado pueden ser estresantes y requieren una respuesta inmediata, mientras que todos los hechos sobre cómo ocurrió un incidente aún se desconocen. Tenga la seguridad de que hacemos todo lo posible para evitar que este tipo de evento ocurra en primer lugar. Sin embargo, ocasionalmente, las raíces de los árboles u otros desechos en las líneas de alcantarillado provocan una copia de seguridad en las casas inmediatamente aguas arriba del bloqueo. En este momento, el Distrito está investigando la causa de este incidente.

Si se determina que el Distrito es responsable del incidente, nos comprometemos a limpiar y restaurar su propiedad, y a proteger la salud de los afectados durante el proceso de reparación.

El contratista de limpieza contactado por el Distrito ha sido seleccionado debido a su adhesión a los protocolos establecidos que están diseñados para garantizar a todas las partes servicios de limpieza exhaustivos, rentables y rápidos. También tiene derecho a seleccionar su propio contratista de limpieza, pero el Distrito no garantiza el pago de los honorarios / gastos incurridos y se reserva el derecho de disputar los honorarios / gastos que no se consideran habituales y habituales.

Para discutir este asunto, comuníquese con el Supervisor de Servicios de Aguas Residuales al (909) 987-2591. Para presentar un reclamo por daños, complete el Formulario de reclamo de agravio estándar y comuníquese con la División de Recursos Humanos / Gestión de riesgos al (909) 987-2591.

Sinceramente,
Distrito del Agua del Valle de Cucamonga

Lo que debes hacer ahora:

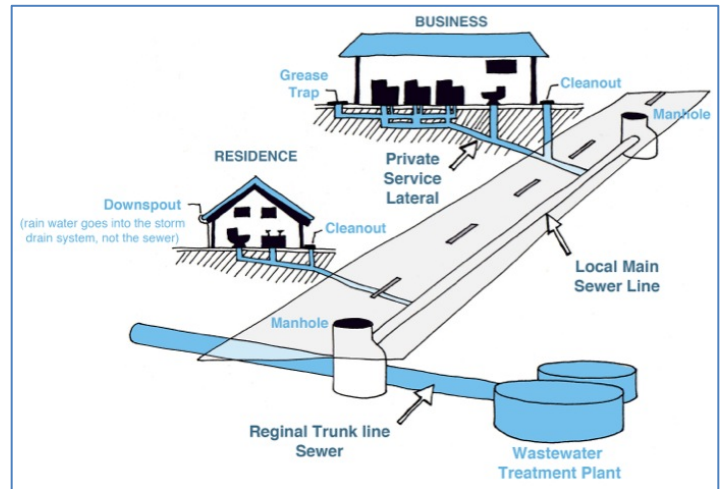
- Minimice el impacto de la pérdida respondiendo rápidamente a la situación.
- No intente limpiar el área usted mismo, deje que la empresa de limpieza y restauración se encargue de esto.
- Mantenga a las personas y las mascotas alejadas de las áreas afectadas hasta que se complete la limpieza.
- Apague cualquier aparato que use agua.
- Apague los sistemas de calefacción / aire acondicionado.
- No retire elementos del área; la empresa de limpieza y restauración se encargará de esto.
- Si ha realizado trabajos recientes de plomería, comuníquese con su plomero o contratista e infórmeles sobre este incidente.

How a Sewer System Works

A property owner's sewer pipes are called **service laterals** and are connected to larger local main and regional trunk lines. Service laterals run from the connection at the home to the connection with the District's sewer system. These laterals are the responsibility of the property owner and must be maintained by the property owner.

How do sewage spills happen?

Sewage spills occur when the wastewater in underground pipes overflows through a manhole, cleanout, or broken pipe. Most spills are relatively small and can be stopped and cleaned up quickly, but left unattended they can cause health hazards, damage to homes and businesses, and threaten the environment, local waterways, and beaches. Common causes of sewage spills include grease build-up, tree roots, broken/cracked pipes, missing or broken cleanout caps, undersized sewers, and groundwater/rainwater entering the sewer system through pipe defects and illegal connections.



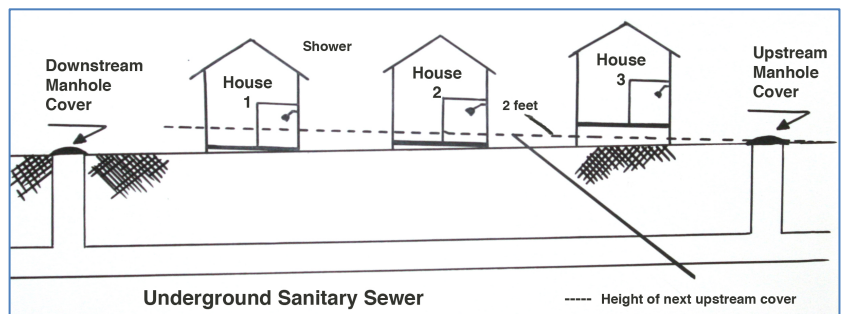
Prevent most sewage backups with a Backflow Prevention Device

This type of device can help prevent sewage backups into homes and businesses. If you don't already have a Backflow Prevention Device, contact a professional plumber or contractor to install one as soon as possible.

Is my home required to have a backflow prevention device?

Section 710.1 of the Uniform Plumbing Code (U.P.C.) states: "Drainage piping serving fixtures which have flood level rims located below the elevation of the next upstream manhole cover or private sewer serving such drainage piping **shall** be protected from backflow of sewage by installing an approved type of backwater valve." The intent of Section 710.1 is to protect the building interior from mainline sewer overflows or surcharges.

Additionally, U.P.C. 710.6 states: "Backwater valves **shall** be located where they will be accessible for inspection and repair at all times and, unless continuously exposed, shall be enclosed in a masonry pit fitted with an adequately sized removable cover."



Spill cleanup inside the home:

For large clean ups, a professional cleaning firm should be contacted to clean up impacted areas, If you hire a contractor, it is recommended to get estimates from more than one company. Sometimes, homeowner's insurance will pay for the necessary cleaning due to sewer backups. Not all policies have this coverage, so check with your agent.

If you decide to clean up a small spill inside your home, protect yourself from contamination by observing the following safety measures. Those persons whose resistance to infection is compromised should not attempt this type of clean up.

Seek immediate attention if you become injured or ill during or after the cleanup process.

Other Tips:

- Keep children and pets out of the affected area.
- Turn off heating/air conditioning systems
- Wear rubber boots, rubber gloves, and goggles during cleanup.
- Discard items that cannot be washed and disinfected (such as: mattresses, rugs, cosmetics, toys, etc.)
- Remove and discard drywall and insulation that has been contaminated with sewage or flood waters.
- Thoroughly clean all hard surfaces (such as flooring, concrete, molding, wood and metal furniture, countertops, appliances, sinks and other plumbing fixtures) with hot water and laundry or dish detergent.
- Help the drying process with fans, air conditioning units, and dehumidifiers.
- After completing cleanup, wash your hands with soap and water. Use water that has been boiled for 1 minute (allow the water to cool before washing your hands) OR use water that has been disinfected (solution of 1/8 teaspoon of household bleach per 1 gallon of water). Let it stand for 30 min. If water is cloudy, use ¼ teaspoon of household bleach per 1 gallon of water.
- Wash clothes worn during cleanup in hot water & detergent (wash apart from uncontaminated clothes).
- Wash clothes contaminated with sewage in hot water and detergent. Consider using a Laundromat until your onsite wastewater system has been professionally inspected and serviced.

Spill cleanup outside the home:

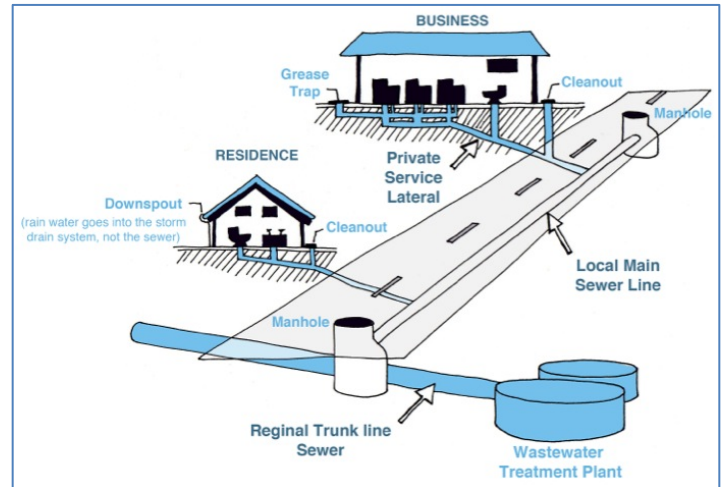
- Keep children and pets out of the affected area until cleanup has been completed.
- Wear rubber boots, rubber gloves, and goggles during cleanup of affected area.
- Clean up sewage solids (fecal material) and place in properly functioning toilet or double bag and place in garbage container.
- On hard surfaces areas such as asphalt or concrete, it is safe to use a 2% bleach solution, or ½ cup of bleach to 5 gallons of water, but don't allow it to reach a storm drain as the bleach can harm the environment.
- After cleanup, wash hands with soap and water. Use water that has been boiled for 1 minute (allow to cool before washing your hands) OR use water that has been disinfected (solution of 1/8 teaspoon of household bleach per 1 gallon of water). Let it stand for 30 min. If water is cloudy, use ¼ teaspoon of household bleach per 1 gallon of water.
- Wash clothes worn during cleanup in hot water and detergent (wash apart from uncontaminated clothes).
- Wash clothes contaminated with sewage in hot water and detergent. Consider using a laundromat until your onsite wastewater system has been professionally inspected and serviced.

Cómo funciona un sistema de alcantarillado

Las tuberías de alcantarillado de un propietario se denominan servicios laterales y están conectadas a líneas troncales principales y regionales locales más grandes. Los servicios laterales se ejecutan desde la conexión en el hogar hasta la conexión con el sistema de alcantarillado del Distrito. Estos laterales son responsabilidad del propietario y deben ser mantenidos por el propietario.

¿Cómo ocurren los derrames de aguas residuales?

Los derrames de aguas residuales ocurren cuando las aguas residuales en las tuberías subterráneas se desbordan a través de un pozo de acceso, limpieza o tubería rota. La mayoría de los derrames son relativamente pequeños y se pueden detener y limpiar rápidamente, pero si se los deja desatendidos, pueden causar riesgos para la salud, dañar viviendas y negocios y amenazar el medio ambiente, las vías fluviales locales y las playas. Las causas comunes de derrames de aguas residuales incluyen acumulación de grasa, raíces de árboles, tuberías rotas / agrietadas, tapas de limpieza faltantes o rotas, alcantarillas de tamaño insuficiente y aguas subterráneas / pluviales que ingresan al sistema de alcantarillado a través de defectos en las tuberías y conexiones ilegales.



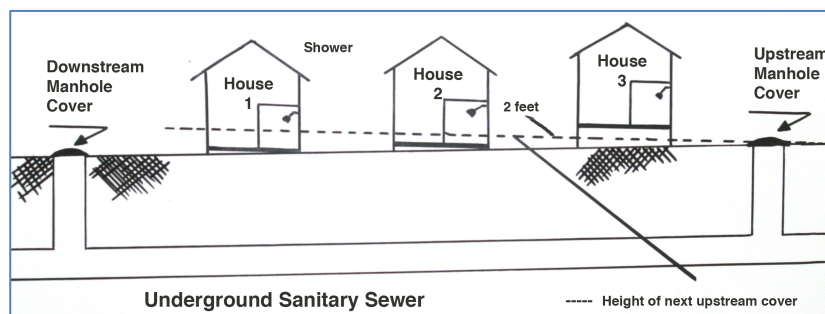
Prevenga la mayoría de las copias de seguridad de aguas residuales con un dispositivo de prevención de reflujo

Este tipo de dispositivo puede ayudar a prevenir las copias de seguridad de aguas residuales en hogares y empresas. Si aún no tiene un dispositivo de prevención de reflujo, comuníquese con un plomero o contratista profesional para instalar uno lo antes posible.

¿Se requiere que mi hogar tenga un dispositivo de prevención de reflujo?

La Sección 710.1 del Código Uniforme de Plomería (UPC) establece: "Los accesorios de tuberías de drenaje que tienen llantas de nivel de inundación ubicadas debajo de la elevación de la siguiente boca de alcantarilla corriente arriba o la alcantarilla privada que atiende dicha tubería de drenaje deben protegerse contra el reflujo de aguas residuales al instalar un tipo de válvula de evacuación". La intención de la Sección 710.1 es proteger el interior del edificio de los desagües o sobrecargas de alcantarillado de la línea principal.

Adicionalmente, U.P.C. 710.6 dice: Las válvulas de aguas residuales deben ubicarse donde puedan ser inspeccionadas y reparadas en todo momento y, a menos que estén continuamente expuestas, deben estar encerradas en un pozo de mampostería equipado con una cubierta removible del tamaño adecuado.



Limpieza de derrames dentro de la casa:

Para grandes limpiezas, se debe contactar a una empresa de limpieza profesional para limpiar las áreas afectadas. Si contrata a un contratista, se recomienda obtener estimaciones de más de una compañía. A veces, el seguro del propietario de vivienda pagará la limpieza necesaria debido a las reservas de alcantarillado. No todas las pólizas tienen esta cobertura, así que consulte con su agente.

Si decide limpiar un pequeño derrame dentro de su casa, protéjase de la contaminación observando las siguientes medidas de seguridad. Aquellas personas cuya resistencia a la infección esté comprometida no deben intentar este tipo de limpieza.

Otros consejos:

- Mantenga a los niños y mascotas fuera del área afectada.
- Apague los sistemas de calefacción / aire acondicionado
- Use botas de goma, guantes de goma y gafas durante la limpieza.
- Deseche los artículos que no se puedan lavar y desinfectar (como: colchones, alfombras, cosméticos, juguetes, etc.)
- Retire y deseche los paneles de yeso y el aislamiento contaminado con aguas residuales o aguas de inundación.
- Limpie a fondo todas las superficies duras (como pisos, concreto, molduras, muebles de madera y metal, mostradores, electrodomésticos, fregaderos y otros accesorios de plomería) con agua caliente y ropa o detergente para platos.
- Ayude al proceso de secado con ventiladores, unidades de aire acondicionado y deshumidificadores.
- Después de completar la limpieza, lávese las manos con agua y jabón. Use agua que haya sido hervida por 1 minuto (deje que el agua se enfríe antes de lavarse las manos) O use agua que haya sido desinfectada (solución de 1/8 cucharadita de lejía doméstica por 1 galón de agua). Dejar reposar durante 30 min. Si el agua está turbia, use ¼ cucharadita de lejía de uso doméstico por 1 galón de agua.
- Lave la ropa usada durante la limpieza con agua caliente y detergente (lave aparte de la ropa no contaminada).
- Lavar la ropa contaminada con aguas residuales en agua caliente y detergente. Considere usar una lavandería hasta que su sistema de aguas residuales en el sitio haya sido inspeccionado y reparado profesionalmente.

Busque atención inmediata si se lesiona o se enferma durante o después del proceso de limpieza.

Limpieza de derrames fuera de la casa:

- Mantenga a los niños y las mascotas fuera del área afectada hasta que se haya completado la limpieza.
- Use botas de goma, guantes de goma y gafas protectoras durante la limpieza del área afectada.
- Limpie los sólidos de alcantarillado (material fecal) y colóquelos en un inodoro o bolsa doble que funcione correctamente y colóquelos en un contenedor de basura.
- En áreas de superficies duras como el asfalto o el concreto, es seguro usar una solución de lejía al 2%, o ½ taza de lejía a 5 galones de agua, pero no permita que llegue a un drenaje de tormenta ya que la lejía puede dañar la ambiente.
- Después de la limpieza, lávese las manos con agua y jabón. Use agua que haya sido hervida por 1 minuto (deje enfriar antes de lavarse las manos) O use agua que haya sido desinfectada (solución de 1/8 cucharadita de cloro por 1 galón de agua). Dejar reposar durante 30 min. Si el agua está turbia, use ¼ cucharadita de lejía de uso doméstico por 1 galón de agua.
- Lave la ropa usada durante la limpieza con agua caliente y detergente (lave aparte de la ropa no contaminada).
- Lavar la ropa contaminada con aguas residuales en agua caliente y detergente. Considere usar una lavandería hasta que su sistema de aguas residuales en el sitio haya sido inspeccionado y reparado profesionalmente.

13. Describe the circumstances of the incident/accident/indebtedness. Be specific as to what happened. Attach all supporting documentation such as photographs, diagrams, sketches, police reports, etc. If there were no injuries please state "no injuries". (Attach additional sheets if necessary indicating corresponding paragraph number answering.)

14. What did the Cucamonga Valley Water District or its employee(s) allegedly do to cause these alleged injuries, damages or losses? Provide names of employees involved in or having knowledge of this incident. If names of employees are not known, state so. (Attach additional sheets if necessary indicating paragraph number answering.)

15. Has the incident been reported to law enforcement, safety or security personnel? If so, to whom? (Indicate report number and contact numbers, if applicable)

16. Have you contacted your insurance carrier? Yes No Insurance Telephone #: _____
Name of Insurance Company and Claim Adjuster: _____

17. If the actual amount of the claim is less than ten thousand dollars (\$10,000) as of the date of presentation of the claim, including the estimated amount of any prospective injury, damage or loss, insofar as it may be known at the time of the presentation of the claim, together with the basis of computation of the amount claimed. If the amount claim exceeds ten thousand dollars (\$10,000), no dollar amount shall be included in the claim. However, it shall indicate whether the claim would be a limited civil case. For property/vehicle damage claims, **attach at least three (3) legible estimates** for repairs and/or replacement. **Attach ALL supporting documentation with this claim.**

I claim damages from CUCAMONGA VALLEY WATER DISTRICT in the sum of \$ _____

The Claimant must sign this claim unless he or she is incapacitated, or a minor, in which case it may be signed on behalf of the Claimant by any relative, attorney, or agent representing the Claimant.

WARNING: It is a criminal offense to file a false claim. (See California Penal Code §72)

I have read the matters and statements made in above claim and I certify under penalty of perjury that the foregoing is TRUE and CORRECT.

Date: _____ Claimant's Signature: _____

Claimant Representative Information

Representative's Name: _____

Relationship to the Claimant: _____

Address: _____

Daytime Telephone number(s): _____

Date: _____ Insurance, Family or Other Representative's Signature: _____

INSTRUCTIONS FOR FILLING OUT THIS FORM STANDARD TORT CLAIM FORM (RM-1)

PLEASE TAKE A MOMENT TO READ...

We understand that you believe you have suffered a loss and that you believe Cucamonga Valley Water District may be responsible. If we are responsible, we are sorry and we want to promptly and fairly compensate you for your loss. To evaluate your claim, we must determine how the incident happened, whether or not we caused it, the extent of your damages, and what the law considers fair compensation. Below you will find frequently asked questions about filing a claim with Cucamonga Valley Water District.

WHAT IS OUR CLAIMS POLICY AND PROCESS?

It is Cucamonga Valley Water District's policy to respond to claims promptly and fairly. We evaluate each claim case-by-case based on the information you provided and our investigation (which may involve but is not limited to the review of records, interviews of employees or witnesses, telephone records and recordings, technical evaluation, etc.). This can take some time depending on the complexity of the incident and the quality of the information you provide. When our investigation is complete, we will send you a letter with our conclusion and response to your claim.

WHO IS RESPONSIBLE FOR DAMAGES?

We are not responsible for damages that we do not cause or that are the result of forces beyond our control. For example, in most instances we are not responsible for damages caused by earthquakes, weather-related conditions or other acts of nature.

You also have a responsibility in this process. You should retain copies of all receipts so you can provide full and accurate documentation of any loss or damage suffered. You must also mitigate your damages, which means you have a duty to try to minimize the loss and make sure that losses or expenses incurred because of an incident (such as storage costs, car rentals, plumbing fees, etc.) are not accumulating needlessly and that they are reasonable in relation to the loss.

HOW TO FILE A CLAIM.

You can help us quickly process your claim by completing the claim form as thoroughly as possible (please Type or Print), enclosing photographs and diagrams/sketches as appropriate, and providing complete and accurate supporting documentation (see next question, "*What Supporting Documentation is Needed?*"). Failure to provide sufficient information could delay the processing of your claim and may cause your claim to be denied or returned. (SEE CALIFORNIA GOVERNMENT CODE § 910.2)

When you are ready to submit your claim packet you may choose **U.S. Postal Service, courier service or "hand deliver" to...**

**CUCAMONGA VALLEY WATER DISTRICT
ATTENTION: RISK MANAGEMENT
10440 ASHFORD STREET
RANCHO CUCAMONGA, CA 91730**

**OFFICE HOURS:
MONDAY – THURSDAY: 7:30 AM – 5:30 PM
FRIDAY: 7:30 AM – 4:30 PM**

You may contact Risk Management for more information at: (909) 987-2591

If you choose to deliver it in person to our office, please submit your claim to the Receptionist at the Information Counter and it will automatically be routed to Risk Management for review.

WHAT SUPPORTING DOCUMENTATION IS NEEDED?

You can help us quickly process your claim by completing the claim form as thoroughly as possible, enclosing photographs and diagrams/sketches as appropriate, and providing complete and accurate supporting documentation, such as:

For Personal Injury

- Copy of medical records and receipts

For Property/Vehicle Damage

- Three (3) detailed repair estimates and/or invoices or purchase records.

For Miscellaneous Losses

- Hotel and Restaurant Receipts
- Car Rental Receipts

For Lost Revenues

- Copy of Tax Records and/or Bank Statements
- Payroll Records
- Revenue and Expense Statements
- Sales Receipts

For Lost Wages

- The amount of time that you were unable to work
- Verification of lost time from your employer
- Payroll stubs showing your hourly or daily pay rate

PROVIDE LEGIBLE COPIES WITH YOUR CLAIM FORM AND RETAIN THE ORIGINALS!

WHAT ARE YOUR CLAIMS OPTIONS?

You may wish to refer your claim to your insurance company. The insurer may be able to reimburse you for your losses without investigation and will, in some cases, pay replacement value for damaged items. Please be advised that the Cucamonga Valley Water District is prohibited from providing legal advice. Claimants should consult an attorney as necessary.

WHAT IF YOUR CLAIM IS DENIED?

Cucamonga Valley Water District takes pride in evaluating claims fairly. If your claim is denied, we will explain the reason for the denial. If a specific Code, rule or law applies, we will supply you with an explanation or a copy of the rule. If you are not satisfied with our decision or explanation, you have the right to file a court action. Please note that a copy will be made of all denied claims and its supporting documentation will be filed in our system with an assigned claim number. All original submitted packages will be mailed back to the claimant.

IS THERE A TIME LIMIT ON FILING A CLAIM?

It is always best to submit a claim as soon as possible. Please refer to the Government Code including, without limitation, Section 911.2 for information regarding deadlines for filing claims.


WARNING: It is a criminal offense to file a false claim. (See California Penal Code §72)

SUBMITTING ADDITIONAL INFORMATION AFTER YOUR CLAIM IS FILED...

1. Any amendments to your claim must be submitted to the **Cucamonga Valley Water District's HR/Risk Management Division**. Please contact HR/Risk Management to obtain your claim number for amendments.
2. Generally, a response to your claim will be provided within 45 days of its submission or amendment.
3. For information regarding the status of your claim, please contact **HR/Risk Management** at (909) 987-2591.

HOW TO COMPLETE THIS FORM...

Please do not write in the shaded areas of the Standard Tort Claim Form. This is for "Official Use Only"...

 Standard Tort Claim Form		For Official Use Only
Submit the original completed and signed standard tort claim form in person/mail to:		Cucamonga Valley Water District HR/Risk Management Division 10440 Ashford Street Rancho Cucamonga, CA 91730
CLAIM FORM RECEIVED VIA: <input type="checkbox"/> U.S. Mail / Courier service (attach original envelope to this form) <input type="checkbox"/> Main Office (Over the counter)		Claim No. _____
SIGNATURE OF CIVIL EMPLOYEE ACCEPTING CLAIM FORM		
ANSWER ALL QUESTIONS. ← → PLEASE PRINT OR TYPE IN INK. OMITTING INFORMATION COULD MAKE YOUR CLAIM LEGALLY INSUFFICIENT!		
TYPE <input type="checkbox"/> Water <input type="checkbox"/> Sewer <input type="checkbox"/> Personal Injury <input type="checkbox"/> Real Property <input type="checkbox"/> Vehicle Accident <input type="checkbox"/> Other (provide a detailed description in #12) <i>Please note: Claim forms WILL NOT be accepted via facsimile (fax) or e-mail.</i>		

Check the box that best describes your tort claim.

PLEASE TYPE OR PRINT THE FOLLOWING INFORMATION...

Numbers 1 – 7 Explained below

CLAIMANT'S INFORMATION	1. Social Security Number (SSN) or if a business Employer ID No. (EIN): _____ (REQUIRED)
	2. Claimant's Name: _____ <small>if applicable include</small> LAST NAME FIRST NAME MIDDLE INITIAL
	3. DATE OF BIRTH (MM/DD/YYYY)
	Business Name: _____
	4. Address: _____ <small>STREET ADDRESS</small> CAPT./SUITE CITY ZIP
	5. Mailing Address (if different): _____
	6. Contact Number(s): () _____ () _____ <small>HOME/BUSINESS CELLULAR</small>
7. Email or Fax Number: _____	

CLAIMANT INFORMATION:

1. Social Security Number (SSN) or Business' Employer ID Number (EIN) of the Claimant - **THIS IS REQUIRED!**
2. Business and/or Claimant's Name: "Legal Name" (or company and point of contact) of the person who is filing this tort claim.
3. Date of Birth: Claimant's Date of Birth (MM/DD/YY) format
4. Address: Claimant's Residence (or Business Address, if your business is filing the claim)
5. Mailing Address: Address where you would like to receive information if different than "Address"
6. Contact Number(s): Please indicate the best number(s) where you can be reached by telephone
7. Email or Fax Number: Your email address or fax number to send correspondence if needed

Numbers 8 – 13 (Explained below)

INCIDENT INFORMATION	8. Date of Incident: _____ Time: _____ <input type="checkbox"/> A.M. <input type="checkbox"/> P.M. (CHECK ONE) <small>MM/DD/YYYY</small>
	9. If the incident occurred over a period of time, indicate the date of first and last occurrences: from _____ Time: _____ <input type="checkbox"/> A.M. <input type="checkbox"/> P.M. (CHECK ONE) to _____ Time: _____ <input type="checkbox"/> A.M. <input type="checkbox"/> P.M. (CHECK ONE) <small>MM/DD/YYYY MM/DD/YYYY</small>
	10. Location of incident: _____ <small>(Place where occurred, name of street or intersection and/or nearby markers)</small>
	11. Name(s) and Contact Number(s) for all persons involved in or witness to this incident: _____ _____
	12. Names, addresses and telephone numbers of all individuals not previously identified in #8 and #9 above that have knowledge regarding the liability issues involved in this incident, or knowledge of the Claimant's resulting damages. Please include a brief description as to the nature and extent of each person's knowledge. (Attach additional sheets if necessary indicating corresponding paragraph number answering.) _____ _____ _____
	13. _____ _____

INCIDENT INFORMATION:

8. Indicate the date(s) and time(s) the incident occurred.
9. If the claim occurred over a period of time, indicate the duration the incident occurred.
10. Indicate the location of the incident. (home/business/other location or address)
11. Indicate names and numbers of witnesses if any.
12. Indicate contact information of other persons/witnesses of your claim.
13. Describe the circumstances of the incident (your claim) in detail. Be specific and provide documentation to support your claim such as photographs, diagrams, sketches, police report, etc. Please indicate if any injuries occurred. If using additional sheets please specify the paragraph number (example: "Paragraph #13 continued...") on those sheets.

Numbers 14 – 17 (Described below)	14. What did the Cucamonga Valley Water District or its employee(s) allegedly do to cause these alleged injuries, damages or losses? Provide names of employees involved in or having knowledge of this incident. If names of employees are not known, state so. (Attach additional sheets if necessary indicating paragraph number answering.)
	15. Has the incident been reported to law enforcement, safety or security personnel? If so, to whom? (Indicate report number and contact numbers, if applicable)
	16. Have you contacted your insurance carrier? <input type="checkbox"/> Yes <input type="checkbox"/> No Insurance Telephone #: _____ Name of Insurance Company and Claim Adjuster: _____
	17. If the actual amount of the claim is less than ten thousand dollars (\$10,000) as of the date of presentation of the claim, including the estimated amount of any prospective injury, damage or loss, insofar as it may be known at the time of the presentation of the claim, together with the basis of computation of the amount claimed. If the amount claim exceeds ten thousand dollars (\$10,000), no dollar amount shall be included in the claim. However, it shall indicate whether the claim would be a limited civil case. For property/vehicle damage claims, attach at least three (3) estimates for repairs and/or replacement. Attach ALL supporting documentation with this claim.
I claim damages from the CUCAMONGA VALLEY WATER DISTRICT in the sum of \$ _____	

14. Indicate what, how and why you feel the Cucamonga Valley Water District and/or its employees caused you to file this claim. Include the employee name(s) and the names of any other District employees with whom you have discussed any facts of this claim.
15. If this incident has been reported to law enforcement, safety or security personnel please provide the contact name and number as well as any reference or police report number(s) you may have received when you filed this report, if applicable.
16. If you have contacted your insurance company and they are assisting you in this claim, please provide their contact information (name, telephone and/or address) and a reference number.
17. Describe the basis for the claim amount and/or computation and claim amount on the line provided if the actual amount is less than ten thousand dollars (\$10,000). **For property/vehicle damage claims, attach three (3) legible estimates for repair/replacement.**

Claimant Acknowledgement & Signature (Described below)	The Claimant must sign this claim unless he or she is incapacitated, or a minor, in which case it may be signed on behalf of the Claimant by any relative, attorney, or agent representing the Claimant. WARNING: It is a criminal offense to file a false claim. (See California Penal Code §72) I have read the matters and statements made in above claim and I certify under penalty of perjury that the foregoing is TRUE and CORRECT. Date: _____ Claimant's Signature: _____
	Claimant Representative Information
Claimant Representative Information (Described below)	Representative's Name: _____ Relationship to the Claimant: _____ Address: _____ Daytime Telephone number(s): _____
	Insurance, Family or Other Date: _____ Representative's Signature: _____

SIGNATURE(S):

A fresh/original signature is required when submitting this form. The Claimant (person filing the claim) **MUST** sign and date the form in the line provided on page 2. If the Claimant is unable to sign this form and has authorized another individual to file this claim on the Claimant's behalf, this person **MUST** complete the "Claimant Representative Information" section at the bottom of page 2. The Claimant's representative (i.e. insurance, family, etc.) **MUST** sign on the line provided under "Claimant Representative Information".

To submit your claim packet, you may choose to deliver via U.S. Postal Service, courier service or in person to...

CUCAMONGA VALLEY WATER DISTRICT Attention: Risk Management 10440 ASHFORD STREET RANCHO CUCAMONGA, CA 91730	<u>OFFICE HOURS:</u> Monday – Thursday: 7:30 AM – 5:30 PM Friday: 7:30 AM – 4:30 PM
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You may contact Risk Management for more information at: (909) 987-2591

If you choose to deliver it in person to our office, please submit your claim to the Receptionist at the Information Counter and it will automatically be routed to Risk Management for review.

OFFICE USE ONLY

Incident Report #		Prepared By	
SSO/Backup Information			
Cause			
Summary of Historical SSOs/Backups/Service Calls/Other Problems			
Date	Cause	Date Last Cleaned	Crew
Records Reviewed By:		Record Review Date:	
Summary of CCTV Information			
CCTV Inspection Date		File Name/Number	
CCTV Tape Reviewed By		CCTV Review Date	
Observations			

Go to Side B

Recommendations					
✓	Type	Specific Actions	Who is Responsible?	Completion Deadline	Who Will Verify Completion?
	No Changes or Repairs Required	n/a	n/a	n/a	n/a
	Repair(s)				
	Construction				
	Capital Improvement(s)				
	Change(s) to Maintenance Procedures				
	Change(s) to Overflow Response Procedures				
	Training				
	Misc.				
Comments/Notes:					
Reviewed by:			Review Date:		

Appendix F: Water Quality Monitoring Plan

WATER QUALITY MONITORING REQUIREMENTS:

To comply with subsection D.7(v) of the SSS WDRs (Order No. 2006-0003-DWQ), 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.

Note: CVWD is in the process of developing a formal, comprehensive water quality monitoring plan to be included at next revision.

Appendix G: Regulatory Reference Documents

**STATE WATER RESOURCES CONTROL BOARD
ORDER NO. 2006-0003-DWQ**

**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-DWQ, 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 30days 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

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

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

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/

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; or• Reach 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