City of Sunnyvale, Environmental Services Department, Water and Sewer Systems Division (CIWQS WDID: 2SSO10200)

2025 Sewer System Management Plan

Prepared by HydroScience Engineers

Last Updated in May 2020

City Council Adoption: April 8, 2025

HydroScience
Strategic Water Solutions

THIS PAGE INTENTIONALLY LEFT BLANK

TABLE OF CONTENTS

Note: Element numbers are based on SWRCB General Order, dated December 6, 2022.

LIST OF FIGURES

LIST OF TABLES

LIST OF APPENDICES

Note: Appendix numbers are based on corresponding General Order Element numbers.

DEFINITIONS, ACRONYMS, AND ABBREVIATIONS

BACWA	Bay Area Clean Water Agencies	A government agency of local clean water agencies that provide sanitary sewer services to people living in the San Francisco Bay Area, founded to assist member agencies in carrying out mutually beneficial projects.
BMP	Best Management Practices	Refers to the procedures, methods, or techniques that have been determined to be the most effective and most practical means of achieving a stated goal. Herein, this is used in reference to commercial kitchens working to minimize the quantity of grease that is discharged to the sanitary sewer system as well as facilities aiming to manage the quantity and improve the quality of stormwater runoff.
Cal OES	California Office of Emergency Management	All Category 1 spills greater than or equal to 1,000 gallons must be reported to Cal OES.
CCTV	Closed Circuit Television	Refers to the process and equipment used to inspect the condition of gravity sewers.
CIP	Capital Improvement Plan, Program	Refers to the document that identifies future capital improvements to the City's sanitary sewer system.
City		Refers to the City of Sunnyvale.
CIWQS	California Integrated Water Quality System	Refers to the SWRCB online electronic reporting system used to report spills, certify completion of the SSMP, and provide information on the sanitary sewer system.
CMMS	Computerized Maintenance Management System	Refers to a database application used to manage and document maintenance activities of a collection system.
CSRMA	California Sanitation Risk Management Authority	A Joint Powers Authority of wastewater service agencies that work together to provide coverage and comprehensive risk management services for all members through innovative solutions and knowledge transfer.
CWEA	California Water Environment Association	An organization of wastewater professionals from all facets of wastewater management and resource recovery (operators, lab techs, engineers, etc) providing training and raising awareness of the profession.
ESD	City of Sunnyvale Environmental Services Department	The Environmental Services Department includes the City's Water and Sewer Systems, Water Pollution Control Plant, Solid Waste and Recycling, and Regulatory Programs Divisions.
FOG	Fats, Oils, and Grease	Typically associated with food preparation and cooking activities that can cause blockages in the sanitary sewer system.
FSE	Food Service Establishment	Refers to commercial or industrial facilities where food is handled/prepared/served that discharge to the sanitary sewer system.
FTE	Full-Time Equivalent	Refers to the equivalent of 2,080 paid labor hours per year by a regular, temporary, or contract employee.
General Order		Refers to the SWRCB updated Statewide Waste Discharge Requirements (WDRs) for sanitary sewer systems, Order WQ 2022-0103-DWQ, adopted December 6, 2022.
GIS	Geographical Information System	Refers to the City's system used to capture, store, analyze, and manage geospatial data associated with the City's sanitary sewer system assets.
GPS	Global Positioning System	Refers to the handheld unit used to determine the longitude and latitude of sanitary sewer overflows for use in meeting CIWQS reporting requirements.

DEFINITIONS, ACRONYMS, AND ABBREVIATIONS

I/I	Infiltration/Inflow	Refers to water that enters the sanitary sewer system from storm water and groundwater and increases the quantity of flow. Infiltration enters through defects in the sanitary sewer system after flowing through soil. Inflow enters the sanitary sewer without flowing through the soil. Typical points of inflow are holes in manhole lids and direct connections to the sanitary sewer (e.g. storm drains, area drains, and roof leaders).
Lateral		Refers to the piping that conveys sewage from a building to the City sewer system. The distinction is sometimes made between the upper lateral (from building to public right-of-way) and the lower lateral (from public right-of-way to the sewer main).
LRO	Legally Responsible Official	Refers to the individual designated by the City to certify spill reports on the CIWQS system. The LRO must be formally designated by the City and registered with the SWRCB.
O&M	Operations and Maintenance	Refers to the activities that keep facilities, equipment, and systems running effectively and safely.
PACP	Pipeline Assessment and Certification Program	Refers to the National Association of Sewer Service Companies (NASSCO) widely used standard for pipeline defect identification and assessment, providing standardization and consistency to the methods in which pipeline conditions are identified, evaluated and managed.
RWQCB	Regional Water Quality Control Board	Refers to the San Francisco Bay Regional Water Quality Control Board.
SCADA	Supervisory Control and Data Acquisition	Refers to the system employed by the City that monitors the performance of its pump stations and notifies the operating staff when an alarm condition requires attention.
SERP	Spill Emergency Response Plan	Refers to the City's Plan, which is a component of this SSMP, that addresses the City's response to spill events.
SMC	Sunnyvale Municipal Code	The City of Sunnyvale's legal ordinances and laws which develop the legal framework for how the City operates.
SSMP	Sewer System Management Plan	Refers to this document, developed as a tool to facilitate management, operation, and maintenance of the sewer collection system in order to reduce and prevent spills and mitigate any that occur.
SWRCB	State Water Resources Control Board	Refers to the government entity and staff responsible for protecting the State's water resources.
Water of the State		Refers to any water, surface or underground, including saline waters, within the boundaries of California. In case of a sewage spill, storm drains are considered contiguous with Waters of the State unless the sewage is completely contained and returned to the sewer system. May also be referred to as surface water(s) or State waterway.
WPCP	Sunnyvale Water Pollution Control Plant	The City's wastewater treatment plant located at the northern end of Borregas Ave on the northern edge of City limits.
WDRs	Waste Discharge Requirements	Regulations from the SWRCB that control the discharge of waste into the land, surface water, and groundwater in the State of California in order to protect the quality of water used for drinking and recreation as well as the habitat of fish and other aquatic life.
WDID	waste discharger identification number	A number assigned to each facility discharging to a body of water, issued by the SWRCB.

ELEMENT 1. GOAL AND INTRODUCTION

On December 6, 2022, the State Water Resources Control Board (SWRCB) adopted new Statewide Waste Discharge Requirements (WDRs) for sanitary sewer systems: Order WQ 2022-0103-DWQ (General Order), which include updated requirements for development and/or updating of a Sewer System Management Plan (SSMP). The General Order is included as Appendix B of the City's Spill Emergency Response Plan (SERP) which is attached as **Appendix 6**.

This document, prepared by the City of Sunnyvale (City) Environmental Services Department (ESD), serves as an update to the City's 2020 SSMP to meet the new requirements of the General Order. In July 2024, Bay Area Clean Water Agencies (BACWA) published the Guide for Developing and Updating of Sewer System Management Plans (2024 SSMP Guide) which was used to aid in the development of this document. The City's waste discharger identification number (WDID) in the California Integrated Water Quality System (CIWQS) is 2SSO10200.

The SSMP contains a compendium of the policies, procedures, and activities describing the planning, management, operation, and maintenance of the City's sanitary sewer system. The structure (element numbering and nomenclature) of this SSMP follows the requirements set forth in the General Order. Throughout this SSMP, each element begins with the relevant excerpt from the General Order that lists the requirements for that element as shown below for **Element 1**.

General Order, Attachment D – Sanitary Sewer Management Plan Required Elements

1. SEWER SYSTEM MANAGEMENT PLAN GOAL AND INTRODUCTION

The goal of the Sewer System Management Plan (Plan) is to provide a plan and schedule to: (1) properly manage, operate, and maintain all parts of the Enrollee's sanitary sewer system(s), (2) reduce and prevent spills, and (3) contain and mitigate spills that do occur.

The Plan must include a narrative Introduction section that discusses the following items:

1.1. Regulatory Context

The Plan Introduction section must provide a general description of the local sewer system management program and discuss Plan implementation and updates.

1.2. Sewer System Management Plan Update Schedule

The Plan Introduction section must include a schedule for the Enrollee to update the Plan, including the schedule for conducting internal audits. The schedule must include milestones for incorporation of activities addressing prevention of sewer spills.

1.3. Sewer System Asset Overview

The Plan Introduction section must provide a description of the Enrollee-owned assets and service area, including but not limited to:

- *Location, including county(ies);*
- *Service area boundary;*
- *Population and community served;*
- *System size, including total length in miles, length of gravity mainlines, length of pressurized (force) mains, and number of pump stations and siphons;*
- *Structures diverting stormwater to the sewer system;*
- *Data management systems;*

- *Sewer system ownership and operation responsibilities between Enrollee and private entities for upper and lower sewer laterals;*
- *Estimated number or percent of residential, commercial, and industrial service connections; and*
- *Unique service boundary conditions and challenge(s).*
- *Additionally, the Plan Introduction section must provide reference to the Enrollee's up-to-date map of its sanitary sewer system, as required in section 4.1 (Updated Map of Sanitary Sewer System) of this Attachment.*

1.1 SSMP Implementation and Update Schedule

Table 1-1 provides a schedule for all upcoming SSMP update and implementation activities. This includes all internal audits and full SSMP updates for the next six years. Some of the action items listed in this table are detailed later in this report, though they are compiled here for ease of viewing the schedule.

Table 1-1: SSMP Implementation and Update Schedule

Action Item	Monitoring Period	To Be Completed By	Frequency
Category 4 Spill Reporting	Prior calendar year	Feb 1	Annually
SERP Updates	Prior calendar year	April 1	Annually
Annual Report	Prior calendar year	April 1	Annually
SERP Annual Assessment	Prior calendar year	June 5	Annually
SSMP Audit	Prior three calendar years	November 2	Every three years, beginning 2027
SSMP Update	Prior six calendar years	May 2	Every six years, beginning 2025

1.2 System Goals

This section identifies goals the City has set for the management, operation, and maintenance of the sewer system and discusses the role of the SSMP in supporting these goals. These goals provide focus for City staff to continue the high-quality work to implement the improvements in the management and maintenance of the City's wastewater collection system.

Providing safe, responsive, and reliable sewage conveyance is a key component of the goals and objectives of the City's ESD, Wastewater Collections Program. The City's Wastewater Collections Program has adopted the goals listed below which outline responsibilities and provide direction and understanding for all sewer maintenance and cleaning activities:

- Provide for the reliable collection of sewage throughout the City to protect public health and the environment, to prevent sanitary sewer spills (spills), and to minimize odors;
- Ensure all sanitary sewage is collected and transported to the Sunnyvale Water Pollution Control Plant (WPCP);
- Maintain and repair the City's Sanitary Sewer Collection System in a cost-effective, safe, reliable, and timely manner;

- Comply with all applicable federal, state, and local laws and regulations pertaining to sanitary sewer collection operation and maintenance;
- Respond to emergency events and provide assistance for residents and businesses;
- Provide sewer collection services in the Rancho Rinconada area located in the City of Cupertino;
- Provide administrative and support services to promote customer satisfaction and confidence;
- Continue to professionally manage, operate, and maintain all parts of the sewer collection system;
- Provide adequate capacity to convey peak flows;
- Minimize the frequency of spills that can pose a threat to public health; and
- Mitigate the impact of spills that may occur notwithstanding the preventive efforts of the City.

This SSMP supplements and supports the City's existing Operations and Maintenance Program and goals by providing high-level, consolidated guidelines and procedures for all aspects of the City's wastewater system management. The SSMP guides the proper management of the collection system and assists the City in minimizing the frequency and impacts of spills by providing direction for appropriate maintenance, capacity management, and emergency response.

General Plan

The City's General Plan, which was consolidated in 2011, contains Goals and Policies for wastewater collection and treatment which are detailed in Chapter 7: Environmental Management of the City's General Plan web page (https://www.sunnyvale.ca.gov/your-government/codes-and-policies/general-plan) and listed below:

- GOAL EM-5 Minimal Pollution and Quantity of Wastewater

  Ensure that the quantity and composition of wastewater generated in the city does not exceed the capabilities of the wastewater collection system or and the water pollution control plant.
- *POLICY EM-5.1* Water pollution control plant improvements should be designed, constructed and maintained and the quantity of industrial wastes should be controlled so that the plant does not have to be expanded in excess of its capacity of 29.5 MGD.
- *POLICY EM-5.2* Ensure that wastes discharged to the wastewater collection system can be treated by existing treatment processes of the water pollution control plant.
- GOAL EM-6 Effective Wastewater Collection System

  Continue to operate and maintain the wastewater collection system so that all sewage and industrial wastes generated within the city are collected and conveyed under safe and sanitary conditions to the water pollution control plant.
- POLICY EM-6.1 Inspect critical points in the wastewater management system annually to ensure that the proper level of maintenance is being provided and that the flow in sewers does not exceed design capacity.

- GOAL EM-7 Effective Wastewater Treatment

  Continue to operate and maintain the water pollution control plant, using cost effective methods, so that all sewage and industrial wastes generated within the city receive sufficient treatment to meet the effluent discharge and receiving water standards of regulatory agencies.
- *POLICY EM-7.1* Monitor water pollution control plant operations and maintenance to meet regulatory standards.
- *POLICY EM-7.2* Coordinate operating procedures with the city energy policy to optimize an alternative energy program so that minimum use and reliance are placed on outside energy sources.
- *POLICY EM-7.3* Actively participate in the watershed management approach to solving water quality issues of the Santa Clara Basin watershed and the South Bay.
- *POLICY EM-7.4* Produce quality recycled water and seek to maximize the use of this resource.

1.3 Sewer System Asset Overview

The City is located in Santa Clara County at the south end of the San Francisco Bay. It is an urban, industrial, and residential community serving a population of approximately 157,566 within approximately 23 square miles.

The City maintains a record of its assets within a Geographical Information System (GIS) geodatabase that includes information for wastewater collection system assets including: gravity line segments, manholes, pumping facilities, and pressure pipes (force mains). The City also has GIS information for the storm drainage system. A collection of block maps is maintained on the City's website that detail the sewer and storm drainage systems, located at the following link: https://www.sunnyvale.ca.gov/city-services/online-services/maps-and-gis/utility-maps.

The City is in the process of implementing a computerized maintenance management system (CMMS) for purposes such as generating work orders, tracking sewer pipeline maintenance issues, and other operations and maintenance (O&M)-related functions. The new CMMS system is planned to be operational in 2025.

The City provides wastewater service to all customers within City limits as well as portions of the City of Cupertino to the south of the City known as the "Rancho Rinconada" area. In 2022, the City diverted sewer flow from a portion of Rancho Rinconada (91 homes) in the area west of E. Estates Drive and north of Bollinger Road to flow into Cupertino Sanitary District (CuSD)'s collection system. The wastewater previously flowed through an aging pipeline suspended over Calabazas Creek which is slated for removal. A new diversion system was implemented which consisted of construction of 20 feet of new 8-inch pipeline at E. Estates Drive, installation of a diversion weir in a CuSD manhole to reroute approximately 15% of the combined flow, and refurbishment of existing infrastructure such as repair of an unused 8-inch pipe along S. Tantau Avenue.

A breakdown of the number of service connections by customer type is provided in **Table 1-2**.

Table 1-2: Service Connection Types

Land Use Type	Number of Connections	Number as Percentage
Residential	28,133	94%
Commercial	1,691	6%
Industrial	28	< 1%
Total	**29,852**	**100%**

The sewer service area boundary is presented in **Figure 1-1**. Wastewater is treated at the WPCP where it is either distributed back to the City for recycled water uses or discharged to the San Francisco Bay (Bay) under NPDES Permit No. CA0037621.

The total collection system is about 310 miles of gravity pipeline – approximately 296 miles within City limits and 14 miles in the Rancho Rinconada area – ranging in size from 4-inch to 48-inch diameter. Within the City, there are approximately 10,719 feet of force main, 5 pump stations, and 11 active siphons.

Table 1-3 and **Table 1-4** provide breakdowns of the existing pipelines by diameter and material, respectively, according to the City's GIS records. Data regarding the exact age of the City's sewer system is inexact; however, the average age is estimated to be over 50 years for City pipelines based on the City's incorporation in 1902, development records, historical population growth, and GIS records, and 70 years for Rancho Rinconada pipelines based on development records.

In addition, there are nearly 20 miles of privately-owned sewers tributary to the system included in the City's GIS, plus additional private sewers not in GIS associated with Lockheed Martin and mobile home parks.

A map of the sanitary sewer system is included in Appendix A of the SERP (see **Appendix 6**).

Sewer Service Laterals: Sewer service laterals within the City's collection system are owned by, and therefore the responsibility of, the property owner to maintain and assure serviceability.

The City may provide maintenance services to laterals located within the public right-of-way as a courtesy service to City and Rancho Rinconada residents only if a property line cleanout exists, and the cleanout and adjacent area are accessible to City staff and equipment. The City may provide maintenance, repair, rehabilitation, and/or replacement of the "lower" portion of private sanitary sewer laterals within the City that are located within the public right-of-way on a discretionary basis. The City does not install any type of cleanout on private sewer laterals.

Table 1-5 lists the number of laterals within the City and Rancho Rinconada.

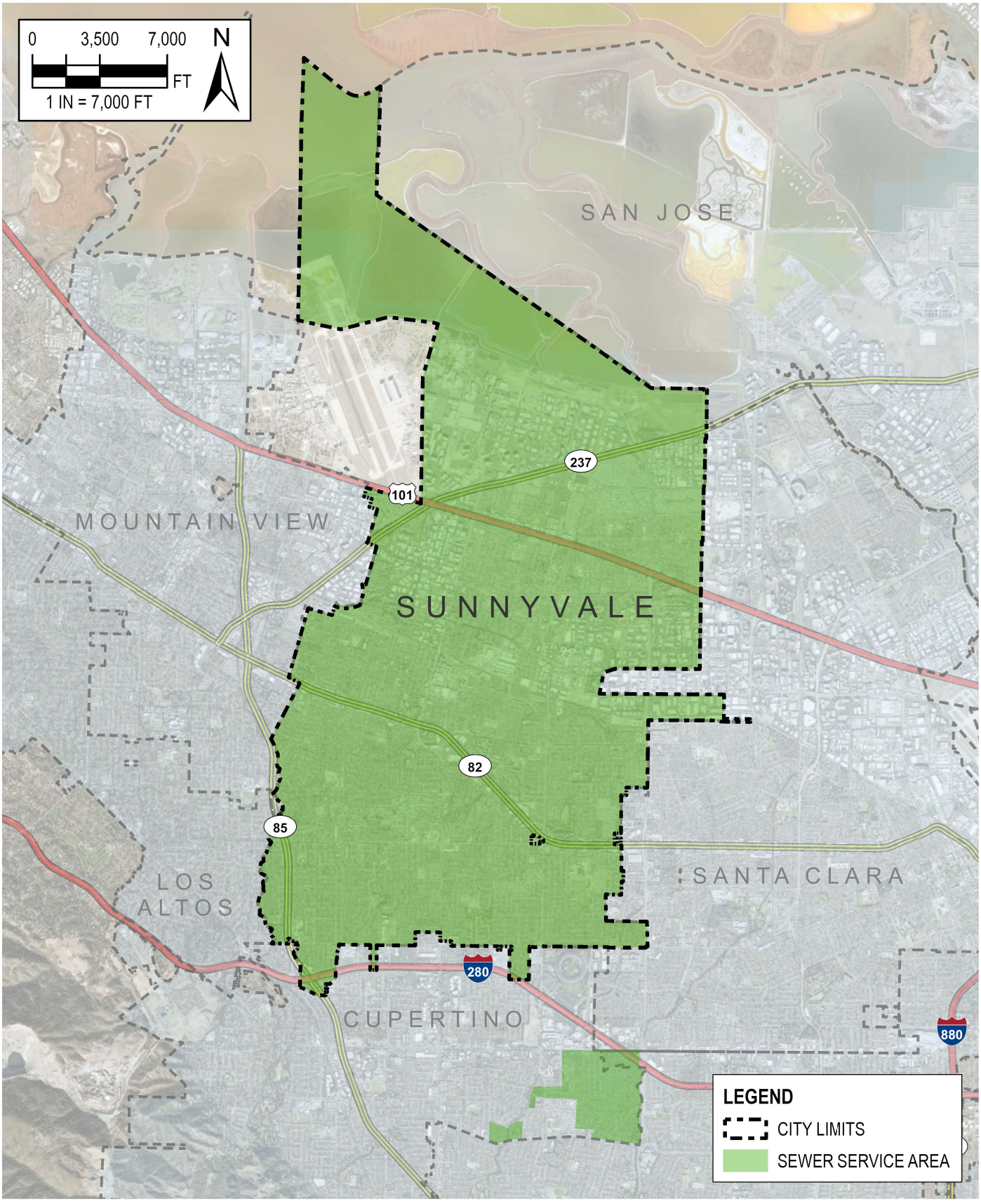


FIGURE 1-1
CITY OF SUNNYVALE
SEWER SYSTEM MANAGEMENT PLAN
SEWER SERVICE AREA BOUNDARY

HydroScience

Table 1-3: Sewer System Gravity Pipeline Size Distribution

Diameter (inches)	Length (feet)	Length (miles)	Length as Percentage
< 8	256,722	48.6	15.7%
8	902,108	170.9	55.0%
10	163,886	31.0	10.0%
12	114,312	21.7	7.0%
14	6,542	1.2	0.4%
15	55,688	10.5	3.4%
16	4,602	0.9	0.3%
18	43,051	8.1	2.6%
21	25,119	4.8	1.5%
22	387	0.1	< 0.1%
24	19,602	3.7	1.2%
27	23,624	4.5	1.4%
30	98	0.0	< 0.1%
33	4,223	0.8	0.3%
36	2,376	0.4	0.1%
39	9,558	1.8	0.6%
42	4,711	0.9	0.3%
48	3,167	0.6	0.2%
Unknown	320	0.1	< 0.1%
Total	**1,640,096**	**310.6**	**100.0%**

Source: City of Sunnyvale GIS, 2025

Table 1-4: Sewer System Gravity Pipeline Materials of Construction

Material	Length (feet)	Length (miles)	Length as Percentage
ABS	32	0.0	< 0.1%
CIP	9,528	1.8	0.6%
Concrete Pipe	9,055	1.7	0.6%
DIP	709	0.1	< 0.1%
PE	23,576	4.5	1.4%
PVC	31,501	6.0	1.9%
RCP	16,374	3.1	1.0%
VCP	1,500,645	284.2	91.5%
Unknown	48,676	9.2	3.0%
Grand Total	**1,640,096**	**310.6**	**100.0%**

Source: City of Sunnyvale GIS, 2025
Notes:
1. ABS = Acrylonitrile Butadiene Styrene
2. ACP = Asbestos Cement Pipe
3. CIP = Cast Iron Pipe
4. CMP = Corrugated Metal Pipe
5. DIP = Ductile Iron Pipe
6. PE = Polyethylene
7. PVC = Polyvinyl Chloride
8. RCP = Reinforced Concrete Pipe
9. VCP = Vitrified Clay Pipe

Table 1-5: Privately Owned Laterals

	City of Sunnyvale	Rancho Rinconada
Estimated Number of Laterals	25,277	1,720

Stormwater: Portions of the City's sanitary sewer system also collect stormwater from two principal sources:

1. A known pipe cross connection from the storm drain system to the sanitary system on Borregas Avenue at E. Weddell Drive; and
2. Direct stormwater discharges from the Northrup Grumman property near Fair Oaks Avenue and E. California Avenue.

While the City cannot accurately quantify the stormwater flows entering the sanitary system from these sources, estimates were developed for evaluating their potential impact on sanitary sewer pipeline capacity as part of the City's2022 Wastewater Collection System Model Expansion and Capacity Analysis (Capacity Analysis), included as **Appendix 8A**.

ELEMENT 2. ORGANIZATION

This section of the SSMP identifies City staff responsible for implementing this SSMP, responding to spill events, and meeting the spill notification and reporting requirements. This section also discusses the designation of the Legally Responsible Official (LRO) who is responsible for completing and certifying spill reports submitted to the SWRCB's on-line reporting system (CIWQS).

General Order, Attachment D – Sanitary Sewer Management Plan Required Elements

2. ORGANIZATION

The Plan must identify organizational staffing responsible and integral for implementing the local Sewer System Management Plan through an organization chart or similar narrative documentation that includes:

- *The name of the Legally Responsible Official as required in section 5.1 (Designation of a Legally Responsible Official) of this General Order;*
- *The position titles, telephone numbers, and email addresses for management, administrative, and maintenance positions responsible for implementing specific Sewer System Management Plan elements;*
- *Organizational lines of authority; and*
- *Chain of communication for reporting spills from receipt of complaint or other information, including the person responsible for reporting spills to the State and Regional Water Boards and other agencies, as applicable. (For example, county health officer, county environmental health agency, and State Office of Emergency Services.)*

2.1 Organization and Staffing

The organization chart for the City's ESD, Water and Sewer Systems Division is provided in Appendix C of the SERP (see **Appendix 6**), and phone number for key positions are provided on the organization chart; general responsibilities for each position are described below.

Description of General Responsibilities

ESD Director: Under administrative direction, the ESD Director provides overall management of the ESD, consisting of the WPCP, Water and Sewer Systems, Solid Waste Programs, and Regulatory Programs Divisions. Along with the City Manager, City Attorney, and other Department heads, the ESD Director serves as a member of the City's Executive Leadership Team.

Water and Sewer Systems Division Manager: Under administrative direction, the Water and Sewer Systems Division Manager provides general direction to the Water and Wastewater Operations Programs; they may act as the ESD Director in the Director's absence or at the Director's discretion.

Wastewater Operations Manager (Senior Environmental Engineer): Under general direction from the Water and Sewer Systems Division Manager, the Wastewater Operations Manager manages the operation of the City's wastewater and stormwater collection systems. This is a management level classification in which the incumbent plans, organizes, directs, and coordinates the activities of the wastewater and stormwater collection system programs.

Wastewater Collections Supervisor: Under general direction from the Water and Sewer Systems Division Manager and the Wastewater Operations Manager, the Wastewater Collections Supervisor supervises the activities of lead personnel, field crews, and other individuals in the maintenance and repair of public utilities operated by the ESD. Positions in this classification are characterized by an intermediate structure where work activities change considerably from day-to-day, or even hour-to-hour, but typically within some reasonable or expected bounds. Contacts are regularly made both inside and outside the organization at all organizational levels and require considerable tact, discretion, and persuasion skills to obtain willing action and consent.

Wastewater Collections Crew Leader: Under direction, the Wastewater Collections Crew Leader works with and leads field crews and individuals in the maintenance and repair of public utilities including, but not limited to, storm drains, sanitary sewers, and water systems; they also perform other related work as required. Incumbents in this classification typically receive assignments from the higher-rated classification of Wastewater Collections Supervisor and may receive direction from the managerial classification of Wastewater Operations Manager.

Senior Wastewater Collections Worker: Under general direction, Senior Wastewater Collections Workers perform skilled manual tasks in the construction, repair, and maintenance of sanitary sewers, storm drains, and supporting facilities; they operate motorized equipment, occasionally lead small field crews, and perform other related work as required.

Maintenance Worker I and II: Under general supervision, Maintenance Workers perform a variety of semi-skilled and skilled manual tasks in the construction, repair, and maintenance of sanitary sewer and storm drain facilities; they operate motorized equipment and perform other related work as required.

Crew Assignments

The Wastewater Operations Manager oversees the entire Program. The Wastewater Collections Supervisor oversees the day-to-day operation. The Wastewater Collections Crew Leaders and Senior Wastewater Collections Workers generally rotate duties that include leading crews, operating hydro-flushers, operating CCTV equipment, locating underground utilities, and being on-call. Hydro-flushing, CCTV, locating, pump and lift station preventive maintenance, and general maintenance and construction duties are shared among Senior Utility Workers and Maintenance Workers.

The construction crew makes needed repairs to the City sanitary sewer system, including but not limited to: mains, laterals, pump/lift stations, manholes, and property line clean outs. A construction crew typically consists of three employees.

The hydro-flushing crews perform all cleaning of City sewer mains up to 15 inches in diameter using high-pressure water. A hydro-flushing crew consists of two employees on a hydro-flushing truck. The City's equipment is able to clean sewer mains up to 15 inches in diameter. As previously noted, cleaning of larger pipelines, as well as siphons, must be contracted out.

The CCTV crew performs televising and condition assessment of the sanitary sewer collection system piping using a robotic pipe inspection camera system and software. A CCTV crew consists of two employees.

The on-call service tech receives and responds to sanitary and storm sewer calls and emergency response requests for wastewater and other issues as required.

One employee is assigned to underground utility locating duties and marks all city underground utilities prior to excavation as required by regulations. Underground utilities owned and maintained by the City include water, sewer, stormwater, street light conduits, etc. This employee typically shares the televising of wastewater laterals duties, when needed.

Legally Responsible Official (LRO)

The City's authorized representative in all wastewater collection system matters is the ESD Director. The Water and Sewer Systems Division Manager is authorized to act in the Director's absence.

The City typically has at least two individuals designated as LROs for purposes of CIWQS reporting and certification, and at least two additional employees designated as CIWQS data submitters. Each of these positions and their contact information are identified on the City's organization chart in Appendix C of the SERP (see **Appendix 6**).

Responsibility for SSMP Implementation

The ESD Director is responsible for implementing all elements of this SSMP. The ESD Director coordinates with the Department of Public Works Director regarding construction of new City-owned sewer facilities and rehabilitation of existing sewer facilities. The table in **Appendix 2** indicates the City staff responsibilities for each SSMP element.

Spill Response and Reporting Chain of Communication

The spill reporting process is described in **Element 6**. The chain of communication for responding to spills from reporting it at the time of observation to reporting it to the appropriate agencies, including all necessary contact information, is provided in the City's SERP which is included as **Appendix 6**.

THIS PAGE INTENTIONALLY LEFT BLANK

ELEMENT 3. LEGAL AUTHORITY

This section of the SSMP discusses the City's legal authority, including references to relevant sections of the Sunnyvale Municipal Code (SMC) and agreements with other agencies.

General Order, Attachment D – Sanitary Sewer Management Plan Required Elements

3. LEGAL AUTHORITY

The Plan must include copies or an electronic link to the Enrollee's current sewer system use ordinances, service agreements and/or other legally binding procedures to demonstrate the Enrollee possesses the necessary legal authority to:

- *Prevent illicit discharges into its sanitary sewer system from inflow and infiltration (I&I); unauthorized stormwater; chemical dumping; unauthorized debris; roots; fats, oils, and grease; and trash, including rags and other debris that may cause blockages;*
- *Collaborate with storm sewer agencies to coordinate emergency spill responses, ensure access to storm sewer systems during spill events, and prevent unintentional cross connections of sanitary sewer infrastructure to storm sewer infrastructure;*
- *Require that sewer system components and connections be properly designed and constructed;*
- *Ensure access for maintenance, inspection, and/or repairs for portions of the service lateral owned and/or operated by the Enrollee;*
- *Enforce any violation of its sewer ordinances, service agreements, or other legally binding procedures; and*
- *Obtain easement accessibility agreements for locations requiring sewer system operations and maintenance, as applicable.*

3.1 Sunnyvale Municipal Code (SMC)

The SMC, Chapter 12, contains the City's current legal authorities. The legal authorities provided by the SMC and other sources that address the regulatory requirements are summarized in **Table 3-1**, and all references are included as **Appendix 3**.

The City's legal authority does not require the control of infiltration and inflow (I/I) from private service laterals. However, I/I is not currently a significant issue for the City. An evaluation and discussion of I/I in the collection system using flow monitoring data is included in the 2022 Capacity Analysis included as **Appendix 8A**.

Table 3-1: Summary of Legal Authorities in SMC and Other Sources

Requirement	SMC Reference	Meets General Order Requirements
General		
Require that sewers and connections be properly designed and constructed	Section 12.08.010 and Chapter 16.24	Yes
Require proper installation, testing, and inspection of new and rehabilitated sewers	Chapter 16.24, Section 18.12.150, and City Std. Specs.	Yes
Maintenance and Inspection, Including Laterals		
Clearly define City responsibility and policies	City Council Policy No. 3.3D.6	Yes

Requirement	SMC Reference	Meets General Order Requirements
Ensure access for maintenance, inspection, or repairs for portions of the service lateral owned or maintained by the City	Sections 18.08.040 (f), 18.12.150 (a), and 18.12.080(a)	Yes
Blockage Source Control		
Prevent illicit discharges into the wastewater collection system	Section 12.12.020	Yes
Limit the discharge of fats, oils, and grease (FOG) and other debris that may cause blockages	Sections 12.12.020, 12.12.025, and 12.12.026	Yes
Requirements to install grease removal devices (GRDs), design standards for the GRDs, maintenance, BMP, record keeping, and reporting requirements	Section 12.12.026	Yes
Authority to inspect grease producing facilities	Sections 12.12.026 and 12.12.260	Yes
Enforcement		
Enforce any violation of sewer ordinances	Section 12.18.090	Yes

3.2 Coordination

Easement Accessibility Agreements: The City has easement accessibility agreements in order to access collection system infrastructure that is located outside of the public right of way. These agreements are stored on-site for easy access by City staff, as needed, for any necessary emergency repairs and/or O&M work.

Stormwater Agency Coordination: The City owns and operates the storm drain system within the City boundaries. The storm system is maintained and managed by the same crew, which means the crew has immediate access to the drainage conveyance system within City limits and can contain and recover spills immediately without having to coordinate with external agencies. Should a spill happen in the Rancho Rinconada portion of the collection system or otherwise flow outside of City limits, the spill would cross into the Santa Clara Valley Water District (Valley Water) stormwater service area. In this case, City staff would contact Valley Water to coordinate necessary cleanup activities.

Agreements with Satellite Agencies: The City has informal mutual aid agreements with the neighboring cities of Santa Clara, Los Altos, and Mountain View. The City will continue to assist any surrounding cities when requested, if able.

ELEMENT 4. OPERATION AND MAINTENANCE PROGRAM

This section provides an overview of the City's sewer system O&M program.

General Order, Attachment D – Sanitary Sewer Management Plan Required Elements

4. OPERATION AND MAINTENANCE PROGRAM

The Plan must include the items listed below that are appropriate and applicable to the Enrollee's system.

4.1. Updated Map of Sanitary Sewer System

An up-to-date map(s) of the sanitary sewer system, and procedures for maintaining and providing State and Regional Water Board staff access to the map(s). The map(s) must show gravity line segments and manholes, pumping facilities, pressure pipes and valves, and applicable stormwater conveyance facilities within the sewer system service area boundaries.

4.2. Preventive Operation and Maintenance Activities

A scheduling system and a data collection system for preventive operation and maintenance activities conducted by staff and contractors.

The scheduling system must include:

- *Inspection and maintenance activities;*
- *Higher-frequency inspections and maintenance of known problem areas, including areas with tree root problems;*
- *Regular visual and closed-circuit television (CCTV) inspections of manholes and sewer pipes.*

The data collection system must document data from system inspection and maintenance activities, including system areas/components prone to root-intrusion potentially resulting in system backup and/or failure.

4.3. Training

In-house and external training provided on a regular basis for sanitary sewer system operations and maintenance staff and contractors. The training must cover:

- *The requirements of this General Order;*
- *The Enrollee's Spill Emergency Response Plan procedures and practice drills;*
- *Skilled estimation of spill volume for field operators; and*
- *Electronic CIWQS reporting procedures for staff submitting data.*

4.4. Equipment Inventory

An inventory of sewer system equipment, including the identification of critical replacement and spare parts.

4.1 Updated Map of Sanitary Sewer System

The field crews use GIS database maps on mobile devices. Block maps presenting the data stored in the GIS database are available at the following link:

https://www.sunnyvale.ca.gov/city-services/online-services/maps-and-gis/utility-maps

The maps include all wastewater facilities including, but not limited to:

- Pipe material, diameter, and direction of flow for both gravity and pressurized pipes;
- Upstream and downstream pipe invert elevations, where available;

- Manholes, including rim elevations, where available; and
- Pump stations.

The City has developed and implemented an ongoing system for updating sewer asset maps. Field crews note corrections to the maps which are transmitted to a GIS consultant, and the consultant makes corrections in the GIS maps. The updated maps are then reviewed by City staff before being entered into the production database.

The link provided above also includes detailed block maps for the City's stormwater conveyance system.

4.2 Preventive Operation and Maintenance Activities

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

- Proactive, preventive, and corrective maintenance of gravity sewers;
- Pipeline and manhole inspections;
- Rehabilitation and replacement (R&R) of sewers that are in poor condition; and
- Periodic inspection and preventive maintenance of pump stations.

Currently, the City has three combination unit crews, one construction crew, one CCTV crew, one on-call personnel, and one utility locating personnel. **Table 4-1** summarizes the total length of gravity pipelines cleaned and inspected over the past ten years. It is noted that there are pipelines in identified hot spot areas that are cleaned more than once annually; the lengths listed may include some reaches counted more than once.

Table 4-1: Annual Preventive Maintenance Activities

Parameter	2014/ 15	2015/ 16	2016/ 17	2017/ 18	2018/ 19	2019/ 20	2020/ 21	2021/ 22	2022/ 23	2023/ 24
Total length of gravity pipeline (mi)	310	310	310	310	310	310	310	310	310	310
Total length cleaned (mi)	173	227	149	151	119	135	183	181	135	117
Total length inspected (mi)	30	39	34	31	35	25	20	15	15	29

Gravity Sewers

The City has three combination (hydro/vacuum) units used for the cleaning or maintenance of its sewer mains which can clean pipelines up to 15 inches in diameter; cleaning of larger pipelines, as well as siphons, must be contracted out. With current funding and staffing levels, the City proactively cleans the sewer system every three to five years, and preventively cleans sewers with a history of issues on enhanced frequency cleaning intervals of two, three, or six months depending upon the specific conditions in individual segments. Approximately 270,000 feet or

about 17% of the system are currently in the enhanced frequencies category. The City also contracts for the treatment of some lines that have a history of issues with roots. Currently about 35,000 feet are treated annually.

Gravity sewer maintenance is currently scheduled using maps and lists of enhanced frequency cleaning line segments. Completed sewer maintenance is recorded in field crew daily reports. A CMMS is currently in development and is planned for implementation in 2025. This CMMS will be used to generate work orders, track history for most sewer line maintenance issues, and provide other O&M-related functions. The City's Standard Operating Procedure (SOP) for sewer cleaning is included as **Appendix 4A**.

Pipeline and Manhole Inspections

Prior to April 2012, the City used an outside contractor for CCTV inspection services for both periodic condition assessment and for follow-up after spill events. In April 2012, the City obtained its own CCTV equipment truck. ESD staff now conduct inspections in-house with assistance provided by contractors as necessary. ESD staff have been trained in the use of the CCTV equipment. The City's SOP for CCTV inspections is included as **Appendix 4B**. City staff that operate the CCTV equipment are trained and certified in the NASSCO PACP coding system that is used internationally to assess and grade the condition of pipelines.

The past several years, the City has experienced staffing shortages and equipment failures which has hampered their ability to keep up with prior pipeline inspection goals. The City has, however, made strides to improve the quality and quantity of inspections: in early 2018, the City installed new hardware and software (GraniteNet) in the CCTV truck and incorporated the latest improvements to the GIS system which has reduced the time required to complete each CCTV inspection. The City has also teamed with SewerAI to speed up the inspection process, and they have increased the number of NASSCO PACP-certified operators from four to ten. It is anticipated that these improvements will help improve the quality of inspection and inspection capacity. The current inspection cycle is approximately 10-12 years, which has largely minimized spills and successfully mitigated them when they have occurred. The City intends to continue to inspect the entire collection system using CCTV every 10 years. This provides an achievable goal for full inspection of the system that provides adequate data for proactive maintenance of the system while allowing sufficient budget and employee capacity to review and analyze all of the CCTV data and incorporate it into any necessary R&R CIP projects.

In 2011, the City committed to an aggressive schedule of manhole inspections to identify potential cross-connections between the sewer system and the storm drain system. Such connections were historically incorporated into the design of certain manholes as a means of preventing uncontrolled spills in the event of a backup but are no longer considered acceptable. The City inspected all 7,133 manholes by the end of 2013. As part of this process, the City documented the condition of the manholes and identified any other issues (e.g., deterioration, excessive I/I). Manhole inspections are now performed during routine cleaning of pipelines and as needed. Manhole rehabilitations are part of the City's CIP program.

Rehabilitation and Replacement (R&R)

City crews or contractors correct localized problems identified by CCTV and/or sewer cleaning crews. Large scale repairs and replacements are completed in priority order and are coordinated with the City's street resurfacing program and annual water main replacement projects. Design, bidding, and construction services for sewer rehabilitation and/or replacement projects are provided by the City's Department of Public Works though the CIP program.

Funding for the CIP is derived from the City's Sewer Fund which is an enterprise fund. Sewer fees are established based on projected needs and are updated periodically. The budget and project descriptions in the City's current CIP are listed in **Appendix 8B**. Additional funding for special projects may be approved by the City Council on a case-by-case basis.

Pump/Lift Station Inspections and Maintenance

City crews inspect the operation of the five lift stations – Arques, Lawrence, Sunken Gardens, Baylands, and Kifer – weekly. Maintenance activities include inspecting the site, verifying pump operation, and vacuuming out grease and debris or applying de-greasers as necessary. Each pump station has gravity bypass capability and can be powered by trailer-mounted generators during power outages. In 2015, the City reconstructed each of the five lift stations; this included mechanical upgrades as well as upgrades to the electrical and SCADA systems to improve operation efficiency.

4.3 Staff and Training

City staff positions dedicated to the maintenance of the collection system facilities are listed in **Table 4-2**. These positions also receive administrative and clerical support provided by the ESD. Staffing and resources are constrained under current budgets but are sufficient to maintain services at an acceptable level and, with careful prioritization, to address long-term needs.

Table 4-2: Collection System Staff Maintenance Resources

Position	FTEs
Wastewater Operations Manager	1
Wastewater Collections Supervisor	1
Wastewater Collections Crew Leader	2
Senior Wastewater Collections Worker	4
Maintenance Worker I, II	7
Total	**15**

The City uses a combination of in-house classes; on the job training; California Sanitation Risk Management Authority (CSRMA) site visits and webinars; and California Water Environment Association (CWEA) conferences, seminars, and other training opportunities to train its Wastewater Collections staff. The City strongly encourages staff to advance their CWEA certification grade, provides financial support for certifications and attending CWEA training, and

provides other training and advancement opportunities. Senior staff are actively involved in leadership roles in CWEA and BACWA.

Annual training on the City's SSMP and SERP is conducted for all wastewater collection employees. The City also maintains an ongoing safety training program that addresses both general and task-specific safety issues. The "Tailgate Schedule for Corp Yard" lists safety training activities for the Water and Sewer Systems Division and is updated annually. The 2024 Tailgate Schedule is included in **Appendix 4C**.

The City's contract language requires contractors working in the wastewater collection system to provide training for their employees in the activities that may cause spills and in responding to contractor-caused spills.

4.4 Equipment Inventory

No critical replacement parts are currently warranted. The pump stations have gravity bypasses for emergency situations, and the City has informal agreements with neighboring agencies for equipment support in the event of a sewer maintenance equipment failure.

A list of the major pieces of equipment and vehicles used to support spill responses and maintenance activities is included in Section 5 of the City's SERP which is included as **Appendix 6**.

THIS PAGE INTENTIONALLY LEFT BLANK

ELEMENT 5. DESIGN AND PERFORMANCE PROVISIONS

The City's design and construction standards are used by City Staff and are communicated to consulting engineers and/or developers at the start of a design process or proposed development. This section references the standards and specifications relevant to the City's wastewater collection system.

General Order, Attachment D – Sanitary Sewer Management Plan Required Elements

5. DESIGN AND PERFORMANCE PROVISIONS

The Plan must include the following items as appropriate and applicable to the Enrollee's system:

5.1. Updated Design Criteria and Construction Standards and Specifications

Updated design criteria, and construction standards and specifications, for the construction, installation, repair, and rehabilitation of existing and proposed system infrastructure components, including but not limited to pipelines, pump stations, and other system appurtenances. If existing design criteria and construction standards are deficient to address the necessary component-specific hydraulic capacity as specified in section 8 (System Evaluation, Capacity Assurance and Capital Improvements) of this Attachment, the procedures must include component-specific evaluation of the design criteria.

5.2. Procedures and Standards

Procedures, and standards for the inspection and testing of newly constructed, newly installed, repaired, and rehabilitated system pipelines, pumps, and other equipment and appurtenances.

5.1 Design Criteria and Construction Standards and Specifications

Links to the standards, details, and specifications referenced in this section are included in **Appendix 5**.

The City's design standards for residential drainage systems are specified in

City of Sunnyvale Single-Family Construction Standards, January 2019.

Design requirements for replacement of sewer lines are specified in

Residential Water/Sewer Pipes, January 2023.

Requirements for GRDs for Food Service Establishments (FSEs) are specified in

Grease Removal Devices, January 2023.

These requirements are consistent with the 2022 California Plumbing Code, which the City has adopted. The City's Building Division issues permits, conducts plan checks, and conducts inspections for all residential and commercial construction.

Design, installation, and testing requirements for sewer mains and related appurtenances constructed in the public right-of-way are specified in the following documents:

City of Sunnyvale Sanitary Sewer Design Guidelines, September 2023.

City of Sunnyvale Standard Specifications for Public Works Construction 2006 Edition, Revised June 2019.

City of Sunnyvale Standard Details for Public Works Construction 2006 Edition, Revised May 2022.

Projects in the public right-of-way are coordinated through the Department of Public Works' Engineering Division. Coordination services include project design, approval of construction plans and specifications, bidding and award of construction contracts, construction management, and inspections.

ELEMENT 6. SPILL EMERGENCY RESPONSE PLAN

This section is designed to ensure that every report of a confirmed spill is immediately dispatched to the appropriate crews. This plan provides a procedure that, when enacted in response to a spill, will reduce or eliminate public health hazards, prevent unnecessary property damage, and minimize the inconvenience of service interruptions. It provides procedures for City staff to follow when responding to, cleaning up, and reporting spills.

General Order, Attachment D – Sanitary Sewer Management Plan Required Elements

6. SPILL EMERGENCY RESPONSE PLAN

The Plan must include an up to date Spill Emergency Response Plan to ensure prompt detection and response to spills to reduce spill volumes and collect information for prevention of future spills. The Spill Emergency Response Plan must include procedures to:

- *Notify primary responders, appropriate local officials, and appropriate regulatory agencies of a spill in a timely manner;*
- *Notify other potentially affected entities (for example, health agencies, water suppliers, etc.) of spills that potentially affect public health or reach waters of the State;*
- *Comply with the notification, monitoring and reporting requirements of this General Order, State law and regulations, and applicable Regional Water Board Orders;*
- *Ensure that appropriate staff and contractors implement the Spill Emergency Response Plan and are appropriately trained;*
- *Address emergency system operations, traffic control and other necessary response activities;*
- *Contain a spill and prevent/minimize discharge to waters of the State or any drainage conveyance system;*
- *Minimize and remediate public health impacts and adverse impacts on beneficial uses of waters of the State;*
- *Remove sewage from the drainage conveyance system;*
- *Clean the spill area and drainage conveyance system in a manner that does not inadvertently impact beneficial uses in the receiving waters;*
- *Implement technologies, practices, equipment, and interagency coordination to expedite spill containment and recovery;*
- *Implement pre-planned coordination and collaboration with storm drain agencies and other utility agencies/departments prior, during, and after a spill event;*
- *Conduct post-spill assessments of spill response activities;*
- *Document and report spill events as required in this General Order; and*
- *Annually, review and assess effectiveness of the Spill Emergency Response Plan, and update the Plan as needed.*

To fulfill the new requirements of the General Order, the City published a Sanitary Sewer SERP in June 2023; it is attached as **Appendix 6**. Table 1 of the SERP includes a table which lists each of the requirements of the General Order alongside which section of the SERP fulfills that requirement.

The General Order requires that the SERP be reviewed, its effectiveness assessed, and the plan updated, as necessary, annually. The schedule for annual SERP updates and assessments are included in the SSMP implementation and update schedule listed in **Table 1-1**.

THIS PAGE INTENTIONALLY LEFT BLANK

ELEMENT 7. SEWER PIPE BLOCKAGE CONTROL PROGRAM

This section of the SSMP evaluates the extent and nature of spills related to pipe blockages including FOG, roots, and other debris such as rags, wipes, etc. It outlines the need for and the elements of the City's Blockage Control Program.

General Order, Attachment D – Sanitary Sewer Management Plan Required Elements

7. SEWER PIPE BLOCKAGE CONTROL PROGRAM

The Sewer System Management Plan must include procedures for the evaluation of the Enrollee's service area to determine whether a sewer pipe blockage control program is needed to control fats, oils, grease, rags and debris. If the Enrollee determines that a program is not needed, the Enrollee shall provide justification in its Plan for why a program is not needed.

The procedures must include, at minimum:

- *An implementation plan and schedule for a public education and outreach program that promotes proper disposal of pipe-blocking substances;*
- *A plan and schedule for the disposal of pipe-blocking substances 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 substances generated within a sanitary sewer system service area;*
- *The legal authority to prohibit discharges to the system and identify measures to prevent spills and blockages;*
- *Requirements to install grease removal devices (such as traps or interceptors), design standards for the removal devices, maintenance requirements, best management practices requirements, recordkeeping and reporting requirements;*
- *Authority to inspect grease producing facilities, enforcement authorities, and whether the Enrollee has sufficient staff to inspect and enforce the fats, oils, and grease ordinance;*
- *An identification of sanitary sewer system sections subject to fats, oils, and grease blockages and establishment of a cleaning schedule for each section; and*
- *Implementation of source control measures for all sources of fats, oils, and grease reaching the sanitary sewer system for each section identified above.*

7.1 Nature and Extent of Blockage Problem

Since 2015, an average of approximately 93% of spills in the City have been caused by pipe blockages annually. Further, a majority are caused by roots (64%), FOG (22%), or a combination of both in the sewer line.

As of January 2025, the City has over 462 FSEs which are potential commercial and industrial sources of FOG discharging to the wastewater collection system. FSEs include eating and drinking establishments, cafeterias, bakeries, delis, meat preparation, mobile facilities, and one sausage manufacturer. The largest concentration of commercial FOG sources are FSEs located in the vicinity of Murphy Ave and along portions of El Camino Real. Some are located in older buildings and have undersized grease traps.

7.2 Blockage Control Program

Approximately 17% of the collection system's pipelines are currently on the enhanced frequency cleaning listings (60-day, 90-day, semi-annual, and bi-annual), which are used by the Wastewater Collections Program (WW Collections) to schedule sewer line preventive maintenance. The enhanced frequency cleaning listings reside on the City network, are accessible by ESD staff,

and are periodically updated based on information collected during maintenance activities (particularly the results of CCTV inspections). Such periodic updating allows the City to adjust cleaning frequencies to the needs of the particular line segment and more effectively utilize maintenance resources.

To address root intrusion, the City deploys both chemical and mechanical methods, as needed. The City also contracts for the treatment of some lines that have a history of issues with roots. Currently about 35,000 feet are treated annually. Pipelines that have had FOG-related spills or surcharging, particularly those with multiple instances of FOG-related spills or surcharging, are placed on the enhanced frequency cleaning listings.

ESD Blockage Control Program Elements

Sewer Line Cleaning:

1. Pipe blockage information is shared between WW Collections and the Regulatory Programs Division / Compliance Inspection Group.
2. WW Collections will contact the Compliance Inspection Group for enforcement or outreach support when a spill event is in progress or has occurred.
3. WW Collections provides line blockage information to the Compliance Inspection Group for review and any follow-up.
4. WW Collections will advise the Compliance Inspection Group of any possible grease discharge or other blockages identified during mainline stoppage, follow up or general maintenance flushing, or scheduled televising wastewater segments.
5. The Compliance Inspection Group will advise WW Collections of all findings, all outreach program participants, and their findings of any investigation initiated by WW Collections or caused by concerns identified during the follow up or annual maintenance flushing of wastewater main segments.

Legal Authority – Ordinance: The SMC identifies discharge-related prohibitions and requirements. These include GRD requirements and enforcement actions. Reference to the sections of the SMC that are relevant to the Blockage Control Program and Enforcement are included in **Table 3-1**.

FSE Permits/Registration: The Compliance Inspection Group has identified all FSEs in the City and performs sampling, inspection, and enforcement to verify compliance with SMC and Best Management Practices (BMPs). New or remodeled FSEs are identified through a review of the Business License list in conjunction with the City's Finance and Building Departments.

FSE Inspections/Enforcement: Currently, one Senior Environmental Compliance Inspector and six Environmental Compliance Inspectors conduct FOG Program inspections. Since 2011, the Compliance Inspection Group has inspected most FSEs on an annual basis. FSEs that are considered low FOG are inspected at least once every three years. Low FOG facilities include businesses that do not cook and use disposal food ware with no dishwashing. Although unrelated to General Order compliance, the Compliance Inspection Group also inspects FSEs for

compliance with stormwater BMPs concurrent with FOG inspections. During FSE inspections, the emphasis is on:

1. GRD installation and maintenance;
2. Process information;
3. Grease management; and
4. BMPs.

Enforcement actions are clearly outlined in the City's Pretreatment Inspection Enforcement Response Plan which was most recently revised in February 2024 and a copy of which is included in **Appendix 7**. Elements include:

1. Identifying and investigating instances of noncompliance;
2. Enforcement procedures; and
3. Enforcement response guide.

A summary of inspections and enforcement actions over the past ten years is included in the following table.

Table 7-1. FSE Inspection and Enforcement

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Total FSEs	509	444	405	423	419	395	418	446	437	460
FOG inspections completed[1]	608	531	559	574	537	536	468	483	483	496
Enforcement actions taken	66	32	72	59	75	69	35	30	18	30
Spills caused by FOG	0	0	2	1	1	2	1	3	2	2

Notes:
1. Includes both routine and follow-up inspections.

Grease Interceptor and Trap Installation Requirements: All GRDs installed or caused to be installed are sized in conformance with the currently adopted edition of the Uniform Plumbing Code (SMC 12.12.026). The Compliance Inspection Group coordinates with the Building Division in the permit review of FSEs.

Grease Interceptor and Trap Maintenance Requirements: In accordance with SMC 12.12.026, all GRDs installed or caused to be installed shall be kept in good repair and shall be maintained in continuous operation. The GRD contents shall be removed every six months at a minimum, and documentation of all grease removal activities shall be maintained. The Environmental Compliance Inspectors inspect FSEs for these criteria. Inspectors review cleaning records for GRDs and if records or other observations indicate insufficient cleaning, inspectors may conduct FOG accumulation measurements of the GRD. The City requires compliance with the 25% rule BMP, that is, FSEs are required to maintain their GRDs below 25% total capacity of measured solids and FOG. Any measurement above 25% indicates that the cleaning frequency of the GRD

is not adequate and requires an immediate pump out and, potentially, an increased maintenance frequency.

Grease Hauling and Disposal Requirements: It is unlawful for any person to dispose of any grease by discharge into any sanitary sewer or storm drainage system (SMC 12.12.025).

1. Environmental Compliance Inspectors review the contracted grease hauling and disposal company documents when conducting an FSE inspection.
2. FSEs that conduct self-cleaning of GRDs are provided guidance regarding proper disposal of the FOG.

Grease Hauling and Disposal Facilities: The nearest disposal site for FOG is Silicon Valley Clean Water (SVCW) in Redwood City. Other local facilities that accept FOG from outside their service areas include the East Bay Municipal Utility District (EBMUD) in Oakland and the City of Watsonville Wastewater Treatment Facility.

Kitchen BMP Requirements: Kitchen BMP activities are observed and related questions are asked during inspections of FSEs. All FSEs receive BMP documents regarding FOG reduction, and the BMPs are published in multiple languages.

Residential Program: The Compliance Inspection Group previously conducted surveys and inspections of residential complexes located in FOG “hot spots,” as identified by WW Collections. These facilities receive information on BMPs, and their effectiveness will be monitored.

Education and Outreach: The Environmental Programs Specialist works with the Compliance Inspection Group in selecting and distributing both FSE and residential complex BMPs related to FOG reduction. In addition, FOG outreach regularly occurs as articles in City newsletters, social media, newspapers, and utility bill inserts.

ELEMENT 8. SYSTEM EVALUATION, CAPACITY ASSURANCE, AND CAPITAL IMPROVEMENTS

This section outlines the City's programs and activities to ensure adequate capacity of all facilities by evaluating the condition of the system as well as the hydraulic capacity.

General Order, Attachment D – Sanitary Sewer Management Plan Required Elements

8. SYSTEM EVALUATION, CAPACITY ASSURANCE AND CAPITAL IMPROVEMENTS

The Plan must include procedures and activities for:

- *Routine evaluation and assessment of system conditions;*
- *Capacity assessment and design criteria;*
- *Prioritization of corrective actions; and*
- *A capital improvement plan.*

8.1 System Evaluation and Condition Assessment

The Plan must include procedures to:

- *Evaluate the sanitary sewer system assets utilizing the best practices and technologies available;*
- *Identify and justify the amount (percentage) of its system for its condition to be assessed each year;*
- *Prioritize the condition assessment of system areas that:*
  - *Hold a high level of environmental consequences if vulnerable to collapse, failure, blockage, capacity issues, or other system deficiencies;*
  - *Are located in or within the vicinity of surface waters, steep terrain, high groundwater elevations, and environmentally sensitive areas;*
  - *Are within the vicinity of a receiving water with a bacterial-related impairment on the most current Clean Water Act section 303(d) List;*
- *Assess the system conditions using visual observations, video surveillance and/or other comparable system inspection methods;*
- *Utilize observations/evidence of system conditions that may contribute to exiting of sewage from the system which can reasonably be expected to discharge into a water of the State;*
- *Maintain documents and recordkeeping of system evaluation and condition assessment inspections and activities; and*
- *Identify system assets vulnerable to direct and indirect impacts of climate change, including but not limited to: sea level rise; flooding and/or erosion due to increased storm volumes, frequency, and/or intensity; wildfires; and increased power disruptions.*

8.2 Capacity Assessment and Design Criteria

The Plan must include procedures to identify system components that are experiencing or contributing to spills caused by hydraulic deficiency and/or limited capacity, including procedures to identify the appropriate hydraulic capacity of key system elements for:

- *Dry-weather peak flow conditions that cause or contributes to spill events;*
- *The appropriate design storm(s) or wet weather events that causes or contributes to spill events;*
- *The capacity of key system components; and*
- *Identify the major sources that contribute to the peak flows associated with sewer spills.*

The capacity assessment must consider:

- *Data from existing system condition assessments, system inspections, system audits, spill history, and other available information;*
- *Capacity of flood-prone systems subject to increased infiltration and inflow, under normal local and regional storm conditions;*
- *Capacity of systems subject to increased infiltration and inflow due to larger and/or higher-intensity storm events as a result of climate change;*

- *Increases of erosive forces in canyons and streams near underground and above- ground system components due to larger and/or higher-intensity storm events;*
- *Capacity of major system elements to accommodate dry weather peak flow conditions, and updated design storm and wet weather events; and*
- *Necessary redundancy in pumping and storage capacities.*

8.3 Prioritization of Corrective Action

The findings of the condition assessments and capacity assessments must be used to prioritize corrective actions. Prioritization must consider the severity of the consequences of potential spills.

8.4 Capital Improvement Plan

The capital improvement plan must include the following items:

- *Project schedules including completion dates for all portions of the capital improvement program;*
- *Internal and external project funding sources for each project; and*
- *Joint coordination between operation and maintenance staff, and engineering staff/consultants during planning, design, and construction of capital improvement projects; and Interagency coordination with other impacted utility agencies.*

8.1 System Evaluation and Condition Assessment

The City's system evaluation and condition assessment process is detailed in **Element 4** as part of the preventive O&M program. This includes pipeline CCTV inspections on a ten-year cycle, manhole inspections, pump/lift station inspections and maintenance, and R&R projects developed as a result of these inspections.

8.2 Capacity Assessment and Design Criteria

To fulfill the requirements of **Element 8** of the SSMP, the City conducted a Wastewater Collection System Model Expansion and Capacity Analysis (Capacity Analysis) – included as **Appendix 8A** – which was finalized in December 2022 as an update to the analysis completed in the 2015 WWMP. The objectives of the 2022 Capacity Analysis were:

- To develop wastewater flow projections for the City's sewer service area using up-to-date development and land use information and flow monitoring data;
- Develop an updated hydraulic model of the trunk sewer system;
- Use the model to identify existing capacity deficiencies and future capacity requirements; and
- Develop a capacity improvement plan, including project priorities and planning level estimates of construction and capital costs.

8.3 Prioritization of Corrective Action and Capital Improvement Plan

The CCTV footage and inspection data is used to develop R&R projects based on pipe condition. Pipes with severe defects (rated 4 or 5 on the NASSCO PACP rating scale) are prioritized for rehabilitation. Pipes with multiple severe defects are further analyzed; if there are too many defects and a full manhole-to-manhole replacement is deemed necessary, the pipe is added to a CIP list which goes out for bid every three years.

As part of the 2022 Capacity Analysis, a set of CIP projects was developed based on hydraulic deficiencies identified in the model in both existing and future development scenarios. Details on the prioritization of projects can be found in Section 5.2 of the Capacity Analysis included as **Appendix 8A**.

Since the completion of the Capacity Analysis, the City has developed a 20-year CIP budget projection for sewer capacity enhancement projects. Specific projects were identified, prioritized, and scheduled within the limitations of the budget. The 20-year CIP is reviewed and adjusted on a two-year cycle.

As they are funded by separate accounts, R&R projects based on pipe condition are analyzed and implemented separately from capacity-related hydraulic deficiencies. The current schedule for the City's R&R and capacity enhancement projects is included in the City's annual budget which is approved by City Council. Annual funding is also programmed in the budget to address emergency repairs on an as-needed basis. A listing of the annual budgets and project description for Wastewater System CIP projects from the City's FY 2024/25 approved Budget and Resource Allocation Plan is included as **Appendix 8B**.

THIS PAGE INTENTIONALLY LEFT BLANK

ELEMENT 9. MONITORING, MEASUREMENT, AND PROGRAM MODIFICATIONS

This section of the SSMP outlines the process that the City will follow to evaluate the effectiveness of the SSMP and to identify updates that may be needed for a more effective program.

General Order, Attachment D – Sanitary Sewer Management Plan Required Elements

9. MONITORING, MEASUREMENT AND PROGRAM MODIFICATIONS

The Plan must include an Adaptive Management section that addresses Plan- implementation effectiveness and the steps for necessary Plan improvement, including:

- *Maintaining relevant information, including audit findings, to establish and prioritize appropriate Plan activities;*
- *Monitoring the implementation and measuring the effectiveness of each Plan Element;*
- *Assessing the success of the preventive operation and maintenance activities;*
- *Updating Plan procedures and activities, as appropriate, based on results of monitoring and performance evaluations; and*
- *Identifying and illustrating spill trends, including spill frequency, locations and estimated volumes.*

9.1 Performance Measures

The statistics that the City will use to measure the performance of its wastewater collection system and the effectiveness of its SSMP are:

- Total number of spills;
- Volume of sewage spilled, recovered, and reaching water of the State;
- Locations with multiple spills;
- Number of spills broken down by cause (roots, debris, FOG, pipe structural issues, etc.); and
- Annual pipeline cleaning and inspection lengths (see **Element 4**).

Table 9-1 summarizes the annual statistics for spills over the past ten years. For this period, the City averaged 5.8 spills annually with a high of 11 in 2022, and a low of three in both 2015 and 2016. Though there is fluctuation from year to year, in general, the number of spills has remained relatively low and consistent in both recent years and in the longer-term average. 2021 saw only four spills which is lower than both the recent and longer-term average. The high number of spills in 2022 may be attributed to changes in wastewater discharge patterns and staffing shortages due to COVID-19, preventing the full menu of preventive O&M activities from being implemented. As of 2024, the City has returned to full staff and has resumed all preventive O&M activities.

In addition to these performance measures, the City internally considers additional measurements such as emergency response times to ensure the best response to a spill.

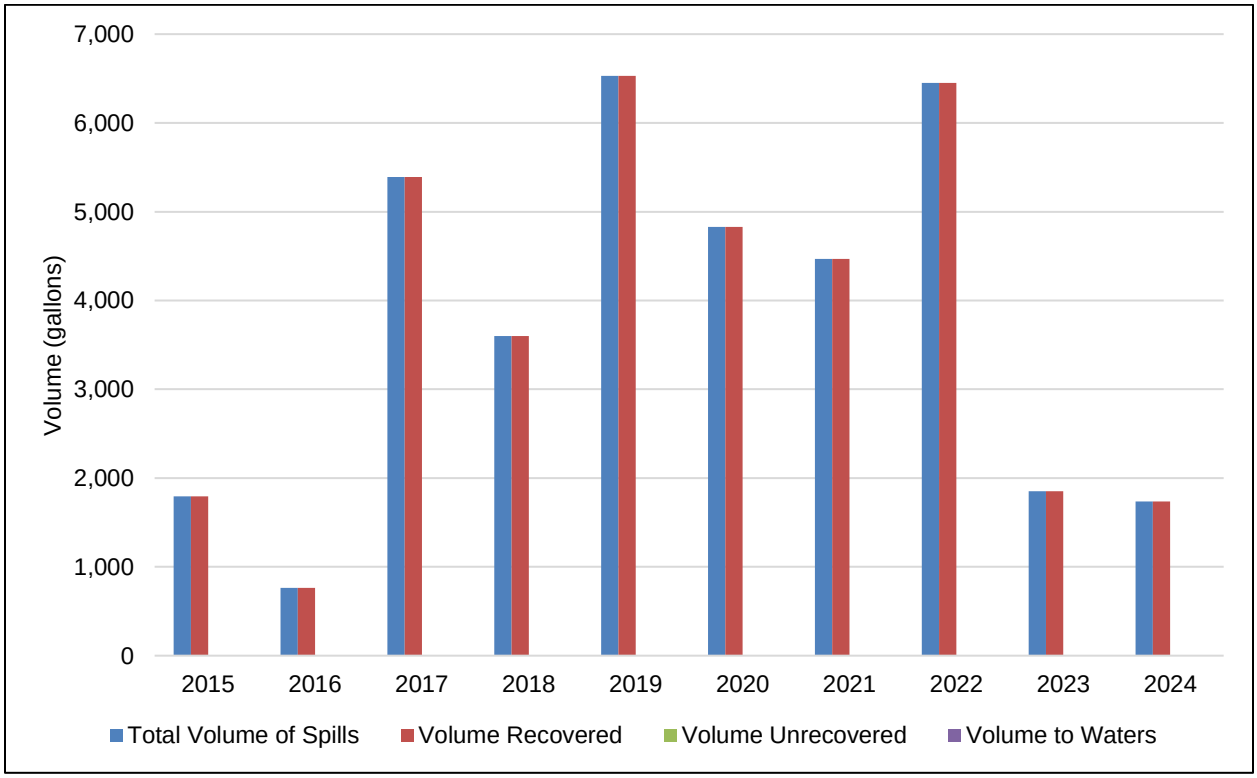
Table 9-1: Annual Spill Statistics

Parameter	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Number of dry weather spills	3	3	6	5	7	6	4	11	7	6
Number of wet weather spills (capacity-related)	0	0	0	0	0	0	0	0	0	0
Total number of spills	3	3	6	5	7	6	4	11	7	6
Number of spills per 100 miles of sewer	1	1	1.9	1.6	2.3	1.9	1.3	3.5	2.3	1.9
Number of spills < 100 gallons	1	2	2	2	2	1	2	6	3	3
Number of spills 100 to 999 gallons	2	1	1	1	2	2	1	2	4	3
Number of spills 1,000 to 9,999 gallons	0	0	3	2	3	3	1	3	0	0
Number of spills > 10,000 gallons	0	0	0	0	0	0	0	0	0	0
Total volume of spills (gallons)	1,795	765	5,390	3,600	6,530	4,829	4,470	6,450	1,851	1,735
Total volume recovered and returned to collection system (gallons)	1,795	765	5,390	3,600	6,530	4,829	4,470	6,450	1,851	1,735
Net volume of spills (total - recovered, gallons)	0	0	0	0	0	0	0	0	0	0
Percent volume recovered (100 x Total volume recovered / Total volume of spills)	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of locations with more than one spill	1	0	0	0	0	1	0	1	0	0

Figure 9-1 provides a visual representation of spills by volumes: total, recovered, and unrecovered. During the five-year period from 2009 to 2013, the total spill volume averaged 12,624 gallons/year and the percentage of spill volume recovered averaged 88%. Since 2015, the total spill volume has decreased substantially to 3,742 gallons/year and the percentage of volume recovered has increased to 100%. The reduction in volume and the increase in overall recovery can be attributed to the programs that the City has implemented as part of the SSMP and speaks to the effectiveness of staff training in spill response and recovery and SSMP programs in general. These changes indicate the success of the City's SSMP in minimizing the number and volume of spills and implementing proper procedures to respond to and contain spills when they do happen.

It is noted that though the number and volume of spills continues to fluctuate from year to year, no spills have been discharged to surface waters since 2012, and no volume has been unrecovered since 2013.

Figure 9-1: Spills by Volume

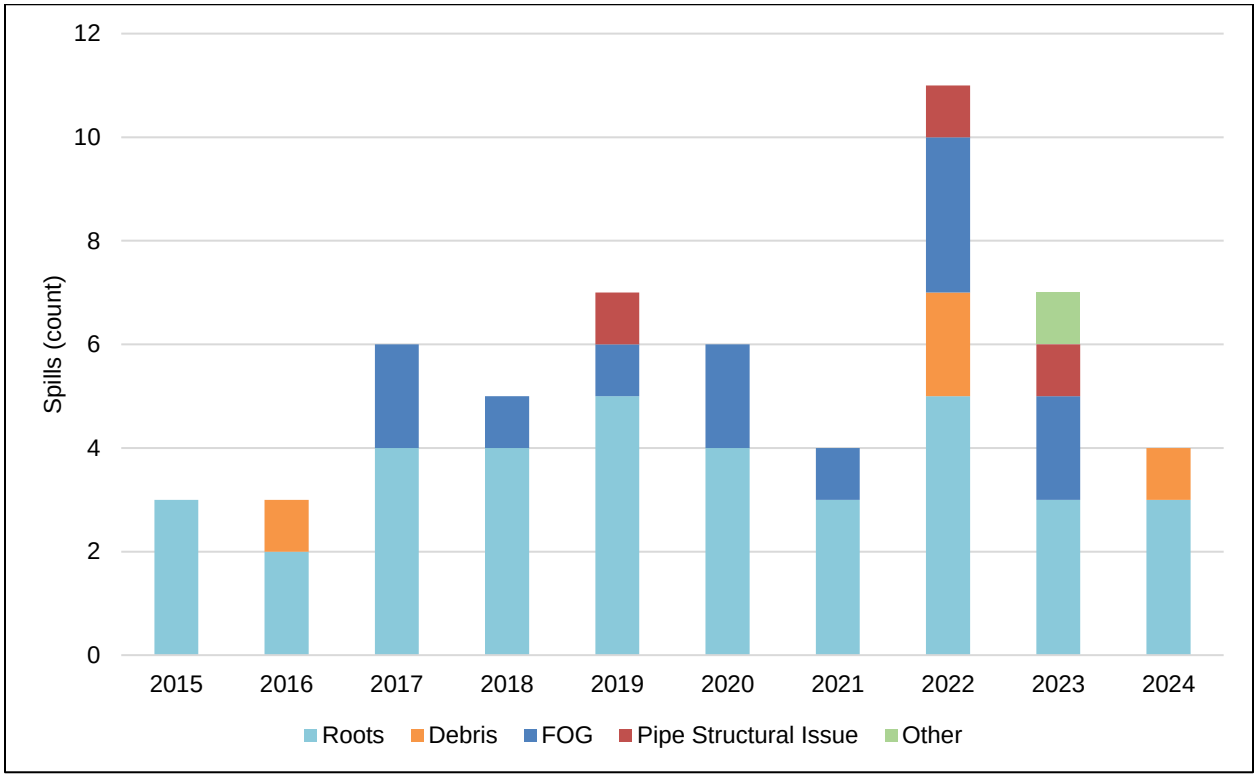


The cause of all spills over the past ten years is summarized in **Table 9-2** and **Figure 9-2**. Roots are the most common cause of spills for all years. The City implements regular maintenance of the collection system and deploys both chemical and mechanical methods for addressing root intrusion, as needed.

Table 9-2: Spills by Cause

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	Percent of Total
Roots	3	2	4	4	5	4	3	5	3	3	64%
Debris	0	1	0	0	0	0	0	2	0	1	8%
FOG	0	0	2	1	1	2	1	3	2	2	24%
Pipe Structural Issue	0	0	0	0	1	0	0	1	1	0	4%
Other	0	0	0	0	0	0	0	0	1	0	0
Total Spills	**3**	**3**	**6**	**5**	**7**	**6**	**4**	**11**	**7**	**6**	**100%**

Figure 9-2: Spills by Cause



9.2 Performance Monitoring and Program Changes

The performance measures listed above are used to evaluate the overall performance of the City's wastewater collection system and the effectiveness of its SSMP; these statistics are tracked and evaluated regularly.

The City also evaluates the effectiveness of each individual SSMP element using a set of key performance indicators developed as part of the SSMP audit in order to ensure all information in the SSMP is current, all regulatory requirements are satisfied, and programs are effective in

meeting the City's goals for the collection system stated in **Section 1.2**. The primary tool for documenting this evaluation is the SSMP audits completed every three years (see **Element 10**).

Where deficiencies are identified, corrective actions are developed to address the deficiencies and improve the SSMP programs where necessary. All changes/updates to the SSMP are recorded in the SSMP change log. The most recent change log is included as **Appendix 10A**.

Examples of changes that could result from ongoing evaluation include:

- Revisions to frequency of cleaning cycles and/or FSE inspections based on field observations and CCTV inspections;
- Reprioritization of R&R projects based on the results of CCTV inspection, manhole inspections, and/or capacity analyses;
- Implementation of new methods and procedures based on experience developed in-house and from other agencies; and/or
- Increased use of information technology (GIS, GPS, and CMMS) for administrative and field operations.

THIS PAGE INTENTIONALLY LEFT BLANK

ELEMENT 10. INTERNAL AUDITS

This section outlines the City's SSMP auditing program.

General Order, Attachment D – Sanitary Sewer Management Plan Required Elements

10. INTERNAL AUDITS

The Plan shall include internal audit procedures, appropriate to the size and performance of the system, for the Enrollee to comply with section 5.4 (Sewer System Management Plan Audits) of this General Order.

General Order, Section 5.4 – Sanitary Sewer Management Plan Audits

The Enrollee shall conduct an internal audit of its Sewer System Management Plan, and implementation of its Plan, at a minimum frequency of once every three years. The audit must be conducted for the period after the end of the Enrollee's last required audit period. Within six months after the end of the required 3-year audit period, the Legally Responsible Official shall submit an audit report into the online CIWQS Sanitary Sewer System Database per the requirements in section 3.10 (Sewer System Management Plan Audit Reporting Requirements) of Attachment E1 of this General Order.

Audit reports submitted to the CIWQS Sanitary Sewer System Database will be viewable only to Water Boards staff.

The internal audit shall be appropriately scaled to the size of the system(s) and the number of spills. The Enrollee's sewer system operators must be involved in completing the audit. At minimum, the audit must:

- *Evaluate the implementation and effectiveness of the Enrollee's Sewer System Management Plan in preventing spills.*
- *Evaluate the Enrollee's compliance with this General Order.*
- *Identify Sewer System Management Plan deficiencies in addressing ongoing spills and discharges to waters of the State; and*
- *Identify necessary modifications to the Sewer System Management Plan to correct deficiencies.*
- *The Enrollee shall submit a complete audit report that includes:*
- *Audit findings and recommended corrective actions.*
- *A statement that sewer system operators' input on the audit findings has been considered; and*
- *A proposed schedule for the Enrollee to address the identified deficiencies.*

10.1 Audits

The City conducted annual audits of the SSMP from calendar years 2008 through 2011; beginning in 2012, the audits were conducted biennially. The latest audit was submitted October 2024, and in compliance with the new requirements of the General Order, SSMP audits will continue every three years moving forward. The schedule for completing SSMP audits is included in the SSMP implementation and update schedule listed in **Table 1-1**.

SSMP audits are due November of the year following the monitoring period; the monitoring period is the previous three calendar years. Thus, the next audit will evaluate the monitoring period of January 1, 2024 through December 31, 2026 and will be submitted by November 2, 2027. Audits have historically been conducted by the City's Wastewater Operations Manager and/or an outside consultant with the support of the City's Wastewater Collections Supervisor; other parties may be added to future audit teams.

An audit checklist, adapted from a document developed by BACWA and based on the requirements of the General Order is used to evaluate each element of the SSMP. The checklist focuses on evaluating the compliance, implementation, and effectiveness of each element with a

set of questions, each answered with a "Yes/No" response and supported by notes to explain any deficiencies and/or provide supporting context or detail. In addition to the checklist, spill data is provided that provides key performance indicators, accompanied by a discussion to measure/evaluate the overall effectiveness of the SSMP during the monitoring period. Finally, a summary of any deficiencies identified is provided, each with a corresponding corrective action and scheduled completion date.

Per the new requirements of the General Order, the audit is submitted to the online CIWQS Sanitary Sewer System Database. Internally, the Wastewater Operations Manager retains the audit for City records. The audit serves as the primary tool for documenting SSMP effectiveness as described in **Element 9**.

10.2 SSMP Updates

As part of the audit process, City staff will update critical information in the SSMP per any deficiencies identified in the audit. In general, information expected to require regular routine updating (contact lists, performance statistics, Enhanced Frequency Cleaning lists, etc.) is included in the SSMP as appendices or referenced to external documents to facilitate the update process and reduce the frequency that the body of the SSMP will require updating. All updates to the SSMP will be tracked in a Change Log. Consistent with the audit, the Wastewater Operations Manager is responsible for maintenance and updating of the SSMP and the Change Log.

The SSMP will be comprehensively updated every six years moving forward per the new requirements of the General Order, i.e., the next major update will be in 2031. This submittal is included in the SSMP Implementation and Update Schedule provided in **Table 1-1**. Changes made to the SSMP as part of this update are documented in the Change Log located in **Appendix 10A**.

10.3 Annual Reports

General Order, Attachment E1 – Notification, Monitoring, and Reporting and Recordkeeping Requirements,

3.9. Annual Report (Previously termed as Collection System Questionnaire in General Order 2006-0003-DWQ)

All enrollees shall update their previous year's Annual Report, by April 1 of each year after the Effective Date of this General Order, for each calendar year (January 1 through December 31).

The Annual Report must be entered directly into the online CIWQS Sanitary Sewer System Database. The Enrollee's Legally Responsible Official shall certify the Annual Report as instructed in CIWQS;

The Annual Report must address, and update as applicable, the following items:

- *Population served;*
- *Updated sewer system service area boundary map, if service area boundary has changed from original map submitted per section 5.14 (Electronic Sanitary Sewer System Service Area Boundary Map) of this General Order;*
- *Number of system operation and maintenance staff:*
  - *Entry level (less than two years of experience),*
  - *Journey level (greater than two years of experience),*
  - *Supervisory level, and*
  - *Managerial level;*

- *Number of operation and maintenance staff certified as a certified collection system operator by the California Water Environmental Association (CWEA), with:*
  - *Corresponding number of certified collection system operator grade levels (Grade I, II, III, IV, and V);*
- *System information:*
  - *Miles of system gravity and force mains,*
  - *Number of upper and lower service laterals connected to system,*
  - *Estimated number of upper and lower laterals owned and/or operated by the Enrollee,*
  - *Portion of laterals that is Enrollee's responsibility,*
  - *Average age the major components of system infrastructure,*
  - *Number and age of pump stations, and*
  - *Estimated total miles of the system pipeline not accessible for maintenance;*
- *Name and location of the treatment plant(s) receiving sanitary sewer system's waste;*
- *Name of satellite sewer system tributaries;*
- *Number of system's gravity sewer above or underground crossings of water bodies throughout system;*
- *Number of force main (pressurized pipe) above or underground crossings of water bodies throughout system;*
- *Number of siphons used to convey waste throughout the sewer system;*
- *Miles of sewer system cleaned;*
- *Miles of sewer system video inspected, or comparable (i.e., video closed-circuit television or alternative inspection methods);*
- *System Performance Evaluation as specified in section 5.11 (System Performance Analysis) of this General Order;*
- *Major spill causes (for example, root intrusion, grease deposition);*
- *System infrastructure failure points (for example, main, pump station, lateral, etc.);*
- *Ongoing spill investigations; and*
- *Actions taken to address system deficiencies.*

Per the requirements of Section 3.9 of the General Order, the City will also submit an Annual Report by April 1 of each calendar year for the monitoring period of the previous calendar year. This submittal is included in the SSMP Implementation and Update Schedule provided in **Table 1-1**.

THIS PAGE INTENTIONALLY LEFT BLANK

ELEMENT 11. COMMUNICATION PROGRAM

This section of the SSMP outlines the process involved in communicating with interested members of the public regarding the development, implementation, and performance of this plan.

General Order, Attachment D – Sanitary Sewer Management Plan Required Elements

11. COMMUNICATION PROGRAM

The Plan must include procedures for the Enrollee to communicate with:

- *The public for:*
  - *Spills and discharges resulting in closures of public areas, or that enter a source of drinking water, and*
  - *The development, implementation, and update of its Plan, including opportunities for public input to Plan implementation and updates.*
- *Owners/operators of systems that connect into the Enrollee's system, including satellite systems, for:*
  - *System operation, maintenance, and capital improvement-related activities.*

11.1 Communication with the Public

SSMP Development and Updates

The City Council approved the schedule for completion of the first SSMP at its August 27, 2007 Council meeting. In advance, Public Works staff prepared a Report to Council that provided background information including regulatory drivers for SSMP development, SSMP purpose and content, relationship to existing City policy as described in the Wastewater Management Sub-element of the City's General Plan, and the SSMP implementation schedule. The Council report was available to the public through the following channels:

- Posted on the City's official notice bulletin board;
- Posted on the City Council web page;
- Through the City Library and the City Clerk's Office; and
- The Council meeting was open to the public and included a period for public comment.

In May 2009, the City amended the sewer use ordinance to implement additional FOG Program elements as required by the SSMP. The proposed ordinance revisions were also publicly noticed and made available to the public through the same channels listed above.

At the September 11, 2012 Council meeting, City Council approved a revised version of the SSMP; a Report to Council was prepared to advise of the changes to the previous SSMP. The Council report was available to the public through the same channels listed above.

In 2015, an update to the SSMP was conducted in order to comply with the Revised Monitoring and Reporting Program (Order No. WQ 2013-0058-EXEC). City Council approved a revised version of the SSMP at the May 12, 2015 Council meeting. As in 2012, a Report to Council was prepared to advise of the changes including content and format updates which was available to the public through the same channels listed above.

In 2020, another update to the SSMP was conducted per the requirements of the WDRs (Order No. 2006-0003). City Council approved the 2020 SSMP at the May 19, 2020 Council meeting. As done previously, a Report to Council was made available through the same channels as listed above.

Ongoing Communication

Posting of SSMP on City Web Site: The City will post the proposed 2025 SSMP on the City's website during the Council approval process as well as the final SSMP once approved and adopted by Council. The link to the document will be on the ESD, Water and Sewer Services page provided below; this page also includes contact information for reporting spills.

https://www.sunnyvale.ca.gov/homes-streets-and-property/water-and-sewer/sewer

Spill Reporting: The Wastewater Operations Manager is the primary person responsible for reporting spills to Cal OES. Information on individual spills is available to the public through a GIS-based application on the SWRCB web site at:

https://www.waterboards.ca.gov/water_issues/programs/sso/sso_map/sso_pub.shtml

Blockage Control Program: The City operates a Blockage Control Program that regulates the discharge of debris, specifically FOG from commercial FSEs by requiring the installation and maintenance of GRDs and through distribution of BMP information (see **Element 7**). FSE inspections and enforcement are administered through the Pretreatment Program. Control of FOG and debris discharge from residential sources is achieved primarily through education and outreach efforts that communicate a consistent and ongoing message regarding the impacts of FOG and other debris on the collection system, provides information for proper disposal, distributes FOG scrapers, etc. The FOG outreach activities are conducted at community events such as the Health and Safety Fairs, during school presentations, and other venues. The Program also uses the City's newsletters, utility bill inserts, electronic billboards, print newspapers, and social media to communicate a variety of pollution prevention messages, including FOG-related messages.

General Outreach: As previously stated, the City communicates a variety of pollution prevention messages to the public through newsletters, utility bill inserts, electronic billboards, and social media. In addition, the City also participates in regional outreach activities through the BACWA/Association of Bay Area Governments (ABAG)/Bay Area Municipal Stormwater Collaborative (BAMSC) Regional Media Relations Campaign.

11.2 Communication with Connected Systems

The City's wastewater collection system does not contain any tributary or satellite systems that require communication or coordination.

APPENDIX 2

City of Sunnyvale
Sewer System Management Plan
City Staff Responsibility for SSMP Implementation

City Staff Responsibility for SSMP Elements

SSMP Element	Responsible Official	Name	Phone Number	Email Address
1. Goal and Introduction	Wastewater Operations Manager	Winola Cheong	408-730-7763	wcheong@sunnyvale.ca.gov
2. Organization	ESD Director	Ramana Chinnakotla	408-730-7785	rchinnakotla@sunnyvale.ca.gov
3. Legal Authority	ESD Director	Ramana Chinnakotla	408-730-7785	rchinnakotla@sunnyvale.ca.gov
4. Operation and Maintenance Program	Wastewater Operations Manager	Winola Cheong	408-730-7763	wcheong@sunnyvale.ca.gov
5. Design and Performance Provisions	Water and Sewer Systems Division Manager	Mansour Nasser	408-730-7578	mnasser@sunnyvale.ca.gov
6. Spill Emergency Response Plan	Wastewater Operations Manager	Winola Cheong	408-730-7763	wcheong@sunnyvale.ca.gov
7. Sewer Pipe Blockage Control Program	Regulatory Programs Division Manager	Winola Cheongr	408-730-7763	wcheong@sunnyvale.ca.gov
8. System Evaluation, Capacity Assurance, and Capital Improvements	Water and Sewer Systems Division Manager	Mansour Nasser	408-730-7578	mnasser@sunnyvale.ca.gov
9. Monitoring, Measurement, and Program Modifications	Wastewater Operations Manager	Winola Cheong	408-730-7763	wcheong@sunnyvale.ca.gov
10. Internal Audits	Wastewater Operations Manager	Winola Cheong	408-730-7763	wcheong@sunnyvale.ca.gov
11. Communication Program	ESD Director	Ramana Chinnakotla	408-730-7785	rchinnakotla@sunnyvale.ca.gov

APPENDIX 3
City of Sunnyvale
Sewer System Management Plan
Legal Authority

Sunnyvale Municipal Code (SMC) and Other Sources

SMC Section 12.08.010	https://ecode360.com/42717567#42717567
SMC Section 12.12.020	https://ecode360.com/42717575#42717575
SMC Section 12.12.025	https://ecode360.com/42717575#42717592
SMC Section 12.12.026	https://ecode360.com/42717593#42717593
SMC Section 12.12.260	https://ecode360.com/42717575#42717764
SMC Section 12.18.090	https://ecode360.com/42717883#42717883
SMC Chapter 16.24	https://ecode360.com/42720869#42720869
SMC Section 18.08.040 (f)	https://ecode360.com/42728741#42728736
SMC Section 18.12.080(a)	https://ecode360.com/42728804#42728781
SMC Section 18.12.150	https://ecode360.com/42728804#42728804
City Council Policy No. 3.3D.6	https://www.sunnyvale.ca.gov/home/showpublisheddocument/688/637887475110100000
City Std. Specs.	https://www.sunnyvale.ca.gov/business-and-development/planning-and-building/permit-center/design-guidelines-and-standards

APPENDIX 4A

City of Sunnyvale
Sewer System Management Plan
SOP for Sewer Cleaning

(2) Hydro-Jet Cleaning Sanitary Sewer (Main)

1. Background:

The City of Sunnyvale will hydro-flush clean city mains on the city owned sewer.

2. Scope:

This document presents the materials, the procedures to follow, and the safety items to hydro-flush clean sewer mains for the City of Sunnyvale.

3. Materials:

3.1 Hydro-flush Truck
3.2 Manhole hook
3.3 GIS or map data
3.4 Atmosphere Tester (4 Gas Analyzer)
3.5 Debris spoon (clam) and/or forks

4. Procedure:

4.1 Ensure that all personnel are using prescribed personal safety/protective equipment (i.e.; ear protections, safety glasses, safety vest, appropriate foot wear, etc.) prior to beginning any work.
4.2 Ensure that all safety signage and warning devices and traffic control are in place prior to beginning any work.
4.3 Check GIS and/or Sewer Maps for ID numbers, location, and orientation of sewer assets.
4.4 Use atmosphere tester to assure safe gas levels in manhole prior to opening lid.
4.5 Pull manhole lids upstream and downstream.
4.6 Insert jetter hose into tiger tail and into the run of the main.
4.7 Turn on water to jetter and turn up trucks rpm to get proper PSI.
4.8 Run out hose up the main until it gets to next manhole.
4.9 Pull hose back slowly to remove debris.
4.10 Vacuum out all heavy debris out of the base of manhole or use “clam” bucket to remove debris.
4.11 Set lids back on manholes.
4.12 Fill out all associated paperwork making note of work performed and findings.

APPENDIX 4B

City of Sunnyvale
Sewer System Management Plan
SOP for CCTV Inspections

(14) CCTV Inspection Video Sanitary or Storm Sewer Inspection (Main)

1. Background:

The City of Sunnyvale will Video sewer mains on the city owned sewer.

2. Scope:

This document presents the materials, the procedures to follow, and the safety items to video sewer mains.

3. Materials:

3.1 Video truck
3.2 Cable rollers
3.3 Manhole hook
3.4 Atmosphere Tester (4 Gas Analyzer)

4. Procedure:

4.1 Ensure that all personnel are using prescribed personal safety/protective equipment (i.e.; ear protections, safety glasses, safety vest, appropriate foot wear, etc.) prior to beginning any work.
4.2 Ensure that all safety signage and warning devices and traffic control are in place prior to beginning any work.
4.3 Check GIS and/or Sewer Maps for ID numbers, location, and orientation of sewer assets.
4.4 Use atmosphere tester to assure safe gas levels in manhole prior to opening lid.
4.5 Clean main or root cut main prior to video operations if necessary.
4.6 Insert camera into main set and up manhole data in computer.
4.7 Televise from manhole to manhole noting all defects and laterals.
4.8 Replace manhole lids.
4.9 Fill out all associated paperwork making note of work performed and findings.

APPENDIX 4C

City of Sunnyvale
Sewer System Management Plan
2024 Tailgate Schedule for Corp Yard

Tailgate Date	Content
01/10/24	Dial 811 Before You Dig/What's Locating?
01/24/24	Wet Weather Tool Box
02/21/24	AWWA Training Library: Powersaw Safety
03/06/24	Spartan Pro Cast Episode 7: Cabling for Roots 101
03/20/24	MSA Altair 5x Multi-Gas Detector, Hands-on Gas Detector Training
04/03/24	Video - MSA GAS Tech / Ladder Safety
04/17/24	Safety- PPE
04/17/24	Video - AWWA PPE
04/30/24	MSA Gas Tech
05/01/24	Protecting our Waterways- Emma Hinojosa
05/15/24	Video - National Safety Compliance
05/29/24	Timecards (Comp Time) Overview
06/12/24	Video - Compacting Tools
06/26/24	Video - Heat Illness Prevention
07/24/24	Video - Solid Waste / Eye Protection
07/24/24	Recycle Training
08/07/24	Video - Slips trips and falls
08/21/24	AEM Vacuum Excavator Safety Training Video
09/04/24	Video of Wet Weather Safety
12/11/24	Video of rodder tips

APPENDIX 5

City of Sunnyvale
Sewer System Management Plan
City Standards, Details, and Specifications

City of Sunnyvale Single-Family Construction Standards, January 2019:

https://www.sunnyvale.ca.gov/home/showpublisheddocument/1724/637820860109470000

Residential Water/Sewer Pipes, January 2023:

https://www.sunnyvale.ca.gov/home/showpublisheddocument/1758/638440411792370000

Grease Removal Devices, January 2023:

https://www.sunnyvale.ca.gov/home/showpublisheddocument/1490/638121413977400000

City of Sunnyvale Sanitary Sewer Design Guidelines, September 2023:

https://www.sunnyvale.ca.gov/home/showpublisheddocument/1602/638301045915400000

City of Sunnyvale Standard Specifications for Public Works Construction 2006 Edition, Revised June 2019:

https://www.sunnyvale.ca.gov/home/showpublisheddocument/1606/637820851912670000

City of Sunnyvale Standard Details for Public Works Construction 2006 Edition, Revised May 2022:

https://www.sunnyvale.ca.gov/home/showpublisheddocument/1604/638084485284930000

APPENDIX 6

City of Sunnyvale
Sewer System Management Plan
City of Sunnyvale Sanitary Sewer Spill Emergency Response Plan

City of Sunnyvale
Sanitary Sewer Spill Emergency Response Plan

Date: June 4, 2023

Table of Contents

Appendices

1. Introduction

The City of Sunnyvale (City) owns and operates the sanitary sewer system within the City boundary as well as a small area in the City of Cupertino. The system consists of about 310 miles of gravity pipes, 2 miles of pressured pipes (i.e., siphons and force mains), over 7,000 manholes, and five pump stations; a map of the system is included as **Appendix A** of this document. The system is operated and maintained by the Environmental Services Department's (ESD's) Water and Sewer Division (Division); whereas the sewer service laterals are owned by, and therefore the responsibilities of, individual property owners.

Pursuant to the *Statewide Sanitary Sewer Systems General Order 2022-0103-DWQ*, attached herein as **Appendix B**, public entities that own and/or operate one or more sanitary sewer systems, such as the City, are required to update and implement a *Spill Emergency Response Plan (SERP)* within six months of the adoption date of the General Order, which is June 5, 2023. **Table 1** provides a summary of the SERP requirements outlined in Attachment D-6 of the General Order. The City is required to keep the SERP on file internally but is not required to submit it to the State. The City is, however, required to certify that the SERP is up to date in its Annual Report (the next one is due on April 1, 2024), and include it in its Sanitary Sewer Management Plan (the next SSMP is due in June 2026).

Table 1: Required Procedures per Attachment D-6 of General Order 2022-0103-DWQ

No.	Procedure	Section(s)
1	Notify primary responders, appropriate local officials, and appropriate regulatory agencies of a spill in a timely manner;	2, 4
2	Notify other potentially affected entities (for example, health agencies, water suppliers, etc.) of spills that potentially affect public health or reach waters of the State;	2, 4
3	Comply with the notification, monitoring and reporting requirements of [the reissued] General Order, State law and regulations, and applicable Regional Water Board Orders;	4
4	Ensure that appropriate staff and contractors implement the Spill Emergency Response Plan and are appropriately trained;	6
5	Address emergency system operations, traffic control and other necessary response activities;	3
6	Contain a spill and prevent/minimize discharge to waters of the State or any drainage conveyance system;	3
7	Minimize and remediate public health impacts and adverse impacts on beneficial uses of waters of the State;	3
8	Remove sewage from the drainage conveyance system;	3
9	Clean the spill area and drainage conveyance system in a manner that does not inadvertently impact beneficial uses in the receiving waters;	3
10	Implement technologies, practices, equipment, and interagency coordination to expedite spill containment and recovery;	3, 5
11	Implement pre-planned coordination and collaboration with storm drain agencies and other utility agencies/departments prior, during, and after a spill event;	2
12	Conduct post-spill assessments of spill response activities;	3
13	Document and report spill events as required in [the reissued] General Order;	4
14	Annually, review and assess effectiveness of the Spill Emergency Response Plan, and update the Plan as needed.	7

2. Sanitary Sewer Spill Notification Procedures

The City is committed to meeting the spill notification requirements outlined in Attachments E1 and E2 of the General Order. To achieve this goal, the City has implemented several measures, including providing multiple platforms for the general public to report potential sewer spills or surcharges, training a crew of qualified staff (aka responders) to respond to spill incidents, and possessing a fleet of vehicles and large equipment to contain and cleanup spills. The City has also appointed three data submitters and two Legally Responsible Officials (LROs) to ensure spill incidents are promptly reported to the appropriate personnel and agencies. Furthermore, the City also maintains one responder on after-hour standby shifts to make sure spill incidents can be addressed promptly even after hours and retains a list of qualified contractors that could assist with emergency responses and repairs on an as needed basis. The City's responders, data submitters, and LROs responsible for the implementation of the spill notification procedures are identified in **Appendix C** along with their contact information. A list of qualified contractors is included in **Appendix D**.

2.1. Informing Potential Spill Incidents to Responders and Local Officials

The City can be notified of potential sewer spills through multiple venues. Spills can be reported by residents or businesses via the City's Customer Relationship Management (CRM) system, which has a utility services hotline (408-730-7400) as well as an online portal (https://sunnyvale.dynamics365portals.us/utility/). Sewer staff are also trained to identify spills and surcharges during their daily assignments. The City also has a Supervisory Control and Data Acquisition (SCADA) system that sends alarms to staff if an issue is detected at one of the pump stations.

Once notified, responders are required to report to the site and assess the situation. If a spill is confirmed, staff must report the spill to the Wastewater Collections Supervisor (supervisor), secure the spill area, follow protocol to control or halt the cause of the spill, and clean the spill as soon as possible. Detailed procedures on how to control and clean the spill are included in Section 3 of this document.

If industrial toxic substances are involved, any volume must be immediately reported to the Department of Public Safety (DPS) Hazardous Materials Response Team.

The supervisor will notify the LROs of the incident, who will be responsible for notifying applicable City staff about the incident. This includes, but are not limited to, the ESD director, the Water Pollution Control Plant if the spill would impact the plant, the DPS Communications Team if public notices and media correspondences are needed, and ESD's Compliance Inspection group if the spill is determined to be caused by fats, oils, and/or grease (FOG).

2.2. Notifications of Spill Incidents to Regulatory Agencies and Potentially Affected Entities

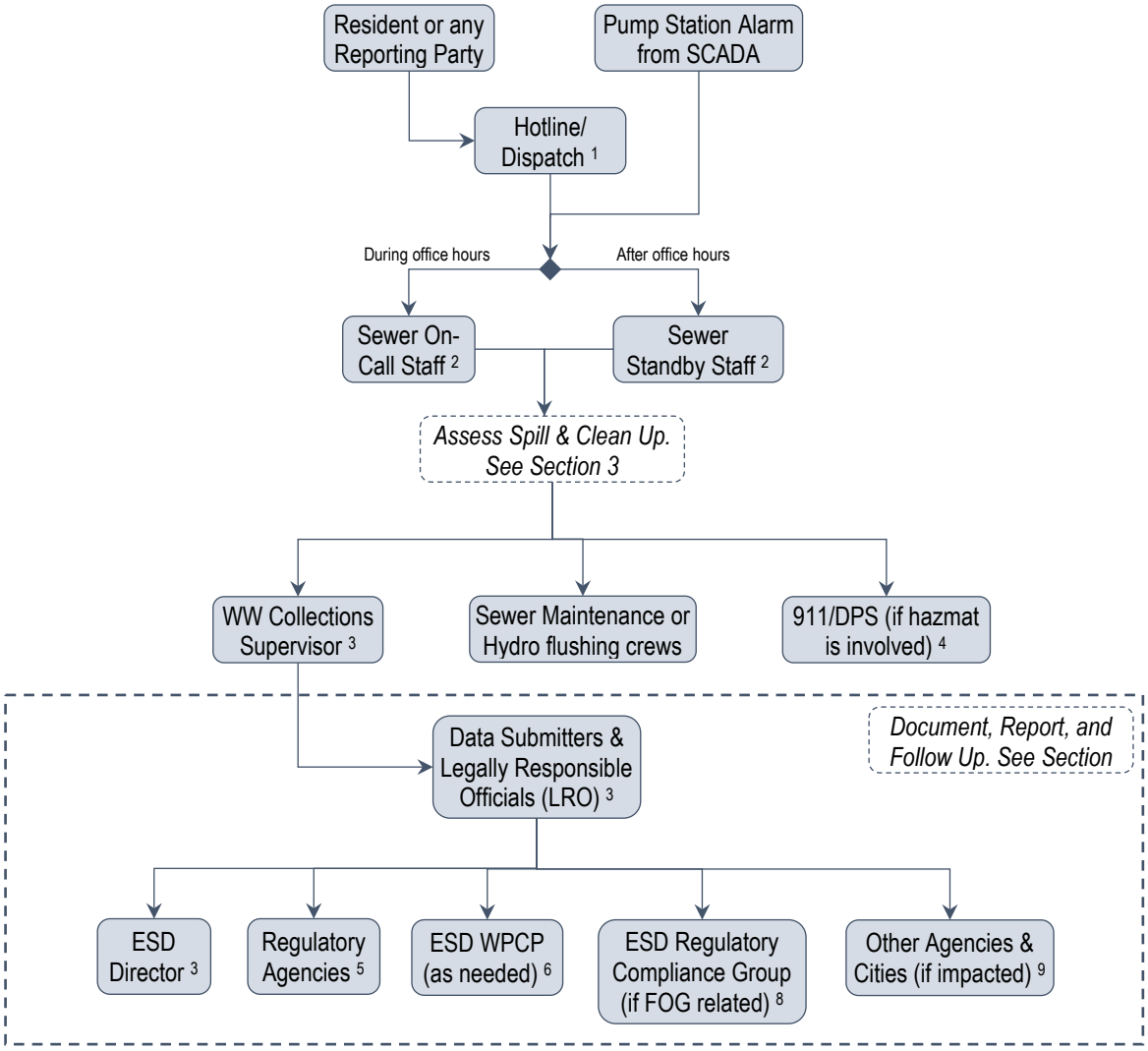
Specific notification and reporting procedures depend on the severity and location of a spill. Detailed procedures are included in Section 4 of this document. In general, the LROs are responsible for reporting all spills using the California Integrated Water Quality System (CIWQS) online platform. Spills greater than or equal to 1,000 gallons that either discharge or threaten to discharge to surface water must also be reported by phone to the California Office of Emergency Services (Cal OES) within two hours of initial knowledge of such incident.

In addition to regulatory agencies, the LROs are also responsible for notifying the following potentially affected entities:

- If spills resulted in a discharge of sewer of any volume to any of the waterways, the LROs will notify the Santa Clara Valley Water District via their Pollution Hotline at 1-888-510-5151.
- Sunnyvale shares borders with the City of Mountain View on the west, the City of Santa Clara on the east, and the City of Cupertino on the south. The crew supervisor maintains a contact list of collection system supervisors of these cities. If a spill is determined to have impacted or have the potential of impacting any of the cities, the supervisor and the LROs will contact these entities to coordinate response efforts.

The City owns and operates the storm drain system within the City boundaries. The storm system is maintained and managed by the same crew, which means the crew has immediate access to the drainage conveyance system and can contain and recover spills immediately without having to coordinate with any external agencies. A flow chart illustrating the chain of communications throughout a spill response procedure is included in **Figure 1**.

Figure 1 – Sanitary Sewer Spill Notification Procedure



1. Customer Relationship Management (CRM) Portal: Utility Services Hotline 408-790-7400; or online at https://sunnyvale.dynamics365portals.us/utility/
2. Sewer on-call and standby staff: 408-859-3559
3. See Appendix C for contact information.
4. If the spill may contain hazardous materials, call 911 immediately and DPS via central hotline (408-790-7400).
5. Regulatory agencies are notified through CIWQS per procedures detailed in Section 4. For a Category 1 spill, LROs must also call the CA Office of Emergency Services at 1-800-852-7550 within 48 hours of the incident.
6. ESD Water Pollution Control Plant: 408-730-7260
7. ESD Regulatory Compliance Group: 408-730-7260
8. The following agencies will be notified depending on the location and impact of a confirmed spill:
    - Santa Clara Valley Water District Pollution Hotline: 1-888-510-5151
    - City of Mountain View Sewer and Storm System Supervisor: 408-903-6270
    - City of Santa Clara Sewer and Storm System Supervisor: 408-752-6046
    - Cupertino: 408-253-7071 (Cupertino Sanitation District for sewer system); 408-777-3200 (City of Cupertino for storm system); or 408-253-7863 (Mark Thomas; CuSD's consultant)
    - City of San Jose Department of Transportation (owner of CSJ's sanitary and storm systems): 408-408-6450

3. Sanitary Sewer Spill Emergency Response Procedure

The sanitary sewer spill emergency response procedures described herein shall be followed for all spills, including those involving discharge from industries into the City's sanitary sewer or storm systems. An abbreviated version of the procedure is included as **Appendix E** and a copy of which will be kept in City vehicles.

3.1. Safety

Whenever qualified City personnel respond to a report of a spill, they may encounter an emergency situation that requires immediate action. The most critical aspect of resolving an incident of this nature is to safely and competently perform the actions necessary to return the system or facility to normal operations as soon as possible in order to minimize public health and environmental impacts.

The most important item to remember during this type of incident is that safe operations always take precedence over expediency or shortcuts. Worker and public safety also take precedence over regulatory notifications and reporting.

Upon arrival at a spill site, the responder will conduct a hazard assessment to determine potential safety hazards, including the possibility that a spill may contain unknown hazardous waste or chemicals. On rare occasions, gasoline and industrial solvents have been found in the sewer system. If a hazard is suspected, the responding field crew should notify DPS Communications immediately and request the DPS Hazardous Materials Response Team to assist.

The LROs should also be notified of a spill as soon as possible. Personnel shall stay clear of any hazards and secure the area from the public.

Depending on the nature or cause of the spill, personnel may be required to remove a mainline blockage with a hydro-flusher, repair a damaged section of pipeline, or wash/clean a City street. At this point, it is essential that all standard safety procedures and/or duties be followed as deemed appropriate.

Typical responses may require personnel to implement the following types of safety procedures:

- Standard personal protective equipment (PPE),
- Confined space entry procedures,
- Traffic control,
- Heavy equipment operation, and/or
- Adequate communication via two-way radio and/or cellular telephone.

In summary, all personnel must diligently adhere to the following safety protocols prior to commencing any work:

(a) Personal Protective Equipment (PPE): Every individual must confirm that they are equipped with the appropriate personal protective gear suitable for their assigned tasks.

(b) Safety Signage and Warning Devices: Prior to initiating any work, personnel must verify that all safety signs and warning devices are correctly installed and operational.

(c) Field Observations and Documentation: Upon arrival at the site, personnel are encouraged to conduct thorough field observations, paying special attention to any spills or hazardous incidents. It is advised to capture photographs or other suitable documentation to ensure proper record-keeping.

3.2. Control the Cause of the Wastewater Spill

(a) Set out absorbent materials (e.g., Spill Shark) to contain the sewage overflow and prevent sewage runoff from entering into the storm system.

(b) Do whatever is necessary to correct the origin of the wastewater spill, or, if the overflow is caused by a stoppage in the sewer collection main, call for assistance and use the hydro-flushing truck to relieve the stoppage immediately.

3.3. Main Line Stoppage and Overflow

(a) Check upstream and downstream manholes to determine between which two manholes the stoppage exists.

(b) Flush or rod from first clear downstream manhole towards stoppage.

(c) Capture and remove all debris if possible. If this cannot be done, check the downstream manholes for any sign of restrictions or the possibility of a second mainline stoppage. Where possible, flush the debris down to a larger main for better access.

(d) Immediately flush the area and wash down manholes and street, contain and remove any solid debris. Wash water is contained and disposed of using the Combo Unit and return to sewer main.

(e) Collect as much of the SSO as possible and dispose back into the sanitary sewer system, estimating how much was captured and placed back into the sanitary sewer system.

(f) Sanitize affected area if necessary.

3.4. Lateral Stoppage

(a) Check upstream and downstream manholes. If clear, stoppage must be in private sewer lateral or building plumbing.

(b) Check lateral and perform curtesy services if deemed safe. If lateral is clear, advise the property owner that the problem is likely in the building's plumbing, and therefore their responsibility to correct.

(c) When the cleanout is buried, inaccessible, non-conforming, or non-existent, the resident should be advised that the main line is clear and it is the responsibility of the property owner to clear the blockage in the private lateral. This may require the owner providing or installing appropriate access to the private sewer lateral for servicing.

(d) If a right-of-way cleanout exists and is accessible, the City may attempt to rod the lateral to the main and clear any stoppage that may exist as a courtesy service. If City staff cannot clear the stoppage, the property owner should be advised that the City lines are clear and it is the responsibility of the property owner to correct the problem in the private plumbing.

(e) If the stoppage or structural defect is in the portion of the lateral in the public right-of-way, the City may repair the line on a discretionary basis.

If City staff cannot resolve a lateral stoppage or structural defect, the City will turn the project over to the property owner and the property owner will have to complete the project at their expense.

3.5. Clean-up and Mitigation

(a) To minimize health hazards to the public and to protect the environment, start cleaning the wastewater spill area as soon as possible.

(b) Inspect the storm drain catch basins to determine whether wastewater has entered the storm system, and to what extent.

(c) Install air plugs or sandbags in storm lines to contain the discharge and/or wash water. Flush the area with water and vacuum up the excess or pump it back into the sanitary sewer collection system.

(d) Remove all debris found in the wastewater spill area by vacuuming the surface area and disposing of the material as appropriate.

(e) Thoroughly inspect and sanitize the spill area before leaving.

3.6. Sampling and Lab Tests

In the event of a spill reaching surface waters or drainage channels that could cause significant impact on water quality, water samples will be collected per steps and requirements outlined in Attachment E1 of the General Order (Appendix B), as long as staff deem it feasible and safe to do so. Specifically, water quality sampling will be conducted within 18 hours of initial knowledge of the spill if an estimated 50,000 gallons or more are discharged into surface waters or drainage channels. Water samples will be collected by the City's Regulatory Programs Division (RPD) Laboratory or Compliance Inspection staff, who are trained in field sampling procedures. Furthermore, samples will be collected in accordance with sections 2.3.2 and 2.3.4 of Attachment E1 of the General Order and be analyzed for constituents specified in section 2.3.3 of the same attachment, and at the City's RPD laboratory, which is an Environmental Laboratory Accreditation Program (ELAP) certified laboratory.

Ideally, samples should be collected at the point of discharge and at upstream and downstream locations. The upstream location should be far enough from the spill to be unaffected by the spill. The appropriate number and location of downstream samples will depend on various factors including spill volume, volume or flow rate of receiving water, sample access, etc. Ideally, a "near field" downstream sample (e.g., 100-ft downstream) and one or more "far field" samples (e.g., 500-ft, 1000-ft) should be collected. If tidal conditions are such that it is unclear as to what is "upstream" and "downstream" from the discharge location, analysis for conductivity may be useful.

Samples should be analyzed for ammonia, dissolved oxygen, and a bacterial indicator, preferably Enterococcus (the Laboratory is set up to perform both Enterococcus and total coliform analyses. The enterococcus analysis is preferred to characterize SSO impacts). Field observations should also be made at each sampling location, including any visual evidence of the spill, presence of odor, or evidence of fish kills. Follow-up sampling should be conducted on successive day(s) (or at other appropriate time intervals). Such sampling is used to document when conditions return to normal, or to establish that downstream levels of ammonia and the bacterial indicator are approximately equal or less than upstream levels, or less than the applicable limits for the appropriate beneficial use. Limits for ammonia are identified in the May 2017 Water Quality Control Plan (Basin Plan) for the San Francisco Bay Basin Plan. Applicable bacteriological limits, which supersede the Basin Plan, are identified in the February 2019 Bacteria Provisions for the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California. The limits are summarized as follows:

- Un-ionized ammonia: 0.4 mg/l as N, south of the Bay Bridge.
- Escherichia coli (E. coli): The bacteria water quality objective for all waters where the salinity is equal to or less than 1 part per thousand (ppth) 95 percent or more of the time during the calendar year is: a six-week rolling geometric mean of E. coli not to exceed 100 colony forming units (cfu) per 100 milliliters (mL), calculated weekly, and a statistical threshold value (STV) of 320 cfu/100 mL not to be exceeded by more than 10 percent of the samples collected in a calendar month, calculated in a static manner.
- *Enterococci*: The bacteria water quality objective for all waters where the salinity is greater than 1 ppth more than 5 percent of the time during the calendar year is: a six-week rolling geometric mean of *Enterococci* not to exceed 30 cfu/100 mL, calculated weekly, with a STV of 110 cfu/100 mL not to be exceeded by more than 10 percent of the samples collected in a calendar month, calculated in a static manner

Field staff will exercise their best judgment in deciding whether to conduct sampling and consult with the crew supervisor and/or the LROs. Water quality sampling should not be given precedence over stopping the spill, worker safety, or protection of public health. However, if sufficient personnel are available, sampling can be conducted in parallel with the clean-up effort.

3.7. Traffic Control during and after Clean-Up (Sign Posting and Barricading)

(a) To limit public interference with clean-up activities or exposure to spills, secure the area with barricades and/or yellow caution tape.

(b) If the spill has entered an open creek, post warning signs and secure the area with barricades and/or yellow

caution tape. Do not remove the signs or barricades until the results of the lab tests show the area to have returned to background levels.

3.8. Recordkeeping and Follow-Up Work

To ensure proper documentation and follow-up work, the responders are required to complete a Spill Response Report (aka "yellow form") for all system blockages resulting in spills or a Surcharge Response Report (aka “green form”) for blockages that do not result in spills. They can be found in **Appendix F** and **Appendix G**, respectively. The completed reports should be submitted to the supervisor and LROs for review and determination of appropriate follow-up work.

After each spill or surcharge incident, a follow-up flushing must be conducted and documented in the City's operation and maintenance (O&M) database. Additionally, the affected pipe segment should be scheduled for CCTV inspections to determine any necessary follow-up work required to maintain the segment in a clear condition. Based on the inspection results, the recommended follow-up work will be scheduled, or the line segment will be added to one of the enhanced frequency cleaning lists, such as the 60-day, 90-day, or semi-annual lists, if needed.

For any mainline blockage that causes property damage, an evaluation will be conducted, and appropriate follow-up work will be scheduled, including spot repairs, structural pipe repairs, root sawing, and root foaming, as determined by CCTV inspections.

Responders and supervisor will also reconvene after each spill incident to evaluate the notification and response procedures, including identifying what worked, what did not work, and what can be improved. A Post-Spill Assessment form is attached in **Appendix H**. Recommended changes will be brought forward to the LROs, who will decide if the changes should be incorporated into future response procedures, at which time the supervisor will update the SOP and the LROs will update the SERP.

All Spill Response Reports, Surcharge Reports, and other related reports will be compiled and maintained in binders and/or a digital O&M database for a period of five (5) years.

4. Sanitary Sewer Spill Regulatory Notifications, Monitoring, Reporting, and Record Keeping

In addition to notifying regulatory agencies and potentially affected entities identified in **Figure 1**, the LROs are also responsible for monitoring and reporting spill incidents according to the category of the spill, which is summarized in **Table 2**. Specific notification, monitoring, reporting, and recordkeeping requirements for each spill category are summarized in **Table 3**. Details of these requirements can be found in Attachment E1 of the General Order, which is attached as Appendix B of this document.

In general, responders will document all spill incidents using the City’s Spill Response Report in **Appendix F**. In the event that the reported incident is determined to be a surcharged manhole but does not result in a spill, the responder will report the incident using the City’s Surcharge Response Report in **Appendix G.**

Once the report is completed, the Wastewater Collection Supervisor is responsible for reviewing and verifying the accuracy of the draft and submitting the final draft to the LROs for approval. Once approved, the Data Submitter will report the incident to the online CIWQS Sanitary Sewer System Database, and the LRO will certify the Spill Report within the timeframe specified in Attachment E1 of the General Order.

Table 2: Spill Categories

Category	Definition
1	A spill of any volume that reach any of the following: • A surface water, including a surface water body that contains no flow or water; • A drainage conveyance system that discharges to surface waters when the spill is *not* fully captured and returned to the sanitary sewer system or disposed of properly unless the drainage conveyance system discharges to a dedicated stormwater infiltration basin or facility. A spill from a City-owned and/or operated lateral that discharges to a surface water is also considered a Category 1 spill.
2	Spills of 1,000 gallons or greater that do *not* discharge to surface waters, including a spill out of a lateral that is caused by a failure of blockage in the sanitary sewer system.
3	Spills of equal or greater than 50 gallons and less than 1,000 gallons that do *not* discharge to surface waters, including spills out of a lateral that is caused by a failure of blockage in the sanitary sewer system.
4	Spills less than 50 gallons that do *not* discharge to surface waters, including a spill out of a lateral that is caused by a failure of blockage in the sanitary sewer system.
N/A	City-owned and/or operated lateral spills that do *not* discharge to surface waters.

Table 2: Summary of Notification, Reporting, Monitoring, and Record Keeping Requirements

Spill Requirements	Due	Reference
Notification	• **Within two (2) hours** of the Enrollee's knowledge of a Category 1 or 2 spill of 1,000 gallons or greater, discharging or threatening to discharge to surface waters, notify the California OES at 1-800-852-7550 and obtain a notification control number. • **Within two (2) hours** of the Enrollee's knowledge of a spill of 1,000 gallons or greater, from an enrollee- owned and/or operated lateral, discharging or threatening to discharge to waters of the State, notify California Office of Emergency Services at 1-800-852-7550 and obtain a notification control number. Not applicable to a spill of less than 1,000 gallons.	Section 1 of Attachment E1 of General Order
Monitoring	• **Category 1:** Conduct spill-specific monitoring; conduct water quality sampling of the receiving water within **18 hours** of initial knowledge of spill of 50,000 gallons or greater to surface waters. • **Category 2, 3, 4:** Conduct spill-specific monitoring. • **Enrollee Owned and/or Operated Lateral Spills:** Conduct visual monitoring.	Section 2 of Attachment E1 of General Order
Reporting	• **Category 1:** Submit Draft Spill Report within three (3) business days of the Enrollee's knowledge of the spill; Submit Certified Spill Report within 15 calendar days of the spill end date; Submit Technical Report within 45 calendar days after the spill end date for a Category 1 spill in which 50,000 gallons or greater discharged to surface waters; and Submit Amended Spill Report within 90 calendar days after the spill end date. • **Category 2:** Submit Draft Spill Report within three (3) business days of the Enrollee's knowledge of the spill; Submit Certified Spill Report within 15 calendar days of the spill end date; and Submit Amended Spill Report within 90 calendar days after the spill end date. • **Category 3:** Submit monthly Certified Spill Report to the online CIWQS Sanitary Sewer System Database within 30 calendars days after the end of the month in which the spills occur; and Submit Amended Spill Reports within 90 calendar days after the Certified Spill Report due date. • **Category 4:** If, during any calendar month, Category 4 spills occur, certify monthly, the estimated total spill volume exiting the sanitary sewer system, and the total number of all Category 4 spills into the online CIWQS Sanitary Sewer System Database, within 30 days after the end of the calendar month in which the spills occurred. Upload and certify a report, in an acceptable digital format (a template is included in **Appendix I**), of all Category 4 spills to CIWQS by February 1st after the end of the calendar year in which the spills occur.	Sections 3 and 4 of Attachment E1 of General Order

Spill Requirements	Due	Reference
	• **Enrollee Owned and/or Operated Lateral Spills:** Upload and certify a report, in an acceptable digital format, of all lateral spills (that do not discharge to a surface water) to the online CIWQS Sanitary Sewer System Database, by February 1st after the end of the calendar year in which the spills occur. Report a lateral spill of any volume that discharges to a surface water as a Category 1 spill.	
Record Keeping	The City will keep the following records on file for five (5) years and will make them available for review by Water Board staff during onsite inspections or through an information request. • **Spill Reports and Surcharge Reports** • **Records of Post-Spill Activities** including records of follow-up flushing, CCTV inspections, and/or repairs. • **Sanitary Sewer Management Plan (SSMP)** implementation, audit, correction, modification, and update records • **Audit Records** pertaining to SSMP audits & other internal audits. • **Equipment Records** containing owned and leased sewer system cleaning, operational, maintenance, construction, and rehabilitation equipment. • **Work Orders** for operations and maintenance projects.	Section 4 of Attachment E1 of General Order

5. Sanitary Sewer Spill Response Equipment and Vehicles

The Division owns and operates a fleet of vehicles and large equipment to handle sanitary sewer spills, as listed in **Table 4**. In addition to these in-house resources, the City also maintains a list of contractors who can be called upon for emergency response in situations where the City does not have sufficient resources, such as staff, vehicles, or equipment, to respond to a spill emergency promptly. Additionally, the City also maintains a list of plumbing contractors that could perform contract work on sewer main or lateral repairs as needed. A list of these contractors is included in **Appendix D**.

Table 4: In-House Vehicles and Large Equipment

Equipment ID	Type	Description	Year	Make	Model
768-4	Vehicle	Dump Truck	2015	Ford	F-650
655-1	Vehicle	Crew Leader Truck	2014	Ford	F-150
631-1	Vehicle	Flushing Truck	2014	Ford	F-450
641-9	Vehicle	On-Call Truck	2022	Ford	F-350
646-6	Vehicle	Construction Truck	2011	Ford	F-350
691-3	Vehicle	Locates Van	2016	Ford	Transit
503-3	Vehicle	VacCon	2011	Freightliner	M2106V
500-3	Vehicle	VacCon	2014	Freightliner	M2106V
518-0	Vehicle	VacCon	2019	Freightliner	114SD
598-4	Vehicle	Backhoe	2010	John Deere	310J
514-0	Vehicle	CCTV Truck	2012	Ford	E-450
590-3	Equipment	Compressor	2011	Ingersoll Rand	P185
301-2	Saw	Concrete Saw	2015	Stihl	TS800
309-2	Generator - Portable	3 KW on Truck 646	2008	Honda	EU3000
368-0	Trailer	Flatbed	2014	Jacobsen	DTB-B-187
552-0	Equipment	Mr. Manhole	2012	Case	TR270
396-0	Trailer	Emergency Response	2013	Pace American	Journey
967-0	Equipment	Skid Flusher on Truck 631	2013	US Jetting	4018-375
341	Generator	3KW on Truck 641	N/A	Honda	E-3000
361-0	Pump	Trash Pump	2013	Wacker Neuson	PT6LT

6. Sanitary Sewer Spill Response Training

An in-house training was provided to the maintenance crew on May 3, 2023, to introduce the reissued General Order and its associated changes in procedures. The following topics were covered:

- Reissued General Order
- Revised spill categories and their corresponding notification, monitoring, and reporting procedures
- Revised Spill Response Report and Surcharge Response Report
- Latest SOP for Spill Response
- This Spill Emergency Response Plan and where to find a copy of it.

The maintenance crew also attended an Overflow Emergency Response training offered by the California Water and Environment Association (CWEA) on May 5, 2023.

On an on-going and regular basis, City provides both in-house and/or external training for the maintenance staff and their supervisor. The training covers topics such as regulatory updates, response procedures, practice drills, and reporting protocols.

- All employees who may have a role in responding to, reporting, and/or mitigating a spill will receive training on an annual basis.
- All new employees will receive in-house training, including practice drills, within 6 months of starting their employment or before being placed in a position where they may have to respond in an independent manner, i.e., without the benefit of being accompanied by an experienced employee.
- Employees are also encouraged to participate in spill response training and exercises offered by CWEA or other agencies, to the extent these opportunities can be accommodated within the Division's workload schedule.
- The records for all scheduled training courses and for each spill emergency response training event or exercise are maintained by the supervisor, and include information on, at a minimum, date, time, place, content, name of trainer(s), and names of attendees.

7. Spill Emergency Response Plan (SERP) Reviews and Updates

The supervisor and LROs will review and update the SERP during the first quarter of every year to confirm and update the following:

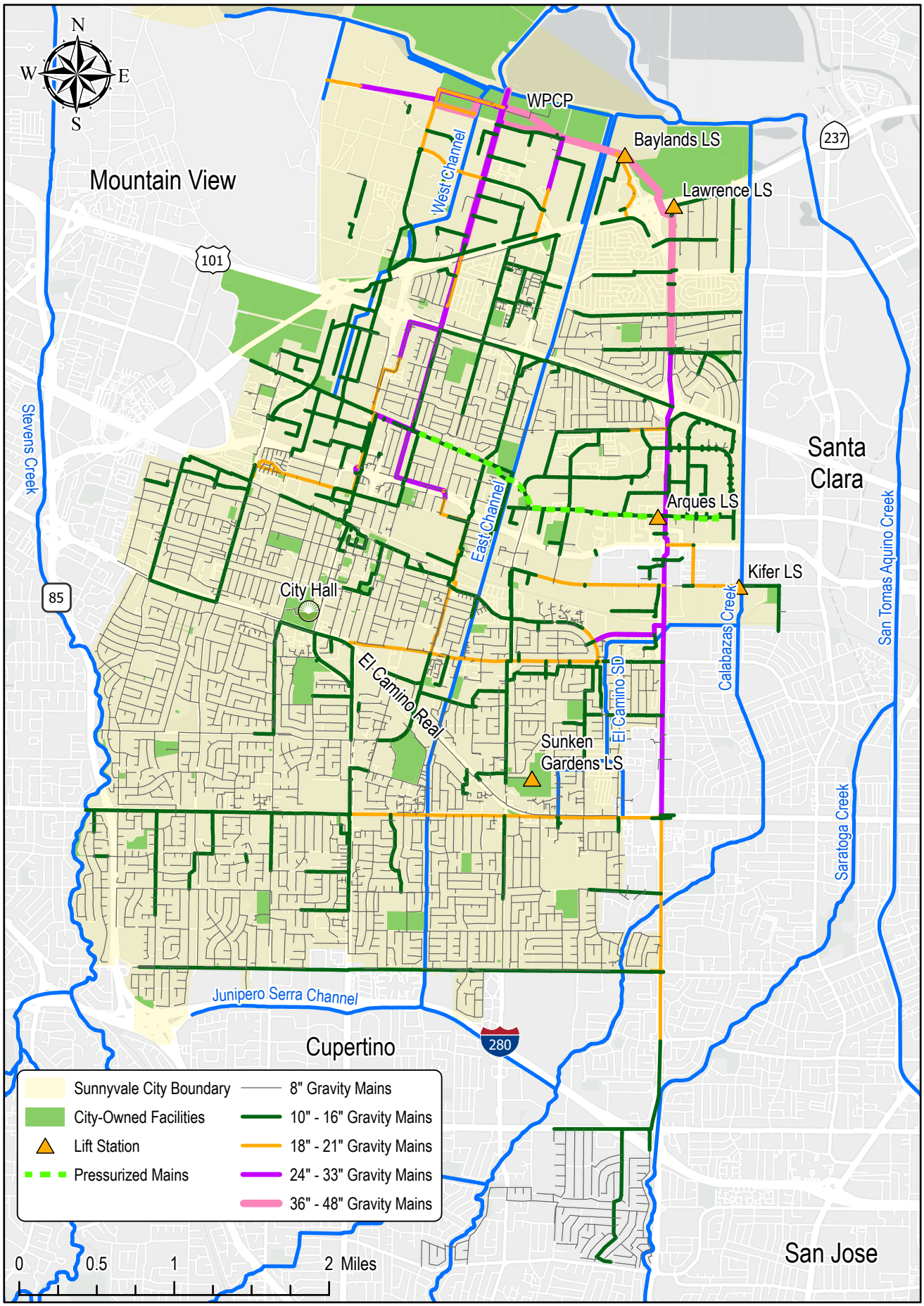
- Names and phone numbers of data submitters and LROs in Appendix C.
- Names and phone numbers of entities involved in the notification process (Figure 1).
- Sanitary sewer system map in Appendix A.
- List of available contractors in Appendix D.
- List of equipment and vehicles in Table 4.
- Response procedures in Section 3 and the latest version of the abbreviated SOP in Appendix E.
- All forms, including the Spill Response Form, Surcharge Response Form, and Post-Spill Assessment Form.
- Check the accuracy and completeness of records of spills, if any, of the previous year.
- Check the accuracy and completeness of records of training for the previous year and identify training needs for the current year.

City of Sunnyvale
Sanitary Sewer Spill Emergency Response Plan

Appendix A

Sanitary Sewer System Map

Appendix A: Sanitary Sewer System Map (June 2023)



City of Sunnyvale
Sanitary Sewer Spill Emergency Response Plan

Appendix B

Statewide Sanitary Sewer Systems General Order 2022-0103-DWQ

STATE WATER RESOURCES CONTROL BOARD
1001 I Street, Sacramento, California 95814
ORDER WQ 2022-0103-DWQ

STATEWIDE WASTE DISCHARGE REQUIREMENTS

GENERAL ORDER FOR SANITARY SEWER SYSTEMS

This Order was adopted by the State Water Resources Control Board on December 6, 2022.
This Order shall become effective **180 days after the Adoption Date of this General Order,** on June 5, 2023. The Enrollee shall comply with the requirements of this Order upon the Effective Date of this General Order.

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

CERTIFICATION

I, Jeanine Townsend, Clerk to the Board, do hereby certify that this Order with all attachments is a full, true, and correct copy of the Order adopted by the State Water Board on December 6, 2022.

AYE:	Chair E. Joaquin Esquivel Vice Chair Dorene D'Adamo Board Member Sean Maguire Board Member Laurel Firestone Board Member Nichole Morgan
NAY:	None
ABSENT:	None
ABSTAIN:	None

Courtney Tyler for
Jeanine Townsend
Clerk to the Board

Table of Contents

Table of Attachments

1. INTRODUCTION

This General Order regulates sanitary sewer systems designed to convey sewage. For the purpose of this Order, a sanitary sewer system includes, but is not limited to, pipes, valves, pump stations, manholes, siphons, wet wells, diversion structures and/or other pertinent infrastructure, upstream of a wastewater treatment plant headworks. A sanitary sewer system includes:

- Laterals owned and/or operated by the Enrollee;
- Satellite sewer systems; and/or
- Temporary conveyance and storage facilities, including but not limited to temporary piping, vaults, construction trenches, wet wells, impoundments, tanks and diversion structures.

Sewage is untreated or partially treated domestic, municipal, commercial and/or industrial waste (including sewage sludge), and any mixture of these wastes with inflow or infiltration of stormwater or groundwater, conveyed in a sanitary sewer system. Sewage contains high levels of suspended solids, non-digested organic waste, pathogenic bacteria, viruses, toxic pollutants, nutrients, oxygen-demanding organic compounds, oils, grease, pharmaceuticals, and other harmful pollutants.

For the purpose of this General Order, a spill is a discharge of sewage from any portion of a sanitary sewer system due to a sanitary sewer system overflow, operational failure, and/or infrastructure failure. Sewage and its associated wastewater spilled from a sanitary sewer system may threaten public health, beneficial uses of waters of the State, and the environment.

This General Order serves as statewide waste discharge requirements and supersedes the previous State Water Resources Control Board (State Water Board) Order 2006-0003-DWQ and amendments thereafter. All sections and attachments of this General Order are enforceable by the State Water Board and Regional Water Quality Control Boards (Regional Water Boards). Through this General Order, the State Water Board requires an Enrollee to:

- Comply with federal and state prohibitions of discharge of sewage to waters of the State, including federal waters of the United States;
- Comply with specifications, and notification, monitoring, reporting and recordkeeping requirements in this General Order that implement the federal Clean Water Act, the California Water Code (Water Code), water quality control plans (including Regional Water Board Basin Plans) and policies;
- Proactively operate and maintain resilient sanitary sewer systems to prevent spills;
- Eliminate discharges of sewage to waters of the State through effective implementation of a Sewer System Management Plan;
- Monitor, track, and analyze spills for ongoing system-specific performance improvements; and
- Report noncompliance with this General Order per reporting requirements.

An Enrollee is a public, private, or other non-governmental entity that has obtained approval for regulatory coverage under this General Order, including:

- A state agency, municipality, special district, or other public entity that owns and/or operates one or more sanitary sewer systems:
  - greater than one (1) mile in length (each individual sanitary sewer system);
  - one (1) mile or less in length where the State Water Board or a Regional Water Board requires regulatory coverage under this Order; or
- A federal agency, private company, or other non-governmental entity that owns and/or operates a sanitary sewer system of any size where the State Water Board or a Regional Water Board requires regulatory coverage under this Order in response to a history of spills, proximity to surface water, or other factors supporting regulatory coverage.

For the purpose of this Order, a sanitary sewer system includes only systems owned and/or operated by the Enrollee.

2. REGULATORY COVERAGE AND APPLICATION REQUIREMENTS

2.1. Requirements for Continuation of Existing Regulatory Coverage

To continue regulatory coverage from previous Order 2006-0003-DWQ under this General Order, **within the 60-days-prior-to the Effective Date of this General Order**, the Legally Responsible Official of an existing Enrollee shall electronically certify the Continuation of Existing Regulatory Coverage form in the online California Integrated Water Quality System (CIWQS) Sanitary Sewer System Database. The Legally Responsible Official will receive an automated CIWQS-issued Notice of Applicability email, confirming continuation of regulatory coverage under this General Order. All regulatory coverage under previous Order 2006-0003-DWQ will cease on the Effective Date of this Order.

An Enrollee continuing existing regulatory coverage is not required to submit a new application package or pay an application fee for enrollment under this General Order. The annual fee due date for continued regulatory coverage from previous Order 2006-0003-DWQ to this General Order remains unchanged.

A previous Enrollee of Order 2006-0003-DWQ that fails to certify the Continuation of Existing Regulatory Coverage form in the online CIWQS database by the Effective Date of this Order is considered a New Applicant, and will not have regulatory coverage for its sanitary sewer system(s) until:

- A new application package for system(s) enrollment is submitted per section 2.2 (Requirements for New Regulatory Coverage) below; and
- The new application package is approved per section 2.2.2 (Approval of Application Package (For New Applicants Only)).

2.2. Requirements for New Regulatory Coverage

No later than 60 days prior to commencing and/or assuming operation and maintenance responsibilities of a sanitary sewer system, a duly authorized representative that

maintains legal authority over the public or private sanitary sewer system is required to enroll under this General Order by submitting a complete application package as specified below and as provided in Attachment B (Application for Enrollment Form) of this General Order.

Unless required by a Regional Water Board, a public agency that owns a combined sewer system subject to the Combined Sewer Overflow Control Policy (33 U.S. Code § 1342(q)), is not required to enroll, under this Order, the portions of its sanitary sewer system(s) that collects combined sanitary wastewater and stormwater.

2.2.1. Application Package Requirements

The Application for Enrollment package for new applicants must include the following items:

- **Application for Enrollment Form**. The form in Attachment B of this General Order must be completed, signed, and certified by a Legally Responsible Official, in accordance with section 5.1 (Designation of a Legally Responsible Official) of this General Order. If an electronic Application for Enrollment form is available at the time of application, a new applicant shall submit its application form electronically; and
- **Application Fee**. A fee payable to the "State Water Resources Control Board" in accordance with the Fee Schedule in the California Code of Regulations, Title 23, section 2200, or subsequent fee regulations updates.

  The application fee for this General Order is based on the sanitary sewer system's threat to water quality and complexity designations of category 2C or 3C, which is assigned based on the population served by the system. The current Fee Schedule for sanitary sewer systems is listed under subdivision (a)(2) at the following website: Fee Schedule (https://www.waterboards.ca.gov/resources/fees/water_quality/).

2.2.2. Approval of Application Package (For New Applicants Only)

The Deputy Director of the State Water Board, Division of Water Quality (Deputy Director) will consider approval of each complete Application for Enrollment package. The Deputy Director will issue a Notice of Applicability letter which serves as approved regulatory coverage for the new Enrollee.

If the submitted application package is not complete in accordance with section 2.2.1 (Application Package Requirements) of this General Order, the Deputy Director will send a response letter to the applicant outlining the application deficiencies. The applicant will have 60 days from the date of the response letter to correct the application deficiencies and submit the identified items necessary to complete the application package to the State Water Board.

2.2.3. Electronic Reporting Account for New Enrollee

Within 30 days after the date of the Approval of Complete Application Package for System Enrollment, a duly authorized representative for the Enrollee shall obtain a CIWQS Sanitary Sewer System Database user account by clicking the "User Registration" button and following the directions on the CIWQS Login Page

(https://ciwqs.waterboards.ca.gov). If additional assistance is needed to establish an online CIWQS user account, contact State Water Board staff by email at CIWQS@waterboards.ca.gov. The online user account will provide the Enrollee secure access to the online CIWQS database for electronic reporting.

2.3. Regulatory Coverage Transfer

Regulatory coverage under this General Order is not transferable to any person or party except after an existing Enrollee submits a written request for a regulatory coverage transfer to the Deputy Director, at least 60 days in advance of any proposed system ownership transfer. The written request must include a written agreement between the existing Enrollee and the new Enrollee containing:

- Acknowledgement that the transfer of ownership is solely of an existing system with an existing waste discharge identification (WDID) number;
- The specific ownership transfer date in which the responsibility and regulatory coverage transfer between the existing Enrollee and the new Enrollee becomes effective; and
- Acknowledgement that the existing Enrollee is liable for violations occurring up to the ownership transfer date and that the new Enrollee is liable for violations occurring on and after the ownership transfer date.

The Deputy Director will consider approval of the written request. If approved, the Deputy Director will issue a Notice of Applicability letter which serves as an approved transfer of regulatory coverage to the new Enrollee.

3. FINDINGS

3.1. Legal Authorities

3.1.1. Federal and State Regulatory Authority

The objective of the Clean Water Act is to restore and maintain the chemical, physical, and biological integrity of the waters of the United States (33 U.S.C. 1251). The Water Code authorizes the State Water Board to implement the Clean Water Act in the State and to protect the quality of all waters of the State (Water Code sections 13000 and 13160).

3.1.2. Discharge of Sewage

A discharge of untreated or partially treated sewage is a discharge of waste as defined in Water Code section 13050(d) that could affect the quality of waters of the State and is subject to regulation by waste discharge requirements issued pursuant to Water Code section 13263 and Chapter 9, Division 3, Title 23 of the California Code of Regulations. A discharge of sewage may pollute and alter the quality of the waters of the State to a degree that unreasonably affects the beneficial uses of the receiving water body or facilities that serve those beneficial uses (Water Code section 13050(l)(1)).

3.1.3 Water Boards Authority to Require Technical Reports, Monitoring, and Reporting

Water Code sections 13267 and 13383 authorize the Regional Water Boards and the State Water Board to establish monitoring, inspection, entry, reporting, and recordkeeping requirements. Water Code section 13267(b), authorizes the Regional Water Boards to "require any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region… or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of water within its region shall furnish, under penalty of perjury, technical or monitoring reports which the regional board requires…In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports and shall identify the evidence that supports requiring that person to provide the reports." Water Code section 13267(f) authorizes the State Water Board to require this information if it consults with the Regional Water Boards and determines that it will not duplicate the efforts of the Regional Water Boards. The State Water Board has consulted with the Regional Water Boards and made this determination.

The technical and monitoring reports required by this General Order and Attachment E (Notification, Monitoring, Reporting and Recordkeeping Requirements) are necessary to evaluate and ensure compliance with this General Order. The effort to develop required technical reports will vary depending on the system size and complexity and the needs of the specific technical report. The burden and cost of these reports are reasonable and consistent with the interest of the state in protecting water quality, which is the primary purpose of requiring the reports.

Water Code section 13383(a) authorizes the Water Boards to "establish monitoring, inspection, entry, reporting, and recordkeeping requirements… for any person who discharges, or proposes to discharge, to navigable waters, any person who introduces pollutants into a publicly owned treatment works, any person who owns or operates, or proposes to own or operate, a publicly owned treatment works or other treatment works treating domestic sewage, or any person who uses or disposes, or proposes to use or dispose, of sewage sludge." Section 13383(b) continues, "the state board or the regional boards may require any person subject to this section to establish and maintain monitoring equipment or methods, including, where appropriate, biological monitoring methods, sample effluent as prescribed, and provide other information as may be reasonably required."

Reporting of spills from privately owned sewer laterals and systems pursuant to section 5.15 (Voluntary Reporting of Spills from Privately-Owned Sewer Laterals and/or Private Sanitary Sewer Systems) of this General Order is authorized by Water Code section 13225(c) and encouraged by the State Water Board, wherein a local agency may investigate and report on any technical factors involved in water quality control provided the burden including costs of such reports bears a reasonable relationship to the need for the report and the benefits to be obtained therefrom. The burden of reporting private spills under section 5.15 (Voluntary Reporting of Spills from Privately-Owned Sewer Laterals and/or Private Sanitary Sewer Systems) is minimal and is outweighed by the benefit of providing Regional Water Boards an opportunity to respond to these spills

when an Enrollee, which in many cases has a contractual relationship with the owner of the private system, has knowledge of the spills.

3.1.4. Water Board Authority to Prescribe General Waste Discharge Requirements

Water Code section 13263(i) provides that the State Water Board may prescribe general waste discharge requirements for a category of discharges if the State Water Board finds or determines that:

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

Since 2006, the State Water Board has been regulating over 1,100 publicly owned sanitary sewer systems (See section 3.1.5 (Previous Statewide General Waste Discharge Requirements) of this General Order). California also has a large unknown number of unregulated privately owned sanitary sewer systems. All waste conveyed in publicly owned and privately owned sanitary sewer systems (as defined in this General Order) is comprised of untreated or partially treated domestic waste and/or industrial waste. Generally, sanitary sewer systems are designed and operated to convey waste by gravity or under pressure; system-specific design elements and system-specific operations do not change the common nature of the waste, the common threat to public health, or the common impacts on water quality. Spills of waste from a sanitary sewer system prior to reaching the ultimate downstream treatment facility are unauthorized and enforceable by the State Water Board and/or a Regional Water Board. Therefore, spills from sanitary sewer systems are more appropriately regulated under general waste discharge requirements.

As specified in Water Code sections 13263(a) and 13241, the implementation of requirements set forth in this Order is for the reasonable protection of past, present, and probable future beneficial uses of water and the prevention of nuisance. The requirements implement the water quality control plans (Basin Plans) for each Regional Water Board and take into account the environmental characteristics of sewer service areas and hydrographic units within the state. Additionally, the State Water Board has considered water quality conditions that could reasonably be achieved through the coordinated control of all factors that affect water quality, costs associated with compliance with these requirements, the need for developing housing within California, and the need to protect sources of drinking water and other water supplies.

3.1.5. Previous Statewide General Waste Discharge Requirements

On May 2, 2006, the State Water Board adopted Order 2006-0003-DWQ serving as Waste Discharge Requirements pursuant to Article 4, Chapter 4, Division 7 of the Water Code (commencing with section 13260) for inadvertent discharges to waters of the State. Order 2006-0003-DWQ prohibited discharges of untreated or partially treated sewage. Order 2006-0003-DWQ also required system-specific management, operation, and maintenance of publicly owned sewer systems greater than one mile in length.

To decrease the impacts on human health and the environment caused by sewage spills, the previous Order required enrollees to develop a rehabilitation and replacement plan that identifies system deficiencies and prioritizes short-term and long-term rehabilitation actions. The previous Order also required enrollees to:

1. Maintain information that can be used to establish and prioritize appropriate Sewer System Management Plan activities; and
2. Implement a proactive approach to reduce spills.

The previous Order required Sewer System Management Plan elements for "the proper and efficient management, operation, and maintenance of sanitary sewer systems, while taking into consideration risk management."

On July 30, 2013, the State Water Board amended General Order 2006-0003-DWQ with Order WQ 2013-0058-EXEC, Amending Monitoring and Reporting Program for Statewide General Waste Discharge Requirements for Sanitary Sewer Systems.

Many enrollees of Order 2006-0003-DWQ have already implemented proactive measures to reduce sewage spills. Other enrollees, however, still need technical assistance and funding to improve sanitary sewer system operation and maintenance for the reduction of sewage spills.

3.1.6. Existing Memorandum of Agreement with California Water Environment Association

The California Water Environment Association is a nonprofit organization dedicated to providing water industry certifications, training, and networking opportunities. The Association's Technical Certification Program provides accredited sanitary sewer system operator certification for collection system operators and maintenance workers.

On February 10, 2016, the State Water Board entered into a collaborative agreement with the Association titled *Memorandum of Agreement Between the California State Water Resources Control Board and the California Water Environment Association - Training Regarding Requirements Set Forth in Statewide General Waste Discharge Requirements for Sanitary Sewer Systems*. The Memorandum sets forth collaborative training necessary for regulated sanitary sewer system personnel to operate and maintain a well operating system and ensure full compliance with statewide sewer system regulations.

On March 15, 2018, the State Water Board and the California Water Environment Association amended the existing Memorandum of Agreement to include collaborative outreach and expand training needs associated with further updates to Water Board regulations for sanitary sewer systems. The State Water Board encourages further Agreement updates as necessary to support improved sewer system operations and the professionalism of collection system operators.

3.2. General

3.2.1. Waters of the State

Waters of the State include any surface water or groundwater, including saline waters, within the boundaries of the state as defined in Water Code section 13050(e), and are inclusive of waters of the United States.

3.2.2. Sanitary Sewer System Spill Threats to Public Health and Beneficial Uses

Sewage contains high levels of suspended solids, pathogenic organisms, toxic pollutants, nutrients, oxygen-demanding organic compounds, oil and grease and other pollutants. Sewage spills may cause a public nuisance, particularly when sewage is discharged to areas with high public exposure such as streets and surface waters used for drinking, irrigation, fishing, recreation, or other public consumption or contact uses.

More specifically, sanitary sewer spills may:

- Adversely affect aquatic life and/or threaten water quality when reaching receiving waters;
- Inadvertently release trash, including plastics;
- Impair the recreational use and aesthetic enjoyment of surface waters by polluting surface water or groundwater;
- Threaten public health through direct public exposure to bacteria, viruses, intestinal parasites, and other microorganisms that can cause serious illness such as gastroenteritis, hepatitis, cryptosporidiosis, and giardiasis;
- Negatively impact ecological receptors and biota within surface waters; and
- Cause nuisance including odors, closure of beaches and recreational areas, and property damage.

Sanitary sewer system spills may pollute receiving waters and threaten beneficial uses of surface water and groundwater. Potentially threatened beneficial uses include, but are not limited to the following (with associated acronym representations as included in statewide water quality control plans and Regional Water Boards' Basin Plans):

- Municipal and Domestic Supply (MUN)
- Water Contact Recreation (REC-1) and Non-Contact Water Recreation (REC-2)
- Cold Freshwater Habitat (COLD)
- Warm Freshwater Habitat (WARM)
- Native American Culture (CUL)
- Wildlife Habitat (WILD)
- Rare, Threatened, or Endangered Species (RARE)
- Spawning, Reproduction, and/or Early Development (SPWN)
- Wetland Habitat (WET)
- Agricultural Supply (AGR)
- Estuarine Habitat (EST)

- Commercial and Sport Fishing (COMM)
- Subsistence Fishing (SUB)
- Tribal Tradition and Culture (CUL)
- Tribal Subsistence Fishing (T-SUB)
- Aquaculture (AQUA)
- Marine Habitat (MAR)
- Preservation of Biological Habitats of Special Significance (BIOL)
- Migration of Aquatic Organisms (MIGR)
- Shellfish Harvesting (SHELL)
- Industrial Process Supply (PROC)
- Industrial Service Supply (IND)
- Hydropower Generation (POW)
- Navigation (NAV)
- Flood Peak Attenuation/Flood Water Storage (FLD)
- Water Quality Enhancement (WQE)
- Fresh Water Replenishment (FRSH)
- Groundwater Recharge (GWR)
- Inland Saline Water Habitat (SAL)

3.2.3. Proactive Sanitary Sewer System Management to Eliminate Spill Causes

Finding 3 of the previous Order, 2006-0003-DWQ, states: “Sanitary sewer systems experience periodic failures resulting in discharges that may affect waters of the state. There are many factors (including factors related to geology, design, construction methods and materials, age of the system, population growth, and system operation and maintenance), which affect the likelihood of an SSO [sanitary sewer overflow]. A proactive approach that requires Enrollees to ensure a system-wide operation, maintenance, and management plan is in place will reduce the number and frequency of SSOs within the state. This approach will in turn decrease the risk to human health and the environment caused by SSOs.”

Many spills are preventable through proactive attention on sanitary sewer system management using the best practices and technologies available to address major causes of spills, including but not limited to:

- Blockages from sources including but not limited to:
  - Fats, oils and grease;
  - Tree roots;
  - Rags, wipes and other paper, cloth and plastic products; and
  - Sediment and debris.
- Sewer system damage and exceedance of sewer system hydraulic capacity from identified system-specific environmental, and climate-change impacts, including but not limited to:

  - Sea level rise impacts including flooding, coastal erosion, seawater intrusion, tidal inundation and submerged lands;
  - Increased surface water flows due to higher intensity rain events;
  - Flooding;
  - Wildfires and wildfire induced impacts;
  - Earthquake induced damage;
  - Landslides; and
  - Subsidence.
- Infrastructure deficiencies and failures, including but not limited to:
  - Pump station mechanical failures;
  - System age;
  - Construction material failures;
  - Manhole cover failures;
  - Structural failures; and
  - Lack of proper operation and maintenance.
- Insufficient system capacity (temporary or sustained), due to factors including but not limited to:
  - Excessive and/or increased storm or groundwater inflow/infiltration;
  - Insufficient capacity due to population increase and/or new connections from industrial, commercial and other system users; and
  - Stormwater capture projects utilizing a sanitary sewer system to convey stormwater to treatment facilities for reuse.
- Community impacts, including but not limited to:
  - Power outages;
  - Vandalism; and
  - Contractor-caused or other third party-caused damages.

3.2.4. Underground Sanitary Sewer System Leakage

Portions of some sanitary sewer systems may leak, causing underground exfiltration (exiting) of sewage from the system. Exfiltrated sewage that remains in the underground infrastructure trench and/or the soil matrix, and that does not discharge into waters of the State (surface water or groundwater) may not threaten beneficial uses.

Underground exfiltrated sewage may threaten beneficial uses if discharged to waters of the State. Exfiltrated sewage that discharges to groundwater may impact beneficial uses of groundwater and pollute groundwater supply. Additionally, if in close proximity, exfiltrated sewage may enter into a compromised underground drainage conveyance system that discharges into a water of the United States, or into groundwater that is hydrologically connected to (feeds into) a water of the United States, thus potentially causing: (1) a Clean Water Act violation, (2) threat and impact to beneficial uses, and/or (3) surface water pollution.

3.2.5. Proactive Sanitary Sewer System Management to Reduce Inflow and Infiltration

Excessive inflow (stormwater entering) and infiltration (groundwater seepage entering) to sanitary sewer systems is preventable through proactive sewer system management using the best practices and technologies available. The efficiency of the downstream wastewater treatment processes is dependent on the performance of the sanitary sewer system. When the structural integrity of a sanitary sewer system deteriorates, high volumes of inflow and infiltration can enter the sewer system. High levels of inflow and infiltration increase the hydraulic load on the downstream treatment plant, which can reduce treatment efficiency, lead to bypassing a portion of the treatment process, cause illegal discharge of partially treated effluent, or in extreme situations make biological treatment facilities inoperable (e.g., wash out the biological organisms that treat the waste).

3.3. Water Quality Control Plans, Policies and Resolutions

The nine Regional Water Boards have adopted region-specific water quality control plans (commonly referred to as Basin Plans) that designate beneficial uses, establish water quality objectives, and contain implementation programs and policies to achieve those objectives. The State Water Board has adopted statewide water quality control plans, policies and resolutions establishing statewide water quality objectives, implementation programs and initiatives.

3.3.1. State Water Board Antidegradation Policy

On October 28, 1968, the State Water Board adopted Resolution 68-16, titled Statement of Policy with Respect to Maintaining High Quality of Waters in California, which incorporates the federal antidegradation policy. Resolution 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings.

The continued prohibition of sewage discharges from sanitary sewer systems into waters of the State aligns with Resolution 68-16. A sewage discharge from sanitary sewers to waters of the State is prohibited by this Order. Therefore, this Order does not allow degradation of waters of the State. In addition, this Order: (1) further expands the existing prohibition of sewage discharges to include waters of the State, in addition to waters of the United States as provided in previous Order 2006-0003-DWQ, and (2) enhances the ability for Water Board enforcement of violations of the established prohibitions.

3.3.2. State Water Board Sources of Drinking Water Policy

On May 19,1988, the State Water Board adopted Resolution 88-63 (amended on February 1, 2006), titled Sources of Drinking Water, establishing state policy that all waters of the State, with certain exceptions, are suitable or potentially suitable for municipal or domestic supply.

3.3.3. State Water Board Cost of Compliance Resolution

On September 24, 2013, the State Water Board adopted Resolution 2013-0029, titled Directing Actions in Response to Efforts by Stakeholders on Reducing Costs of

Compliance While Maintaining Water Quality Protection. Through this resolution, the State Water Board committed to continued stakeholder engagement in identifying and implementing measures to reduce costs of compliance with regulatory orders while maintaining water quality protection and improving regulatory program outcomes.

3.3.4. State Water Board Human Right to Water Resolution

On February 16, 2016, the State Water Board adopted Resolution 2016-0010, titled Adopting the Human Right to Water as a Core Value and Directing its Implementation in Water Board Programs and Activities, addressing the human right to water as a core value and directing Water Board programs to implement requirements to support safe drinking water for all Californians.

On November 16, 2021, the State Water Board adopted Resolution 2021-0050 titled Condemning Racism, Xenophobia, Bigotry, and Racial Injustice, and Strengthening Commitment to Racial Equity, Diversity, Inclusion, Access, and Anti-racism. Among other actions, through Resolution 2021-0050, the State Water Board, in summary as corresponding to this General Order, reaffirms its commitment to its Human Right to Water resolution, upholding that every human being in California deserves safe, clean, affordable, and accessible water for human consumption, cooking, and sanitation purposes. Resolution 2021-0050 provides the State Water Board commitment to:

- Protect public health and beneficial uses of waterbodies in all communities, including communities disproportionately burdened by wastes discharge of waste to land and surface water;
- Restore impaired surface waterbodies and degraded aquifers; and
- Promote multi-benefit water quality projects.

Through Resolution 2021-0050, the State Water Board also commits to expanding implementation of its Climate Change Resolution to address the disproportionate effects of extreme hydrologic conditions and sea-level rise on Black, Indigenous, and people of color communities, prioritizing:

- The right to safe, clean, affordable, and accessible drinking water and sanitation;
- Sustainable management and protection of local groundwater resources;
- Healthy watersheds; and
- Access to surface waterbodies that support subsistence fishing.

On June 7, 2022, the State Water Board adopted a Resolution, titled Authorizing the Executive Director or Designee to Enter into One or More Multi-Year Contracts Up to a Combined Sum of $4,000,000 for a Statewide Wastewater Needs Assessment, supporting the equitable access to sanitation for all Californians and implementation of Resolutions 2016-0010 and 2021-0050.

This General Order supports the State Water Board priority in collecting a comprehensive set of data for California's wastewater systems, including sanitary sewer systems. Data reported per the requirements of this Order will be used with data from other Water Boards' programs, to further develop criteria and create a statewide risk

framework to prioritize critical funding and infrastructure investments for California's most vulnerable populations, including disadvantaged or severely disadvantaged communities with inadequate or failing sanitation systems and threatened access to healthy drinking water supplies.

3.3.5. State Water Board Open Data Resolution

On July 10, 2018, the State Water Board adopted Resolution 2018-0032, titled Adopting Principles of Open Data as a Core Value and Directing Programs and Activities to Implement Strategic Actions to Improve Data Accessibility and Associated Innovation, directing regulatory programs to assure all monitoring and reporting requirements support the State Water Boards' Open Data Initiative.

3.3.6. State Water Board Response to Climate Change

On March 7, 2017, the State Water Board adopted Resolution 2017-0012, titled Comprehensive Response to Climate Change, requiring a proactive response to climate change in all California Water Board actions, with the intent to embed climate change consideration into all programs and activities.

3.4. California Environmental Quality Act

The adoption of this Order is an action to reissue general waste discharge requirements that is exempt from the California Environmental Quality Act (Public Resources Code section 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., Title 14, section 15308). In addition, the action to adopt this Order is exempt from CEQA pursuant to Cal. Code Regs., Title 14, section 15301, to the extent that it applies to existing sanitary sewer collection systems that constitute "existing facilities" as that term is used in sections 15301 and 15302, to the extent that it results in the repair or replacement of existing systems involving negligible or no expansion of capacity.

3.5. State Water Board Funding Assistance for Compliance with Water Board Water Quality Orders

The State Water Board, Division of Financial Assistance administers the implementation of the State Water Board financial assistance programs, per Board-adopted funding policies. Among other funding areas, the Division administers loan and grant funding for the planning and construction of wastewater and water recycling facilities per funding program-specific policies and guidelines. Applicants may apply for Clean Water State Revolving Fund low-interest loan, Small Community Wastewater grant funding assistance, and other funding available at the time of application, for some of the costs associated with complying with this General Order.

Funding applicants may obtain further information regarding current funding opportunities, and Division of Financial Assistance staff contact information at the following website: Financial Assistance Funding - Grants and Loans | California State Water Resources Control Board.
(https://www.waterboards.ca.gov/water_issues/programs/grants_loans/)

Section 13477.6 of the Water Code authorizes the Small Community Grant Fund. The Small Community Grant Fund allows the State Water Board to provide grant funding assistance to small, disadvantaged communities and small severely disadvantaged communities that may not otherwise be able to afford a loan or similar financing for projects to comply with requirements of this General Order. The State Water Board also considers loan forgiveness on a disadvantaged community-specific basis.

For disadvantaged communities' wastewater needs, the State Water Board places priority on the funding of projects that address:

- Public health;
- Violations of waste discharge requirements and National Pollutant Discharge Elimination System (NPDES) permits;
- Providing sewer system service to existing septic tank owners; and
- High priority public health and water quality concerns identified by a Regional Water Board.

3.6. Notification to Interested Parties

On January 31, 2022, the State Water Board notified interested parties and persons of its intent to reissue Sanitary Sewer Systems General Order 2006-0003-DWQ by issuing a draft General Order for a 60-day public comment period. State Water Board staff conducted extensive stakeholder outreach and encouraged public participation in the adoption process for this General Order. On March 15, 2022, the State Water Board held a public meeting to hear and consider oral public comments. The State Water Board considered all public comments prior to adopting this General Order.

THEREFORE, IT IS HEREBY ORDERED, that pursuant to Water Code sections 13263, 13267, and 13383 this General Order supersedes Order 2006-0003-DWQ, Order WQ 2013-0058-EXEC, and any amendments made to these Orders thereafter, except for enforcement purposes and to meet the provisions contained in Division 7 of the Water Code (commencing with section 13000) and regulations adopted thereunder, and the provisions of the Clean Water Act and regulations and guidelines adopted thereunder, the Enrollee shall comply with the requirements in this Order.

4. PROHIBITIONS

4.1 Discharge of Sewage from a Sanitary Sewer System

Any discharge from a sanitary sewer system that has the potential to discharge to surface waters of the State is prohibited unless it is promptly cleaned up and reported as required in this General Order.

4.2. Discharge of Sewage to Waters of the State

Any discharge from a sanitary sewer system, discharged directly or indirectly through a drainage conveyance system or other route, to waters of the State is prohibited.

4.3. Discharge of Sewage Creating a Nuisance

Any discharge from a sanitary sewer system that creates a nuisance or condition of pollution as defined in Water Code section 13050(m) is prohibited.

5. SPECIFICATIONS

5.1. Designation of a Legally Responsible Official

The Enrollee shall designate a Legally Responsible Official that has authority to ensure the enrolled sanitary sewer system(s) complies with this Order, and is authorized to serve as a duly authorized representative. The Legally Responsible Official must have responsibility over management of the Enrollee's entire sanitary sewer system, and must be authorized to make managerial decisions that govern the operation of the sanitary sewer system, including having the explicit or implicit duty of making major capital improvement recommendations to ensure long-term environmental compliance. The Legally Responsible Official must have or have direct authority over individuals that:

- Possess a recognized degree or certificate related to operations and maintenance of sanitary sewer systems, and/or
- Have professional training and experience related to the management of sanitary sewer systems, demonstrated through extensive knowledge, training and experience.

For example, a sewer system superintendent or manager, an operations manager, a public utilities manager or director, or a district engineer may be designated as a Legally Responsible Official.

The Legally Responsible Official shall complete the electronic CIWQS "User Registration" form (https://ciwqs.waterboards.ca.gov/ciwqs/newUser.jsp). A Legally Responsible Official that represents multiple enrolled systems shall complete the electronic CIWQS "User Registration" form for each system.

The Enrollee shall submit any change to its Legally Responsible Official, and/or change in contact information, to the State Water Board within 30 calendar days of the change by emailing ciwqs@waterboards.ca.gov and copying the appropriate Regional Water Board as provided in Attachment F (Regional Water Quality Control Board Contact Information) of this General Order.

5.2. Sewer System Management Plan Development and Implementation

To facilitate adequate local funding and management of its sanitary sewer system(s), the Enrollee shall develop and implement an updated Sewer System Management Plan. The scale and complexity of the Sewer System Management Plan, and specific elements of the Plan, must match the size, scale and complexity of the Enrollee's sanitary sewer system(s). The Sewer System Management Plan must address, at minimum, the required Plan elements in Attachment D (Sewer System Management Plan – Required Elements) of this General Order. To be effective, the Sewer System Management Plan must include procedures for the management, operation, and maintenance of the sanitary sewer system(s). The procedures must: (1) incorporate the

prioritization of system repairs and maintenance to proactively prevent spills, and (2) address the implementation of current standard industry practices through available equipment, technologies, and strategies.

For an existing Enrollee under Order 2006-0003-DWQ that has certified its Continuation of Existing Regulatory Coverage, per section 2.1 (Requirements for Continuation of Existing Regulatory Coverage) of this General Order:

Within six (6) months of the Adoption Date of this General Order:

- The Legally Responsible Official shall upload the Enrollee's existing Sewer System Management Plan to the online CIWQS Sanitary Sewer System Database.

For a new Enrollee:

Within twelve (12) months of the Application for Enrollment approval date:

- The governing entity of the new Enrollee shall approve its Sewer System Management Plan; and
- The Legally Responsible Official shall certify and upload its Sewer System Management Plan to the online CIWQS Sanitary Sewer System Database.

5.3. Certification of Sewer System Management Plan and Plan Updates

The Legally Responsible Official shall certify and upload its Sewer System Management Plan and all subsequent updates to the online CIWQS Sanitary Sewer System Database.

5.4. Sewer System Management Plan Audits

The Enrollee shall conduct an internal audit of its Sewer System Management Plan, and implementation of its Plan, at a minimum frequency of once every three years. The audit must be conducted for the period after the end of the Enrollee's last required audit period. **Within six months after the end of the required 3-year audit period**, the Legally Responsible Official shall submit an audit report into the online CIWQS Sanitary Sewer System Database per the requirements in section 3.10 (Sewer System Management Plan Audit Reporting Requirements) of Attachment E1 of this General Order.

Audit reports submitted to the CIWQS Sanitary Sewer System Database will be viewable only to Water Boards staff.

The internal audit shall be appropriately scaled to the size of the system(s) and the number of spills. The Enrollee's sewer system operators must be involved in completing the audit. At minimum, the audit must:

- Evaluate the implementation and effectiveness of the Enrollee's Sewer System Management Plan in preventing spills;
- Evaluate the Enrollee's compliance with this General Order;
- Identify Sewer System Management Plan deficiencies in addressing ongoing spills and discharges to waters of the State; and

- Identify necessary modifications to the Sewer System Management Plan to correct deficiencies.

The Enrollee shall submit a complete audit report that includes:

- Audit findings and recommended corrective actions;
- A statement that sewer system operators' input on the audit findings has been considered; and
- A proposed schedule for the Enrollee to address the identified deficiencies.

A new Enrollee of this General Order (that did not have a sanitary sewer system enrolled in the previous State Water Board Order 2006-0003-DWQ) shall conduct its first internal Sewer System Management Plan audit for the time period between the date of submittal of its certified Sewer System Management Plan and the third subsequent December 31st date. The audit report must be submitted into the online CIWQS Sanitary Sewer System Database **by July 1 of the following calendar year**.

See the following tables for clarification:

Initial Audit Period and Audit Due Date for New Enrollees

	Audit Period	Audit Due Date
New Enrollee	Certified Sewer System Management Plan Submittal Date through the third subsequent December 31st date	July 1st date after audit period
Example	*Certified Sewer System Management Plan Submittal Date of August 2, 2025* *Audit Period of August 2, 2025 through December 31, 2027*	*July 1, 2028*

Initial Audit Period for Transition from 2-Year Audit Required in Previous Order 2006-0003-DWQ to 3-Year Audit Required in this General Order

	Audit Period	Audit Due Date
An Enrollee previously regulated by Order 2006-003-DWQ	A 3-year period starting from the end of last required 2-year Audit Period	Within six months after end of 3-year Audit Period
Example	*Last required Audit Period start date of August 2, 2021;* *Audit Period of August 2, 2021 through August 1, 2024*	*February 1, 2025*

Three-Year Ongoing Audit Period

	Audit Period	Audit Due Date
Each Enrollee	A 3-year period starting from the end of last required Audit Period	Within six months after end of 3-year Audit Period

5.5. Six-Year Sewer System Management Plan Update

At a minimum, the Enrollee shall update its Sewer System Management Plan every six (6) years after the date of its last Plan Update due date. (For an Enrollee previously regulated by Order 2006-0003-DWQ, the six-year period shall commence on the due date identified in section 3.11 of Attachment E1 (Notification, Monitoring, Reporting and Recordkeeping Requirements) of this Order. The Updated Sewer System Management Plan must include:

- Elements required in Attachment D (Sewer System Management Plan – Required Elements) of this Order;
- Summary of revisions included in the Plan update based on internal audit findings; and
- Other sewer system management-related changes.

The Enrollee's governing entity shall approve the updated Plan. The Legally Responsible Official shall upload and certify the approved updated Plan in the online CIWQS Sanitary Sewer System Database in accordance with section 3.11 (Sewer System Management Plan Reporting Requirements) of Attachment E1 (Notification, Monitoring, Reporting and Recordkeeping Requirements) of this General Order. During the time period in between Plan updates, the Enrollee shall continuously document changes to its Sewer System Management Plan in a change log attached to the Plan.

5.6. System Resilience

The Enrollee shall include and implement system-specific procedures in its Sewer System Management Plan to proactively prioritize: (1) operation and maintenance, (2) condition assessments, and (3) repair and rehabilitation, to address ongoing system resilience, as specified in Attachment D (Sewer System Management Plan – Required Elements) of this General Order.

5.7. Allocation of Resources

The Enrollee shall:

- Establish and maintain a means to manage all necessary revenues and expenditures related to the sanitary sewer system; and
- Allocate the necessary resources to its sewer system management program for:
  - Compliance with this General Order,
  - Full implementation of its updated Sewer System Management Plan,
  - System operation, maintenance, and repair, and
  - Spill responses.

5.8. Designation of Data Submitters

The Legally Responsible Official may designate one or more individuals as a Data Submitter for reporting of spill data. The Legally Responsible Official shall authorize the designation of Data Submitter(s) through the online CIWQS database (https://ciwqs.waterboards.ca.gov) prior to the individuals establishing a CIWQS user account (https://ciwqs.waterboards.ca.gov/ciwqs/newUser.jsp) and entering spill data into the online CIWQS Sanitary Sewer System Database.

The Legally Responsible Official shall submit any change to its Data Submitter(s), and/or change in Data Submitter contact information, to the State Water Board within 30 calendar days of the change, by emailing ciwqs@waterboards.ca.gov and copying the appropriate Regional Water Board as provided in Attachment F (Regional Water Quality Control Board Contact Information) of this General Order.

5.9. Reporting Certification

The Legally Responsible Official shall electronically certify, on the Enrollee's behalf, all applications, reports, the Sewer System Management Plan(s) and corresponding updates, and other information submitted electronically into the online CIWQS Sanitary Sewer System Database, as follows:

"I certify under penalty of perjury under the laws of the State of California that the electronically submitted information was prepared under my direction or supervision. Based on my inquiry of the person(s) directly responsible for gathering the information, to the best of my knowledge and belief, the information submitted is true, accurate, and complete, and complies with the Statewide Sanitary Sewer Systems General Order. I am aware that there are significant penalties for submitting false information."

Hardcopy submittals to the State Water Board must be accompanied by the above certification statement.

5.10. System Capacity

The Enrollee shall maintain the system capacity necessary to convey: (1) base flows during dry weather conditions, and (2) wet weather peak flows consistent with designated local historic storms. Design storms must take into account system-specific stormwater contributions via inflow and infiltration, and location-specific depth of groundwater and storm frequencies. The Enrollee shall implement capital improvements to provide adequate hydraulic capacity to:

- Meet or exceed the design criteria as defined in the Enrollee's System Evaluation and Capacity Assurance element of its Sewer System Management Plan; and
- Prevent system capacity-related spills, and adverse impacts to the treatment efficiency of downstream wastewater treatment facilities.

5.11. System Performance Analysis

The Enrollee shall include a running 10-year system performance analysis in its Annual Report. The analysis must include two CIWQS-generated graphs presenting the following information:

Graph 1 – Total Spill Volume per Year:

X axis: A 10-year period which includes the current calendar year and the nine previous calendar years;

Y axis: The total spill volume, per Spill Category, for each calendar year.

Graph 2 – Total Number of Spills per Year:

X axis: A 10-year period which includes the current calendar year and the nine previous calendar years;

Y axis: The total number of spills, per Spill Category, for each calendar year.

The current calendar year is the calendar year covered in the Annual Report.

The Enrollee shall generate the graphs in CIWQS, using the existing data in the online CIWQS Sanitary Sewer System Database at the following graph generation link: (https://ciwqs.waterboards.ca.gov/ciwqs/readOnly/PublicReportSSOServlet?reportAction=criteria&reportId=sso_operation_report).

5.12. Spill Emergency Response Plan and Remedial Actions

For Existing Enrollees (with regulatory coverage under Order 2006-0003-DWQ):

Within six (6) months of the Adoption Date of this General Order, the Enrollee shall update and implement its Spill Emergency Response Plan, per Attachment D, section 6 (Spill Emergency Response Plan) of this General Order.

For New Enrollees:

Within six (6) months of the Application for Enrollment approval date, the Enrollee shall develop and implement a Spill Emergency Response Plan, per Attachment D, section 6 (Spill Emergency Response Plan) of this General Order.

The Enrollee shall certify, in its Annual Report, that its Spill Emergency Response Plan is up to date.

The Spill Emergency Response Plan shall include measures to protect public health and the environment. The Enrollee shall respond to spills from its system(s) in a timely manner that minimizes water quality impacts and nuisance by:

- Immediately stopping the spill and preventing/minimizing a discharge to waters of the State;
- Intercepting sewage flows to prevent/minimize spill volume discharged into waters of the State;
- Thoroughly recovering, cleaning up and disposing of sewage and wash down water; and
- Cleaning publicly accessible areas while preventing toxic discharges to waters of the State.

5.13. Notification, Monitoring, Reporting and Recordkeeping Requirements

The Enrollee shall comply with notification, monitoring, reporting, and recordkeeping requirements in Attachment E1 of this General Order.

5.13.1. Spill Categories

Individual spill notification, monitoring and reporting must be in accordance with the following spill categories:

- **Category 1 Spill**

  A Category 1 spill is a spill of any volume of sewage from or caused by a sanitary sewer system regulated under this General Order that results in a discharge to:

  - A surface water, including a surface water body that contains no flow or volume of water; or
  - A drainage conveyance system that discharges to surface waters when the sewage is not fully captured and returned to the sanitary sewer system or disposed of properly.

    Any spill volume not recovered from a drainage conveyance system is considered a discharge to surface water, unless the drainage conveyance system discharges to a dedicated stormwater infiltration basin or facility.

A spill from an Enrollee-owned and/or operated lateral that discharges to a surface water is a Category 1 spill; the Enrollee shall report all Category 1 spills per section 3.1 of Attachment E1 (Notification, Monitoring, Reporting and Recordkeeping Requirements) of this General Order.

- **Category 2 Spill**

  A Category 2 spill is a spill of 1,000 gallons or greater, from or caused by a sanitary sewer system regulated under this General Order that does not discharge to a surface water.

  A spill of 1,000 gallons or greater that spills out of a lateral and is caused by a failure or blockage in the sanitary sewer system, is a Category 2 spill.

- **Category 3 Spill**

  A Category 3 spill is a spill of equal to or greater than 50 gallons and less than 1,000 gallons, from or caused by a sanitary sewer system regulated under this General Order that does not discharge to a surface water.

  A spill of equal to or greater than 50 gallons and less than 1,000 gallons, that spills out of a lateral and is caused by a failure or blockage in the sanitary sewer system is a Category 3 spill.

- **Category 4 Spill**

  A Category 4 spill is a spill of less than 50 gallons, from or caused by a sanitary sewer system regulated under this General Order that does not discharge to a surface water.

  A spill of less than 50 gallons that spills out of a lateral and is caused by a failure or blockage in the sanitary sewer system is a Category 4 spill.

5.13.2. Annual Report

The Enrollee shall submit an Annual Report (previously termed as Collection System Questionnaire in Order 2006-0003-DWQ) as specified in section 3.9 (Annual Report) of Attachment E1 (Notification, Monitoring, Reporting and Recordkeeping Requirements) of this General Order.

For new Enrollees: Within 30 days of obtaining a CIWQS account, a new Enrollee shall submit its initial Annual Report, as specified in section 3.9 (Annual Report) of Attachment E1 (Notification, Monitoring, Reporting and Recordkeeping Requirements) of this General Order.

5.14. Electronic Sanitary Sewer System Service Area Boundary Map

For continuing enrollees, starting on July 1, 2025, and no later than December 31, 2025:

For new enrollees – no earlier than July 1, 2025, or within 12 months of the Application for Enrollment approval date, whichever date is later:

The Legally Responsible Official shall submit, to the State Water Board, geospatial data detailing the locations of the Enrollee's sanitary sewer system service area boundary, per the required content and specifications in section 3.8 (Electronic Sanitary Sewer System Service Area Boundary Map) of Attachment E1 of this General Order, for each system identified by a WDID number.

An Enrollee of a disadvantaged community that may need assistance developing an electronic map to comply with this requirement, may contact State Water Board staff for assistance at SanitarySewer@waterboards.ca.gov.

5.15. Voluntary Reporting of Spills from Privately-Owned Sewer Laterals and/or Private Sanitary Sewer Systems

Within 24 hours of becoming aware of a spill (as described below) from a private sewer lateral or private sanitary sewer system that is not owned/operated by the Enrollee, the Enrollee is encouraged to report the following observations to the online CIWQS Sanitary Sewer System Database at the following link: https://ciwqs.waterboards.ca.gov:

- A spill equal or greater than 1,000 gallons that discharges (or has a potential to discharge) to a water of the State, or a drainage conveyance system that discharges to waters of the State; **or**
- Any volume of sewage that discharges (or has a potential to discharge) to surface waters.

In the CIWQS module, the Enrollee is encouraged to identify:

- Time of observation;
- Description of general spill location (for example, street name and cross street names);
- Estimated volume of spill;
- If known, general description of spill destination (for example, flowing into drainage channel, flowing directly into a creek, etc.); and
- If known, name of private system owner/operator.

The CIWQS database will make the name and contact information of the entity voluntarily reporting a private spill, accessible to State and Regional Water Board staff only. The CIWQS database will only make information regarding the actual spill, accessible to the public.

5.16. Voluntary Notification of Spills from Privately-Owned Laterals and/or Systems to the California Office of Emergency Services

Upon observing or acquiring knowledge of any of the following from a private sewer lateral or private sanitary sewer system that is not owned/operated by the Enrollee, the Enrollee is encouraged to notify the California Office of Emergency Services (as provided by Health and Safety Code section 5410 et. seq. and Water Code section 13271), or inform the responsible party that State law requires such notification to the Office of Emergency Services by any person that causes or allows a sewage discharge to waters of the State:

- A spill equal to 1,000 gallons or more that discharges (or has a potential to discharge) to waters of the State, or a drainage conveyance system that discharges to waters of the State; or
- A spill of any volume to surface waters.

5.17. Unintended Failure to Report

If an Enrollee becomes aware that they unintentionally failed to submit relevant facts in any report required in this General Order, the Enrollee shall promptly notify Regional Water Board and State Water Board staff. Regional Water Board contact information is included in Attachment F of this Order. State Water Board staff shall be contacted by email at SanitarySewer@waterboards.ca.gov for assistance in formally amending the corresponding report(s) in the online CIWQS Sanitary Sewer System Database.

5.18. Duty to Report to Water Boards

In accordance with Water Code section 13267 and/or section 13383, upon request by the State Water Board Executive Director (or designee) or a Regional Water Board Executive Officer (or designee), the Enrollee shall provide the requested information which the State or Regional Water Board deems necessary to determine compliance with this General Order.

5.19. Operation and Maintenance

To prevent discharges to the environment, the Enrollee shall maintain in good working order, and operate as designed, any facility or treatment and control system designed to contain sewage and convey it to a treatment plant.

6. PROVISIONS

6.1. Enforcement Provisions

The following enforcement provisions are based on existing federal and state regulations, laws and policies, including the federal Clean Water Act, the state Water Code and the State Water Board Enforcement Policy.

6.1.1. Enforceability of Clean Water Act and Water Code Violations

Noncompliance with requirements of this General Order or discharging sewage without enrolling in this General Order constitutes a violation of the Water Code and a potential

violation of the Clean Water Act and is grounds for an enforcement action by the State Water Board or the applicable Regional Water Board. Failure to comply with the notification, monitoring, inspection, entry, reporting, and recordkeeping requirements may subject the Enrollee to administrative civil liabilities of up to $10,000 a day per violation pursuant to Water Code section 13385; up to $1,000 a day per violation pursuant to Water Code section 13268; or referral to the Attorney General for judicial civil enforcement. Discharging waste not in compliance with the requirements of this General Order or the Clean Water Act may subject the Enrollee to administrative civil liabilities up to $10,000 a day per violation and additional liability up to $10 per gallon of discharge not cleaned up after the first 1,000 gallons of discharge; up to $5,000 a day per violation pursuant to Water Code section 13350 or up to $20 per gallon of waste discharged; or referral to the Attorney General for judicial civil enforcement.

6.1.2. Monetary Penalties

The Water Code provides the State and Regional Water Boards the authority to pursue formal enforcement actions, including imposing administrative liability and civil monetary penalties, for non-compliance with the requirements of this General Order and violations of the Clean Water Act.

6.1.3. Falsifying or Failure to Report

The Water Code provides that any person failing or refusing to furnish technical or monitoring program reports, as required under this General Order, or falsifying any information provided in the technical or monitoring reports is subject to administrative liability and civil monetary penalties. Any person who knowingly fails or refuses to furnish technical or monitoring program reports or falsifies any information provided in reports required by this General Order is subject to criminal penalties.

6.1.4. Severability of General Order

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

6.1.5. Indirect Discharges

In the event that a spill enters into a drainage conveyance system, the Enrollee shall take all feasible steps to prevent discharge of sewage into waters of the State by blocking or redirecting the flow in the drainage conveyance system, removing the sewage from the drainage conveyance system, and cleaning the system in a manner that does not inadvertently impact beneficial uses of the receiving water body.

6.1.6. Water Boards' Considerations for Discretionary Enforcement

Consistent with the State Water Board Enforcement Policy, when considering Water Code section 13327 factors, the State Water Board or a Regional Water Board may consider the Enrollee's efforts to contain, control, clean up, and mitigate spills. In assessing the factors, the State Water Board or the applicable Regional Water Board will consider:

- The Enrollee's compliance with this General Order with a focus on compliance with reporting requirements;
- The Enrollee's provision of adequate funding to implement the requirements of this General Order;
- The Enrollee's compliance with providing a complete and updated Sewer System Management Plan;
- The Enrollee's compliance with implementing its Sewer System Management Plan;
- The overall effectiveness of the Enrollee's Sewer System Management Plan with respect to:
    - System management, operation, and maintenance,
    - Adequate treatment facilities, sanitary sewer system facilities, and/or components with an appropriate design capacity, to reasonably prevent spills (e.g. adequately enlarging treatment or collection facilities to accommodate growth, infiltration and inflow, etc.),
    - Preventive maintenance (including cleaning, root grinding, and fats, oils, and grease control) and source control measures,
    - Implementation of backup equipment,
    - Inflow and infiltration prevention and control,
    - Appropriate sanitary sewer system capacity to prevent spills, and
    - The Enrollee's responsiveness to stop and mitigate the impact of the discharge;
- The Enrollee's compliance with identifying the cause of the spill;
- The Enrollee's use of available information and observations to accurately estimate the spill volume and identify the affected or potentially affected receiving waters;
- The Enrollee's thoroughness of cleaning up sewage in drainage conveyance systems after the spill(s);
- The Enrollee's use of water quality and biological monitoring and assessment to determine the short-term and long-term impacts to beneficial uses and the environment;
- The Enrollee's follow up actions to improve system performance;
- The Enrollee's implementation of feasible alternatives to prevent spills, such as:
    - Use of temporary storage or waste retention,
    - Reduction of system inflow and infiltration,
    - Collection and hauling of waste to a treatment facility,
    - Prevention of and/ or containment of spills due to a design storm event identified in the Enrollee's Sewer System Management Plan,

- Implementation of available equipment, technologies, strategies, and recommended industry practices for maintaining and managing sewer systems to prevent spills, and contain and eliminate discharges to waters of the State; and

- The spill duration and factors beyond the reasonable control of the Enrollee causing the event.

6.1.7. Enforcement Discretion Based on Reporting Compliance

Consistent with the State Water Board Enforcement Policy, the State Water Board or a Regional Water Board may consider the Enrollee's efforts to comply with spill reporting requirements when determining compliance with Water Code section 13267 and section 13383. When assessing Water Code section 13227 factors, the State Water Board or the applicable Regional Water Board will consider:

- The Enrollee's diligence to comply with all reporting requirements in this General Order;
- The use of best available information for the Enrollee's reporting of spill start date and start time in which the release of sewage from the sanitary sewer system initiated;
- The Enrollee's reporting of spill end date, and end time to be the date and time in which the release of sewage from the sanitary sewer system was stopped;
- The Enrollee's diligence to accurately estimate and report spill volumes;
- The Enrollee's subsequent verification and/or updates to initial Draft Spill Reports in accordance with this General Order; and
- The Enrollee's timely certification of required spill reports.

Consistent with Water Code section 13267 and section 13383, the State Water Board or a Regional Water Board may require an Enrollee to report the results of a condition assessment of a specified portion of the Enrollee's sanitary sewer system.

6.2. Other Regional Water Board Orders

It is the intent of the State Water Board that sanitary sewer systems be regulated in a manner consistent with federal and state regulations. This Order will not be interpreted or applied:

- In a manner inconsistent with the federal Clean Water Act;
- To authorize a spill or discharge that is illegal under either the Clean Water Act, the Water Code, and/or an applicable Basin Plan prohibition or water quality standard;
- To prohibit a Regional Water Board from issuing an individual National Pollutant Discharge Elimination System (NPDES) permit or individual waste discharge requirements superseding an Enrollee's regulatory coverage under this General Order for a sanitary sewer system authorized under the Clean Water Act or Water Code;

- To supersede any more specific or more stringent waste discharge requirements or enforcement orders issued by a Regional Water Board; or
- To supersede any more specific or more stringent state or federal requirements in existing regulation, an administrative/judicial order, or Consent Decree.

6.3. Sewer System Management Plan Availability

The Enrollee's updated Sewer System Management Plan must be maintained for public inspection at the Enrollee's offices and facilities and must be available to the public through CIWQS and/or on the Enrollee's website, in accordance with section 3.8 (Sewer System Management Plan Reporting Requirements) of Attachment E1 (Notification, Monitoring, Reporting and Recordkeeping Requirements) of this General Order.

6.4. Entry and Inspection

6.4.1. Entry and Availability of Information

The Enrollee shall allow State and Regional Water Board staff, upon presentation of credentials and other documents as may be required by law, to:

- Enter upon the Enrollee's premises where a regulated facility or activity is located or conducted, or where records are kept under the requirements of this General Order;
- Have access to and reproduce any records required to be maintained by this General Order;
- Inspect any facility and/or equipment (including monitoring and control equipment), practices, or operations required in this General Order; and
- Sample or monitor substances or parameters for assuring compliance with this General Order, or as otherwise authorized by the Water Code.

6.4.2. Pre-Inspection Questionnaire

The Enrollee shall provide pre-inspection information to State and Regional Water Board staff through the completion of a Pre-Inspection Questionnaire provided by Water Board staff.

ATTACHMENT A - DEFINITIONS

Annual Report

An Annual Report (previously termed as Collection System Questionnaire in Order 2006-0003-DWQ) is a mandatory report in which the Enrollee provides a calendar-year update of its efforts to prevent spills.

Basin Plan

A Basin Plan is a water quality control plan specific to a Regional Water Quality Control Board (Regional Water Board), that serves as regulations to: (1) define and designate beneficial uses of surface and groundwaters, (2) establish water quality objectives for protection of beneficial uses, and (3) provide implementation measures.

Beneficial Uses

The term “Beneficial Uses” is a Water Code term, defined as the uses of the waters of the State that may be protected against water quality degradation. Examples of beneficial uses include but are not limited to, municipal, domestic, agricultural and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves.

California Integrated Water Quality System (CIWQS)

CIWQS is the statewide database that provides for mandatory electronic reporting as required in State and Regional Water Board-issued waste discharge requirements.

Data Submitter

A Data Submitter is an individual designated and authorized by the Enrollee’s Legally Responsible Official to enter spill data into the online CIWQS Sanitary Sewer System Database. A Data Submitter does not have the authority of a Legally Responsible Official to certify reporting entered into the online CIWQS Sanitary Sewer System Database.

Disadvantaged Community

A disadvantaged community is a community with a median household income of less than eighty percent (80%) of the statewide annual median household income.

For the purpose of this General Order, there is no differentiation between a small and large disadvantaged community.

Drainage Conveyance System

A drainage conveyance system is a publicly- or privately-owned separate storm sewer system, including but not limited to drainage canals, channels, pipelines, pump stations, detention basins, infiltration basins/facilities, or other facilities constructed to transport stormwater and non-stormwater flows.

Enrollee

An Enrollee is a public, private, or other non-governmental entity that has obtained approval for regulatory coverage under this General Order, including:

- A state agency, municipality, special district, or other public entity that owns and/or operates one or more sanitary sewer systems:
  - greater than one (1) mile in length (each individual sanitary sewer system);
  - one mile or less in length where the State Water Resources Control Board or a Regional Water Quality Control Board requires regulatory coverage under this Order, or
- A federal agency, private company, or other non-governmental entity that owns and/or operates a sanitary sewer system of any size where the State Water Resources Control Board or a Regional Water Quality Control Board requires regulatory coverage under this Order in response to a history of spills, proximity to surface water, or other factors supporting regulatory coverage.

Environmentally Sensitive Area

An environmentally sensitive area is a designated agricultural and/or wildlife area identified to need special natural landscape protection due to its wildlife or historical value.

Exfiltration

Exfiltration is the underground exiting of sewage from a sanitary sewer system through cracks, offset or separated joints, or failed infrastructure due to corrosion or other factors.

Flood Control Channel

A flood control channel is a channel used to convey stormwater and non-stormwater flows through and from areas for flood management purposes.

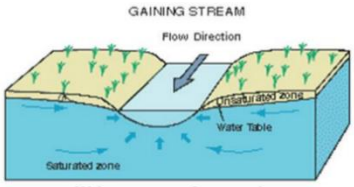
Governing Entity

A governing entity includes but is not limited to the following:

- A publicly elected governing board, council, or commission of a municipal agency;
- A Department or Division director of a federal or state agency that is not governed by a board;
- A governing board or commission of an organization or association; and
- A private system owner/manager that is not governed by a board.

Hydrologically Connected

Two waterbodies are hydrologically connected when one waterbody flows, or has the potential to flow, into the other waterbody. For the purpose of this General Order, groundwater is hydrologically connected to a surface water when the groundwater feeds into the surface water. (The surface waterbody in this example is termed a gaining stream as it gains flow from surrounding groundwater.)



Lateral (including Lower and Upper Lateral)

A lateral is an underground segment of smaller diameter pipe that transports sewage from a customer's building or property (residential, commercial, or industrial) to the Enrollee's main sewer line in a street or easement. Upper and lower lateral boundary definitions are subject to local jurisdictional codes and ordinances, or private system ownership.

A lower lateral is the portion of the lateral located between the sanitary sewer system main, and either the property line, sewer clean out, curb line, established utility easement boundary, or other jurisdictional locations.

An upper lateral is the portion of the lateral from the property line, sewer clean out, curb line, established utility easement boundary, or other jurisdictional locations, to the building or property.

Legally Responsible Official

A Legally Responsible Official is an official representative, designated by the Enrollee, with authority to sign and certify submitted information and documents required by this General Order.

Nuisance

For the purpose of this General Order, a nuisance, as defined in Water Code section 13050(m), is anything that meets all of the following requirements:

- 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;
- Affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal; and
- Occurs during, or as a result of, the treatment or disposal of wastes.

Private Sewer Lateral

A private sewer lateral is the privately-owned lateral that transports sewage from private property(ies) into a sanitary sewer system.

Private Sanitary Sewer System

A private sanitary sewer system is a sanitary sewer system of any size that is owned and/or operated by a private individual, company, corporation, or organization. A private sanitary sewer system may or may not connect into a publicly owned sanitary sewer system.

Potential to Discharge, Potential Discharge

Potential to Discharge, or Potential Discharge, means any exiting of sewage from a sanitary sewer system which can reasonably be expected to discharge into a water of the State based on the size of the sewage spill, proximity to a drainage conveyance system, and the nature of the surrounding environment.

Receiving Water

A receiving water is a water of the State that receives a discharge of waste.

Resilience

Resilience is the ability to recover from or adjust to adversity or change, and grow from disruptions. Resilience can be built through planning, preparing for, mitigating, and adapting to changing conditions.

Sanitary Sewer System

A sanitary sewer system is a system that is designed to convey sewage, including but not limited to, pipes, manholes, pump stations, siphons, wet wells, diversion structures and/or other pertinent infrastructure, upstream of a wastewater treatment plant headworks, including:

- Laterals owned and/or operated by the Enrollee;
- Satellite sewer systems; and/or
- Temporary conveyance and storage facilities, including but not limited to temporary piping, vaults, construction trenches, wet wells, impoundments, tanks and diversion structures.

For purpose of this Order, sanitary sewer systems include only systems owned and/or operated by the Enrollee.

Satellite Sewer System

A satellite sewer system is a portion of a sanitary sewer system owned or operated by a different owner than the owner of the downstream wastewater treatment facility ultimately treating the sewage.

Sewer System Management Plan

A sewer system management plan is a living document an Enrollee develops and implements to effectively manage its sanitary sewer system(s) in accordance with this General Order.

Sewage

Sewage, and its associated wastewater, is untreated or partially treated domestic, municipal, commercial and/or industrial waste (including sewage sludge), and any mixture of these wastes with inflow or infiltration of stormwater or groundwater, conveyed in a sanitary sewer system.

Spill

A spill is a discharge of sewage from any portion of a sanitary sewer system due to a sanitary sewer system overflow, operational failure, and/or infrastructure failure. Exfiltration of sewage is not considered to be a spill under this General Order if the exfiltrated sewage remains in the subsurface and does not reach a surface water of the State.

Training

Training is in-house or external education and guidance needed that provides the knowledge, skills, and abilities to comply with this General Order.

Wash Down Water

Wash down water is water used to clean a spill area.

Waste

Waste, as defined in Water Code section 13050(d), includes sewage and any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, or from any producing, manufacturing, or processing operation, including waste placed within containers of whatever nature prior to, and for purposes of, disposal.

Waste Discharge Identification Number (WDID)

A waste discharge identification number (WDID) identifies each individual sanitary sewer system enrolled under this General Order. A WDID number is assigned to each enrolled system upon an Enrollee's approved regulatory coverage.

Waters of the State

Waters of the State are surface waters or groundwater within boundaries of the state as defined in Water Code section 13050(e), in which the State and Regional Water Boards have authority to protect beneficial uses. Waters of the State include, but are not limited to, groundwater aquifers, surface waters, saline waters, natural washes and pools, wetlands, sloughs, and estuaries, regardless of flow or whether water exists during dry conditions. Waters of the State include waters of the United States.

Waters of the United States

Waters of the United States are surface waters or waterbodies that are subject to federal jurisdiction in accordance with the Clean Water Act.

Water Quality Objective

A water quality objective is the limit or maximum amount of pollutant, waste constituent or characteristic, or parameter level established in statewide water quality control plans and Regional Water Boards' Basin Plans, for the reasonable protection of beneficial uses of surface waters and groundwater and the prevention of nuisance.

ATTACHMENT B – APPLICATION FOR ENROLLMENT

1. Enrollment Status: (Mark only one item)

☐ New Enrollee

☐ New Enrollee with previous regulatory coverage under Order 2006-0003-DWQ
(that failed to certify continuation of coverage in CIWQS per Order 2022-XXXX-DWQ)
Existing WDID Number: _____

2. Applicant Information:

Legally Responsible Official Submitting Application

First and Last Name: _____

Title: _____

Phone: _____

Email: _____

System Owner/Operator Name: _____

Mailing Address:_____

City, State, Zip:_____

County:_____

Sanitary Sewer System Name: _____

Regional Water Quality Control Board(s): _____

Signature and Date: _____

3. Applicant Type (Check one):

☐ City ☐ County ☐ State ☐ Federal ☐ Special District

☐ Government Combination ☐ Private ☐ Other Non-governmental Entity

4. Wastewater Treatment Plant Receiving Sanitary Sewer System Waste:

Wastewater Treatment Plant Permittee:_____

WDID No.: _____

5. Billing Information

Billing Address: _____

City, State, Zip: _____

Billing Contact Person and Title: _____

Phone and Email Address: _____

6. Application Fee:

The application fee, as required by Water Code section 13260, is based on the daily population served by the sanitary sewer system. See updated Fee Schedule. (https://www.waterboards.ca.gov/resources/fees/water_quality/)

Check one of the following and enter fee amount:

☐ Population Served < 50,000 – Total Fee submitted: $ _____

☐ Population Served ≥ 50,000 – Total Fee submitted: $ _____

Make the fee payment payable to the State Water Resources Control Board and mail the complete application package to:

State Water Resources Control Board, Accounting Office
P. O. Box 1888
Sacramento, CA 95812-1888

Attention: Statewide Sanitary Sewer System Program

7. Application Submittal Certification

I certify under penalty of perjury under the laws of the State of California that to the best of my knowledge and belief, the information in the submitted application package is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment.

Print Name: _____

Title: _____

Signature: _____Date: _____

ATTACHMENT C - NOTICE OF TERMINATION

1. Enrollee Information

Enrollee Name: _____

WDID No:_____

Legally Responsible Official Requesting Termination of Coverage: _____

First and Last Name: _____

Title: _____

Phone: _____

Email: _____

Mailing Address: _____

City, State, Zip: _____

County: _____

Sanitary Sewer System Name(s) or Unique Identifier(s): _____

Regional Water Quality Control Board(s): _____

Signature and Date:_____

2. Basis of Termination

Explanation of termination, including subsequent regulatory coverage and subsequent owner/operator of enrolled sanitary sewer system, as applicable:

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

3. Regulatory Coverage Termination Certification

I certify under penalty of perjury under the laws of the State of California that to the best of my knowledge: 1) the sanitary sewer system I officially represent is not required to be regulated under the Statewide Waste Discharge Requirements for Sanitary Sewer Systems Order 2022-XXXX-DWQ, and 2) the information submitted in this Notice of Termination is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment. Additionally, I understand that the submittal of this Notice of Termination does not release sanitary sewer system agencies from liability for any violations of the Clean Water Act.

Print Name: _____

Title: _____

Signature: _____Date: _____

For State Water Board Use Only

☐ Approved for Termination ☐ Denied and Returned to Enrollee

Deputy Director of Water Quality Signature: _____

Date: _____Notice of Termination Effective Date: _____

ATTACHMENT D – SEWER SYSTEM MANAGEMENT PLAN – REQUIRED ELEMENTS

Table of Contents

ATTACHMENT D – SEWER SYSTEM MANAGEMENT PLAN – REQUIRED ELEMENTS

A Sewer System Management Plan (Plan) is a living planning document that documents ongoing local sewer system management program activities, procedures, and decision-making – at the scale necessary to address the size and complexity of the subject sanitary sewer system(s). This Plan may incorporate other programs and other plans by reference, to address short-term and long-term system resilience through:

- Proactive planning and decision-making;
- Local government ordinances;
- Updated operations and maintenance activities and procedures;
- Implementation of capital improvements;
- Sufficient local budget to support staff resources, contractors, equipment, and training; and
- Updated training of staff and contractors.

The Enrollee's development, update, and implementation of a Sewer System Management Plan addressing the requirements of this Attachment is an enforceable component of this General Order. As specified in Provision 6.1 (Enforcement Provisions) of this General Order, consistent with the Water Code and the State Water Board Enforcement Policy, the State Water Board or a Regional Water Board may consider the Enrollee's efforts in implementing an effective Sewer System Management Plan to prevent, contain, control, and mitigate spills when considering Water Code section 13327 factors to determine necessary enforcement of this General Order.

This Attachment includes the following required elements that the Enrollee shall address in its Plan and subsequent updates. The Enrollee shall identify any requirement in this Attachment that is not applicable to the Enrollee's sewer system and shall explain in its Plan why the requirement is not applicable.

1. SEWER SYSTEM MANAGEMENT PLAN GOAL AND INTRODUCTION

The goal of the Sewer System Management Plan (Plan) is to provide a plan and schedule to: (1) properly manage, operate, and maintain all parts of the Enrollee's sanitary sewer system(s), (2) reduce and prevent spills, and (3) contain and mitigate spills that do occur.

The Plan must include a narrative Introduction section that discusses the following items:

1.1. Regulatory Context

The Plan Introduction section must provide a general description of the local sewer system management program and discuss Plan implementation and updates.

1.2. Sewer System Management Plan Update Schedule

The Plan Introduction section must include a schedule for the Enrollee to update the Plan, including the schedule for conducting internal audits. The schedule must include milestones for incorporation of activities addressing prevention of sewer spills.

1.3. Sewer System Asset Overview

The Plan Introduction section must provide a description of the Enrollee-owned assets and service area, including but not limited to:

- Location, including county(ies);
- Service area boundary;
- Population and community served;
- System size, including total length in miles, length of gravity mainlines, length of pressurized (force) mains, and number of pump stations and siphons;
- Structures diverting stormwater to the sewer system;
- Data management systems;
- Sewer system ownership and operation responsibilities between Enrollee and private entities for upper and lower sewer laterals;
- Estimated number or percent of residential, commercial, and industrial service connections; and
- Unique service boundary conditions and challenge(s).

Additionally, the Plan Introduction section must provide reference to the Enrollee's up-to-date map of its sanitary sewer system, as required in section 4.1 (Updated Map of Sanitary Sewer System) of this Attachment.

2. ORGANIZATION

The Plan must identify organizational staffing responsible and integral for implementing the local Sewer System Management Plan through an organization chart or similar narrative documentation that includes:

- The name of the Legally Responsible Official as required in section 5.1 (Designation of a Legally Responsible Official) of this General Order;
- The position titles, telephone numbers, and email addresses for management, administrative, and maintenance positions responsible for implementing specific Sewer System Management Plan elements;
- Organizational lines of authority; and
- Chain of communication for reporting spills from receipt of complaint or other information, including the person responsible for reporting spills to the State and Regional Water Boards and other agencies, as applicable. (For example, county

health officer, county environmental health agency, and State Office of Emergency Services.)

3. LEGAL AUTHORITY

The Plan must include copies or an electronic link to the Enrollee's current sewer system use ordinances, service agreements and/or other legally binding procedures to demonstrate the Enrollee possesses the necessary legal authority to:

- Prevent illicit discharges into its sanitary sewer system from inflow and infiltration (I&I); unauthorized stormwater; chemical dumping; unauthorized debris; roots; fats, oils, and grease; and trash, including rags and other debris that may cause blockages;
- Collaborate with storm sewer agencies to coordinate emergency spill responses, ensure access to storm sewer systems during spill events, and prevent unintentional cross connections of sanitary sewer infrastructure to storm sewer infrastructure;
- Require that sewer system components and connections be properly designed and constructed;
- Ensure access for maintenance, inspection, and/or repairs for portions of the service lateral owned and/or operated by the Enrollee;
- Enforce any violation of its sewer ordinances, service agreements, or other legally binding procedures; and
- Obtain easement accessibility agreements for locations requiring sewer system operations and maintenance, as applicable.

4. OPERATION AND MAINTENANCE PROGRAM

The Plan must include the items listed below that are appropriate and applicable to the Enrollee's system.

4.1. Updated Map of Sanitary Sewer System

An up-to-date map(s) of the sanitary sewer system, and procedures for maintaining and providing State and Regional Water Board staff access to the map(s). The map(s) must show gravity line segments and manholes, pumping facilities, pressure pipes and valves, and applicable stormwater conveyance facilities within the sewer system service area boundaries.

4.2. Preventive Operation and Maintenance Activities

A scheduling system and a data collection system for preventive operation and maintenance activities conducted by staff and contractors.

The scheduling system must include:

- Inspection and maintenance activities;

- Higher-frequency inspections and maintenance of known problem areas, including areas with tree root problems;
- Regular visual and closed-circuit television (CCTV) inspections of manholes and sewer pipes.

The data collection system must document data from system inspection and maintenance activities, including system areas/components prone to root-intrusion potentially resulting in system backup and/or failure.

4.3. Training

In-house and external training provided on a regular basis for sanitary sewer system operations and maintenance staff and contractors. The training must cover:

- The requirements of this General Order;
- The Enrollee's Spill Emergency Response Plan procedures and practice drills;
- Skilled estimation of spill volume for field operators; and
- Electronic CIWQS reporting procedures for staff submitting data.

4.4. Equipment Inventory

An inventory of sewer system equipment, including the identification of critical replacement and spare parts.

5. DESIGN AND PERFORMANCE PROVISIONS

The Plan must include the following items as appropriate and applicable to the Enrollee's system:

5.1. Updated Design Criteria and Construction Standards and Specifications

Updated design criteria, and construction standards and specifications, for the construction, installation, repair, and rehabilitation of existing and proposed system infrastructure components, including but not limited to pipelines, pump stations, and other system appurtenances. If existing design criteria and construction standards are deficient to address the necessary component-specific hydraulic capacity as specified in section 8 (System Evaluation, Capacity Assurance and Capital Improvements) of this Attachment, the procedures must include component-specific evaluation of the design criteria.

5.2. Procedures and Standards

Procedures, and standards for the inspection and testing of newly constructed, newly installed, repaired, and rehabilitated system pipelines, pumps, and other equipment and appurtenances.

6. SPILL EMERGENCY RESPONSE PLAN

The Plan must include an up to date Spill Emergency Response Plan to ensure prompt detection and response to spills to reduce spill volumes and collect information for prevention of future spills. The Spill Emergency Response Plan must include procedures to:

- Notify primary responders, appropriate local officials, and appropriate regulatory agencies of a spill in a timely manner;
- Notify other potentially affected entities (for example, health agencies, water suppliers, etc.) of spills that potentially affect public health or reach waters of the State;
- Comply with the notification, monitoring and reporting requirements of this General Order, State law and regulations, and applicable Regional Water Board Orders;
- Ensure that appropriate staff and contractors implement the Spill Emergency Response Plan and are appropriately trained;
- Address emergency system operations, traffic control and other necessary response activities;
- Contain a spill and prevent/minimize discharge to waters of the State or any drainage conveyance system;
- Minimize and remediate public health impacts and adverse impacts on beneficial uses of waters of the State;
- Remove sewage from the drainage conveyance system;
- Clean the spill area and drainage conveyance system in a manner that does not inadvertently impact beneficial uses in the receiving waters;
- Implement technologies, practices, equipment, and interagency coordination to expedite spill containment and recovery;
- Implement pre-planned coordination and collaboration with storm drain agencies and other utility agencies/departments prior, during, and after a spill event;
- Conduct post-spill assessments of spill response activities;
- Document and report spill events as required in this General Order; and
- Annually, review and assess effectiveness of the Spill Emergency Response Plan, and update the Plan as needed.

7. SEWER PIPE BLOCKAGE CONTROL PROGRAM

The Sewer System Management Plan must include procedures for the evaluation of the Enrollee's service area to determine whether a sewer pipe blockage control program is needed to control fats, oils, grease, rags and debris. If the Enrollee determines that a program is not needed, the Enrollee shall provide justification in its Plan for why a program is not needed.

The procedures must include, at minimum:

- An implementation plan and schedule for a public education and outreach program that promotes proper disposal of pipe-blocking substances;
- A plan and schedule for the disposal of pipe-blocking substances 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 substances generated within a sanitary sewer system service area;
- The legal authority to prohibit discharges to the system and identify measures to prevent spills and blockages;
- Requirements to install grease removal devices (such as traps or interceptors), design standards for the removal devices, maintenance requirements, best management practices requirements, recordkeeping and reporting requirements;
- Authority to inspect grease producing facilities, enforcement authorities, and whether the Enrollee has sufficient staff to inspect and enforce the fats, oils, and grease ordinance;
- An identification of sanitary sewer system sections subject to fats, oils, and grease blockages and establishment of a cleaning schedule for each section; and
- Implementation of source control measures for all sources of fats, oils, and grease reaching the sanitary sewer system for each section identified above.

8. SYSTEM EVALUATION, CAPACITY ASSURANCE AND CAPITAL IMPROVEMENTS

The Plan must include procedures and activities for:

- Routine evaluation and assessment of system conditions;
- Capacity assessment and design criteria;
- Prioritization of corrective actions; and
- A capital improvement plan.

8.1 System Evaluation and Condition Assessment

The Plan must include procedures to:

- Evaluate the sanitary sewer system assets utilizing the best practices and technologies available;

- Identify and justify the amount (percentage) of its system for its condition to be assessed each year;
- Prioritize the condition assessment of system areas that:
    - Hold a high level of environmental consequences if vulnerable to collapse, failure, blockage, capacity issues, or other system deficiencies;
    - Are located in or within the vicinity of surface waters, steep terrain, high groundwater elevations, and environmentally sensitive areas;
    - Are within the vicinity of a receiving water with a bacterial-related impairment on the most current Clean Water Act section 303(d) List;
- Assess the system conditions using visual observations, video surveillance and/or other comparable system inspection methods;
- Utilize observations/evidence of system conditions that may contribute to exiting of sewage from the system which can reasonably be expected to discharge into a water of the State;
- Maintain documents and recordkeeping of system evaluation and condition assessment inspections and activities; and
- Identify system assets vulnerable to direct and indirect impacts of climate change, including but not limited to: sea level rise; flooding and/or erosion due to increased storm volumes, frequency, and/or intensity; wildfires; and increased power disruptions.

8.2. Capacity Assessment and Design Criteria

The Plan must include procedures to identify system components that are experiencing or contributing to spills caused by hydraulic deficiency and/or limited capacity, including procedures to identify the appropriate hydraulic capacity of key system elements for:

- Dry-weather peak flow conditions that cause or contributes to spill events;
- The appropriate design storm(s) or wet weather events that causes or contributes to spill events;
- The capacity of key system components; and
- Identify the major sources that contribute to the peak flows associated with sewer spills.

The capacity assessment must consider:

- Data from existing system condition assessments, system inspections, system audits, spill history, and other available information;
- Capacity of flood-prone systems subject to increased infiltration and inflow, under normal local and regional storm conditions;

- Capacity of systems subject to increased infiltration and inflow due to larger and/or higher-intensity storm events as a result of climate change;
- Increases of erosive forces in canyons and streams near underground and above-ground system components due to larger and/or higher-intensity storm events;
- Capacity of major system elements to accommodate dry weather peak flow conditions, and updated design storm and wet weather events; and
- Necessary redundancy in pumping and storage capacities.

8.3. Prioritization of Corrective Action

The findings of the condition assessments and capacity assessments must be used to prioritize corrective actions. Prioritization must consider the severity of the consequences of potential spills.

8.4. Capital Improvement Plan

The capital improvement plan must include the following items:

- Project schedules including completion dates for all portions of the capital improvement program;
- Internal and external project funding sources for each project; and
- Joint coordination between operation and maintenance staff, and engineering staff/consultants during planning, design, and construction of capital improvement projects; and Interagency coordination with other impacted utility agencies.

9. MONITORING, MEASUREMENT AND PROGRAM MODIFICATIONS

The Plan must include an Adaptive Management section that addresses Plan-implementation effectiveness and the steps for necessary Plan improvement, including:

- Maintaining relevant information, including audit findings, to establish and prioritize appropriate Plan activities;
- Monitoring the implementation and measuring the effectiveness of each Plan Element;
- Assessing the success of the preventive operation and maintenance activities;
- Updating Plan procedures and activities, as appropriate, based on results of monitoring and performance evaluations; and
- Identifying and illustrating spill trends, including spill frequency, locations and estimated volumes.

10. INTERNAL AUDITS

The Plan shall include internal audit procedures, appropriate to the size and performance of the system, for the Enrollee to comply with section 5.4 (Sewer System Management Plan Audits) of this General Order.

11. COMMUNICATION PROGRAM

The Plan must include procedures for the Enrollee to communicate with:

- The public for:
  - Spills and discharges resulting in closures of public areas, or that enter a source of drinking water, and
  - The development, implementation, and update of its Plan, including opportunities for public input to Plan implementation and updates.
- Owners/operators of systems that connect into the Enrollee's system, including satellite systems, for:
  - System operation, maintenance, and capital improvement-related activities.

ATTACHMENT E1 – NOTIFICATION, MONITORING, REPORTING AND RECORDKEEPING REQUIREMENTS

Table of Contents

ATTACHMENT E1– NOTIFICATION, MONITORING, REPORTING AND RECORDKEEPING REQUIREMENTS

The Notification Requirements (section 1), Spill-specific Monitoring Requirements (section 2), Reporting Requirements (section 3) and Recordkeeping Requirements (section 4) in this Attachment are pursuant to Water Code section 13267 and section 13383, and are an enforceable component of this General Order. For the purpose of this General Order, the term:

- Notification means the notifying of appropriate parties of a spill event or other activity.
- Spill-specific Monitoring means the gathering of information and data for a specific spill event to be reported or kept as records.
- Reporting means the reporting of information and data into the online California Integrated Water Quality System (CIWQS) Sanitary Sewer System Database.
- Recordkeeping means the maintaining of information and data in an official records storage system.

Failure to comply with the notification, monitoring, reporting and recordkeeping requirements in this General Order may subject the Enrollee to civil liabilities of up to $10,000 a day per violation pursuant to Water Code section 13385; up to $1,000 a day per violation pursuant to Water Code section 13268; or referral to the Attorney General for judicial civil enforcement.

Water Code section 13193 et seq. requires the Regional Water Quality Control Boards (Regional Water Boards) and the State Water Resources Control Board (State Water Board) to collect sanitary sewer spill information for each spill event and make this information available to the public. Sanitary sewer spill information for each spill event includes but is not limited to: Enrollee contact information for each spill event, spill cause, estimated spill volume and factors used for estimation, location, date, time, duration, amount discharged to waters of the State, response and corrective action(s) taken.

1. NOTIFICATION REQUIREMENTS

1.1. Notification of Spills of 1,000 Gallons or Greater to the California Office of Emergency Services

Per Water Code section 13271, for a spill that discharges in or on any waters of the State, or discharges or is deposited where it is, or probably will be, discharged in or on any waters of the State, the Enrollee shall notify the California Office of Emergency Services and obtain a California Office of Emergency Services Control Number as soon as possible **but no later than two (2) hours** after:

- The Enrollee has knowledge of the spill; and
- Notification can be provided without substantially impeding cleanup or other emergency measures.

The notification requirements in this section apply to individual spills of 1,000 gallons or greater, from an Enrollee-owned and/or operated laterals, to a water of the State.

1.2. Spill Notification Information

The Enrollee shall provide the following spill information to the California Office of Emergency Services before receiving a Control Number, as applicable:

- Name and phone number of the person notifying the California Office of Emergency Services;
- Estimated spill volume (gallons);
- Estimated spill rate from the system (gallons per minute);
- Estimated discharge rate (gallons per minute) directly into waters of the State or indirectly into a drainage conveyance system;
- Spill incident description:
  - Brief narrative of the spill event, and
  - Spill incident location (address, city, and zip code) and closest cross streets and/or landmarks;
- Name and phone number of contact person on-scene;
- Date and time the Enrollee was informed of the spill event;
- Name of sanitary sewer system causing the spill;
- Spill cause or suspected cause (if known);
- Amount of spill contained;
- Name of receiving water body receiving or potentially receiving discharge; and
- Description of water body impact and/ or potential impact to beneficial uses.

1.3. Notification of Spill Report Updates

Following the initial notification to the California Office of Emergency Services and until such time that the Enrollee certifies the spill report in the online CIWQS Sanitary Sewer System Database, the Enrollee shall provide updates to the California Office of Emergency Services regarding substantial changes to:

- Estimated spill volume (increase or decrease in gallons initially estimated);
- Estimated discharge volume discharged directly into waters of the State or indirectly into a drainage conveyance system (increase or decrease in gallons initially estimated); and
- Additional impact(s) to the receiving water(s) and beneficial uses.

2. SPILL-SPECIFIC MONITORING REQUIREMENTS

2.1 Spill Location and Spread

The Enrollee shall visually assess the spill location(s) and spread using photography, global positioning system (GPS), and other best available tools. The Enrollee shall document the critical spill locations, including:

- Photography and GPS coordinates for:
  - The system location where spill originated.

    For multiple appearance points of a single spill event, the points closest to the spill origin.
- Photography for:
  - Drainage conveyance system entry locations,
  - The location(s) of discharge into surface waters, as applicable,
  - Extent of spill spread, and
  - The location(s) of clean up.

2.2 Spill Volume Estimation

To assess the approximate spill magnitude and spread, the Enrollee shall estimate the total spill volume using updated volume estimation techniques, calculations, and documentation for electronic reporting. The Enrollee shall update its notification and reporting of estimated spill volume (which includes spill volume recovered) as further information is gathered during and after a spill event.

2.3. Receiving Water Monitoring

2.3.1. Receiving Water Visual Observations

Through visual observations and use of best available spill volume-estimating techniques and field calculation techniques, the Enrollee shall gather and document the following information for spills discharging to surface waters:

- Estimated spill travel time to the receiving water;
- For spills entering a drainage conveyance system, estimated spill travel time from the point of entry into the drainage conveyance system to the point of discharge into the receiving water;
- Estimated spill volume entering the receiving water; and
- Photography of:
  - Waterbody bank erosion,
  - Floating matter,
  - Water surface sheen (potentially from oil and grease),

- Discoloration of receiving water, and
- Impact to the receiving water.

2.3.2. Receiving Water – Water Quality Sampling and Analysis

For sewage spills in which an estimated 50,000 gallons or greater are discharged into a surface water, the Enrollee shall conduct the following water quality sampling no later than **18 hours** after the Enrollee's knowledge of a potential discharge to a surface water:

- Collect one water sample, each day of the duration of the spill, at:
  - The DCS-001 location as described in section 2.3.4 (Receiving Water Sampling Locations) of this Attachment, if sewage discharges to a surface water via a drainage conveyance system; and/or
  - Each of the three receiving water sampling locations in section 2.3.4 (Receiving Water Sampling Locations) of this Attachment;

    If the receiving water has no flow during the duration of the spill, the Enrollee must report "No Sampling Due To No Flow" for its receiving water sampling locations.

The Enrollee shall analyze the collected receiving water samples for the following constituents per section 2.3.3 (Water Quality Analysis Specifications) of this Attachment:

- Ammonia, and
- Appropriate bacterial indicator(s) per the applicable Basin Plan water quality objectives, including one or more of the following, unless directed otherwise by the Regional Water Board:
  - Total Coliform Bacteria
  - Fecal Coliform Bacteria
  - *E-coli*
  - Enterococcus

  Dependent on the receiving water(s), sampling of bacterial indicators shall be sufficient to determine post-spill (after the spill) compliance with the water quality objectives and bacterial standards of the California Ocean Plan or the California Inland Surface Water Enclosed Bays, and Estuaries Plan, including the frequency and/or number of post-spill receiving water samples as may be specified in the applicable plans.

The Enrollee shall collect and analyze additional samples as required by the applicable Regional Water Board Executive Officer or designee.

2.3.3. Water Quality Analysis Specifications

Spill monitoring must be representative of the monitored activity (40 Code of Federal Regulations section 122.41(j)(1)).

Sufficiently Sensitive Methods

Sample analysis must be conducted according to sufficiently sensitive test methods approved under 40 Code of Federal Regulations Part 136 for the sample analysis of pollutants. For the purposes of this General Order, a method is sufficiently sensitive when the minimum level of the analytical method approved under 40 Code of Federal Regulations Part 136 is at or below the receiving water pollutant criteria.

Environmental Laboratory Accreditation Program-Accredited Laboratories

The analysis of water quality samples required per this General Order must be performed by a laboratory that has accreditation pursuant to Article 3 (commencing with section 100825) of Chapter 4 of Part 1 of Division 101 of the Health and Safety Code. (Water Code section 13176(a).) The State Water Board accredits laboratories through its Environmental Laboratory Accreditation Program (ELAP).

2.3.4. Receiving Water Sampling Locations

The Enrollee shall collect receiving water samples at the following locations.

Sampling of Flow in Drainage Conveyance System (DCS) Prior to Discharge

Sampling Location	Sampling Location Description
DCS-001	A point in a drainage conveyance system before the drainage conveyance system flow discharges into a receiving water.

Receiving Surface Water Sampling (RSW)[1]

Sampling Location	Sampling Location Description
RSW-001 Point of Discharge	A point in the receiving water where sewage initially enters the receiving water.
RSW-001U: Upstream of Point of Discharge	A point in the receiving water, upstream of the point of sewage discharge, to capture ambient conditions absent of sewage discharge impacts.

Sampling Location	Sampling Location Description
RSW-001D: Downstream of Point of Discharge	A point in the receiving water, downstream of the point of sewage discharge, where the spill material is fully mixed with the receiving water.

[1] The Enrollee must use its best professional judgment to determine the upstream and downstream distances based on receiving water flow, accessibility to upstream/downstream waterbody banks, and size of visible sewage plume.

2.4. Safety and Access Exceptions

If the Enrollee encounters access restrictions or unsafe conditions that prevents its compliance with spill response requirements or monitoring requirements in this General Order, the Enrollee shall provide documentation of access restrictions and/or safety hazards in the corresponding required report.

3. REPORTING REQUIREMENTS

All reporting required in this General Order must be submitted electronically to the online CIWQS Sanitary Sewer System Database (https://ciwqs.waterboards.ca.gov), unless specified otherwise in this General Order. Electronic reporting may solely be conducted by a Legally Responsible Official or Data Submitter(s) previously designated by the Legally Responsible Official, as required in section 5.8 (Designation of Data Submitters) of this General Order.

The Enrollee shall report any information that is protected by the Homeland Security Act, by email to SanitarySewer@waterboards.ca.gov, with a brief explanation of the protection provided by the Homeland Security Act for the subject report to be protected from unauthorized disclosure and/or public access, and for official Water Board regulatory purposes only.

3.1. Reporting Requirements for Individual Category 1 Spill Reporting

3.1.1. Draft Spill Report for Category 1 Spills

Within three (3) business days of the Enrollee's knowledge of a Category 1 spill, the Enrollee shall submit a Draft Spill Report to the online CIWQS Sanitary Sewer System Database.

The Draft Spill Report must, at minimum, include the following items:

1. Contact information: Name and telephone number of Enrollee contact person to respond to spill-specific questions;
2. Spill location name;
3. Date and time the Enrollee was notified of, or self-discovered, the spill;
4. Operator arrival time;

5. Estimated spill start date and time;
6. Date and time the Enrollee notified the California Office of Emergency Services, and the assigned control number;
7. Description, photographs, and GPS coordinates of the system location where the spill originated;
    - If a single spill event results in multiple appearance points, provide GPS coordinates for the appearance point closest to the failure point and describe each additional appearance point in the spill appearance point explanation field;
8. Estimated total spill volume exiting the system;
9. Description and photographs of the extent of the spill and spill boundaries;
10. Did the spill reach a drainage conveyance system? If Yes:
    - Description of the drainage conveyance system transporting the spill;
    - Photographs of the drainage conveyance system entry location(s);
    - Estimated spill volume fully recovered from the drainage conveyance system;
    - Estimated spill volume remaining within the drainage conveyance system;
11. Description and photographs of all discharge point(s) into the surface water;
12. Estimated spill volume that discharged to surface waters; and
13. Estimated total spill volume recovered.

3.1.2. Certified Spill Report for Category 1 Spills

Within 15 calendar days of the spill end date, the Enrollee shall submit a Certified Spill Report for Category 1 spills, to the online CIWQS Sanitary Sewer System Database. Upon completion of the Certified Spill Report, the online CIWQS Sanitary Sewer System Database will issue a final spill event identification number.

The Certified Spill Report must, at minimum, include the following mandatory information in addition to all information in the Draft Spill Report per section 3.1.1 (Draft Spill Report for Category 1 Spills) above:

1. Description of the spill event destination(s), including GPS coordinates if available, that represent the full spread and reach of the spill;
2. Spill end date and time;
3. Description of how the spill volume estimations were calculated, including at a minimum:
    - The methodology, assumptions and type of data relied upon, such as supervisory control and data acquisition (SCADA) records, flow monitoring or other telemetry information used to estimate the volume of the spill discharged, and the volume of the spill recovered (if any volume of the spill was recovered), and
    - The methodology(ies), assumptions and type of data relied upon for estimations of the spill start time and the spill end time;

4. Spill cause(s) (for example, root intrusion, grease deposition, etc.);
5. System failure location (for example, main, lateral, pump station, etc.);
6. Description of the pipe material, and estimated age of the pipe material, at the failure location;
7. Description of the impact of the spill;
8. Whether or not the spill was associated with a storm event;
9. Description of spill response activities including description of immediate spill containment and cleanup efforts;
10. Description of spill corrective action, including steps planned or taken to reduce, eliminate, and prevent reoccurrence of the spill, and a schedule of major milestones for those steps;
11. Spill response completion date;
12. Detailed narrative of investigation and investigation findings of cause of spill;
13. Reasons for an ongoing investigation (as applicable) and the expected date of completion;
14. Name and type of receiving water body(s);
15. Description of the water body(s), including but not limited to:
    - Observed impacts on aquatic life,
    - Public closure, restricted public access, temporary restricted use, and/or posted health warnings due to spill,
    - Responsible entity for closing/restricting use of water body, and
    - Number of days closed/restricted as a result of the spill.
16. Whether or not the spill was located within 1,000 feet of a municipal surface water intake; and
17. If water quality samples were collected, identify sample locations and the parameters the water quality samples were analyzed for. If no samples were taken, Not Applicable shall be selected.

3.1.3. Spill Technical Report for Individual Category 1 Spill in which 50,000 Gallons or Greater Discharged into a Surface Water

For any spill in which 50,000 gallons or greater discharged into a surface water, **within 45 calendar days** of the spill end date, the Enrollee shall submit a Spill Technical Report to the online CIWQS Sanitary Sewer System Database. The Spill Technical Report, at minimum, must include the following information:

1. Spill causes and circumstances, including at minimum:
    - Complete and detailed explanation of how and when the spill was discovered;

- Photographs illustrating the spill origin, the extent and reach of the spill, drainage conveyance system entrance and exit, receiving water, and post-cleanup site conditions;
- Diagram showing the spill failure point, appearance point(s), the spill flow path, and ultimate destinations;
- Detailed description of the methodology employed, and available data used to calculate the discharge volume and, if applicable, the recovered spill volume;
- Detailed description of the spill cause(s);
- Description of the pipe material, and estimated age of the pipe material, at the failure location;
- Description of the impact of the spill;
- Copy of original field crew records used to document the spill; and
- Historical maintenance records for the failure location.

2. Enrollee's response to the spill:
   - Chronological narrative description of all actions taken by the Enrollee to terminate the spill;
   - Explanation of how the Sewer System Management Plan Spill Emergency Response Plan was implemented to respond to and mitigate the spill; and
   - Final corrective action(s) completed and a schedule for planned corrective actions, including:
     - Local regulatory enforcement action taken against an illicit discharge in response to this spill, as applicable,
     - Identifiable system modifications, and operation and maintenance program modifications needed to prevent repeated spill occurrences, and
     - Necessary modifications to the Emergency Spill Response Plan to incorporate lessons learned in responding to and mitigating the spill.
3. Water Quality Monitoring, including at minimum:
   - Description of all water quality sampling activities conducted;
   - List of pollutant and parameters monitored, sampled and analyzed; as required in section 2.3 (Receiving Water Monitoring) of this Attachment;
   - Laboratory results, including laboratory reports;
   - Detailed location map illustrating all water quality sampling points; and
   - Other regulatory agencies receiving sample results (if applicable).
4. Evaluation of spill impact(s), including a description of short-term and long-term impact(s) to beneficial uses of the surface water.

3.1.4. Amended Certified Spill Reports for Individual Category 1 Spills

The Enrollee shall update or add additional information to a Certified Spill Report within **90 calendar days** of the spill end date by amending the report or by adding an attachment to the Spill Report in the online CIWQS Sanitary Sewer System Database. The Enrollee shall certify the amended report.

After **90 calendar days**, the Enrollee shall contact the State Water Board at SanitarySewer@waterboards.ca.gov to request to amend a Spill Report. The Legally Responsible Official shall submit justification for why the additional information was not reported within the Amended Spill Report due date.

3.2. Reporting Requirements for Individual Category 2 Spill Reporting

3.2.1. Draft Spill Report for Category 2 Spills

Within three (3) business days of the Enrollee's knowledge of a Category 2 spill, the Enrollee shall submit a Draft Spill Report to the online CIWQS Sanitary Sewer System Database.

The Draft Spill Report must, at minimum, include the following items:

1. Contact information: Name and telephone number of Enrollee contact person to respond to spill-specific questions;
2. Spill location name;
3. Date and time the Enrollee was notified of, or self-discovered, the spill;
4. Operator arrival time;
5. Estimated spill start date and time;
6. Date and time the Enrollee notified the California Office of Emergency Services, and the assigned control number;
7. Description, photographs, and GPS coordinates of the system location where the spill originated;

   If a single spill event results in multiple appearance points, provide GPS coordinates for the appearance point closest to the failure point and describe each additional appearance point in the spill appearance point explanation field;
8. Estimated total spill volume exiting the system;
9. Description and photographs of the extent of the spill and spill boundaries;
10. Did the spill reach a drainage conveyance system? If Yes:
    - Description of the drainage conveyance system transporting the spill;
    - Photographs of the drainage conveyance system entry location(s);
    - Estimated spill volume fully recovered from the drainage conveyance system;
    - Estimated spill volume remaining within the drainage conveyance system;

- Estimated spill volume discharged to a groundwater infiltration basin or facility, if applicable; and

11. Estimated total spill volume recovered.

3.2.2. Certified Spill Report for Category 2 Spills

Within 15 calendar days of the spill end date, the Enrollee shall submit a Certified Spill Report for the Category 2 spill, to the online CIWQS Sanitary Sewer System Database (https://ciwqs.waterboards.ca.gov). Upon completion of the Certified Spill Report, the online CIWQS Sanitary Sewer System Database will issue a final spill event identification number.

The Certified Spill Report must, at minimum, include the following mandatory information in addition to all information in the Draft Spill Report per section 3.2.1 (Draft Spill Report for Category 2 Spills) above:

1. Description of the spill event destination(s), including GPS coordinates if available, that represent the full spread and reach of the spill;
2. Spill end date and time;
3. Description of how the spill volume estimations were calculated, including at a minimum:
   - The methodology, assumptions and type of data relied upon, such as supervisory control and data acquisition (SCADA) records, flow monitoring or other telemetry information used to estimate the volume of the spill discharged, and the volume of the spill recovered (if any volume of the spill was recovered), and
   - The methodology(ies), assumptions and type of data relied upon for estimations of the spill start time and the spill end time;
4. Spill cause(s) (for example, root intrusion, grease deposition, etc.);
5. System failure location (for example, main, pump station, etc.);
6. Description of the pipe/infrastructure material, and estimated age of the pipe material, at the failure location;
7. Description of the impact of the spill;
8. Whether or not the spill was associated with a storm event;
9. Description of spill response activities including description of immediate spill containment and cleanup efforts;
10. Description of spill corrective action, including steps planned or taken to reduce, eliminate, and prevent reoccurrence of the spill, and a schedule of major milestones for those steps;
11. Spill response completion date;
12. Detailed narrative of investigation and investigation findings of cause of spill;
13. Reasons for an ongoing investigation (as applicable) and the expected date of completion; and

14. Whether or not the spill was located within 1,000 feet of a municipal surface water intake.

3.2.3. Amended Certified Spill Reports for Individual Category 2 Spills

The Enrollee shall update or add additional information to a Certified Spill Report within **90 calendar days** of the spill end date by amending the report or by adding an attachment to the Spill Report in the online CIWQS Sanitary Sewer System Database. The Enrollee shall certify the amended report.

After **90 calendar days**, the Enrollee shall contact the State Water Board at SanitarySewer@waterboards.ca.gov to request to amend a Spill Report. The Legally Responsible Official shall submit justification for why the additional information was not reported within the Amended Spill Report due date.

3.3. Monthly Certified Spill Reporting for Category 3 Spills

The Enrollee shall report and certify all Category 3 spills to the online CIWQS Sanitary Sewer System Database within 30 calendar days after the end of the month in which the spills occurred. (For example, all Category 3 spills occurring in the month of February shall be reported and certified by March 30th). After the Legally Responsible Official certifies the spills, the online CIWQS Sanitary Sewer System Database will issue a spill event identification number for each spill.

The monthly reporting of all Category 3 spills must include the following items for each spill:

1. Contact information: Name and telephone number of Enrollee contact person to respond to spill-specific questions;
2. Spill location name;
3. Date and time the Enrollee was notified of, or self-discovered, the spill;
4. Operator arrival time;
5. Estimated spill start date and time;
6. Description, photographs, and GPS coordinates where the spill originated:
    - If a single spill event results in multiple appearance points, provide GPS coordinates for the appearance point closest to the failure point and describe each additional appearance point in the spill appearance point explanation field;
7. Estimated total spill volume exiting the system;
8. Description and photographs of the extent of the spill and spill boundaries;
9. Did the spill reach a drainage conveyance system? If Yes:
    - Description of the drainage conveyance system transporting the spill;
    - Photographs of the drainage conveyance system entry locations(s);
    - Estimated spill volume fully recovered from the drainage conveyance system; and

- Estimated spill volume discharged to a groundwater infiltration basis or facility, if applicable.

10. Estimated total spill volume recovered;
11. Description of the spill event destination(s), including GPS coordinates, if available, that represent the full spread and reaches of the spill;
12. Spill end date and time;
13. Description of how the spill volume estimations were calculated, including, at minimum:
    - The methodology and type of data relied upon, including supervisory control and data acquisition (SCADA) records, flow monitoring or other telemetry information used to estimate the volume of the spill discharged, and the volume of the spill recovered (if any volume of the spill was recovered), and
    - The methodology and type of data relied upon to estimate the spill start time, on-going spill rate at time of arrival (if applicable), and the spill end time;
14. Spill cause(s) (for example, root intrusion, grease deposition, etc.);
15. System failure location (for example, main, pump station, etc.);
16. Description of the pipe/infrastructure material, and estimated age of the pipe/infrastructure material, at the failure location;
17. Description of the impact of the spill;
18. Whether or not the spill was associated with a storm event;
19. Description of spill response activities including description of immediate spill containment and cleanup efforts;
20. Description of spill corrective actions, including steps planned or taken to reduce, eliminate, and prevent reoccurrence of the spill, and a schedule of the major milestones for those steps; including, at minimum:
    - Local regulatory enforcement action taken against an illicit discharge in response to this spill, as applicable, and
    - Identifiable system modifications, and operation and maintenance program modifications needed to prevent repeated spill occurrences at the same spill event location, including:
      - Adjusted schedule/method of preventive maintenance,
      - Planned rehabilitation or replacement of sanitary sewer asset,
      - Inspected, repaired asset(s), or replaced defective asset(s),
      - Capital improvements,
      - Documentation verifying immediately implemented system modifications and operating/maintenance modifications,
      - Description of spill response activities,

- Spill response completion date, and
- Ongoing investigation efforts, and expected completion date of investigation to determine the full cause of spill;

21. Detailed narrative of investigation and investigation findings of cause of spill.

3.4. Monthly Certified Spill Reporting for Category 4 Spills

The Enrollee shall report and certify the estimated total spill volume exiting the sanitary sewer system, and the total number of all Category 4 spills to the online CIWQS Sanitary Sewer System Database, within 30 calendar days after the end of the month in which the spills occurred.

3.5. Amended Certified Spill Reports for Category 3 Spills

Within 90 calendar days of the certified Spill Report due date, the Enrollee may update or add additional information to a certified Spill Report by amending the report or by adding an attachment to the Spill Report in the online CIWQS Sanitary Sewer System Database. The Enrollee shall certify the amended report.

After 90 calendar days, the Legally Responsible Official shall contact the State Water Board at SanitarySewer@waterboards.ca.gov to request to amend a certified Spill Report. The Legally Responsible Official shall submit justification for why the additional information was not reported within the 90-day timeframe for amending the certified Spill Report, as provided above.

3.6. Annual Certified Spill Reporting of Category 4 and/or Lateral Spills

For all Category 4 spills and spills from its owned and/or operated laterals that are caused by a failure or blockage in the lateral and that do not discharge to a surface water, the Enrollee shall:

- Maintain records per section 4.4. of this Attachment;

  The Enrollee shall provide records upon request by State Water Board or Regional Water Board staff.

- Annually upload and certify a report, in an appropriate digital format, of all recordkeeping of spills to the online CIWQS Sanitary Sewer System Database, by February 1st after the end of the calendar year in which the spills occurred.

A spill from an Enrollee-owned and/or operated lateral that discharges to a surface water is a Category 1 spill; the Enrollee shall report all Category 1 spills per section 3.1 of Attachment E1 (Notification, Monitoring, Reporting and Recordkeeping Requirements) of this General Order.

3.7. Monthly Certification of "No-Spills" or "Category 4 Spills" and/or "Non-Category 1 Lateral Spills"

If either (1) no spills occur during a calendar month or (2) only Category 4, and/or Enrollee-owned and/or operated lateral spills (that do not discharge to a surface water) occur during a calendar month, the Enrollee shall certify, within 30 calendar days after

the end of each calendar month, either a “No-Spill” certification statement, or a “Category 4 Spills” and/or “Non-Category 1 Lateral Spills” certification statement, in the online CIWQS Sanitary Sewer System Database, certifying that there were either no spills, or Category 4 and/or Non-Category 1 Lateral Spills that will be reported annually (per section 3.6 of this Attachment) for the designated month.

If a spill starts in one calendar month and ends in a subsequent calendar month, and the Enrollee has no further spills of any category, in the subsequent calendar month, the Enrollee shall certify “no-spills” for the subsequent calendar month.

If the Enrollee has no spills from its systems during a calendar month, but the Enrollee voluntarily reported a spill from a private lateral or a private system, the Enrollee shall certify “no-spills” for that calendar month.

If the Enrollees has spills from its owned and/or operated laterals during a calendar month, the Enrollee shall not certify “no spills” for that calendar month.

3.8. Electronic Sanitary Sewer System Service Area Boundary Map

The Legally Responsible Official shall submit, to the State Water Board, an up-to-date electronic spatial map of its sewer system service area boundaries. The map must be in accordance with section 5.14 (Electronic Sanitary Sewer System Service Area Boundary Map) of this General Order and the specification provided on the statewide Sanitary Sewer Systems program website. The map must include the location of wastewater treatment facility(ies) that treats the sewer system waste, if in the same sewer service boundary.

By the Effective Date of this General Order, specifications for the electronic sanitary sewer service area boundary map format will be provided on the statewide Sanitary Sewer Systems Order program website.

3.9. Annual Report (Previously termed as Collection System Questionnaire in General Order 2006-0003-DWQ)

A new Enrollee shall complete and submit its first certified Annual Report into the online CIWQS Sanitary Sewer System Database, **within 30 days of obtaining a CIWQS account**; Subsequent Annual Reports are due by April 1 of each year.

All enrollees shall update their previous year’s Annual Report, **by April 1 of each year after the Effective Date of this General Order,** for each calendar year (January 1 through December 31)**.**

The Annual Report must be entered directly into the online CIWQS Sanitary Sewer System Database. The Enrollee’s Legally Responsible Official shall certify the Annual Report as instructed in CIWQS;

The Annual Report must address, and update as applicable, the following items:

- Population served;

- Updated sewer system service area boundary map, if service area boundary has changed from original map submitted per section 5.14 (Electronic Sanitary Sewer System Service Area Boundary Map) of this General Order;
- Number of system operation and maintenance staff:
  - Entry level (less than two years of experience),
  - Journey level (greater than two years of experience),
  - Supervisory level, and
  - Managerial level;
- Number of operation and maintenance staff certified as a certified collection system operator by the California Water Environmental Association (CWEA), with:
  - Corresponding number of certified collection system operator grade levels (Grade I, II, III, IV, and V);
- System information:
  - Miles of system gravity and force mains,
  - Number of upper and lower service laterals connected to system,
  - Estimated number of upper and lower laterals owned and/or operated by the Enrollee,
  - Portion of laterals that is Enrollee's responsibility,
  - Average age the major components of system infrastructure,
  - Number and age of pump stations, and
  - Estimated total miles of the system pipeline not accessible for maintenance;
- Name and location of the treatment plant(s) receiving sanitary sewer system's waste;
- Name of satellite sewer system tributaries;
- Number of system's gravity sewer above or underground crossings of water bodies throughout system;
- Number of force main (pressurized pipe) above or underground crossings of water bodies throughout system;
- Number of siphons used to convey waste throughout the sewer system;
- Miles of sewer system cleaned;
- Miles of sewer system video inspected, or comparable (i.e., video closed-circuit television or alternative inspection methods);
- System Performance Evaluation as specified in section 5.11 (System Performance Analysis) of this General Order;
- Major spill causes (for example, root intrusion, grease deposition);

- System infrastructure failure points (for example, main, pump station, lateral, etc.);
- Ongoing spill investigations; and
- Actions taken to address system deficiencies.

3.10. Sewer System Management Plan Audit Reporting Requirements

The Enrollee shall submit its Sewer System Management Plan Audit and other pertinent audit information, in accordance with section 5.4 (Sewer System Management Plan Audits) of this General Order, to the online CIWQS Sanitary Sewer System Database **by six (6) months after the end of the 3-year audit period**.

If a Sewer System Management Plan Audit is not conducted as required: the Enrollee shall:

- Update the online CIWQS Sanitary Sewer System Database and select the justification for not conducting the Audit; and
- Notify its corresponding Regional Water Board (see Attachment F (Regional Water Quality Control Board Contact Information)) of the justification for the lapsed requirements.

The Enrollee's reporting of a justification for not conducting a timely Audit does not justify non-compliance with this General Order. The Enrollee shall:

- Submit the late Audit as required in this General Order; and
- Comply with subsequent Audit requirements and due dates corresponding with the original audit cycle.

3.11. Sewer System Management Plan Reporting Requirements

For an Existing Enrollee previously regulated by Order 2006-0003-DWQ: **Within every six (6) years after the required due date of its last Plan Update**, the Legally Responsible Official shall upload and certify a local governing entity-approved Sewer System Management Plan Update to the online CIWQS Sanitary Sewer System Database. If the electronic document format or size capacity prevents the electronic upload of the Plan, the Legally Responsible Official shall report an electronic link to its updated Sewer System Management Plan posted on its own website.

Order 2006-0003-DWQ required each enrollee to develop its initial Sewer System Management Plan per the following schedule, with required Plan updates at a frequency of 5-years thereafter:

Systems serving populations: Greater than 100,000: May 2, 2009

Between 100,000 and 10,000: August 2, 2009

Between 10,000 and 2,500: May 2, 2010

Less than 2,500: August 2, 2010

This Order carries forth the previously-required Plan Update schedule per Order 2006-0003-DWQ. Per the six-year Plan Update frequency required in this Order, the Enrollee shall upload and certify its first Plan Update, to the online CIWQS Sanitary Sewer System Database by the following due dates, with subsequent Plan Updates at the frequency of six years thereafter:

Systems serving populations: Greater than 100,000: May 2, 2025

Between 100,000 and 10,000: August 2, 2025

Between 10,000 and 2,500: May 2, 2026

Less than 2,500: August 2, 2026

For a New Enrollee: **Within twelve (12) months of its Application for Enrollment Approval date**, the Legally Responsible Official of a new Enrollee shall upload and certify a local governing entity-approved Sewer System Management Plan to the online CIWQS Sanitary Sewer System Database. If electronic document format or size capacity prevents the electronic upload of the Plan, the Legally Responsible Official shall report an electronic link to its Sewer System Management Plan posted on its own website. The due date for subsequent 6-year Plan updates, is six (6) years from the submittal due date of the new Enrollee's first Sewer System Management Plan.

4. RECORDKEEPING REQUIREMENTS

The Enrollee shall maintain records to document compliance with the provisions of this General Order, and previous General Order 2006-0003-DWQ as applicable, for each sanitary sewer system owned, including any required records generated by an Enrollee's contractor(s).

4.1. Recordkeeping Time Period

The Enrollee shall maintain records of documents required in this Attachment, including records collected for compliance with this General Order, and records collected in accordance with previous General Order 2006-0003-DWQ, for five (5) years.

4.2. Availability of Documents

The Enrollee shall make the records required in this General Order readily available, either electronic or hard copies, for review by Water Board staff during onsite inspections or through an information request.

4.3. Spill Reports

The Enrollee shall maintain records for each of the following spill-related events and activities:

- Spill event complaint, including but not limited to records documenting how the Enrollee responded to notifications of spills. Each complaint record must, at a minimum, include the following information:
    - Date, time, and method of notification,

- Date and time the complainant first noticed the spill, if available,
- Narrative description of the complaint, including any information the caller provided regarding whether the spill has reached surface waters or a drainage conveyance system, if available,
- Complainant's contact information, if available, and
- Final resolution of the complaint;

- Records documenting the steps and/or remedial action(s) undertaken by the Enrollee, using all available information, to comply with this General Order, and previous General Order 2006-0003-DWQ as applicable;
- Records documenting how estimate(s) of volume(s) and, if applicable, volume(s) of spill recovered were calculated;
- All California Office of Emergency Services notification records, as applicable; and
- Records, in accordance with the Monitoring Requirements in this Attachment.

4.4. Recordkeeping of Category 4 Spills and Non-Category 1 Lateral Spills

An Enrollee must maintain the following records for each individual Category 4 spill and for each individual non-Category 1 Enrollee-owned and/or operated lateral spill, and report in accordance to section 3.6 (Annual Certified Spill Reporting of Category 4 and/or Lateral Spills) of this Attachment.

Recordkeeping of Individual Category 4 Spill Information:

1. Contact information: Name and telephone number of Enrollee contact person to respond to spill-specific questions;
2. Spill location name;
3. Description and GPS coordinates for the system location where the spill originated;
4. Did the spill reach a drainage conveyance system? If Yes:
   - Description of drainage conveyance system location,
   - Estimated spill volume fully recovered within the drainage conveyance system, and
   - Estimated spill volume remaining within the drainage conveyance system;
5. Estimated total spill volume exiting the sanitary sewer system;
6. Spill date and start time;
7. Spill cause(s) (for example, root intrusion, grease deposition, etc.);
8. System failure location (for example, main, pump station, etc.);
9. Description of spill response activities including description of immediate spill containment and cleanup efforts;
10. Description of how the volume estimation was calculated, including, at minimum:

- The methodology and type of data relied upon, including supervisory control and data acquisition (SCADA) records, flow monitoring or other telemetry information used to estimate the volume of the spill discharged, and the volume of the spill recovered (if any volume of the spill was recovered), and
- The methodology and type of data relied upon to estimate the spill start time, on-going spill rate at time of arrival (if applicable), and the spill end time;

11. Description of implemented system modifications and operating/maintenance modifications.

Recordkeeping of Individual Lateral Spill Information:

1. Date and time the Enrollee was notified of, or self-discovered, the spill;
2. Location of individual spill;
3. Estimated individual spill volume;
4. Spill cause(s) (for example, root intrusion, grease deposition, etc.); and
5. Description of how the volume estimations were calculated.

Total Annual Spill Information:

1. Estimated total annual spill volume;
2. Description of spill corrective actions, including at minimum:
   - Local regulatory enforcement action taken against the sewer lateral owner in response to a spill, as applicable, and
   - System operation, maintenance and program modifications implemented to prevent repeated spill occurrences at the same spill location.

4.5. Sewer System Telemetry Records

The Enrollee shall maintain the following sewer system telemetry records if used to document compliance with this General Order, and previous General Order 2006-0003-DWQ as applicable, including spill volume estimates:

- Supervisory control and data acquisition (SCADA) system(s);
- Alarm system(s);
- Flow monitoring device(s) or other instrument(s) used to estimate sewage flow rates, and/or volumes;
- Computerized maintenance management system records; and
- Asset management-related records.

4.6. Sewer System Management Plan Implementation Records

The Enrollee shall maintain records documenting the Enrollee's implementation of its Sewer System Management Plan, including documents supporting its Sewer System Management Plan audits, corrections, modifications, and updates to the Sewer System Management Plan.

4.7. Audit Records

The Enrollee shall maintain, at minimum, the following records pertaining to its Sewer System Management Plan audits, and other internal audits:

- Completed audit documents and findings;
- Name and contact information of staff and/or consultants that conducted or involved in the audit; and
- Follow-up actions based on audit findings.

4.8. Equipment Records

The Enrollee shall maintain a log of all owned and leased sewer system cleaning, operational, maintenance, construction, and rehabilitation equipment.

4.9. Work Orders

The Enrollee shall maintain record of work orders for operations and maintenance projects.

ATTACHMENT E2 – SUMMARY OF NOTIFICATION, MONITORING AND REPORTING REQUIREMENTS

This Attachment provides a summary of notification, monitoring and reporting requirements, by spill category, and for Enrollee-owned and/or operated laterals as required in Attachment E1 of this General Order, for quick reference purposes only.

Table E2-1

Spill Category 1: Spills to Surface Waters

Spill Requirement	Due	Method
Notification	**Within two (2) hours** of the Enrollee's knowledge of a Category 1 spill of 1,000 gallons or greater, discharging or threatening to discharge to surface waters: Notify the California Office of Emergency Services and obtain a notification control number.	California Office of Emergency Services at: (800) 852-7550 (Section 1 of Attachment E1)
Monitoring	• Conduct spill-specific monitoring; • Conduct water quality sampling of the receiving water within **18 hours** of initial knowledge of spill of 50,000 gallons or greater to surface waters.	(Section 2 of Attachment E1)
Reporting	• Submit Draft Spill Report **within three (3) business days** of the Enrollee's knowledge of the spill; • Submit Certified Spill Report **within 15 calendar days** of the spill end date; • Submit Technical Report **within 45 calendar days** after the spill end date for a Category 1 spill in which **50,000 gallons or greater** discharged to surface waters; and • Submit Amended Spill Report **within 90 calendar days** after the spill end date.	(Section 3.1 of Attachment E1)

Table E2-2
Spill Category 2: **Spills of 1,000 Gallons or Greater That Do Not Discharge to Surface Waters**

Spill Requirements	Due	Method
Notification	**Within two (2) hours** of the Enrollee's knowledge of a Category 2 spill of 1,000 gallons or greater, discharging or threatening to discharge to waters of the State: Notify California Office of Emergency Services and obtain a notification control number.	California Office of Emergency Services at: (800) 852-7550 (Section 1 of Attachment E1)
Monitoring	Conduct spill-specific monitoring.	(Section 2 of Attachment E1)
Reporting	• Submit Draft Spill Report **within three (3) business days** of the Enrollee's knowledge of the spill; • Submit Certified Spill Report **within 15 calendar days** of the spill end date; and • Submit Amended Spill Report **within 90 calendar days** after the spill end date.	(Section 3.2 of Attachment E1)

Table E2-3
Spill Category 3: Spills of Equal or Greater than 50 Gallons and Less than 1,000 Gallons That Does Not Discharge to Surface Waters

Spill Requirements	Due	Method
Notification	Not Applicable	Not Applicable
Monitoring	Conduct spill-specific monitoring.	(Section 2 of Attachment E1)
Reporting	• Submit monthly Certified Spill Report to the online CIWQS Sanitary Sewer System Database within **30 calendars days** after the end of the month in which the spills occur; and • Submit Amended Spill Reports **within 90 calendar days** after the Certified Spill Report due date.	(Section 3.3 and 3.5 of Attachment E1)

Table E2-4
Spill Category 4: Spills Less Than 50 Gallons That Do Not Discharge to Surface Waters

Spill Requirements	Due	Method
Notification	Not Applicable	Not Applicable
Monitoring	Conduct spill-specific monitoring.	(Section 2 of Attachment E1)
Reporting	• If, during any calendar month, Category 4 spills occur, certify monthly, the estimated total spill volume exiting the sanitary sewer system, and the total number of all Category 4 spills into the online CIWQS Sanitary Sewer System Database, within 30 days after the end of the calendar month in which the spills occurred. • Upload and certify a report, in an acceptable digital format, of all Category 4 spills to the online CIWQS Sanitary Sewer System Database, by February 1st after the end of the calendar year in which the spills occur.	(Section 3.4, 3.6, 3.7 and 4.4 of Attachment E1)

Table E2-5
Enrollee Owned and/or Operated Lateral Spills That Do Not Discharge to Surface Waters

Spill Requirements	Due	Method
Notification	**Within two (2) hours** of the Enrollee's knowledge of a spill of 1,000 gallons or greater, from an enrollee-owned and/or operated lateral, discharging or threatening to discharge to waters of the State: Notify California Office of Emergency Services and obtain a notification control number. Not applicable to a spill of less than 1,000 gallons.	California Office of Emergency Services at: (800) 852-7550 (Section 1 of Attachment E1)
Monitoring	Conduct visual monitoring.	(Section 2 of Attachment E1)
Reporting	• Upload and certify a report, in an acceptable digital format, of all lateral spills (that do not discharge to a surface water) to the online CIWQS Sanitary Sewer System Database, by February 1st after the end of the calendar year in which the spills occur. • Report a lateral spill of any volume that discharges to a surface water as a Category 1 spill.	(Sections 3.6, 3.7 and 4.4 of Attachment E1)

ATTACHMENT F – REGIONAL WATER QUALITY CONTROL BOARD CONTACT INFORMATION

This Attachment provides a map, list of counties, and contact information to assist the Enrollee in identifying the corresponding Regional Water Quality Control Board office, for all Regional Water Board notification requirements in this General Order.

Region 1 -- North Coast Regional Water Quality Control Board:
Del Norte, Glenn, Humboldt, Lake, Marin, Mendocino, Modoc, Siskiyou, Sonoma, and Trinity counties.

RB1SpillReporting@waterboards.ca.gov or (707) 576-2220

Region 2 -- San Francisco Bay Regional Water Quality Control Board:
Alameda, Contra Costa, San Francisco, Santa Clara (Northern most part of Morgan Hill), San Mateo, Marin, Sonoma, Napa, Solano counties.

RB2SpillReports@waterboards.ca.gov or (510) 622-2369

Region 3 -- Central Coast Regional Water Quality Control Board:
Santa Clara (most of Morgan Hill), San Mateo (Southern portion), Santa Cruz, San Benito, Monterey, Kern (small portions), San Luis Obispo, Santa Barbara, Ventura (Northern portion) counties.

CentralCoast@waterboards.ca.gov or (805) 549-3147

Region 4 -- Los Angeles Regional Water Quality Control Board:
Los Angeles, Ventura counties (small portions of Kern and Santa Barbara counties).

rb4-ssswdr@waterboards.ca.gov or (213) 576-6600

Region 5 -- Central Valley Regional Water Quality Control Board:

Rancho Cordova (Sacramento) Office: Colusa, Lake, Sutter, Yuba, Sierra, Nevada, Placer, Yolo, Napa, (North East), Solano (West), Sacramento, El Dorado, Amador, Calaveras, San Joaquin, Contra Costa (East), Stanislaus, Tuolumne counties.

RB5sSpillReporting@waterboards.ca.gov or (916) 464-3291

Fresno Office: Fresno, Kern, Kings, Madera, Mariposa, Merced, and Tulare counties, and small portions of San Benito and San Luis Obispo counties.

RB5fSpillReporting@waterboards.ca.gov or (559) 445-5116

Redding Office: Butte, Glen, Lassen, Modoc, Plumas, Shasta, Siskiyou, and Tehama counties.

RB5rSpillReporting@waterboards.ca.gov or (530) 224-4845

Region 6 -- Lahontan Regional Water Quality Control Board:
Lake Tahoe Office: Alpine, Modoc (East), Lassen (East side and Eagle Lake), Sierra, Nevada, Placer, El Dorado counties.

RB6sSpillReporting@waterboards.ca.gov or (530) 542-5400

Victorville Office: Mono, Inyo, Kern (East), San Bernardino, Los Angeles (North East corner) counties.

RB6vSpillReporting@waterboards.ca.gov or (760) 241-6583

Region 7 -- Colorado River Basin Regional Water Quality Control Board:
Imperial county and portions of San Bernardino, Riverside, San Diego counties.

RB7SpillReporting@waterboards.ca.gov or (760) 346-7491

Region 8 -- Santa Ana Regional Water Quality Control Board:
Orange, Riverside, San Bernardino counties.

RB8SpillReporting@waterboards.ca.gov or (951) 782-4130

Region 9 -- San Diego Regional Water Quality Control Board:
San Diego county and portions of Orange and Riverside counties.

RB9Spill_Report@waterboards.ca.gov or (619) 516-1990

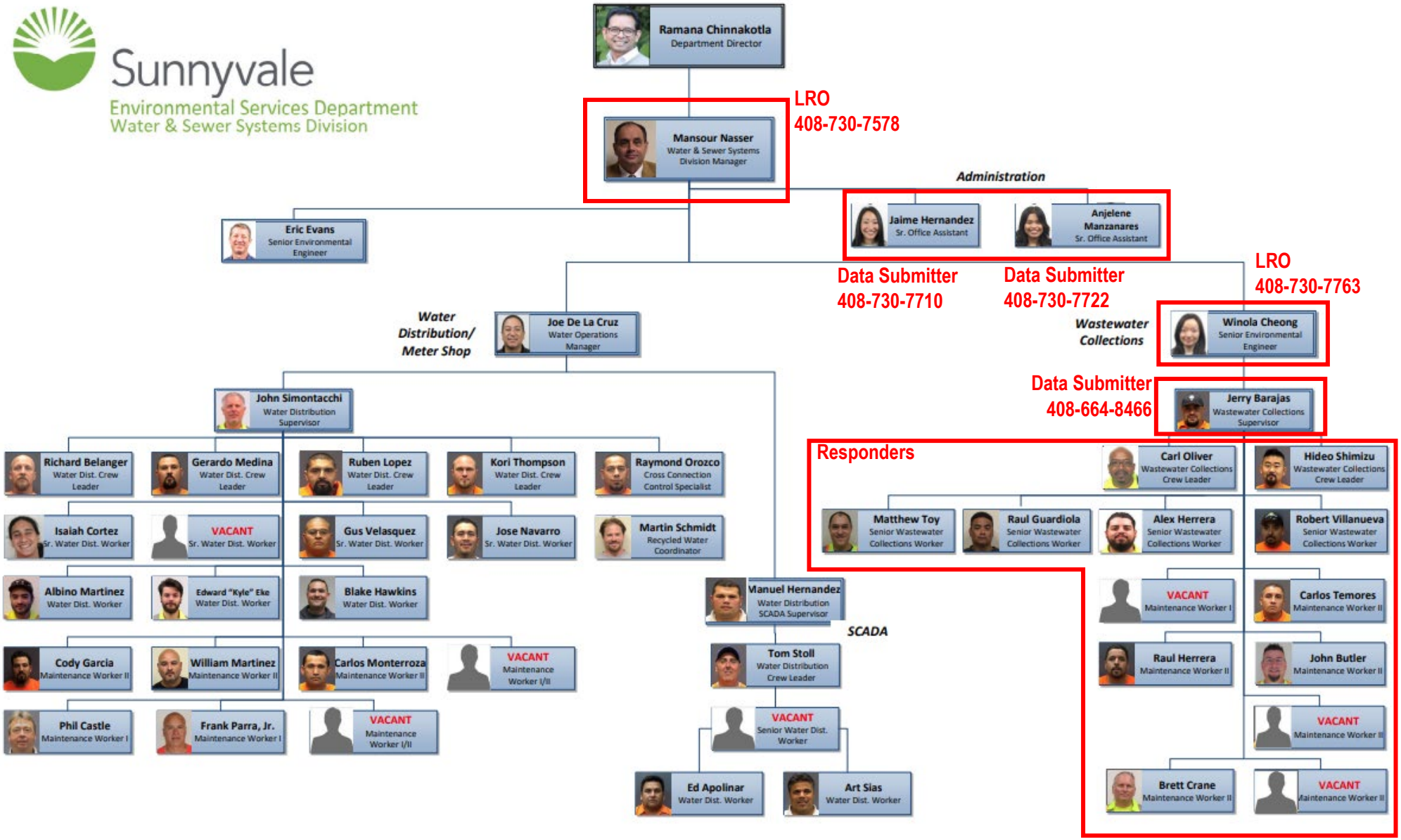
End of Order 2022-0103-DWQ

City of Sunnyvale
Sanitary Sewer Spill Emergency Response Plan

Appendix C

Org Chart and Contact Information for responders, data submitters, and Legally Responsible Officials

Appendix C: Spill Emergency Response Team Organization Chart (as of June 2023)



City of Sunnyvale
Sanitary Sewer Spill Emergency Response Plan

Appendix D

List of On-Call Plumbing Contractors and Emergency Response Contractors

List of Contractors – Emergency Responses & Repairs

- Able Septic Tank Service, 408-377-9990
- Bay Area Trenchless, 408-981-5730
- Castillo Plumbing, 415-786-2564
- Rain For Rent, 925-679-2803

City of Sunnyvale
Sanitary Sewer Spill Emergency Response Plan

Appendix E

Abbreviated Standard Operation Procedure (SOP) for Sanitary Sewer Spill Response

(17) Sanitary Sewer Spill Response

1. Background:

The City of Sunnyvale will clear blockages and mitigate sewage overflows from city owned sanitary sewer.

2. Scope:

This document presents the materials, the procedures to follow, and the safety items to restore flow and recover spill contents emanating from city owned sewer structures.

3. Materials:

3.1 Combination truck
3.2 Stand-by truck
3.3 Spill Response Report
3.4 GIS and/or block map book
3.5 Manhole hook
3.6 Absorbent (Spill Shark)
3.7 Camera (portable or cell phone)
3.8 Atmosphere Tester (4 Gas Analyzer)
3.9 Sampling Equipment

4. Procedure:

4.1 Ensure that all personnel are using prescribed personal safety/protective equipment (i.e.; ear protections, safety glasses, safety vest, appropriate foot wear, etc.) prior to beginning any work.
4.2 Ensure that all safety signage and warning devices and traffic control are in place prior to beginning any work.
4.3 Take pictures when arriving. Also photograph various points of spill mitigation at various locations.
4.4 Contain spill contents and protect storm drain inlets.
4.5 Notify supervisor as soon as possible and call for assistance.
4.6 Check GIS and/or Sewer Maps for ID numbers, location, and orientation of sewer assets.
4.7 Locate upstream and downstream manholes in suspected area.
4.8 Use atmosphere tester to assure safe gas levels in manhole prior to opening lid.=
4.9 Pull manhole lid on downstream manhole check for flow. Hydro-flush upstream if no flow and upstream manhole is holding sewer to restore flow.
4.10 Remove manhole lid on upstream manhole and monitor flow conditions.
4.11 Follow procedures in Sunnyvale Spill and Surcharge Response Plan.
4.12 Vacuum spill contents at furthest point of containment. Wash spill contents with fresh water toward vacuum unit (“wash and walk”).
4.13 Hydro-flush and vacuum affected storm system if applicable.
4.14 Fill out all associated paperwork making note of work performed and findings.

City of Sunnyvale
Sanitary Sewer Spill Emergency Response Plan

Appendix F

Spill Response Report Template

INCIDENT SUMMARY

Recorded By: _____ Weather Condition: ☐ Clear ☐ Rain ☐ Other _____

Spill Location: _____ (WO #_____)

Caller Name: _____ Phone: _____

Receipt of Report*: Date: _____/_____/_____ Time: _____:_____ ☐ AM ☐ PM Call Received By: _____

Call Dispatch: Date: _____/_____/_____ Time: _____:_____ ☐ AM ☐ PM Assigned To: _____

Spill Start*: Date: _____/_____/_____ Time: _____:_____ ☐ AM ☐ PM

Spill End: Date: _____/_____/_____ Time: _____:_____ ☐ AM ☐ PM

*Receipt of Report & Spill Start Time should be 15 minutes prior to Call Dispatch Time

Response Crew: _____, _____, _____, _____

_____, _____, _____, _____

Arrival Time:	Date: _____/_____/_____	Time:_____:_____	☐ AM	☐ PM
Contacted Supervisor:	Date: _____/_____/_____	Time:_____:_____	☐ AM	☐ PM
Requested Additional EE's/Equip:	Date: _____/_____/_____	Time:_____:_____	☐ AM	☐ PM
Requested Additional EE's/Equip:	Date: _____/_____/_____	Time:_____:_____	☐ AM	☐ PM
Requested Additional EE's/Equip:	Date: _____/_____/_____	Time:_____:_____	☐ AM	☐ PM
Containment Implemented:	Date: _____/_____/_____	Time:_____:_____	☐ AM	☐ PM
Clean Up Begin:	Date: _____/_____/_____	Time:_____:_____	☐ AM	☐ PM
Clean Up Complete:	Date: _____/_____/_____	Time:_____:_____	☐ AM	☐ PM
Departure Time:	Date: _____/_____/_____	Time:_____:_____	☐ AM	☐ PM
_____	Date: _____/_____/_____	Time:_____:_____	☐ AM	☐ PM
_____	Date: _____/_____/_____	Time:_____:_____	☐ AM	☐ PM
_____	Date: _____/_____/_____	Time:_____:_____	☐ AM	☐ PM
Report to Cal-OES:	Date: _____/_____/_____	Time:_____:_____	☐ AM	☐ PM
Report to CIWQS:	Date: _____/_____/_____	Time:_____:_____	☐ AM	☐ PM
Caller Interview:	Date: _____/_____/_____	Time:_____:_____	☐ AM	☐ PM

Were signs posted? Yes _____ No _____

Were samples taken? Yes _____ No _____

Samples must be taken within 18 hours of a spill 50,000 gallons or greater that discharges to a surface water.

SPILL LOCATION

Observed spill from:

☐ Manhole ID_____ ☐ Lift Station ID _____

☐ Clean Out Address _____ ☐ Building Address _____

☐ Other (Specify) _____

Closest Cross Street/Landmark _____

Comments: _____

_____

_____

_____

Describe the extent of spill and spill boundaries:

_____

_____

_____

_____

_____

Spill Destination: ☐ Building ☐ Paved Surface ☐ Storm Sys. ☐ Curb/Gutter ☐ Unpaved ☐ Surface Water

If Spill Destination is Surface Water, photos of receiving water must be taken including: Waterbody bank erosion, Floating matter, Water surface sheen (potentially from oil and grease), Discoloration of receiving water, and Impact to the receiving water.

SPILL VOLUME WORKSHEET

The purpose of this worksheet is to capture the data and method(s) used in estimating the volume of a spill. Since there are many variables and often unknown values involved, this calculation is just an *estimate*. Additionally, it is useful to use more than one method, if possible, to validate your estimate.

The following methods and tools are the approved methods in the SSMP and ERP. Check all methods and tools that you used:

- ☐ Eyeball Estimate Method
- ☐ Measured Volume Method
- ☐ Duration and Flow Rate Method (Account for diurnal flow pattern for long duration)
- ☐ Other (explain) i.e., estimated daily use per capita upstream or meter @ Pump Station.

_____

_____

_____

Eyeball Estimate Method: Imagine the following container(s) of water tipped over to match the quantity observed.

Size of container(s)	How many of this Size?		Total Volume Estimated
1 gal. bucket		X 1	
5 gal. bucket		X 5	
32 gal. trash can		X 32	
55 gal. trash can		X 55	
Total Volume Estimated Using Eyeball Method			

Measured Volume Method: (this may take several calculations and may have to break down the odd shaped spill to rectangles, circles, and polygons). It is important when guessing depth to measure several locations and use an average depth if possible. Use a separate sheet, if necessary, to sketch the shapes and show your work. Reference the West Bay Sanitary District "Initial Spill Calculation Worksheet" for appropriate formulas and conversions.

1. Draw a sketch of the spill and/or use a photocopy of block map to draw on and attach it.
2. Draw shapes and dimensions used on your sketch.
3. Use correct formula for various shapes.

Rectangle	L x W x D
Circle	3.14 x R^2 x D
Polygons see reference chart	Show formula used

Duration and Flow Rate Method worksheet:

Start Date and Time	1.
End Date and Time	2.
Total time elapsed of spill event (subtract line 1 from line 2. Show time in minutes)	3.
Average flow rate GPM (account for diurnal pattern)	4.
Total volume estimate using duration and flow rate method (Line 3 x Line 4)	5.

List Assumptions made to arrive at the total estimated spill volume:

_____

_____

_____

_____

_____

SPILL CONTAINMENT

Containment Implemented: Date: _____/_____/_____ Time: _____:_____ ☐ AM ☐ PM

Containment Measures: ☐ Plugged Storm Drain ☐ Washed Down ☐ Vacuum Up Water/Sewage

☐ Other Measures: _____

_____

_____

Estimated Total spill volume to Reach Surface Water	Estimated Total spill volume to Reach Land	Estimated Total spill volume to Reach Drainage Conveyance System	Estimated Total spill volume	Estimated Total spill volume Recovered	Estimated spill discharge rate (gallons per minute)

SPILL CATAGORIZATION

Answer These Questions

#1 - Was there a discharge to a surface water? Yes _____ No _____

#2 - Was there a discharge to drainage conveyance system that was "NOT" fully captured & returned to the sanitary sewer system? Yes _____ No _____

If the answer is "yes" to any of the questions above, this spill is a Category 1. (Notification within 2-hours is required if Cat. 1 Spill is greater than 1,000 gallons)

#3 - Is the spill 1,000 gallons or greater? Yes _____ No _____

If the answer is "yes" to question #3, this spill is a Category 2. (Notification within 2-hours is required)

#4 - Is the spill between 50 gallons and 999 gallons? Yes _____ No _____

If the answer is "yes" to question #4, this spill is a Category 3.

#5 - Is the spill less than 50 gallons? Yes _____ No _____

If the answer is "yes" to question #5, this spill is a Category 4

Spill Category: ☐ Category 1 ☐ Category 2 ☐ Category 3 ☐ Category 4

CLEAN UP

Clean Up Begin: Date: _____/_____/_____ Time: _____:_____ ☐ AM ☐ PM

Clean Up Complete: Date: _____/_____/_____ Time: _____:_____ ☐ AM ☐ PM

Describe Clean Up Operations: _____

_____

_____

_____: **Gallons** – Estimate Volume of Spill Recovered (**do not** count wash down water)

CAUSE OF SPILL

Spill Cause: ☐ Roots ☐ Grease ☐ Debris ☐ Vandalism ☐ Lift Sta. Fail ☐ Other _____

☐ Spill cause to be determined by CCTV inspection (Attach TV Report to this form)

Final Cause Determination:

_____

_____

_____

Follow-up or Corrective Action Taken:

_____

_____

_____

_____

Notes:

SUPERVISOR REPORTING

Report to Cal-OES: Date:_____ _____:_____ ☐ AM ☐ PM (Cat.1 & 2 Only) **(800) 852-7550** By: _____

→ Control Number provided by Cal-OES: _____

→ Name of Person Contacted: _____ or Left Message: ☐

Report to CIWQS: Date:_____ _____:_____ ☐ AM ☐ PM By: _____

→ CIWQS ID: _____

GPS Coordinates: Latitude _____ Longitude _____

Name of Receiving Water Body: _____

Type: ☐ Drainage Conveyance System ☐ Creek ☐ Channel ☐ Other _____

CALLER INTERVIEW

Contacted: Date: _____/_____/_____ Time: _____:_____ ☐ AM ☐ PM

☐ Telephone ☐ In Person ☐ Left Message at _____:_____

Where did you see sewage spill from? ☐ Manhole ☐ Inside Building ☐ C/O

☐ Wet well/Lift station ☐ Other_____

Time Caller noticed spill: _____:_____ ☐ AM ☐ PM Date: _____/_____/_____

Comments:

_____

_____

Did Caller notice if spill had reached a storm drain or surface waters? Yes _____ No _____

Comments:

_____

_____

Last time Caller observed NO Spill occurring: _____:_____ ☐ AM ☐ PM Date: _____/_____/_____

Comments:

_____

_____

_____

Other Comments regarding spill start time:

_____

_____

_____

City of Sunnyvale
Sanitary Sewer Spill Emergency Response Plan

Appendix G

Surcharge Response Report Template

City of Sunnyvale
Environmental Services Department
SURCHARGE RESPONSE REPORT
version 2023.5.2

Sunnyvale

Date: Time Call Received: Dispatched to:

Weather Condition: Clear Rain

Location:

Cross Street:

Time arrived at site: Time normal flow restored:

First Responder:

Crew Members:

Downstream Manhole: Upstream Manhole:

Mainline size: Distance between Manholes:

Describe cause and location of blockage (include pictures if taken):

Additional comments:

Attach a copy of the service report, flushing report, site map & all pictures to this report

Televise Date:

Recommendations:

City of Sunnyvale
Sanitary Sewer Spill Emergency Response Plan

Appendix H

Post-Spill Response Assessment Form

SPILL LOCATION

Spill Location: _____ (WO #_____)

☐ Manhole ID_____ ☐ Lift Station ID _____

☐ Clean Out Address _____ ☐ Building Address _____

☐ Other (Specify) _____

NOTIFICATION & COMMUNICATION PROCEDURES

Were notification procedures adhered to? ☐ Yes ☐ No

_____

_____

_____

Were notification procedures effective? ☐ Yes ☐ No

_____

_____

_____

RESPONSE PROCEDURES

Were response time goals met? ☐ Yes ☐ No

_____

_____

_____

Were safety procedures adhered to? ☐ Yes ☐ No

_____

_____

_____

Were safety procedures effective? ☐ Yes ☐ No

_____

_____

_____

Were initial response procedures adhered to? ☐ Yes ☐ No

Were initial response procedures effective? ☐ Yes ☐ No

Were containment procedures adhered to? ☐ Yes ☐ No

Were containment procedures effective? ☐ Yes ☐ No

Were clean up and recovery procedures adhered to? ☐ Yes ☐ No

Were clean up and recovery procedures effective? ☐ Yes ☐ No

Were sewer back up procedures adhered to? ☐ Yes ☐ No

Were sewer back up procedures effective? ☐ Yes ☐ No

Were chain of custody procedures adhered to? ☐ Yes ☐ No

Was failure analysis investigation performed and documented? ☐ Yes ☐ No

REPORTING & NOTIFICATION PROCEDURES

Were reporting and notification timeline requirements met? ☐ Yes ☐ No

DOCUMENTATION

Was spill file created? ☐ Yes ☐ No

Was QA/QC performed to ensure field data matched CIWQS data? ☐ Yes ☐ No

RECOMMENDED CHANGES

☐ N/A

ATTENDEES

FACILITATED BY

	Date:

City of Sunnyvale
Sanitary Sewer Spill Emergency Response Plan

Appendix I

Category 4 Spill Recordkeeping Template

Spill No.	Spill Date	Spill Start Time	Location	Spill Volume	Estimation Method	Cause(s)	System failure location (e.g., main, PS, etc.)	Response activities	Reached SD system? (Y/D)	SD Location	Volume Recovered	Volume Remained in SD

APPENDIX 7

City of Sunnyvale
Sewer System Management Plan
City of Sunnyvale Pretreatment Inspection Enforcement Response Plan

City of Sunnyvale

Pretreatment Inspection

Enforcement Response Plan

Revised on 2/28/2024

Environmental Services Department

Regulatory Programs Division

February 28, 2024

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

I. BACKGROUND

In 1990, the Environmental Protection Agency (EPA) promulgated amendments to the General Pretreatment Regulations to require all Publicly Owned Treatment Works (POTW) with approved pretreatment programs to develop and implement enforcement response plans (40 CFR Part 403.8(f)(5). The EPA hoped that the POTW plans would be based on the same management principles and internal controls that have been used successfully in the National Pollution Discharge Elimination System (NPDES) program and issued its "Guidance for Developing Control Authority Enforcement Response Plans" in September 1989 [1].

In its guidance document, the EPA identified the principles below that describe the process for obtaining and evaluating information on industrial use compliance: identifying noncompliance; selecting an appropriate enforcement action; and resolving noncompliance in a timely, fair, and consistent manner. The principles establish a framework for managing an enforcement process, while providing flexibility to develop management procedures best suited to program operations and resources.

- Establish responsibilities, procedures, and timeframes to provide information to all levels of the organization.
- Maintain a complete and accurate Industrial User inventory.
- Collect and dispense information.
- Conduct inspections and sampling of Industrial User based on a systematic plan.
- Ensure compliance screening of all relevant data.
- Perform an enforcement evaluation, where appropriate.
- Institute formal enforcement action and follow-up, where necessary.

[1] Also see "Pretreatment Compliance Monitoring and Enforcement Guidance", EPA, July 1986.

II. ACRONYMS

AC – Administrative Citation

ACR – Administrative Citation Referral

AO – Administrative Orders

AP – Administrative Penalty

BMP – Best Management Practice

CC – Consistently Achieving Compliance

CA – Control Authority

CFR – Code of Federal Regulations

CIG – Compliance Inspection Group

CIU – Categorical Industrial User

CM – Compliance Meeting

CWA – Clean Water Act

ECI – Environmental Compliance Inspector

ERG – Enforcement Response Guide

ERP – Enforcement Response Plan

HO – Hearing Officer

IC – Inconsistently Compliant

IND – Industrial/Commercial Site

IU – Industrial User

NPDES – National Pollutant Discharge Elimination System

NOV – Notice of Violation

NS – Not Sampled

POTW – Publicly Owned Treatment Works

RP – Responsible Party

SECI – Senior Environmental Compliance Inspector

SIU – Significant Industrial User

SMC – Sunnyvale Municipal Code

TCS – Time Compliance Schedule

VN – Verbal Notice

WN – Warning Notice

III. DEFINITIONS

1. **Administrative Orders (AO)** – Enforcement documents that direct Industrial Users to undertake or to cease specified activities by specified deadlines. The terms of an administrative order may or may not be negotiated with Industrial User. Administrative orders may incorporate compliance schedules, administrative penalties, and termination of service orders. Administrative orders include:
    a) Finding of Noncompliance – A written notice instructing the Industrial User to identify and correct causes on noncompliance. The notice may require a response from the Industrial User identifying corrective actions taken.
    b) Consent Order – Documents noncompliance and includes actions required to be accomplished by specific dates (milestones). Consent Orders are developed during compliance meetings and terms are agreed upon by both parties.
    c) Compliance Order – Directs the Industrial User to achieve or restore compliance by a date specified in the order. A compliance order is often a stipulated agreement that may include a compliance schedule, the payment of monetary penalties or cost recovery, and the imposition of fines when milestones are not met.
    d) Cease and Desist Order (CDO) – Directs an Industrial User to cease illegal or unauthorized discharges immediately or to terminate its discharge altogether.
    e) Termination of Service or Permit revocation – A notification to an Industrial User of the intent to revoke the Industrial User's Permit or the termination of service.
2. **Administrative Penalty (AP)** – A punitive monetary charge assessed by the Control Authority rather than a court. The purpose of the penalty is to recover the economic benefit of noncompliance and to deter future violations.
3. **Average Monthly Discharge Limit** – The highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during that month divided by the number of days on which monitoring was performed (except in the case of fecal coliform).
4. **Best Management Practice (BMP)** – Schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to implement the prohibitions listed in (Sunnyvale Municipal Code (SMC)) Section 12.12.020 (a) and (b), and the local limits on wastewater in Section 12.12.120(c). BMPs also include treatment requirements, operating procedures, and practices to control site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw materials storage.
5. **Bypass** – The intentional diversion of wastestreams from any portion of an Industrial User's treatment facility. (Sunnyvale Municipal Code (SMC)) Section 12.12.340 (c).
6. **Categorical Industrial User (CIU)** – An Industrial User subject to a categorical pretreatment standard or categorical standard.
7. **Categorical Pretreatment Standard** or **Categorical Standard** – Any regulation containing pollutant discharge limits promulgated by EPA in accordance with Sections 307(b) and (c) of the Act (33 U.S.C. Section 1317) that apply to a specific category of Industrial User and that appear in 40 CFR Chapter I, Subchapter N, Parts 405-471.
8. **Cease and Desist Order** – Directs an Industrial User to cease illegal or unauthorized discharges immediately or to terminate the discharge altogether.
9. **Clean Water Act (CWA)** – The Federal Water Pollution Control Act, as amended, 33 U.S.C. Section 1251, et seq.

10. **Code of Federal Regulations (CFR)** – A codification of the final rules published daily in the Federal Register. Title 40 of the CFR contains the environmental regulations.
11. **Compliance Order** – A compliance order directs the Industrial User to achieve or restore compliance by a date specified in the order. A compliance order is often a stipulated agreement that may include a compliance schedule, the payment of monetary penalties or cost recovery, and the imposition of fines when milestones are not met.
12. **Composite Sample** – A flow-proportional or time-proportioned sample collected manually or automatically, either discretely or continuously. Manual compositing requires a minimum of four individual samples, that when combined and mixed, form one representative sample that is analyzed to determine the conditions during a specific period.
13. **Compliance Meeting (CM)** – A meeting with the Industrial User to discuss the causes of noncompliance, corrective actions to achieve compliance, and the time frames for the implementation or corrective actions.
14. **Compliance Time Schedule** – A timetable for the implementation of corrective actions (milestones) by an Industrial User to achieve consistent compliance with all pretreatment program requirements.
15. **Consent Order** – A Consent order, also known as a **Time Compliance Schedule (TCS)**, documents noncompliance and includes actions required to be accomplished by specific dates (milestones). Consent Orders are developed during compliance meetings and terms are agreed to by both parties.
16. **Consistently Achieving Compliance (CC)** – Compliance with all applicable federal and local standards as confirmed by POTW sampling, showing no more than one violation of any individual parameter during the quarter, if such violation was not an obvious continuation of a problem detected in the previous quarter and is not a severe violation of the City sewer ordinance.
17. **Control Authority (CA)** – The entity directly administering and enforcing Pretreatment Standards and requirements against Industrial Users. For purposes of this Enforcement Response Plan, the Control Authority is the approved POTW Pretreatment Program.
18. **Daily Maximum Discharge Limit** – The maximum allowable discharge of pollutant during a calendar day. Where daily maximum limits are expressed in units of mass, the daily discharge is the total mass discharged over the course of the day. Where daily maximum limits are expressed in terms of a concentration, the daily discharge is the average pollutant concentration derived from all measurements taken that day.
19. **Diluting Water** – Noncontact cooling water, boiler blowdown, domestic sewage, groundwater, stormwater, surface drainage, reverse osmosis reject or potable waters that are not part of an industrial process and do not contain priority pollutants, but are combined with industrial process wastewater prior to the monitoring point for industrial waste discharge. SMC 12.04.030 (12).
20. **Domestic Wastewater** – Consists of 1) wastewater from normal residential activities including, but not limited to, wastewater from kitchen, bath, and laundry facilities, or 2) wastewater from the personal sanitary conveniences (toilets, showers, bathtubs, fountains, non-commercial sinks, and similar structures) of commercial, industrial or institutional buildings, provided that the wastewater exhibits characteristics which are similar to those of wastewater from normal residential activities. Specifically excluded from this definition is wastewater from commercial, industrial, or institutional laundries or food preparation facilities.
21. **Effluent Limit** – The maximum pollutant concentration in wastewaters discharged from industrial and commercial users into the sanitary sewer system. Effluent Limits include discharge limits established by Federal, State, and Local agencies.

22. **Grab Sample** – A single sample collected at a particular time and place which represents the composition of the wastewater only at that time and place.

23. **Good Faith Effort or Progress** – Prompt and vigorous pollution control measures undertaken by the discharger which shows that extraordinary efforts (not a "business-as-usual" approach) have been made to achieve compliance.

24. **Inconsistently Achieving Compliance (IC)** – Having more than one violation of the same parameter during the most recent quarter, and the violations do not meet the definition of significant noncompliance, or having only one violation in the quarter but it is a continuation of a problem detected the previous quarter, or a severe violation of the City sewer ordinance. A severe violation is a violation that is five times the most stringent limit for metals; or below 2.0 or above 12.5 for pH; or known to be intentional.

25. **Industrial User or User (IU)** – A source of indirect discharge.

26. **Indirect Discharge** or **Discharge** – The introduction of pollutants into the POTW from any non-domestic source.

27. **Interference** – A discharge which, alone or in conjunction with a discharge or discharges from other sources:

    a) Inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use or disposal; and

    b) Is a cause of a violation of any requirement of the City's NPDES permit (including an increase in the magnitude or duration of a violation) or of the prevention of sewage sludge use or disposal in compliance with the following statutory provisions and regulations or permits issued thereunder (or more stringent state or local regulations): Section 405 of the Clean Water Act, the Solid Waste Disposal Act (SWDA) (including Title II, more commonly referred to as the Resource Conservation and Recovery Act (RCRA), and including state regulations contained in any state sludge management plan prepared pursuant to subtitle D of the SWDA), the Clean Air Act, the Toxic Substances Control Act, and the Marine Protection, Research and Sanctuaries Act.

28. **Local Limits** – Specific discharge limits developed and enforced by the City upon industrial or commercial facilities to implement the general and specific discharge prohibitions listed in SMC Chapter 12.12.020.

29. **Notice of Violation (NOV)** – An official notice that a significant violation of discharge regulations has occurred. A written response to the NOV identifying causes of the violation and corrective actions taken to prevent recurring violations is required within two weeks (14 calendar days or 10 business days) of the mailing date. Notices of violation are authorized under SMC 12.18.030.

30. **Not Sampled (NS)** – Industrial Users who have closed down or ceased discharge sometime during the calendar year will have a compliance status of NS for the quarter in which they closed down, as a well as for all subsequent quarters. New Industrial Users will show a compliance status of NS until the quarter in which they begin operation and are sampled.

31. **Pass Through** – A discharge which exits the POTW into waters of the United States in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the City's NPDES permit, including an increase in magnitude or duration of a violation.

32. **pH** – A measure of the acidity or alkalinity of a solution, expressed in standard units.

33. **Point Source** – Any discernible, confined, and discrete conveyance from which pollutants are or may be discharged.

34. **Pollutant** – Dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded

equipment, rock, sand, cellar dirt, municipal, agricultural and industrial wastes, and certain characteristics of wastewater (e.g., pH, temperature, TSS, turbidity, color, BOD, COD, toxicity, or odor).

35. **Pretreatment or Treatment** – The reduction of the amount of pollutants, the elimination of pollutants, or the alteration of the nature of pollutant properties in wastewater prior to, or in lieu of, introducing such pollutants into the POTW. The reduction or alteration can be obtained by physical, chemical, or biological processes; by process changes; or by other means, except by diluting the concentration of the pollutant unless allowed by an applicable pretreatment standard.

36. **Process Wastewater** – Water, which, during manufacturing or processing, comes into contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product.

37. **Publicly Owned Treatment Works (POTW)** – A treatment works, as defined by Section 212 of the Act (33 U.S.C. Section 1292), which is owned by the City. This definition includes any devices equipment or sewerage systems used in the collection, storage, treatment, recycling, and reclamation of sewage or industrial wastes of a liquid nature and any conveyances that convey wastewater to a treatment plant.

38. **Self-Monitoring** – Sampling and analyses performed by a facility to determine compliance with a permit or other regulatory requirements.

39. **Significant Industrial User (SIU)** –

    a) An Industrial User subject to categorical pretreatment standards; or

    b) An Industrial User that:

        (i) Discharges an average of twenty-five thousand gallons per day or more of process wastewater to the POTW (excluding sanitary, noncontact cooling and boiler blowdown wastewater),

        (ii) Contributes a process wastestream which makes up five percent or more of the average dry weather hydraulic or organic capacity of the POTW treatment plant, or

        (iii) Is designated as such by the City on the basis that it has a reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement.

40. **Significant Noncompliance (SNC)** – Any violations, which are:

    a) Chronic violations of wastewater discharge limits, defined as those in which sixty-six percent or more of all the measurements taken for the same pollutant parameter taken during a six-month period exceed (by any magnitude) a numeric pretreatment standard or requirement, including those defined in Chapter 12.12 of the Sunnyvale Municipal Code.

    b) Technical review criteria (TRC) violations, defined as those in which thirty-three percent or more of wastewater measurements taken for each pollutant parameter during a six-month period equals or exceeds the product of the numeric pretreatment standard or requirement including those defined in Chapter 12.12 of the Sunnyvale Municipal Code, multiplied by the applicable criteria (TRC = 1.4 for BOD, TSS, fats, oils and grease, and 1.2 for all other pollutants except pH);

    c) Any other violation of a pretreatment standard or requirement as defined by Chapter 12.12 of the Sunnyvale Municipal Code that the director determines has caused, alone or in combination with other discharges, interference or pass through, including endangering the health of POTW personnel or the general public;

d) Any discharge of a pollutant that has caused imminent endangerment to the public or to the environment, or has resulted in the director's exercise of its' emergency authority to halt or prevent such a discharge;

e) Failure to meet, within ninety days of the scheduled date, a compliance schedule milestone contained in an individual wastewater discharge permit or enforcement order for starting construction, completing construction, or attaining final compliance;

f) Failure to provide within forty-five days after the due date, any required reports, including baseline monitoring reports, reports on compliance with categorical pretreatment standard deadlines, periodic self-monitoring reports, and reports on compliance with compliance schedules;

g) Failure to accurately report noncompliance; or

h) Any other violation(s), which may include a violation of best management practices, which the director determines will adversely affect the operation or implementation of the local pretreatment program.

41. **Slug Load of Slug Discharge** – Any discharge at a flow rate or concentration, which could cause a violation of the prohibited discharge standards in Section 12.12.020 of this title. A slug discharge is any discharge of a nonroutine, episodic nature, including but not limited to an accidental spill or a noncustomary batch discharge, which has a reasonable potential to cause interference or pass through, or in any other way violate the POTW's regulations, local limits or permit conditions.

42. **Termination of Service** – A notification to an Industrial User of the intent to revoke the Industrial User's Permit or the termination of service.

43. **Verbal Notice (VN)** – A warning communicated to the Industrial User orally. A VN does not require a response from the Industrial User and may be given during an inspection or by phone call. The violation is usually very minor or within the range of analytical error for discharge violations.

44. **Violation Types**

    a) Minor violations include: 1) exceeding a discharge limit by 1.4 times or less for BOD, TSS, fats, oils and grease, or 1.2 times or less for all other pollutants except pH and toxic pollutants, or 1.4 times or less for conventional pollutants, 2) submitting a required report no more than 5 days late, and 3) an isolated violation of a permit condition.

    b) Moderate violations include: 1) exceeding a discharge limit by 5 times or less for toxic and conventional pollutants, 2) submitting a required report 6 or more days late, and 3) recurring or uncorrected violations of a permit condition.

    c) Severe violations include 1) exceeding a discharge limit by more than 5 times the limit for toxic and conventional pollutants, 2) submitting a required report more than 30 days late, and any violation meeting the definition of Significant Noncompliance.

45. **Upset** – An exceptional incident in which there is unintentional and temporary noncompliance with the permit limit because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

46. **Warning Notice (WN)** – A written notice that a moderate violation has occurred. The WN directs the Industrial User to take actions to correct the violation, and does require a formal response.

IV. LEGAL AUTHORITY

The City of Sunnyvale Municipal Code (SMC) Chapter 12.12. Sewer Use Regulations provides the authority to conduct onsite inspections of all facilities discharging to the City's sanitary sewer system. This includes inspections at commercial, retail, and industrial facilities.

Following is a list of common SMCs that provide legal authority to implement pretreatment inspection programs:

- SMC 12.12.012 Users shall provide wastewater treatment as necessary to comply with this title and shall achieve compliance with all categorical pretreatment standards, local limits, and the prohibitions set out in Section 12.12.020 of this chapter within the time limitations specified by EPA, the state, or the director, whichever is more stringent.
- SMC 12.12.020 No user shall introduce or cause to be introduced into the POTW any pollutant or wastewater which causes pass through or interference. These general prohibitions apply to all users of the POTW whether they are subject to categorical pretreatment standards or any other national, state, or local pretreatment standards or requirements.
- SMC 12.12.278 The director may require submission of information to evaluate the implementation and/or require the implementation of best management practices (BMPs). (Ord. 2490-94 § 1).

For a more complete list visit Chapter 12.12. SEWER USE REGULATIONS (qcode.us)

V. ROLES AND RESPONSIBILITIES

The City's pretreatment inspection programs are implemented by the Environmental Services Department, Regulatory Programs Division, Compliance Inspection Group (CIG). The CIG conducts the following types of pretreatment inspections:

- Industrial/Commercial Facilities (IND/COM)
- Permitted, Significant Industrial User (SIUs)

The following positions are responsible for implementing the pretreatment inspection programs:

- Environmental Compliance Inspector
- Laboratory/Field Technician
- Senior Environmental Compliance Inspector
- Regulatory Programs Division Manager
- Environmental Services Department Director
- City Attorney

1.0. ENVIRONMENTAL COMPLIANCE INSPECTOR

The Environmental Compliance Inspector (ECI) is responsible for inspecting assigned facilities, provide compliance information, and issue the appropriate level of enforcement action based on the type, severity, and history of violation observed using established guidelines. The ECIs are responsible for processing enforcement actions in a timely manner. The following are the ECI duties related to pretreatment inspections:

- Review inspection and compliance history
- Conduct inspection of assigned facility
- Educate Responsible Party (RP) on Best Management Practices (BMPs)
- Document inspection findings
- Initiate appropriate enforcement action, such as Verbal Notice (VN), Warning Notice (WN), Notice of Violation (NOV), and Administrative Citation (AC)
- Review Administrative Citation Referrals (ACRs) with the Senior Environmental Compliance Inspector for potential AC
- Arrange and prepare for Compliance Meetings (CMs)
- Provide direction to RP for preparation of Compliance Schedules (CSs) and verify deadlines are being met
- Conduct follow-up inspections and assess if compliance issues are adequately addressed
- Issue AC and prepare for hearing, as needed

2.0. LABORATORY/FIELD TECHNICIAN

The Laboratory/Field Technician is responsible for sampling, including pH continuous monitoring, at industry compliance locations and surveillance monitoring in the sanitary sewer system. The enforcement responses carried out by the Laboratory/Field Technician are:

- Perform repeat sampling and analysis within 30 days after the City becomes aware of a violation.

3.0. SENIOR ENVIRONMENTAL COMPLIANCE INSPECTOR

The Senior Environmental Compliance Inspector (SECI) has the responsibility to monitor the ECI duties. Following are the SECI duties related to pretreatment inspection programs:

- Provide oversight and guidance for all enforcement actions
- Ensure consistency across the team in employing the level of enforcement
- Ensure that remedial actions taken are consistent and timely
- Ensure Inspection Staff are adequately trained on the ERP
- Approve enforcement actions beyond verbal notices prepared by the ECI
- Review ACR with ECI and approve AC
- Facilitate CM
- Refer violations to the City Attorney, District Attorney, or EPA, as needed
- Revise ERP, as needed

4.0. REGULATORY PROGRAMS DIVISION MANAGER

The Regulatory Programs Division Manager has direct responsibility for the CIG. Following are the Regulatory Programs Division Manager's duties related to pretreatment inspection programs:

- Approve and sign the ERP
- Aid and counsel CIG staff, as needed
- Review ACs, as needed
- Ensure CIG is adequately trained to perform duties
- Participate in Administrative Hearings and Appeals

5.0. ENVIRONMENTAL SERVICES DEPARTMENT DIRECTOR

The Environmental Services Department Director's duties related to pretreatment inspection programs includes the following:

- Act as the Hearing Officer for Administrative Citation
- Represent CIG to the City Council

6.0. CITY ATTORNEY

The City Attorney's duties related to pretreatment inspection programs include the following:

- Provide guidance to the CIG on enforcement procedures with respect to SMC and ERP, as needed.
- Manage civil and criminal litigation on behalf of the City.

VI. IDENTIFYING AND INVESTIGATING INSTANCES OF NONCOMPLIANCE

1.0. INDUSTRIAL USER INVENTORY

Each year an updated list of Industrial Users within the service area is compiled and submitted with the Pretreatment Program annual report. The list indicates whether Industrial Users are regulated by categorical standards or local limits, and includes the discharge status during the year. Throughout the year, the Industrial User inventory is continually updated as new Industrial Users are identified or they cease discharge to the sanitary sewer. Among the methods used to identify potential Industrial Users are:

- Review of building plans submitted to the City for construction permits, as referred by the Building Division;
- Inspection of commercial areas to identify new tenants and industries previously identified as zero discharge;
- Annual review of internet yellow pages;
- Referral by other City departments;
- Review Water Board list of industries subject to Stormwater General Industrial Permit;
- Direct contact by business representatives; and
- Review of new business license list from the Finance Department.

These methods are employed annually and are particularly effective when all resources are utilized.

When potential dischargers to the sanitary sewer are identified, the business is contacted through a telephone call or inspection to determine the nature of its operations. Businesses that discharge a regulated wastestream are required to submit an industrial wastewater discharge permit application. A record of all businesses contacted is maintained in the files and database, regardless of whether the business is regulated by permit or Best Management Practices or does not discharge to the sanitary sewer.

2.0. INSPECTION PROGRAM

In accordance with 40 CFR Part 403.8(f)(2)(v), the Pretreatment Program performs a minimum of two compliance inspections per year for every SIU. Two general types of inspections are conducted: scheduled and demand, with additional inspections performed throughout the year as needed. More frequent inspections should be conducted when considering one or more of the following criteria:

- The Industrial User's potential to adversely affect the POTW's operations (e.g., the type and/or concentration of pollutants in the Industrial User's discharge);
- The volume and variability of the discharge;
- The type and reliability of control methods used to achieve compliance;
- The quantity and nature of materials stored or in use and their relative risk of accidental spill;
- POTW problems known or suspected to have been caused by the Industrial User;
- A history of complaints, if any, at the facility;
- The Industrial User's compliance history and
- The period of time since the last inspection.

The Environmental Compliance Inspector prepares an annual monitoring and inspection plan that specifies the number of compliance inspections and monitoring events scheduled for each SIU. A description of the general types of inspections and the situation in which they would be applied follows:

2.1. Scheduled Inspections

- **Annual Compliance Inspection** – An inspection, based upon 40 CFR Part 403.8(f)(2)(v), in which Pretreatment Program staff performs a minimum of one compliance inspection for each permitted Industrial User per year. While the inspection is typically scheduled, it does not mean that inspectors must notify the facility prior to each inspection. Rather, a scheduled inspection may be more effective since arrangements can be made for accompanying personnel who are knowledgeable of the industry's operations. This routine compliance inspection is conducted to examine the environmental activities of an Industrial User, ensure they comply with regulations relevant to their facility and to generate a permit or enforce an existing permit that identifies the responsibilities of the Industrial User.
- **Follow-Up Inspection** – An inspection generally performed in order to obtain information unavailable during the routine compliance inspection or to determine compliance or progress toward a time schedule or corrective action. Scheduling a follow-up inspection may be necessary to involve personnel who have additional information or knowledge crucial to the operation of the facility. Like a routine compliance inspection, it is not required that an inspector notify the facility prior to the inspection.
- **Facility Modification Inspection** – An inspection typically initiated by a request from a facility. Requests for an inspection from a facility may be due to modifications in their operation, including installation of new equipment, removal of equipment, relocation of processes, or closure of a facility. A facility may request an inspection to ensure they are compliant with their permit requirements.

2.2. Demand Inspections

- **Enforcement Response Inspection** – An inspection performed in response to an incident that is occurring or has occurred at a facility including spills, sewer line blockages, excursions, illegal dumping, or upset of pretreatment systems. This inspection may be initiated through a call from an industry representative, another environmental agency, public complaint, or violations discovered during routine sampling.
- **Preliminary Inspection** – An unannounced inspection conducted at non-permitted (commercial) facilities where it is suspected that the facility may be performing an operation requiring a discharge permit. Occasionally, through inspection of new and existing non-permitted facilities, operations are discovered that would require a discharge permit. It is the goal of the City of Sunnyvale to assess every business to characterize the business activity and its need for permitting or continued inspection.

3.0. MONITORING PROGRAM

The City of Sunnyvale generally performs all required compliance sampling in lieu of the SIU. In cases of continued noncompliance, the City may require the SIU to share the cost burden of demonstrating compliance by requiring increased monitoring to be conducted by an Environmental Laboratory Accreditation Program certified laboratory, on behalf of the SIU.

Discharges from SIUs are generally monitored each quarter by composite sampling, grab sampling, and continuous pH monitoring where feasible. SIUs subject to Categorical Standards are monitored for all applicable pollutants in accordance with 40 CFR 136 procedures for sample collection, handling, and analysis. In general, composite

samples are collected to determine compliance with federal and local limits for metals and to measure revenue parameters. Grab samples are collected for pollutants where composite sampling is inappropriate such as oil and grease, cyanide, and volatile organics. Grab samples for metals may be taken in addition to composite sampling where deemed appropriate by the Environmental Compliance Inspector. pH recording is performed quarterly through grab or continuous chart recording if deemed appropriate. Monitoring is unannounced except in limited cases where security protocols prohibit access without prior clearance and escort. Wastewater samples are collected after process or pretreatment and prior to combining with sanitary or non-process flows.

Monitoring at frequencies greater than once per quarter is conducted at facilities with demonstrated noncompliant discharge limits. Frequencies are determined by the Environmental Compliance Inspector, using the EPA Guidance Manual (Industrial User Guidance Manual), the Sunnyvale Pretreatment Program Guidance for Determining Monitoring Frequencies, and this Enforcement Response Plan. Monitoring frequencies are individually evaluated for each SIU and determined based on the need for representative sampling data to evaluate compliance and to meet minimum monitoring requirements.

Sampling events may be random and are unannounced. Since almost all sampling structures are located within the facility, the Environmental Compliance Inspector or Laboratory/Field Technician collecting the sample checks the final effluent pH, including any previous day's pH data available for review, and the general functioning appearance of the pretreatment system. They will also verify compliance with permit conditions such as maintaining proper pH calibration records and performing required process control monitoring. Facility personnel are notified of any significant problems requiring immediate attention at the pretreatment system, unusual sample appearance, or any other problems observed in the surrounding area which may negatively impact spill control or storm or sanitary sewer discharges.

Chain of Custody documentation is maintained for all industrial samples. A Chain of Custody form is created prior to collection and is assigned a unique number to identify the sampling event. This number appears on all sample collection bottles and the Chain of Custody form. This number is used to identify results reported by the laboratory. Staff record pertinent information about the sampling event on the Chain of Custody form and maintain custody of all samples until they are relinquished to the laboratory. Samples are secured in an area of the laboratory that is accessible to authorized personnel only. Information regarding the sampling event, including test results, is stored in a computer tracking system. A hard copy version is stored in the Industry's file.

Within 30 days of becoming aware of a sampling violation, the City will repeat the sampling and analysis unless the City notifies the IU of the violation and requires the IU to perform the repeat analysis. This sampling and analysis is required by 40 CFR 403.12(g)(2).

VII. INDUSTRIAL USER REPORTING

General Pretreatment Regulations at 40 CFR 403.12 set forth five basic reporting requirements that apply to Industrial Users subject to specific categorical pretreatment standards. Categorical Industrial Users must comply with these Federal reporting requirements, even if the Control Authority has determined that the local limit(s) requirement is more stringent than the categorical standard. Pursuant to 40 CFR, these reporting requirements are:

- Baseline Monitoring Report (403.12(b)), including a compliance schedule, when necessary, for meeting categorical pretreatment standards (403.12(c)).
- Report on Progress in Meeting Compliance Schedules (403.12(c))
- Report on Compliance with Categorical Pretreatment Standard Deadline (403.12(d)).
- Periodic Report on Continued Compliance (403.12(e)).
- Notice of Potential Problems, including Slug Loading (403.12(f)).

The Pretreatment Program requires all potential SIUs submit a Wastewater Discharge Permit Application (WDPA) prior to the commencement of discharge, which contains information listed in 40 CFR Part 403.12 (b)(1)-(5), and estimates of information requested in paragraphs (b)(4) and (5). As permissible by 40 CFR Part 403.12(g), because the Pretreatment Program conducts all minimally required sampling and analysis in lieu of the Industrial User, the Industrial User is not required to submit the compliance certification required under 40 CFR Part 403.12 (b)(6) and (d). Similarly, because the POTW itself collects all the sampling and analysis information required for the report, and that all other required information is included in the WDPA, new Industrial Users are not required to submit a separate BMR report in addition to the WDPA.

VIII. Enforcement Procedures

When enforcement action is warranted, the appropriate response can usually be determined by referencing the Enforcement Response Guide (Attachment A). A more or less severe enforcement action may be justified depending on the nature of the violation, abatement actions taken by the Industrial User, previous compliance history, and the effects of the violation on the POTW or receiving water.

1.0. TIMEFRAMES FOR ENFORCEMENT RESPONSE

The timelines of any enforcement action is important if escalated enforcement actions are necessary due to continued noncompliance. The Industrial User is notified of the violation in a timely manner to provide a better opportunity to identify potential causes of the violation before the circumstances surrounding the violation are lost. Finally, prompt notification with an expectation of an equally prompt response by the Industrial User demonstrates that the POTW is serious in addressing noncompliance and enforcing discharge regulations.

The timeframes listed below establish the maximum period in which enforcement actions are expected to be taken. It is desirable that any enforcement action be taken as soon as practical.

- All violations will be identified and documented within five days of receiving compliance information.
- Initial enforcement responses (informal and formal) will occur within 10 days of identifying a violation.
- Follow-up actions for continuing or recurring violations will be taken within 60 days of the initial enforcement response.
- Violations that threaten health, property, or environmental quality are considered emergencies and will receive immediate response such as halting the discharge or terminating service.
- All violations meeting the criteria for significant noncompliance will be addressed through formal enforcement within 30 days of the identification of significant noncompliance.
- Within 30 days of becoming aware of a sampling violation the City will repeat the sampling and analysis unless the City notifies the IU of the violation and requires the IU to perform the repeat analysis (40 CFR 403.12(g)(2)).
- Each year, all Significant Industrial Users in Significant Noncompliance (SNC) within the last twelve months will be reported in the local newspaper (40 CFR 403.8(f)(2)(viii)).

<u>Exception to Notification Procedure</u>

An exception to the timely notification of violations by Industrial Users is when evidence indicates intentional behavior and possible criminal activity. Such instances include information received from an employee reporting illegal dumping or dumping detected during collection system monitoring. In any such cases, notification to the Industrial User is withheld as an investigation is conducted, and routine inspections and monitoring are suspended.

2.0. TYPES OF ENFORCEMENT ACTION

A range of enforcement response mechanisms are available. Enforcement responses may include informal responses such as a Verbal Notice, or a more formal, response such as a written Warning Notice or Notice of Violation, Administrative Order (with or without penalties), judicial action, and/or termination of service. The

appropriate enforcement action can be determined through the Enforcement Response Guide (ERG), found in Attachment A. The ERG reflects the following concepts:

- The Industrial User is notified when a violation is found.
- If the Industrial User (or POTW) repeats the analysis for an effluent violation, and no further noncompliance is identified, no further response may be necessary.
- For most violations, the POTW should receive an explanation and, as appropriate, a plan from the Industrial User to correct the violation within a specified time period.
- If the violations persist or the explanation and the plan are not adequate, the POTW response should become more formal and commitments (or schedules, as appropriate) for compliance should be established in an enforceable document.
- The enforcement response selected should be related to the seriousness of the violation, and enforcement response should be escalated if compliance is not achieved expeditiously after the initial action. A serious initial violation requires a formal enforcement action.

By incorporating criteria for evaluating noncompliance and determining the appropriate enforcement action, the ERG provides a level of response appropriate to the violation. Additional criteria, which are not described in the ERG, can be used to establish an appropriate enforcement action, which may be more or less stringent. These criteria are listed in Appendix A - Criteria for Evaluating Enforcement Response[1].

[1] USEPA Guidance for Developing Control Authority Enforcement Response Plans (1989)

IX. TYPES OF VIOLATIONS

1.0. MINOR VIOLATION:

Minor violations include:

- Exceeding a discharge limit by 1.4 times or less for BOD, TSS, fats, oils and grease, or 1.2 times or less for all other pollutants except pH and toxic pollutants, or 1.4 times or less for conventional pollutants.
- pH that is less than 6 but is greater or equal to 5 for less than an hour.
- pH that is more than 10.5 but less than or equal to 11.5 for less than an hour.
- Submitting a required report, no more than 5 days late.
- An isolated violation of a permit condition.

2.0. MODERATE VIOLATION:

Moderate violations include:

- Exceeding a discharge limit by 5 times or less for toxic and conventional pollutants.
- pH less than or equal to 4 to but less than 5 for any duration.
- pH that is greater than or equal to 11.5 but less than 12.5 for any duration.
- Submitting a required report 6 or more days late but not more than 30 days late.
- Recurring or uncorrected violations of a permit condition.

3.0. SEVERE VIOLATION:

Severe violations include:

- Exceeding a discharge limit by more than 5 times the limit for toxic and conventional pollutants.
- pH less than 4 or greater than 12.5 for any duration.
- Submitting a required report more than 30 days late, and
- Any violation meeting the definition of Significant Noncompliance.

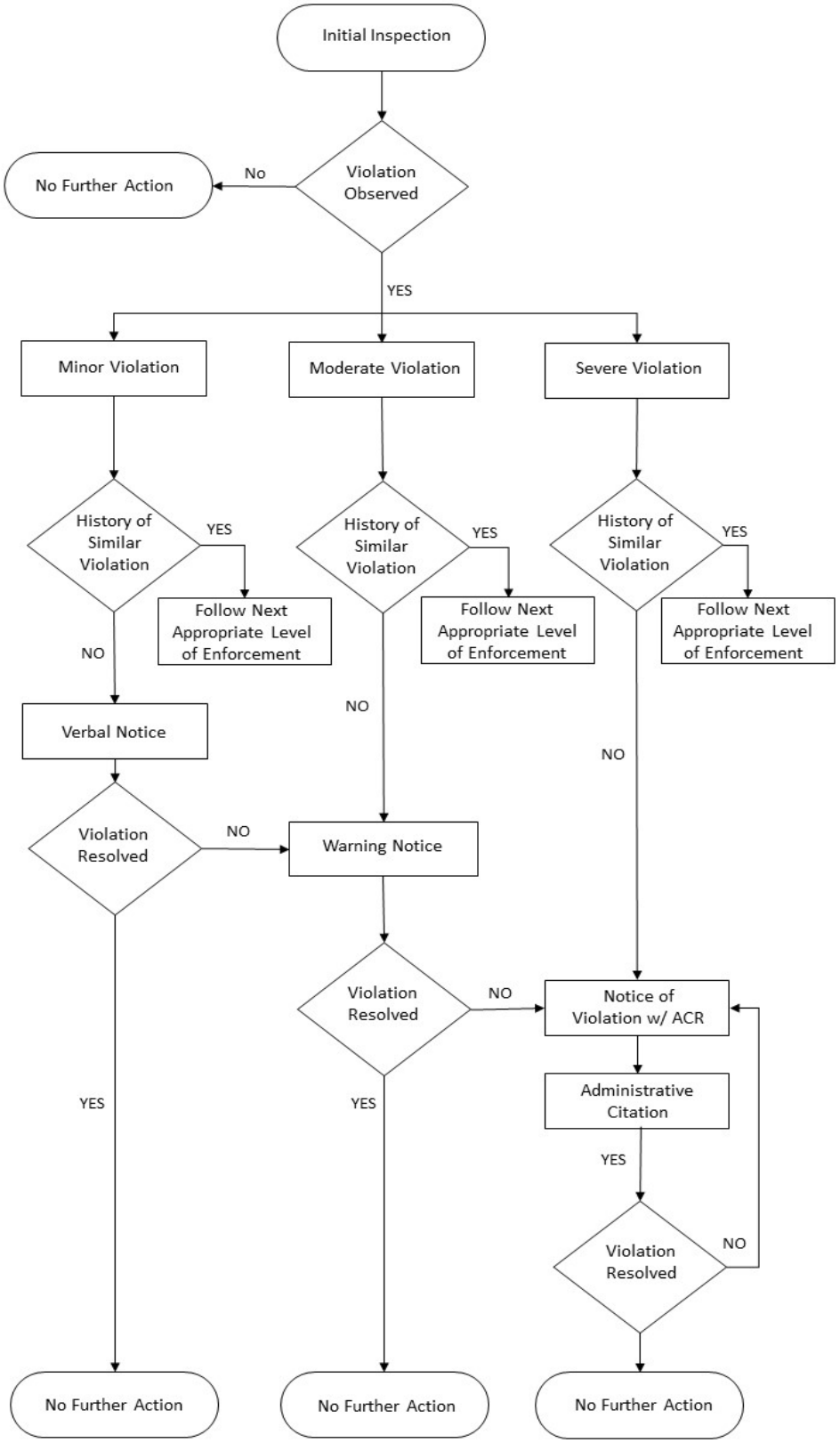


Figure 1: Enforcement Response

X. ENFORCEMENT ACTIONS

The City follows a tiered approach for issuing enforcement actions to violations. Following are the enforcement tools available to pretreatment inspection programs:

- Distribution of Educational Materials
- Verbal Notice (VN)
- Warning Notice (WN)
- Notice of Violation (NOV) with Administrative Citation Referrals (ACRs)
- Administrative Citation (AC)

See *Enforcement Response* in Figure 1 for a flow diagram related to the Enforcement process.

When considering the type of enforcement action to be taken, the Enforcement Response Guide (ERG) is used. City staff gives the RP every reasonable opportunity to comply with directives issued to them. City staff acknowledges that education plays a vital role in environmental enforcement. The use of verbal education, outreach materials, and recommendations in coordination with more formal enforcement assists City staff in ensuring compliance.

All violations and corrective actions require follow-up by City staff to ensure appropriate compliance.

See *Enforcement Response Guide* in Attachment A for a schedule of enforcement actions.

1.0. DISTRIBUTION OF EDUCATIONAL MATERIALS

The ECI gives the RP any relevant educational outreach materials that address the violation(s). The ECI verbally notifies the RP of future enforcement escalation should violations not be addressed. If the responsible party is not identified, educational materials are distributed to all identifiable dischargers at the site.

2.0. VERBAL NOTICE (VN)

A warning communicated to the Industrial User orally. A VN does not require a response from the Industrial User and may be given during an inspection or by phone call. The violation is usually very minor or within the range of analytical error for discharge violations.

A VN may require a written response from a facility. However, the ECI notifies the RP of future enforcement escalation should violations not be addressed.

See the *Inspection Notice* in Attachment B.

3.0. WARNING NOTICE (WN)

A WN is an official notice of noncompliance and is generally issued as an escalation from the VN. A WN is issued when a when a moderate violation has occurred or a violation that was issued a VN was not resolved within the compliance timeline. A WN may require a written response from a facility and directs the RP in writing to take immediate corrective action(s), within a compliance timeline.

The ECI notifies the RP of future enforcement escalation if the violation(s) is not addressed. A WN is documented on the Inspection Notice and the applicable database(s). A WN may also be a separate written document sent to the facility.

4.0. NOTICE OF VIOLATION (NOV)

An official notice that a significant violation of discharge regulations has occurred and is accompanied by an Administrative Citation Referral (ACR). An NOV is generally issued as an escalation from the WN, for a severe actual violation. An NOV is issued when a violation is not resolved within the compliance timeline. An NOV may require a written response from the facility and it directs the RP in writing to take immediate corrective action(s). The ECI notifies the RP of future enforcement escalation if the violation(s) is not addressed. An NOV is documented on the Inspection Notice or may be a separate written document sent to the facility and documented in applicable database(s).

An ACR gives the RP notice that the violation has been referred for an Administrative Citation. Multiple violations meriting ACR enforcement will be documented on the same notice.

5.0. ADMINISTRATIVE CITATION (AC)

The issuance of an AC indicates the increase in magnitude of the violation(s) beyond WN, while requiring immediate response from the RP to resolve/cease the violation(s). An AC is generally issued for severe violations, for unresolved repeat violations, or when previous enforcement fails to achieve compliance. An AC is delivered after an ACR has been issued with an NOV at the time of the inspection. Additional ACs may be issued to different RPs for the same violation(s) (e.g., the business owner and the property owner, the owner and the general contractor, or the general contractor and the subcontractor). An AC carries a monetary penalty and always requires approval from the SECI.

See the *Administrative Citation* in Attachment C.

6.0. ADMINISTRATIVE ORDER (AO)

Administrative Orders (AO) – Enforcement documents that direct Industrial Users to undertake or to cease specified activities by specified deadlines. The terms of an administrative order may or may not be negotiated with Industrial Users. Administrative orders may incorporate compliance schedules, administrative penalties, and termination of service orders. Administrative orders include:

- Finding of Noncompliance – A written notice instructing the Industrial User to identify and correct causes on noncompliance. The notice may require a response from the Industrial User identifying corrective actions taken.
- Consent Order – Documents noncompliance and includes actions required to be accomplished by specific dates (milestones). Consent Orders are developed during compliance meetings and terms are agreed upon by both parties.
- Compliance Order – Directs the Industrial User to achieve or restore compliance by a date specified in the order. A compliance order is often a stipulated agreement that may include a compliance schedule, the

payment of monetary penalties or cost recovery, and the imposition of fines when milestones are not met.

- Cease and Desist Order – Directs an Industrial User to cease illegal or unauthorized discharges immediately or to terminate its discharge altogether.
- Termination of Service or Permit revocation – A notification to an Industrial User of the intent to revoke the Industrial User's Permit or the termination of service.

7.0. COMPLIANCE MEETING (CM)

A CM is a meeting with the Industrial User to discuss the causes of noncompliance, corrective actions to achieve compliance, and the time frames for the implementation or corrective actions.

8.0. TIME COMPLIANCE SCHEDULE

A Time Compliance Schedule is a timetable for the implementation of corrective actions (milestones) by an Industrial User to achieve consistent compliance with all pretreatment program requirements.

9.0. ADMINISTRATIVE HEARING

Any recipient of an AC may contest the violation by completing a "Request for Hearing Form" and returning it to the City, together with a deposit of the total fine amount, within 15 days from the date of the AC. The RP requesting the hearing shall be notified in writing of the time and place set for the hearing at least 10 calendar days prior to the date of the hearing. If the City staff submits an additional written report concerning the AC to the Hearing Officer (HO) for consideration at the hearing, then a copy of this report shall also be served to the person requesting the hearing no less than five calendar days prior to the date of the hearing.

The City Manager shall designate the HO for the AC hearing. A hearing before the HO shall be set for a date that is not less than 15 calendar days and not more than 60 calendar days from the date that the "Request for Hearing" is filed. The RP has one opportunity to reschedule the hearing and must do so promptly to save their opportunity for hearing. Failing to appear will result in the loss of the deposit and opportunity for hearing. At the hearing, the RP contesting the AC shall be given the opportunity to testify and to present evidence concerning the AC. The AC and any additional report submitted by the City staff shall constitute the primary evidence of the respective facts contained in those documents. The HO may continue the hearing and request additional information from City staff or the recipient of the AC prior to issuing a written decision.

After considering all the testimony and evidence submitted at the hearing, the HO shall issue a written decision to uphold or cancel the AC and shall state in the decision the reasons for that decision. The decision of the HO shall be final. If the HO determines that the AC should be upheld, then the HO shall determine the amount of the fine to be imposed, and shall specify a date by which the fine is to be paid to the City. The RP shall be served with a copy of the written decision.

Any RP aggrieved by an administrative decision by the HO regarding the disposition of an AC may obtain review by filing a petition for review with the Municipal Court in accordance with the timelines and provisions set forth in Government Code Section 53069.4.

See *Hearing Process - Administrative Citation* in Figure 2 for a flow diagram of ECI and SECI responsibilities related to the Hearing process.

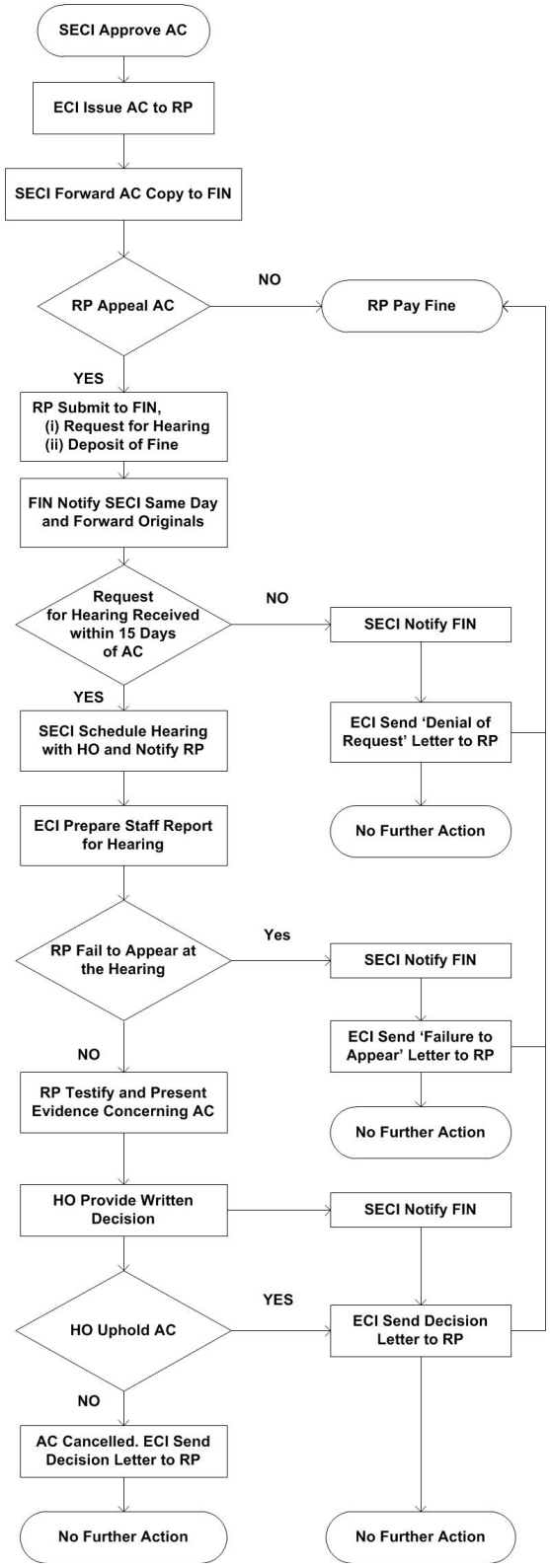


Figure 2: Hearing Process

XI. RECORDKEEPING

The City has electronic Inspection/Sampling Databases that maintain records to track compliance and appropriate follow-up enforcement responses for sites inspected.

In addition to the electronic database, hardcopy case files are maintained in an onsite filing system.

APPENDIX A

Appendix A -Selected EPA Guidance

1.0. CRITERIA FOR EVALUATING ENFORCEMENT RESPONSE

Violations of discharge limits and/or reporting requirements may range from relatively minor violations (such as reports submitted a week late but having no effluent violations) to major violations, such as discharges that cause an NPDES violation or a decrease in biosolids quality. The enforcement response to each violation is based on the severity and duration of the violation, the discharge history of the company, the enforcement history for the company, the good faith or culpability of the company, the potential or actual harm caused by the violation, and the Significant Noncompliance (SNC) status of the company. The enforcement procedures are designed to ensure that the proper enforcement response will be selected after considering the factors below.

Magnitude of Violation

Ratings of violations will reflect the relative magnitude of the violation. Minor violations are no more than 1.2 times the discharge limit, moderate violations are no more than twice the discharge limit, and significant violations are greater than twice the discharge limit or cause shock loading to the treatment system. Reporting violations also are evaluated based on the number of days that a report is late or not submitted at all. EPA recommends that the response to any significant noncompliance be an enforceable order that requires a return to compliance by a specific deadline. The Enforcement Response Guide specifies the type of enforcement action to be taken depending on the severity or magnitude of the violation.

Duration of Violation

Violations (regardless of severity) that continue over prolonged periods should subject the Industrial User to escalated enforcement actions. For example, an effluent violation, which occurs in two out of three samples over a six-month period or a report that is more than 30 days late, is considered significant, while a report that is two days late would not be deemed significant.

Effect on the Receiving Water

One of the primary objectives of the National Pretreatment Program is to prevent pollutants from "passing through" the POTW and entering the receiving water. Consequently, any violation that results in environmental harm should be met with a severe response. Environmental harm should be presumed wherever an industry discharges a pollutant into the sewerage system which:

- Passes through the POTW
- Causes a violation of the POTWs NPDES permit (including water quality standards),
- Has a toxic effect on the receiving waters.

Effect on the POTW

Some violations may have negative impacts on the POTW itself. For example, they may result in significant increases in treatment costs, interfere or harm POTW personnel, equipment, processes, operations, or cause sludge contamination resulting in increased disposal costs. These violations should be met with an administrative fine or civil penalty and an order to correct the violation in addition to recovery of additional costs and expenses to repair the POTW. For example, when the Industrial User's discharge upsets the treatment plant, damages the collection system through pipe corrosion, causes an obstruction or explosion, or causes additional expenses (e.g., to trace a spill back to its source), the POTW's response should include cost recovery, civil penalties, and a requirement to correct the condition causing the violation.

Compliance History of the Industrial User

A pattern of recurring violations (even of different program requirements) may indicate either that the Industrial User's treatment system is inadequate or that the Industrial User has taken a casual approach to operating the maintaining its treatment system. These indications should alert to the likelihood of future significant violations. Accordingly, Industrial Users exhibiting recurring compliance problems should be strongly dealt with to ensure that consistent compliance is achieved. Compliance history is an important factor for deciding which of the two or three designated appropriate remedies to apply to a particular violator. For example, if the violator has a good compliance history the decision to use the less severe option would be appropriate. Compliance history for commercial facilities should be evaluated to see if there is a systemic issue with implementing appropriate BMPs.

Good Faith of the Industrial User

The Industrial User's "good faith" in correcting its noncompliance is a factor in determining which enforcement response to invoke. "Good faith" may be defined as the Industrial User's honest intention to remedy its noncompliance coupled with actions that give support to this intention. Generally, an Industrial User's demonstrated willingness to comply should qualify for less stringent enforcement responses. However, good faith does not eliminate the necessity of an enforcement action. For example, if the POTW experiences a treatment upset, it should recover its costs regardless of prior good faith. Good faith is typically demonstrated by cooperation and completion of corrective measures in a timely manner (although compliance with previous enforcement orders is not necessarily good faith).

2.0. COMPLIANCE ISSUES RELATED TO SAMPLING AND ANALYSIS

2.1. The Use of Duplicate Samples to Evaluate Compliance

In most cases, if proper QA/QC procedures are followed, the analysis from the duplicates should be very close together. This indicates that the sample collection technique is sufficiently precise and that the lab has a high degree of precision in its analysis of samples. If the duplicate sample results are very close to one another (i.e., within the QC range established by the laboratory) but one is above the limit and the other is below the limit, the results should be averaged together to determine the compliance status of

the Industrial User. Remember, this can only be done if the sample results are within the QC range of the laboratory.

In other cases, the analytical results from the duplicate samples, even though pulled from the same sample (or a simultaneous second sample), may yield significantly different analytical results. If this happens, an evaluation as to whether the sample can be used for determining the compliance status of the Industrial User. If duplicate samples produce significantly different analytical results the following procedures should be followed [2]:

- Investigate the Analytic Methodology. Review the procedures used by the laboratory personnel when analyzing the sample to ensure that all steps were followed properly. Evaluate the nature of the samples themselves and whether the samples may be responsible for contributing to any analytical discrepancies (e.g., matrix effects, serial dilutions, etc.).
- Review the Sampling Methodology. It is possible that a duplicate sample, if taken as two discrete samples, will have very different characteristics. For example, when taking a duplicate sample for oil and grease, it is usually necessary to take two discrete samples because it is not possible to split an oil and grease sample. When the two samples are taken, the sampler may not take each sample in exactly the same way (e.g., one sample may skim the top of the wastestream and the other may be taken from the bottom of the wastestream). This can produce two radically different samples, even though they were taken at the same time from the same place. If samples are taken from the same sample collection vessel, make sure that the sample is well mixed and homogeneous so that each sample is as close as possible to each other.
- Check the Laboratory QA/QC. The laboratory and sampling QA/QC procedures should be reviewed when duplicate samples produce different analytical results. The lab should check to see if blank and spike sample analyses give appropriate results. If the blanks and/or spikes do not produce expected values, it is highly likely that there is a problem with the analytical procedures. If the blanks and spikes indicate analytic problems, it may be necessary to discard the sample and disregard the results when determining the compliance status of the Industrial User.

When a sample is split with an Industrial User (regardless of whether the Industrial User or the POTW collected the sample) the POTW has the responsibility to determine whether the Industrial User's results from the split sample are valid. Where an Industrial User's results are different than the POTW's, the burden is on the Industrial User to show that all preservation, chain-of-custody, and analytical and QA/QC methods were followed. If the user cannot make this showing, then the analytical results from the Industrial User should be discarded when determining the compliance status of the facility. If both the Industrial User and POTW have followed appropriate procedures, and there is still a wide divergence, then follow-up sampling should be conducted. If follow-up sampling consistently shows Industrial User noncompliance, or if the POTW is otherwise satisfied with the validity of its own results, it should proceed to follow its enforcement procedures.

---

[2] While these procedures apply to both the POTW laboratory and the Industrial User's contract laboratory, a commercial laboratory will typically follow less stringent QA/QC protocols.

If the source of the discrepancy is identified, the POTW should run another analysis from the same sample batch (this is one good reason to take an adequate sample amount when in the field) making sure to avoid the mistakes on the original duplicate sample.

There is the option of sending the sample in question to an independent laboratory. This "referee" laboratory can serve to give impartial analysis of the sample so that the sample results can be used to evaluate compliance. If this option is chosen, keep in mind that while the "referee" laboratory will give independent results, it will not necessarily give the "fight" result. The referee lab should be evaluated in terms of the equivalency of its analytical procedures, QA/QC, etc., in relation to 40 CFR 136 as well as equivalency to the POTW laboratory.

2.2. Compliance with Monthly Average Limitations

There have been some questions regarding how many samples are required to demonstrate a violation of a monthly average. At a minimum, only one valid sample from the month is needed to assess compliance with the monthly average. If there is only one sample from an IU in the six-month reporting period and that sample is in violation of the monthly average, the maximum liability the IU faces for that effluent violation is that six-month period is the maximum penalty authority of the POTW multiplied by the number of days in the month the sample was taken. This process should be used by the POTW when evaluating the appropriate penalty amount to assess in situations where the enforcement response plan indicates the need to assess a penalty.

2.3. SNC in Situations with Multiple Outfalls

Multiple outfall situations can arise in three ways:

1. multiple categorical operations with multiple outfalls,
2. a single categorical operation with multiple outfalls, and
3. a wastestream regulated by local limits with multiple outfalls.

If an Industrial User has several outfalls to the POTW from separate categorical operations, each of these outfalls and each pollutant parameter per outfall must be evaluated separately for the purpose of determining whether the facility meets the criteria for Significant Noncompliance. For example, if the Industrial User has three outfalls from three separate categorical operations and each outfall is regulated for chromium, cadmium, and zinc, and any of the data from each separate outfall exceeds either the chronic or TRC criterion, then the Industrial User meets the criteria for SNC and should be published in the newspaper. When evaluating the compliance status of the Industrial User keep in mind that the Industrial User must be evaluated on a categorical operation-by-categorical operation, parameter-by-parameter, and outfall-by-outfall basis. However, if the Industrial User has more than one outfall *from the same categorical operation* (e.g., several lines from the same meal finishing operation), those different categorical operations should be treated as a single, aggregate line for purposes of determining compliance. For example, if a metal finisher discharges categorical process wastewater generated from different categorical operations in the same process line through two different sewer connections (without any intermediate treatment), compliance with the categorical standard should be determined

by using a flow weighted average of the two lines. Finally, how to evaluate compliance in situations where local limits control the nature of the discharge and there is more than one discharge point to the POTW. If there is more than one discharge point to the POTW which is regulated by a local limit (even if the separate outfalls come from the same process line), then the facility must meet the local limit *at the end of each pipe*. Likewise, the federal prohibitive standards in 403.5 must be met *for each discharge point* to the POTW no matter where the discharge point is derived.

2.4. Violation Date

If a sample taken at an Industrial User indicates a violation, the date of the violation is the date the sample was taken, not the date the sample was analyzed in the laboratory. For a long-term composite sample, the date of violation is the date the sample was completed. For example, if a sampler is placed at an Industrial User at 8 a.m. on Tuesday and picked up at 8 a.m. on Wednesday (the following day), but the sampler stopped taking samples at 5 p.m. Tuesday, the date of violation is 5 p.m. Tuesday (not 8 a.m. Tuesday)

2.5. Compliance with Continuous Monitoring of pH

POTW's may implement a local policy analogous to 40 CFR 401.17, which allows transient excursions from discharge limits for pH, subject to several restrictions. First, the federal pretreatment regulations contain a specific prohibition against discharges with a pH below 5.0, from which no waivers are allowed unless the treatment works is specifically designed to accommodate such discharges. Second, although federal pretreatment regulations do not include an upper pH limit applicable to all dischargers, some categorical pretreatment standards do so. Waivers from the requirements of those categorical standards would not be allowed unless expressly permitted by the standards themselves. Third, a POTW may not grant a waiver from a local limit if such waiver would cause pass through or interference. If a POTW wishes to provide waivers from pH limits that are technically based and are part of the POTW's Approved Pretreatment Program, the POTW will have to modify its Approved Pretreatment Program accordingly.

3.0. DENIAL OF CONSENT TO ENTER

If an inspector is refused entry into a facility to conduct their inspection under appropriate State or Local law, the following procedural steps should be taken:

- Present Credentials - Make sure that all credentials have been presented to the facility contact or agent-in-charge.
- Tactfully Discuss the Reason for Denial - If entry is not granted, courteously ask why. Diplomatically probe the reason for the denial to see if obstacles (such as misunderstandings) can be resolved.
- Request to speak with the contact person's supervisor, facility owner or CEO,
- If the resolution of these conflicts is beyond the inspector's authority, he or she may suggest that the facility officials seek advice from their attorneys regarding a clarification of the POTW's inspection authority and right of entry.
- Carefully Record Observations in Your Field Logbook – All observations pertaining to the denial should be noted carefully in the inspector's field logbook. Specifically, note the following:
    - Facility name and exact address;
    - Name, title, and authority of the person who refused entry;
    - Date and time of refusal;
    - Reason for denial; and
    - Facility appearance (e.g., neat and orderly, or chaotic)
- Avoid Threatening or Inflammatory Statements – Under no circumstances should the inspector discuss potential penalties or do anything that may be construed as coercive or threatening.
- Leave Premises and Contact Supervisor – If entry is still denied after attempting to resolve the obstacles, the inspector should leave the premises after obtaining the information noted above in the field logbook.

ATTACHMENTS

ATTACHMENT A

Enforcement Response Guide

Violation and/or Enforcement Response Not Listed

The Enforcement Response Guide contains recommended enforcement actions for most violations and is not meant to be a comprehensive list of every possible violation or enforcement action. Generally, instances of noncompliance are resolved by applying the enforcement response listed. Where compliance is not achieved using the enforcement response listed, further escalation of enforcement is appropriate.

Description of Terms

Term and abbreviations used in the guide are defined below. Specific enforcement responses that appear in this guide are described in more detail in the Enforcement Response Plan.

AC – Administrative Citation
CA – City Attorney
CDO – Cease and Desist
CM – Compliance Meeting
CS – Compliance Schedule
CP – Civil Penalty
IU – Industrial User
NOV – Notice of Violation
SNC – Significant Noncompliance
TP - Termination of Permit
TS - Termination of Service
VN – Verbal Notice

Table 1: Unpermitted Discharge

Unpermitted Discharge			
SMC Reference	**Nature of Violation**	**Enforcement Response**	**Admin Citation**
Discharge Permit Required 12.12.160, .170, .180, .220.	IU unaware of requirement; no harm to POTW/environment	**VN** with application form; 2-week response	None
	IU unaware of requirement; harm to POTW/environment	**NOV** with **CM** Immediate Response	$100
	Failure to submit application within 10 days of due day	**NOV** with Immediate Response	None
	Continued failure to apply 45 days after notice.	**CDO** with Possible Civil Action	$500
	IU aware of requirement; no harm to POTW/environment	**NOV** with **AC**; Immediate Response	$500
	IU aware of requirement; harm to POTW/environment	**CDO** with **AC**; Possible Civil Action	$1,000

Table 2: Effluent Limitations or General Discharge Prohibitions

Effluent Limitations or General Discharge Prohibitions			
SMC Reference	**Nature of Violation**	**Enforcement Response**	**Admin Citation**
Local or Federal Discharge Limitations 12.12.014, .020, .025, .050, .120, .200	Isolated, minor violation	**VN**; no response	None
	Isolated, moderate violation	**WN**; 2-week response	None
	Severe violation	**NOV** with **CM** immediate response; **CS**; potential **AC** or **AP**	$250
	Recurring violation	**NOV** with **CM** and **CS** 10-day response; potential **AC** or **AP** or **CDO**;	$500
	Discharge causes damage to the collection system or city property or causes pass through or interference at the wastewater treatment plant or causes the plant to violate its' NPDES Permit discharge limits.	**NOV** with **CM** and **CS** 10-day response; potential **AC** or **AP** or **CDO**;	$1,000 or cost recovery

Table 3: Notification

Notification			
SMC Reference	**Nature of Violation**	**Enforcement Response**	**Admin Citation**
Notification of Noncompliance 12.12.155, .300, 12.18.030	Failure to report a violation of a permit effluent limitation (includes 24-hr and 5-day notifications).	**NOV**; 2-week response	None
	Failure to provide a written response as required by an enforcement action.	**NOV** with potential **AC** or **AP**; immediate response	$200
	Failure to report spill or violation of permit condition.	**NOV**; 2-week response	None
	Failure to immediately report any slug load, spill, or discharge that could cause interference or pass-through.	**NOV** with potential **AC** or **AP**; immediate response	$250

Table 4: Reporting

Reporting			
SMC Reference	**Nature of Violation**	**Enforcement Response**	**Admin Citation**
Required Reports 12.12.190, .200, .290, 12.12.150	Failure to submit any required report (5 days or less)	**WN**; immediate response	None
	Failure to submit any required report (more than 45 days)	**NOV** with **AC** or **AP**; **SNC** status; immediate response	$500
	Failure to report changed discharge, no impact	**NOV**; 2-week response	None
	Failure to report changed discharge, impact present	**NOV** with **AC** or **AP**; **SNC** status; immediate response	$500
	SMR is improperly certified	**WN** for first occurrence; **NOV** after notice	None
	SMR is falsified in lieu of compliance	**NOV** with **AC** or **AP**; possible civil action	$500
	Failure to submit SMR (5 days or less)	**VN**; immediate response	None
	Failure to submit SMR (more than 5 days)	**NOV**; immediate response	None
	Failure to submit SMR (more than 45 days)	**NOV** with **AC** or **AP**; **SNC** status; immediate response	$500

Table 5: Monitoring

Monitoring			
SMC Reference	**Nature of Violation**	**Enforcement Response**	**Admin Citation**
Improper Sampling and Analysis 12.12.200, .240, .254	Failure to conduct self-monitoring as required in permit.	**NOV**; **NOV** with **AC** or **AP** after notice	$200
	Failure to monitor for all pollutants required by permit	**WN**; **NOV** after notice; **NOV** with **AC** or **AP** if not corrected.	$200
	Improper sampling location or improper sampling and analytical methods	**WN**; **NOV** after notice; **NOV** with **AC** if not corrected.	$200

Table 6: Pollution Prevention

Pollution Prevention			
SMC Reference	**Nature of Violation**	**Enforcement Response**	**Admin Citation**
Best Management Practices (BMPs) 12.12.278	Failure to implement required Best Management Practices	**WN**; **NOV** after notice; **NOV** with **AC** or **AP** if not corrected.	$200
Pretreatment Facilities and Monitoring Equipment 12.12.012, .026, .030, .200, .250	Failure to maintain required pretreatment equipment	**NOV**; **NOV** with **AC** or **AP** after notice	$250
	Failure to install required pretreatment equipment	**NOV** if less than 30 days late; **NOV** with **AP** if more than 30 days; **CM** and **CDO** if not corrected.	$500
	Failure to maintain monitoring equipment	**NOV**; **NOV** with **AC** or **AP** after notice	$250
	Failure to install monitoring equipment	**NOV** if less than 30 days late; **NOV** with **AC** or **AP** if more than 30 days; **CM** and **CDO** if not corrected.	$500
	Failure to meet within 90 days after the schedule date, a compliance milestone in the permit or enforcement order for starting construction, completing construction, or attaining final compliance	**NOV** with **AC** or **AP, SNC** status	$500

Table 7: Significance of pH Violations

Significance of pH Violations			
Type of Violation	**Low pH**	**High pH**	**Duration**
Minor Violation	$5.0 \leq x < 6.0$	$10.5 < x \leq 11.5$	Less than 1 hour
Moderate Violation	$5.0 \leq x < 6.0$	$10.5 < x \leq 11.5$	More than 1 hour
	$4.0 \leq x < 5.0$	$11.5 < x < 12.5$	Less than 1 hour
Severe Violation	< 4.0	≥ 12.5	Any duration

ATTACHMENT B

Inspection Notice

CITY OF SUNNYVALE – INSPECTION NOTICE

Sunnyvale

Responsible Party: _____ Date of Inspection: _____

Address: _____ Inspection Type: ☐ Routine ☐ Follow-Up

I acknowledge that the site noted above was inspected by the City of Sunnyvale Environmental Services Department – Regulatory Programs Division, Compliance Inspection Group.

At the time of inspection, the above-named site was determined to have:

☐ No violations and is compliant with all applicable pretreatment or stormwater regulations

Comments: _____

_____

_____

_____

Best Management Practices/Documents Provided: _____

Description of Violation(s)

Pretreatment – Enforcement Action: ☐ Verbal Notice ☐ Warning Notice ☐ Notice of Violation (Administrative Citation Referral)

☐ 12.12.026. Failure to properly operate and maintain grease removal device

☐ 12.12.120. Violation of local discharge limits

☐ 12.12.180. Failure to comply with conditions of the Wastewater Discharge Permit

☐ 12.12.260. Failure to provide access to all parts of the premises for purposes of inspection, sampling, or records examination

☐ 12.12.278. Failure to implement minimum best management practices and source control measures

☐ Other: _____

Stormwater – Enforcement Action: ☐ Verbal Notice ☐ Warning Notice ☐ Notice of Violation (Administrative Citation Referral)

Enforcement Due to Trash: ☐ Yes ☐ No

☐ 12.60.310(a). Any discharge not composed entirely of stormwater or allowing any material/waste to enter the storm drain

☐ 12.60.070(b). Improper storage of waste or material that may result in an illicit discharge

☐ 12.60.310. Failure to implement minimum best management practices and source control measures

☐ 12.60.340. Failure to properly operate and maintain stormwater treatment and/or source control best management practices

☐ Other: _____

Comments: _____

_____

_____

_____

_____

_____

Corrective Action(s): _____

_____

_____

_____

_____

_____

☐ You are hereby notified to implement the corrections or actions for the violations noted above within _____ days(s) from the date of this notice (no later than _____).

I acknowledge that by living or doing business in Sunnyvale, compliance with Sunnyvale Municipal Code, Title 12 Water and Sewers, is required.

Received By (Name/Title):_____ Inspector: _____

Signature: _____

- Failure to correct the above violation(s) will result in escalated enforcement actions, including possible monetary penalties -

City of Sunnyvale – Environmental Services Department – Regulatory Program
1444 Borregas Avenue, Sunnyvale, CA 94088 | Phone: 408-730-7270 | Fax: 408-747-1139 | E-Fax: 408-3258-0727

Chapter 12.12. SEWER USE REGULATIONS

12.12.010. Use of city sanitary sewers required.
12.12.012. Pretreatment facilities.
12.12.014. National categorical pretreatment standards.
12.12.020. Prohibitions on discharges.
12.12.025. Fats, oils and grease disposal prohibited.
12.12.026. Grease removal device requirements.
12.12.027. Variance from grease interceptor requirement.
12.12.028. Requirements for food service establishment best management practices.
12.12.030. Additional pretreatment measures.
12.12.050. Prohibitions on discharge of storm drainage and groundwater into sewer—Exceptions.
12.12.060. Prohibition on use of diluting waters.
12.12.090. Limitations on the use of garbage grinders.
12.12.100. Limitations on point of discharge.
12.12.110. Prohibition on holding tank wastes.
12.12.115. Copper-based biocides.
12.12.118. Collection of samples.
12.12.120. Local limits for wastewater.
12.12.130. Wastewater volume determination—Metered water supply.
12.12.140. Metered wastewater volume and metered diversions.
12.12.150. Reporting Requirements.
12.12.155. Notice of violation/repeat sampling and reporting.
12.12.160. Wastewater discharge permit application.
12.12.165. Application signatories and certifications.
12.12.170. Interim wastewater discharge permit.
12.12.180. Wastewater discharge permit requirement.
12.12.185. Wastewater discharge permit—Existing connections.
12.12.187. Wastewater discharge permit—New connections.
12.12.190. Notification requirements—Changed conditions.
12.12.200. Permit conditions.
12.12.210. Duration of and amendments to permits.
12.12.220. Renewal of wastewater discharge permit.
12.12.230. No transfer of a permit.
12.12.235. Change of ownership.
12.12.240. Self-monitoring.
12.12.245. Construction requirements.
12.12.250. Monitoring facilities.
12.12.254. Measurement of pollutants.
12.12.260. Inspection and sampling.
12.12.278. Best management practices (BMPs).
12.12.280. Special agreement or arrangement allowed.
12.12.290. Protection from accidental and slug discharges.
12.12.300. Reports of potential problems.
12.12.310. Certification statements.
12.12.320. Public records—Trade secrets.
12.12.330. Maintenance of monitoring records.
12.12.340. Affirmative defenses to discharge violations.

Chapter 12.18. ENFORCEMENT

12.18.010. Responsibility.
12.18.020. Submission of compliance time schedule.
12.18.030. Notification of violation.
12.18.040. Public nuisance.
12.18.050. Issuance of cease and desist orders.
12.18.055. Termination of service.
12.18.060. Emergency corrections.
12.18.070. Revocation of permit.
12.18.080. Appeals.
12.18.090. Administrative civil penalties.
12.18.100. Judicial enforcement remedies.
12.18.120. Falsifying information.
12.18.130. Remedies cumulative.
12.18.140. Publication of users in significant noncompliance.

Chapter 12.60. STORMWATER MANAGEMENT

12.60.010. Purpose and intent.
12.60.020. Scope and limits of chapter.
12.60.030. Administration.
12.60.040. Definitions.
12.60.050. Ultimate responsibility of discharger.
12.60.060. Fees.
12.60.070. Discharge prohibitions.
12.60.080. Wastewater discharges containing copper or copper-based chemicals.
12.60.090. Prohibition of illegal connection.
12.60.100. False statements.
12.60.110. Compliance with NPDES stormwater permit.
12.60.120. Stormwater pollution reduction.
12.60.130. Stormwater treatment requirements—Applicability.
12.60.140. Development and redevelopment projects—Regulated projects.
12.60.150. New or widening road projects—Regulated projects.
12.60.160. Road Construction—Regulated projects.
12.60.170. Special Projects—Regulated Project which may qualify for use of non-LID treatment measures
12.60.180. Required site design measures for small projects and single-family homes.
12.60.190. Site design measures for nonregulated project.
12.60.200. Trash load reductions to storm drain collection system.
12.60.210. Stormwater management plan required.
12.60.220. Numeric sizing criteria for treatment systems.
12.60.230. Low impact development (LID) requirements.
12.60.240. Hydromodification management (HM) requirements—Applicability.
12.60.250. Design standards concerning flooding.
12.60.260. Alternative certification of adherence to numeric sizing criteria for stormwater treatment systems.
12.60.270. Infiltration treatment measures.
12.60.280. Agreement to maintain best management practices.
12.60.290. Submission of revised stormwater management plan.
12.60.300. Best management practices and CASQA Stormwater Best Management Practice Handbook incorporated.
12.60.310. Minimum best management practices and source control measures for all dischargers.
12.60.320. Authority to inspect.
12.60.330. Requirement to remediate.
12.60.340. Failure to properly operate and maintain stormwater treatment and hydromodification management facilities.
12.60.350. Alternative compliance.
12.60.360. Public nuisance.
12.60.370. Manner of notification of a violation.
12.60.380. Administrative process and civil penalties.
12.60.390. Administrative hearing and appeals process.
12.60.400. Emergency corrections.
12.60.410. Judicial civil penalties.
12.60.420. Remedies cumulative.

For more information regarding the Sunnyvale Municipal Codes, Visit: » *qcode.us/codes/Sunnyvale/*

Other Important Phone Numbers:

Sewer/Water Problems	408-730-7400
Storm Drain Spills/Illegal Dumping	408-730-7260
Neighborhood Preservation	408-730-7610
Garbage/Recycling	408-565-9900
Recycling/Household Hazardous Waste	408-730-7262

ATTACHMENT C

Administrative Citation

Citation # _____

Sunnyvale

CITY OF SUNNYVALE – ENVIRONMENTAL SERVICES DEPARTMENT
COMPLIANCE INSPECTION GROUP
VIOLATION OF THE SUNNYVALE MUNICIPAL CODE (SMC)
ADMINISTRATIVE CITATION (Pursuant to SMC Chap 1.05)

Facility/Property Name:			
Responsible Party: Last		First	Middle
Street Address:			
City:	State:	Zip:	Phone Number:
Date of Violation: Month		Day	Year

Location of Violation (if different from above):

Street Address: _____

City: _____ State: _____ Zip: _____

All violations of the Sunnyvale Municipal Code enforced pursuant to Chapter 1.05 are governed by Section 9.09 and 9.10 of the City of Sunnyvale Fee Schedule.

VIOLATION(S):

SMC	DESCRIPTION OF VIOLATION(S):	FINE:
	_____	
	_____	
	_____	
	_____	

Violation Issued to Property Owner: [ ] Yes [ ] No **TOTAL FINE:** **$**

The amounts of the fines for violations imposed pursuant to this chapter shall be set forth in the schedule of fines established by resolution of the city council.

I certify that the foregoing is true and correct as of the date shown below:

Printed Name of Issuer:	Signature:	Telephone Number:
_____	_____	_____
Date Issued:	**Time Issued:**	**Case number:**
_____	_____ AM / PM	_____

Make check payable to: **City of Sunnyvale**

Mail payment to: **City of Sunnyvale**
Finance Department – Attention Accounts Receivable
P.O. Box 3707
Sunnyvale, CA 94088-3707

* All fines are due within thirty (30) days of the citation date. A late fee of 10% per month payment penalty will be assessed for all payments received after the due date. If the violation(s) is not corrected, you may receive additional citations. **Pursuant to Sunnyvale Municipal Code 1.05.110, unpaid citations may be added to your property tax bill.**

- SEE REVERSE SIDE FOR IMPORTANT INFORMATION -

White-**Responsible Party** Canary- **Return with Payment** Pink-**Revenue** Golden Rod- **Environmental Services**

IMPORTANT – PLEASE READ

1. **ORDER:** You are ordered to immediately correct the Municipal Code Violation(s) listed on the front of this Administrative Citation. If the violation(s) is not corrected, you may receive additional citations.

2. **REPEAT VIOLATIONS:** Each day that a violation of any provision of the Sunnyvale Municipal Code exists constitutes a separate offense. Furthermore, each section of the Sunnyvale Municipal Code violated constitutes a separate violation, Sunnyvale Municipal Code 1.04.010 and 1.04.040. If the violation(s) is not corrected, you may receive additional citations, each day, for each offense.

3. **PAYMENT OF ADMINISTRATIVE FINE:** Payment of fine is due within thirty (30) days of the citation date. A late fee of 10%/month payment penalty will be assessed for all payments received after the due date. **Pursuant to Sunnyvale Municipal Code 1.05.110, unpaid citations may be added to your property tax bill.**

4. **APPEAL:** You have the right to contest this Administrative Citation at a hearing before a Hearing Officer. To request a hearing you must complete the section below **(REQUEST FOR HEARING)** and mail it, together with a deposit of the total fine amount to:

City of Sunnyvale
Finance Department – Attention Accounts Receivable
P.O. Box 3707
Sunnyvale, CA 94088-3707

Your **REQUEST FOR HEARING** and deposit must be received within fifteen (15) calendar days of the date the citation was issued. You will be notified in writing of the location, date and time set for your hearing. If you are unable to appear at the hearing, you have one opportunity to reschedule and must do so promptly otherwise you lose your opportunity for a hearing. Failing to appear will result in the loss of your deposit and the opportunity for a hearing.

REQUEST FOR HEARING

1. Name:	2. Mailing address:
3. Reason for appeal:	
	4. Telephone number:

You must fill out this form completely. Failure to complete all boxes **(1 thru 4)** will result in automatic denial of the Request for Hearing.

Updated: 06/2017

APPENDIX 8A

City of Sunnyvale
Sewer System Management Plan
City of Sunnyvale Wastewater Collection System Model
Expansion and Capacity Analysis

City of Sunnyvale Wastewater Collection System Model Expansion and Capacity Analysis, December 2022:

https://www.sunnyvale.ca.gov/home/showpublisheddocument/5678

APPENDIX 8B

City of Sunnyvale
Sewer System Management Plan
City of Sunnyvale FY 2023/24 Budget and Resource Allocation Plan - Wastewater

Wastewater

This Page Intentionally Blank

Wastewater

Sunnyvale provides wastewater management services as a municipal utility. Wastewater collection and treatment is one of the core services the City provides to Sunnyvale residents and businesses. The City's Wastewater Fund Long-Term Financial Plan includes sewage collection and treatment, environmental protection, regulatory compliance, and maintenance of the City's aging collection and treatment systems.

Major Wastewater Projects

Wastewater Collection Systems. In general, the collection system projects related to wastewater management address critical and immediate needs. Projects address manholes, sewer pipes, and rebuilding sewer lift stations. The largest of these efforts is the replacement of sewer mains with funding totaling $37 million over the next twenty years. The proposed budget also allocates an additional $6.5 million to perform emergency repair and replacement work.

Peery Park Wastewater Capacity Projects. The budget includes capacity increase projects to accommodate increasing sewage flow from Peery Park development. The estimated budget is $21 million with design commencing in FY 2024/25 and construction completed in FY 2027/28.

Sewer Capacity Enhancement Projects. Several sewer capacity projects were recommended in a consultant modeling study completed in 2022. Sewer projects along Mary Ave, California Ave, and upgrading the sewer pump station on Arques Ave are scheduled to start design in FY 2026/27 with construction completed in 2034/35 at an estimated cost of $14.9 million. Construction is scheduled to be phased over seven years.

Water Pollution Control Plant Biosolids Processing. This project addresses the removal, processing, and disposal of accumulated sediment from the Plant's Oxidation Ponds, as well as digester cleaning. These services will be necessary until a permanent thickening and dewatering building can be constructed as part of the Cleanwater Program.

Water Pollution Control Plant Permanent Chemical Storage Structure. This project consists of the construction of a new permanent chemical storage tank facility. About six months ago, temporary chemical tanks were installed to test the effectiveness of multiple chemical regimes to mitigate the pond algae. The new chemical regimes have proven to be effective, however, a permanent tank storage facility is needed to store the chemicals. This includes a permanent concrete pad, one chemical storage tank and dosing station. The current temporary chemical storage tanks have an engineered useful life of about 2 years in the current construction.

This Page Intentionally Blank

CITY OF SUNNYVALE
FUNDED / UNFUNDED PROJECTS
BUDGETED PROJECT COSTS SUMMARY

Wastewater Funded Projects

Project	Prior Actual	Current 2022-23	Plan 2023-24	Plan 2024-25	Plan 2025-26	Plan 2026-27	Plan 2027-28	Plan 2028-29	Plan 2029-30	Plan 2030-31	Plan 2031-32	Plan 2032-33	Y11-Y20 Total	Project Life Total
805253 - Sewer Emergency Repair and Replacement	1,615,169	670,924	895,739	926,918	225,000	225,000	225,000	225,000	225,000	225,000	225,000	225,000	2,259,369	8,168,120
822762 - Storm Pump Station Number 2 Rehabilitation	4,431,804	148,738	12,876	-	-	-	-	-	-	-	-	-	-	4,593,418
824341 - Wastewater Cost of Service Study	90,149	56,007	50,000	-	-	-	-	-	50,000	-	-	-	100,000	346,156
825331 - Replacement/Repair/Rehabilitation of Sanitary Sewer System	11,896,226	5,772,638	-	539,280	-	3,163,298	569,394	-	3,558,279	640,490	-	4,002,580	18,731,772	48,873,958
825362 - Replacement/Repair/Rehabilitation of Storm Drain	137,861	1,205,456	-	184,468	1,137,820	-	-	-	213,849	776,757	-	-	3,061,536	6,717,747
825521 - WPCP Biosolids Processing	14,976,656	1,979,488	1,925,000	2,000,000	2,080,000	2,165,000	2,250,000	-	-	-	-	-	-	27,376,144
825962 - SCVURPPP Contracting and Fiscal Agent - General Fund	99,611	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	550,000	1,254,611
827040 - WPCP Asset Condition Assessment	-	-	-	-	-	-	-	-	-	367,107	-	-	-	367,107
828210 - Inspection Data Mgmt and Handheld Data Entry Device Project	-	250,000	-	-	-	-	-	-	-	-	250,000	-	250,000	750,000
829070 - Lawrence Expressway Sanitary Sewer Rehabilitation	4,817,577	30,000	-	-	-	-	-	-	-	-	-	-	-	4,847,577
829100 - Sanitary Sewer Siphon Cleaning and Assessment	279,355	690,473	-	-	-	-	-	-	-	1,090,850	-	-	1,201,507	3,262,185
830200 - Repairs to the Secondary Process	744,809	100,000	-	-	-	-	-	-	-	-	-	-	-	844,809
830210 - Repairs to the Power Generation Facility	1,220,776	829,224	450,000	450,000	265,000	265,000	265,000	-	-	-	-	-	-	3,745,000
830220 - Repairs to the Tertiary Process	1,073,459	809,709	121,079	639,224	-	-	-	-	-	-	-	-	-	2,643,471
830260 - Sanitary Sewer Salinity Reduction Study	466	113,646	-	-	-	-	-	-	-	-	-	-	-	114,112
831390 - CFD No.3 - Ten Year Infrastructure Improvements Plan	-	44,941	37,856	-	-	-	-	-	-	-	-	-	104,381	187,178
831620 - Repairs to the WPCP Support Facilities	392,833	100,000	100,000	100,000	250,000	-	-	-	-	-	-	-	-	942,833
831630 - Repairs to Solids/Dewatering Facilities	147,572	325,000	-	-	-	-	-	-	-	-	-	-	-	472,572
831680 - Adjust Sewer Utilities In Support of Paving Projects	125,160	274,063	113,948	107,897	105,327	109,541	113,922	118,479	123,218	128,147	133,273	138,604	1,728,677	3,320,255
831730 - WPCP Oxidation Pond Levee Rehabilitation	1,001,959	6,468,880	478,555	3,030,447	1,907,914	1,123,233	1,035,601	1,037,025	1,038,505	1,040,046	149,932	43,313	950,446	19,305,857
832430 - Recycled and Potable Water Plan Development	3,835	146,165	-	-	-	-	-	-	-	-	-	-	-	150,000

CITY OF SUNNYVALE
FUNDED / UNFUNDED PROJECTS
BUDGETED PROJECT COSTS SUMMARY

Wastewater Funded Projects

Project	Prior Actual	Current 2022-23	Plan 2023-24	Plan 2024-25	Plan 2025-26	Plan 2026-27	Plan 2027-28	Plan 2028-29	Plan 2029-30	Plan 2030-31	Plan 2031-32	Plan 2032-33	Y11-Y20 Total	Project Life Total
833050 - Wastewater Master Plan Update	-	-	-	-	-	-	-	-	1,710,792	-	-	-	-	1,710,792
833060 - WPCP Annual Digester Cleaning	352,690	198,738	207,365	208,704	-	209,899	-	213,995	-	218,170	-	222,427	1,653,938	3,485,926
833070 - WPCP Electronic Operations and Maintenance Manual	170,564	343,516	-	-	-	-	-	-	-	-	-	-	-	514,080
833090 - Sanitary System Hydraulic Model Update	759,787	-	50,000	50,000	-	-	-	-	-	-	-	-	-	859,787
833091 - Storm System Hydraulic Model Update - General Fund	-	-	-	-	-	-	-	-	279,541	-	-	-	-	279,541
834460 - Sewer Capacity Enhancement Projects	-	1,000,000	-	-	970,000	-	3,850,000	940,000	-	3,760,000	1,080,000	-	4,290,000	15,890,000
834720 - Laboratory Certification Update	23,621	76,379	64,862	66,808	68,812	-	-	-	-	-	-	-	-	300,482
834750 - Peery Park Specific Plan Wastewater Capacity Improvements	-	1,069,668	-	1,069,668	-	5,320,744	4,595,316	-	-	-	-	-	-	12,055,396
835480 - Baykeeper Litigation Expenses	386,629	363,371	-	-	-	-	-	-	-	-	-	-	-	750,000
835991 - Cupertino Sanitary District Sewer Flow Diversion	-	115,000	-	-	-	-	-	-	-	-	-	-	-	115,000
836230 - Sewer System Management Plan	-	-	-	100,000	-	-	-	-	-	100,000	-	-	200,000	400,000
836380 - WPCP Digester No. 3 Improvement Project	-	-	2,025,000	225,000	-	-	-	-	-	-	-	-	-	2,250,000
836390 - WPCP Chemical Tank Storage Facility	-	-	100,000	430,000	-	-	-	-	-	-	-	-	-	530,000
836440 - Abandonment of Rancho Rinconada Sewer Line Segment	-	25,000	-	-	-	-	-	-	-	-	-	-	-	25,000
Total Wastewater Funded Projects	44,748,570	23,262,022	6,687,282	10,183,414	7,064,874	12,636,715	12,959,233	2,589,499	7,254,185	8,401,567	1,893,204	4,686,924	35,081,626	177,449,116

805253 - Sewer Emergency Repair and Replacement

Originating Year:	2000	**Project Type:**	Wastewater	**Department:**	270 - Environmental Services
Planned Completion Year:	Ongoing	**Category:**	Infrastructure	**Project Manager:**	Winola Cheong

Project Description/Scope/Purpose

City staff routinely reviews CCTV inspection reports to identify defects and prioritize repairs for the sewer system. The purpose of this project is to provide sufficient funding for emergency repairs of high-risk defects, particularly those that are highly severe or located close to critical waterways and facilities. These repairs must be addressed promptly due to the potential consequences of inaction, such as pipe collapses, service disruptions, sewage spills, regulatory violations, and legal liabilities, which could result in costly clean-up and repair efforts.

Due to the backlog of high-risk defects, which stands at about 500 pipes awaiting review and prioritization, plus the addition of even more high-risk defects from future CCTV inspections, the City has a pressing need to allocate additional resources towards repairs. The average cost per defect is about $15,000 (could be up to $50,000 depending on scope and complexity); the City has already completed over 40 such repairs in the current fiscal year, almost draining the available budget. To address the mounting backlog and ensure the ongoing safety of the sewer system, staff is proposing to increase the project budget to $900,000 for the next two fiscal years. After the completion of the most pressing repairs, the budget for this project can return to $225,000 per year.

This project is different from other sewer main replacement projects because its focus is to address emergency spot repairs instead of replacing the entire pipe, which are usually planned and executed through large contracts. This project is aimed to provide immediate funding for emergency work that requires swift action to maintain the reliable functioning of the sewer system.

Project Evaluation and Analysis

The alternative is not to fund this project and delay the needed repairs until funds are requested and approved by Council on a case by case basis. These repairs are of an urgent nature most of the time, and delay could result in adverse effects for public health and the environment should overflows occur. The City could also be subject to penalties and fines from regulatory agencies should sewage discharges occur as result of deferring an emergency repair. Delaying can also result in higher repair costs.

Fiscal Impact

Repairs typically range from $15,000 for a spot repair to over $100,000 for sewer repairs on a major thoroughfare. The requested increase in annual budget over the next two years will provide the necessary funds for emergency repairs.

Funding Sources

Wastewater Management Fund

Plans and Goals

EM - Environmental Management - EM-6: Effective Wastewater Collection System

EM - Environmental Management - EM-5: Minimal Pollution and Quantity of Wastewater

Project Financial Summary

	Project Costs	Revenues	Operating Costs
Prior Actual	2,254,321	-	-
2023-24	895,739	-	-
2024-25	926,918		-
2025-26	225,000	-	-
2026-27	225,000	-	-
2027-28	225,000	-	-
2028-29	225,000	-	-
2029-30	225,000	-	-
2030-31	225,000	-	-
2031-32	225,000	-	-
2032-33	225,000	-	-
2033-34	225,000	-	-
2034-35	217,651	-	-
2035-36	217,357	-	-
2036-37	217,052	-	-
2037-38	216,733	-	-
2038-39	216,403	-	-
2039-40	223,521	-	-
2040-41	232,462	-	-
2041-42	241,760	-	-
2042-43	251,430	-	-
2043-44	-	-	-
20 Year Total	**4,986,288**	**-**	**-**
Grand Total	**8,136,348**	**-**	**-**

822762 - Storm Pump Station Number 2 Rehabilitation

Originating Year:	2002	**Project Type:**	Wastewater	**Department:**	270 - Environmental Services
Planned Completion Year:	2023/24	**Category:**	Infrastructure	**Project Manager:**	Nathan Scribner

Project Description/Scope/Purpose

This project provides funds for the rehabilitation of Storm Pump Station #2, east of Baylands Park. Sunnyvale operates two storm pump stations to pump accumulated storm water into tributaries to the San Francisco Bay. These are required due to areas of the City that are close to sea level and could suffer flooding, particularly during large storms and exceptionally high tides. The current configuration of Storm Pump Station #2 consists of a structure with six pumps (one small electric and five natural gas-powered engines), a storage pond surrounded by a levee, and an access road to get to the facility. Several capital aspects of the facility must be periodically funded.

This station was built in 1962. The pumps and motors are original and need to be replaced. The redesign includes replacing the existing natural gas engines with more efficient electrical submersible pumps with an onsite generator for an emergency back-up power source. Several upgrades are also included for code and regulatory compliance as well as operational efficiency including: rehabilitation or replacement of discharge piping; installation of trash capture devices; upgrading electrical control panels and accessories to current standards; replacing Supervisory Control and Data Acquisition (SCADA) controls, which includes the installation of a flow meter; inlet and wet well improvements; and addressing other pump station rehabilitation items identified in the feasibility study.

Project Evaluation and Analysis

This project is necessary to maintain existing essential infrastructure of the Wastewater Utility. Failure of this station to operate would result in flooding of the northeast portion of Sunnyvale.

Fiscal Impact

This project is funded by the General Fund

Funding Sources

General Fund

Plans and Goals

EM - Environmental Management - EM-6: Effective Wastewater Collection System

Project Financial Summary

	Project Costs	Revenues	Operating Costs
Prior Actual	4,431,804	6,934	-
2022-23	148,738	6,947	-
2023-24	12,876	-	-
2024-25	-	-	-
2025-26	-	-	-
2026-27	-	-	-
2027-28	-	-	-
2028-29	-	-	-
2029-30	-	-	-
2030-31	-	-	-
2031-32	-	-	-
2032-33	-	-	-
2033-34	-	-	-
2034-35	-	-	-
2035-36	-	-	-
2036-37	-	-	-
2037-38	-	-	-
2038-39	-	-	-
2039-40	-	-	-
2040-41	-	-	-
2041-42	-	-	-
2042-43	-	-	-
20 Year Total	**12,876**	**-**	**-**
Grand Total	**4,593,418**	**13,880**	**-**

824341 - Wastewater Cost of Service Study

Originating Year:	2003	**Project Type:**	Wastewater	**Department:**	170 - Finance
Planned Completion Year:	Ongoing	**Category:**	Special	**Project Manager:**	Stephen Napier

Project Description/Scope/Purpose

Every five years, the Utility Billing Division in the Department of Finance performs a cost of service study of the wastewater system to update and align the City's wastewater rates with the costs associated with providing service. Staff works with a consultant to develop a cost of service model and populate the model with current data. The study generates a cost of service for each customer class and recommends adjustments to the City's rates and rate structure to ensure costs are recovered on an equitable basis from the different customer classes.

The most recent analysis was done in FY 2017/18. This project provides funding to hire a consultant that will support staff's effort to refresh the analysis every five years.

Project Evaluation and Analysis

City policy and state law require that the rates be periodically restructured in a way that equitably allocates program costs among rate payers (Council Policy 7.1.B.1.4). An alternative to using a consultant would be for staff to conduct the cost of service study. However, city resources and staff hours are not available for a project of this magnitude. If the project is not completed, it is possible that rates will not reflect actual costs, will not provide the complete cost-recovery needed to provide wastewater services, and costs may not be equitably allocated per city policy.

Fiscal Impact

The studies completed through this project will ensure utility rates are consistent with the true cost of providing the utility service and provide enough revenue to operate the utility. This is a requirement of Proposition 218, and the results of the analysis will be used to determine utility rates for each customer class. The next study is being delayed until FY 2024/25 so that the study can reflect the WPCP Master Plan updates currently in progress.

Funding Sources

Wastewater Management Fund

Plans and Goals

EM - Environmental Management - EM-6: Effective Wastewater Collection System

EM - Environmental Management - EM-7: Effective Wastewater Treatment

Project Financial Summary

	Project Costs	Revenues	Operating Costs
Prior Actual	90,149	12,500	-
2022-23	56,007	-	-
2023-24	50,000	-	-
2024-25	-	-	-
2025-26	-	-	-
2026-27	-	-	-
2027-28	-	-	-
2028-29	-	-	-
2029-30	50,000	-	-
2030-31	-	-	-
2031-32	-	-	-
2032-33	-	-	-
2033-34	-	-	-
2034-35	50,000	-	-
2035-36	-	-	-
2036-37	-	-	-
2037-38	-	-	-
2038-39	-	-	-
2039-40	50,000	-	-
2040-41	-	-	-
2041-42	-	-	-
2042-43	-	-	-
20 Year Total	**200,000**	**-**	**-**
Grand Total	**346,156**	**12,500**	**-**

825331 - Replacement/Repair/Rehabilitation of Sanitary Sewer System

Originating Year:	2006	**Project Type:**	Wastewater	**Department:**	270 - Environmental Services
Planned Completion Year:	Ongoing	**Category:**	Infrastructure	**Project Manager:**	Bennett Chun

Project Description/Scope/Purpose

This project is for repair, replacement, and rehabilitation of sewer pipes and associated appurtenances, including but not limited to, manholes, lateral piping, and surface restoration. The goal of this project is to reduce sanitary sewer overflows as well as reduce inflow and infiltration which results in higher treatment costs. Alternative technologies are evaluated to select the best, most cost-effective rehabilitation method for each location. These methods include traditional open-trench replacement as well as "trenchless" methods including pipe-bursting/replacement, or Cured-in-Place pipe lining.

The City has over 310 miles of sewer lines, ranging from 6 inches to 48 inches in diameter, and valued at over $330 million. Many of the sewer lines are over 50 years old and have reached the end of their useful life. Pipe failures have been increasing. Recent video inspection has revealed significant deficiencies at multiple locations that require rehabilitation to prevent failure.

Specific projects will be identified based on need from CCTV findings and as identified in the Wastewater Master Plan. The projects will be constructed in a three-year cycle, with the first two years for planning and design and the third year for construction. Projects will be built to fall within allocated budget, therefore linear footage of pipelines to be replaced/repaired/rehabilitated will vary.

Project Evaluation and Analysis

This project is necessary to comply with regulatory standards which require agencies to rehabilitate and/or replace sanitary sewer system piping and associated components. The alternative to replacement of sewer pipes in poor condition would be to repair them segment by segment on an emergency basis. Public health and the environment could be threatened, and fines could be levied against the City, should overflows occur as a result of a structural failure. Further, repairing or replacing segments of pipeline on an emergency basis would be significantly costlier than scheduled replacements.

Fiscal Impact

This project is funded by Wastewater Management Fund revenues. The projects will be constructed in a three-year cycle, with the first two years for design including permitting and the third year for construction. Projects will be built to fall within allocated budget, therefore linear footage of pipelines to be replaced/repaired/rehabilitated will vary.

Funding Sources

Wastewater Management Fund

Plans and Goals

EM - Environmental Management - EM-6: Effective Wastewater Collection System

Project Financial Summary

	Project Costs	Revenues	Operating Costs
Prior Actual	11,896,226	-	-
2022-23	5,772,638	-	-
2023-24	-		-
2024-25	539,280	-	-
2025-26	-	-	-
2026-27	3,163,298	-	-
2027-28	569,394	-	-
2028-29	-	-	-
2029-30	3,558,279	-	-
2030-31	640,490	-	-
2031-32	-	-	-
2032-33	4,002,580	-	-
2033-34	720,464	-	-
2034-35	-	-	-
2035-36	4,502,358	-	-
2036-37	810,424	-	-
2037-38	-	-	-
2038-39	5,064,541	-	-
2039-40	911,618	-	-
2040-41	-	-	-
2041-42	5,696,920	-	-
2042-43	1,025,446	-	-
20 Year Total	**31,205,094**	**-**	**-**
Grand Total	**48,873,958**	**-**	**-**

825362 - Replacement/Repair/Rehabilitation of Storm Drain

Originating Year:	2019	**Project Type:**	Wastewater	**Department:**	270 - Environmental Services
Planned Completion Year:	Ongoing	**Category:**	Infrastructure	**Project Manager:**	Richard Chen

Project Description/Scope/Purpose

This project is for the repair, replacement, and rehabilitation of storm drain pipes. The City has over 320 miles of storm lines, from 6 inches to 84 inches in diameter. Many of the lines are 50 or more years old. This project repairs, replaces, or rehabilitates storm mains as they are identified or as identified in the Wastewater Master Plan CIP list. Alternative technologies are investigated to apply the best method for each location, including open-trench replacement, "trenchless" pipe-bursting/replacement, or pipe-lining. Storm systems are not generally subjected to the same conditions as sewer systems, and can typically be expected to last longer.

The project additionally provides for repair, replacement, or rehabilitation of associated storm water conveyance components that could include manholes, catch basins, drain inlet grates and lids, and other related system components. Design of the Remington Court storm drain outfall into Stevens Creek was completed in 2021, with construction of the outfall repairs completed in December 2022. Funding includes a study to evaluate sources of storm water inflow into the sanitary sewer system. The study will list and prioritize these locations and propose corrections for future capital improvement projects. The Sources of Storm Water Inflow into Sanitary System Study 2021 9UW-21-01 is currently being finalized.

This project also may include condition assessment; cleaning and debris removal to conduct condition assessment; and flow monitoring as needed to diagnose system structural and performance issues. Specific task identification relies upon condition assessment methods, most commonly the findings of video inspection, to identify locations in need of replacement or rehabilitation each year. This project is necessary to assure storm water conveyance and mitigate system failures which can result in flooding.

Project Evaluation and Analysis

The other alternatives to the project are either not to fund it or to delay funding to later years. However, if funding is not provided or delayed for too long, structural failures in the system due to aging pipes might develop that could cause flooding and property damage. Emergency repairs would then be necessary, which are usually more expensive than scheduled replacements.

Fiscal Impact

This project is funded by the General Fund.

Funding Sources

General Fund

Plans and Goals

EM - Environmental Management - EM-9: Adequate Storm Drain System

Project Financial Summary

	Project Costs	Revenues	Operating Costs
Prior Actual	137,861	-	-
2022-23	1,205,456	-	-
2023-24	-		-
2024-25	184,468	-	-
2025-26	1,137,820	-	-
2026-27	-	-	-
2027-28	-	-	-
2028-29	-	-	-
2029-30	213,849	-	-
2030-31	776,757	-	-
2031-32	-	-	-
2032-33	-	-	-
2033-34	-	-	-
2034-35	247,910	-	-
2035-36	1,191,618	-	-
2036-37	-	-	-
2037-38	-	-	-
2038-39	-	-	-
2039-40	287,395	-	-
2040-41	1,334,612	-	-
2041-42	-	-	-
2042-43	-	-	-
20 Year Total	**5,374,430**	**-**	**-**
Grand Total	**6,717,747**	**-**	**-**

825521 - WPCP Biosolids Processing

Originating Year:	2006	**Project Type:**	Wastewater	**Department:**	270 - Environmental Services
Planned Completion Year:	2027/28	**Category:**	Infrastructure	**Project Manager:**	Bryan Berdeen

Project Description/Scope/Purpose

The Water Pollution Control Plant (WPCP) Biosolids Processing project was initiated in 2009 to address the accumulation of biosolids (sediments) on the bottom of the WPCP Secondary Treatment Oxidation Ponds. This project provides funding for the removal, processing, and disposal of accumulated sediments from the Plant's Oxidation Ponds.

The WPCP Biosolids Processing project also provides funding for the dewatering and beneficial reuse of anaerobically digested biosolids from the Plant's solids handling process until new solids dewatering facilities are constructed as part of the ongoing Sunnyvale Cleanwater Program.

The Biosolids Handling scope of work provides for the removal of ponds solids by dredging and preconditioning before sending those biosolids to a centrifuge for dewatering. The WPCP Biosolids Processing project also provides funding for the dewatering and disposal of biosolids generated by the WPCP Anaerobic Digesters. After dewatering, those concentrated solids are hauled off-site for land application (beneficial reuse).

Funding can also be used to clean digesters when the same contractor provides one or both of the previously mentioned services (pond and/or digester solids processing). This is a cost and logistical advantage for the City as much of the same equipment is used in the cleaning process.

Project Evaluation and Analysis

The WPCP is a heavily regulated wastewater treatment facility with strict effluent discharge requirements. The ammonia concentration in the WPCP final effluent is one of the plant effluent limits. Reduced volumetric treatment capacity within the Oxidation Ponds due to solids accumulation can directly affect the ammonia removal ability of the ponds and, if not addressed, may increase the concentration of ammonia in the effluent.

Over the last decade, the WPCP held several technical meetings with scientists and engineers to determine the best course of action to minimize the chance of process failure of the Secondary Oxidation Ponds. During those meetings, it was concluded that dredging the ponds at a rate faster than accumulation is the most prudent approach.

The rate of capacity restoration of the ponds is slow and needs to be spread over several years. The anaerobic digestion of wastewater solids provides fuel for power generation and volumetric reductions of plant-generated solids. Both save operating costs associated with purchasing power, handling, and disposal of plant-generated biosolids.

Fiscal Impact

The project costs are reflected in the agreement with the current contractor providing the handling, processing, and disposal services. $280,000 in operating impacts have been added to cover the ongoing hauling and disposal costs related to biosolids dewatering and disposal after 2027, once a new Thickening and Dewatering Building has been constructed.

Funding Sources

Wastewater Management Fund

Plans and Goals

EM - Environmental Management - EM-7: Effective Wastewater Treatment

Project Financial Summary

	Project Costs	Revenues	Operating Costs
Prior Actual	14,976,656	-	-
2022-23	1,979,488	-	-
2023-24	1,925,000		-
2024-25	2,000,000	-	-
2025-26	2,080,000	-	-
2026-27	2,165,000	-	-
2027-28	2,250,000	-	-
2028-29	-	-	280,000
2029-30	-	-	280,000
2030-31	-	-	280,000
2031-32	-	-	280,000
2032-33	-	-	280,000
2033-34	-	-	280,000
2034-35	-	-	280,000
2035-36	-	-	280,000
2036-37	-	-	280,000
2037-38	-	-	280,000
2038-39	-	-	280,000
2039-40	-	-	280,000
2040-41	-	-	280,000
2041-42	-	-	280,000
2042-43	-	-	280,000
20 Year Total	**10,420,000**	**-**	**4,200,000**
Grand Total	**27,376,144**	**-**	**4,200,000**

825962 - SCVURPPP Contracting and Fiscal Agent - General Fund

Originating Year:	2019	**Project Type:**	Wastewater	**Department:**	170 - Finance
Planned Completion Year:	Ongoing	**Category:**	Special	**Project Manager:**	Stephen Napier

Project Description/Scope/Purpose

The City of Sunnyvale is one of 15 members of the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP). SCVURPPP was formed to implement the National Pollution Discharge Elimination Permit (NPDES) issued to the cities, county, and Valley Water who discharge storm water to the San Francisco Bay. These 15 agencies have signed a Memorandum of Agreement (MOA) and pay annual assessments to cover the cost of programmatic activities related to implementing the NPDES Permit.

The MOA provides for the selection of one of the members as the program's Contracting and Fiscal Agent. The Contracting and Fiscal Agent provides audited financial statements, billing, and payment services for SCVURPPP. It also acts as the awarding authority for any contracts that the agency is required to enter into.

Project Evaluation and Analysis

The City of Sunnyvale is providing billing and payment services for SCVURPPP and acting as the awarding authority for any contracts that the agency is required to enter into during the course of its normal operations under the MOA.

Fiscal Impact

Total costs of the project are covered by assessments to the SCVURPPP members. The City of Sunnyvale's assessment under the MOA is 7.25% of the total annual program budget.

Funding Sources

Revenue from this project goes to the General Fund. This project monitors Santa Clara Valley Urban Runoff Pollution Prevention Program reimbursement of reasonable and customary costs, pursuant to the SCVURPPP MOA.

Plans and Goals

EM - Environmental Management - EM-8: Protection of Creeks and Bay

Project Financial Summary

	Project Costs	Revenues	Operating Costs
Prior Actual	99,611	100,000	-
2022-23	55,000	160,000	-
2023-24	55,000	55,000	-
2024-25	55,000	55,000	-
2025-26	55,000	55,000	-
2026-27	55,000	55,000	-
2027-28	55,000	55,000	-
2028-29	55,000	55,000	-
2029-30	55,000	55,000	-
2030-31	55,000	55,000	-
2031-32	55,000	55,000	-
2032-33	55,000	55,000	-
2033-34	55,000	55,000	-
2034-35	55,000	55,000	-
2035-36	55,000	55,000	-
2036-37	55,000	55,000	-
2037-38	55,000	55,000	-
2038-39	55,000	55,000	-
2039-40	55,000	55,000	-
2040-41	55,000	55,000	-
2041-42	55,000	55,000	-
2042-43	55,000	55,000	-
20 Year Total	**1,100,000**	**1,100,000**	**-**
Grand Total	**1,254,611**	**1,360,000**	**-**

827040 - WPCP Asset Condition Assessment

Originating Year:	2008	**Project Type:**	Wastewater	**Department:**	270 - Environmental Services
Planned Completion Year:	2030/31	**Category:**	Infrastructure	**Project Manager:**	Leonard Espinoza

Project Description/Scope/Purpose

This project will provide for the multi-disciplinary (structural, civil, electrical, corrosion) engineering review of the Water Pollution Control Plant (WPCP) on a periodic basis. As part of long-range infrastructure planning for the WPCP, a periodic condition assessment of plant facilities is needed in order to prioritize repair/replacement projects and provide for a systematic approach to capital budget planning. The next assessment is scheduled for FY 2030/31, which is five years after the anticipated completion of the first phase of the new Water Pollution Control Plant.

The information will be used to define existing conditions and priorities as part of the ongoing predictive maintenance efforts. Funds should be allocated at five year intervals to maintain this level of evaluation. An assessment should be completed periodically to track the condition and deterioration of assets so that repair/replacement projects can be timed appropriately, and the various needs can be prioritized. This data will then be input into the plant's asset database for evaluation and comparison to be used in managing the WPCP infrastructure. The schedule and cost for these assessments will be reevaluated at the completion of the Master Plan.

Project Evaluation and Analysis

Periodic assessment and comparison of actual condition of WPCP assets with agreed-upon service levels and predicted useful lives facilitates determination of least life-cycle costs for these assets. This information can then be used to provide for capital planning, to minimize the effect on sewer rates.

Fiscal Impact

Project may be incorporated into Cleanwater Program. Actual need will depend on Cleanwater Program availability. This project is funded by Wastewater Management Fund revenues.

Funding Sources

Wastewater Management Fund

Plans and Goals

EM - Environmental Management - EM-7: Effective Wastewater Treatment

Project Financial Summary

	Project Costs	Revenues	Operating Costs
Prior Actual	-	-	-
2022-23	-	-	-
2023-24	-		-
2024-25	-	-	-
2025-26	-	-	-
2026-27	-	-	-
2027-28	-	-	-
2028-29	-	-	-
2029-30	-	-	-
2030-31	367,107	-	-
2031-32	-	-	-
2032-33	-	-	-
2033-34	-	-	-
2034-35	-	-	-
2035-36	-	-	-
2036-37	-	-	-
2037-38	-	-	-
2038-39	-	-	-
2039-40	-	-	-
2040-41	-	-	-
2041-42	-	-	-
2042-43	-	-	-
20 Year Total	**367,107**	**-**	**-**
Grand Total	**367,107**	**-**	**-**

828210 - Inspection Data Mgmt and Handheld Data Entry Device Project

Originating Year:	2010	**Project Type:**	Wastewater	**Department:**	270 - Environmental Services
Planned Completion Year:	Ongoing	**Category:**	Capital	**Project Manager:**	Melody Tovar

Project Description/Scope/Purpose

This project is to update the data system used by, and to provide handheld data entry devices to, the Environmental Service Department's Environmental Compliance Inspectors and Lab/Field Technicians in the Regulatory Programs Division. This project will aim to integrate (or replace) the various databases currently used to manage inspection data, and enable inspection and sampling activities by inspectors to be recorded on a hand-held data entry device and uploaded to a database for further tracking, trend analysis, regulatory reporting, work scheduling, and enforcement actions. It will achieve greater efficiencies by making inspection data more readily available, reducing the possibility of human error in transcribing paper inspection reports to a database, minimizing the possibility of lost or misplaced paper files, and reducing the time needed to gather and store inspection data. Current methods are error-prone, slow, and consume staff time that could be better used for other critical tasks.

Project Evaluation and Analysis

Other water quality inspection programs in Bay Area cities already use such equipment and databases to handle their work. Newer and expanded requirements for various inspection types and business types, such as stormwater treatment features in new and redevelopment; trash reduction ; mercury management practices at dental practices; as well as long established commercial, and significant industrial user programs, have led to a growing inventory of businesses inspected with dynamic needs for reporting to regulatory agencies. This project will help the program keep pace with the increased needs.

Fiscal Impact

Operating costs are for software licensing and equipment replacement. These costs were derived from expenditures for a different hand-held data device project for Maintenance and Operations staff. Replacement is estimated at eight-year intervals but will be evaluated and updated when appropriate hardware/software platforms have been identified.

Funding Sources

Wastewater Management Fund

Plans and Goals

EM - Environmental Management - EM-8: Protection of Creeks and Bay

EM - Environmental Management - EM-7: Effective Wastewater Treatment

Project Financial Summary

	Project Costs	Revenues	Operating Costs
Prior Actual	-	-	-
2022-23	250,000	-	-
2023-24	-		-
2024-25	-	-	15,000
2025-26	-	-	15,450
2026-27	-	-	15,914
2027-28	-	-	16,391
2028-29	-	-	16,883
2029-30	-	-	17,389
2030-31	-	-	17,911
2031-32	250,000	-	18,448
2032-33	-	-	19,002
2033-34	-	-	19,572
2034-35	-	-	20,159
2035-36	-	-	20,764
2036-37	-	-	21,386
2037-38	-	-	22,028
2038-39	-	-	22,689
2039-40	250,000	-	23,370
2040-41	-	-	24,071
2041-42	-	-	24,793
2042-43	-	-	25,537
20 Year Total	**500,000**	**-**	**376,753**
Grand Total	**750,000**	**-**	**376,753**

829070 - Lawrence Expressway Sanitary Sewer Rehabilitation

Originating Year:	2012	**Project Type:**	Wastewater	**Department:**	270 - Environmental Services
Planned Completion Year:	2022/23	**Category:**	Infrastructure	**Project Manager:**	Bennett Chun

Project Description/Scope/Purpose

The Lawrence Expressway Sanitary Sewer trunk main (main) is a critical pipe for carrying sewage from the southern and eastern portions of the City and the Rancho Rinconada area of Cupertino to the Water Pollution Control Plant. The main, which was originally installed in 1963, has been impacted by corrosive sewer gases over the years and has reached the end of its useful life expectancy of 50 years.

A condition assessment and preliminary design report for the main was completed in 2016 which identified several defects, access issues, areas requiring heavy cleaning, and degraded portions of the sewer trunk main pipeline. Bids for construction of an Initial Project to address these immediate needs were received in late 2020. In addition, the 2015 Wastewater Master Plan indicates that a capacity increase is needed along this alignment, or along an adjacent corridor. An analysis to determine the preferred alternative is underway and a new project to fund the capacity improvements will be proposed once conceptual costs are known. If a capacity increase along Lawrence Expressway is preferred, this increase will likely involve installation of a parallel sewer rather than upsizing the existing sewer. For this reason, rehabilitation of the existing sewer is warranted.

Project Evaluation and Analysis

Not funding this project could result in a complete failure of the Lawrence Sanitary Sewer Trunk Main piping system. Due to the high volume of sewage that the line conveys, a failure of this magnitude could be an environmental disaster and the Lawrence Expressway roadway could potentially develop a sinkhole if the City takes no action.

Fiscal Impact

This project is funded by Wastewater Management Fund revenues.

Funding Sources

Wastewater Management Fund

Plans and Goals

EM - Environmental Management - EM-6: Effective Wastewater Collection System

EM - Environmental Management - EM-5: Minimal Pollution and Quantity of Wastewater

Project Financial Summary

	Project Costs	Revenues	Operating Costs
Prior Actual	4,817,577	-	-
2022-23	30,000	-	-
2023-24	-		-
2024-25	-	-	-
2025-26	-	-	-
2026-27	-	-	-
2027-28	-	-	-
2028-29	-	-	-
2029-30	-	-	-
2030-31	-	-	-
2031-32	-	-	-
2032-33	-	-	-
2033-34	-	-	-
2034-35	-	-	-
2035-36	-	-	-
2036-37	-	-	-
2037-38	-	-	-
2038-39	-	-	-
2039-40	-	-	-
2040-41	-	-	-
2041-42	-	-	-
2042-43	-	-	-
20 Year Total	**-**	**-**	**-**
Grand Total	**4,847,577**	**-**	**-**

829100 - Sanitary Sewer Siphon Cleaning and Assessment

Originating Year:	2012	**Project Type:**	Wastewater	**Department:**	270 - Environmental Services
Planned Completion Year:	Ongoing	**Category:**	Capital	**Project Manager:**	Eric Evans

Project Description/Scope/Purpose

The City's sanitary sewer system includes 13 locations with inverted siphons, which are pipes that dip under obstructions such as roadways and creeks. Over time, these low points accumulate sediment and grease and must occasionally be removed. In 2019, this project funded cleaning and inspection of some of the siphons. In early 2023, the City advertised a construction contract to clean and inspect the siphons that still need work. This project will fund this effort, and will allow for periodic cleaning and inspection in future years.

Project Evaluation and Analysis

Siphons must be cleaned and inspected to ensure proper function, and to prevent blockages due to sediment, grease, and potential damage of existing pipes. Such blockages may result in sewer overflows in nearby roadways or creeks, which may trigger regulatory fines.

Fiscal Impact

This project is funded by the Wastewater Management Fund.

Funding Sources

Wastewater Management Fund

Plans and Goals

EM - Environmental Management - EM-6: Effective Wastewater Collection System

Project Financial Summary

	Project Costs	Revenues	Operating Costs
Prior Actual	279,355	-	-
2022-23	690,473	-	-
2023-24	-		-
2024-25	-	-	-
2025-26	-	-	-
2026-27	-	-	-
2027-28	-	-	-
2028-29	-	-	-
2029-30	-	-	-
2030-31	1,090,850	-	-
2031-32	-	-	-
2032-33	-	-	-
2033-34	-	-	-
2034-35	-	-	-
2035-36	-	-	-
2036-37	-	-	-
2037-38	-	-	-
2038-39	-	-	-
2039-40	-	-	-
2040-41	1,201,507	-	-
2041-42	-	-	-
2042-43	-	-	-
20 Year Total	**2,292,357**	**-**	**-**
Grand Total	**3,262,185**	**-**	**-**

830200 - Repairs to the Secondary Process

Originating Year:	2008	**Project Type:**	Wastewater	**Department:**	270 - Environmental Services
Planned Completion Year:	2023/24	**Category:**	Infrastructure	**Project Manager:**	Leonard Espinoza

Project Description/Scope/Purpose

This project funds the maintenance and rehabilitation of the current secondary treatment equipment at the Water Pollution Control Plant (WPCP) pending the construction of new secondary treatment facilities in ten to twelve years.

Rehabilitation may include: incorporation of chemical dosing facilities; upgrades to the existing polymer feed system, pump overhauls, and replacements. Cost estimates for these elements are based on vendor quotes, benchmarks with other agencies, and preliminary estimates from engineering consultants. Specification development and implementation planning will require additional engineering efforts which will form the first phase of this project.

Project Evaluation and Analysis

Project implementation is phased over several years to allow for continued operation of the WPCP and sequencing of the processes and equipment to ensure adequate processing capacity for the incoming wastewater. Polymer system upgrades started in FY 2019/20 and will continue into FY 2023/24. This schedule may change due to WPCP conditions and evaluation results.

Fiscal Impact

This project is funded by Wastewater Management Fund revenues.

Funding Sources

Wastewater Management Fund

Plans and Goals

EM - Environmental Management - EM-7: Effective Wastewater Treatment

Project Financial Summary

	Project Costs	Revenues	Operating Costs
Prior Actual	744,809	-	-
2022-23	100,000	-	-
2023-24	-		-
2024-25	-	-	-
2025-26	-	-	-
2026-27	-	-	-
2027-28	-	-	-
2028-29	-	-	-
2029-30	-	-	-
2030-31	-	-	-
2031-32	-	-	-
2032-33	-	-	-
2033-34	-	-	-
2034-35	-	-	-
2035-36	-	-	-
2036-37	-	-	-
2037-38	-	-	-
2038-39	-	-	-
2039-40	-	-	-
2040-41	-	-	-
2041-42	-	-	-
2042-43	-	-	-
20 Year Total	**-**	**-**	**-**
Grand Total	**844,809**	**-**	**-**

830210 - Repairs to the Power Generation Facility

Originating Year:	2008	**Project Type:**	Wastewater	**Department:**	270 - Environmental Services
Planned Completion Year:	2027/28	**Category:**	Infrastructure	**Project Manager:**	Leonard Espinoza

Project Description/Scope/Purpose

The Power Generation Facility (PGF) at the Water Pollution Control Plant (WPCP) was built in 1997 with the gas management/controls system to generate power using three fuel sources: landfill gas, digester gas, and natural gas. Stricter emission requirements imposed by the California Air Resources Board and the Bay Area Air Quality Management District combined with the declining quality of landfill gas continue to raise the cost of operating the engines, requiring frequent tune-ups and additional gas pre-treatment.

Over the last few years there were several instances when the engines "dropped" off the power distribution grid, resulting in immediate demand for PG&E, who provides back-up power. The instantaneous load results in significant cost increases in the WPCP utility bill, estimated at $80,000 to $100,000 per year in demand charges and peak day pricing. Additionally, legislation and regulation are currently being considered to further reduce emissions associated with combustion power generation for the WPCP engine types.

The scope of this project includes ongoing rebuilds and preventative measures to ensure reliable engine operations and adherence to emission regulations. A new PGF is being contemplated as part of the WPCP rebuild and is anticipated to be on-line by 2028.

Project Evaluation and Analysis

PGF is currently scheduled to be replaced in the 4 - 5 years. This project is proposed to complete more rigorous re-builds of the engines and replacement of the associated components to ensure compliance with the air regulations as well as reliable operations until the new facility is completed.

The obsolete engine control system on the No. 2 PGF was upgraded in 2018, the No 1 PGF engine control system was replaced in early 2022 in conjunction with the major overhaul.
The digester gas dryer, and PGF engine gas flowmeters are also on schedule for replacement in FY 2022/23.

Fiscal Impact

This project is funded by Wastewater Management Fund revenues.

Funding Sources

Wastewater Management Fund

Plans and Goals

EM - Environmental Management - EM-7: Effective Wastewater Treatment

Project Financial Summary

	Project Costs	Revenues	Operating Costs
Prior Actual	1,220,776	-	-
2022-23	829,224	-	-
2023-24	450,000		-
2024-25	450,000	-	-
2025-26	265,000	-	-
2026-27	265,000	-	-
2027-28	265,000	-	-
2028-29	-	-	-
2029-30	-	-	-
2030-31	-	-	-
2031-32	-	-	-
2032-33	-	-	-
2033-34	-	-	-
2034-35	-	-	-
2035-36	-	-	-
2036-37	-	-	-
2037-38	-	-	-
2038-39	-	-	-
2039-40	-	-	-
2040-41	-	-	-
2041-42	-	-	-
2042-43	-	-	-
20 Year Total	**1,695,000**	**-**	**-**
Grand Total	**3,745,000**	**-**	**-**

830220 - Repairs to the Tertiary Process

Originating Year:	2008	**Project Type:**	Wastewater	**Department:**	270 - Environmental Services
Planned Completion Year:	2024/25	**Category:**	Infrastructure	**Project Manager:**	Leonard Espinoza

Project Description/Scope/Purpose

This project funds the rehabilitation of the tertiary treatment process at the Water Pollution Control Plant (WPCP). Master Planning for the WPCP rebuild has identified that the tertiary process at the facility will most likely not change in technology. However, electrical and instrumentation upgrades will be needed in the future to integrate with the new treatment plant along with rehabilitation of existing equipment.

In the interim, some extensive rehabilitation is necessary to maintain operations of the WPCP and compliance with the City's NPDES permit. The tertiary process of the WPCP consists of four Dual Media Filters (DMF), which are large tanks filled with sand and anthracite coal that provide filtration, and disinfection facilities consisting of chlorine contact tanks. Most rehabilitation will be completed by the pending Existing Plant Rehabilitation Project.

This Project will address items not included in the Existing Plant Rehabilitation Project.

Project Evaluation and Analysis

Project implementation is phased over several years to allow for continued operation of the WPCP and sequencing of the processes and equipment to ensure adequate processing capacity for the incoming wastewater. Mechanical, electrical and control system evaluations were conducted, and the final condition assessment report was used to develop and design the Existing Plant Rehabilitation Project. Due to the Existing Plant Rehabilitation Project Budget constraints some identified areas in the condition assessment report were excluded from the project. Project items identified that may be addressed in this project are the Filtered Water Pump overhauls, coatings and DMF galley filtered water flowmeter replacements and DMF media replacements. Pond effluent flow bypass pipping is essential for the operation of the tertiary system. Funds may also be used for modifications of the emergency pond effluent bypass piping installation.

Fiscal Impact

The project is funded by Wastewater Management Fund revenues. Existing implementation funds are proposed to support rehabilitation or replacement of the tertiary process equipment through FY 2024/25 in alignment with the Plant Rehabilitation.

Funding Sources

Wastewater Management Fund

Plans and Goals

EM - Environmental Management - EM-7: Effective Wastewater Treatment

Project Financial Summary

	Project Costs	Revenues	Operating Costs
Prior Actual	1,073,459	-	-
2022-23	809,709	-	-
2023-24	121,079		-
2024-25	639,224	-	-
2025-26	-	-	-
2026-27	-	-	-
2027-28	-	-	-
2028-29	-	-	-
2029-30	-	-	-
2030-31	-	-	-
2031-32	-	-	-
2032-33	-	-	-
2033-34	-	-	-
2034-35	-	-	-
2035-36	-	-	-
2036-37	-	-	-
2037-38	-	-	-
2038-39	-	-	-
2039-40	-	-	-
2040-41	-	-	-
2041-42	-	-	-
2042-43	-	-	-
20 Year Total	**760,303**	**-**	**-**
Grand Total	**2,643,471**	**-**	**-**

830260 - Sanitary Sewer Salinity Reduction Study

Originating Year:	2014	**Project Type:**	Wastewater	**Department:**	270 - Environmental Services
Planned Completion Year:	2024/25	**Category:**	Special	**Project Manager:**	Mansour Nasser

Project Description/Scope/Purpose

This project funds a study that will identify sources of direct Inflow and Infiltration (I&I) of ground water into the sanitary sewer collection system. I&I contributes to additional hydraulic loading in the collection system which increases treatment costs as well as reduces design collection system conveyance capacity. I&I causes poor recycled water quality. The City is currently producing recycled water with a higher than average salinity content, which is affecting the overall quality and usability of recycled water for certain applications. The current sewage treatment process used by the City is not effective at removing salinity.

Several neighboring cities have been successful at reducing salinity and treatment costs by identifying and correcting sources of groundwater I&I. The first phase of this project will conduct a feasibility study to identify sanitary sewer pipe segments where I&I is occurring. Conductivity monitors are deployed at strategic locations in the collection system where I&I is suspected. The information collected by conductivity meters identifies pipe segments where high salinity is occurring, which is generally indicative of an I&I source. Pipe segments are typically recommended to be rehabilitated to eliminate the I&I source. The most common method of pipe rehabilitation to correct I&I sources is cured-in-place pipe lining (CIPP), but replacement and/or spot repairs may be necessary as well. This study may result in additional funding needs based on study findings.

Project Evaluation and Analysis

This project will identify sources of groundwater I&I, which may be affecting the quality of recycled water produced by the WPCP. The sanitary sewer collection system and the WPCP stand to benefit from this project by improving recycled water quality and reducing treatment costs associated with additional hydraulic loading. The reliability of the collection should also be improved as capacity in the system will be increased with the reduction of the additional hydraulic loading.

Failing to undertake this project would result in increased treatment costs to improve recycled water quality. It could also result in illicit sewage discharges from the sanitary sewer collection system due to hydraulic overloading which would have adverse public health and environmental impacts, as well as result in regulatory penalties and fines.

Fiscal Impact

This project is funded by the Wastewater Management Fund. This project is necessary to minimize treatment costs and improve recycled water quality. FY 2022/23 project funding will be used to see the project to completion in FY 2024/25.

Funding Sources

Wastewater Management Fund

Plans and Goals

EM - Environmental Management - EM-7: Effective Wastewater Treatment

Project Financial Summary

	Project Costs	Revenues	Operating Costs
Prior Actual	466	-	-
2022-23	113,646	-	-
2023-24	-		-
2024-25	-	-	-
2025-26	-	-	-
2026-27	-	-	-
2027-28	-	-	-
2028-29	-	-	-
2029-30	-	-	-
2030-31	-	-	-
2031-32	-	-	-
2032-33	-	-	-
2033-34	-	-	-
2034-35	-	-	-
2035-36	-	-	-
2036-37	-	-	-
2037-38	-	-	-
2038-39	-	-	-
2039-40	-	-	-
2040-41	-	-	-
2041-42	-	-	-
2042-43	-	-	-
20 Year Total	**-**	**-**	**-**
Grand Total	**114,112**	**-**	**-**

831390 - CFD No.3 - Ten Year Infrastructure Improvements Plan

Originating Year:	2016	**Project Type:**	Wastewater	**Department:**	270 - Environmental Services
Planned Completion Year:	Ongoing	**Category:**	Infrastructure	**Project Manager:**	Mansour Nasser

Project Description/Scope/Purpose

CFD is mandated by the State's stormwater permit to maintain twenty stormwater biotreatment basins, which require rehabilitation of infrastructure every ten years. This includes the replacement of plants and drainage materials, with an estimated cost of $75,000. While the City has allocated funds for a portion of the improvements to take place in FY 22-23, this project seeks to secure funding for the remaining work needed to ensure compliance with the permit requirements for all basins.

Project Evaluation and Analysis

The City's current landscape vendor for CFD No.3 has provided a quote (attached) for recommended improvements, which includes the replacement of plants and drainage materials, at an estimated cost of $75,000. We propose to utilize the allocated funds in FY 22-23 to initiate the project and aim to secure additional funding for FY 2023/24 to complete the remaining work for all basins.

Fiscal Impact

This project is funded through an annual property assessment of homes located within CFD No. 3. Project expenditure is limited to funds collected under CFD No 3.

Funding Sources

Community Facilities District No. 3 (Estates at Sunnyvale) Fund

Plans and Goals

EM - Environmental Management - EM-6: Effective Wastewater Collection System

Project Financial Summary

	Project Costs	Revenues	Operating Costs
Prior Actual	-	-	-
2023-24	82,797	-	-
2024-25	-		-
2025-26	-	-	-
2026-27	-	-	-
2027-28	-	-	-
2028-29	-	-	-
2029-30	-	-	-
2030-31	-	-	-
2031-32	-	-	-
2032-33	-	-	-
2033-34	104,381	-	-
2034-35	-	-	-
2035-36	-	-	-
2036-37	-	-	-
2037-38	-	-	-
2038-39	-	-	-
2039-40	-	-	-
2040-41	-	-	-
2041-42	-	-	-
2042-43	-	-	-
2043-44	-	-	-
20 Year Total	**104,381**	**-**	**-**
Grand Total	**187,178**	**-**	**-**

831620 - Repairs to the WPCP Support Facilities

Originating Year:	2016	**Project Type:**	Wastewater	**Department:**	270 - Environmental Services
Planned Completion Year:	2025/26	**Category:**	Infrastructure	**Project Manager:**	Leonard Espinoza

Project Description/Scope/Purpose

Water Pollution Control Plant (WPCP) Master Plan is completed and the facilities will be reconstructed over the next 10 to 15 years, existing buildings and supporting structures need major rehabilitation to make them last until the new structures are built. These various support facilities will require updates to heating, ventilating, and air conditioning (HVAC) related equipment upgrades, Plant service air compressor replacements, power generation building roof repair and fan replacements, sodium bisulfite pump station canopy, painting of various structures and equipment.

The proposed budget includes funding for plant wide facility repairs including roof and heating/cooling systems, building upgrades and a canopy at the Sodium Bisulfite pump station. The sodium bisulfite pump station is subject to the elements, water intrusion into the pump controls and the electrical system has caused pump failures. Temporary corrective measures are in place until a permanent structure can be installed. Due to the pump station location the installation of the new canopy will follow the completion of the planned flood wall which is anticipated to be completed by FY 2025/26.

Project Evaluation and Analysis

The WPCP has several buildings and facilities that are in varying states of decay, as the buildings are over 40+ years old and are in need of replacement. Also, the new administration building and laboratory that was initially proposed is currently unfunded and repairs will need to be done until there is a new building.

Fiscal Impact

This project will be funded by Wastewater Management Fund revenues.

Funding Sources

Wastewater Management Fund

Plans and Goals

EM - Environmental Management - EM-7: Effective Wastewater Treatment

Project Financial Summary

	Project Costs	Revenues	Operating Costs
Prior Actual	392,833	-	-
2022-23	100,000	-	-
2023-24	100,000		-
2024-25	100,000	-	-
2025-26	250,000	-	-
2026-27	-	-	-
2027-28	-	-	-
2028-29	-	-	-
2029-30	-	-	-
2030-31	-	-	-
2031-32	-	-	-
2032-33	-	-	-
2033-34	-	-	-
2034-35	-	-	-
2035-36	-	-	-
2036-37	-	-	-
2037-38	-	-	-
2038-39	-	-	-
2039-40	-	-	-
2040-41	-	-	-
2041-42	-	-	-
2042-43	-	-	-
20 Year Total	**450,000**	**-**	**-**
Grand Total	**942,833**	**-**	**-**

831630 - Repairs to Solids/Dewatering Facilities

Originating Year:	2016	**Project Type:**	Wastewater	**Department:**	270 - Environmental Services
Planned Completion Year:	2022/23	**Category:**	Infrastructure	**Project Manager:**	Leonard Espinoza

Project Description/Scope/Purpose

Solids processing facilities at the Water Pollution Control Plant (WPCP) consist of four digesters and associated piping and pumping systems along with the gas collection systems. The digested solids were processed further on tile beds for further drying and hauled off site for disposal. The solids drying operation has been transferred to a contracted operation to allow for the area of the tile beds to be prepared for the construction of the new headworks and primary treatment facilities. This project allows for modifications to the solids conveyance systems, supernatant drainage system and the pumping station improvements needed to allow for the transition of the drying operation to a contracted operation. Further, the project allows for digestor repairs and other modifications required to operate the solids handling facilities safely and efficiently.

Project Evaluation and Analysis

Recent projects involve repairs to the digesters that are part of the solids handling facilities. These include repairs to the digesters dome cover and the seals to prevent gas leaks and adding improved hatches for safe access and digester gas system conveyance upgrades.

Fiscal Impact

This project will be funded by Wastewater Management Fund revenues.

Funding Sources

Wastewater Management Fund

Plans and Goals

EM - Environmental Management - EM-7: Effective Wastewater Treatment

Project Financial Summary

	Project Costs	Revenues	Operating Costs
Prior Actual	147,572	-	-
2022-23	325,000	-	-
2023-24	-		-
2024-25	-	-	-
2025-26	-	-	-
2026-27	-	-	-
2027-28	-	-	-
2028-29	-	-	-
2029-30	-	-	-
2030-31	-	-	-
2031-32	-	-	-
2032-33	-	-	-
2033-34	-	-	-
2034-35	-	-	-
2035-36	-	-	-
2036-37	-	-	-
2037-38	-	-	-
2038-39	-	-	-
2039-40	-	-	-
2040-41	-	-	-
2041-42	-	-	-
2042-43	-	-	-
20 Year Total	**-**	**-**	**-**
Grand Total	**472,572**	**-**	**-**

831680 - Adjust Sewer Utilities In Support of Paving Projects

Originating Year:	2016	**Project Type:**	Wastewater	**Department:**	270 - Environmental Services
Planned Completion Year:	Ongoing	**Category:**	Infrastructure	**Project Manager:**	Marlon Quiambao Jr.

Project Description/Scope/Purpose

This project provides for wastewater utility surface access adjustments in order to preserve consistent height with surfaces and roadways. Wastewater utility surface access features include manholes, clean out and inspection covers, drainage inlets, and other wastewater infrastructure surface access points. Wastewater utility surface access points can be impacted by street rehabilitation activities and other excavation projects.

Paving rehabilitation projects generally have an effect on the elevation of the surfaces of existing utility access assets. This project provides funding for the adjustment of utility access infrastructure with paving rehabilitation with both contracted and in-house projects. Additionally, the City performs utility access surface restoration as a result of public inquiry, unsafe condition, other misalignment, or in conjunction with other operational activities. This project will also provide funding for the purchase of new wastewater utility surface access covers that are worn out, damaged, structurally compromised, or those that are not able to be reinstalled.

Project Evaluation and Analysis

This project will ensure that wastewater utility surface access assets are maintained and restored in a manner that is consistent with City standards. The project will also ensure that wastewater utility surface access assets are able to be restored to a condition that allows for the smooth travel of vehicles and bicycles on roadways and other surfaces where utility access covers are not uniform.

Fiscal Impact

This project is funded by the Wastewater Management Fund.

Funding Sources

Wastewater Management Fund

Plans and Goals

EM - Environmental Management - EM-6: Effective Wastewater Collection System

Project Financial Summary

	Project Costs	Revenues	Operating Costs
Prior Actual	125,160	-	-
2022-23	274,063	-	-
2023-24	113,948		-
2024-25	107,897	-	-
2025-26	105,327	-	-
2026-27	109,541	-	-
2027-28	113,922	-	-
2028-29	118,479	-	-
2029-30	123,218	-	-
2030-31	128,147	-	-
2031-32	133,273	-	-
2032-33	138,604	-	-
2033-34	144,148	-	-
2034-35	149,914	-	-
2035-36	155,910	-	-
2036-37	162,147	-	-
2037-38	168,632	-	-
2038-39	175,377	-	-
2039-40	182,392	-	-
2040-41	189,688	-	-
2041-42	197,275	-	-
2042-43	203,194	-	-
20 Year Total	**2,921,032**	**-**	**-**
Grand Total	**3,320,255**	**-**	**-**

831730 - WPCP Oxidation Pond Levee Rehabilitation

Originating Year:	2016	**Project Type:**	Wastewater	**Department:**	270 - Environmental Services
Planned Completion Year:	Ongoing	**Category:**	Capital	**Project Manager:**	Matthew Hoang

Project Description/Scope/Purpose

The Water Pollution Control Plant (WPCP) Oxidation Pond Levee Rehabilitation project provides funding for site assessments, weed abatement, levee repairs, levee maintenance, levee road maintenance, and other levee related work to keep this critical asset sound for the next 20 years. These levees form the containment, flow paths, and pumping structures that make-up the WPCP Secondary Treatment Process. The levee roads allow the public to enjoy access to the lower south bay slough systems while keeping the Bay and Storm water from entering the WPCP Secondary Treatment process.

The oxidation ponds are contained by approximately eight miles of earthen levees formed by clamshell dredging and compaction. The WPCP levee system has not had any significant rehabilitation since the ponds were commissioned in the late 1960s. The network of levees has become significantly overgrown vegetation and significant erosion has occured along the levee roads. The proposed weed abatement will remove all vegetation (estimated at approximately eight acres) from the levees and manage regrowth overtime. Also, this project will also rehabilitate sections of the levee roads which have become significantly worn and eroded.

Project Evaluation and Analysis

A City-wide condition assessment study was conducted of City structures. WPCP oxidation pond levees were included in this study. Areas along the levees were identified for repair in this condition assessment study. The information in the condition assessment was used to create the WPCP Pond Levee Operations and Maintenance manual. Rehabilitation projects may include, but are not limited to, structurally reinforcing the levees, repairing breaches and cracks, removing weeds, and raising subsided sections of the levees. On-call engineering firms will provide construction management support and outside contractors will perform the repair work. Segments with the highest likelihood of impact will be given priority.

Additional funding needed to complete repairs to South, West and completion of the East pond levees. Cost estimates have now been refined based on actual construction costs of one section of levee repair. Costs estimates for the West levee repair range from $650,00 to $1,820,033 depending on repair option chosen. The cost estimate to repair the remaining section of the East levee is $4.5M given on page 6 of the HDR Engineers design memo. A rough cost estimate of $4M for the repair of the south levee is based on in house repairs per Operations and Maintenance manual.

Fiscal Impact

The initial cost estimate indicated up to $27 million would be needed for all repairs identified in the engineering report and the most urgent repair work is budgeted and underway. Additional funding would be required to address all repairs. The twenty-year budget is based on oxidation pond weed abatement costs and in house levee repair projections.

Funding Sources

Wastewater Management Fund

Plans and Goals

EM - Environmental Management - EM-7: Effective Wastewater Treatment

EM - Environmental Management - EM-8: Protection of Creeks and Bay

Project Financial Summary

	Project Costs	Revenues	Operating Costs
Prior Actual	1,492,903	-	-
2023-24	6,456,492	-	-
2024-25	3,030,447		-
2025-26	1,907,914	-	-
2026-27	1,123,233	-	-
2027-28	1,035,601	-	-
2028-29	1,037,025	-	-
2029-30	1,038,505	-	-
2030-31	1,040,046	-	-
2031-32	149,932	-	-
2032-33	43,313	-	-
2033-34	45,047	-	-
2034-35	46,848	-	-
2035-36	48,722	-	-
2036-37	182,415	-	-
2037-38	189,711	-	-
2038-39	197,299	-	-
2039-40	56,998	-	-
2040-41	58,754	-	-
2041-42	61,104	-	-
2042-43	63,548	-	-
2043-44	-	-	-
20 Year Total	**11,356,463**	**-**	**-**
Grand Total	**19,305,857**	**-**	**-**

832430 - Recycled and Potable Water Plan Development

Originating Year:	2018	**Project Type:**	Wastewater	**Department:**	270 - Environmental Services
Planned Completion Year:	2023/24	**Category:**	Infrastructure	**Project Manager:**	Mansour Nasser

Project Description/Scope/Purpose

As the City adopts the Master Plan to rebuild the Water Pollution Control Plant, there is growing interest from corporations, wholesale water agencies and retailers in the region to partner with the City in expanding its recycled water program and potentially develop potable reuse projects as well. The recent drought has further emphasized this need for reuse projects. There are several complex technical issues and regulatory and financial impacts to be evaluated, and concepts developed in partnership with other adjacent cities and the water agencies such as Valley Water further the planning efforts related to potable re-use. This project could also be utilized in extending technical assistance to companies interested in using recycled water. The technical expertise and resources needed for these evaluations are beyond the scope of City staff and would further need to align with the Program Management Consultant team's efforts in implementing the Master Plan. Therefore, this project is needed to support the planning efforts related to potable and non-potable reuse and respond to requests for technical information and review of ideas and concepts presented by regional partners related to re-use.

In the past, the WPCP produced Recycled Water (RW) with relative ease. Title 22 of CA Code of Regulations describes guidelines for production and use (RW is also known as Title 22 water). The main requirement for Title 22 water is to have a solids content of <2 NTU. However, in the past 2 years, the plant has had a difficult time producing <2 NTU water. In fact, our RW production has stopped for the last year. The primary reason for this is due to the water quality changing in our pond system. In the last couple of years, the ponds have been propagating a single cell, sub-micron blue-green algae species in high quantities. This algae and other solids are typically taken out in our Air Flotation Tanks (AFTs) after the wastewater returns to the plant from the ponds, however, due to the small size of this unique algae, the AFTs have not been able to take it out. As a result, it ends up in our Dual Media Filters (DMFs) and tends to choke it. Because of this, the efficiency of the DMFs has reduced resulting in producing poor quality water that is not suitable for RW. We would like to run a filter study pilot (example, disk filters, cloth filters and the like) that can accommodate any type of algae and still produce <2 NTU water. This would allow us to produce RW continuously.

Project Evaluation and Analysis

It is important for the City to produce RW, especially during drought years, which has been the case for the past few years. This project will look at different ways of producing RW including using new equipment. Before installing new equipment, they need to be pilot tested to affirm the equipment works for our wastewater. Equipment vendors have small pilot plants they rent for short periods of time to test wastewater. This type of a pilot study allows us to confirm the process works for our wastewater before we make a decision to buy equipment for the plant, which is a sizable expense and effort. Currently there are multiple vendors approved to produce RW. These technologies are mostly disk and cloth filters. This project will plan to run pilot studies with this equipment with multiple vendors side by side so that they could competitively bid in the event the City decides to implement the technology.

Fiscal Impact

This project is funded by the Wastewater Management Fund and the Water Supply and Distribution Fund.

Funding Sources

Wastewater Management Fund 58%, Water Supply and Distribution Fund 42%

Plans and Goals

EM - Environmental Management - EM-2: Water Conservation

EM - Environmental Management - EM-7: Effective Wastewater Treatment

Project Financial Summary

	Project Costs	Revenues	Operating Costs
Prior Actual	3,835	-	-
2023-24	-	-	-
2024-25	-	-	-
2025-26	-	-	-
2026-27	-	-	-
2027-28	-	-	-
2028-29	-	-	-
2029-30	-	-	-
2030-31	-	-	-
2031-32	-	-	-
2032-33	-	-	-
2033-34	-	-	-
2034-35	-	-	-
2035-36	-	-	-
2036-37	-	-	-
2037-38	-	-	-
2038-39	-	-	-
2039-40	-	-	-
2040-41	-	-	-
2041-42	-	-	-
2042-43	-	-	-
2043-44	-	-	-
20 Year Total	**-**	**-**	**-**
Grand Total	**3,835**	**-**	**-**

833050 - Wastewater Master Plan Update

Originating Year:	2018	**Project Type:**	Wastewater	**Department:**	270 - Environmental Services
Planned Completion Year:	2029/30	**Category:**	Infrastructure	**Project Manager:**	Eric Evans

Project Description/Scope/Purpose

This project provides funding for an update to the master plan for the sanitary sewer system and storm drain system. The project will assess the hydraulics, system models, physical condition, and separation and maintenance of the collection systems, and will recommend improvements to provide adequate hydraulic capacity and improve the reliability of the collection system. It will include an analysis of the financial impacts of the recommendations and scheduling, and may inform revisions to Project 825331 - Replacement, Rehabilitation, and Repair of Sewer Pipes.

The City provides sanitary sewer services to residents and businesses within the City as well as a portion of Cupertino known as Rancho Rinconada. This study is needed to define the capital projects that will be necessary to replace aging infrastructure and to identify any capacity-increasing projects that may be needed as a result of in-fill development. This type of plan is considered to be a best management practice for ensuring that the wastewater collection system can continue to provide reliable service.

A sewer master plan including hydraulic models for the storm and sanitary systems was completed in FY 2014/15. This project will update the models and analyze and develop alternatives for future wastewater capital projects and funding.

Project Evaluation and Analysis

This project is necessary to maintain existing essential infrastructure of the Wastewater Utility that excludes the WPCP. The information developed as a result of this study can allow the City to require developers to pay for capacity increases or for rehabilitation of existing sewers. This project will also fulfill several regulatory requirements for wastewater asset management.

Fiscal Impact

This project is funded by Wastewater Management Fund revenues. When completed, the master planning effort will likely result in new project recommendations that will be proposed in future capital improvements budgets.

Funding Sources

Wastewater Management Fund

Plans and Goals

EM - Environmental Management - EM-6: Effective Wastewater Collection System

Project Financial Summary

	Project Costs	Revenues	Operating Costs
Prior Actual	-	-	-
2022-23	-	-	-
2023-24	-		-
2024-25	-	-	-
2025-26	-	-	-
2026-27	-	-	-
2027-28	-	-	-
2028-29	-	-	-
2029-30	1,710,792	-	-
2030-31	-	-	-
2031-32	-	-	-
2032-33	-	-	-
2033-34	-	-	-
2034-35	-	-	-
2035-36	-	-	-
2036-37	-	-	-
2037-38	-	-	-
2038-39	-	-	-
2039-40	-	-	-
2040-41	-	-	-
2041-42	-	-	-
2042-43	-	-	-
20 Year Total	**1,710,792**	**-**	**-**
Grand Total	**1,710,792**	**-**	**-**

833060 - WPCP Annual Digester Cleaning

Originating Year:	2017	**Project Type:**	Wastewater	**Department:**	270 - Environmental Services
Planned Completion Year:	Ongoing	**Category:**	Special	**Project Manager:**	Bryan Berdeen

Project Description/Scope/Purpose

The City of Sunnyvale Water Pollution Control Plant (WPCP) provides wastewater treatment for the residents and businesses within the city. The Primary treatment process removes solids in the influent. Those separated solids are collected and sent to the anaerobic digestion treatment process.

Over time, the WPCP Digesters accumulate debris. This debris impedes the operation of digester equipment and decreases the solids reduction efficiency. Digester Cleaning is required at regular intervals to ensure that the city's anaerobic digesters have sufficient treatment capacity and to protect digester equipment from damage. During the cleaning process, Digesters are taken out of service, and a contractor is hired to break up and remove the fixed debris and other inorganic material trapped in the digesters. The contractor also dewaters trapped biosolids during the cleaning process and hauls them off-site for proper disposal.

Project Evaluation and Analysis

Task-specific contractor equipment and specially trained staff are required to handle digester cleaning safely and efficiently. The need to clean the anaerobic digesters increased when the WPCP upgraded and rehabilitated all four of the Plant's anaerobic digesters. These upgrades allow for better mixing, reduced solids, and increased digester gas production, all positive benefits. However, the trade-off with better mixing systems is more frequent cleaning. The current cleaning interval will be extended post-completion of the New Headworks Project, part of the Sunnyvale Cleanwater Program, and all the digesters have been cleaned at least once post-startup of the New Headworks and Primary Treatment facilities. The mechanical systems that are part of the new Headworks will remove most of the problematic material that currently ends up inside the digesters, decreasing the required cleaning frequency.

Fiscal Impact

This project is funded by the Wastewater Management Fund revenues. Cost projections are based on the current contract for the required service, and future costs are based on the market rate for the same service. Under the current contract and the potential reduction in need when the new headworks treatment process comes online, a reduction of 1.2 million dollars over the 20-year horizon is anticipated.

Funding Sources

Wastewater Management Fund

Plans and Goals

EM - Environmental Management - EM-7: Effective Wastewater Treatment

Project Financial Summary

	Project Costs	Revenues	Operating Costs
Prior Actual	352,690	-	-
2022-23	198,738	-	-
2023-24	207,365		-
2024-25	208,704	-	-
2025-26	-	-	-
2026-27	209,899	-	-
2027-28	-	-	-
2028-29	213,995	-	-
2029-30	-	-	-
2030-31	218,170	-	-
2031-32	-	-	-
2032-33	222,427	-	-
2033-34	-	-	-
2034-35	283,459	-	-
2035-36	-	-	-
2036-37	288,989	-	-
2037-38	-	-	-
2038-39	353,554	-	-
2039-40	-	-	-
2040-41	360,452	-	-
2041-42	-	-	-
2042-43	367,485	-	-
20 Year Total	**2,934,498**	**-**	**-**
Grand Total	**3,485,926**	**-**	**-**

833070 - WPCP Electronic Operations and Maintenance Manual

Originating Year:	2018	**Project Type:**	Wastewater	**Department:**	270 - Environmental Services
Planned Completion Year:	2024/25	**Category:**	Capital	**Project Manager:**	Bryan Berdeen

Project Description/Scope/Purpose

This project scope funds the implementation of a web-based operations and maintenance (O&M) manual for the Water Pollution Control Plant (WPCP) that is similar to or the same as other document management systems the City uses. This project is intended to replace the limited, narrative-based paper O&M manual. The WPCP Electronic Operations and Maintenance Manual (EOM) project aimed to develop a living document, repository, and seamless interface. Regulations require O&M information to be readily available for training and as a response reference to keep plant personnel safe, the process compliant, and for systems to run as efficiently as possible.

When systems fail, the WPCP O&M team requires rapid access to accurate technical information. The new system is intended to reduce the time spent searching through folders, binders, and other documents that may contain obsolete information. This project also facilitates the capture and transition of institutional O&M knowledge from departing employees. The WPCP Electronic Operations and Maintenance Manual project also includes the procurement, installation, and implementation of an electronic logbook, another regulatory requirement, to increase operational efficiency further and simplify historical review of process changes and system troubleshooting.

Project Evaluation and Analysis

The City's WPCP Cleanwater program is replacing old wastewater treatment systems and updating existing ones. The information needed to operate and maintain these systems reliably must include an intuitive method of storing and retrieving any WPCP documentation. Changes in nearly every future process require operations and maintenance team members (that are turning over as well) to have access to a centralized, user-friendly interface to view standard operating procedures (SOPs), record drawings, equipment information, process control descriptions, operating manuals, regulatory information, and historical data from the Laboratory Information Management System (LIMS), Enterprise Asset Management System/Computerized Maintenance Management System (EAMS/CMMS) and Supervisory Control and Data Acquisition (SCADA). An electronic O&M manual would also facilitate training new employees, refreshing the knowledge of existing staff, and function as an up-to-date reference for a wide variety of information. The City's NPDES permit requires the wastewater treatment plant to furnish and maintain accurate O&M manuals, SOPs, and record drawings. These documents are necessary for the reliable operation, maintenance, and troubleshooting of treatment and support systems.

Fiscal Impact

This project is funded by the Wastewater Management Fund revenues. Costs are based on the amount of effort required to fully populate a digital platform, the transition from one system to another, and to procure an online logbook based on market availability.

Funding Sources

Wastewater Management Fund

Plans and Goals

EM - Environmental Management - EM-7: Effective Wastewater Treatment

Project Financial Summary

	Project Costs	Revenues	Operating Costs
Prior Actual	170,564	-	-
2022-23	343,516	-	-
2023-24	-		-
2024-25	-	-	-
2025-26	-	-	6,155
2026-27	-	-	6,339
2027-28	-	-	6,530
2028-29	-	-	6,725
2029-30	-	-	6,927
2030-31	-	-	7,135
2031-32	-	-	7,349
2032-33	-	-	7,570
2033-34	-	-	7,797
2034-35	-	-	8,031
2035-36	-	-	8,271
2036-37	-	-	8,520
2037-38	-	-	8,775
2038-39	-	-	9,040
2039-40	-	-	9,311
2040-41	-	-	9,591
2041-42	-	-	9,878
2042-43	-	-	10,175
20 Year Total	**-**	**-**	**144,118**
Grand Total	**514,080**	**-**	**144,118**

833090 - Sanitary System Hydraulic Model Update

Originating Year:	2018	**Project Type:**	Wastewater	**Department:**	270 - Environmental Services
Planned Completion Year:	2024/25	**Category:**	Capital	**Project Manager:**	Eric Evans

Project Description/Scope/Purpose

A sanitary sewer system hydraulic model is an essential tool for determining where existing sewer pipes may need to be upsized to accommodate existing and future development. The City completed an initial model in 2015, and then a much more detailed model in 2022. During both efforts, temporary flow meters installed during relatively dry winters were not able to record increases in sewer flows that happen during rain storms. This project will allow for installation of flow meters during upcoming rainy seasons, and allow for updates and recalibration of the hydraulic model based upon the new data.

Project Evaluation and Analysis

The 2022 hydraulic model update identified sewer capacity improvement projects. However, the necessary sizes of larger pipes, and the timing of when the projects should be implemented, are uncertain due to lack of wet weather flow data. Upon successful collection of wet weather data, these parameters will be better understood, and staff will be able to proceed with efficient project implementation.

Fiscal Impact

Proposed budget in two consecutive fiscal years allows for attempted collection of wet weather flow data in the first year that, if unsuccessful due to dry weather, can be attempted again the following year. After successful data collection, funding allows for the engineering effort of updating the model and providing a summary report.

Funding Sources

Wastewater Management Fund

Plans and Goals

EM - Environmental Management - EM-6: Effective Wastewater Collection System

Project Financial Summary

	Project Costs	Revenues	Operating Costs
Prior Actual	759,787	-	-
2023-24	50,000	-	-
2024-25	50,000		-
2025-26	-	-	-
2026-27	-	-	-
2027-28	-	-	-
2028-29	-	-	-
2029-30	-	-	-
2030-31	-	-	-
2031-32	-	-	-
2032-33	-	-	-
2033-34	-	-	-
2034-35	-	-	-
2035-36	-	-	-
2036-37	-	-	-
2037-38	-	-	-
2038-39	-	-	-
2039-40	-	-	-
2040-41	-	-	-
2041-42	-	-	-
2042-43	-	-	-
2043-44	-	-	-
20 Year Total	**50,000**	**-**	**-**
Grand Total	**859,787**	**-**	**-**

833091 - Storm System Hydraulic Model Update - General Fund

Originating Year:	2019	**Project Type:**	Wastewater	**Department:**	270 - Environmental Services
Planned Completion Year:	2029/30	**Category:**	Capital	**Project Manager:**	Eric Evans

Project Description/Scope/Purpose

A storm collection system model was prepared in FY 2014/15 and was limited to all pipelines 36-inches and larger plus smaller pipes as required to make connections. This project is to revisit the model and update it. This project will be done to coincide with the Project 833050 - Wastewater Master Plan Update.

Project Evaluation and Analysis

System modeling information is critical to ensure that necessary information is available to make the appropriate project planning decisions and determine system capacity. The storm modeling is critical in assessing how the storm system is performing and whether capacity improvements are needed.

Fiscal Impact

This project is funded by the General Fund.

Funding Sources

General Fund

Plans and Goals

EM - Environmental Management - EM-6: Effective Wastewater Collection System

EM - Environmental Management - EM-8: Protection of Creeks and Bay

Project Financial Summary

	Project Costs	Revenues	Operating Costs
Prior Actual	-	-	-
2022-23	-	-	-
2023-24	-		-
2024-25	-	-	-
2025-26	-	-	-
2026-27	-	-	-
2027-28	-	-	-
2028-29	-	-	-
2029-30	279,541	-	-
2030-31	-	-	-
2031-32	-	-	-
2032-33	-	-	-
2033-34	-	-	-
2034-35	-	-	-
2035-36	-	-	-
2036-37	-	-	-
2037-38	-	-	-
2038-39	-	-	-
2039-40	-	-	-
2040-41	-	-	-
2041-42	-	-	-
2042-43	-	-	-
20 Year Total	**279,541**	**-**	**-**
Grand Total	**279,541**	**-**	**-**

834460 - Sewer Capacity Enhancement Projects

Originating Year:	2019	**Project Type:**	Wastewater	**Department:**	270 - Environmental Services
Planned Completion Year:	2035/36	**Category:**	Capital	**Project Manager:**	Bennett Chun

Project Description/Scope/Purpose

Sewer capacity projects previously identified in the 2015 Wastewater Collection System Master Plan and budgeted under this capital number have been superseded by the projects listed below, as identified by a 2022 Wastewater sewer capacity study. Design of CIP-1, CIP-2, and CIP-3 are scheduled for FY 2025-26, FY 2027-28, and 2031-32 respectively. Wet weather flow monitoring data collected in early 2023 may result in changes to the proposed scopes, budgets, and timing of these projects.

CIP 1: S. Mary Ave from Cambridge Ave to north of W. Evelyn Drive. Upsize existing 6”-12” pipe with 10”-15” pipe.

CIP-2: New Arques Lift Station: Install new force main, wet well, and pump system.

CIP-3: Along E. California Ave., Roosevelt Ave., and E. Arques Ave., upsize existing 21” pipe with 24”-30” pipe.

Project Evaluation and Analysis

Many existing sewer lines are not large enough to carry existing peak wet weather flows. Upsizing of sewer lines is necessary to reliably convey the wastewater to the Water Pollution Control Plant, prevent sewer overflows and accommodate future growth.

Fiscal Impact

This project is funded by the Wastewater Management Fund.

Funding Sources

Wastewater Management Fund

Plans and Goals

EM - Environmental Management - EM-6: Effective Wastewater Collection System

Project Financial Summary

	Project Costs	Revenues	Operating Costs
Prior Actual	25,011	-	-
2023-24	974,989	-	-
2024-25	-		-
2025-26	970,000	-	-
2026-27	-	-	-
2027-28	3,850,000	-	-
2028-29	940,000	-	-
2029-30	-	-	-
2030-31	3,760,000	-	-
2031-32	1,080,000	-	-
2032-33	-	-	-
2033-34	4,290,000	-	-
2034-35	-	-	-
2035-36	-	-	-
2036-37	-	-	-
2037-38	-	-	-
2038-39	-	-	-
2039-40	-	-	-
2040-41	-	-	-
2041-42	-	-	-
2042-43	-	-	-
2043-44	-	-	-
20 Year Total	**14,890,000**	**-**	**-**
Grand Total	**15,890,000**	**-**	**-**

834720 - Laboratory Certification Update

Originating Year:	2019	**Project Type:**	Wastewater	**Department:**	270 - Environmental Services
Planned Completion Year:	2025/26	**Category:**	Special	**Project Manager:**	Melody Tovar

Project Description/Scope/Purpose

This project funds the transition of Laboratory protocols and practices to address new standards for Laboratory Certification, adopted by the State of California. ESD's Lab provides water quality testing for both drinking water and wastewater, and certification is required for both services. Implementation of the new standards is required to be in place by December 2023. Extension of the project is proposed to include support for validating implementation and evaluating ongoing workload impacts based on actual implementation.

Project Evaluation and Analysis

The State has completed a multi-year process to adopt more stringent standards for water quality laboratory certification. The State's update more closely mirrors national standards, which include much more stringent requirements for quality control and operational documentation. This project provides consultant support and limited temporary staffing to address transition to the new standard.

Implementing the new certification standards requires significant additional work to maintain a robust quality control program including much more documentation. The addition of a Limited Term position provides more stable staffing to support the implementation as the department evaluates how needs may change with implementation experience.

Fiscal Impact

This project is funded by Wastewater Management Fund and Water Supply and Distribution Fund revenues. Additional funding proposed is for 50% of a Limited Term Lab/Field Tech for FY 2023/24 through FY 2025/26. The other half of the funding for this position is available in the Operating Budget for ESD Program 14705 Environmental Laboratory.

The ongoing funding in the Lab's Operating Budget has been used for temporary agency staffing. In the last 18 months, it has been very difficult to get and retain (for even the 6 months) temp agency staffing and the Limited Term approach will provide some valuable reprieve from the inherent turn-over and recent impracticability of 6-month assignments.

Funding Sources

Wastewater Management Fund, Water Supply and Distribution Fund

Plans and Goals

EM - Environmental Management - EM-7: Effective Wastewater Treatment

EM - Environmental Management - EM-3: Reliable and Safe Water Distribution

Project Financial Summary

	Project Costs	Revenues	Operating Costs
Prior Actual	34,593	-	-
2023-24	87,798	-	-
2024-25	66,808		-
2025-26	68,812	-	-
2026-27	-	-	64,272
2027-28	-	-	64,272
2028-29	-	-	64,272
2029-30	-	-	64,272
2030-31	-	-	64,272
2031-32	-	-	64,272
2032-33	-	-	64,272
2033-34	-	-	64,272
2034-35	-	-	64,272
2035-36	-	-	64,272
2036-37	-	-	64,272
2037-38	-	-	64,272
2038-39	-	-	64,272
2039-40	-	-	64,272
2040-41	-	-	64,272
2041-42	-	-	64,272
2042-43	-	-	64,272
2043-44	-	-	-
20 Year Total	**135,620**	**-**	**1,092,624**
Grand Total	**258,011**	**-**	**1,092,624**

834750 - Peery Park Specific Plan Wastewater Capacity Improvements

Originating Year:	2018	**Project Type:**	Wastewater	**Department:**	270 - Environmental Services
Planned Completion Year:	2027/28	**Category:**	Infrastructure	**Project Manager:**	Bennett Chun

Project Description/Scope/Purpose

On September 20, 2016 Council approved the Peery Park Specific Plan. The plan calls for developers to pay $3.12/net new square foot of development to be put towards wastewater infrastructure improvements to accommodate increased development in the Peery Park area.
The project is scheduled to begin design in FY 2024-25, with construction beginning in FY 2026-27. Wet weather flow monitoring data collected in early 2023 may result in proposed changes to the scope, budget, and timing of this project.

Project Evaluation and Analysis

Based upon the wastewater study performed, a number of larger diameter sewer pipes need to be upsized to serve the increased development anticipated in the Peery Park area. The Peery Park wastewater capacity improvement fees will cover design and construction costs associated with increasing size of the larger (10" and larger) sanitary sewer pipelines, per the study. Each development project will be responsible for performing a sanitary sewer analysis to determine if the sewer mains fronting their project need to be upsized; costs for the analysis and subsequent upsizing will be the developer's responsibility.

Fiscal Impact

Funding for this project is provided by fees assessed to developers within the Peery Park Specific Plan area. It is anticipated that some wastewater capacity improvements may be performed by the developer. However, should a development project not do the construction, the fees would be collected for the City to perform a capital project. Funding shown is the maximum amount anticipated, should all developers pay instead of constructing the wastewater infrastructure.

Funding Sources

Wastewater Management Fund

Plans and Goals

EM - Environmental Management - EM-6: Effective Wastewater Collection System

Project Financial Summary

	Project Costs	Revenues	Operating Costs
Prior Actual	29,313	-	-
2023-24	1,040,355	5,440,835	-
2024-25	1,069,668	4,464,029	-
2025-26	-	-	-
2026-27	5,320,744	-	-
2027-28	4,595,316	-	-
2028-29	-	-	-
2029-30	-	-	-
2030-31	-	-	-
2031-32	-	-	-
2032-33	-	-	-
2033-34	-	-	-
2034-35	-	-	-
2035-36	-	-	-
2036-37	-	-	-
2037-38	-	-	-
2038-39	-	-	-
2039-40	-	-	-
2040-41	-	-	-
2041-42	-	-	-
2042-43	-	-	-
2043-44	-	-	-
20 Year Total	**10,985,728**	**4,464,029**	**-**
Grand Total	**12,055,396**	**9,904,864**	**-**

835480 - Baykeeper Litigation Expenses

Originating Year:	2020	**Project Type:**	Wastewater	**Department:**	270 - Environmental Services
Planned Completion Year:	2023/24	**Category:**	Special	**Project Manager:**	John Nagel

Project Description/Scope/Purpose

All costs are associated with active litigation regarding alleged non-compliance with the Stormwater Permit and potential leakage from the sanitary sewer collection system into the stormwater system causing or contributing to exceedances of water quality objectives for bacteria in local waterways. The case could possibly move to the trial phase in January 2023.

Project Evaluation and Analysis

In February 2020, Baykeeper filed suit against the City of Sunnyvale and the City of Mountain View alleging violations of the Clean Water Act/non-compliance with the Stormwater Permit due to bacteria discharges above water quality standards. Plaintiff alleges the potential that such discharges are the result of leakage from the sanitary sewer collection system into the storm drainage system as described above. This project funds outside litigations costs due to the complex nature of the case.

Fiscal Impact

Funding included in this project covers attorney fees. If the case settles before trial, the full amount of $750,000 will not be necessary. In the event of settlement, a separate project would be established to fund commitments under the settlement agreement.

Funding Sources

Wastewater Management Fund

Plans and Goals

EM - Environmental Management - EM-6: Effective Wastewater Collection System

EM - Environmental Management - EM-8: Protection of Creeks and Bay

Project Financial Summary

	Project Costs	Revenues	Operating Costs
Prior Actual	386,629	-	-
2022-23	363,371	-	-
2023-24	-		-
2024-25	-	-	-
2025-26	-	-	-
2026-27	-	-	-
2027-28	-	-	-
2028-29	-	-	-
2029-30	-	-	-
2030-31	-	-	-
2031-32	-	-	-
2032-33	-	-	-
2033-34	-	-	-
2034-35	-	-	-
2035-36	-	-	-
2036-37	-	-	-
2037-38	-	-	-
2038-39	-	-	-
2039-40	-	-	-
2040-41	-	-	-
2041-42	-	-	-
2042-43	-	-	-
20 Year Total	**-**	**-**	**-**
Grand Total	**750,000**	**-**	**-**

835991 - Cupertino Sanitary District Sewer Flow Diversion

Originating Year:	2021	**Project Type:**	Wastewater	**Department:**	270 - Environmental Services
Planned Completion Year:	2022/23	**Category:**	Capital	**Project Manager:**	Mansour Nasser

Project Description/Scope/Purpose

The City of Sunnyvale provides sewer service to a subdivision of 91 homes in the City of Cupertino and Valley Water requested the City remove the existing sewer pipe bridge due to a Calabazas Creek improvement project. This project will include removing the sewer bridge and diverting sewage flow from 91 homes to Cupertino Sanitary District (CuSD) pipe system, and diversion back into City of Sunnyvale pipe system. An executed agreement between the City of Sunnyvale and Cupertino Sanitation District outlines the responsibilities for the project.

Project Evaluation and Analysis

This project was prompted by Valley Water to remove an existing City sewer pipe bridge from Calabazas Creek serving 91 City homes. The City needed to find an alternative routing of the sewage flow away from the bridge. The City negotiated an agreement with Cupertino Sanitary District to divert the flow from the 91 homes into their system. This project will find the diversion of the flow, for the City to receive the flow back at a different location. Other options considered would have still required the sewage flow to cross the Creek and were deemed cost-prohibitive.

Fiscal Impact

The cost to remove the bridge and make appropriate improvements is estimated at $115,000. The agreement with CuSD will not affect the level of service provided to the residents of the 91 homes and the transfer will be seamless with no interruption in service. The City will continue to respond to service calls and perform any facility improvement within the subdivision.

Funding Sources

Wastewater Management Fund

Plans and Goals

EM - Environmental Management - EM-6: Effective Wastewater Collection System

Project Financial Summary

	Project Costs	Revenues	Operating Costs
Prior Actual	-	-	-
2022-23	115,000	-	-
2023-24	-		-
2024-25	-	-	-
2025-26	-	-	-
2026-27	-	-	-
2027-28	-	-	-
2028-29	-	-	-
2029-30	-	-	-
2030-31	-	-	-
2031-32	-	-	-
2032-33	-	-	-
2033-34	-	-	-
2034-35	-	-	-
2035-36	-	-	-
2036-37	-	-	-
2037-38	-	-	-
2038-39	-	-	-
2039-40	-	-	-
2040-41	-	-	-
2041-42	-	-	-
2042-43	-	-	-
20 Year Total	**-**	**-**	**-**
Grand Total	**115,000**	**-**	**-**

836230 - Sewer System Management Plan

Originating Year:	2023	**Project Type:**	Wastewater	**Department:**	270 - Environmental Services
Planned Completion Year:	Ongoing	**Category:**	Infrastructure	**Project Manager:**	Winola Cheong

Project Description/Scope/Purpose

The State Water Resources Control Board, which regulates sanitary sewer systems issued a statewide Order 2022-0103-DWQ on December 8, 2022 updating sanitary sewer systems regulations. The City of Sunnyvale as an operator of a wastewater collections system is required to prepare a Sewer System Management Plan (SSMP) by 2026 and every five years thereafter.

Project Evaluation and Analysis

The SSMP is aimed at reducing sanitary sewer overflows and should includes elements demonstrating how the City constructs, manages, operates and maintains its sanitary sewer system.

Fiscal Impact

$100,000 will fund the services of a consultant to prepare the SSMP. This project is funded by Wastewater utility rates. Rates are set to cover the cost of operations and capital projects required to maintain the system and provide Wastewater service.

Funding Sources

Wastewater Management Fund

Plans and Goals

EM - Environmental Management - EM-6: Effective Wastewater Collection System

Project Financial Summary

	Project Costs	Revenues	Operating Costs
Prior Actual	-	-	-
2022-23	-	-	-
2023-24	-		-
2024-25	100,000	-	-
2025-26	-	-	-
2026-27	-	-	-
2027-28	-	-	-
2028-29	-	-	-
2029-30	-	-	-
2030-31	100,000	-	-
2031-32	-	-	-
2032-33	-	-	-
2033-34	-	-	-
2034-35	-	-	-
2035-36	-	-	-
2036-37	100,000	-	-
2037-38	-	-	-
2038-39	-	-	-
2039-40	-	-	-
2040-41	-	-	-
2041-42	-	-	-
2042-43	100,000	-	-
20 Year Total	**400,000**	**-**	**-**
Grand Total	**400,000**	**-**	**-**

836380 - WPCP Digester No. 3 Improvement Project

Originating Year:	2023	**Project Type:**	Wastewater	**Department:**	270 - Environmental Services
Planned Completion Year:	2024/25	**Category:**	Infrastructure	**Project Manager:**	Leonard Espinoza

Project Description/Scope/Purpose

The Digester No.3 Improvement project will repair the failed interior and exterior annular tank lid seal. This seal prevents methane gas which is collected at the top of the tank from leaking out to atmosphere. In order to increase the life of the epoxy seal the tank lid skirt which extends into the tank will be lengthened to prevent exposure to the methane gas. In addition, a new larger side hatch will be installed similar to the Digester 1 and 2. The removal of the tank lid will facilitate the hatch installation. The larger hatch will facilitate safer entries into the tank by plant staff and contractors.

Project Evaluation and Analysis

This project was initially developed for construction under the plant Maintenance program. However, due to the scale of the project it has been determined that a Public Works project is needed to complete the project. The design and construction estimate has been completed by an outside engineering firm. This digester is currently operating under a very constrained operating level due to the failed seal.

Fiscal Impact

This project is funded by Wastewater utility rates. Rates are set to cover the cost of operations and capital projects required to maintain the system and provide Wastewater service.

Funding Sources

Wastewater Management Fund

Plans and Goals

EM - Environmental Management - EM-7: Effective Wastewater Treatment

EM - Environmental Management - EM-11: Improved Air Quality

Project Financial Summary

	Project Costs	Revenues	Operating Costs
Prior Actual	-	-	-
2022-23	-	-	-
2023-24	2,025,000		-
2024-25	225,000	-	-
2025-26	-	-	-
2026-27	-	-	-
2027-28	-	-	-
2028-29	-	-	-
2029-30	-	-	-
2030-31	-	-	-
2031-32	-	-	-
2032-33	-	-	-
2033-34	-	-	-
2034-35	-	-	-
2035-36	-	-	-
2036-37	-	-	-
2037-38	-	-	-
2038-39	-	-	-
2039-40	-	-	-
2040-41	-	-	-
2041-42	-	-	-
2042-43	-	-	-
20 Year Total	**2,250,000**	**-**	**-**
Grand Total	**2,250,000**	**-**	**-**

836390 - WPCP Chemical Tank Storage Facility

Originating Year:	2023	**Project Type:**	Wastewater	**Department:**	270 - Environmental Services
Planned Completion Year:	2024/25	**Category:**	Infrastructure	**Project Manager:**	Leonard Espinoza

Project Description/Scope/Purpose

This project consists of the construction of a new permanent chemical storage tank facility consisting of one chemical storage tank with chemical dosing pump skid. The permanent chemical storage facility is to be constructed to accommodate all health and safety requirements. Chemical treatment is needed to treat pond effluent water With changing pond water quality in the future, the plant needs to have the capacity to store chemicals to treat this pond effluent.

Project Evaluation and Analysis

About six months ago, temporary chemical tanks were installed to test the effectiveness of multiple chemical regimes to mitigate the pond algae. In the last couple of years, the ponds have been propagating a single cell, sub-micron blue-green algae species in high quantities. This algae and other solids are typically taken out in our Air Flotation Tanks (AFTs) after the wastewater returns to the plant from the ponds, however, due to the small size of this unique algae, the AFTs have not been able to take it out this algae. This has resulted in the plant's ability to meet its National Pollutant Discharge Elimination System (NPDES) permit limits difficult. In fact, the plant violated its NPDES permit limit 5 times this past summer. Each violation can result in a $3,000 penalty. The new chemical regimes have proven to be effective, however, a permanent tank storage facility is needed to store the chemicals. This includes a permanent concrete pad, one chemical storage tank and dosing station. The current temporary chemical storage tanks have an engineered useful life of about 2 years in the current construction.

Fiscal Impact

This project is funded by Wastewater utility rates. Rates are set to cover the cost of operations and capital projects required to maintain the system and provide Wastewater service.

Funding Sources

Wastewater Management Fund

Plans and Goals

EM - Environmental Management - EM-7: Effective Wastewater Treatment

EM - Environmental Management - EM-2: Water Conservation

Project Financial Summary

	Project Costs	Revenues	Operating Costs
Prior Actual	-	-	-
2022-23	-	-	-
2023-24	100,000		-
2024-25	430,000	-	-
2025-26	-	-	-
2026-27	-	-	-
2027-28	-	-	-
2028-29	-	-	-
2029-30	-	-	-
2030-31	-	-	-
2031-32	-	-	-
2032-33	-	-	-
2033-34	-	-	-
2034-35	-	-	-
2035-36	-	-	-
2036-37	-	-	-
2037-38	-	-	-
2038-39	-	-	-
2039-40	-	-	-
2040-41	-	-	-
2041-42	-	-	-
2042-43	-	-	-
20 Year Total	**530,000**	**-**	**-**
Grand Total	**530,000**	**-**	**-**

836440 - Abandonment of Rancho Rinconada Sewer Line Segment

Originating Year:	2022	**Project Type:**	Wastewater	**Department:**	270 - Environmental Services
Planned Completion Year:	2023/24	**Category:**	Special	**Project Manager:**	Tim Kirby

Project Description/Scope/Purpose

This project will fund the abandonment of a small section of Sunnyvale's sewer line. In the 1950s, the City of Sunnyvale entered an agreement with developers that allowed the Rancho Rinconada sewer system to be tied into a City sewer main. This sewer main would serve a mostly residential area that did not have direct access to a sewer collection system. The sewer system was constructed to meet the City's standards and allowed the City to collect fees from homeowners and businesses to reimburse the City for the costs of providing ongoing sewer service. In January 2021, the City reached out to the City of San Jose to investigate a change that was made to the existing sewer main. This change included a new manhole which plugged Sunnyvale's pipeline. A new sewer pipe was constructed which diverted the flow into the City of San Jose's sewer system. After several meetings, both cities came to an agreement where the City of San Jose will pay the City of Sunnyvale $800,000 to return the system to its previous condition. This change in systems will also require the abandonment of a small section of Sunnyvale's sewer line that is south of the new manhole.

Project Evaluation and Analysis

This project is required to properly abandon a section of sewer line that is no longer in use. This process is a regulatory requirement and needed to complete the transfer of a portion of the City's sewer system outside of the City to the City of San José.

Fiscal Impact

This project is funded by a settlement payment in the amount of $800,000 received as part of the agreement to transfer the system.

Funding Sources

Settlement of claims

Plans and Goals

EM - Environmental Management - EM-6: Effective Wastewater Collection System

Project Financial Summary

	Project Costs	Revenues	Operating Costs
Prior Actual	-	-	-
2022-23	25,000	-	-
2023-24	-		-
2024-25	-	-	-
2025-26	-	-	-
2026-27	-	-	-
2027-28	-	-	-
2028-29	-	-	-
2029-30	-	-	-
2030-31	-	-	-
2031-32	-	-	-
2032-33	-	-	-
2033-34	-	-	-
2034-35	-	-	-
2035-36	-	-	-
2036-37	-	-	-
2037-38	-	-	-
2038-39	-	-	-
2039-40	-	-	-
2040-41	-	-	-
2041-42	-	-	-
2042-43	-	-	-
20 Year Total	**-**	**-**	**-**
Grand Total	**25,000**	**-**	**-**

APPENDIX 10A

City of Sunnyvale
Sewer System Management Plan
SSMP Change Log

City of Sunnyvale
Sewer System Management Plan Change Log
April 2025

Element # Section # (2020)	Element # Section # (2025)	Description of Change/Revision
Appendices	Appendices	Appendices have been updated to reflect updates within the SSMP. Some appendices were removed from the SSMP because they are now included in other documents, such as the SERP, to avoid duplication and ease future SSMP updates.
General	General	Minor clarifying text and formatting updates throughout.
Introduction C. Definitions, Acronyms, and Abbreviations	General	The *Definitions, Acronyms, and Abbreviations* section was extracted from the body of the Introduction section and moved to the beginning of the document for ease of reference.
General	General	Per the new General Order, the Element numbering has been updated from roman numerals to numbers. Element 1 now combines the Goals and Introduction where previously, there was an Introduction section before Element I. Goals. This section was generally updated to combine these two sections, reflect updated background and details about the City's system and the updated regulatory requirements.
General	General	The term "SSO" has been updated to "spill" throughout the entire document to reflect the updated terminology in the General Order.
General	General	*A. Introduction* and *B. Regulatory Requirements* removed from each element. Introductory text simply placed at the beginning of the Element section. Regulatory requirements placed in a blue box in each Element section.
Introduction D. References	**-**	Section removed as the new General Order supersedes these requirements.
Introduction	**Element 1**	Per the General Order, the *Introduction* has been absorbed into Element 1.
	Element 1	Introductory text updated to describe new adopted General Order.
-	**Element 1** 1.1 SSMP Implementation and Update Schedule	New section including **Table 1-1: SSMP Implementation and Update Schedule** added to list the due dates of items to be completed by the City.
Element I D. Goals and Policies	**Element 1** 1.2 System Goals	This section was expanded to list the General Plan goals in the text in addition to referring to the link.

Element # Section # (2020)	Element # Section # (2025)	Description of Change/Revision
Introduction B. Sanitary Sewer System Facilities	**Element 1** 1.3 Sewer System Asset Overview	Section moved to **Element 1**.
		Section title updated to match General Order.
		Section reorganized for clarity and sewer system data updated in text and tables to reflect the City's current GIS records.
		Population updated to reflect current data.
		Reference and link added to City GIS block maps.
		Detail added of changes to the service area since 2020 in the Rancho Rinconada area.
		Table 1-2: Service Connection Types added per General Order requirements.
		Figure 1-1: Sewer Service Area Boundary added to show the sewer service area boundary which is a new requirement for agencies to submit to the SWRCB starting in 2025.
		Tables I-1 through *I-6* were combined into **Tables 1-3** through **1-5** to list infrastructure as combined totals for those within the City and those within Rancho Rinconada.
		Discussion added about known stormwater cross-connections
Element II C. Organization and Staffing	**Element 2** 2.1 Organization and Staffing	*Figure II-1* and *Table II-1* were removed from this section and reference was added to the org chart in the SERP, included **Appendix 6**, to avoid duplication of information and ease future updates.
		Clarification added to the Wastewater Operations Manager position description to note that it is also referred to as Senior Environmental Engineer to ensure alignment with the org chart in the SERP.
		Clarification added that the City's flushing equipment is only able to clean pipelines up to 15 inches in diameter.
		Text updated regarding LRO to refer to the org chart in the SERP so as not to duplicate information.
		Table II-2: City Staff Responsibility for SSMP Elements moved from the body of the report to Appendix 2 to ease future updates.
		Link for current staff lists on City's website removed as this no longer exists.
		Spill reporting process referred to SERP.
Element III C. Sunnyvale Municipal Code	**Element 3** 3.1 Sunnyvale Municipal Code (SMC)	Discussion of I/I reduced and referred to discussion in Capacity Analysis.

Element # Section # (2020)	Element # Section # (2025)	Description of Change/Revision
-	**Element 3** 3.2 Coordination	Discussion of Easement Accessibility Agreements added per General Order requirements.
		Discussion of Stormwater Agency Coordination added per General Order requirements.
Element III D. Agreements with Satellite Agencies	**Element 3** 3.2 Coordination	Discussion of Agreements with Satellite Agencies moved to subsection under Coordination for organization purposes.
-	**Appendix 3**	Links to SMC added as **Appendix 3** per General Order requirements.
Element IX C. Operations and Maintenance Program	**Element 4** 4.1 Updated Map of Sanitary Sewer System	Reference and link added to City GIS block maps available on the City's website per General Order requirements. List added of what is included on the block maps.
	Element 4 4.2 Preventive Operation and Maintenance Activities	**Table 4-1** added to track annual maintenance activities.
		CCTV inspection description updated to both pipeline and manhole inspections.
		Discussion of updated pipeline inspection cycle added.
	Element 4 4.3 Staff and Training	*Table IV-1* is now **Table 4-2**. Table updated to reflect current staff numbers.
		2024 Tailgate Schedule included as **Appendix 4C**.
	Element 4 4.4 Equipment Inventory	Subsection added to reflect General Order requirements.
	-	Outreach to Sewer Service Contractors subsection removed as the City no longer participates in this program.
Element V C. Design and Construction Standards	**Element 5** 5.1 Design Criteria and Construction Standards and Specifications	References to standards and specifications updated to reflect the most current versions.
		Links for standards and specifications removed from the body of the document and placed in **Appendix 5** to ease future updates.
Element VI	**Element 6**	As part of the new General Order, the SSO Emergency Response Plan has been updated to a Spill Emergency Response Plan (SERP). To fulfill the new requirements of the SERP, the City published a standalone document in 2023 which is included in the SSMP as an appendix. All content previously detailed in the 2020 SSMP in this section is removed and this section simply refers to the SERP included in the appendix.

Element # Section # (2020)	Element # Section # (2025)	Description of Change/Revision
Element VII	**Element 7**	Per the new General Order, this section has been updated from "FOG Control Program" to "Blockage Control Program." Terminology throughout has been updated and the content has been updated to meet new requirements.
		Data in text and tables updated to reflect current statistics.
Element VII D. FOG Control Program	**Element 7** 7.2 Blockage Control Program	To reduce duplication of information, the specific SMC references were removed from this section and reference was added to **Table 3-1** since it presents the same information.
		Table 7-1 rows and columns switched for consistency with other tables. Data updated to show current statistics.
Element VIII	**Element 8**	Element title updated to "System Evaluation, Capacity Assurance, and Capital Improvements" per new General Order. This section was almost completely rewritten per the new General Order requirements.
Element VIII C. System Evaluation and Capacity Assurance Plan (SECAP)	**Element 8** 8.1 System Evaluation and Condition Assessment	Condition Assessment portion refers to **Element 4** which details the CCTV program and other inspections.
	Element 8 8.2 Capacity Assessment and Design Criteria	The City developed a Capacity Analysis, which is included as Appendix 8A, to fulfill the requirements for this section.
	Element 8 8.3 Capital Improvement Plan	Description added of how the City develops the CIP projects based on condition and capacity analyses. The latest version of the City's budget (FY 2024/25) included as **Appendix 8B**.
Element IX C. Performance Measures	**Element 9** 9.1 Performance Measures	List of performance measures updated to reflect latest SSMP Audit
		Presentation and discussion of performance measure statistics updated.
		Data in text, tables, and figures updated to represent most recent data.
		Table 9-1 added to present additional performance measures.
		Figure IX-2 is now **Figure 9-1**.
		Table IX-1 is now **Table 9-2**. "Percent of Total" column added to depict which causes are the most common on average.
		Figure IX-1 is now **Figure 9-2**.

Element # Section # (2020)	Element # Section # (2025)	Description of Change/Revision
Element X	**Element 10**	Element title updated to “Internal Audits” per new General Order.
Element X C. Audits	**Element 10** 10.1 Audits	Details of the SSMP audits updated to reflect the latest audit template submitted in 2024. Timeline for audits updated to every 3 years per the General Order
		Discussion added about audit submission process to CIWQS per General Order requirements.
-	**Element 10** 10.3 Annual Reports	Section added detailing the requirements for annual reports to be submitted by the City.
Element XI C. Communication during SSMP Development and Implementation	**Element 11** 11.1 Communication with the Public	Discussion of approval of 2020 SSMP added.
		Link added to the location of the SSMP posted on the City’s website.
		Reference to Bay Area Stormwater Agencies Association (BASMAA) updated to new organization called Bay Area Municipal Stormwater Collaborative (BAMSC)
-	**Element 11** 11.2 Communication with Connected Systems	Subsection added to address new requirements in the General Order.

APPENDIX 10B

City of Sunnyvale
Sewer System Management Plan
SSMP Formal Adoption Documents