City of San Fernando Sewer System Management Plan



(Final Report)

City of San Fernando 117 Macneil Street San Fernando, CA 91340



ACKNOWLEDGEMENT

This Sewer System Management Plan (SSMP) has been drafted and assembled using material and information gathered from the City of San Fernando Public Works Department. SA Associates would like to extend their deepest gratitude to the Public Works Director, Mr. Matt Baumgardner and the entire Public Works staff.



Table of Contents

Acknowledgementi
Executive Summaryvi
Acronyms
Change Logix
Certification and Recertificationx
1 Introduction1
1.1 Regulatory Reguirements1
1.1.1 Additional Regulatory Considerations
1.2 Service Area and Sewer System
2 Goals
2.1 Requirements4
2.2 Overview
2.3 Sewer System Goals4
2.4 Monitoring and Reporting Plan Requirements
3 Organization
3.1 Requirements
3.2 Overview
3.3 Sewer System Overview
3.3.1 Sewer System Organization5
3.3.2 Chain of Communication and SSMP Element Implementation.8
3.4 Legally Responsible Official8
4 Legal Authority
4.1 Requirements
4.2 Overview
4.3 Discussion of Legal Authority
4.4 legal Authority and Existing City Codes
4.4.1 Enforcement
4.4.1.1 Recommendation12
4.5 Prevention of Illicit Discharges
4.5.2 Industrial Discharges
4.5.3 Proper Connections and Construction
4.5.4 Accessibility for Maintenance. Inspection, and Repair
4.5.5 Limit Fats, Oils, and Grease Discharge
5 Operations and Maintenance Program
5.1. Requirements
5.2 Overview
5.3 Sewer System Mapping 18



5.4.1 Summary of Maintenance	19
5.4.2 Wastewater Map	19
5.4.3 Wastewater Operations Crew	19
5.4.4 Mechanical Cleaning	19
5.4.5 Root Treatment	21
5.4.6 Maintenance Hole Treatment Program	21
5.4.7 Closed Circuit television Inspections	21
5.4.8 Response to Customer Notification	21
5.5 Wastewater Collection System Inspection and Condition Asse	essment
Program	21
5.6 Capital Improvement Program	22
5.7 Employee Training Program	22
5.8 Equipment and Replacement Inventories	22
6 Design and Performance Provisions	23
6.1 Requirements	23
6.2 Overview	23
6.3 Discussion on Design and Performance Provisions	23
6.3.1 Design and Construction Standards	23
6.3.2 Procedures and Standards for Inspection and testing	23
7 Overflow Emergency Response Plan	24
7.1 Requirements.	24
7.2 Overview	24
7.3 Discussion of Overflow Emergency Plan	24
7.4 Overflow Emergency Response Plan Elements	25
7.4.1 Notification	26
7.4.2 Response Actions	26
7.4.3 Reporting	29
7.4.4 Training	30
8 Fats, Oils, and Grease Control Program	31
8.1 Requirements	31
8.2 Overview	31
8.3 Discussion of FOG Control Program	31
8.4 Regulatory Requirements for FOG Control Program	32
8.5 Elements of Fog Control Program	35
8.5.1 Public Education Outreach Program	35
8.5.2 Disposal of FOG	
8.5.3 Legal Authority to Prohibit Discharge	
8.5.4 Requirements for Installation of Pretreatment Devices	
8.5.5 Inspection and Enforcement Authority	



8.5.6 Collection System Maintenance	36
8.5.7 Source Control Measures	37
9 System Evaluation and Capacity Assurance Plan	38
9.1 Requirements	38
9.2 Overview	38
9.3 Discussion on System Evaluations and Capacity Assurance Pla	n .38
10 Monitoring, Measurement, and Program Modification	40
10.1 Requirements	40
10.2 Overview	40
10.3 Discussion of Monitoring, Measurement, and Program	
Modification	40
10.3.1 Data Maintenance Activities	41
10.3.2 Monitoring Activities	41
10.3.3 Assessment of Preventative Maintenance Program	41
10.3.4 Program Updates	41
10.3.5 Identify and Illustrate SSO Trends	41
11 SSMP Program Audits	42
11.1 Requirements	42
11.2 Overview	42
11.3 Discussion of SSMP Program Audits	42
11.4 Discussion of Audit Reports	42
11.5 Performance Indicators	43
12 Communication Program	44
12.1 Requirements	44
12.2 Overview	44
12.3 Discussion of Communication Program	44
12.4 Public Communication	44
12.4.1 Enrollee Official Website	45
12.4.2 Enrollee FOG Control Program	45
12.4.3 Overflow Emergency Response Plan	45
12.4.4 Public Meetings	45
12.4.5 Other	46

Table of Contents (Tables)

Table ES-1 SSS WDR Element and Section Location	. vii
Table CL-1 Change Log	ix
Table 3-1 Position Description	7
Table 3-2 Chain of Communication and SSMP Element Implementation.	8
Table 7-1 SSO Response Procedures	.28



Table 7-2 Additional Emergency Response Actions and Contractors	29
Table 8-1 Hot Spot Locations	37

Table of Contents (Exhibits)

Exhibit 3-1 Organization	Chart	6	



Executive Summary

This specific Sewer System Management Plan (SSMP) has been prepared and drafted pursuant to the requirements of the State Water Resources Control Board (SWRCB) Order Number 2006-0003-DWQ. It includes the various plans and programs that comprise a comprehensive SSMP. The completion dates for each mandatory element are determined according to the size of population served by the federal and state agencies, municipalities, counties, districts, and other public entities that own or operate a wastewater collection system. Based on an estimated population of approximately 24,500 people, the City of San Fernando (City) must comply with the schedule provided for agencies that serve a population greater than 10,000.

On May 2, 2006, the SWRCB adopted Order Number 2006-0003-DWQ, the Sanitary Sewer System Waste Discharge Requirements (SSS WDRs), which requires all federal and state agencies, municipalities, counties, districts, and other public entities that own or operate a wastewater collection system greater than one mile in length to develop and implement a system specific SSMP. An SSMP must document how an agency manages its wastewater collection system. Each agency must present the SSMP to its governing body at a public meeting prior to certifying the document. The City is scheduled to adopt its SSMP at the City Council meeting on **May 1, 2023**.

This SSMP is in compliance with the requirements of the SSS WDRs, documents the City's system specific plans and programs to operate, maintain, and manage its wastewater collection system. Goals of the SSMP include:

- Minimizing the frequency and impact of sanitary sewer overflows (SSOs),
- Effectively and efficiently mitigating the impacts of SSOs should they occur,
- Providing adequate sewer capacity to convey peak flows,
- Maintaining and improving the condition of the collection system infrastructure to provide continual reliable service, and
- Engaging and educating the public regarding programs and issues related to the wastewater collection system.

On the following page, **Table ES-1** includes a summary of the mandatory components required by the SSS WDRs and included in the City's SSMP. Each SSMP Element shown in the **Table ES-1** is described in detail in the corresponding chapter.





SSS WDR Element	Element Description	Section
1	Goals	2
2	Organization	3
3	Legal Authority	4
4	Operations and Maintenance Program	5
5	Design and Performance Provision	6
6	Overflow Emergency Response Plan	7
7	FOG Control Program	8
8	System Evaluation and Capacity Assurance Plan	9
9	Monitoring, Measurement, and Program Modifications	10
10	SSMP Program Audits	11
11	Communication Program	12

Table ES-1 SSS WDR Element and Section Location



Acronyms

AIMS	Activity Information Management System
BMP	Best management practice
Cal OES	California Governor's Office of Emergency Services Operations
CWEA	California Water Environment Association
CIP	Capital Improvement Program
COD	Chemical oxygen demand
CCTV	Closed Circuit Television
FOG	Fats, oils, and grease
FSE	Food Service Establishment
GIS	Geographical Information System
GRD	Grease removal devices
I/I	Inflow and infiltration
LACDPW	Los Angeles County Department of Public Works
Μ	Million
MRP	Monitoring and Reporting Program
O&M	Operations and Maintenance
OERP	Overflow Emergency Response Plan
PPE	Personal protective equipment
PM	Preventative Maintenance
RWQCB	Regional Water Quality Control Board
SSO	Sanitary sewer overflow
SSS WDR	Sanitary Sewer System Waste Discharge Requirement
SSMP	Sewer System Management Plan
SWRCB	State Water Resources Control Board
LRO	Legally Responsible Official
EPA	U.S. Environmental Protection Agency
VCP	Vitrified clay pipe
WDR	Wastewater Discharge Requirements



Change Log

State Water Resources Control Board (SWRCB) Order Number 2006-0003-DWQ, Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (SSS WDR), the City, hereinafter referred to as "Enrollee", must update the SSMP every five (5) years, must self-audit every two (2) years, and must include any significant program changes.

The frequency of self-audits and updates is dependent on the SSMP's original adoption date. For example, if the SSMP was adopted on January 1st, 2022, then the SSMP must be self-audited no later than January 1st, 2024, and must be updated no later than January 1st, 2027.

Failure to comply is subject to enforcement actions ranging from informal to formal actions that could require the Enrollee to simply provide the missed information all the way to formal hearings to impose administrative civil liability penalties for failure to comply with the SSS WDR, including the audit requirements.

A Change Log has been provided for the Enrollee to record audits and/or updates to the SSMP.

Description and/or Reason for Change	Name/Title Responsible for Change	Date

Table CL-1 Change Log



Certification and Recertification

The Enrollee shall certify that the SSMP and subparts thereof, are in compliance with the general Wastewater Discharge Requirements (WDR) within the allotted time frame. In order to complete certification, the Enrollee's authorized representative must complete the certification portion in the Online Sanitary Sewer Overflow (SSO) Database Questionnaire by checking the appropriate milestone box, printing and signing the automated form, and sending the form to:

State Water Resources Control Board

Division of Water Quality

Attn: SSO Program Manager

P.O. Box 100 Sacramento, CA 95812

Recertification must take place every five (5) years, or if any significant program change is to be made. The Enrollee defines what is to be considered as a "significant" program change. For certification and recertification, the Enrollee's governing board must approve and adopt the SSMP.



1 Introduction

This SSMP has been developed to facilitate proper funding and management of the Enrollee's sanitary sewer system. In order to be effective, the SSMP includes provisions to provide efficient and proper management, operation, and maintenance of sanitary sewer systems; while also considering risk-management and cost-benefit analysis. Additionally, the SSMP contains a spill response plan which establishes standard procedures for an immediate response to an SSO in order to minimize water quality impacts, environmental impacts, and other potentially harmful conditions.

1.1 Regulatory Requirements

As of May 2nd, 2006, SWRCB Order No. 2006-0003 has served as general WDRs for sanitary sewer systems. On July 30th, 2013, Attachment A to the Order was promulgated and became effective on September 9th, 2013 and is known as Attachment A, SWRCB Order No. WQO 2013-0058-EXEC. This amended the Monitoring and Reporting Program (MRP) for SSS WDRs. Together, these documents constitute the SSS WDR.

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

Enrollees are required to develop a SSMP. They must self-audit their SSMP at least every two (2) years and updated every five (5) years of its original adoption date. The Enrollee's governing board must approve and adopt SSMP and all further updates which are done.

Audit reports prepared are not specifically required to be presented to the governing board for review and approval unless the Enrollee deems the audit to contain a significant change to the SSMP program.

The SSMP, all document references, and adopted documents must be available on the Enrollee's website. It must also be submitted to SWRCB for adoption or recertification. Enrollees do not send their SSMP to the State or Regional Water Boards for review or approval, but must make it publicly available, and upload an electronic copy to the SSO database or provide a link to the Enrollees' website where the SSMP is posted.

Failure to comply with the actions stated here and within the Order(s) may be subject to enforcement actions.

1.1.1 Additional Regulatory Considerations

Additional regulatory considerations can be found in SWRCB Order No. 2006-0003-DWQ. The Enrollee may be subject to additional laws, acts, codes, and/or other regulatory considerations enacted by a legislative, governmental, and/or other authoritative organization which was not mentioned, discussed, and/or summarized herein this section and/or the SSMP as a whole. Therefore, the Enrollee should be familiarized with and have full-understanding of all laws, codes, and/or other regulatory considerations which may apply.

The following consists of summaries and/or the direct phrasing of "REGULATORY



CONSIDERATIONS" found in SWRCB Order No. 2006-0003-DWQ.

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

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

California Water Code section 13050, subdivision (m), defines nuisance as anything which meets all of the following requirements:

- a) Is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property.
- b) Affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal.
- c) Occurs during, or as a result of, the treatment or disposal of wastes.

This Order [SWRCB Order No. 2006-0003] 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.

The action to adopt this General Order [SWRCB Order No. 2006-0003] is exempt from the California Environmental Quality Act (Public Resources Code §21000 et seq.) because it is an action taken by a regulatory agency to assure the protection of the environment and the regulatory process involves procedures for protection of the environment. (Cal. Code Regs., tit. 14, §15308). In addition, the action to adopt this Order is exempt from CEQA pursuant to Cal.Code Regs., title 14, §15301 to the extent that it applies to existing sanitary sewer collection systems



that constitute "existing facilities" as that term is used in Section 15301, and §15302, to the extent that it results in the repair or replacement of existing systems involving negligible or no expansion of capacity.

The Fact Sheet, which is incorporated by reference in the Order [SWRCB Order No. 2006-0003], contains supplemental information that was also considered in establishing these requirements.

The Enrollee must comply with all conditions of SWRCB Order No. 2006-0003. Any noncompliance with this Order constitutes a violation of the California Water Code and is grounds for enforcement action."

1.2 Service Area and Sewer System

The Enrollee is located within Los Angeles County, and bordered by City of Sylmar to the north, City of Lake View Terrace to the east, City of Pacoima to the south, and City of Mission Hills to the west. It is served by Interstate 5, Interstate 210, State Route 118, and Interstate 405. The Enrollee encompasses approximately 2.37 square miles and serves approximately 24,535 customers. Their customer base is comprised of residential and commercial users.

The Enrollee's wastewater collection system is under the jurisdiction of the Los Angeles Regional Water Quality Control Board, SWRCB, and the U.S. Environmental Protection Agency (EPA).

The Enrollee maintains 215,915 linear feet of a contiguous gravity sewer system. 97percent of the system is vitrified clay pipe (VCP) which has an extremely long service life. Main size varies from four (4) to 24-inches. 78-percent of the system is made up of eight (8)-inch pipe. The oldest sections in the system were built in the 1920s and the newest sections were built in the 1950s. In total, the system has 834 maintenance holes.

The Enrollee is not responsible for the main line lateral connection. If there is an issue involving the lateral connection, the customer is responsible for it.



2 Goals 2.1 Requirements

D.13.(i) **Goals**: 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.

2.2 Overview

This section will discuss the Enrollee's goals for their sanitary sewer system. The Enrollee has developed realistic, attainable, and effective goals which are unique to the infrastructure and performance of their sewer system. Their goals show commitment to all aspects of their sewer system, and provide focus for staff to better work practices and/or management.

2.3 Sewer System Goals

The Enrollee's goals showcase their aspirations to enhance overall performance, and protection of public health, waters of the state, and the environment from the hazards of SSOs. The following goals describe the guiding policies of the Enrollee at a very high level and are realistic, attainable, and effective.

The goals of the Enrollee are:

- Continue the use of sewer overflow monitoring devices at key locations to provide advanced warning to all key members of the sewer maintenance team.
- Increase funding allotted for training sewer maintenance staff to ensure they are properly trained and certified by the California Water Environment Association (CWEA) for collection operations.
- Hire a consultant to provide wastewater engineering services including sewer system condition assessment, strategic planning assistance, and update the Sewer Master Plan 2014.
- Budget funds on an annual basis to run a cyclical CCTV program for the sewer system.
- Development of a Geographical Information System (GIS) which tracks and records all maintenance activity
- Ensure staff are continually prepared to respond to SSOs, properly manage SSOs, and prevent SSOs from occurring.

2.4 Monitoring and Reporting Plan Requirements

To ensure goals remain relevant, the Enrollee will reevaluate their goals during self-audits. The Enrollee may be required to explain their reasoning for changes made. It is recommended that the Enrollee records the reasoning for the change, date, person making the change, and any other relevant data in the event an explanation is needed. If a change is deemed "significant", the SSMP may need to be recertified.



3 Organization

3.1 Requirements

- D.13.(ii) Organization: The SSMP must identify:
- (a) The name of the responsible or authorized representative as described in Section J of this Order (SSS WDR).
- (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 (Cal OES)).

3.2 Overview

This section will identify the Enrollee's organization and communication structures for implementing SSMP elements, responding to SSOs, and properly reporting SSOs. Exhibits and tables are provided to better illustrate the structure. As required, the names and telephone numbers of positions responsible for implementing specific measures of the SSMP program are shown herein. Additionally, the name of the Legally Responsible Official (LRO) will be given.

3.3 Sewer System Overview

3.3.1 Sewer System Organization

Shown below, **Exhibit 3-1** illustrates how the sewer system hierarchy is organized. **Table 3-1** provides a brief description and general duties of the positions shown in **Exhibit 3-1**.

Any agency or contractor that implements a SSMP element, or any agency or contractor with a long-term contract, may be included in **Exhibit 3-1.** Services may include regional fats, oils, and grease (FOG) control, sewer cleaning, root control, CCTV assistance, and etc.







Table 3-1 Position Description

Title	Description
City Council	Establishes policies, reviews and accepts formal plans, sets overall City direction, authorizes funds for projects/plans/programs, general overview of upper management (Mayor, City Manager, and City Attorney), conducts public meetings and hearings, approves SSMP.
City Attorney	The City's attorney develops and approves legal documents, provides legal advice, conducts litigation, and attends public meetings.
City Manager	Responsible for the day-to-day management and operation of the City under the direction of the City Council. Specifically, the City Manager establishes procedures, plans strategy, leads staff, allocates resources defined in the City budget, delegate responsibility, authorizes outside contractor to perform services, and serves as overall public information officer.
Public Works Director	Responsible for the management and operation of the Public Works Department, including the operation and management of the sanitary sewer system. Reports to the City Manager. <u>Typically is</u> <u>the LRO for the City</u>
City Engineer	Responsible for the development and implementation of city design and construction standards. Quite often responsible for 3rd party plan check as well as construction and building inspection. Provides engineering drawings, plans, and specifications for projects within the city. Also is responsible for developing or overseeing engineering studies such as hydraulic modeling, master planning, and CIP program development.
Public Works Superintendent	Responsible for the operation and maintenance activities of the sanitary sewer system, including direct System staff and supervision and scheduling of all maintenance crews, and regularly scheduling maintenance activities.
Public Works Field Supervisor II	Coordinates filed operations and prepares and implement overflow emergency response plan, leads emergency response, investigates and reports SSOs and trains maintenance workers and field crews.
Public Works Sr. Maintenance Workers	Staff preventative maintenance activities, report condition of City assets, mobilize and respond to notification of stoppages and SSOs, and mobilize sewer-cleaning equipment and by pass pumping equipment.
Public Works Admin. Coord. / Office Specialist	Responsible for initiating records within the agencies tracking system for SSOs and other related events.



3.3.2 Chain of Communication and SSMP Element Implementation

The Public Works Department is responsible for the management and maintenance of the sanitary sewer system. Table 3-2 contains executive and management personnel responsible implementing elements of the SSMP, respond to SSOs, and reporting SSOs. Table 3-2 is to be considered as the Enrollee's chain of communication for responding and/or reporting SSOs.

Title/Name/Contact Number	Responsibility	Reports to
Public Works Director Matt Baumgardner (818)-898-1237	Legally Responsible Officer for SSO WDR Electronic Reporting, Ensures implementation for the SSMP Program Reports to the State Board.	City Manager
Civil Eng. Assist. II Manuel Fabian - and - Civil Eng. Assist. II Patsy Orozco	Participate in Post SSO Debriefings, respond to SSOs as needed, ensure proper traffic control measures are implemented, and document areas for future engineering review and analysis.	Public Works Director
Public Works Superintendent Richard De La Pena (818)-987-6513	Oversees Public Works Sewer Operations and Maintenance Staff	Public Works Director
Public Works Supervisor Robert Davidson (818)-425-7728	Responsible for the maintenance and operation of the sewer collection system, First Responder for SSOs. Collects Data for reporting. Reports incident to applicable agencies in the event that SSO warrants immediate notification.	Public Works Superintendent

Table 3-2 Chain of Communication and SSMP Element Implementation

3.4 Legally Responsible Official

Section J of the SSS WDR outlines the requirements for the responsible authorized representative, also known as the LRO.

The LRO is responsible for certifying data entered into the California Integrated Water Quality System (CIWQS) Online SSO Database. If the LRO requires assistance, they may authorize a Data Submitter (DS). A DS may only be authorized by the LRO and must be registered with the State Water Board. A DS may only assist with data entry, they cannot



certify data. Only the LRO may certify the data entered into CIWQS Online SSO Database.

At this time, the Enrollee's LRO is Matt Baumgardner, Public Works Director.

In order to maintain continuous coverage, the Enrollee may and should have more than one LRO. Any change of a registered LRO or DS (e.g., retired staff), including deactivation or a change to the LRO's or DS's contact information, shall be submitted by the Enrollee to the State Water Board within 30 days of the change by calling (866)-792-4977 or e-mailing help@ciwqs.waterboards.ca.gov.



4 Legal Authority

4.1 Requirements

- D.13.(iii) **Legal Authority**: Each Enrollee must demonstrate, through sanitary sewer system use ordinances, service agreements, or other legally binding procedures, that it possesses the necessary legal authority to:
- (a) Prevent illicit discharges into its sanitary sewer system (examples may include infiltration and inflow (I/I), storm water, 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.

4.2 Overview

This section is intended to identify and describe the necessary legal authority that the Enrollee must have in order to enforce elements of the SSMP. The Enrollee is granted powers in relation to the services provided through legal authority outlined in statutes. The Enrollee implements these granted powers through sewer use ordinances, service agreements, or other legally binding procedures or mechanisms. The Enrollee may use regulatory mechanisms including, but not limited to, Ordinances, Codes and Resolutions, State and Federal Laws, Licensing and Permitting Processes, Memorandum of Agreements, Contractual Agreements, Service Agreements, Discharge permits, as well as other programmatic and legally binding procedures and mechanisms. These regulatory mechanisms can include the proper authority and power to require wastewater collection system users to comply with applicable design, construction, use, and maintenance standards and regulations. The Enrollee can use its applicable legal authority to require system users and customers to meet performance standards, maintain user-owned assets such as laterals, and pay penalties for non-compliance with City regulations.

4.3 Discussion of Legal Authority

In order to lower the frequency of or eliminate SSOs, the Enrollee should have comprehensive policies and procedures for their sanitary sewer system. These should address permitting, design, construction, inspection, monitoring, enforcement, etc. The Enrollee must ensure, when implemented, all existing codes, policies, procedures, etc. meet all applicable state and federal requirements.

The Enrollee can include codes, policies, and procedures so that it has the legal authority to enforce violations of its ordinances and ultimately disconnect users for egregious noncompliance. The Enrollee can use codes or policies to outline the processes and penalties for violations of the Enrollee's regulations and agreements, such as fines, and even civil and criminal penalties in cases of deliberate and significant violations of ordinances and codes that may result in substantial impacts to receiving waters, endangerment of human



health, or interference or disruption with the downstream WWTP. Illicit discharges can be defined and subject to corrective response actions, using any existing laws or ordinances that prohibit a certain type of discharge, regardless of the user class (for example, domestic, commercial or industrial classes). Existing enforceable regulations prohibiting downspout, roof drain, area drain, and storm water connections to their sanitary sewer systems can be included as aforementioned "illicit discharges" and may be prohibited.

Legal authority can also be used to specify what assets are the responsibility of the Enrollee or the responsibility of private users and customers. The Enrollee may utilize sewer use ordinances or municipal codes to specify what parts of the system are privately owned and who is responsible for the maintenance of certain assets, such as laterals. It is advised that the exact boundary of ownership and maintenance responsibility should be defined. Ordinances and codes can be utilized to specify what the Enrollee's authority is to access to portions of Enrollee-owned laterals located on private property.

It should be noted that the legal authority available to agencies and the Enrollee varies significantly depending on the legal designation of the agency or Enrollee, since State law differs for various entities, such as sanitary districts, wastewater districts, utility districts, general purpose cities, and charter cities. This should be taken into consideration in the case the Enrollee utilizes an outside agency.

The Enrollee's legal authority and powers are established in the City of San Fernando City Code and provide the necessary measures to facilitate the control of inflow and infiltration (I/I), require proper design, construction, installation, testing, and inspection of new and rehabilitated sewers and laterals; control the discharge of FOG; and enforce violation of ordinances. Additionally, it allows the Enrollee to promote and protect the health, safety, and general welfare of all of the residents.

The Enrollee has codified several ordinances related to the sanitary sewer system in the City of San Fernando City codes in Chapter 94, titled Utilities, under Article II, Sewers and Sewage Disposal. In addition, the Enrollee has executed an agreement with Los Angeles County Sanitation Districts for the conveyance, treatment, and disposal of wastewater.

The existing ordinances identify the Public Works Director and City Engineer as the persons responsible for approving and managing permit requirements for the Enrollee's wastewater collection system. Permits like discharge permits can also include the proper legal authority or power to require collection system users to comply with the applicable design, construction, use, and maintenance standards and regulations.

4.4 Legal Authority and Existing City Codes

The following sections include a summary of the Enrollee's existing codes and ordinances that are used to implement and enforce regulations as they apply to the wastewater collection system.

4.4.1 Enforcement

City Code Chapter 94, Utilities, Article II, Sewers and Sewage Disposal, Sections 94-27, 94-30, 94-31, 94-32, 94-33, 94-104 discuss and outline penalties and processes for violations of the Code of Ordinances. The codes and ordinances in these sections are set forth to provide the Enrollee with the necessary legal authority and powers to require



system users and customers to meet performance standards and pay penalties for noncompliance with Enrollee regulations. The aforementioned sections outline the enforceable penalties the Enrollee has the powers to impose through criminal or civil penalties, revocation of permit(s), or discontinuance of service. The Enrollee utilizes imposing civil and criminal penalties, fines, revocation of permit(s), and ultimately disconnection from services in order to enforce codes and ordinances set forth in order to meet state and federal regulations.

Section 94-27 states that any person(s) who violate ordinances and code in Article II shall be guilty of a misdemeanor and upon conviction thereof shall be punishable as provided in section 1-10. Section 94-104 also reiterates that persons who violate code set forth in Division 3 of Article II shall be guilty of a misdemeanor and upon conviction thereof shall be punishable as provided in section 1-10. City Code Section 94-30 outlines grounds upon which the Enrollee has the legal authority to revoke any issued permit if any person discharges sewage into the sanitary sewer system. Section 94-30 also outlines the processes and penalties for revocation. Section 94-31 outlines the parameters and legal authority the Enrollee has to impose a refusal or discontinuance of services for violations to code set forth under Divisions 1 & 2 of Article II. Sections 94-32 and 94-33 further elaborates on the powers and legal authority the Enrollee has to regulate code violations through disconnection of services and further outlines the processes involved to do so.

4.4.1.1 Recommendations

It is also recommended that the Enrollee further adjusts the language beyond what is recommended here so that the impact of the violation of the code is considered when issuing a penalty, in regard to the deliberateness & significance of the violation to the code and the impact the violation has on receiving waters, endangerment of human health, or interference or disruption with the downstream WWTP. It is recommended that the Enrollee discerns, decides and further differentiates penalties for different violations based on impact, and updates the set forth language to reflect those decisions.

The language set forth by the Code of Ordinances in Sections 94-27, 94-30, and others needs to be updated to more accurately outline the penalties the City will impose per code violation.

While Section 94-27 outlines enforceable penalties, the language set forth is not specific to particular violations that could occur and the associated processes of the penalties. The language does not differentiate between various kinds of violations to the City code and ordinances, as the current language states any person violating any section of the City Code Chapter 94, Utilities, Article II, Sewers and Sewage Disposal shall be guilty of a misdemeanor and upon conviction thereof shall be punishable as provided in section 1-10. However, while the Enrollee should be able to use code and ordinances to enforce regulations and prohibit illicit discharge, the conditions for imposing fines, including civil and criminal penalties should be updated. The Enrollee should include language that differentiates between the conditions of violations to codes & ordinances, so that it is in the cases of deliberate and significant violations of ordinances & codes that may result in substantial impacts to receiving waters, endangerment of human health, or interference or disruption with the downstream WWTP, that the Enrollee can



impose penalties, such as fines and/or civil and criminal penalties. This update to language should be kept in mind for imposing penalties such as fines and civil and criminal penalties for other Sewer and Sewage disposal ordinance or code violations, since the existing language in Section 94-27 covers penalties for all code violations in City Code Chapter 94, Utilities, Article II, Sewers and Sewage Disposal. It should also be noted that this same recommendation applies to the language set forth in Section 94-104 in Division 3 of Article II, as Section 94-104 sets forth the same language as code in Section 94-27.

• **Recommended Language:** Any person who deliberately and significantly violates any sections of this article that may result in substantial impacts to receiving waters, endangerment of human health, or interference or disruption with the downstream WWTP, shall be guilty of a misdemeanor and upon conviction thereof shall be punishable as provided in section 1-10.

Overall Recommendations:

The Enrollee has its own code, but specific divisions of Chapter 94, Article II, have adopted Los Angeles County Code. Since the selection of the adopted code from the Los Angeles County Code covers a broader range of topics that have already been covered in prior divisions of Article II, there may be contradictions or confusion over which code applies. The impact of any contradictions may be small as the two municipal codes tend to follow similar protocols; however, there are still and can be differences between the two codes. In order to avoid confusion or contradictions currently and in the future, the Enrollee should decide whether in the event of a contradiction, which municipal code takes preference. Alternatives or further recommendations would be to limit the scope of what the existing code or adopted code apply by specifying which divisions or sections of code the processes, ordinances, or penalties apply to so that there are no overlapping or contradictory codes or ordinances on the same subject matter. However, because the selection of the adopted code is so broad, it may be easier to select which municipal code to defer to by division, or ensure the language includes the limitation of the existing City of San Fernando Code to only applicable divisions.

4.5 Prevention of Illicit Discharges

The Enrollee is required to prevent discharges of illicit and undesirable substances from entering the wastewater collection system. Illicit discharges include, but are not limited to, the release of I/I, storm water, chemical dumping, unauthorized debris and constituents, cut roots, downspout, roof drain, and area drain. However, the specific purpose is to prevent the discharge of any pollutant into the sanitary sewer system that would obstruct or damage the collection system, interfere with treatment, or threaten harm to human health or the environment.

Properly drafted ordinances provide the Enrollee with the tools to identify and enforce penalties to prevent illicit discharges. The Enrollee's current ordinances prohibit illicit discharges to control both domestic and industrial discharges. Illicit discharges can be defined and subject to corrective response actions, using any existing laws or ordinances



that prohibit a certain type of discharge, regardless of the user class, (i.e. domestic, commercial or industrial classes). Existing enforceable regulations prohibiting downspout, roof drain, area drain, and storm water connections to sanitary sewer systems can also be considered illicit discharge and may be prohibited.

City Code Chapter 94, Utilities, Article II, Sewers and Sewage Disposal, Sections 94-28 sets forth the definitions for different types of domestic discharges. Section 94-29 elaborates on Permit to discharge sewer into sewer systems. Section 94-27 sets forth penalties for any person violating any sections of City Code Chapter 94, Utilities, Article II, Sewers and Sewage Disposal in accordance with City Code Section 1-10.

4.5.2 Industrial Discharges

City Code Chapter 94, Utilities, Article II, Sewers and Sewage Disposal, Division 3, <u>Industrial Wastes</u>, describes limitations on industrial waste discharges and special permit requirements. Under the Division 3 Industrial Wastes section, the City Code adopts the Los Angeles County Code Title 20, division 2 Sanitary Sewers and Industrial Water. While the existing City Code adopts the Los Angeles County Title 20, division 2 code to outline and enforce regulations pertaining to Industrial Wastes, the adopted code, Los Angeles County Code under division 2, does not outline parameters specific to only industrial wastes. The division 2 section of the Los Angeles County Code Title 20 covers definitions, general provisions, administration, permits & fees, sanitary sewers, and industrial waste. Section 94-103, Amendments, requires that the discharge of industrial wastes into a sanitary sewer shall be governed as follows. It is recommended that all "City Engineer" references be changed to "Director of Public Works" as the LRO:

Section 20.24.080 Damages caused by prohibited wastewater discharge reads as follows:

Any industrial wastewater discharger who discharges or causes the discharge of prohibited wastewaters which cause damage to city facilities, detrimental effects on treatment processes or any other damages to the city shall be liable to the city for all damages occasioned thereby, including any penalty assessed against the city pursuant to federal law and as a result of such prohibited discharge.

Section 20.24.100 Administration should be amended to read as follows:

Except as otherwise provided herein, the city engineer shall administer, implement, and enforce the provisions of these regulations. Any powers granted or duties imposed upon the *Public Works Director* may be delegated by the *Public Works Director* to persons acting in the beneficial interest of or in the employment of the city.

Section 20.24.190 Availability of city facilities reads as follows:

If sewerage capacity is not available, the city may require the industrial wastewater discharger to restrict discharge until sufficient capacity can be made available. When requested, the city will advise persons desiring to



locate new facilities as to the areas where industrial wastewater of their proposed quantity and quality can be received by available sewerage facilities. The city may refuse service to persons locating facilities in areas where their proposed quantity or quality of industrial wastewater is unacceptable in the available sewerage facility. *Section 20.24.220 Industrial wastewater user charges* should be amended to read as follows:

A system of user charges shall be established by the city council to reflect fair and equitable charges for actual usage of sewer facilities. Such charges shall be based upon yearly volume, chemical oxygen demand (COD), suspended solids, and such other parameters or constituents that may be determined by the *Public Works Director* to create a burden upon the sewer system.

Section 20.24.230 Industry classifications should be amended to read as follows:

The *Public Works Director* may classify discharges by industrial categories and establish average industrial wastewater flow quantity and quality for each industrial category.

The following will also be added to the code under Section 20 and adopted by the City Council:

- (I) All wastes, however harmless, shall be reduced to a minimum in volume and strength, and fluctuations of temperature and flow shall be evened out by adequate storage before discharge.
- (II) All wastes, when necessary, shall be pretreated by screening, sedimentation, neutralization, or other approved methods to produce a quality and character of waste.
- (III) Pretreatment of industrial wastes shall be at the source and at the expense of the agency producing such.

For both the domestic and industrial waste discharges, the City has included and delineated restrictions on what may be deposited into its sewer system. These codes, while they provide the City with sufficient authority to limit and control the types of industrial waste discharged into the system, expanding the codes to include more descriptive types of industrial wastewater not acceptable in the City's wastewater collection system will reduce the potential for misinterpretation. It is recommended that the City also address "Other Discharges" as defined below and adopt the recommended language, accordingly.

 <u>Other Discharges</u> – The City shall include more specific discharge prohibitions of any waste that could by itself or by interaction with other waste could, among other requirements, endanger human health, cause damage to the sewer system or extra collection, treatment, or disposal cost, create a nuisance, affect the treatment process, or impact treated water quality. Set standards or prohibit discharge of



several components, including (but not limited to) dyes, explosives, debris, cut roots, organic solvents, radioactive waste, solids and toxic substances

- Recommended Language: Wastes discharged into the sewer system shall not have characteristics which by themselves or by interaction with other wastes may:
 - Endanger the health and safety of the public or city personnel
 - Cause damage to the sewer system;
 - Create nuisance such as odors or coloration;
 - Result in extra cost of collection, treatment, or disposal;
 - Interface with, inhibit, or disrupt any wastewater treatment process the plant, its treatment processes, sludge processes, or operations in such manner to cause violations of the plant's NPDES permit, or any regulatory requirements, or result in the use of sludge in noncompliance with any applicable requirements. This shall include instances due to flow rate and/or pollutant concentration and applies to increases in magnitude or duration of violation by the plant;
 - Exit the plant into waters of the United States in quantities or concentrations which contribute to a violation of any regulatory requirement applicable to the plant. This shall include increases in magnitude or duration of any violation or period of noncompliance;
 - Cause the temperature of the influent flow to the plant to exceed forty (40) degrees Celsius (one hundred four (104) degrees Fahrenheit);
 - Prevent, hinder, delay, or impede compliance with effluent quality requirements established by regulatory agencies, or exceed the same;
 - Cause wastewater quality to fall outside reclamation feasibility limits.

4.5.3. Proper Connections and Construction

The requirements for the design and construction of new, rehabilitated, and replaced sewer system facilities, including mains, tie-ins, service laterals, cleanouts, maintenance holes, and other system appurtenances, are necessary to ensure the proper operation of the sewer system. The Enrollee does not have any such sections within their existing municipal code. Therefore, the adoption of Los Angeles County Department of Public Works (LACDPW) "Design and Construction Standards and Specifications" is recommended.

LACDPW has standard plans and specifications for the construction of sanitary sewers and appurtenances to ensure that sewer lines and connections are properly designed and constructed. The DPW specifications by reference incorporate the Standard Plans and Specifications for Public Works Construction, Special Provisions, and Standard Drawings. In addition, the LACDPW has other publications such as the Private Contract Sanitary Sewer Procedural Manual, Guidelines for the Design of Pump Stations, etc., to ensure consistency in the design of collection systems within unincorporated County areas. To further assure that sewer facilities are properly designed and constructed,



DPW requires that plans are designed by licensed engineers and provides thorough review of plans prior to approval for and conducting inspection of construction work. Appendix G outlines suggested language for private sewer lateral installation and backflow devices ordinance.

4.5.4. Accessibility for Maintenance, Inspection, and Repair

The Enrollee's codes do not document access requirements for maintenance, inspection, or repair of the wastewater collection system. Furthermore, accessibility requirements are not managed through the plan reviews of new sewer services. Plan review allows staff to ensure that sewer system facilities are constructed to specific standards within the public right-of-way or within adequate, permanent easements.

Therefore, it is recommended that the Enrollee generate some accessibility rights which would require executive management level staff to issue a permit before a sewer line may be constructed. As such, executive management level staff would have the opportunity to ensure that new sewer lines are accessible. This is not an explicit requirement, and may be based on best engineering abilities, since not all new sewer pipes may be designed with proper access to the facilities for maintenance, repair, replacement and/or rehabilitation purposes. Additionally, authorized personnel may not have the right to access existing sewer lines located on private property. As such, adding a specific code section or adopting an ordinance that governs accessibility for maintenance, inspection, and repair efforts will provide the appropriate legal authority for crews to access the sewer facilities.

4.5.5. Limit Fats, Oils, and Grease Discharge

Chapter 94, Article II, Division 4, Section 94-110 to Section 94-118 addresses FOG and FOG disposal systems by Food Service Establishments (FSEs). These sections give the Enrollee's Health Officer the authority to inspect all FSEs. This section also talks about hydro-mechanical grease interceptors and gravity grease interceptors' requirements.

These appurtenances are required in all packing plants and other establishments that may be a source of food fats and greases with respect to grease interceptors, and in establishments equipped with wash racks, floor drains, or wash tanks for cleaning machined parts or other materials.

Section 94-117 stipulates the Health Officer's authority and identifies circumstances that warrant payback to the City by an FSE in the case of overflows due to line blockage and overflow due to FOG. The enforcement section needs to be strengthened and added as a stand-alone section to this chapter. Although there is an enforcement section in Chapter 34, Environment, Article III – Stormwater and Urban Runoff Pollution Control, section 34-104, Enforcement, it needs to be more specific with penalties and civil liabilities and by whom can these be assessed. It is also recommended that Health Officer be re-classified as Public Works Director or his designee.

With implementation of the FOG Control Program, the City intends to implement and enforce actions against users of the wastewater collection system that violate the prohibition of discharging FOG into the wastewater collection system. The City will initiate enforcement actions for noncompliance and it will be possible for other regulatory agencies, including the EPA or the State to initiate their own enforcement actions, if in their opinion, the City does not implement adequate enforcement.



5 Operations and Maintenance Program 5.1 Requirements

- D.13.(iv) **Operation and Maintenance Program**. The SSMP must include those elements listed below that are appropriate and applicable to the Enrollee's system:
- (a) Maintain an up-to-date map of the sanitary sewer system, showing all gravity line segments and manholes, pumping facilities, pressure pipes and valves, and applicable storm water conveyance facilities;
- (b) Describe routine preventive operation and maintenance activities by staff and contractors; including a system for scheduling regular maintenance and cleaning of the sanitary sewer system with more frequent cleaning and maintenance targeted at known problem areas. The Preventative Maintenance (PM) program should have a system to document scheduled and conducted activities, such as work orders;
- (c) Develop rehabilitation and replacement plan to identify and prioritize system deficiencies and implement short-term and long-term rehabilitation actions to address each deficiency. The program should include regular visual and TV inspections of manholes and sewer pipes, and a system for ranking the condition of sewer pipes and scheduling rehabilitation. Rehabilitation and replacement should focus on sewer pipes that are at risk of collapse or prone to more frequent blockages due to pipe defects. Finally, the rehabilitation and replacement plan should include a capital improvement plan that addresses proper management and protection of the infrastructure assets. The plan shall include a time schedule for implementing the short and long term plans plus a schedule for developing the funds needed for the capital improvement plan;
- (d) Provide training on a regular basis for staff in sanitary sewer system operations, maintenance, and require contractors to be appropriately trained; and
- (e) Provide equipment and replacement part inventories, including identification of critical replacement parts

5.2 Overview

The section will identify and discuss the Enrollee's Operations and Maintenance (O&M) program, rehabilitation and replacement programs, employee training programs, equipment and replacement parts inventory, and other programs.

5.3 Sewer System Mapping

The Enrollee effectively manages and maintains information pertaining to their sanitary sewer infrastructure by means of manually updating atlas maps and/or references to hard copy as-built drawings. Additionally, the Enrollee maintains up-to-date GIS shape files of their sewer system. Information such as year of installation, diameter, slope, material, elevations, and etc. is recorded.

The Enrollee currently stores all GIS data on their local server. However, they are currently transitioning to a cloud server.

It is recommended that different departments (e.g., water resources, traffic, etc.) have



access to GIS. This will allow multiple departments to plan maintenance or other large projects in unison.

5.4 Operation and Maintenance Program

The Enrollee's sanitary sewer system requires frequent maintenance due to age, extended use, debris accumulation, and tree root intrusion. In response, the Enrollee has developed an O&M program in order to extend the useful life of and minimize blockages within their sanitary sewer system.

Maintenance primarily involves the routine cleaning of sewer pipelines, but may also include root control and/or responses to customer complaints. The following subsections describe the Enrollee's preventive maintenance procedures.

5.4.1 Summary of Maintenance

Public Works Department staff is responsible for all maintenance and cleaning activities conducted on the sanitary sewer system. However, at times, the Enrollee may approve the use of an outside contractor. Upon completing their scheduled work, Public Works Maintenance crews summarize and report their daily progress. Reports are submitted to the Wastewater Collection System Supervisor in order to track maintenance progress.

5.4.2 Wastewater Map

The Wastewater Map is a 41page map book of the sanitary sewer system. Each page contains a section of the sanitary sewer system and a recommended maintenance date. Each month, crews complete three-and-a-half (3.5) Map pages. Upon completion of the scheduled maintenance assignment, it is recorded using a Sewer Maintenance Worksheet(s).

5.4.3 Wastewater Operations Crew

Wastewater Operations crews work daily to eliminate potential maintenance hole and/or pipe blockages. There are currently two (2) crews and each is comprised of two (2) staff members. On a daily basis, crews conduct routine cleaning assignments. On a monthly basis, crews will clean "Problem Areas" hereinafter referred to as Hot Spots. Hot spots are areas having excessive amounts of grease accumulation, concentrations of roots and/or areas which experience frequent blockages.

5.4.4 Mechanical Cleaning

Crews primarily use jetting nozzles and/or Guzzler vehicles. However, the Guzzle model vehicle is being retired, but the Enrollee will take possession of a Vactor vehicle in May of 2022. The new Vactor will flush with both pressure and vacuum.

Sewer pipes are typically cleaned by inserting a high-pressure water jetting nozzle into the pipes and manually removing debris from the downstream maintenance hole. Purchased equipment or staff-made appurtenances are inserted at the downstream maintenance hole to aid in the capture and/or removal of debris.

The following describes the procedures crews will use to accomplish their assigned tasks. <u>Procedures for Sewer Cleaning Crews</u>

Prior to leaving the City Yard, crew members will:

1. Plan their work and if possible, plan to clean sewer line from the downstream

maintenance hole, working north to south (San Fernando directions).

- 2. Acquire the necessary Wastewater Map page, and prepare Sewer Maintenance Worksheet with corresponding address.
- 3. Inspect all tools and equipment which will be used during the cleaning process for wear and make replacements as necessary.
- 4. If using the guzzler, perform an inspection.
- 5. Fill the appropriate equipment with water.

At the jobsite, crew members will:

- 1. Set up proper traffic control measures in accordance with the Watch Manual.
- 2. Move the sewer jet and/or guzzler into the traffic control and position the hose reel over the maintenance hole.
- 3. Open the maintenance hole lid using a maintenance hole hook.
- 4. Lower the hose into the maintenance hole and ensure the nozzle is lined up in the main.
- 5. Engage the high-pressure pump and set an appropriate engine speed to provide adequate pressure for cleaning operations.
- Open the water valve and allow the hose to extend at a rate no greater than three (3) feet per minute.
- 7. Allow the hose to proceed upstream from one maintenance hole to the other (approximately 300 feet on average).
- 8. Once reaching the upstream maintenance hole, retract the hose while continuing to flush the pipe with water.
- 9. Observe this operation, take notice of debris flushed from the line.
- 10. If flushed debris are moderate to heavy, clean the remaining portion in increments not to exceed 25 percent of total length.
- 11. Clean the line until successive passes with cleaning nozzle do not produce any additional debris.
- 12. Fully retract hose and remove debris from the maintenance hole using the vacuum unit and/or debris removal device (handy clams).
- 13. Shut off equipment and clean mating surface.
- 14. Close maintenance hole lid, ensure the maintenance hole lid is properly seated with the maintenance hole ring flush with the street surface.
- 15. Record results on a Sewer Maintenance Worksheet and if needed, proceed to the next cleaning location.

At the end of the day, crew members will:

1. Inspect tools and equipment for any problems and/or wear, and report accordingly.



- 2. Report any problems and/or issues encountered and/or discovered while cleaned the lines.
- 3. Turn in completed Sewer Maintenance Worksheet.

Required Equipment and Tools

- 1. Personal protective equipment (PPE) hardhat, steel-toe boots, gloves, eye/face protection, hearing protection
- 2. Proper work zone safety equipment safety cones, barricades, signs, flags or other traffic control devices
- 3. City of San Fernando Sewer Maps / Wastewater Map
- 4. Sewer Jet and/or Guzzler
- 5. Sewer maintenance hole hook
- 6. Measuring wheel
- 7. Disinfectant

5.4.5 Root Treatment

On a yearly basis, a contractor will treat high root concentration areas with chemical root inhibitors to reduce or eliminate roots intruding into the pipes. Areas with high root concentrations are known as target sites. Target sites may be pre-existing or discovered during Closed Circuit Television (CCTV) inspections. CCTV inspections are recorded in the CCTV database. Target sites are regularly assessed and evaluated for continued root control.

5.4.6 Maintenance Hole Treatment Program

On a yearly basis, a contractor will treat maintenance holes to control insect infestations.

5.4.7 Closed Circuit Television Inspections

The Enrollee has inspected their sewer system using CCTV. Discovered defects are identified and rated for their incorporation into Capital Improvement Program (CIP). CCTV inspection is prioritized based on age of pipe.

5.4.8 Response to Customer Notifications

To assist with customer calls, a Coordinator is used and will route calls to the appropriate staff. If a customer's call pertains to the sanitary sewer system, their call may be routed to Public Works Field Supervisor II or Public Works Admin. Public Works is responsible for assess and resolving customer complaints. To ensure after hours support, Public Works has staff who can respond to customer's calls available during business and non-business hours.

All outside calls and/or reports pertaining to SSOs are documented and tracked through an electronic work order system called Activity Information Management System (AIMS).

5.5 Wastewater Collection System Inspection and Condition Assessment Program

The Enrollee regularly inspects their sewer system in order to identify decencies. Record is kept of gravity line segments, maintenance holes, pump facilities, pressure pipes and valves, and storm water conveyance facilities. The Enrollee's Sewer Master Plan 2014



(SMP) has identified, cataloged, and created a condition based ranking system in order to prioritize rehabilitation or replacement projects for sewer infrastructure. Public Works Department staff will conduct minor repairs, but larger or extensive breaks are repaired by a contractor or handled under the Enrollee's Capital Improvement Program (CIP).

5.6 Capital Improvement Program

Based on the previous assessment, an estimated \$9.96 million (M) is needed to address the severe structural defects of the sewer system. A new sewer assessment is scheduled for completion in the year of 2022.

Time allotment and monetary budgeting is based on the fiscal year. A minimum of \$535,000 has been allocated for sewer main upgrades for the Fiscal Year of 2021-2022 and 2022-2023. Findings from the 2022 sewer assessment will be used for future planning and budgeting.

5.7 Employee Training Program

Staff are regularly trained to ensure all sewer O&M activities are done in a safe and proper manner. All staff are encouraged to stay up to date with the latest technologies and attend conferences, seminars, and workshops provided by reputable organizations, manufacturers, or other continuing education programs.

Prior to working at sewer facilities, operators receive mandatory training covering O&M policies and procedures, safety protocols, and any potentially used equipment. All operators must also have certification and training through CWEA. Training records are maintained in order to monitor completed classes and schedule employee training accordingly.

Contracts require bonding and contracted personnel must possess proficient knowledge and experience for the task at hand. In order to ensure contractors possess proficient knowledge and have appropriate training, the Enrollee is considering incorporating language which will make this a requirement for all future contracts.

5.8 Equipment and Replacement Inventories

The Enrollee maintains an inventory of routine replacement parts used in the sanitary sewer system. If parts or equipment is not on-hand, the Enrollee has relationships with vendors who can make deliveries on an as needed basis.



6 Design and Performance Provisions 6.1 Requirements

D.13.(v) Design and Performance Provisions:

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

6.2 Overview

This section will discuss the Enrollee's adopted standards for design, construction, inspection, and testing. These standards apply to all new or rehabilitated sewer systems or sewer projects. These standards ensure the sanitary sewer system is safe, reliable, and built as intended.

6.3 Discussion on Design and Performance Provisions

Design, construction, inspection, and testing standards represent a critical part of an Enrollee's operation and maintenance for their sewer system. Properly designed and constructed sewers are less likely to fail which may result in an SSO. Once adopted, standards will be regularly evaluated and updated as the industry improves and changes.

If significant changes are made to this element during a self-audit or SSMP update, the Enrollee will record an explanation, date, and person responsible for the change in the Change Log provided.

6.3.1 Design and Construction Standards

The Enrollee's engineering staff have the resources and experience to design a system that will perform as intended. The Enrollee uses the Standard Plans for Public Works Construction and the Standard Specifications for Public Works Construction as the standards of design and construction for all of its sewer pipes, connections, manholes etc. in their sanitary sewer system.

6.3.2 Procedures and Standards for Inspecting and Testing

The Enrollee's engineering staff have the resources and experience to ensure that every project is built as designed. The Enrollee has officially adopted LACDPW's standards, including adoption of the APWA's "Green Book" as part of a series of new ordinances



7 Overflow Emergency Response Plan 7.1 Requirements

- D.13.(vi) **Overflow Emergency Response Plan** Each Enrollee shall develop and implement an overflow emergency response plan that identifies measures to protect public health and the environment. At a minimum, this plan must include the following:
- (a) Proper notification procedures so that the primary responders and regulatory agencies are informed of all SSOs in a timely manner;
- (b) A program to ensure appropriate response to all overflows;
- (c) Procedures to ensure prompt notification to appropriate regulatory agencies and other potentially affected entities (e.g. health agencies, regional water boards, water suppliers, etc.) of all SSOs that potentially affect public health or reach the waters of the State in accordance with the MRP. All SSOs shall be reported in accordance with this MRP, the California Water Code, other State Law, and other applicable Regional Water Board WDR or NPDES permit requirements. The SSMP should identify the officials who will receive immediate notification;
- (d) Procedures to ensure that appropriate staff and contractor personnel are aware of and follow the Emergency Response Plan and are appropriately trained;
- (e) Procedures to address emergency operations, such as traffic and crowd control and other necessary response activities; and
- (f) A program to ensure that all reasonable steps are taken to contain and prevent the discharge of untreated and partially treated wastewater to waters of the United States and to minimize or correct any adverse impact on the environment resulting from the SSOs, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the discharge.

7.2 Overview

This section will discuss the necessary components of the Enrollee's Overflow Emergency Response Plan (OERP). The OERP is intended to be a comprehensive document that includes components for minimizing the effects of SSOs on the environment, while protecting the public's health and safety. Components discussed are notification, response activities, reporting, and training. Additionally, the OERP includes a strategy for the Public Works Maintenance Section to mobilize labor, material, tools, and equipment to contain, mitigate, and clean up residuals from an SSO and correct or repair any condition which may cause or contribute to an unpermitted sewage discharge. The OERP helps ensure all reasonable steps are taken to contain and prevent discharge of untreated and/or partially treated wastewater into the waters of the United States and to minimize or correct any adverse impact on the environment resulting from the SSOs.

7.3 Discussion of Overflow Emergency Response Plan

The OERP is not expected to cover every detail or possible response activity to SSOs. It may be a simple description of tasks and a checklist to ensure the responder has gathered the necessary information to be reported.

To ensure a proper response, best management practices for SSO containment and recovery may be included in the response plan. A strong emphasis may be placed on activities, such as blocking drain inlets and placing berms around the spill. This will help to prevent sewage from entering a waterway or drainage channel leading to downstream surface waters. The OERP may also include recovery efforts and cleanup activities that will reduce the effects of the overflow. This may require an OERP that covers different types of SSOs. The infrastructure that caused the overflow may dictate what response activities are warranted. Different response activities may be necessary depending on the volume or area affected by the overflow.

Requirements for the OERP have been provided herein this section, but for a brief understanding, a summary of some requirements are shown below:

- Notification This section requires Enrollees to have internal notification procedures so response and mitigation efforts to minimize the effects of the SSO are completed in a timely manner. Enrollees are also required to notify OES for Category 1 SSOs equal or greater than 1000 gallons. Enrollees may also want to, or are required under other orders, to notify the Health Department, local Regional Water Quality Control Board (RWQCB), or other state or local agencies. Each agency should evaluate the accuracy of their volume estimates and report accordingly. However, it should be remembered that the volumes of SSOs reported to state agencies are estimates not exact measurements, and therefore the volume reported should not overstate the degree of accuracy. Agencies may estimate to volume to the nearest five or ten.
- Response Activities This section requires Enrollees to adequately address various types of overflows and to perform reasonable SSO response activities to contain the overflow and to minimize the impact to the environment.
- Reporting This section requires Enrollees to meet the MRP requirements listed in Section G of the SSS WDR. The MRP requires certain overflow information be reported to the CIWQS database online.
- Training This section requires Enrollee to adequately train their employees to understand and follow the OERP. The training should include emergency operations, such as traffic and crowd control as well as procedures for volume estimation and SSO start time determinations. Periodic field drills and exercises should be considered to assure that field crews practice under actual conditions especially where agencies have very few or no spills.

In addition to the requirements set forth in the SSS WDR, RWQCBs may impose additional reporting and monitoring requirements. If required to report or monitor additional information, it may be beneficial to combine all applicable requirements into one response plan. Having one comprehensive response plan will help avoid confusion and ensure all requirements are met. The OERP should address all requirements specifically stated in the SSS WDR and any additional requirements prescribed by the RWQCB.

7.4 Overflow Emergency Response Plan Elements

The Enrollee's OERP includes formal procedures for staff to contain, correct, and clean up



SSOs; and the components necessary for minimizing the effects of SSOs on the environment while protecting public health and safety. Additionally, the OERP includes a strategy for the Public Works Maintenance Section to mobilize labor, material, tools, and equipment to contain, mitigate, and clean up residuals from an SSO and correct and/or repair any condition which may cause and/or contribute to an un-permitted sewage discharge.

The following subsections discuss the components of the OERP.

7.4.1 Notification

The Enrollee's OERP includes notification procedures that ensure primary responders and regulatory agencies are informed of all SSOs in a timely manner. In the event of SSO, immediate notification is sent to the Public Works Operations Manager and Public Works Director. Notifications may come in the form of e-mail and/or text/call to their work phone and/or personal phone. In the event an SSO is reported by citizen through phone call, their call will be routed to the Public Works Operations Manager or the designated backup, the local police dispatch center.

7.4.2 Response Actions

Based on the SSO size, various response actions may be taken. On the following page, **Table 7-1** lists the response actions the Enrollee may take during a more severe SSO. However, regardless of size, the Enrollee is committed to taking all necessary action(s). If at any time during an SSO addition personnel are needed, the Enrollee may call upon the additional Emergency Response Contractors shown in **Table 7-2**.

The following outlines some response actions the Enrollee will take during different sized SSOs. The Enrollee is committed to taking all necessary action(s) to contain and/or prevent the discharge of untreated or partially treated wastewater into waters of the United States. Also, the Enrollee is committed to helping minimize or correct any adverse impact to the environment caused by the SSO, and ensuring public safety and wellbeing.

Small SSOs (Up to 1,000 gallons):

- Set up cones to direct traffic away from spill area.
- Use City personnel to control traffic and pedestrians.

Medium SSOs (1,000 to 10,000 gallons):

- Contact regulatory agencies as required.
- Perform lane closures as necessary.
- Place proper signage for any lane closures and contaminated area signs.
- Close affected entrances or exits from public and private facilities.
- Place caution tape and barricades to protect pedestrians from contaminated area.

Large SSOs (greater than 10,000 gallons):

- Assess spill situation
- Contact regulatory agencies as required.



City of San Fernando SSMP Final Report

- Inform City Police Department of any law enforcement assistance necessary for roadway closures and traffic control.
- Delegate responsibility to County Health Department of informing public of hazards.
- Place signage to inform public of potential hazards to public health and safety.
- Block public access to hazard using barricades, cones, and caution tape.



If SSO requires	THEN contact	AT
Safety and Rescue	San Fernando Police Department	911 -or- (818)-898-1267
Media notification	San Fernando Administration Department -or- Public Works Department	(818)-898-1203 -or- (818)-898-1222
SCADA monitoring -or- Maintenance crew(s)	Public Works Operation Manager	(818)-898-1294 -or- (818)-438-4112
Hazmat identification -or- Public health issues	Los Angeles County Hazardous Materials Division -or- Los Angeles County Health Department	(323)-890-4317 After hours: (323)-881-2455 -or- (626)-430-5420 After hours: (213)-974-1234
Investigation of authority -or- Evaluation of industrial discharge	Public Works Department -or- Los Angeles County Industrial Waste	(818)-898-1222 -or- (626)-458-3567
Coordination of response resources (for use during significant SSO i.e., Category 1)	Office of Emergency Services	(818)-898-1293
Containment of SSO on private property	Public Works Department	(818)-898-1222
Cleanup oversight -or- Obtain recommended cleanup procedures	Public Works Department	(818)-898-1222
Investigation -or- Prosecution due to damages caused by SSO	City Attorney Recommended to contact through Administration Department	Admin: (818)-898-1203 City Attorney: (213)-744-0099 -or- (213)-626-2906
Cleanup of flooded structureCity Contractors:1.ServPro of Studio City2.ServPro of Sylmar3.Emergency Service Restoration		As shown in center column: 1. (818)-508-7282 2. (818)-951-6780 3. (888)-377-4195



If SSO Involves	If SSO Requires	THEN Contact	AT
Flooding	Bypass Pumping due to flooding or broken pipe	City Contractor: Rain for Rent	(800)-742-7246
Flooding	Sand Bags	Contractor: Baron Bag and Erosion Supply	(800)-562-6055
Impacts to roadways	Traffic Control	Traffic Control Contractor: Traffic Control Service	(714)-526-9500
Damages to pipe, pipe blockage, etc.	CCTV -or- Cleaning Services	Contractor: 1. Performance Pipeline Technologies 2. National Plant Services	As shown in center column 1. (714)-536-7586 2. (562)-436-7600
Reaches surface waters	Lab testing and lab sampling of industrial/commercial waste	Los Angeles County Industrial Waste Inspector	(626)-458-3567
Immediate repair to sewer infrastructure	Immediate repair of sewer infrastructure	City Contractor: O'Campo & Sons	(818)-361-8070

Table 7-2 Additional Emergency Response Actions and Contractors

7.4.3 Reporting

All SSOs are to be reported in accordance with the MRP, California Water Code, State Law, and other applicable RWQCB permit requirements. However, the Enrollee is not required to report private overflows. If the Enrollee determines that a SSO is caused by a blockage from a private sewer or lateral, the Enrollee should notify the owner or other responsible party to take appropriate response action(s).

Depending on the size and category of SSO, there may be time-sensitive requirements for reporting it. For example, if the SSO is a Category 1 (greater than or equal to 1,000 gallons) and if notification is possible without substantially impeding cleanup or other emergency measures, the Enrollee must inform the California Governor's Office of Emergency Services Operations (Cal OES) no later than two (2) hours after acknowledgment of the SSO.

Recommendations:

While not required, it is recommended employees receive training on appropriate reporting methods. This will ensure SSOs are documented and reported correctly. Additionally, it is recommended to format reporting forms to match those used by the CIWQS database. This will prevent confusion and ensure all required information is collected and entered. Training modules for CIWQS may be available and can be utilized by responders.



7.4.4 Training

It is required that personnel are adequately trained to understand and follow the OERP. Training should include emergency operations such as, traffic and crowd control, volume estimation, and SSO start time determinations. Periodic field drills and exercises should be considered to allow crews to practice under actual conditions. This is may be especially beneficial for agencies that have had very few or no spills.

Training should be planned and implemented regularly. Regular training ensures all responders are up-to-date with the latest procedures. Trainings should be documented to show compliance with the SSS WDR requirement. Most employees will not be expected to know how to complete every task, but supervisors and managers may need to know how to perform multiple roles. To prepare for this, training sessions involving execution of duties and awareness of responsibilities may be beneficial.

Recommendations:

While not required, the Enrollee should consider including emergency responders (Police, Fire, etc.) in field exercises and/or training. Emergency responders should be familiar with and able to identify personnel who will respond to SSOs. This will ensure the proper personnel are allowed onto the scene of an SSO. Emergency responders may need training and/or information in order to contact the correct personal during an SSO. Emergency responders can assist in a number of ways (closing the area to the public, directing traffic, directing communications received, etc.).



8 Fats, Oils, and Grease Control Program 8.1 Requirements

- D.13.(vii) Fats, Oils, and Grease (FOG) Control Program: Each Enrollee shall evaluate its service area to determine whether a FOG control program is needed. If an Enrollee determines that a FOG program is not needed, the Enrollee must provide justification for why it is not needed. If FOG is found to be a problem, the Enrollee must prepare and implement a FOG source control program to reduce the amount of these substances discharged to the sanitary sewer system. This plan shall include the following as appropriate:
- (a) An implementation plan and schedule for a public education outreach program that promotes proper disposal of FOG;
- (b) A plan and schedule for the disposal of FOG generated within the sanitary sewer system service area. This may include a list of acceptable disposal facilities and/or additional facilities needed to adequately dispose of FOG generated within a sanitary sewer system service area;
- (c) The legal authority to prohibit discharges to the system and identify measures to prevent SSOs and blockages caused by FOG;
- (d) Requirements to install grease removal devices (such as traps or interceptors) design standards for the removal devices, maintenance requirements, BMP requirements, record keeping and reporting requirements;
- (e) Authority to inspect grease producing facilities, enforcement authorities, and whether the Enrollee has sufficient staff to inspect and enforce the FOG ordinance;
- (f) An identification of sanitary sewer system sections subject to FOG blockages and establish a cleaning maintenance schedule for each section; and
- (g) Development and implementation of source control measures, for all sources of FOG discharged to the sanitary sewer system, for each section identified in (f) above.

8.2 Overview

The Enrollee has evaluated their system and determined that a FOG Control Program is necessary. This section will discuss the Enrollee's FOG Control Program and how it has been implemented to effectively control the quantity of FOG that is discharged into the sanitary sewer system.

8.3 Discussion of FOG Control Program

Reducing FOG involves a combination of source control and preventative maintenance. Source control involves minimizing or preventing FOG from entering the system. Preventative maintenance involves regularly cleaning and inspecting the system to prevent buildups of FOGs. Additionally, for a FOG program to be strategically implemented, it takes an understanding of the types of discharge and how the sewer system works as a whole.

Most restaurants and FSE generate FOG during food preparation, food service, and kitchen cleanup. If flushed down the drain, FOG can buildup in pipes, pumps, and equipment causing line blockages or other issues within the sewer system. Blockages can



lead to SSOs. Therefore, understanding and controlling the discharge of FOGs will greatly reduce the probability of SSOs and/or efforts required to keep lines clean.

8.4 Regulatory Requirements for FOG Control Program

If the Enrollee has evaluated their system and determined a FOG Control Program is not needed, the SSS WDR permits it, provided that the Enrollee can justify their reasoning. However, if the Enrollee deems a FOG Control Program necessary, they are then required to develop and implement one.

If deemed necessary, the FOG Control Program shall include the following, as appropriate:

Outreach - Develop an outreach program for residential and commercial customers to keep FOG out of the sanitary sewer. Describe the types of outreach methods used, such as:

- Direct mail or utility bill inserts
- Radio or newspaper ads
- Use of internet and social media
- Door hangers
- Participation in community events
- Consider translating messages into different languages to reflect the diversity of your community

Disposal method - Describe the FOG disposal method and prepare a FOG disposal list to include:

- Location of local FOG disposal facilities, including address and phone numbers for wastewater treatment facilities and waste drop off locations that may accept FOG
- Name and phone number of licensed grease haulers
- Location of the facilities that use FOG for energy recovery

Legal authority - This section should provide the legal authority to regulate FOG discharges to the sewer system. The legal authority could be a standalone Sewer Use Ordinance, a provision in a municipal code, or a permit. When writing or adopting an ordinance, keep in mind that the document should include clearly defined legal requirements and should be easily enforced. Some model ordinances are published on CalFOG.org website - http://www.calfog.org/Programs.html and a typical ordinance may include the following provisions:

- General prohibition
- Prohibition against discharge of FOG to the sewer
- Prohibition against discharge of FOG to a storm drain or any surface water
- Definition of FSEs, including commercial, industrial and institutions
- Discharge standards, including the allowable discharge concentration limit for fat laden waste streams, temperature, pH, and other pollutant



- Requirements for installation of grease removal devices (GRD) with design standards or a reference to building/plumbing codes
- Requirements for operation of GRD 56
- Maintenance and record keeping requirements for GRD operators
- Facility inspection program
- Reporting requirements
- Enforcement provisions, including administrative order, civil and criminal penalties
- Implementation of best management practices (BMPs) for FSEs

Requirements to Install GRDs - Acceptable FOG handling and disposal practices may be developed and written as part of a FOG Control Program. FOG handling practices may include the installation of a GRD or implementation of BMPs, which are described as follows:

- 1) If installation of a GRD is required, the following items may be considered as part of the installation plan:
 - Determine type of device (tarps, interceptor, or mechanical grease removal unit)
 - Create design standards including size, water temperature, location, and access points for sampling and inspection. Many municipal ordinances require use of Appendix H of the Uniform Plumbing Code to size grease interceptors.
 - Specify cleaning and maintenance frequency
 - Set record keeping requirement to verify the facility's maintenance, disposal, and billing records
 - Identify the required storage and disposal method (location of used grease containers and storm water pollution protection method if stored outside)
- 2) BMPs are activities that if properly implemented will reduce the discharge of FOG to the sewer. Many sewer agencies have developed BMPs that are easily available on the internet so there is no need to create new programs from scratch.

Inspection and Enforcement Authority - A FOG plan may develop a comprehensive inspection and enforcement program to include the following:

- Resources (staff, training, collection system map, etc.)
- List of FSEs
- List of FSEs with problems, ranked based on the severity of the problem(s)
- Inspection checklist to aid inspectors when reviewing FSEs
- Inspection frequency and schedule



- Location of FOG hotspots in local sewers
- Training for staff and FSEs
- Enforcement authority as described in the Legal Authority document (permit, ordinance)

Collection System Maintenance - Maintenance of the collection system for removing FOG to prevent sewer blockages or SSOs is part of the "more frequent cleaning and maintenance targeted at known problem areas" described in Section 2.4 (iv) Operation and Maintenance Program (b), which may make some of this information redundant.

The FOG maintenance program may include the following:

- Characterization of the sources of FOG
- Identification of the problem areas (Hotspots), which may include reviewing the historical cleaning data, blockage reports, or field observations
- Determining the cause of FOG-related blockages. Review other compounding factors, such as roots, rags, or insufficient pipe slope that may exacerbate a FOG problem.
- Developing a schedule using a severity index for the areas with heavy FOG to prioritize areas for cleaning. This prioritization may also consider FOG concentration, age of pipes, roots, or other field conditions.
- Defining the most effective methods of cleaning on the work orders should optimize results of cleaning efforts.
- Consider incorporating a QA/QC Plan in the cleaning schedule to ensure desired results are achieved. The plan may include random follow up inspections of some of the lines that have been cleaned, using CCTV.
- Conducting post SSO/Stoppage review The use of CCTV and data review after blockages can be useful in determining future preventive efforts.
- Consider utilizing predictive maintenance and other collection system monitoring methods, such as use of remote monitoring devices, flow meters, or scheduled manhole/pump station inspections.

Source Control Program - Source control can be a cost-effective method of minimizing or preventing FOG from entering a sanitary sewer system. Source control may be achieved by installation of a GRD at a FSE, or by implementation of a public outreach program for both commercial and residential customers. The source control program could include the following:

- A survey program to identify all FSEs. The survey methodology should be designed to identify all types of food service and grease generating facilities (schools, hospitals, food kitchens, creameries, butcher shops, grocers, restaurants, food trucks, etc.).
- Identification of problem areas, which may include reviewing historical cleaning



data, blockage reports, or field observations.

- Public outreach programs for education of the customers on wastewater related issues, including FOG disposal and potential impacts of improper disposal. A public outreach program can include educational materials, including BMPs for both residential and commercial customers, focusing on problem areas first. Public outreach can also describe storm water pollution prevention methods as it relates to FOG handling, storage, transportation and disposal.
- Ordinance or engineering specifications for installation of GRDs in conformance with plumbing and building codes.
- Inspection programs to ensure FSEs comply with the regulatory requirements and keep their treatment devices in good working condition.
- Documentation and tracking system to ensure the program's elements and procedures are followed and progress data can be evaluated to determine the success of the FOG program. Some agencies have had good results using a manifest system that is maintained by the FSE showing proper disposal of the FOG hauled away.

8.5 Elements of FOG Control Program

The Enrollee has evaluated their service area and determined a FOG Control Program is necessary. The Enrollee has created a FOG Control Program that involves a combination of source control and preventative maintenance. The FOG Control Program aims to lower the quantity of FOG discharged into the sanitary sewer system and regular clean and inspect the system; thereby, minimizing SSOs due to excessive FOG. Elements of the FOG Control Program include:

- Kitchen Best Management Practices
- Grease Trap Installation, Operation and Maintenance Requirements
- Grease Interceptor Installation, Operation and Maintenance Requirements
- Notification Requirements
- Record Keeping and Reporting Requirements
- Permits and Enforcement
- Drawing Submittals
- Public Education

The following subsections provide a summary of the Enrollee's FOG Control Program.

8.5.1 Public Education Outreach Program

The FOG Control Program identifies several forms of media available to educate and inform residential and/or commercial customers. Media used for outreach and education purposes include direct mailers, door hangers, brochures distributed at Enrollee locations and kiosks, and announcements placed on the Enrollee's website. Information provided within these forms of media include effects of FOG in wastewater collection systems and



methods to reduce and/or limit the release of FOG into wastewater systems. All media used by the Enrollee to communicate with their customers is prepared and available in multiple languages.

8.5.2 Disposal of FOG

FOG inspection and disposal is handled by Los Angeles County Department of Public Health. At a local level, FSEs are required to pretreat wastewater containing FOG before discharging into the sewer system. Typically, pretreatment involves the use of grease traps and/or grease interceptors.

8.5.3 Legal Authority to Prohibit Discharges

The Enrollee is evaluating their legal authority and examining existing codes, ordinances, and permitting procedures. The Enrollee's ultimate goal is compliance with the SSS WDR and all other orders which may apply. If the Enrollee's current legal authority is not in line with their goal, an updated set of ordinances shall be adopted through the proper legislative channels.

8.5.4 Requirements for Installation of Pretreatment Devices

If the installation of a GDR is required, the entity is required to consult the California Plumbing Code to determine design standards including size, water temperature, location, and access points for sampling and inspection for the specific GDR. Cleaning and maintenance frequency is to be done in accordance with the manufacture's recommendations and California Plumbing Code. Entities are required to keep record of all maintenance, disposal method and frequency, billing records, and storage methods related to GDRs.

Los Angeles County maintains record of the type and/or date of installation of GDRs at FSEs.

8.5.5 Inspection and Enforcement Authority

Inspection is handled by Los Angeles County, and to ensure FSEs are in compliance with the necessary standards, the Enrollee requires all FSEs to obtain and/or renew a Food Service Establishment Waste Discharge Permit. The permit requires FSEs to pay all required fees and to comply with the standards and policies of the Enrollee and Los Angeles County.

8.5.6 Collection System Maintenance

The Enrollee handles their own sewer system maintenance. Pipe segments with high FOG and/or root concentrations have been identified, and receive regular cleanings. Cleaning is conducted using a 2500 psi high pressure sewer jet cleaning machine. Regular cleanings prevent the occurrences of blockages and overflows. Locations with high FOG and/or root concentrations are shown below in **Table 8-1**.



From	То		
Address	Street	Address	Street
1301	First St.	1302	First St.
1301	First St.	1302	First St.
1501	First St.	1530	First St.
1000	S. Brand Blvd.	1030	Alley off S. Brand Blvd.
1000	Coronel St.	1030	Coronel St.
1000	Hollister St.	1030	Hollister St.
1000	O'Melveny Ave.	1030	O'Melveny Ave.
805	Chatsworth Dr.	813	Chatsworth Dr.
805	Chatsworth Dr.	N/A	San Fernando Middle School

Table 8-1 Hot Spot Locations

8.5.7 Source Control Measures

The Enrollee takes a proactive and ongoing approach for source control. Their outreach program educates customers on the harmful effects caused by FOGs. FSEs have requirements to install GRDs. These devices help prevent FOGs from entering the sewer system and FSEs must continually pay to register/renew their Food Service Establishment Waste Discharge Permit. Additionally, FSEs are inspected by Los Angeles County and the sewer system receives regular inspections and cleanings.



9 System Evaluation and Capacity Assurance Plan 9.1 Requirements

- D.13.(viii) **System Evaluation and Capacity Assurance Plan**: The Enrollee shall prepare and implement a capital improvement plan (CIP) that will provide hydraulic capacity of key sanitary sewer system elements for dry weather peak flow conditions, as well as the appropriate design storm or wet weather event. At a minimum, the plan must include:
- (a) Evaluation: Actions needed to evaluate those portions of the sanitary sewer system that are experiencing or contributing to an SSO discharge caused by hydraulic deficiency. The evaluation must provide estimates of peak flows (including flows from SSOs that escape from the system) associated with conditions similar to those causing overflow events, estimates of the capacity of key system components, hydraulic deficiencies (including components of the system with limiting capacity) and the major sources that contribute to the peak flows associated with overflow events;
- (b) Design Criteria: Where design criteria do not exist or are deficient, undertake the evaluation identified in "a" above to establish appropriate design criteria; and
- (c) Capacity Enhancement Measures: The steps needed to establish a short- and longterm capital improvement plan (CIP) to address identified hydraulic deficiencies including prioritization, alternatives analysis, and schedules. The CIP may include increases in pipe size, I/I reduction programs, increases and redundancy in pumping capacity, and storage facilities. The CIP shall include an implementation schedule and shall identify sources of funding.
- (d) Schedule: The Enrollee shall develop a schedule of completion dates for all portions of the capital improvement program developed in (a-c) above. This schedule shall be reviewed and updated consistent with the SSMP review and update requirements as described in Section D. 14.

9.2 Overview

This section will identify and discuss the means and methods used to assure that the collection system has adequate hydraulic capacity to convey dry and peak wet weather flows through the system to the ultimate disposal point without upset or discharge to the environment or private property.

9.3 Discussion on System Evaluation and Capacity Assurance Plan

This typically involves the definition of a design storm that causes the most significant flow within the collection system. If no evaluation has been made to date, the audit can establish a timeline for the completion of a capacity evaluation, including the steps necessary to complete the program. However, if the Enrollee has previously determined that no capacity deficiencies exist for the collection system, they should include reasoning as to how this determination was made. They should also include what evaluations led the Enrollee to determine that a capacity assurance element is not required at the current time. If the size and configuration of the system changes over time, the conclusions on capacity may need



to be reviewed.

The following are considerations for review:

Evaluation Process – Describe the techniques used or that will be used to evaluate capacity in all infrastructure within the collection system that has the potential to experience or has experienced SSOs due to size deficiencies in pipes, pump stations, or other appurtenances in the collection system.

Design Criteria – Describe the current infrastructure design criteria, including the selection and use of system design storm, peaking factors for pipe and pump station design, impacts of I/I on the system, and any other criteria used to project current and future flows through the collection system infrastructure.

Capacity Enhancement Measures – If deficiencies in the collection system infrastructure are discovered from the above evaluations, describe the prioritization of the capacity enhancement projects, the drivers for the capacity enhancements, and the risk that capacity enhancements present to system operations. These enhancements can be described and displayed in a table providing project titles, estimated costs, and timing for both short and long-term projects.

Schedule – Once the capacity enhancement projects are defined and prioritized, an appropriate schedule for those projects is prepared and included in the Enrollee's CIP. This section can also outline a description of the CIP, including timelines for updating processes and defining a schedule for regular review and evaluation of the capacity enhancement implementation program.



10 Monitoring, Measurement, and Program Modification 10.1 Requirements

- D.13.(ix) Monitoring, Measurement, and Program Modifications: The Enrollee shall:
- (a) Maintain relevant information that can be used to establish and prioritize appropriate SSMP activities;
- (b) Monitor the implementation and, where appropriate, measure the effectiveness of each element of the SSMP;
- (c) Assess the success of the preventative maintenance program;
- (d) Update program elements, as appropriate, based on monitoring or performance evaluations; and
- (e) Identify and illustrate SSO trends, including: frequency, location, and volume.

10.2 Overview

This section will discuss how the Enrollee maintains relevant information and data related to SSMP activities, monitors the implementation of SSMP Elements, and measures the effectiveness of its SSMP Elements.

10.3 Discussion of Monitoring, Measurement, and Program Modification

Meaningful data should be identified, obtained, and displayed to support the opinion of program effectiveness or the need to revise SSMP program elements. Relevant performance indicators showing the success or failure to meet the established goals should be selected and tracked on a regular basis.

Performance indicators may include:

- Total number of SSOs per year, including the previous 3-5 years
- SSO rate, often measured as the number of SSOs/100 miles of system/year
- Number of SSOs by cause (e.g., roots, grease or FOG-related blockage, debris, line failure, capacity deficiency, storm flow exceeding design, lift station failure, or other)
- Total volume of SSOs and volume contained and returned to the system
- Number and percentage of SSOs that reached surface water
- Total volume and percentage of SSO volume that reached surface water
- Footage of main lines and percentage of system cleaned annually
- Footage of "hot spot" or high frequency cleaning compared to the total length of pipe cleaned, and percentage of system hot spot areas cleaned annually
- Percentage of "hot spots" cleaned on schedule
- Footage of main lines rehabilitated or replaced annually
- Footage of main lines and percentage of system inspected by CCTV or video



annually

- Annual number of FSE inspections and number of enforcement actions on FSEs
- Average SSO response and clean up time (response is time from call out to arrival, and clean-up is time from arrival to completion of immediate spill response action)

10.3.1 Data Maintenance Activities

The Enrollee has effectively managed and maintained relevant information pertaining to their sewer infrastructure. Relevant information includes maintenance activities, SSOs notifications, length of pipe cleaned and/or televised, quantity/cause/location of blockage, scheduled and performed maintenance of Hot Spot locations, and SSOs.

The Enrollee currently stores their data on a local server and retains hard copies of their information. However, they are in the process of transitioning over to a cloud-based storage system. The switch will increase their resiliency to potential loss of data.

10.3.2 Monitoring Activities

The MRP requires that audits, changes, and any other significant information be attached the this SSMP. As the SSMP updates and changes, the Enrollee will include any and all relevant information in the appendices of the SSMP.

10.3.3 Assessment of Preventative Maintenance Program

At regularly scheduled intervals, the Enrollee will conduct a comprehensive evaluation of the elements of the sanitary sewer system's O&M program. Elements that will be reviewed include system inventory and mapping, work order process, system inspection and assessment, objective standards, CIP project identification process, preventative maintenance procedures, repair and rehabilitation procedures, and training programs.

10.3.4 Program Updates

At regular scheduled intervals, the Enrollee shall review elements of the SSMP and other related documents. Upon assessment of these documents, if changes or updates are needed, the Enrollee shall make record of it. At a minimum, the SSMP shall be reviewed every two (2)-years, and updated and recertified every five (5)-years. Review of the SSMP may include communication among multiple staff members and/or departments, data review, and/or review of multiple technical documents. Ample review time should be given based on the length of the SSMP.

10.3.5 Identify and Illustrate SSO Trends

The Enrollee maintains record and information on emergency calls received for reporting potential actual SSOs. The Enrollee may use various types of graphics and tables to show data trends and track information such as sewer infrastructure, SSO causes, types, volume, frequency, and other information the Enrollee considers relevant.



11 SSMP Program Audits

11.1 Requirements

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

11.2 Overview

This section will discuss the self-audits that must be done every two (2)-years. Under the SSS WDR, the Enrollee is required to conduct periodic internal SSMP audits at least every two (2) years starting from the original date of adoption. The purpose of the audit is to evaluate the effectiveness of the SSMP and its Elements and to determine the compliance of the Enrollee with the SSMP requirements.

11.3 Discussion of SSMP Program Audits

The audit must identify any deficiencies in the SSMP and any corrective actions taken or will be taken for compliance with the following SSMP Elements:

- 1. Goal
- 2. Organization
- 3. Legal Authority
- 4. Operation and Maintenance Program
- 5. Design and Performance Provisions
- 6. Overflow Emergency Response Plan
- 7. FOG Control Program
- 8. SECAP
- 9. Monitoring, Measurement, and Program Modifications
- 10. SSMP Program Audits
- 11. Communication Program

11.4 Discussion of Audit Reports

The core purpose of the audit is to evaluate the effectiveness of the SSMP and demonstrate compliance with the SSMP requirements. The Enrollee may want to consult with legal counsel to determine what information resulting from the internal audit evaluation is confidential and how the results of that evaluation should be presented in the SSMP audit report.

Section J of the SSS WDR states that all reports shall be certified by the LRO. These audit reports may be attached as an appendix or may be easily locatable on the Enrollee's



website.

The SWRCB and/or RWQCB may utilize SSMP audit reports during inspections to determine compliance with the SSS WDR. They may use this information to prioritize which Enrollees to inspect, identify areas to focus enforcement actions on, and to determine the need for future regulatory changes. Presentation of information in the audit report may affect the level of scrutiny the Enrollee receives.

11.5 Performance Indicators

The Enrollee may want to consider establishing a variety of performance indicators that demonstrate the effectiveness of the SSMP program. Indicators could include:

- Describing the Enrollee's goals, strategies, and successes in improving system performance, reducing SSOs, and achieving the goal(s) outlined in the SSMP;
- Identifying areas of the SSMP that need to be updated and the associated actions necessary to complete the updates; or
- Establishing metrics or benchmarks that help demonstrate SSMP effectiveness. For example, using the information reported in CIWQS to establish performance as compared to metrics and benchmarks may assist in showing improvement and effectiveness of the program over time

The Enrollee should only select performance indicators that are appropriate for their operations and management of their system and their SSMP program. Before a performance goal is established, the Enrollee should consider the cost of implementing changes to their system operations in order to meet goals, and whether sufficient resources (staff, equipment, and funding) are and will be available.

If an action is identified in the SSMP or the SSMP audit report, it is important for the Enrollee to follow through and implement the identified action. The Enrollee should not state they will do anything they do not intend on doing.



12 Communication Program

12.1 Requirements

D.13.(xi) **Communication Program**. The Enrollee shall communicate on a regular basis with the public on the development, implementation, and performance of its SSMP. The communication system shall provide the public the opportunity to provide input to the Enrollee as the program is developed and implemented.

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

12.2 Overview

This section will discuss the methods the Enrollee uses to communicate with the public. The Enrollee has multiple programs set up to communicate with the public on a regular basis and in the event of an SSO.

12.3 Discussion of Communication Program

The SSS WDR does not define "regular basis" in relation to how often communications should be made, but this would likely be dictated, at least in part, by budget restrictions. What is a regular basis for one Enrollee may not be regular for another.

There are numerous ways to communicate with the public, including the following that could be considered:

- Quarterly newsletters
- Enrollee website
- Board/City Council Meetings
- Flyers in billings to satellite agencies
- Flyers in billings to the ratepayers/customers
- During Public Outreach events
- During crew interactions with the public
- Creating an Advisory Council for citizens to share information with the public.

It is recommended that one person be designated as the media spokesperson when inquiries are made, particularly in times of emergency (e.g., during a large SSO event).

Training may be provided to the specific employee(s) to ensure they have extensive knowledge of all elements of the SSMP and are able to convey that information to the public or other agencies.

12.4 Public Communication

The Enrollee's Public Education and Outreach Program communicates their efforts to comply with the SSS WDR and other orders. The program serves to educate, inform, and engage key stakeholders such as agencies served by the Enrollee's wastewater collection system, or those that may be affected by an SSO. It also includes businesses, developers,

contractors, vendors, and plumbers whose business may be impacted by elements of the SSMP.

The Enrollee communicates with the public regarding the development and implementation of SSMP elements. Media in the form of news releases, articles, monthly electronic newsletter, and website provides important information.

The following includes a summary of the Enrollee's efforts to educate, inform, and engage the public in the proper utilization of the sewer system and their compliance with the SSS WDR.

12.4.1 Enrollee Official Website

The Enrollee currently maintains the website <u>http://www.ci.san-fernando.ca.us/</u> to inform the public. The website is an effective communication channel for providing alerts and/or news. The website provides access to various departments, diverse information, important announcements, agendas and minutes for City Council meetings, and other key information for residents. Once recertified, the SSMP shall be available to the public through the Enrollee's website.

12.4.2 Enrollee FOG Control Program

The Enrollee's FOG Control Program includes public education on how FOGs may negatively impact the sewer system or cause SSOs. Media such as flyers/door-hanger (presented in both English and Spanish) and postcards are mailed to residents shortly after a FOG related SSO has occurred.

12.4.3 Overflow Emergency Response Plan

The Enrollee's OERP includes a Public Advisory of Sewage Contamination Procedures. The procedures contain descriptions of actions that Enrollee staff must take to limit public access to surface waters and other areas that may have been impacted by an SSO, and to notify the public of potential hazardous conditions. Staff may use warning signs for potential public health risk. Signs are included in Attachment H of the Enrollee's OERP. Additionally, pre-scripted notices may be used and are included in Attachment I of the OERP. Pre-scripted notices may be modified to accurately reflect the conditions at the time of publication or airing.

Should additional notification of sewage contamination be deemed necessary, appropriate staff may provide further notices to be used by the media for immediate publication.

12.4.4 Public Meetings

Public meetings are held regularly and residents are encouraged to attend. Council meetings provide the residents with a forum to give feedback about the programs which impact them. During Citizen Participation, residents may address the City Council on an item which may not be on the agenda. The SSMP shall be certified during a public City Council meeting.

Copies of the Council Agenda are publicly available at the City Clerk's Office and in the lobby of the Council Chambers during the meeting. A complete agenda packet is also available for review in the Special Collections section of the San Fernando Public Library and at the Council meeting.



Project specific meetings may also be convened with community leaders and other citizens to discuss the impacts, schedule, and criteria of projects and efforts. These meetings give citizens a forum to learn about the City's activities, voice their concerns, and receive clarification on a variety of issues. Often the project managers will arrange these meetings.

12.4.5 Other

A variety of means exist to educate and inform the public regarding impacts to the Enrollee sewer system. The following list identifies several forms of media available for the Enrollee to use to educate and inform the public:

- Bi-annual inserts in water and/or sewer bills
- Press releases
- Direct mailers
- Door hangers
- Brochures distributed at City locations and kiosks
- Posters and flyers displayed prominently in public areas, such as on buses, libraries, and recreational centers
- Announcements and notices placed on the City's web site
- Advertisements placed in the City's news outlet
- Public service announcements on the City's cable television channel
- Specific events to educate the public on the effects of SSOs to the public and environment such as at an earth day fair, open house events, and other appropriate venues.

All messages that are communicated to the public should be prepared in English, Spanish, or other dominant language spoken by the target audience. Translation services may be required during any educational campaign. Educational activities should occur regularly throughout the year, and may need to be enhanced around the holidays when many residents increase their cooking activities, and consequently generate more FOG