

WESTERN RIVERSIDE COUNTY
REGIONAL WASTEWATER AUTHORITY

SEWER SYSTEM MANAGEMENT PLAN



2014

WESTERN RIVERSIDE COUNTY REGIONAL WASTEWATER AUTHORITY
(WRCRWA)

SEWER SYSTEM MANAGEMENT PLAN
2014

PREPARED UNDER THE DIRECTION OF

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AND SSMP SECTION LEADER

GREG SNYDER, WASTEWATER COLLECTIONS SUPERVISOR
AND SSMP PROJECT MANAGER

In compliance with State Order 2006-0003, Section D.12
an appropriately qualified professional has prepared the SSMP.

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License Renewal Date: March 31, 2016
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TABLE OF CONTENTS

SSMP REPORT

Page numbers have been assigned to this hard copy report to be the same as the page numbers in electronic format.

Cover	1
Preparation Compliance	2
Table of Contents	3
Executive Summary	6
Certification	7
State Order Summary (See Attachment A for text of State Order)	8
WRCRWA's Sewer Systems	9
SSMP Format (See Attachment B for Abbreviations & Terminology)	10
1. Goals: (State Order Section D.13.i) (See also Appendix 1 for Staff Quantitative Goals)	11
2. Organization: (State Order Section D.13.ii) 2(a): Responsible or Authorized Representative 2(b): Names and Phone Numbers 2(c): Chain of Communication for reporting SSOs	13
3. Legal Authority: (State Order Section D.13.iii) 3(a): Prevent Illicit Discharges 3(b): Proper Design & Construction 3(c): Insure Access and Maintained Right of Way 3(d): Limit Fats, Oil and Grease 3(e): Enforcement of Violations	19
4. Operation and Maintenance: (State Order Section D.13.iv) 4(a): Mapping of the Sanitary Sewer System 4(b): Operation and Maintenance Program 4(c): Rehabilitation and Replacement Program 4(d): Operation and Maintenance Training Program 4(e): Equipment and Parts Inventory Program	27

5. Design and Construction Standards: (State Order Section D.13.v)	34
5(a): Design and Construction Standards	
5(b): Procedures for Inspection and Testing	
6. Emergency Response Plan: (State Order Section D.13.vi)	36
6(a): Notification Procedures	
6(b): Proper Response to SSOs	
6(c): Names of Officials to be contacted at Regulatory Agencies	
6(d): OERP Training for Staff and Contractors	
6(e): Procedures to Address Emergency Operations	
6(f): Steps to Protect Waters of the United States Overflow Emergency Response Plan (OERP)	
7. FOG Control Plan: (State Order Section D.13.vii)	43
7(a): Public Education for Proper Disposal of FOG	
7(b): FOG Disposal Plan, Schedule and Facilities	
7(c): Legal Authority to Prohibit FOG Discharge	
7(d): Standard FOG Interceptor Requirements	
7(e): Authority and Staffing to Inspect FOG Facilities	
7(f): Identification of Sewers Subject to FOG	
7(g): Source Control Measures for All Sources of FOG	
8. System Evaluation and Capacity Assurance Plan: (State Order Section D.13.viii)	53
8(a): Evaluation	
8(b): Design Criteria	
8(c): Capacity Enhancement Measure.	
8(d): Schedule	
9. Monitoring, Measurement, and Program Modifications: (State Order Section D.13.ix)	56
9(a): Maintain Relevant Information	
9(b): Monitor the Implementation of the SSMP	
9(c): Assess the Preventative Maintenance Program	
9(d): Update SSMP Program Elements	
9(e): Identify SSO Trends	
10. Sewer System Management Plan Program Audits: (State Order Section D.13.x)	65
11. Communication Program (State Order Section D.13.xi)	66
11(a): Communicate with the Public	
11(b): Communicate with Upstream/Downstream Agencies	

TABLE OF CONTENTS
for the DOCUMENT ENTITLED
SSMP ATTACHMENTS AND APPENDICIES
A stand-alone document
that will be constantly updated
as new data becomes available

	SSMP Appendix Section & Page
Attachment A - State Orders as Amended & Updated	A-1
Attachment B - Abbreviations and Terminology	B-1
Appendix 1 - Goals	1-1
Appendix 2 - Organization	2-1
Appendix 3 - Legal Authority	3-1
Appendix 4 - O&M Program	4-1
Appendix 5 - Design & Performance Provisions	5-1
Appendix 6 - Overflow Emergency Response Plan	6-1
Appendix 7 - FOG Plan (fats, oils and grease)	7-1
Appendix 8 - System Evaluation and Capacity Assurance Plan	8-1
Appendix 9 - Monitoring, Measurement and Program Modifications	9-1
Appendix 10 - SSMP Program Audits	10-1
Appendix 11 - Communication Program	11-1

EXECUTIVE SUMMARY

WRCRWA

SEWER SYSTEM MANAGEMENT PLAN

WRCRWA's Board of Directors adopted its original Sewer System Management Plan in 2009. The SSMP was prepared in compliance with State Order 2006-0003 issued May 2, 2006 to all publicly owned wastewater collection agencies owning more than one mile of pipeline.

Included in the State Order is a requirement that all agencies audit their SSMPs every two years to evaluate the effectiveness of the plan and staff member's compliance with the State Order. WRCRWA has complied with that requirement by having its SSMP audited in 2011 and 2013. The next audit will be due in 2015.

A recommendation from the first audit report prepared in 2011 was to revise and update the WRCRWA SSMP to be as similar to the Western Municipal Water District SSMP as possible because Western is the contract administrator and operator for WRCRWA and it would be more efficient for staff to be operating from one set of guidelines. WRCRWA achieved that goal by revising its SSMP in 2013.

Additionally, the WRCRWA SSMP has been updated to incorporate requirements contained in the most recent State Order No. WQ 2013-0058-EXEC (State 2013 MRP) issued September 9, 2013. This report represents the updated WRCRWA SSMP, a near mirror image of the Western SSMP. The appendices, a separate volume, contain necessary support information for the SSMP.

The SSMP has been formatted to be used as a training text with all pertinent training information in the body of the report and supporting literature in the appendices.

This 2014 SSMP represents the latest updated SSMP and has been prepared for

- (1) review and approval by the Board of Directors at a public meeting;
- (2) recertification by Jeffrey D. Sims, WRCRWA Administrator, and
- (3) submittal to the California State Water Resources Control Board for its records, all in accordance with State Order 2006-0003.

CERTIFICATION

I certify that WRCRWA's 2014 Sewer System Management Plan including the SSMP Report, its attachments and appendices comply with the requirements set forth in the General Waste Discharge Requirements for Sanitary Sewer Systems, Order No. 2006-0003 DWQ. I further certify that the documents were prepared under WRCRWA's direction and supervision to assure that qualified personnel provided input, evaluated the contents, and subsequently incorporated the information in this 2014 SSMP into the daily operation and maintenance of WRCRWA's Sanitary Sewer Systems; that the information included in this 2014 SSMP is, to the best of my knowledge, true, accurate, and complete, and that the 2014 SSMP has been duly presented to and approved by WRCRWA's Board of Directors at its October 20, 2014 public meeting.

Signed this 29th day of October, 2014 by Jeffrey D. Sims, WRCRWA Administrator, Western Riverside County Regional Wastewater Authority, Riverside County, CA.



STATE ORDER

The California State Water Resources Control Board adopted Order No. 2006-0003 May 2, 2006 (State Order) to create an equitable statewide mechanism to manage all publicly owned wastewater collection agencies with more than a mile of pipeline, to reduce the number and severity of Sanitary Sewer Overflows (SSOs), and to set up a central depository for online reporting of SSOs when they do occur.

The 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.

A principal element of the State Order is the requirement that WRCRWA adopt and maintain a management plan for its sewer collection and conveyance systems, referred to as a Sewer System Management Plan or SSMP.

The State Order was amended September 9, 2013 with the issuance of State Order WQ 2013-0058-EXEC. Therefore all SSMPs across the state were to be updated to include the amended order. WRCRWA complied with the September 9, 2013 Amended State Order by revising its SSMP so it could be received, reviewed and filed by WRCRWA's Board of Directors October 2013.

This 2014 update is in compliance with the State Order requiring that all SSMP's across the State be updated and recertified in 2014, and contains updated information as recommended in the 2011 Audit, the 2013 Audit and required by the 2013 Amended State Order WQ 2013-0058-EXEC.

The State Order establishes the following goal:

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.*

The State Order requires WRCRWA staff members perform periodic internal audits of the SSMP with focus on evaluating the effectiveness of the SSMP and staff member's compliance with its requirements, as shown in Section D-13 of the State Order. The internal audits must be performed at least every two (2) years with the audit report kept on file at WRCRWA. WRCRWA's audits were completed in 2011 and 2013 as required, and therefore the next audit will be due in 2015.

The SSMP must be updated every five (5) years, must contain any significant program changes, and be recertified after review and approval by the WRCRWA Board of Directors. To complete the recertification process, WRCRWA staff members must enter the information into the Online SSO Database and mail a hard copy to the State Water Resources Control Board. This 2014 SSMP is in compliance as an updated, recertified SSMP.

WRCRWA'S SEWER SYSTEM

In accordance with the State Order WRCRWA's SSMP applies to all sewer systems governed by WRCRWA's Board of Directors. Noteworthy is that the State Order applies to pipelines and lift stations and not treatment plants. Treatment facilities are regulated with Federal NPDES permits or State Agreements.

This SSMP applies to all WRCRWA wastewater pipeline and lift station systems whether or not listed herein, noteworthy systems currently governed by WRCRWA's Board of Directors are as follows:

- WRCRWA system tributary to the WRCRWA treatment facility near River Road and Archibald Street, near the cities of Norco and Corona, California. The system consists primarily of one 30-inch force main and one major lift station. The force main and lift station have been named WRCRWA's South Regional Force Main and WRCRWA's South Regional Lift Station. The entire system is called the South Regional Conveyance System.
- The weir and lateral between the South Regional Lift Station and SAWPA's Inland Empire Brine Line. SAWPA constructed the South Regional Lift Station without the normally required redundancy including but not limited to on-site electrical generation equipment and backup pumping equipment. SAWPA instead constructed the weir and lateral between the lift station and the Brine Line so that the Brine Line could provide the necessary redundancy.

SSMP FORMAT

The State's requirements for the SSMP are extremely complex with many overlapping topics. There are eleven major categories in the SSMP and over three-dozen subcategories.

This SSMP has been formatted to meld seamlessly with the State Order such that Section 1 of this SSMP is in response to the first State Order Requirement Section 13.D.i; Section 2 herein matches Section 13.D.ii, and so on.

State Order Main Topic	State Order Section	SSMP Section
Goals	13.D.i	1
Organization	13.D.ii	2
Legal Authority	13.D.iii	3
O&M Program	13.D.iv	4
Design & Performance Provisions	13.D.v	5
Overflow Emergency Response Plan	13.D.vi	6
FOG Plan (fats, oils & greases)	13.D.vii	7
System Evaluation and Capacity Assurance Plan	13.D.viii	8
Monitoring, Measurement and Program Modifications	13.D.ix	9
SSMP Program Audits	13.D.x	10
Communication Program	13.D.xi	11

SECTION 1: GOALS

State Order Paragraph D.13.i

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.

The purpose of the SSMP is to protect water quality, eliminate or substantially reduce preventable SSOs, and to protect public health and the environment. The SSMP provides a consolidated document that references adequate policies, procedures, guidelines, planning documents, programs, and communication requirements to ensure WRCRWA properly funds, manages, operates and maintains all parts of the sewage collection system owned by WRCRWA. WRCRWA will continue to employ adequately trained staff and contractors that possess the necessary knowledge, skills, and abilities to carry out the provisions of this document.

WRCRWA's Board of Directors hereby adopts with its approval, certification and ongoing recertification of this SSMP the following goals.

The goals of the SSMP, as stated in the State Order, are as follows:

To provide a plan and schedule to properly and efficiently manage, operate, and maintain WRCRWA's sanitary sewer systems, while taking into consideration risk management and cost benefit analysis. WRCRWA's SSMP shall 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.

To provide adequate capacity to convey peak flows, to provide notifications and reports to all required regulatory agencies in a timely manner, to minimize the frequencies of SSOs throughout WRCRWA's collection system, to effectively mitigate the effects of any SSO that may occur, and to provide public education to increase awareness of FOG issues and how they can impact the collection system.

WRCRWA has also adopted a goal from Western's Mission Statement:

To provide (reclaimed) water supply, wastewater disposal and water resource management to the public in a safe, reliable, environmentally sensitive and financially responsible manner.

The Management Team's quantitative goals:

- To incorporate SSMP training into routine monthly meetings of the O&M Team. Incorporate SSMP Section 1, into January training each year, Section 2 into February each year, continuing each month with the next SSMP section, thereby completing the eleven sections of the SSMP in eleven of the 12 available months.
- To analyze peak flows using hydraulic system analyses for all WRCRWA Systems and to recommend improvements for any deficiencies.
- To complete recommendations from the each SSMP Audit prior to SSMP recertification every 5 years.

The Operation and Maintenance Team's quantitative goals:

- Provide adequate capacity to convey peak wastewater flows.
- Minimize the frequency of SSOs for both dry and wet weather conditions.
- Mitigate the impacts that are associated with any SSO that may occur.
- Meet all applicable regulatory notification and reporting requirements.
- Mitigate the impact of sanitary sewer overflows that do occur.
- Properly manage, operate and maintain all parts of the system.

SECTION 2: ORGANIZATION

State Order Paragraph D.13.ii

The SSMP must identify:

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

Section J of the State Order: Report Declaration

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.*

(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)).

State Order Section 2(a) Responsible or Authorized Representative

The SSMP must identify the name of the responsible or authorized representative as described in Section J of this Order.

Jeff Sims, WRCRWA Administrator has selected Greg Snyder to be WRCRWA's responsible, authorized representative to meet Section J requirements.

"I hereby appoint Greg Snyder as WRCRWA's duly authorized representative to sign, certify and file all reports required by the State Order and other relevant information required by the State or Regional Water Board."



Signed Jeff Sims, WRCRWA Administrator

State Order Section 2(a)i Report Signing

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 written and signed above, Jeff Sims, WRCRWA Administrator, a Principal Executive Officer of WRCRWA has named Greg Snyder as his duly authorized representative.

State Order Section 2(a)ii Qualifications of the Duly Authorized Representative

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.

The authorization has been made above in writing, signed by Jeff Sims. The individual named by Jeff Sims has responsibility for the overall operation of the activity known herein as the SSMP. The SSMP pertains to the overall operation of all WRCRWA owned sanitary sewer systems.

State Order Section 2(b) Names and Phone Numbers

The SSMP must identify 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

Names and telephone numbers are listed in order of notification.

Greg Snyder, Operations Supervisor for Wastewater Collections and duly authorized representative for all SSMP activities, reporting to the Deputy Director of Operations.
Office: 951 789 5131 Cell: 951 956 0411

Stephen Schultz, Deputy Director of Operations, reporting to the Director of Operations.
Office: 951 789 5130 Cell: 951 295 2325

Paul Rugge, Director of Operations, reporting to the WRCRWA Administrator,
Office: 951 789 5129

Jeffrey Sims, WRCRWA Administrator and Western's Assistant General Manager and Chief
Operating Officer,
Office: 951 571 5221

Craig Miller, Western's Deputy General Manager, in the event Jeff Sims, WRCRWA
Administrator is unavailable.
Office: 951 571 7100

John Rossi, Western's General Manager, in the event both Jeff Sims and Craig Miller are
unavailable.
Office: 951 571 7100

State Order Section 2(b) continued: Lines of Authority

The SSMP must identify lines of authority through an organization chart or similar document with a narrative explanation.

See above for names and telephone numbers of management, administrative, and maintenance positions responsible for implementing specific measures in the SSMP program. The names are those of Western staff members because Western is the contract administrator and operator for WRCRWA and as such has pledged the use of its entire staff as needed by WRCRWA.

Lines of authority are identified in the organization chart within Appendix 2 and a narrative description for each position follows. Jeff Sims is the Administrator for WRCRWA, appointed by Western's General Manager. Jeff Sims as WRCRWA Administrator reports to the Executive Committee of the WRCRWA Board of Directors and to the WRCRWA Board of Directors. Jeff Sims is supported by Western's Deputy General Manager and Western's General Manager. Western's Deputy General Manager is a member of the WRCRWA Executive Committee and Western's General Manager is a member of the WRCRWA Board of Directors. The following are Western positions that support the WRCRWA operation.

General Manager- Working with WRCRWA's Administrator to draft WRCRWA policy and plan WRCRWA work activities. Is a member of WRCRWA's Board of Directors to establish policy for various WRCRWA engineering and work matters, including those related to WRCRWA's collection system. Also delegates responsibilities to lower staff through the Deputy General Manager.

Deputy General Manager - Receives general administrative direction from the General Manager and works with WRCRWA's Administrator as needed by WRCRWA. Is a member of WRCRWA's Executive Committee to draft policy for consideration by WRCRWA's Board of

Directors. Exercises direct supervision over Western management, supervisory, professional, technical and clerical staff. Assists the WRCRWA Administrator in the development of strategy and delegates staff, allocates resources, delegates responsibilities, and authorizes outside contractors to perform services as needed by the WRCRWA Administrator and WRCRWA Executive Committee.

Assistant General Manager and Chief Operating Officer - This position serves as the WRCRWA Administrator and as such establishes policy and plans WRCRWA's work activities. Reports and advises WRCRWA's Executive Committee Members and WRCRWA's Board of Directors, of various WRCRWA engineering and work matters, including those related to WRCRWA's collection system. Also delegates responsibilities to lower staff. Receives direction from WRCRWA's Executive Committee (consisting primarily of WRCRWA Member Agency General Managers); Exercises direct supervision over staff in Engineering, Operations and Administrative functions; Assists the Deputy General Manager with Western's resource allocation needed to support WRCRWA operations.

Director of Engineering - Under general policy direction, plans, organizes, directs and implements WRCRWA's engineering activities and operations. Prepares wastewater collection system planning documents, manages capital improvement delivery system, documents new and rehabilitated assets and assists in coordinating the development and implementation of the SSMP.

Director of Operations - Under general policy direction, plans organizes, directs and implements comprehensive strategies and programs for the operation of WRCRWA's wastewater collection and treatment system. Manages and coordinates all aspects of WRCRWA's Operations and assists in coordinating the development and implementation of the SSMP.

Deputy Director of Operations - Under the general direction of the Director of Operations, plans, organizes, directs and administers the operations and maintenance of WRCRWA's wastewater and Preventive Maintenance functions. The Deputy Director of Operations also coordinates the development and implementation of the SSMP.

Operations Supervisor Wastewater Collections - Assists in coordinating the development and implementation of WRCRWA's SSMP. Manages field operations and maintenance activities, provides relevant information to agency management, prepares and implements contingency plans, leads emergency responses, investigates and reports SSOs and trains field crews. Supervises the operation, maintenance, and cleaning of lift stations domestic sewer systems and contract wastewater systems.

Operations Supervisor Preventive Maintenance - Assists in coordinating the development and implementation of WRCRWA's SSMP. Develops, implements, monitors, and reviews a predictive and preventive maintenance and asset management programs. This position in cooperation with and coordination with the Operations Supervisor Wastewater Collections

supervises, the maintenance of WRCRWA's pumping plants, sewer lift stations, treatment facilities, vehicles and equipment under the direction of the Deputy Director of Operations.

Operations Technicians I/II/III/IV Staff - Performs a wide variety of preventive maintenance activities, mobilizes and responds to notification of stoppages and SSOs (mobilize sewer cleaning equipment, by-pass pumping equipment, and portable generators). Assists with sewer line cleaning, inspects, repairs sewer lift stations and performs required maintenance.

Principal Engineer Construction Management - Under general direction from WRCRWA's Engineering Manager, plans, organizes, directs and implements assigned engineering activities and operations and assists in coordinating the development and implementation of the SSMP.

Construction Contracts Supervisor - Performs professional and technical contract administration and engineering inspection activities for WRCRWA's construction projects; assigns, supervises and participates in the work of staff performing inspections of WRCRWA's facilities; and assists in coordinating the development and implementation of the SSMP.

Construction Inspector - Ensures that new and rehabilitated assets meet WRCRWA's standards, works with field crews to handle emergencies when contractors are involved, provides verbal reports to Principal Engineer.

Pretreatment Program Manager - Manages and assists in administering WRCRWA's approved Pretreatment Program; assists WRCRWA in complying with Federal, State and local environmental laws and regulations; develops and prepares as needed applicable permits, conducts inspections at industrial user facilities and provides support to all Elements of WRCRWA's SSMP.

State Order Section 2(c) Chain of Communication for Reporting SSOs

The SSMP must identify 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)).

When anyone (member of the general public, law enforcement, regulatory agency, etc.) discovers a possible SSO they can call WRCRWA's 24 hour emergency telephone hot line (also known as Western's 24 hour emergency telephone hot line), 951 789 5109 any day of the year and speak to a knowledgeable individual. The emergency number is listed on Western's Web site and in the local telephone directory.

The call will either be handled by WRCRWA's administrative staff or rolled over to WRCRWA's (Western's) answering service. In either event, the information along with the caller's phone number will be forwarded immediately to WRCRWA's Call Team member assigned for the day.

The Call Team member receiving the information will either drive to the site or request a member of another Call Team to drive to the site depending on fastest response time, to determine if an SSO is eminent or occurring.

If the SSO is affirmed, the Call Team member at the site will mobilize a first responder team to control the SSO and mitigate its effects. The Call Team member will then contact one or more of the following to obtain additional resources if needed and report status of the SSO.

Alex Chang, Senior Tech for Wastewater Collections
Office: 951 789 5110 Cell: 951 712 3070

Greg Snyder, Operations Supervisor for Wastewater Collections,
Office: 951 789 5131 Cell: 951 956 0411

Steve Schultz, Deputy Director of Operations,
Office: 951 789 5130 Cell: 951 295 2325

If for any reason, Alex Chang, Greg Snyder and Steve Schultz are unavailable the Call Team member will contact Director of Operations, Paul Rukke

Paul Rukke, Director of Operations,
Office: 951 789 5129.

All wastewater collection O&M Team members are trained in SSO response, control techniques and documentation. All reporting information will be forwarded to Greg Snyder, WRCRWA's Authorized Representative named in Section 2(a) above for purposes of reporting SSOs to the State and Regional Water Board and other agencies as applicable (such as County Health Officer, County Environmental Health Agency, Regional Water Board, and/or State Office of Emergency Services (OES)).

SECTION 3: LEGAL AUTHORITY

State Order Paragraph D.13.iii

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.*

State Order Section 3(a) Legal Authority to Prevent Illicit Discharges

Each Enrollee must demonstrate that it possesses the necessary legal authority to prevent illicit discharges into its sanitary sewer system (examples may include I/I, stormwater, chemical dumping, unauthorized debris and cut roots, etc.);

WRCRWA's Board of Directors adopted Ordinance 97-OR5 December 18, 1997, hereafter referred to as WRCRWA's Regional Wastewater Ordinance or the Wastewater Ordinance. The enforcement section of the Wastewater Ordinance has been produced as WRCRWA's Enforcement Response Plan (ERP), a stand-alone document that can be handed out for purposes of staff training and public education. The following information (Scope, Applicability and Authority) is as stated in the Wastewater Ordinance.

Scope:

The provisions of the Wastewater Ordinance shall apply to any aspect of WRCRWA's Sanitary Sewer System, its POTW or any downstream POTW receiving Wastewater from WRCRWA's Sanitary Sewer System.

Purpose and Objective:

The purpose of the Wastewater Ordinance is to provide for the maximum possible beneficial use of the Regional Sewerage System, ground water resources, effluent-receiving waterways and operating personnel through regulation of Wastewater discharges by establishing terms, limits and conditions of discharge through waste

Permits, whether from existing, new or increased Pollutant contributions; to provide for equitable distribution of the Authority's costs; and to provide procedures for complying with requirements placed upon the Authority by local, State of California, and federal regulations. This is accomplished by compliance with the NPDES Permits issued by the California Regional Water Quality Control Board in conformity with 40 CFR Part 403 of the Clean Water Act as amended and the California Water Code as amended.

It is the intent of the Wastewater Ordinance to recognize that Contracting Agencies with Regional Board approved pretreatment programs have the primary responsibility for compliance monitoring and enforcement of the Federal, State and locally mandated pretreatment regulations. However, in the event a Contracting Agency does not take action to enforce Pretreatment Standards and Requirements, the Authority has the right to take administrative or legal action.

The objectives of the Wastewater Ordinance are:

- (A) To prevent the introduction of Pollutants into the Regional Sewerage System which may harm or cause interference with the operation of the Publicly Owned Treatment Works (POTW), may expose Authority employees and agents to chemical hazards created by Industrial Users, or may contaminate the resulting sludge;*
- (B) To prevent the introduction of Pollutants to the Regional Sewerage System which may not be amenable to treatment and/or may Pass Through the POTW if inadequately treated, into the Receiving Waters or the atmosphere; and*
- (C) To increase the options for the disposal of the sludge resulting from Wastewater treatment.*

Applicability:

The Wastewater Ordinance shall apply to all discharges, whether direct or indirect, to the Regional Sewerage System and shall be interpreted in accordance with definitions set forth in Section 1.7 of this Ordinance.

The Wastewater Ordinance provides for the regulation of the quantity and quality of Wastewater to be discharged to the Regional Sewerage System, the degree of waste Pretreatment required, the setting of charges to provide for equitable distribution of costs, the issuance of Permits for non-domestic Wastewater discharge, all other Permits as required, and the establishment of penalties for violation of the Wastewater Ordinance.

Authorization:

The Wastewater Ordinance was enacted by Western Riverside County Regional Wastewater Authority ("the Authority") pursuant to the authorization of the Exercise of Joint Powers Act, Government Code Section 6500 et seq., Municipal Water District Law of 1911, California Water Code Section 71000, se seq., California Government Code, Sections 54739 et seq., the Clean Water Act (33 U.S.C. 1251 et seq.) and the General Pretreatment Regulations (40 CFR 403). The Wastewater Ordinance provides the required legal authority to meet the intent, purposes, and policies set forth herein.

WRCRWA's authority includes, but is not limited to, the right to establish limitations, conditions, and prohibitions; to establish flow rates or prohibit flows discharged to WRCRWA's Sanitary Sewer System; to require the development of compliance schedules for the installation of equipment, systems, and materials by all Persons; and to take all actions necessary to enforce its authority, whether within or outside WRCRWA's service area, including those Persons tributary to WRCRWA or within areas which WRCRWA has contracted to provide sewerage services.

The Wastewater Ordinance includes several sections that prohibit the discharge of fats, oils, greases and illicit discharges that may cause operational problems.

Topics include:

1. Oils, Fats and Greases
2. Waste Causing Damage to the Sanitary Sewer System
3. Waste that Interferes with a POTW
4. Waste in Violation of State and Federal Requirements
5. Grease and Oil Interceptors

From Section 2.1(F) and 2.1 (G) of the Wastewater Ordinance:

Any amounts of petroleum oil, non-biodegradable cutting oil, or products of mineral origin which form persistent water emulsions or that will cause Interference or Pass Through.

Any biodegradable oils, fats and greases, such as lard, tallow or vegetable oil, in concentrations that may cause adverse effects on the Regional Sewerage System except as allowed in Section 2.2.

From Section 2.1(H) if the Wastewater Ordinance:

Any wastes which cause excessive incrustations or scale, or precipitates on sewer walls; or having any corrosive or detrimental characteristics that may cause damage to the Regional Sewer System or injury to service and maintenance personnel.

From Section 2.1(O) of the Wastewater Ordinance:

Any waste containing toxic or poisonous solids, liquids, or gases in such quantities that alone, or in combination with other waste substances, may create a hazard for humans, animals, or local environment, interfere with Wastewater treatment processes, cause a public nuisance, cause any hazardous condition in the Regional Sewer System or which cause Interference, Upset or Pass Through.

From Section 2.1(II) of the Wastewater Ordinance:

Any waste that is generated in violation of or which violates applicable federal standards or state regulations or discharge limitations or requirements established by the Board as described in Industrial Wastewater Discharge Permits or within Ordinances, resolutions or other rules adopted by the Board.

From Section 4.2(G) 3 of the Wastewater Ordinance:

Grease and oil or sand interceptors shall be required when, in the opinion of the Executive Committee, they are appropriate for the proper handling of Wastewater containing excessive amounts of grease, oil, or sand; except that such interceptors shall not be required for residential Users. All interceptor units shall be of type and capacity approved by the Executive Committee and shall be so located to be easily accessible for cleaning and inspection. Such interceptors shall be inspected, cleaned, and repaired regularly, as needed, by the User at their expense.

State Order Section 3(b) Proper Design and Construction

Each Enrollee must demonstrate that it possesses the necessary legal authority to require that sewers and connections be properly designed and constructed.

It is the practice of WRCRWA to require the submittal of plans and construction specifications to WRCRWA for review and edits prior to the approval of any connection to WRCRWA's Sanitary Sewer System. Connections shall be in conformance with Federal, State and Local standards and shall meet all WRCRWA requirements and shall be approved by WRCRWA's Administrator prior to beginning construction. WRCRWA's review of plans and construction specifications in no way relieves the Person of the responsibility for treating wastewater to a level acceptable to WRCRWA's Administrator, Executive Committee and Board of Directors. WRCRWA utilizes resources made available by its contract administrator/operator at Western. As a guide, Western publishes Standard Drawings for Sewer Facilities, made a part of this SSMP within the Appendices. WRCRWA utilizes its own General and Technical Specifications, also made a part of this SSMP within the Appendices.

State Order Section 3(c) Insure Access and Maintained Right of Way

Each Enrollee must demonstrate that it possesses the necessary legal authority to ensure access for maintenance, inspection, or repairs for portions of the lateral owned or maintained by the Public Agency.

WRCRWA has the means and authority to ensure access for maintenance, inspection and repair of its Sanitary Sewer System. Rights of access are generally obtained at the time the member agency applies for a sewerage service connection but may be acquired in advance through other agreements.

Access is assured in Section 3.1, Inspection and Entry of the Wastewater Ordinance.

From Section 3.1 of the Wastewater Ordinance:

Unless otherwise specified in the Regional Pretreatment Agreement:

- (A) *The Authority is hereby authorized at any reasonable time to enter the Premises of all Users to determine compliance with all applicable requirements, to inspect facilities and monitoring equipment, take photographs and to take samples of the wastes discharged to the Regional Sewer System thereof, insofar as such inspection and sampling is reasonably related to enforcement and compliance with this Ordinance and the Users' Permit conditions, requirements and discharge limitations. Such inspection shall also include the right to inspect and copy records required to be maintained by the Permittee under Federal, State, or Local Permit requirements.*
- (B) *Inspection may include every facility that is directly or indirectly involved with the discharge of Wastewater to the Regional Sewer System as determined by the Authority. Authorized personnel of the Authority shall be provided immediate access to all of the above facilities. No Person shall interfere with, delay, resist or refuse entrance to authorized personnel attempting to inspect any facility involved directly or indirectly with a discharge of Wastewater to the Regional Sewer System.*
- (C) *Any permanent or temporary obstruction to the safe and easy access to any sewerage facility to be inspected shall promptly be removed by the User or property owner at the written or verbal request of the Executive Committee and shall not be replaced.*
- (D) *Unreasonable delays in allowing the Executive Committee access to the User's Premises shall be a violation of the Wastewater Ordinance.*

State Order Section 3(d) Limit Fats, Oils and Grease

Each Enrollee must demonstrate that it possesses the necessary legal authority to limit the discharge of fats, oils, and grease and other debris that may cause blockages.

WRCRWA requires that any User/Person discharging wastewater containing fats, oils and grease or solids at excessive levels, as solely determined by WRCRWA, be required to remove FOG prior to discharging to WRCRWA's Sanitary Sewer System. Adequate FOG

removal is the responsibility of the Person, User, or Discharger to protect the operation of WRCRWA's Sanitary Sewer System facilities, its POTW and/or downstream POTWs owned by other Public Agencies. The following is stated in the Wastewater Ordinance.

From Section 2.1 of the Wastewater Ordinance

General Limitations on Wastewater

No Person other than a Contracting Agency or a permitted waste hauler shall discharge Wastewater directly into the Regional Sewer System. No Person shall discharge or cause to be discharged directly or indirectly to the Regional Sewer System or to a Community Sewer System which is tributary to the Sanitary Sewer System a quantity or quality of material which causes, or is capable of causing, either alone or by interaction with other substances, Pass Through, Interference, damage to any part of the Regional Sewer System, abnormal maintenance of the Regional Sewer System or a nuisance or a menace to public health. As used herein, "excessive" shall mean any concentration or quantity of material or substance that may, by itself or in combination with other discharges, create a hazard to maintenance personnel and/or cause physical damage to the Regional Sewer System or causes or threatens to cause the Authority to violate State of California or Federal requirements.

From Section 2.1(G) of the Wastewater Ordinance:

Any biodegradable oils, fats and greases, such as lard, tallow or vegetable oil, in concentrations that may cause adverse effects on the Regional Sewer System except as allowed in Section 2.2.

From Section 2.1(H) of the Wastewater Ordinance:

Any wastes which cause excessive incrustations or scale, or precipitates on sewer walls; or having any corrosive or detrimental characteristics that may cause damage to the Regional Sewer System or injury to service and maintenance personnel.

From Section 2.1(Z) of the Wastewater Ordinance:

Any waste containing substances that may precipitate, solidify, gel, polymerize, or become viscous when discharged into the Regional Sewer System.

State Order Section 3(e) Enforcement of Violations

Each Enrollee must demonstrate that it possesses the necessary legal authority to Enforce any violation of its sewer ordinances.

Section 5 beginning with Section 5.1 of the Wastewater Ordinance addresses enforcement.

From Section 5.1 of the Wastewater Ordinance:

Notification of Violation

When the Executive Committee finds that any Significant Industrial User, or any other User whose discharge has the potential, alone or in conjunction with other discharges, to adversely affect the Regional Sewer System, has violated or continues to violate, any provision of this Ordinance, any provisions of a wastewater discharge ordinance enacted by a Contracting Agency as part of its pretreatment program, a Permit hereunder, or any other Pretreatment Standard or Requirement, the Executive Committee may serve upon that User a Notice of Violation. Nothing in this section shall limit the authority of the Executive Committee to take any action, including emergency actions or any other enforcement action, without first issuing a Notice of Violation.

From Section 5.2(A-E) of the Wastewater Ordinance:

5.2 – Administrative Orders

The Executive Committee may require compliance with this Ordinance, Permit conditions or limitations by issuing Administrative Orders including but not limited to the following types of Administrative Orders:

- (A) Corrective Action Orders – Corrective Action Orders may contain requirements to address noncompliance, including, but not limited to, investigation of noncompliance, submission of an explanation of the violation and a plan for the satisfactory correction and prevention thereof, additional self-monitoring and management practices designed to minimize the amount of Pollutants discharged to the Regional Sewer System, the preparation of reports, and the submittal of additional information related to the discharge of Wastewater.*
- (B) Compliance Orders – Compliance Orders may direct a User to achieve or restore compliance by a specific date. If the User fails to achieve compliance within the time provided, sewer service may be discontinued in accordance with Section 5.3, 5.4 or 5.5. Compliance Orders may also contain the requirements listed in 5.2(A).*
- (C) Show Cause Orders – Show Cause Orders may require a User to appear at the Authority’s office at a certain date and time to show cause to the Authority as to why a proposed enforcement action(s) should not be taken.*
- (D) Consent Orders – Consent Orders shall establish an agreement with any User responsible for noncompliance. Such orders may include specific actions to be taken by the User to correct the noncompliance within a time period specified by the order. Such orders shall have the same force and effect as the administrative orders issued pursuant to Section 5.2 (B) and 5.2 (E) of the Ordinance.*
- (E) Cease and Desist Orders – Cease and Desist Orders shall direct a User to cease and desist all discharge violations, to comply immediately with all discharge requirements and to take such appropriate remedial or preventive action as may be*

needed to properly address a continuing or threatened discharge violation, including halting operations and/or terminating the discharge.

The issuance of any administrative order pursuant to this section shall not be a bar against, or prerequisite for, taking any other action against the User.

From Section 5.3 of the Wastewater Ordinance:

(A) If the Executive Committee determines that a violation constitutes a serious threat, of an immediate or emergency nature, to the health and welfare of the community or to the environment, or may cause Interference or Pass Through, or may cause the Authority to violate any State of California or federal law, regulation or permit requirement, the Executive Committee may order an immediate cessation of the discharge and suspend the User's permission to discharge into the Regional Sewerage System. If the User does not cease discharging at once, the Executive Committee may disconnect the User from the Regional Sewerage System.

(B) As soon as reasonably practicable following the issuance of a cessation order and/or suspension order, but in no event more than seven (7) days following the issuance of such order, the Executive Committee shall hold a hearing to provide the User an opportunity to present information in opposition to the issuance of the cessation or suspension order. The hearing shall be conducted in accordance with procedures established by the Executive Committee. The Executive Committee shall issue a written decision and order within seven (7) days following the hearing to the User or its legal counsel/representative at the User's business address. Any cessation or suspension order included within the Executive Committee's written statement shall be deemed final upon delivery to the User.

In order to demonstrate that WRCRWA possesses the necessary legal authority to enforce any violation, the above enforcement provisions have been copied from WRCRWA's Wastewater Ordinance 97-OR5. All enforcement sections of WRCRWA's Wastewater Ordinance have been incorporated into WRCRWA's Enforcement Response Plan (ERP), adopted by the Board of Directors and enclosed in Appendix 3.

WRCRWA's entire Wastewater Ordinance can be found in Appendix 3.

SECTION 4: OPERATIONS & MAINTENANCE

State Order D.13.iv

The SSMP must include the following elements if appropriate and applicable to the Enrollee's Sanitary Sewer System:

- (a) up to date map of the sewer system that shows all pipe reaches, manholes, siphons, valves, and pumps if any,*
- (b) routine preventative maintenance program and operations program,*
- (c) rehabilitation and replacement program,*
- (d) operations and maintenance training program, and*
- (e) part inventory program including identification of critical replacement parts.*

State Order Section 4(a) Mapping of the Sanitary Sewer System

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 storm water conveyance facilities.

WRCRWA maintains mapping for all its Sanitary Sewer Systems in electronic format and hard copy. Current examples of WRCRWA's Sanitary Sewer Systems include:

WRCRWA's system tributary to the WRCRWA treatment facility; for example, WRCRWA's South Regional Conveyance System.

WRCRWA's system tributary to SAWPA's Inland Empire Brine Line (Brine Line) system; for example, WRCRWA's diversion lateral from WRCRWA's South Regional Lift Station to the Brine Line.

Electronic mapping is provided by WRCRWA using Western's Nobel System's GeoViewer Online to bring all of the power and functionality of high end GIS to the WRCRWA O&M team through the World Wide Web (www). The O&M team members can securely access Western's GIS data using Internet Explorer from any PC with an internet connection, a unique User Name and Password. GeoViewer Online includes search and query tools, and also includes a number of customizable reporting options, that allows the O&M team members to set up frequently used forms on the system to generate standard reports with data and maps from the GIS.

The State Order calls for a map that shows all pipe reaches, manholes, siphons, valves and pumps. WRCRWA's GIS system provides the detailed data required. However, if the internet service provider or internet transmitters are down for an emergency the O&M team members will use hard copy maps on file at Western's Operations Center for detailed mapping. The hard copy maps can be found in the Operations Center map room, a room dedicated to hard copy maps as well as a room with monitors and computer systems to access maps electronically. During an emergency and in the event the electronic copies are unavailable; these hard copy maps can be reproduced using copy machines. The Operations Center is self sufficient with on-site electrical power generation equipment, tested weekly for readiness so lighting systems and copy machines will function.

WRCRWA's (Western's) Engineering Division maintains WRCRWA's hard copy maps at the Meridian Office including sewer blueprints and detailed cut sheets showing vertical location of sewers. Adequate mapping detail is provided in both electronic form and hard copy to meet or exceed the requirements of the State Order. The Meridian Office building also has a back-up generator to provide electrical power to all electrical lighting and office equipment.

The following information is contained in both the electronic and hard copy formats:

- Drawing Scale
- North arrow
- Date map was drafted
- Property lines
- Landmarks (water bodies, streams, roads, etc.)
- Manholes and other access points
- Location of building laterals
- Street Names
- Areas prone to SSO occurrences
- Force mains
- Lift Stations
- Main, trunk interceptor and force main sewer lines
- Easement lines and dimensions
- Pipe material
- Pipe diameter
- Slope
- Manhole rim elevation
- Manhole coordinates
- Manhole invert elevations
- Distance between manholes
- Sewer invert elevations

All manholes have a unique identifying number on the GIS and the sewer line between manholes is identified by pipe size and material, length between manholes and upper and lower manhole elevations.

State Order Section 4(b) Operations and Maintenance Program

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.

WRCRWA's routine preventative maintenance program is performed by Western and includes routine sewer cleaning programs. Inspection of sewers and maintenance access structures (MAS) including manholes and vaults is part of the sewer cleaning program and condition reports are a part of the Daily Line Cleaning Report filled out by the field team members. Report of problems on the Daily Line Cleaning Report triggers more frequent cleaning and/or CCTV work in compliance with the State Order. See the next subsection (4-C) for more detail about the use of CCTV.

To support WRCRWA's routine maintenance program WRCRWA's O&M team has developed a computerized sewer inspection program using Western's information technology infrastructure. The Standard Operating Procedure (SOP) For Collection System Maintenance and Line Cleaning Frequency provide necessary detail to determine the sewer collections system cleaning frequency including associated maintenance activities and to perfect GIS information. As stated in the SOP, the ability to effectively manage a sewer collection system is determined by proper design and preventative maintenance. The benefits of an effectively operated and maintained collection system include management and protection of the communities' assets, service to the customer, regulatory compliance, protection of the safety and health of the public, environmental protection, and cost-effective use of agency resources.

The SOP describes Hydraulic Cleaning, CCTV Inspection, MAS Inspections, Flume Inspections, Force Main Inspections, Air Valve Inspections, Lift Station Maintenance and Inspection Activities, GIS Mapping Accuracy and Record Keeping Activities.

MAS inspection is a part of the line-cleaning program. All manholes and vaults within the Sanitary Sewer Systems are being inspected and noted on the Daily Line Cleaning Report along with findings during the cleaning of the adjacent sewers. When manholes are inspected, the following observations are recorded:

- Conditions of the manhole frame and cover
- Evidence of surcharge
- Offsets or misalignments

- Details of the primary cause of cracks or breaks in the manhole or pipe, including blockages
- Presence of corrosion (only if extreme)
- If repairs are necessary
- Manhole identifying number and location
- Wastewater flow only if surcharged or backed up
- Presence of infiltration, location, and estimated quantity
- Accumulations of grease, debris and grit
- Recommended date for next inspection

A routine day for the Sanitary Sewer System cleaning crew is as follows:

At the beginning of each day, Western's collection crew is given a packet of work orders. On any given day the packet may contain work orders relating to the WRCRWA Sanitary Sewer System. Each time a section of the sewer is cleaned, the collection crew(s) completes a cleaning record of that section of sewer including:

- Date and time of the cleaning
- Method of cleaning
- Identity of the cleaning personnel
- Cause of any stoppages
- Location of stoppage or routine cleaning activity
- Any further actions that are necessary or taken

When the job has been completed, the collection crew records their findings on the work order and all the completed work orders are returned at the end of the day with the statistics for the day, e.g. sewer line footage that was cleaned, CCTV footage, etc. WRCRWA records are filed separately from Western records.

The system employed by the WRCRWA O&M Team for rating condition of the various components of WRCRWA's Sanitary Sewer System was derived from guidelines published by the US EPA and Office of Water Programs. The rating system can be incorporated into existing data base information systems and is therefore preferred over other rating systems.

NASCO provides guidance to less knowledgeable staff such as those with less focused interest in the private sector. Therefore private service companies with NASCO membership provide some assurance that private company field crews are trained in Sanitary Sewer System inspection and rating.

State Order Section 4(c) Rehabilitation and Replacement Program

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.

As discussed above in 4b, rehabilitation and replacement planning begins with the SOP and information from field sewer cleaning teams reported on the Daily Line Cleaning Report. Reported problems trigger CCTV when appropriate to assess the extent of current blockage and to predict potential for future blockage.

WRCRWA uses Western's closed circuit television (CCTV) inspection equipment for WRCRWA laterals and sewers up to a maximum of 6 inches. CCTV inspections of the larger sewers are contracted out. The video inspections address the following:

- Pipe size, type, length, and joint spacing
- Distances are recorded
- Structural deficiencies
- Corrosion
- Inflow/Infiltration
- Illegal connections
- Results of the video inspection
- CCTV operator name
- Cleanliness of the line
- Location and identification of the sewer and manholes being examined

Once the CCTV examination is completed the sewer is rated based upon the defects discovered during the video examination.

When the problem is not easily remedied through more frequent cleaning, it is added to the Maintenance Work Plan as a WRCRWA repair/replacement project into WRCRWA's Access Database furnished and maintained by Western (also referred to as a rehab entry in State documentation). This master work schedule includes costs for labor and maintenance. The numerous entries are summarized with major activities and anticipated costs for the upcoming fiscal year with priorities identified. With an iterative approach the work and costs are revised based on current estimates and priorities, and when the draft is final, the requests are submitted to the WRCRWA Administrator for consideration by WRCRWA's Executive Committee and Board of Directors for the upcoming fiscal year budget. WRCRWA's procedure for rehabilitation and replacement of the Sanitary Sewer System meets or exceeds the requirement of the State Order.

State Order Section 4(d) O&M Training Program

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

Western provides training to the WRCRWA O&M team working on the WRCRWA Sanitary Sewer System on a regular basis and requires team members to be certified by the California Water Environment Association, signifying the degree of knowledge retained and the years of experience on the job applying this knowledge. Additionally, all WRCRWA O&M team members are evaluated at least once per year to determine level of proficiency and performance for the purpose of determining compensation. WRCRWA's training program, conducted by Western, includes classroom settings, simulated activities at the Operations Center and on-the-job training in the field. Formal classroom and Operations Center sessions are documented on the "Operations Department Training Documentation Form", containing trainee's name, date, type and description of training. A few examples of training programs include "Sampling", "USA Dig-Alert", "Service Truck Operation" and "Vactor Truck Operation".

Western's Management team has developed an overall training protocol for WRCRWA O&M Team Members as follows. Training incorporates both WRCRWA and Western Sanitary Sewer Systems.

1. O&M SOP
2. Legal Authority
3. FOG
4. ERP
5. OERP
6. CIP
7. Standard Boilerplate Specs
8. Standard Technical Specs
9. Standard Drawings
10. Record Keeping
11. System Master Planning
12. Public Communication

The WRCRWA O&M Team receives training to deal with WRCRWA member requests. Under the service program, the O&M Team accepts service requests from WRCRWA Member agencies, which describe the problems the Member is having or has observed. These problems could be related to Member agency customers. When a service problem is identified by a Member agency, a service request form is completed; this form includes the following information:

- Western's personnel who received the information
- Nature of the problem
- To whom the follow-up action was assigned
- Date of the call or email problem
- Date the problem was resolved
- Name of the Member agency
- Location of the problem
- Date the follow-up action was assigned
- Cause of the problem
- Investigation findings
- Corrective actions taken

The O&M Team responds as soon as the problem is identified by the Member agency during working hours or typically within 60 minutes if the call is received after hours. The WRCRWA O&M Team's goal is to resolve all issues related to a service call as soon as possible, but not later than the close of the current business day.

State Order Section 4(e) Equipment and Parts Inventory Program

Provide equipment and replacement part inventories, including identification of critical replacement parts.

The O&M Team maintains an equipment parts inventory for the equipment used to service various components of the Sanitary Sewer System as well as equipment and material that make up the Sanitary Sewer System, including sewers, lift stations and MAS. Service equipment includes for example Western's Vactor trucks, the Emergency Response trailer, the CCTV van, portable compressors, portable pumps, portable generators and hand tools. The Sanitary Sewer System parts inventory list is maintained by Western for WRCRWA facilities. In general, critical parts including sections of sewers of various diameter and manholes are staged at the Operations Center. Repair material and equipment are a part of the warehouse inventory. The warehouse system is operated with a computerized minimum and maximum inventory system that can be tailored as needed based on past and current history of usage.

SECTION 5: DESIGN AND CONSTRUCTION STANDARDS

State Order D.13.v

The Enrollee shall have:

(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.

State Order Section 5(a) Design and Construction Standards

Maintain 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.

Copies of WRCRWA's Technical Provisions of its standard specifications and General Provisions of its standard specifications for construction of new facilities are provided in Appendix 5. Technical Provisions of the specifications have been reproduced from WRCRWA's River Road Force Main Relocation Project and address technical construction details and requirements during construction for new and replacement facilities. General Provisions of the specifications address legal detail, requirements and procedures. Both provisions are made a part of every public works contract. Western's Technical Provisions and Standard Drawings are used by WRCRWA and are available on the Western website. Examples of Standard Drawings include:

- Typical Plan layout Sewer Systems
- Typical Pipe Bedding Vitrified Clay Pipe Extra Strength
- Sewer Lateral "Normal Cut"
- Sewer Lateral "Deep Cut"
- Precast Concrete Manhole
- Sewer Precast Concrete Sampling Manhole
- Drop manhole
- Sewer Clean Out & Terminus Manhole
- Manhole Cover and Frame
- Connection to Existing Main
- 5' Diameter with Cast in Place Base
- Shallow Manhole
- 4' and 6' Sewer Cut-In Wye Connections
- Sewer On-Site Cleanout
- Sewer Sample Wye

WRCRWA also uses Western's design criteria. A copy of Western's design criteria is also provided in Appendix 5 and made available on the Western website (within the Developer's Handbook) to establish planning and design requirements for Sanitary Sewer Systems with such parameters as depth of water to diameter of pipe (d/D) ratios, minimum pipe size, system loading in gallons, and other data needed to properly design sewers, lift stations, MAS and other components.

Criteria for FOG removal facilities can be found in Section 7 of this SSMP.

State Order Section 5(b) Procedures for Inspection and Testing

Maintain procedures and standards for inspecting and testing the installation of new sewers, pumps, and other appurtenances and for rehabilitation and repair projects.

WRCRWA uses Western's procedures for Inspection and Testing. Copies of Western's requirements for establishing and implementing procedures and standards for inspecting and testing the installation of new facilities prior to acceptance are attached within Appendix 5. General and Technical provisions of WRCRWA Construction Specifications provide detailed information about WRCRWA's requirements for inspection with instructions to the contractor for everything from notification to begin work, to acceptance of the facility.

Wastewater O&M personnel are routinely involved in the sewer design review process by being able to provide historical and current use information for Engineering personnel. This information is valuable in the design of sewers and appurtenances to insure that the project will meet expectations.

As stated previously in Section 2, Western provides WRCRWA with necessary resources including, for example, a Construction Manager, Construction Supervisor, and a team of Construction Inspectors to manage, inspect, and test newly constructed or rehabilitated facilities.

For example:

New manholes that are installed are visually tested to determine if there are any conditions of inflow or infiltration. This activity is particularly important in areas with traditionally shallow groundwater tables.

All new sewer projects shall be CCTV inspected after completion. The video inspection and inclinometer testing is useful to determine if the sewer systems were built according to design and that all construction debris has been removed from the new facilities.

SECTION 6: EMERGENCY RESPONSE PLAN

State Order D.13.vi

The Enrollee shall have an Emergency Response Plan that includes:

- (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 proper response to all overflows,*
- (c) Procedures to ensure prompt notification to appropriate regulatory agencies and other affected entities (e.g. health agencies, Regional 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 Plan (MRP). All SSOs shall be reported in accordance with this MRP, the California Water Code, other State Law, and other applicable Regional Board Waste Discharge Requirements (WDRs) or National Pollution Discharge Elimination System (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 OERP and are appropriately trained,*
- (e) Procedures to address emergency operations, such as traffic control 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.*

State Order Section 6(a) Notification Procedures

The Enrollee shall have an Emergency Response Plan that includes proper notification procedures so that the primary responders and regulatory agencies are informed of all SSOs in a timely manner.

WRCRWA has developed its own Overflow Emergency Response Plan (OERP) by adapting the content of Western's OERP to WRCRWA's sanitary sewer systems. WRCRWA's Board of Directors approved the WRCRWA OERP in 2013.

Primary responsibilities of each employee in the emergency response team are outlined in Appendix 6, Table 6-1. The first responder is not a named individual because the

assignment rotates among the members of the call team. The table identifies the first responder as the on duty O&M team member on "Call Team C" and the cell phone number of the cell phone carried by the call team member on call 24/7. Although the individuals change the phone does not. The phone is handed from the call team member coming off duty to the next person on call; so, calling that Call Team phone number will always alert the person on call at that moment.

The on duty Call Team member will either investigate the emergency or contact a team member who can respond faster in the event the emergency is at a location some distance from where the on duty Call Team member is when receiving the call. If the incident is deemed an emergency, such as a SSO, the Call Team member will immediately contact the Spill Response Supervisor or if unavailable will contact the Deputy Director of Operations - Wastewater. The Call Team member and Spill Response Supervisor and/or Deputy Director of Operations - Wastewater will collaborate and mobilize an emergency response crew immediately.

A call out list is provided in the OERP, Appendix 6, and Table 6-2. The list is labeled "Call Out List with SSO Contact Information, Outside Vendor Resources". The list provides company name, addresses, contact names and title and phone numbers of private contractors who have said they are willing to assist with an emergency including a SSO. Table 6-1 indicates the Spill Response Supervisor is responsible for mobilizing "Outside Vendor Resources" a.k.a. outside services. Outside Vendor Resources will be called in to assist with an emergency on an as needed basis as determined by the Spill Response Supervisor or Deputy Director of Operations - Wastewater. The capabilities of the outside service providers are known and are briefly described in Table 6-2 of the OERP.

If the emergency is a SSO, the Spill Response Supervisor or the Deputy Director of Operations - Wastewater will notify the regulatory agencies by phone for an attempt to make immediate contact and by email to document the time and to memorialize the information currently available.

WRCRWA's jurisdictional area is within the Santa Ana Regional Water Quality Control Board, Region 8 area.

All reportable emergencies within WRCRWA's service area would be directed to Santa Ana Region 8. Contact information for the Regional Board is shown on the "Reportable Incident Notification Log Sewer Spill" form included hereafter within the OERP, Appendix 6.

A "Command and Management Organization Chart" has also been included in the OERP, Appendix 6, to pinpoint the person responsible for each element of the SSMP such as the OERP and SSO response, and the one person responsible for the entire SSMP. Responsibility may be linked to the severity of the SSO using Category 3 (under 1,000 gallons that do not reach waters of the United States), Category 2 (over 1,000 gallons that do not reach waters of the United States) or Category 1 (any quantity that reaches waters

of the United States). For example, OERP responsibility for Category 3 SSOs will likely rest with the Spill Response Supervisor or if unavailable, be elevated to the Deputy Director of Operations - Wastewater. But with more severe and immediate emergencies such as Category 1 & 2 SSOs, responsibility may be assumed immediately by the Director of Operations.

State Order Section 6(b) Proper Response to SSOs

The Enrollee shall have an Emergency Response Plan that includes a program to ensure proper response to all overflows.

The SSMP notification information is updated routinely with copies distributed to Call Team members (first responders). A list has been included in Appendix 6 to provide contact names for Member agencies that could be significantly impacted if the sewerage flow from their service area was curtailed while a downstream SSO was being corrected. Those agencies are currently:

- City of Norco
- City of Corona
- Home Gardens Sanitary District
- Jurupa Community Services District
- Western Municipal Water District

Contingency plans have been made a part of the SSMP/OERP for SSOs at the South Regional lift station. Operators are familiar with the lateral and weir at the lift station wet well that automatically diverts wastewater to SAWPA's Brine Line when there is a pump failure. Operators understand the notification procedures that were made part of a Mutual Aid Agreement between SAWPA and WRCRWA. SAWPA constructed the South Regional Lift Station without redundancy, knowing and promising that SAWPA's Brine Line would provide the necessary redundancy, and therefore, the Mutual Aid Agreement affirms SAWPA's pledge to use the Brine Line for emergencies. A copy of the Mutual Aid Agreement is attached in Appendix 9. The original can be found in Addendum No. 7 to the WRCRWA Joint Exercise of Powers Agreement, signed by all WRCRWA Members and SAWPA in 2012.

The Responder Flow Chart in the OERP, Appendix 6, names the responders that can best respond to the Sanitary Sewer System. The Flow Chart provides a hierarchy listing the first responder, the first backup responder the second backup responder and so on. The likely candidate for first responder would be the C Call Team member for that day. The C Call Team member would request immediate assistance from the operators at WRCRWA's POTW and from Western's wastewater collections team.

The first responders will set up traffic control and pedestrian notification as indicated in 6(e) below.

State Order Section 6(c) Names of Officials to be contacted at Regulatory Agencies

The Enrollee shall have an Emergency Response Plan that includes procedures to ensure prompt notification to appropriate regulatory agencies and other affected entities (e.g. health agencies, Regional 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 Plan (MRP). All SSOs shall be reported in accordance with this MRP, the California Water Code, other State Law , and other applicable Regional Board Waste Discharge Requirements (WDRs) or National Pollution Discharge Elimination System (NPDES) permit requirements. The SSMP should identify the officials who will receive immediate notification.

A Communication Chart in the OERP, Appendix 6 names specifically which agencies under what circumstances will be notified. The Communication Chart is linked to the Reportable Incident Notification Log Sewer Spill discussed above in 6(a) to provide the names of the individuals within the regulatory agencies that need to be notified. The communication chart also provides notification direction and information for non regulatory agencies such as local police, fire, CHP, Caltrans, City and County public works, major dischargers impacted, and downstream entities such as SAWPA and downstream POTW operators at the Orange County Sanitation District.

State Order Section 6(d) OERP Training for Staff and Contractors

The Enrollee shall have an Emergency Response Plan that includes procedures to ensure that appropriate staff and contractor personnel are aware of and follow the OERP and are appropriately trained.

WRCRWA (Western) management holds meetings with its O&M Team weekly with segments or the entire meeting devoted to training including training on WRCRWA’s Sanitary Sewer System. A Training Documentation Form is filled out and signed by each employee in attendance along with the topic of discussion when formal training is offered. The O&M Team will participate in three different types of training each year, (1) Orientation, (2) Tabletop Exercises and (3) Functional Full Scale Exercises. Training includes the entire SSMP. Training goals include coverage of the entire SSMP each year with one State Order Section each month beginning with Section 1 in January and ending with Section 11 in November as follows:

State Order Section	SSMP Section	Training Subject(s)	Training Month
D13.i	1	State Order, Western’s Sewer Systems and Section 1 - Goals	January
D13.ii	2	Organization	February

D13.iii	3	Legal Authority, Western's Wastewater Ordinance	March
D13.iv	4	Operation and Maintenance Program	April
D13.v	5	Design and Performance Provisions	May
D13.vi	6	Overflow Emergency Response Plan	June
D13.vii	7	FOG (fats, oils and grease) Control Plan	July
D13.viii	8	System Evaluation and Capacity Assurance Plan	August
D13.ix	9	Monitoring, Measurement and Program Modifications	September
D13.x	10	SSMP Program Audits	October
D13.xi	11	Communication Program	November

WRCRWA (Western) management provides information from WRCRWA's SSMP to contractors named in Section 6(a) above and explains the requirement that the contractors conduct training with their crews using WRCRWA SSMP information appropriate to the services they provide.

State Order Section 6(e) Procedures to Address Emergency Operations

The Enrollee shall have an Emergency Response Plan that includes procedures to address emergency operations, such as traffic control and crowd control and other necessary response activities.

The first responder to a WRCRWA emergency will call for the delivery of Western's emergency response trailer that has been equipped with traffic control and crowd control equipment.

A standard traffic control plan has been included in the OERP, Appendix 6, to guide first responders in setting safe spacing and tapers for cones and delineators and safe spacing for emergency zones and work zones.

Traffic control and crowd control procedures are as follows:

Category 3 Spills (less than 1,000 gallons that won't reach Waters of the U.S.)

- A. Contact Mutual Aid Wastewater Departments as needed.
- B. Perform lane closures as needed.
- C. Close any affected entrances or exits from all public and private facilities.
- D. Place proper signage for any lane closures including contaminated area signs.
- E. Use caution tape and barricades to protect pedestrians from contaminated area.

Category 1 (any spill quantity reaching Waters of the United States) and
Category 2 (any spill greater than 1,000 gallons)

- A. Assess spill situation.
- B. Contact Mutual Aid Wastewater Departments as needed.
- C. Perform lane closures as needed.
- D. Close any affected entrances or exits from all public and private facilities.
- E. Place proper signage for any lane closures including contaminated area signs.
- F. Inform local police, highway patrol and/or sheriff's department of any law enforcement needed for road closures and traffic control.
- G. Delegate the responsibilities to Mutual Aid team members (from neighboring agencies) to inform public of hazards also use signage to inform public of potential hazards to public health and safety.
- H. Block public access to hazard using barricades, cones and caution tape.
- I. Contact Public Affairs staff to enlist assistance with public communication.

In addition to the above procedures that are to be implemented at the site, SSOs can be mitigated immediately on WRCRWA's South Regional Force Main by shutting the pumps off at WRCRWA's South Regional Lift Station.

In the event of a SSO on WRCRWA's South Regional Force Main or at its South Regional Lift Station, the pumps can be turned off and the contents of the wet well at the lift station will spill into SAWPA's Brine Line that discharges to the Orange County Sanitation District treatment plant. SAWPA's Brine Line connection at the South Regional Lift Station can accommodate discharges from four of WRCRWA's Member Agencies, City of Norco via Cota Street, City of Corona from Western's Corona Diversion Structure and pipeline, City of Corona from Corona's Plant No. 2 and its connection to Western's trunk sewer near Cota Street and Home Gardens Sanitary District from Western's Buchanan Trunk Sewer and Western via Western's Buchanan Trunk Sewer. The operator is to contact SAWPA and OCSD immediately upon receiving the high level alarm signal that indicates the wet well is about to spill into the Brine Line.

SSOs on WRCRWA's South Regional Force Main can be mitigated by shutting the pumps off at the two Norco Lift Stations (one at Rincon and River Road and the other at 2nd Street and River Road). Norco has the ability to divert its wastewater to either Corona, SAWPA or both. A schematic drawing has been included in Appendix 6 showing the Norco Lift Stations and sewers to Corona.

State Order Section 6(f) Steps to Protect Waters of the United States

The Enrollee shall have an Emergency Response Plan that includes 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.

The first responder, after the initial assessment and immediate reporting to the Spill Response Supervisor, will make all reasonable efforts to contain the SSO by initiating actions to stop, divert or contain the discharge.

Actions to contain a spill include emergency dyke building around the spill with hand tools and upon arrival of heavy equipment, the building of dykes in drainage channels leading to Waters of the United States. Advance permission process includes telephoning the contact person at the local public works jurisdiction or flood control district. The first responder will contact on duty O&M team members or other On Call team members to monitor upstream lift stations to prevent wet well overflows if the lift station has to be shut down to limit the magnitude of the downstream SSO. Upstream WRCRWA Member agencies will be contacted by the Spill Response Supervisor or a designated team member to limit discharges. First steps will be to shut down lift stations at the South Regional and at Norco and to close off the Corona Diversion structure gate. WRCRWA O&M Team members may request Member agency O&M staff at Jurupa to shut down major water connections at the meter in instances where control of the SSO is not possible without major reduction of upstream discharges. They could also request Jurupa divert flow to SAWPA's Brine Line and to the City of Riverside Regional Treatment Plant.

SECTION 7: FOG CONTROL PLAN

State Order D.13.vii

The 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:

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

7(b) A plan and schedule for the disposal of FOG generated within the 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,

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

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

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

7(f) An identification of Sanitary Sewer System sections or pipe reaches subject to FOG blockages and establishment of a cleaning maintenance schedule for each section or pipe reach, and

7(g) Development and implementation of source control measures for all sources of FOG discharged to the Sanitary Sewer System for each section (pipe reach) identified in (f) above.

State Order Section 7(a) Public Education for Proper Disposal of FOG

The Enrollee's FOG Control Plan shall include an implementation plan and schedule for a public education outreach program that promotes proper disposal of FOG.

Public outreach is primarily a result of inspector's contact with known FOG producing Member Agencies. A FOG information brochure is available for the inspector to send to

employees at Member Agencies. The brochure and WRCRWA's information on Western's website provide the following information:

Fats, Oils, and Grease Control Program

WRCRWA's Fats, Oils and Grease (FOG) Control Program addresses those mandatory SSMP provisions outlined in Section D, 13 (vii) FOG Control Program of SWRCB Order No. 2006-0003. WRCRWA receives discharges from its Member Agencies and has regulations to control the quantity of FOG discharged by its Members to the WRCRWA system. Additionally, WRCRWA has developed its own FOG Control Program manual using WRCRWA regulations and Western's FOG Control Program manual to establish limits at Member Agency connections and to share information that can be passed on to Member Agency customers.

Background

The discharge of fats, oils, and grease (FOG) from animal and vegetable sources can create sewer line stoppages that result in sanitary sewer overflows (SSOs). Two main sources of FOG discharges are from the restaurant industry and food service facilities (e.g. cafeterias, penal institutions, schools, colleges, and universities with food services, and commercial kitchens) and residential users. The FOG discharges may be a result of poor housekeeping practices at restaurants and from poorly informed decisions by residential users. The result is the same: SSOs.

The discharge of hot or warm FOG to the sewer causes stoppage problems due to the accumulation on the upper surfaces of sewer lines due to the floating and non-mixing properties of FOGs in water. The depositions of the FOGs on the upper surfaces of a sewer line are created during high flows and by FOG obstructions downstream that restricts the sewer flows and cause the water level to rise.

Grease interceptors are gravity separation devices to separate FOGs and solids from the wastewater discharge by allowing solids to be collected through settling and floatable FOG through plumbing configurations that retain fluids in the upper layers of the interceptor. The use of biological or chemical agents in grease interceptors to liquefy FOGs prior to discharge is problematic and prohibited. Bacteria and enzymes act by reducing the long chain fatty acids into smaller chain molecules. A bacteriological system would need 24 – 72 hours to completely aerobically metabolize the FOGs to carbon dioxide and water. A gravity separation interceptor has about 30-120 minutes of detention time. The result of prohibited bacterial or enzymatic product usage is a liquefaction or emulsification of the FOGs in the interceptor. This liquefied FOG is subsequently discharged to the sewer where any further degradation of the FOG by the bacteria or enzyme is prevented due to the dilution of the material and other interferences in the receiving sewage. The liquefied FOGs begin to adhere to sewer line interior walls, deplete the oxygen content of the wastewater due to the natural degradation microbes present in wastewater, and create odor problems due to

the depleted oxygen content. Therefore, it is unlawful to add any biological or chemical agents to the sewage that would liquefy FOG.

WRCRWA's FOG program promotes Best Management Practices (BMPs) designed to prevent the discharge of FOGs to the sewer system and to educate Member Agencies and Member Agency customers about the BMPs.

Fog Program Elements

WRCRWA utilizes the following control techniques to minimize the discharge of FOG to WRCRWA's sewer collection system.

1. Sanitary Sewer System inspections and data sharing
2. Education of Member Agency staff
3. Best Management Practices (BMPs)
4. BMP Adoption as part of WRCRWA's SSMP
5. BMPs for Food Preparation Areas with Member Agency Service Areas
6. BMPs for Maintenance
7. Interceptors
8. Prohibited Products
9. Enforcement

Inspections

Inspection of the WRCRWA Sanitary Sewer System allows WRCRWA staff members to determine which Member Agencies may be problematic. WRCRWA's Pretreatment Program Services team is responsible for inspecting all WRCRWA facilities minimally once per year. Any increase in inspection frequency is determined by the findings, sewer line stoppage history, or SSO history.

The inspections are used to ensure proper maintenance and the results of the inspections are maintained in a computer relational database that has the ability to provide the inspector with an inspection and enforcement history for the Member Agency.

WRCRWA will assist its Member Agencies with inspections. For example, WRCRWA staff members will help evaluate grease interceptors for performance and integrity. WRCRWA

uses the "25% Rule" when determining the efficiency of grease removal by an interceptor. The 25% Rule simply states that when the operational fluid capacity has been reduced by more than 25%, the interceptor is no longer capable of removing FOG at its designed rate and therefore needs to be serviced. The performance will also be affected from missing elbows or mid-wall tees or influent extensions that are too long. The integrity of the interceptor is often affected by anaerobic conditions that generate sulfide gas that causes corrosion of concrete surfaces. Once the concrete begins to corrode, plumbing connections are compromised and, in some cases, the structural integrity of the interceptor is in question.

WRCRWA's Pretreatment Program Services team is at times invited to make inspections within a Member Agencies service area. In such situations, WRCRWA's Pretreatment Program Services team works closely with the County of Riverside's Department of Environmental Health to share information gained during restaurant inspections. Pretreatment Program Services inspectors have some knowledge of what constitutes Health and Safety Code restaurant violations. When these violations are observed, a phone call is placed to the Health Department to have the area inspector respond and take appropriate enforcement actions.

Public Education and Outreach

WRCRWA uses its Pretreatment Program Services team members as the principle education and outreach method to contact the Member Agencies. Occasionally the Pretreatment Program Services team members will participate in outreach efforts sponsored by Member Agencies. When participating in an inspection of a restaurant, the inspector will use the opportunity to inform and educate the owner or manager about the various laws and regulations that affect their business. The inspectors also provide useful information related to interceptor design, maintenance, and businesses that can assist the restaurants in maintaining pretreatment equipment. Subject areas would include:

- Product usage and substitution
- Good housekeeping practices
- Grease interceptor evaluation
- Wastewater Ordinance legal authority citations, and
- WRCRWA permit requirements

Best Management Practices

WRCRWA has adopted Best Management Practices related to the operations and maintenance of grease interceptors and in the housekeeping operations associated with food preparation and cleanup at restaurants and other food service facilities. WRCRWA has

also passed the BMPs along to WRCRWA Member Agencies by sharing this SSMP and the WRCRWA FOG Control Program.

Member Agencies are reminded that BMPs are not just guidelines for Food Service Establishments (FSE); they are enforceable requirements when a FSE fails to implement one or more of the listed BMPs. WRCRWA's adopted BMPs are as follows:

BMPs – Food Prep Area

Introduction: Fats, Oils and Grease (FOG) are food by-products that can severely damage a facility's drain line system as well as the sanitary sewer system. FOG collects and eventually hardens on the inside of the sewer pipes; preventing water from flowing and causing blockages.

Blockages in the sewer cause Sanitary Sewer Overflows (SSOs), dumping raw sewage into streets, lakes, streams, homes and businesses.

The best way to prevent blockages is to keep the FOG out of the sewer system. Below is a list of Best Management Practices that will help to prolong the life of building sewer systems and reduce the inconvenience and cost of line blockages.

- **Don't** put grease or fryer oil down any sink or floor drain.
- **Don't** dispose of food or food scraps in sinks.
- **Don't** pour bleach directly down ANY drain. Bleach when use improperly dewater grease, making it as hard as concrete.
- **Don't** take out sink strainers or drain covers. Empty scraps into trash, not down the drain.
- **Don't** use cleaning chemicals improperly. Follow the instructions on the label, for your safety as well as the safety of the environment.
- **Scrape** all solid food waste into the garbage.
- **Encourage** staff to be conservative about use of FOG in food preparation and serving.
- **Use** paper towels to soak up oil and grease under fryer baskets and to wipe down work areas. Dispose of the paper towels into the trash.
- **Eliminate** the use of garbage disposals.
- **Check** all sinks and floor drains for strainers and covers to ensure they are in place and in good working order.

- **Be Knowledgeable** regarding the location, operation, and maintenance schedules of all FOG control devices.
- **Ensure** that used fryer oil is placed in the appropriate recycling container.
- **Maintain** grease interceptors in good working order at all times.

BMPs – Interceptor and Grease Trap Maintenance

Introduction: Best Management Practices for controlling fats, oils, and grease also include maintenance of any required grease removal devices. WRCRWA's approved technology for removing FOG is a gravity interceptor; however, Member Agencies of WRCRWA may use other treatment units as long as they function properly. For the treatment unit (TU) to work effectively, it must be cleaned periodically to ensure adequate detention time (the time water remains in the unit before passing through to the sewer). Ensuring adequate detention time is accomplished by proper "sizing" when the TU is first installed and secondly by maintaining the TU so that 75% or more of the design capacity is available when in use.

- **Contract** an approved grease waste hauler to completely clean all chambers of the interceptor including the sample box (if one exists).
- **Establish** a routine interceptor cleaning schedule and adjust the schedule based upon condition of interceptor after routine service. A minimum of 75% available capacity must be maintained at all times.
- **Observe** the interceptor cleaning periodically to ensure the waste hauler is doing a thorough job. This also provides an opportunity to view the internal plumbing to ensure it is in good working order and complies with Member Agency and/or WRCRWA standards.
- **Don't** use any emulsify agents in the interceptor that inhibits the interceptor from separating floatables and solids from the final effluent.
- **Keep Records** that document all interceptor service events on-site for the Member Agency and/or WRCRWA inspector to review for a minimum of three years.

Grease Interceptor Retro Fits

One of the main compliance tools available to the Member Agencies for restaurant and similar facilities is the WRCRWA requirement to install a grease interceptor. For new construction and tenant improvement projects, this action is accomplished through the Member Agency's plan check process. Occupancy permits cannot be obtained if the User has not agreed to the Pretreatment requirements of the project.

If an existing restaurant or similar facility has been proven to be the cause of a sewer line blockage and/or SSO and does not have a grease interceptor, then the User is required to

install an appropriately sized grease interceptor within 90 days. If the existing restaurant or similar facility has a grease interceptor but the device is poorly maintained or is inadequate to treat the type and volume of wastewater from the facility, then the User will be required to replace the existing grease interceptor with a one that is adequate for the intended application.

If a Member Agency has adopted requirements similar to WRCRWA's Wastewater Ordinance, any restaurant or food service facility found responsible for the sewer line blockage and/or SSO, will be assessed all costs of cleanup and/or repairs necessary to remove the blockage and/or SSO.

Prohibited Products

WRCRWA's Wastewater Ordinance prohibits the use of any chemical or material that will emulsify, suspend or dissolve oil and grease and the use of any microbiological product to metabolize FOG. The Member Agency inspectors are constantly looking for these products during every inspection. When a prohibited product is discovered being used, the Member Agency or WRCRWA will issue an order to the User to immediately stop the use of the product and have the product removed from the premises. Failure to comply with these administrative orders may result in additional enforcement actions by the Member Agency or by WRCRWA, including civil and/or criminal actions.

Enforcement

The discharge of wastewater by a User that causes a sewer line obstruction or blockage is prohibited by the Federal Clean Water Act, 40 CFR 403.5(b)(3) and WRCRWA's Wastewater Ordinance. WRCRWA's Pretreatment Program Services staff is empowered by WRCRWA's federally approved pretreatment program to take enforcement actions against any User that causes a sewer line obstruction and/or SSO.

State Order Section 7(b) FOG Disposal Plan, Schedule and Facilities

The Enrollee's FOG Control Plan shall include a plan and schedule for the disposal of FOG generated within the 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.

Seven grease waste haulers are identified in Appendix 7 in compliance with the State Order to identify FOG disposal facilities. A FOG producing customer or Member Agency would most likely call for FOG pumping and disposal as opposed to looking for a receiving facility; therefore, the listing of haulers is most appropriate. This list can be made available to any potential FOG discharger by the Member Agency during scheduled and unscheduled visits. FOG generators are to provide a plan and schedule for pumping as a part of their Best Management Practices for FOG control (FOG BMPs).

State Order Section 7(c) Legal Authority to Prohibit FOG Discharges

The Enrollee's FOG Control Plan shall include the legal authority to prohibit discharges to the system and identify measures to prevent SSOs and blockages caused by FOG.

WRCRWA's Regional Wastewater Ordinance promulgates WRCRWA's rules and regulations and provides WRCRWA the legal authority to prohibit FOG discharges to the system in compliance with the State Order. WRCRWA's Regional Wastewater Ordinance is sanctioned by State and Federal law and by General Pretreatment Regulations (40CFR403) as referenced in Section 3 herein. Every Member Agency of WRCRWA has a copy of the Wastewater Ordinance. Every Member Agency of WRCRWA has signed a Pretreatment Agreement with WRCRWA pledging compliance with 40CFR403.

Prevention is the primary means to prevent blockages that can lead to SSOs. When FOG is detected in the Sanitary Sewer System it is cleaned, flushed and removed by the O&M Team. When excessive FOG is encountered, the O&M Team searches for the source and notifies the Member Agency to require its FOG Producers to install gravity separation interceptors, maintain existing interceptors or upgrade as called for in the Wastewater Ordinance.

Any User, Person or Member Agency, that Discharges wastewater containing fats, oils and grease or solids at excessive levels, as solely determined by WRCRWA, shall be required to install and maintain a gravity separation interceptor (Interceptor). Sanitary wastewater shall not be allowed to pass through the Interceptor. The Interceptor shall conform to WRCRWA standards and the operational fluid capacity shall be determined by WRCRWA.

If WRCRWA finds, either by engineering knowledge or by observation that an existing Interceptor within a Member Agency's service area is incapable of adequately eliminating Prohibited Discharges, is structurally inadequate, or is undersized for the intended use, WRCRWA and/or the Member Agency shall condemn such Interceptor and declare that the Interceptor does not meet WRCRWA requirements. The User shall be required to install, at the User's expense, an Interceptor which is acceptable to WRCRWA.

State Order Section 7(d) Standard FOG Interceptor Requirements

The Enrollee's FOG Control Plan shall include requirements to install FOG removal devices (such as traps or interceptors) design standards for the removal devices, maintenance requirements, owner BMP requirements, record keeping requirements and reporting requirements.

Oil Grease Interceptor Requirement

WRCRWA's Wastewater Ordinance requires food processing facilities tributary to WRCRWA's Sanitary Sewer System, designated by either the Member Agency or WRCRWA - including restaurants - to install an approved gravity separation interceptor. The interceptor designated by WRCRWA is required to meet all installation and maintenance requirements of WRCRWA's Wastewater Ordinance. The interceptor is sized according to the design criteria specified in the current version of the Uniform Plumbing Code but may need to be larger based on WRCRWA and the Member Agency's design requirements. The interceptor shall contain a minimum of two chambers, with a manhole cover over each chamber and internal plumbing fixtures (tees), and shall include a sample box. The sample box is used to collect wastewater samples to verify the wastewater is in compliance with required discharge limits. WRCRWA's Wastewater Ordinance requires permitted food service facilities to meet specific discharge limits designed to protect the sewer collection and treatment system. An approved interceptor design has been included in Appendix 7 along with a list of waste haulers known to WRCRWA.

WRCRWA has incorporated Western's FOG Control Program into WRCRWA's FOG Control Program manual to assist WRCRWA Member Agencies with administration of their FOG Control Programs. The FOG Control Program document provides a standard drawing for an approved FOG interceptor in compliance with the State Order. The FOG Control Program document provides a list of approved FOG interceptor manufacturers to provide customers with options for purchasing. Best Management Practices (BMPs) for maintaining FOG interceptors are provided to WRCRWA Member Agency management and the Member Agency's inspectors. WRCRWA encourages its Members to inspect FOG producing facilities routinely, and request interceptor owners provide written proof of cleaning frequency in the form of trucking company manifests. As stated in the Wastewater Ordinance, Interceptor pumping records shall be maintained continuously on site and retained for a minimum of 3 years by the User and made available to the Member Agency and/or WRCRWA immediately upon request. Enforcement in accordance with the Wastewater Ordinance is initiated when records are not produced.

State Order Section 7(e) Authority and Staffing to Inspect FOG Facilities

The Enrollee's FOG Control Plan shall include Authority to inspect grease producing facilities, enforcement authorities, and whether Western has sufficient staff to inspect and enforce the FOG ordinance

WRCRWA has the authority to inspect FOG producing sites within its Member Agency boundaries as a result of State and Federal Codes, WRCRWA's Pretreatment Agreements and WRCRWA's Wastewater Ordinance. As stated in the Wastewater Ordinance, WRCRWA shall be granted permission to enter any properties from which wastewaters are being, or are capable of being discharged into the Sanitary Sewer System for purposes of inspecting, observing, measuring, sampling, and testing the Discharge. WRCRWA shall have access at

reasonable times to all parts of the Person's wastewater generating and disposal facilities for the purposes of inspection and sampling. WRCRWA and its Member Agency shall have the right to set up on the Person's property such devices as are necessary to conduct sampling or metering operations. Where a Person has security measures in force, the Person shall make necessary arrangements so that authorized personnel from WRCRWA and/or the Member Agency will be permitted to enter without delay for the purpose of performing their specific responsibilities.

WRCRWA has a competent staff including experienced pretreatment specialists and utilizes outside consultants as needed; therefore, has the necessary staffing to inspect sites and enforce all regulations including those relating to FOG. WRCRWA staff and consultants are knowledgeable in all aspects of the Wastewater Ordinance.

State Order Section 7(f) Identification of Sewers Subject to FOG

The Enrollee's FOG Control Plan shall include an identification of Sanitary Sewer System sections or pipe reaches subject to FOG blockages and establishment of a cleaning maintenance schedule for each section or pipe reach.

Direct dischargers to WRCRWA's Sanitary Sewer System are its Member Agencies. The O&M Team and pretreatment services staff know the dischargers and the downstream reaches of sewer pipe that could be exposed to FOG build up. Maps of the Sanitary Sewer System showing Member Agency connections are included herein Appendix 7. Cleaning schedules are recommended based on inspection reports.

State Order Section 7(g) Source Control Measures for All Sources of FOG

The Enrollee's FOG Control Plan shall include Development and implementation of source control measures for all sources of FOG discharged to the Sanitary Sewer System for each section (pipe reach) identified in (f) above.

WRCRWA utilizes Western's FOG Control Program elements in WRCRWA's FOG Control Program manual to share preferred source control measures with Member Agencies. Control measures are enforced with WRCRWA's Pretreatment Agreements, its Wastewater Ordinance and its ERP and are applied as needed to remedy potential FOG issues as well as other discharge issues.

SECTION 8: SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN

State Order D.13.viii

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 system that are experiencing or contributing to a SSO discharge due to hydraulic deficiency. The evaluation must provide estimates of peak flows (including flows from SSOs that escape from the system) associated with conditions similar to those causing overflow events, estimates of the capacity of key system components, hydraulic deficiencies (including components of the system with limiting capacity) and the major sources that contribute to the peak flows associated with overflow events,

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

(c) Capacity Enhancement Measures: The steps needed to establish a short term 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, and

(d) Schedule: Western shall develop a schedule of completion dates for all portions of the CIP developed in 8(a) - 8(c) above. This schedule shall be reviewed and updated consistent with the SSMP review and update requirements as described in Section D. 14.

State Order Section 8(a) Evaluation

The Enrollee's CIP plan shall include Evaluation: Actions needed to evaluate those portions of the system that are experiencing or contributing to a SSO discharge due to 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.

There are no hydraulic deficiencies within WRCRWA's Sanitary Sewer System. However, WRCRWA evaluates the hydraulic capability of its Sanitary Sewer System using computer calculations and field verification. Using results of existing and future computer analyses

the engineer prescribes needed facilities and estimated future capital improvement costs for entry into WRCRWA's Capital Improvement Program (CIP).

All future anticipated hydraulic deficiencies, if any, will most likely be the result of growth but can be anticipated and addressed prior to realization as a result of the computer work and master planning reports that are fed into the CIP by the Member Agencies. However, at the present time there is just one major force main and one major lift station in WRCRWA's sanitary sewer system, the South Regional Conveyance System. The current capacity of the South Regional Conveyance System is far in excess of the current flow rates. The pipeline capacity can readily be increased with the installation of larger pumps at the lift station. The need for additional capacity is projected to be a decade or more in the future.

WRCRWA requires Members with new growth to pay for its own needed infrastructure without burdening other existing Members; so, future computer simulated deficiencies will be eliminated as growth occurs as a result of WRCRWA's advance funding requirements and advance facility planning, design and construction. Mechanisms for adding new facilities include (1) the annual CIP for facilities constructed by WRCRWA based on information provided by WRCRWA Member Agencies and (2) expansion agreements with its Members.

WRCRWA's system tributary to SAWPA's Brine Line consists generally of a single pipe reach known as a lateral between WRCRWA's wet well at the South Regional Lift Station and the weir upstream from the Brine Line, a distance of a few dozen feet. The pipe is always available to receive flow from the wet well in the event the pumps at the lift station shut down. Wastewater from the lift station wet well cascades over the weir into the Brine Line without any operator involvement in the event of pump failure.

State Order Section 8(b) Design Criteria

The Enrollee's CIP plan shall include Design Criteria: Where design criteria do not exist or are deficient, undertake the evaluation identified in (a) above to establish appropriate design criteria.

As reported within Section 5 of this SSMP, WRCRWA uses Western design criteria that exceed the requirements of the State Order. Design criteria are published on Western's website and included herein Appendix 8. Design criteria are conservative and therefore more than adequate to support the needs of WRCRWA's Sanitary Sewer System.

State Order Section 8(c) Capacity Enhancement Measures

The Enrollee's CIP plan shall include Capacity Enhancement Measures: The steps needed to establish a short term 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.

WRCRWA's annual budget cycle includes the establishment of project priorities and provides short term and long-term CIP goals, together with the implementation schedule required by the State Order for major projects such as new facility construction to meet growth needs and replacement facility construction to remedy aging problems. Projects such as storm water and drainage inflow and infiltration (I/I) reduction are made a part of maintenance planning each year in each of the Member Agencies jurisdictions if and when I/I sources are identified. If I/I impacts WRCRWA it will be a result of I/I from its Members and can be identified by the flow meters at each connection between the Member Agencies and WRCRWA.

State Order Section 8(d) Schedule

The Enrollee's CIP plan shall include a Schedule: Western shall develop a schedule of completion dates for all portions of the CIP developed in 8(a) - 8(c) above. This schedule shall be reviewed and updated consistent with the SSMP review and update requirements as described in Section D. 14.

As discussed above, WRCRWA provides updates to its CIP each year when it prepares the budget for the upcoming year and therefore exceeds the requirements of the State Order. WRCRWA's annual CIP budget is presented to its Board of Directors prior to the beginning of each fiscal year with cash flow planned into the future and funding distributed according to action such as planning, design and construction. The CIP therefore provides project identification, funding source and schedule.

In accordance with update requirements of Section D.14 of the State Order, the SSMP shall be updated every five (5) years, and must include any significant program changes. Re-certification after review and approval by WRCRWA's Board of Directors is required in accordance with Section D.14 of the State Order when significant updates to the SSMP are made. To keep its files current, the WRCRWA Administrator will take the five year SSMP update to WRCRWA's Board of Directors for re-certification whether or not there have been significant program changes. To complete the re-certification process every five years, the WRCRWA Administrator will cause the necessary information including the date of re-certification to be entered in the State Water Board Online SSO Database and the SSMP to be mailed to the State Water Board as required.

SECTION 9: MONITORING, MEASUREMENT, AND PROGRAM MODIFICATIONS

State Order D.13.ix

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.*

State Order Section 9(a) Maintain Relevant Information

The Enrollee shall maintain relevant information that can be used to establish and prioritize appropriate SSMP activities.

WRCRWA uses the SSMP as the central document in the array of numerous documents used to establish and prioritize SSMP activities. A key document used to form the culture of responsiveness is Western's Mission Statement adopted herewith by WRCRWA as one of its goals. Documents describing WRCRWA's organization are used to identify individual responsibility and proper channels of communications. Legal documents such as WRCRWA's Wastewater Ordinance are used to enforce SSMP activities whether the SSMP activities are impacted by those outside WRCRWA or within WRCRWA.

Mapping documents; maintenance records; annual budgets for rehabilitation and replacement of system components; Capital Improvement Programs; and, system computer calculations are used to prioritize SSMP activities and establish funding commitments in support of the SSMP.

Sanitary Sewer System planning criteria; design requirements; construction standards and specifications; and, inspection protocols are means and methods to assure all new construction and rehabilitation are consistent with SSMP intent.

A major emphasis has been placed on understanding WRCRWA's Sanitary Sewer System. WRCRWA's system is tributary to its own POTW, owned and operated by WRCRWA using Western personnel and to other POTW's owned and operated by others including SAWPA's Brine Line and POTWs owned and operated by a WRCRWA Member Agency, the City of Corona.

WRCRWA's Sanitary Sewer System conveys wastewater to the following POTWs.

WRCRWA's own Treatment and Water Recycling Plant at 14634 River Road, Corona, CA, 92880 and in the event of planned or unplanned maintenance on WRCRWA's South Regional Force Main or at its South Regional Lift Station, the contents of the wet well at the lift station will discharge to SAWPA's Brine Line that conveys wastewater to the Orange County Sanitation District treatment plant. SAWPA's Brine Line connection at the South Regional Lift Station can accommodate discharges from four of WRCRWA's Member Agencies, City of Norco via Cota Street, City of Corona from Corona's Treatment Plant No. 2 and from Western's Corona Diversion Structure and pipeline, Home Gardens Sanitary District from Western's Buchanan Trunk Sewer and Western via Western's Buchanan Trunk Sewer. In times of emergency, Jurupa can discharge directly to SAWPA's Brine Line at connections created specifically for Jurupa.

Discharges from the City of Norco can be rerouted to the City of Corona's Treatment Plant No. 1 where it then can be treated or discharged to SAWPA's Brine Line.

In accordance with Addendum 7 to the WRCRWA Joint Exercise of Powers Agreement, SAWPA and WRCRWA pledged to provide mutual aide.

Section 3 of the Mutual Aid Agreement reads as follows:

3. Continuation of Mutual Aid. The PARTIES to this Addendum No. 7 agree that the AUTHORITY and SAWPA shall continue providing mutual aid for planned and unplanned maintenance at their respective facilities in accordance with the provisions of Exhibit B attached hereto and incorporated by this reference.

Section 1 and 2 of Exhibit B to the Agreement reads as follows:

EXHIBIT B TO ADDENDUM NO. 7 TO THE AUTHORITY'S JPA AGREEMENT (MUTUAL AID)

1. These Mutual Aid Guidelines provide procedures for planned maintenance and unplanned emergency discharges from one Sanitary Sewer System to the other involving the AUTHORITY and SAWPA. Sanitary Sewer System is defined by State Order 2006-0003, as amended.

2. The AUTHORITY and SAWPA shall strive to accept the other's discharge, excluding discharges that may cause a regulatory violation or upset in the receiving Sanitary Sewer

System and/or the receiving Public Owned Treatment Works (POTW) biological process. POTW is defined by Federal Regulation 40CFR 403.12(a).

Exhibit B to Addendum No. 7 of the WRCRWA Joint Exercise of Powers Agreement can be found in Appendix 9 of this SSMP.

State Order Section 9(b) Monitor the Implementation of the SSMP

The Enrollee shall monitor the implementation and, where appropriate, measure the effectiveness of each element of the SSMP.

WRCRWA completed a thorough audit of its SSMP and staff's application of the SSMP to the administration and operation of the Sanitary Sewer System in 2011 and 2013 as required by the State Order. The primary objective of the SSMP Audits was to measure the effectiveness of each element of the SSMP. The measure of effectiveness was standardized with sufficiency, the measure of audit evidence obtained from independent research by the auditor, an outside third party registered engineer, knowledgeable in wastewater administration and operation, to fairly evaluate the evidence. The Audit Report is presented to the general public and WRCRWA's Board of Directors for review and comment at open meetings of the WRCRWA Board of Directors.

In 2013, WRCRWA adopted the State's 2013 MRP, State Order WQ 2013-0058-EXEC.

The WRCRWA O&M Team understands the need to:

- Properly estimate and report SSO volumes discharged and quantities recovered.
- Comply with all minimum MRP record keeping requirements
- Implement feasible alternatives and actions necessary to identify and correct problems causing SSOs.
- Have only the Legally Responsible Official login to the SSO Online Database, and not allow any other person to have knowledge of the password or use of the signature.
- Implement the Overflow Emergency Response Plan (OERP) when an SSO occurs.
- Ensure all reasonable steps are taken to contain and prevent the discharge of untreated and partially treated wastewater to waters of the United States.
- To Minimize or correct any adverse impact on the environment resulting from any SSO, including accelerated or additional monitoring necessary to determine the nature and impact of the SSO.
- Implement required training for sewer system operators and contractors.
- Submit all reports on time.

A copy of the State 2013 MRP has been included in Appendix 9 together with the State's "Discharger Workbook", "Fact Sheet", and "Data Submitter Registration Form for the SSO Database".

The following diagram has been produced as a training tool for all WRCRWA O&M Team Members and WRCRWA Management and for better understanding of SSO Categories in the State 2013 MRP.

STATE ORDER WQ 2013-0058 EXEC for MRP

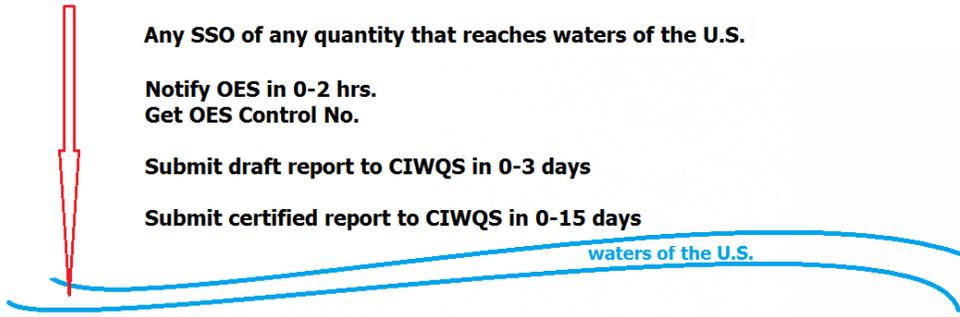
CATEGORY 1

Any SSO of any quantity that reaches waters of the U.S.

Notify OES in 0-2 hrs.
Get OES Control No.

Submit draft report to CIWQS in 0-3 days

Submit certified report to CIWQS in 0-15 days

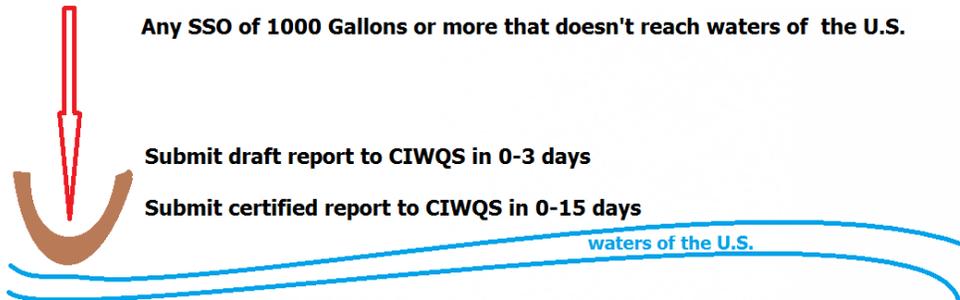


CATEGORY 2

Any SSO of 1000 Gallons or more that doesn't reach waters of the U.S.

Submit draft report to CIWQS in 0-3 days

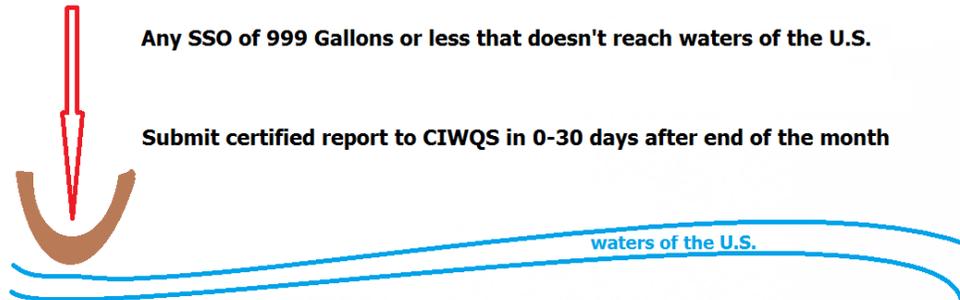
Submit certified report to CIWQS in 0-15 days



CATEGORY 3

Any SSO of 999 Gallons or less that doesn't reach waters of the U.S.

Submit certified report to CIWQS in 0-30 days after end of the month



State Order Section 9(c) Assess the Preventative Maintenance Program

The Enrollee shall assess the success of the preventative maintenance program.

The auditor of the SSMP found significant evidence to consistently support the findings that the preventative maintenance program is a success. The preventative maintenance program is structured enough to support training and individual learning curves yet flexible

enough to account for variable conditions. Finally, in the event of an SSO the maintenance team can respond quickly with the necessary material and equipment in part because it has a first responder plan in place. And with the Mutual Aid Agreement between WRCRWA and SAWPA the maintenance team can minimize spill quantities by simply shutting off the pumps at either the Norco Lift Stations or the South Regional Lift Station or both. Shutting off the pumps at Norco allows the wastewater to discharge to Corona and shutting off the pumps at the South Regional Lift Station allows the wastewater to automatically discharge over the weir to SAWPA's Brine Line. (Refer to the SAWPA - WRCRWA Mutual Aid Agreement for notification requirements.)

WRCRWA will again assess the success of its preventative maintenance program with its next scheduled audit. Updates to the SSMP will be made as needed and the entire SSMP will be re-certified every five years. Success in staff's adherence to the Western SSMP translates to success in the WRCRWA SSMP. For example, cleaning and manhole inspection data is fed into Western's "Hansen" computerized preventive maintenance module that links findings automatically to Western's work order management system for work on the WRCRWA sanitary sewer system. All meters at lift stations and at various locations within the sanitary sewer system have been calibrated each year during the past two years and will continue on an annual basis in perpetuity. Training is continual on emergency response and the SSMP.

State Order Section 9(d) Update SSMP Program Elements

The Enrollee shall update program elements, as appropriate, based on monitoring or performance evaluations.

Although there were no deficiencies found during the audits, the auditor made recommendations to improve SSMP program elements. One of the recommendations was to update the SSMP so that it would be similar to the Western SSMP. Considerable time and money would be saved by having both the WRCRWA and Western SSMP in the same format. The recommendation was satisfied with 2013 revisions. The 2013 SSMP therefore optimized the WRCRWA SSMP as a communication and training document, to save WRCRWA/Western staff time and to eliminate confusing and dissimilar protocols that could lead to mistakes. This 2014 SSMP update for recertification includes all 2013 and 2014 updates.

State Order Section 9(e) Identify SSO Trends

The Enrollee shall identify and illustrate SSO trends, including frequency, location and volume.

WRCRWA's Sanitary Sewer System has no SSO trends as a result of deficiencies in system design, operation and/or maintenance.

However, WRCRWA and all owners of sanitary sewer systems are subject to SSO's caused by individuals external to their organization. One somewhat rare example is vandalism by individual's intent on causing significant damage to public and private property and infrastructure. These SSO's are beyond the ability of the public agency to completely eliminate even with thorough security measures. For obvious security reasons WRCRWA's SSMP will not be made available to the public on WRCRWA's portion of Western's website but will be available upon request by any individual whether a member of the public or a satellite agency. Basic information will be kept on file about the individual requesting a copy in the event of vandalism or terrorism at some future date.

The other trend is from incidents external to any Sanitary Sewer System operator. Contractors and individuals are required to call for pipeline location markings before they dig in accordance with State law. The notification system called DigAlert is for any digging and is defined in the California Government Code Section 4216-4216.9 as any excavation where excavation means any operation in which earth, rock, or other material in the ground is moved, removed, or otherwise displaced by means of tools, equipment, or explosives in any of the following ways: grading, trenching, digging, ditching, drilling, auguring, tunneling, scraping, cable or pipe plowing and driving, or any other way.

DigAlert provides WRCRWA O&M team members with time and location of the proposed excavation work so that a WRCRWA inspector can be present to assure the safety of WRCRWA's sewer. But many contractors and individuals fail to abide by the law and proceed to dig without notifying DigAlert. WRCRWA operators are trained to spot illegal digging activity whenever they are in the field but cannot prevent all illegal work. WRCRWA's only recourse is to pursue each contractor and individual vigorously using the legal system if the contractor or individual is digging without previously notifying DigAlert.

WRCRWA staff uses the enforcement elements of its Wastewater Ordinance to curtail illegal digging within its Sanitary Sewer System service area by pursuing each offender causing a SSO as a result of illegal digging. Hopefully, with aggressive enforcement action, contractors and individuals will know they need to notify DigAlert before any digging takes place near WRCRWA's facilities.

State Order 2006-0003-DWQ, Section D.13.ix, Section G GENERAL MONITORING AND REPORTING REQUIREMENTS

The following paragraphs are reprinted from State Order 2006-0003 with update information from State Order No. WQ 2013-0058-EXEC (State 2013 MRP), amending the 2008 Monitoring and Reporting Program.

State Order G.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.

There was no change in paragraph G.1 as a result of the State 2013 MRP.

State Order G.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.

Paragraph G.2 was amended by the State 2013 MRP representing revisions to the original Monitoring and Reporting Program within Order No. 2006-0003. WRCRWA is to comply with the requirements of the State 2013 MRP. A copy of the State 2013 MRP can be found in Appendix 9 of this SSMP.

State Order G.3

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

There was no change in paragraph G.3 as a result of the State 2013 MRP.

State Order G.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.

SSO Categories are defined by the amended State 2013 MRP as follows:

As shown above in Section 9(b) of this SSMP, the definition of SSO Categories has changed. The State 2013 MRP defines the categories as follows:

SSO Categories - Per State Order 2013-0058-EXEC

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 municipal separate storm sewer system (a.k.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 municipal separate storm sewer system 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 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 municipal separate storm sewer system unless the entire SSO volume 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 Sewerage Discharges (PLSDs) from the amended State Order.

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.

The enrollee is also encouraged to provide notification to the California Office of Emergency Services (a.k.a. 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.

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.

WRCRWA has incorporated State Order D.13.ix and Section G together with State Order No. WQ-2013-0058-EXEC (State 2013 MRP) into its SSMP and has augmented the requirements with the informational recording and reporting information contained in Appendix 9.

SECTION 10: SEWER SYSTEM MANAGEMENT PLAN PROGRAM AUDITS

State Order D.13.x

As a part of the SSMP, the Enrollee shall conduct periodic 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.

As a part of the SSMP, WRCRWA conducts periodic audits. At a minimum WRCRWA audits its SSMP every two years (odd years) and prepares a report that is reviewed first by management then by the Executive Committee and finally by the Board of Directors at a public meeting. As required by the State Order, WRCRWA's audits focus on evaluating the effectiveness of the SSMP, and WRCRWA's compliance with the SSMP requirements identified in the State Order including identification of any deficiencies in the SSMP and steps to correct them.

The first audit of WRCRWA's SSMP was conducted in 2011 and the second audit in 2013. The audits focused as required on evaluation of the effectiveness of the SSMP and WRCRWA staff's compliance with SSMP elements. The measure of effectiveness was standardized with sufficiency, the measure of audit evidence obtained from independent research by the auditor, an outside third party registered engineer knowledgeable in wastewater administration and operation. The auditor found no deficiencies in either 2011 or 2013 but made recommendations for clarification of various elements of the SSMP. This updated SSMP includes responses and actions recommended by the auditor in the previous audits. A major effort was to make the WRCRWA SSMP as similar as possible to the Western SSMP for efficacy. Western is the contract administrator and operator for WRCRWA. Similar SSMPs will allow similar practices and procedures to be utilized by WRCRWA/Western staff members.

This SSMP was recertified in 2014 by WRCRWA's Administrator after review and approval by WRCRWA's Board of Directors and the recertification will be filed with the State.

For reasons of security to protect public health and safety and to protect the Sanitary Sewer System from vandalism and/or terrorism, neither the SSMP nor the SSMP audits will be posted on WRCRWA's web site. The public can obtain information about WRCRWA's SSMP by calling WRCRWA's offices at 951 571 7100.

In accordance with the State 2013 MRP, Section C.8.iv WRCRWA has elected to deliver an electronic copy of its SSMP together with proof of its Board of Directors public review and approval to the State Water Board by mail or private carrier in lieu of posting a copy on its website.

SECTION 11: COMMUNICATION PROGRAM

State Order D.13.xi

The Enrollee shall communicate 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.

State Order Section 11(a) Communicate with the Public

Communicate on a regular basis with the public on the development, implementation and performance of the SSMP.

State Order requirements are complex with eleven major categories, over three-dozen subcategories and the numerous elements of its monitoring and reporting program. The WRCRWA SSMP has increased complexity with various WRCRWA Member Agency systems tributary to the WRCRWA Sanitary Sewer System (Corona, Home Gardens, Norco and Western). Jurupa is a Member Agency but Jurupa discharges directly to the WRCRWA POTW and does not use the WRCRWA Sanitary Sewer System for conveyance. The SSMP and its supporting appendices contain information that would aid and abet vandals, criminals and terrorist. Communication of the information contained in the SSMP will be monitored. The SSMP and its appendices are public documents after approval by the Board of Directors and as such, copies will be made available to persons requesting the information but the name, address, phone number and company or organizational affiliation will be recorded and filed. The requestor will be notified that the information is sensitive.

The WRCRWA Sanitary Sewer System has the ability to automatically discharge to SAWPA's Brine Line that conveys wastewater to the Orange County Sanitation District's POTW. WRCRWA Member Agencies of Norco, Western and Home Gardens can discharge to Corona in the event of planned and unplanned maintenance on the WRCRWA Sanitary Sewer System. Because of the complexity and numerous agencies upstream and downstream of the WRCRWA Sanitary Sewer System, WRCRWA staff members provide thorough notification when developing or updating the SSMP.

Pertinent information from the SSMP is shared with WRCRWA Member Agencies (Corona, Home Gardens, Jurupa, Norco and Western) and with downstream agencies (SAWPA and Orange County Sanitation District).

Prior to its adoption by the Board of Directors, the updated draft SSMP will be submitted to staff members for review and comment.

Then, the Board of Directors will publicly review the updated SSMP at a regularly scheduled meeting of the Board of Directors to receive comments from all interested parties prior to considering its adoption.

With the completion of each audit, WRCRWA staff members will provide a report on audit findings to WRCRWA's Executive Committee and subsequently to its Board of Directors where the information will be shared publically. At those meetings, feedback will be encouraged. After receipt and approval by the Board of Directors, audit results will be shared with staff members responsible for various elements of the SSMP for information and education. For security of the Sanitary Sewer System, the SSMP Audit will not be posted on the website. As noted in the State Order the SSMP Audit is the mechanism to be used to measure SSMP performance and the best document for communicating performance but in the wrong hands could provide easy access for vandalism, criminal activity and/or terrorism. It is however the best source of consolidated information for training staff members and approved contractors.

At mentioned above, the general public and customers will have an opportunity to provide input with the completion of each audit every two years and certification every five years. That represents three times every five years for Member Agencies, downstream agencies and general public review and comment directly to the Board of Directors. Executive Committee and Board meeting agendas are posted to provide full disclosure to interested members of the public that a review of an audit or updated SSMP will be conducted. However, WRCRWA Member Agencies, downstream agencies and the general public will be encouraged to comment any time during the life of the SSMP.

Western staff created a call center for WRCRWA to enable the residents within Member Agencies of WRCRWA to call one phone number, to report any problem with anything related to WRCRWA's Sanitary Sewer System. The request generated from the call center service order has a chronological events feature that allows dispatch to accurately report the information to minimize response time.

State Order Section 11(b) Communicate with Upstream/Downstream Agencies
Create a plan of communication with agencies tributary to Western's system or satellite of Western's system.

Tributary and satellite agencies include:

- City of Corona
- Home Gardens Sanitary District
- City of Norco
- Western Municipal Water District
- Santa Ana Watershed Project Authority
- Orange County Sanitation District

The City of Corona is tributary to WRCRWA's system via the Corona Diversion Structure and Western's Pipeline that runs from the Corona Diversion Structure to WRCRWA's South Regional Lift Station. The Corona Diversion Structure and Western's pipeline conveys wastewater from Corona via the WRCRWA South Regional Lift Station for transport in WRCRWA's South Regional Force Main to the WRCRWA treatment plant. The Home Gardens Sanitary District and City of Norco are tributary to Western's gravity sewer (a.k.a. Western's Sterling/Sampson Trunk Sewer) that conveys wastewater from Western's West Sewer System to the WRCRWA South Regional Lift Station and WRCRWA's treatment plant.

The Jurupa Community Services District is a member of WRCRWA and discharges wastewater directly to the WRCRWA POTW. It does not discharge wastewater to WRCRWA's sanitary sewer system. However, as a Member of WRCRWA and a discharger to the WRCRWA Sanitary Sewer System, it will receive a copy of the SSMP each time it is updated and the SSMP Audit after it has been reviewed by WRCRWA's Board of Directors.

WRCRWA O&M Team members communicate continually with Member Agency wastewater teams and downstream agency staff members and encourage feed-back continually.

As mentioned above WRCRWA will communicate findings from audits and information about the updated, recertified SSMP to the general public, satellite and tributary agencies at least three times every five years at the Board of Director's meetings, giving the general public three times during the five years to make comments directly to the Board of Directors but, of course, public comment is welcomed by the staff at any time.