# Sewer System Management Plan (SSMP)

City of Burlingame

2025 Update



Waste Discharge ID = 2SSO10099

REVIEWED AND APPROVED BY:

Richard Horne Streets, Storm Drains and Sewer Divisions Manager Legally Responsible Official City of Burlingame

Sanitary Sewer Collection System

City Council Approval Date: Resolution #:

PREPARED BY:



Date Signed

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# SSMP CHANGE LOG

Revision Date	SSMP Section	Approval Date	Description of Change/Revision Made	Initials

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City of Burlingame Attn: Richard Horne Legally Responsible Official (LRO) 1361 N. Carolan Ave. Burlingame, CA 94010

Dear Mr. Horne,

We are pleased to present the new 2025 Sewer System Management Plan (SSMP) Update developed in partnership with the City of Burlingame's management. The 2025 Update meets and exceeds compliance with the WDR (State Water Board, Water Quality Order No. 2022-0103-DWQ, Attachment D-10 and Specifications 5.4). The 2025 SSMP has been completely revised to harmonize with industry standard guidelines and incorporates the City's latest SSMP Audit findings.

The 2025 SSMP is a declaration of what the City is doing to demonstrate full compliance with the WDR. Attachment A of the WDR (page A-4), states "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." We suggest that the City review the SSMP on a regular basis, and as required by the WDR, continuously document changes to its SSMP in a change log attached to the Plan.

We look forward to assisting the City wherever necessary to fully implement the new 2025 SSMP Update.

Sincerely,

James Fischer

James Fischer, P.E. Principal, Fischer Compliance LLC Credentialed U.S. EPA NPDES Compliance Inspector

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# Introduction

This Sewer System Management Plan (SSMP) or "Plan" has been prepared by the City of Burlingame (City) with technical assistance from Fischer Compliance LLC and Sam Rose Consulting for meeting and exceeding compliance with the State Water Resources Control Board 2022 General Waste Discharge Requirements, Order WQ 2022-0103-DWQ for Sanitary Sewer Systems, referred to throughout this document as the WDR.

In addition, the City's NPDES Permit (No. CA0037788) incorporates the requirements to comply with the WDR by reference in the treatment plant permit ((Order R2-2023-0010) to operate the Burlingame Wastewater Treatment Plant and City of Burlingame's wastewater collection system.

The SSMP has been developed to meet the size, scale and complexity of the City to serve as a "living document," that will be used as a tool to manage and operate the collection system. Further, the new 2024 Sewer System Management Plan Guidance Manual published by the Bay Area Clean Water Agency (BACWA) was utilized as a model for development of the SSMP to ensure the SSMP harmonizes with the latest available industry standard recommendations for the development and updating of SSMPs.

A commitment to meeting or exceeding regulatory requirements, along with a proactive approach to operation and management of the collection system has led to system improvements helping the City to provide excellent service to its customers while reducing the likelihood of sewer spills or environmental and public harm.

Figure 1 provides key City spill metrics including data comparing the City's spill record with state and regional system data. The City consistently performs well when compared to both statewide and regional spill rate indices and net spill volumes for all categories of spills from its sanitary sewer collection system.

	Collection System Spill Summary						
Operational Indi	ces: Burlingam	e City CS					
			Spill Ra	ate Indice (spills/1	00mi/yr)		
		Category 1		Categ	jory 2	Categ	jory 3
	Main System	Laterals	Other	Main System	Other	Main System	Other
Burlingame City CS	0.88	0.61	0.39	0.0	0.0	4.08	0.0
<u>State</u> <u>Municipal(Public)</u> Average	<u>1.76</u>	<u>6.39</u>	<u>1.15</u>	<u>1.28</u>	<u>1.75</u>	<u>2.64</u>	<u>0.57</u>
<u>Region</u> <u>Municipal</u> Average	<u>3.1</u>	<u>5.76</u>	<u>1.11</u>	<u>1.02</u>	<u>0.03</u>	<u>3.72</u>	<u>0.8</u>
		N	lat Valuma Sa	ille Indice (gallone	(1000 Capita (vr)		
		Category 1	let volume sp	Cate	gory 2	Categ	jory 3
	Main System	Laterals	Other	Main System	Other	Main System	Other
Burlingame City CS	628.53	45.99	23738.03	0.0	0.0	2.48	0.0
<u>State</u> Municipal(Public) Average	<u>6476.31</u>	<u>208.84</u>	<u>2918.57</u>	<u>230.25</u>	<u>1561.38</u>	<u>84.32</u>	<u>37.12</u>
Region Municipal Average	<u>-4086.43</u>	<u>29.03</u>	<u>3317.38</u>	<u>195.07</u>	<u>2.41</u>	<u>207.39</u>	<u>141.56</u>

Figure 1 - Collection Spill Summary: Burlingame City CS

# SSMP Organization

This SSMP is organized into 11 core elements following Attachment D of the WDR, with inclusion of applicable Specifications requirements.

Each individual element in the SSMP includes the following technical contents.

- 1. Requirements Provides the actual description of applicable requirements in the WDR.
- 2. Compliance Describes the City's approach to complying with the WDR requirements.
- 3. Effectiveness As measured by Key Performance Indicators (KPIs.)
- 4. Implementation Demonstrates how the City will ensure the SSMP will be carried out as described.
- 5. Resilience Demonstrates the resilience that is addressed in the SSMP and built-in to the City's collection system and procedures.
- 6. Appendix Inclusions List the items included in the Appendix for each SSMP Element, if any.

# Abbreviations and Acronyms

ASM	Administrative Services Manager
BMP	Best Management Practices
CCTV	Closed Circuit Television
CIP	Capital Improvement Program
CIPP	Cured in Place Pipe
CIWQS	California Integrated Water Quality System (State Water Board Online Spill Database)
CMMS	Computerized Maintenance Management System
EPA	US Environmental Protection Agency
FOG	Fats, Oils and Grease
FSE	Food Service Establishment
GCD	Grease Control Device
GIS	Geographic Information System
GM	General Manager
HCFLS	High Cleaning Frequency Line Segments
1&1	Inflow and Infiltration
LRO	Legally Responsible Official
MRP	Monitoring and Reporting Program
NPDES	National Pollutant Discharge Elimination System
PLCO	Property Line Clean Out
RWQCB	Regional Water Quality Control Board (Lahontan Region)
SCADA	Supervisory Control and Data Acquisition
SERP	Overflow Emergency Response Plan
SOP	Standard Operating Procedure
SSMP	Sewer System Management Plan
Spill	Sanitary Sewer Overflow
WDR	Sanitary Sewer Systems General Wastewater Discharge Requirements Order issued by the State Water Board (Order No. 2022-0103-DWQ)
SWRCB	State Water Resources Control Board
WDID	Waste Discharge ID Number (CIWQS)

Table 1 - Abbreviations and Acronyms

# 1. Goal and Introduction

# WDR REQUIREMENTS

#### Att. D-1 (pg. D-2)

"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

# WDR REQUIREMENTS

#### Att. D-1.1 (pg. D-2)

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

#### COMPLIANCE

The City is committed to fully implementing the WDR which includes addressing all requirements and integrating a wide range of programs specifically designed for ensuring the integrity and efficiency of the City's sanitary sewer collection system. The primary focus remains on reducing spills and employing targeted strategies to minimize their environmental and public health impact.

Additionally, the City is dedicated to maintaining its collection system in a systematic manner by implementing various work programs, which target critical areas to prevent spills, allowing for a comprehensive approach to maintenance. Work programs include, but are not limited to, CCTV inspections, pipe cleaning, manhole inspections, lift station maintenance, root control, source control and pipe repair.

By prioritizing proactive measures and taking a comprehensive approach, the City is well-equipped to effectively operate its sanitary sewer collection system, comply with the WDR, and reduce/eliminate sewage spills.

#### **EFFECTIVENESS**

N/A

IMPLEMENTATION PLAN/SCHEDULE

N/A

# 1.2. SSMP Update Schedule

# WDR REQUIREMENTS

# Att. D-1.2 (pg. D-3)

"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."

# COMPLIANCE

The City utilizes the State Water Board's online lookup tool for ensuring all required due dates for updating its SSMP and completing required SSMP Audits (see Fig 2 below).

	Sewer System Management Plan & Subsequent Update Due Dates						
System Name	WDID Number	Original Plan Required Due Date	Required Plan Update Due Date	Required Plan Update Due Date	Required Plan Update Due Date*		
Burlingame City CS	2SSO10099	8/2/2009	8/2/2014	8/2/2019	8/2/2025		

	Audit Due Dates							
System Name	WDID Number	Original Required Plan Audit Due Date	Required Plan Audit Due Date	End of Required 3-Year Audit Period**				
Burlingame City CS	2SSO10099	8/2/2011	8/2/2013	8/2/2015	8/2/2017	8/2/2019	8/2/2021	8/2/2024

#### Figure 2 - Sewer System Management Plan, Subsequent Update and Audit Due Dates

Notable maintenance milestones include three-year CCTV inspection, gravity main and siphon cleaning cycles, daily lift station inspections, chemical root control is performed on identified line segments every 24 months (both laterals and gravity mains). The City has a Lateral Program and is working to define the optimal return interval. Problem lines that require accelerated maintenance have been identified and are addressed on prescribed intervals. The City has a Capital Improvement Program (CIP) that includes sewer projects that are completed on a prioritized basis.

# **EFFECTIVENESS**

Key Performance Indicators:

- Are SSMP Audits and SSMP Updates being performed as scheduled?
- Has the Sewer System Management Plan been approved by the governing board on schedule (every six years)?
- Are specific internally established sewer program milestones being monitored and met?

No.	Plan	Schedule	Responsible Party		ý
	-		Mgr.	Sup	Crews
1.2.1	Prepare for next SSMP Audit	Begin 8/2/2024	x	Х	
1.2.2	Complete and Upload next SSMP Audit	By 2/2/2025	x	Х	
1.2.3	Incorporate Audit Findings, update Change Log and Update SSMP	Begin 2/2/2025	x	х	
1.2.4	Board Approval and LRO Certification of SSMP	By 8/2/2025	x	х	
1.2.5	Prepare for next SSMP Audit	Begin 8/2/2027	х	Х	
1.2.6	Complete and Upload SSMP Audit	By 2/2/2027	х	х	
1.2.7	Prepare for next SSMP Audit	Begin 8/2/2029	x	Х	
1.2.8	Complete and Upload SSMP Audit	By 2/2/2029	x	х	
1.2.9	Board Approval and LRO Certification of SSMP	By 8/2/2031	х	х	

# 1.3. Sewer System Asset Overview

# WDR REQUIREMENTS

# Att. D-1.3 (pg. D-3)

"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 percentage 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."

# COMPLIANCE

Located in the San Francisco Peninsula, the City operates a sanitary sewer system that serves a population of approximately 30,150 in a 4.3 square mile service area. The sewer system serves 7,576 residential connections, 956 commercial, industrial and institutional customers as of May 2025. The system consists of 81 miles of gravity mains, about 31 miles of lower laterals (approximately 8,532 laterals), 2,000 manholes, 6.1 miles of force mains, 8 pump stations and 6 siphons.

Sewer pipe diameters range from 4 inches to 51 inches. The City provides service and repair of lower lateral, described as the portion of the lateral that extends from the sewer main in the public right-of-way to the clean out at the property line/edge of City right-of-way. The property owner is responsible for maintenance and repair of the upper lateral that extends from the clean out at the property line/edge of public right-of-way to the building sewer (Ordinance No. 1329, which became effective August 7, 1986, and later modified by ordinance 1623 on March 23, 2000.) The City requires inspection of the upper lateral and repair of identified deficiencies when the property is sold and when additional water fixtures are added to the house.

The City utilizes a Geographical Information System (GIS) to manage data for both its wastewater collection system and storm drainage system maps. See D, 4.1, Updated Map of Sewer System for details.

The City will provide electronic version of the City's maps to the State and Regional Water Boards upon request.



Figure 3 - City Vicinity Map and Service Area

# **EFFECTIVENESS**

Key Performance Indicators:

- Are asset statistics periodically reviewed and updated as necessary?
- Are corrections addressed in a timely manner?
- Are system maps up to date?

No.	Plan	Schedule	Respons	ible Part	y
			Mgr.	Sup	Crews
1.3.1	Review City-owned asset statistics and element description; update as necessary	At the beginning of the audit cycle and when significant changes have been made.	х	х	
1.3.2	Update Maps	As needed. Updates distributed monthly.		х	х

#### RESILIENCE

Resilience is addressed in Element 1 by:

- Adhering to an SOP for collecting and managing asset data.
- Redundancy: More than one member of staff is trained and able to retrieve and manage the data.
- Implementing a QA/QC process to help ensure information is accurate.
- Using Calendar Reminders to ensure compliance deadlines are met.

#### **APPENDIX 1 INCLUSIONS:**

• None

# Specifications 5.2 – SSMP Development and Implementation

# WDR REQUIREMENTS

# Specification. 5.2 (pg. 18)

"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."

# COMPLIANCE

The City's current Sewer System Management Plan (SSMP) has been updated to meet the requirements of Order WQ 2022-0103-DWQ and addresses the required Elements. The SSMP addresses management, operations and maintenance procedures. The City maintains active inspection programs, such as CCTV inspection for both gravity mains and laterals, manhole inspections, and pump stations inspections. Inspection findings are then prioritized for repair, replacement, rehabilitation, or modified maintenance schedules. (See Elements 4 and 8.)

The City is proactive in keeping up with current industry standards, technology and best practices and stays abreast by reviewing industry periodicals, networking and attending industry conferences and workshops.

# Specifications 5.7 – Allocation of Resources

# WDR REQUIREMENTS

#### Specification. 5.7 (pg. 22)

"The Enrollee shall comply with the following requirements:

- 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."

# COMPLIANCE

The City has established revenues/expenditures for proper and effective operations and maintenance of the sewer system through the enterprise fund annual budgeting process. The City allocates resources for its sewer system operation and maintenance through a comprehensive approach that prioritizes maintenance efforts. The city conducts regular inspections and assessments to identify areas of potential concern, allowing for preemptive repairs and upgrades to mitigate future issues.

Additionally, a portion of the city's budget is dedicated to emergency response capabilities, ensuring swift action in the event of unexpected sewer system failures, enabling the city to uphold high standards of public health and environmental protection while managing its sewer infrastructure. An additional revenue stream is the Sewer Capacity charge for future system upsizing.

The City recently completed its third rate increase in as many years, which commenced in January of 2022, and will continue to monitor expenditures to ensure proper funding is secured to operate and maintain its sewer system efficiently.

The City's vehicle and equipment inventory and workforce are adequate for operating the collection system.

# Provisions 6.1 - Enforcement Provisions

# WDR REQUIREMENTS

#### Provisions 6.1 (pg. 27)

"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."

# COMPLIANCE

The City is aware of the consequences for noncompliance including associated penalties for violations. The City maintains a proactive stance with full implementation of its SSMP.

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 City 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 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 City 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 to:

# Provisions 6.3 Sewer System Management Plan Availability

# WDR REQUIREMENTS

# Provisions 6.3 (pg. 31)

"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."

#### COMPLIANCE

The City publishes its SSMP, available for public review, on its website at the <u>Sewer Systems</u> page and also maintains a paper copy in its offices which can be made available for inspection during regular business hours.

# 2. Organization

# WDR REQUIREMENTS

#### <u>Att. D-2 (pg. D-3)</u>

"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 Element;.
- 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.)

#### COMPLIANCE

The requirements above are addressed in order below.

The City has designated the Streets, Storm Drains & Sewer Divisions Manager, Mr. Rick Horne as its LRO. Mr. Horne is the authorized representative in all wastewater collection system matters who is authorized to certify electronic spill reports submitted to CIWQS and is authorized to submit spill reports to other appropriate government agencies, as necessary.

Mr. Michael Heathcote, the Deputy Director of Public Works Operations, also serves as an LRO for the City, alongside Mr. Horne. Mr. Heathcote is authorized to certify electronic spill reports submitted to CIWQS and has the authority to submit spill reports to other relevant government agencies whenever required.

Mr. Horne has over 24 years of experience and has received training from Fischer Compliance LLC on all elements of the Reissued WDR. He serves as the primary LRO and is the liaison between the different departments that support collection system efforts. Mr. Horne meets quarterly with engineering and every two weeks with the Deputy Director of Public Works Operation.

Specifications 5.1 lists the qualifications for the Legally Responsible Official. Both Mr. Horne and Mr. Heathcote possess the necessary qualifications. Both have the necessary authority over managerial decisions that govern the operation of the sanitary sewer system, including having the explicit or implicit duty of making major capital improvement recommendations. Both have a wealth of professional training and experience.

# IMPLEMENTATION RESPONSIBILITIES

Sev	ver System Management Plan Elements	Responsible Position
1.	SSMP Plan, Goal and Introduction	
	1.1. Regulatory Context	Deputy Director of Public Works Operations
	1.2. SSMP Update Schedule	Deputy Director of Public Works Operations
	1.3. Sewer System Asset Overview	Deputy Director of Public Works Operations
2.	Organization	Deputy Director of Public Works Operations
3.	Legal Authority	Deputy Director of Public Works Operations
4.	Operations and Maintenance Program	
	4.1. Updated maps of Sanitary Sewer System	Public Works Sewer Supervisor
	4.2. Preventive Operation & Maintenance	Public Works Sewer Supervisor
	4.3. Training	Public Works Sewer Supervisor
	4.4. Equipment Inventory	Public Works Sewer Supervisor
5.	Design/Performance	
	5.1. Updated Design Criteria & Construction Standards	Assistant Public Works Director
	5.2. Procedures and Standards	Assistant Public Works Director
6.	Spill Emergency Response Plan	Streets, Storm & Sewer Divisions Manager
7.	Sewer Pipe Blockage Program	Streets, Storm & Sewer Divisions Manager
8.	System Eval, Capacity Assurance, Capital Imp.	
	8.1. System Evaluation and Condition Assessment	Senior Engineer
	8.2. Capacity Assessment and Design Criteria	Senior Engineer
	8.3. Prioritization of Corrective Action	Senior Engineer
	8.4. Capital Improvement Plan	Senior Engineer
9.	Monitoring, Measurement & Program Modifications	Streets, Storm & Sewer Divisions Manager
10.	Internal Audits	Streets, Storm & Sewer Divisions Manager
11.	Communication Program	Deputy Director of Public Works Operations

Table 2 - Implementation Responsibilities

# **RESPONSIBLE POSITION CONTACT INFORMATION**

Responsible Position Contact Information	Phone
Deputy Director of Public Works Operations	650-558-7670
Assistant Public Works Director	650 558-7230
Streets, Storm & Sewer Divisions Manager	650-558-7670
Public Works Sewer Supervisor	650-558-7670

Table 3 - Responsible Position Contact Information

# 2.1. Organizational Chart



Figure 4 - Organization Chart

# 2.2. Organizational Staffing Responsibilities

#### City Manager

Approves the Sewer Department budgets and gives general direction to the Public Works Director relative to the department's operations and representation of the wastewater collection division.

# Director of Public Works

Plans, organizes and directs the public works activities of the City, including engineering, streets, sewers, water and wastewater treatment. The Director coordinates Public Works activities with other City departments and public works agencies and is responsible for preparing the department budget and controlling budget expenditures.

# Deputy Director of Public Works Operations

Oversees various divisions within the Public Works Department, managing construction, maintenance, and repair of streets, sewer systems, water distribution, and facilities. Responsibilities include coordinating with City officials, developing budgets, directing project planning, reviewing contract documents, ensuring safety procedures are followed, and overseeing the administration of contracts. Serves as LRO

# Streets, Storm Drain & Sewer Manager

The Streets, Storm Drain and Sewer Manager supervises crews responsible for maintaining and repairing various city infrastructure such as streets, sidewalks, street lights, sewer and storm drain systems. Responsibilities include developing and implementing goals, policies, and procedures, evaluating work methods for improvement, participating in budget development, monitoring expenditures, ensuring compliance with regulatory mandates, scheduling repairs, prioritizing tasks, supervising training, and coordinating worker safety programs. Serves as LRO.

#### Streets and Sewer Supervisor

The Street and Sewer Supervisor oversees maintenance and repair activities for streets, sewers, and related infrastructure. Responsibilities include supervising crews, implementing maintenance policies, coordinating with managers and workers, participating in goal setting and budgeting, managing inventory and equipment, preparing reports, organizing work plans, tracking maintenance activities, ensuring compliance with regulations, assigning tasks, working with the Engineering Division on projects, and addressing complaints. The Streets and Sewer Supervisor is tasked with the duties of a Data Submitter.

# Maintenance Staff

Cleans, inspects, maintains, and repairs sewer lines. Conducts inspection/maintenance on sewer lift station. Locates and raises manholes. Operates power equipment, including hydraulic cleaning trucks and other duties as necessary as directed by the Streets, Storm Drain and Sewer Manager. City staff operate multiple pieces of City -owned sewer maintenance vehicles and equipment for maintaining the collection system and responding to spills. At all times there is a staff member on-call who acts as the initial responder for field problems or concerns.

Figure 5 - Organizational Staffing Responsibilities

# 2.3. Chain of Communication for Reporting Spills

All wastewater collection system matters are the responsibility of the Streets, Storm Drains & Sewer Divisions Manager. The Streets, Storm Drains & Sewer Divisions Manager acts as the primary City LRO, certifying electronic spill reports submitted to the SWRCB/CIWQS<sup>1</sup> system, and is also authorized to submit spill reports to other Outside Appropriate Government Agencies.

The City has a chain of communication in place for reporting spills. This process involves various steps, such as public observation, lift station alarms, and the observation by City or contractor staff. Once a spill is reported, the City's Collections crew a standby employee will promptly respond and follow the procedures outlined in the Sewer Spill/Backup Response Workbook. This response includes containment, rectifying the issue, estimating spill and recovered volumes and spill start time, documenting the spill, and taking the necessary actions to clean up the affected area.



Figure 6 - City Chain of Communication for Reporting Spills

Location/Staff	Telephone Number
Office (Business Hours)	(650) 558-7670
After Hours (Police Dispatch)	(650) 692-0310
Streets and Sewer Supervisor	(650) 558-7670
Streets, Storm Drain and Sewer Manager	(650) 558-7670

Table 4 - Key City Phone Numbers for Spill Reporting

<sup>&</sup>lt;sup>1</sup> State Water Resources Control Board/California Integrated Water Quality System, CIWQS, publicly available at: https://www.waterboards.ca.gov/water issues/programs/ciwqs/publicreports.html

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#### EFFECTIVENESS

Key Performance Indicators:

- Have there been any changes requiring updates to the Organizational Chart?
- Have there been instances when a service call for a spill was not properly routed to response personnel?
- Were all spill response activities documented and forwarded to the LRO?
- Have there been any changes in assigned responsibilities for implementing the Sewer System Management Plan?
- Is there a process in place to ensure all contact information remains up to date?

# IMPLEMENTATION PLAN/SCHEDULE

No.	Plan	Schedule	Responsible Party		
			Mgr.	Sup	Crew
2.1	Review names, contact information and position responsibilities. Update as necessary.	Annually		х	
2.2	Review Chain of Communication outcomes for all spill responses	Each Spill Event	х		
2.3	Review Organizational Chart for any changes. Update as necessary.	Annually		х	

#### RESILIENCE

Resilience is addressed in Element 2 by:

- Ensuring that more than one person is capable and responsible for specific duties for SSMP implementation, e.g., back-up personnel.
- Designation of more than one LRO to help ensure full and continuous coverage of duties.
- Testing the phone notification system to ensure calls are received and routed to appropriate personnel.

#### **APPENDIX 2 INCLUSIONS:**

• None

# 3. Legal Authority

# WDR REQUIREMENTS

#### Att. D-3 (pg. D-4)

"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.

#### COMPLIANCE

The above items are addressed in order below:

Burlingame Municipal Code 15.10.056 states: "No person shall discharge, cause or allow or permit any stormwater, roof or yard drainage, foundation, underdrainage, or groundwater to be discharged into the sanitary sewer system without first obtaining a permit from the city to do so. In addition, Burlingame Municipal Code 15.12.010 and 15.12.110 offer additional regulation of I&I from private service laterals.

The City's Street, Storm Drain and Sewer divisions are responsible for the operation and maintenance of both the sanitary sewer system and the storm drain systems. The City has all current maps for both systems. There is some storm drain facilities that the City shares ownership/responsibility with another agency and there is an informal agreement in place that addresses maintenance and repairs.

Burlingame Municipal Code No. 15.10.024, 15.10.028 and 15.10.030 govern the City's design and construction standards.

Burlingame Municipal Code 15.10.024 specifies the Minimum standards for the design and construction of sewers within the City and that all public sewers and side sewers be planned, designed, constructed, installed and repaired in accordance with the plans and specifications established by the Director of Public Works.

Burlingame Municipal Code 15.10.032 governs rights of way and ensures the right to enter onto private property for the purpose of inspection, maintenance, repair, rehabilitation or replacement of the portion of the lower lateral maintained by the City.

Burlingame Municipal Code 15.06.070 - The director, all employees of the water department, public works department and fire department have the duty and are authorized to enforce the provisions of this chapter

and shall have all the powers and authority contained in <u>California Penal Code Section 836.5</u>, including the power to issue written notices to appear.

Burlingame Municipal Code 26.24.040 governs the Dedication of Easements. "In the event that easements for sanitary sewers, drainage purposes or other public utilities are required, the city engineer shall so notify the person filing the map and the person shall offer to the city to dedicate the required easements before the map may be approved..."

Right-of-way including sewers constructed in rights of way including in easement locations for ensuring access.

#### EFFECTIVENESS

The City utilizes the following Key Performance Indicators for measuring effectiveness of this Element:

- Are the City ordinances and standards adequate for fulfilling the Sewer System Management Plan legal requirements?
- Does the City have a process in place for periodic review and evaluation of ordinances?
- Have there been instances when the code or ordinance did not address a need or circumstance?

# IMPLEMENTATION PLAN/SCHEDULE

No.	Plan	Schedule	Responsible Party		ty
			Mgr.	Sup	Crew
3.1	Review Ordinance to confirm all documents provide necessary required legal authority	Once per 6-year SSMP Update Cycle	x	x	
3.2	Monitor and Document occasions when ordinance(s) failed to address issues as intended.	Continuously	x	x	x

# RESILIENCE

Resilience is addressed in Element 3 by:

• Keeping abreast of industry trends and local ordinances that may affect operations.

# APPENDIX 3 INCLUSIONS:

None

# 4. Operation and Maintenance Program

# WDR REQUIREMENTS

# Att. D-4 (pg. D-4)

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

# 4.1. Updated Map of Sewer System

# WDR REQUIREMENTS

# Att. D-4.1 (pg. D-4)

"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."

# COMPLIANCE

The City utilizes a Geographical Information System (GIS) to manage data for both its wastewater collection system and storm drainage system maps. Field crews use tablets to access system maps. Hard-copy maps are also available. Corrections submitted by field personnel are updated by GIS staff which in-turn become readily available to all staff.

Managing the mapping system involves regular updates to the hard copy and GIS maps, with corrections identified by field crews and managed by the Senior Management Analyst, including incorporating new facilities and as-built information form CIP projects. Updating maps involves tracking of discrepancies, creating work orders, resolving edits, and distributing corrected map pages to the Sewer Division regularly.

The City will provide electronic version of the City's maps to the State and Regional Water Boards upon request.

# EFFECTIVENESS

The City utilizes the following Key Performance Indicators for measuring effectiveness of this Element:

- Were all map updates completed in a timely manner?
- Are all staff trained in the procedure for providing map update information?
- Are newly installed sewer assets incorporated into the system maps?
- Are there terrain features or assets that should be incorporated in future map updates (e.g. exposed pipe, siphons, ARVs, surface water, etc.)

# OPERATIONS AND MAINTENANCE PROGRAM

No	Plan	Schedule	Responsible Party		
			Mgr.	Sup	Crew
4.1.1	Review map update procedures with all affected staff.	Annually		х	х
4.1.2	Review/ensure all newly installed facilities have been updated and included in the system maps.	Annually	x	x	х

# 4.2. Preventive Operation and Maintenance Activities

# WDR REQUIREMENTS

#### Att. D-4.2 (pgs. D-4/D-5)

"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."

# COMPLIANCE

The purpose of a work order system is to program and track all required inspection and maintenance activities within the collection system to help improve system performance and prevent blockages/operational problems or spills. This includes documenting all inspection and maintenance activities, including higher-frequency inspection and maintenance areas with known problems ("hot spots"), documenting ongoing CCTV inspections and data for pipelines and manholes including areas prone to root intrusion that could cause blockages/operational problems or spills.

The City utilizes OpenGov Asset Management for its CMMS (CMMS). The City schedules all inspection and maintenance work via tasks and work orders, which also serve as documentation of work activities completed. Hot Spots are on a preventive maintenance schedules and work orders are automatically created on prescribed intervals. Work orders for production work such as CCTV inspections, gravity main cleaning, and repair work are also generated by workorders in the system by supervisory personnel. Work orders are completed in the field by maintenance staff and then reviewed and closed by a supervisor to ensure quality data entry. Work orders for spill response or other unscheduled activities are completed after the event.

# EFFECTIVENESS

The City utilizes the following Key Performance Indicators for measuring effectiveness of this Element:

- Is the agency maintenance, operations, engineering work orders periodically audited for accuracy and completeness?
- Does the agency monitor "planned," "overdue," or "in progress" work orders to ensure completion of tasks?
- Are inspection and maintenance activities reducing the number and volume of spills?
- Is maintenance work being completed as scheduled?

# OPERATIONS AND MAINTENANCE PROGRAM

No.	Plan	Schedule	Responsible Party		
			Mgr.	Sup	Crew
4.2.1	Review work completed to date to ensure critical work is being completed	Quarterly		x	x
4.2.2	Review scheduled Preventative Maintenance to ensure the prescribed schedule remains appropriate.	Annually		x	x

# 4.3. Training

# WDR REQUIREMENTS

#### Att. D-4.3 (pg. D-5)

*"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."

# COMPLIANCE

The City maintains a sound internal training program. Work Standards are used as the basis for most training. The City uses contracted services for training on Spill Emergency Response Plan, which includes review of WDR requirements, spill volume/recovered, and spill start time estimations and practical spill response drills in the field environment. The method of training ranges from classroom training, hands-on training and drills, and through hired contractors, seminars and conferences provided by California Water Environment Association (CWEA.)

The City requires employees to be certified in Collection System Maintenance by CWEA. The certification process requires employees to demonstrate that they have participated in 12 hours of training every two years to renew their certificates.

Data Submitter training for the City reporting procedures includes reporting timelines, spill categories, QA/QC processes, spill response procedures, communication and coordination between staff and proper documentation and recordkeeping.

The City has developed spill response procedures for Contract Service personnel who perform work for the City are required to:

- Immediately notify the City of any sewage spill they encounter.
- Make attempts to contain the spill
- Cordon off the area to keep the public safe
- Remain on-site until Burlingame staff arrives and relieves them.

This language is included in service agreements and discussed during pre-job meetings.

# **EFFECTIVENESS**

The City utilizes the following Key Performance Indicators for measuring effectiveness of this Element:

- Has all training been completed as scheduled?
- Have records of training and attendance been documented and maintained?
- Have all staff demonstrated ability and knowledge after each training event?
- Have contractors received, at a minimum, direction for reporting and responding to spills.

# OPERATIONS AND MAINTENANCE PROGRAM

No.	Plan	Schedule	Responsible Party		
			Mgr.	Sup	Crew
4.3.1	Review training documentation to ensure all staff have received required training	Annually	x	x	
4.3.2	Review agreements with contractors and/or pre-job meeting minutes to ensure contract personnel have received instruction for responding to sewage spills	Each Contract	x	x	

# 4.4. Equipment Inventory

# WDR REQUIREMENTS

# Att. D-4.4 (pg. D-5)

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

# COMPLIANCE

The City maintains an inventory of equipment and vehicles utilized for the operation and maintenance of the collection system. In addition, the City maintains an inventory of emergency bypass equipment and related fittings, hoses and pipes, as well as portable generators.

Critical spare parts are identified and readily available for use. Examples include, SCADA PLC's and radios, pumps, repair pipe and couplings for both gravity and force main pipes.

Lift Stations are equipped with bypass manifolds that can be connected to bypass pumps to manage flows for long periods of time while repairs are being completed.

# EFFECTIVENESS

The City utilizes the following Key Performance Indicators for measuring effectiveness of this Element:

- Have inventory lists been audited as scheduled?
- Have any inventory deficiencies or omissions been discovered and rectified?
- Has the City experienced any equipment failure that inhibited a spill response?

# IMPLEMENTATION PLAN/SCHEDULE

No.	Plan	Schedule	Responsible Party		
			Dir	Eng	Sup
4.4.1	Audit inventory lists to ensure stock is adequate	Annually		х	x
4.4.2	Check with vendors to ensure critical lead times for critical parts are as expected.	Annually		х	x

# RESILIENCE

Resilience is addressed in Element 4 by:

- Developing an SOP for updating maps when errors are discovered.
- Developing and using forms (paper or electronic) for data collection to help ensure all pertinent information is consistently collected.
- Periodically evaluating inspection cycle intervals to help ensure they are optimized.
- Requiring staff to demonstrate ability and/or knowledge for all training activities.
- Monitoring equipment and critical spare parts usage for and trends.
- Performing periodic audits of the Vehicle and Equipment Inventory List.

# **APPENDIX 4 INCLUSIONS:**

• 4.1 Critical Spare Parts List

# Specifications 5.19 - Operations and Maintenance

# WDR REQUIREMENTS

### Specification. 5.19 (pg. 27)

"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."

# COMPLIANCE

The City's goal is to reduce the likelihood of spills by proactively maintaining the collection system in a variety of ways.

<u>Gravity Main Cleaning</u>: The City endeavors to clean the gravity main system on a three-year cycle, by cleaning approximately 27 miles per year. This is done in a systematic manner as crews work through maintenance basins to improve efficiency. Cleaning results of the mainlines are evaluated and reported by the cleaning crew based upon the Standard Operating Procedure for Sewer Cleaning. The cleaning crew will clean mainlines before they are televised.

**High Frequency Cleaning**: In addition to routine production cleaning, the City has a Hot Spot Program, in which lines that require a higher frequency cleaning schedule are prioritized by monthly, quarterly, semiannual and Annual intervals. Staff places mainline segments on these higher frequency schedules based upon past cleaning results, history of SSO events, history of cleaning results, and professional judgment.

<u>Gravity Main Inspection</u>: The City inspections are coordinated with gravity cleaning activities and completed on a three-year return interval, utilizing (NASSCO) PACP coding and IT Pipes to record the defects. CCTV work is coordinated with cleaning activities.

**<u>Root Control</u>**: The City procures a contractor to conduct annual root foaming on main lines that exhibit significant root intrusion in areas currently identified by City staff. The current effort involves a 2-year return cycle for the root foaming processes. The City staff is responsible for conducting root cutting 3 to 4 months prior to the root foaming to assure maximum effectiveness from the foaming. The City has identified two separate areas where these activities are required, and the service contractor handles one area each year.

**Lateral Program**: The City has developed a lower lateral preventive maintenance program adopted by the City Council on May 5, 2003, in Resolution 53-2003. The maintenance program includes cleaning of all and root foaming of selected lower laterals. The City utilizes one staff position for the cleaning efforts with the lower laterals.

Areas of the concern are identified through CCTV inspections, line cleaning, customer complaints and lateral spills. It is expected that this staff position will clean an average of 2,100 laterals per year. The lateral root foaming program, up to 500 lower laterals per year, is handled each year through the City's procurement and awarded to a contractor.

In addition to this lateral program, the City's Municipal Code further addresses laterals by requiring backflow prevention for buildings with drain fixtures lower that the immediate upstream manhole and lateral testing upon transfer of ownership.

Municipal Code 15.12 - Lateral Test Ordinance. Whenever any property is to be transferred to or vested in any other person or entity and that property includes any buildings or structures constructed more than twenty-five (25) years prior to the date of transfer or vesting, the sewer lateral(s) to that property shall be tested for infiltration and all necessary repairs or replacements performed to prevent all infiltration.

#### **OPERATIONS AND MAINTENANCE PROGRAM**

Municipal Code 15.12.110 – Sewer Backwater Ordinance. This confirms the city's authority to require the property owner to install of such backwater valves and relief devices and be responsible for their maintenance; and further requires the filing of information regarding fixture levels in connection with additions of drainage fixtures and each property transfer as designated, to determine whether a valve, ejector, or relief device is required under the Municipal Code.

<u>Manhole Inspections</u>: The purpose of a manhole inspection program is to ensure viability of access to all collection system assets for preventive maintenance and emergency responses to proactively help prevent blockages/operational problems or spills. Manholes are inspected using a top-Down method, without entry. Inspection results are documented using ITpipes and CMMS inspection tasks logs, which are reviewed monthly by supervisors to prioritize any work to be completed. CCTV Crews perform the inspections at all setup manholes. The remaining manholes are scheduled for inspection when staff is available.

**Pipe Repair Program** – Discoveries of PACP defect scores of a 5 or 4 are scheduled in a prioritized order. The City, in some cases, takes a reactive approach to pipe repairs. Information from inspections or blockages/spills that require immediate attention are deemed the highest priority. Repairs are completed by contracted services or internal staff.

**Pump Station Inspection & Maintenance**: Pump stations are inspected daily, where the pump run hours are logged and the wet well is inspected and documented. Alarms are tested semi-annually to help ensure reliability. Onsite generators and automatic transfer switch are tested annually to ensure transfer of power during power outages. The wet wells are cleaned annually. The mechanical and electrical equipment preventive maintenance is scheduled quarterly. The City initiates annual pump station condition assessments utilizing the Lift Station Condition Assessment Checklist

# 5. Design and Performance Provisions

# 5.1. Updated Design Criteria/Construction Standards/Specifications

# WDR REQUIREMENTS

# Attachment D-5.1 (pg. D-5)

"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."

# COMPLIANCE

The City's Municipal Code, <u>Chapter 26</u>, contains the physical design requirements for new development construction. Municipal Code <u>12.12.020</u> Standard Specifications states all work shall conform with "standard specifications" for the construction of public works as are compiled by the city engineer. Municipal Code <u>26.16.100</u> provides requirements for the installation of sewer facilities.

# **EFFECTIVENESS**

The City utilizes the following Key Performance Indicators for measuring effectiveness of this Element:

• Are plan checking QA/QC processes helping to ensure adherence to the standards?

No.	Plan	Schedule	Responsible Party		
			Mgr.	Eng	Sup
5.1.1	Ensure all project plans are approved in accordance with the City's Standard Specifications and Details.	Each Project		х	
5.1.2	Verify design standards and hydraulic model previously completed are adequate and consistent with current standards of practice.	10-year cycle		х	

# 5.2. Procedures and Standards

# WDR REQUIREMENTS

# Attachment D-5.2 (pg. D-5)

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

# COMPLIANCE

The City's Wastewater Collection System Inspection and Testing Criteria are based on the State of California Standard Specifications, latest edition, published by the Department of Transportation. All sewer installations and sewer repairs are subject to this required testing. Municipal Code 15.10.30 addresses City requirements for inspections.

# EFFECTIVENESS

The City utilizes the following Key Performance Indicators for measuring effectiveness of this Element:

- Were any design or installation deficiencies found during warranty inspections?
- Are deviations from standard procedures and/or specs, testing, etc., justified and documented?
- Does the City stay abreast of industry design standards and technical advances in the industry?

# IMPLEMENTATION PLAN/SCHEDULE

No.	Plan	Schedule	Responsible Party		Party
			Mgr.	Eng	Crew
5.2.1	Verify inspection procedures are adequate and consistent with current standards of practice	10-year cycle	х	х	
5.2.2	Monitor development Warranty inspection outcomes	10-year cycle	х	Х	х

# RESILIENCE

Resilience is addressed in Element 5 by:

- Staying abreast of industry trends and standards.
- Performing warranty inspections of newly installed or repaired assets to evaluate design and installation practices.
- Evaluating as-built changes for trends and areas for design and performance improvements.

# APPENDIX 5 INCLUSIONS:

None

# 6. Spill Emergency Response Plan

# WDR REQUIREMENTS

#### Attachment D-6 (pg. D-6)

"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."

# COMPLIANCE

The City's Spill Emergency Response Plan (SERP), developed in coordination with DKF Solutions Group, LLC, was updated prior to the June 5, 2023, deadline and initial training to affected staff was completed at that time. The SERP addresses all the requirements as stated in Attachment D, 6 of the WDR.

The purpose of the City of Burlingame's Spill Emergency Response Plan (SERP) is to support an orderly and effective response to Sanitary Sewer spills. The SERP provides guidelines for City personnel to follow in responding to, cleaning up, and reporting spills that may occur within the City's service area.

#### **EFFECTIVENESS**

The City utilizes the following Key Performance Indicators for measuring effectiveness of this Element:

- Have staff's spill response efforts helped to prevent the discharge of sewage to surface waters?
- Do post-spill assessments indicate staff are following the procedures outlined in the SERP?
- Is SERP training effective and are trainees demonstrating adequate knowledge and abilities?

# IMPLEMENTATION PLAN/SCHEDULE

No.	Plan	Schedule	Responsible Party		
			Mgr.	Sup	Crew
6.1	Perform SERP training including practice drills.	Annually		х	х
6.2	Perform Post Spill Event Assessments	Each spill		х	х
6.3	Review Post Spill Assessments to ensure adherence and to indemnify any trends that should be addressed	Annually	х	х	

# RESILIENCE

Resilience is addressed in Element 6 by:

- Multiple staff are trained to respond to spill events.
- Post-spill assessments are conducted to evaluate staff's adherence to the SERP and to identify areas for improvement.
- Data collection forms are used to direct staff to collect all the required data to be submitted to CIWQS and are designed as a guide to a proper spill event response.
- The City employees several different spill volume estimation methods to account for different circumstances.

# APPENDIX 6 INCLUSIONS:

• City of Burlingame Spill Emergency Response Plan available upon request.

# 7. Sewer Pipe Blockage Program

# WDR REQUIREMENTS

# Attachment D-7 (pg. D-7)

"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."

# COMPLIANCE

The items above are addressed in order below.

The City's public outreach program includes efforts to educate customers on "what not to flush,' and Kitchen Best Practices. This is accomplished through flyers and pamphlets for both general and targeted outreach. The City also has Messaging on the City website <u>Fats, Oils, & Grease Outreach</u>, including a means for the public to <u>Contact</u> the City. In addition, the City maintains a presence at community events where it further attempts to educate the public.

Pipe blocking substances collected during maintenance and repair activities are disposed of at the Burlingame Wastewater Treatment Facility. This is done on an as-needed basis.

The City's legal authority to prevent illicit discharges is through Municipal Code 15.10.40, Municipal Code 15.10.056 which prohibits stormwaters, surface water and groundwater and 15.10.38, general prohibited wastes.

The City's authority to require grease removal devices is through Municipal Code 15.10.066.

The City's design and installation criteria for grease removal devices is the most recent edition of the <u>Uniform Plumbing Code</u> enforced in the Municipal Code <u>18.08.005</u>

The City's authority to inspect grease producing facilities is through its FOG Source Control Program and supported by Municipal Code <u>15.10.102</u>

The City has identified problem areas within the collection system and addresses pipe blocking issues through its high frequency cleaning and root control programs, described in 4.5 of this document.

The City's FOG Source Control Program is intended to work in conjunction with the City's preventive maintenance program to monitor and prevent FOG-related SSOs. It remains an essential component in meeting and maintaining its projected spill reduction performance goals mandated by the Sanitary Sewer WDR

The elements of the City's FOG Source Control Program include:

- Requirement for the installation of grease removal devices (GRDs);
- Permitting food service establishments (FSE);
- Requirement for proper operation and maintenance of GRDs
- Verification of grease handling and disposal practices
- FSE inspections
- Public Education and Outreach and
- Enforcement.

In addition to the City's source control program, hydro-cleaning of gravity lines is performed on a routine and systematic basis to control grease and ensure continuity of service. New problems found through the CCTV inspection program are brought to a supervisor's attention and evaluated to determine the best course of action to mitigate or eliminate. All problem line segments are evaluated for the best method of repair or rehabilitation.

The City's Spill Reduction Performance Goal requires the City to identify controllable sources of spillgenerating activities through the implementation of a FOG Program. The overall aim is to reduce the occurrence of FOG-related mainline spills in the service area over time. The City focused on food service establishments (FSEs) to prevent or reduce FOG-related mainline spills in an effective manner. In 2008, the City modified its FOG Source Control Program to include public outreach targeting residential areas with FOG-related mainline spills. All residential FOG-related mainline SSO's are categorized and mapped. This data is utilized by City staff to assist with identifying areas or line segments of the sanitary sewer collection system prone to FOG-related stoppages. Staff establishes a prioritized or accelerated preventive cleaning, inspection and maintenance schedule for each identified area.

# EFFECTIVENESS

The City utilizes the following Key Performance Indicators for measuring effectiveness of this Element:

- Have there been any blockages/spills from any identified problem area?
- Is the City receiving feedback on public outreach efforts?
- Are the debris and other sewage solids collected during cleaning activities being disposed of appropriately?
- Have there been spills due to excessive fats, oil, grease, roots, or non-dispersible wipes discovered in the sewer system during the audit period?
- Are there repeat offenders among FSEs?
- Are enforcement trends decreasing?
- Are Source Control and Collection staff included in the plan check process?

# IMPLEMENTATION PLAN/SCHEDULE

No	Plan	Schedule	Responsible Party		
			Mgr.	Sup	Crew
7.1	Review/evaluate enforcement and inspection findings and implement changes as necessary.	Annually		х	
7.2	Review spill rates and causes and make changes to maintenance programs, as necessary.	Annually	x	Х	x

# RESILIENCE

Resilience is addressed in Element 7 by:

- Inspection of select assets directly downstream of grease producing businesses to ensure source control is effective.
- Residential FOG outreach and education program.
- Performance of regular assessments of system assets to monitor performance.
- QA/QA process for evaluating pipe cleaning effectiveness.
- Daily disposal of pipe blocking materials retrieved during maintenance activities.

# APPENDIX 7 INCLUSIONS:

7.1 FOG Ordinance § 15.10.038 Generally prohibited wastes and § 15.10.040 Specifically prohibited wastes

# 8. System Evaluation, Capacity Assurance, Capital Improvements

# WDR REQUIREMENTS

# Attachment D-8 (pg. D-)

"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

# WDR REQUIREMENTS

# Attachment D-8.1 (pgs. D-7/D-8)

"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 method;
- 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."

# COMPLIANCE

The City CCTV inspects the collection system on a 3-year return cycle and has records on the entire system. Defects are coded using IT Pipes and the NASSCO PACP rating system, which provides consistent assessment and rankings of defects. Pump Stations are inspected daily, and findings are documented. Condition assessments are performed, by City staff, on all stations annually.

The City has identified and justified the CCTV inspection three-year return interval in its current <u>Master Plan</u>, developed by City engineers and last updated in 2022. The City is evaluating this interval to determine the optimal interval.

The City's owns 8532 lower laterals totaling approximately 31 miles. The maintenance goal for the Lateral Program is to clean 2100 laterals per year, which equates to a 4 year return cycle. This is being monitored to determine the optimal return cycle.

The City has a program to annually assesses the condition of its pump stations, In addition to this, an indepth assessment was performed and is documented in the City's 2022 Master Plan. The intent of the visual condition assessment is to identify and prioritize repair and replacement needs for aging facilities and mitigate potential risks of failure.

The City's approach to prioritizing inspection and maintenance activities is generally performance-based. However, the City has identified system assets that hold a high level of environmental consequences, such as facilities within a proximity of surface waters, including aerial creek crossings, and pipes located in areas where heavy rains could erode soil and possibly damage pipe. The City uses Smart Cover (flow level monitors) to monitor I&I as well as exfiltration, which would occur if a pipe were severely damaged. If areas are found to have significant infiltration, a project will be created to replace the segment.

The City's CCTV inspection program, for both gravity mains and laterals, manhole inspection program and lift station inspection program are all used to assess conditions of system assets. These are on-going programs that have been in place for years.

The City maintains records for CCTV, manhole, and lift station inspections. Supervisory staff monitor, evaluate, and document findings, which are used to determine capital improvement and repair/replace projects This is a collaborative effort between operations and engineering. The operations management staff and engineering have a monthly meeting where inspections and assessment are discussed on an as needed basis.

The City has identified possible climate change impacts of the collection system. Drought, leading to more root intrusion, primarily in the lower lateral, Public Safety Power Shutdowns (PSPS) due to wildfires and/or overtaxed electrical grids, and intense rain events that might exceed storms used in the hydraulic model. These have not had a noticeable impact of the collection system but are continuously being monitored so the City can react and adapt to changing conditions. The collection system experiences high levels of I&I during significant storm events and is addressing this in the current CIP. All CIP projects carried out near the San Francisco Bay are reviewed to include engineering controls against sea level rise as feasible.

# **EFFECTIVENESS**

The City utilizes the following Key Performance Indicators for measuring effectiveness of this Element:

- Has the City maintained its schedules for CCTV, lift station, lateral and lift station inspections?
- Are efforts being documented?
- Is collected data being reviewed in a timely manner.
- Are potential climate change impacts being monitored?

No.	Plan	Schedule	Resp	onsible I	Party
			Mgr.	Sup	Crew
8.1.1	Review/evaluate enforcement and inspection findings and implement changes as necessary.	Annually	x	х	
8.1.2	Review spill rates and causes and make changes to maintenance programs, as necessary.	Annually	х	х	
8.1.3	Hold meetings to discuss any issues that may result from climate changes.	Annually	х		

# 8.2. Capacity Assessment and Design Criteria

# WDR REQUIREMENTS

# Attachment D-8.2 (pgs. D-8/D-9)

"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.

# COMPLIANCE

The City's current Sewer System Master Plan includes an updated hydraulic model and includes an analysis of system component performance, during both dry weather and peak wet weather conditions. The existing system was evaluated for capacity and projections for the future system were established.

In Burlingame's service area, back-to-back storm events are a common occurrence. For this reason, the system was evaluated using a 5-year, 24-hour storm event on day one, followed by a 1- year, 24-hour storm on day two. Proposed sewer improvements required to correct existing deficiencies have been identified.

Included in the <u>Master Plan</u>, was an Inflow and Infiltration (I&I) study performed by V&A Consulting Engineers. Monitoring sites includes 25 manhole locations and 6 pump stations covering 24 drainage basins within the City service area. Sources of I&I were identified for each basin.

The City's Rehabilitation and Replacement Program includes the rehabilitation or replacement of 2 percent of pipelines that are not already a recommended improvement project. This equates to approximately 19 miles of pipeline R&R projects between 2021 through 2030. This includes the pipelines identified in the I/I identification and elimination program. The City uses existing inspection data to prioritize pipelines and choose the best rehabilitation or replacement method.

# EFFECTIVENESS

The City utilizes the following Key Performance Indicators for measuring effectiveness of this Element:

- Number of capacity-related spills or surcharge condition during the audit period.
- Has the system responded to rain events as indicated by the hydraulic model?
- Has there been any changes to zoning designations (residential, commercial, industrial)?

No	Plan	Schedule	Resp	onsible I	Party
			Mgr.	Sup	Crew
8.2.1	Monitor/evaluate significant rain events to see if they exceed the design storm in the hydraulic model.	Each significant rain evet		х	x
8.2.2	Identify and monitor flood-prone areas susceptible to erosion from rain events	Each significant rain event		x	x

# 8.3. Prioritization of Corrective Action

# WDR REQUIREMENTS

# Attachment D-8.3 (pg. D-9)

"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."

# COMPLIANCE

All defects discovered from CCTV inspections of the gravity system are rated using the PACP defect coding system. Manhole and Lift Station inspections and findings are documented using ITpipes, checklists and CMMS task records. Collections management staff evaluates and prioritizes each defect and determines the best course of action to rectify. This is done in coordination with engineering.

Larger, more involved work such as line replacement or rehabilitation is recommended by collection staff to the engineering team. Engineering then designs the project and includes the projects in the CIP.

When prioritizing work to be done, staff considers all factors such as the likelihood a defect would contribute to a service disruption or spill, location of facility to surface water or other environmentally sensitive areas, difficulty of access and severity and consequence of failure or inaction.

# EFFECTIVENESS

The City utilizes the following Key Performance Indicators for measuring effectiveness of this Element:

- Has the City adhered to its system evaluation/condition assessment schedule?
- Has the City adhered to its prioritization/corrective procedures for sewer repair and capacity improvement projects?
- Have projects been completed before deficiencies caused failures?

No.	Plan	Schedule	Res	ponsible	Party
			Mgr.	Sup	Crew
8.3.1	Utilize all available data for prioritizing corrective actions considering severity and consequences of potential spills.	Each CIP Update		x	х
8.3.2	Maintain documents and recordkeeping of system evaluation and condition assessment inspections and activities.	After each significant rain event		x	х

# 8.4. Capital Improvement Plan

# WDR REQUIREMENTS

#### Attachment D-8.4 (pg. D-9)

"The capital improvement plan must include the following items:

- Project schedules include 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."

# COMPLIANCE

The City's Capital improvement Plan (CIP) includes construction or renovation projects that will allow the City to provide reliable service to its customers. The projects have been prioritized based on reducing spills under peak wet weather flows, the type and extent of the deficiency and when the deficiency is triggered (i.e., existing versus buildout) Based on these factors' projects were assigned an implementation year.

The capital improvements were grouped into one of the following phases:

- Near Term Phase 1 (FY 2021-22 thru FY 2025-26): This phase includes projects that are targeted as the highest priority improvements.
- Near Term Phase 2 (FY 2026-27 thru FY 2030-31): This phase includes projects that are targeted as high priority improvements that may be mitigated or monitored for several years prior to being implemented.
- Long Term (FY 2031-32 thru FY 2040-41): This phase generally includes medium priority improvements or improvements.

Critical projects were phased in the earlier phases (years) of the 20-year CIP. Less critical projects were phased into later phases of the 20-year CIP.

Funds for CIP projects are collected through two avenues. The two sources of revenue are customer sewer rates, large development capacity fees. While these two sources are the primary inflow of funding, the department also explores grant funding and loans to assist with large program projects.

#### EFFECTIVENESS

The City utilizes the following Key Performance Indicators for measuring effectiveness of this Element:

• Has the City's capital improvement plan schedule been adhered to?

No.	Plan	Schedule	Respons	sible Party	1
			Mgr.	Sup	Crew
8.4.1	Hold regular coordination meetings, with all parties, to help keep the projects on track and resolve issues that may arise in a timely manner.	Annually	x	x	
8.4.2	For schedules that are not followed, justify and document the reason.	Each Delayed Project	x	x	

#### RESILIENCE

Resilience is addressed in Element 7 by:

• Is there an annual review of the Capital Improvement Plan by all appropriate individuals including both Engineering and Operations?

# **APPENDIX 8 INCLUSIONS**

• None

# 9. Monitoring, Measurement, and Program Modifications

# WDR REQUIREMENTS

# Attachment D-9 (pg. D-9)

"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."

# COMPLIANCE

The City maintains accurate and relevant inspection and maintenance records for the collection system. Much of their documentation today is maintained electronically, which allows for ease of access and analysis. This helps City staff to make sound decisions and prioritize activities when dealing with the routine and the unexpected.

To further improve effectiveness audit findings are evaluated, prioritized and addressed. Any findings not addressed during the three-year audit cycle will be carried over to the next audit and addressed in a prioritized order. Audit findings that lead to updating the SSMP are documented in the SSMP Change Log.

The City is committed to continuous improvement and monitors and evaluates performance of work programs to ensure they are being implemented as intended. Data is collected and maintained on all inspection and maintenance activities in the CMMS database and with minimal paper records to keep track of outcomes of the various work plans (e.g., pipe repairs, gravity cleaning, pipe inspections, pump station activities, etc.)

This SSMP has been designed to include key performance indicators (KPIs) for each element, which are used to measure effectiveness. KPI's are monitored annually to help staff monitor performance against intended outcomes and adjust as necessary.

The City monitors spill trends, at a minimum every three (3) years during required audits, utilizing the data maintained in the CMMS database. These efforts are helpful in planning efforts with limited resources reduce the impact of spills.

# EFFECTIVENESS

The City utilizes the following Key Performance Indicators for measuring effectiveness of this Element:

- Are SSMP Elements being periodically evaluated for effectiveness?
- Are work activities and spill events being documented?
- Has a plan and schedule been established to address audit findings/deficiencies from the last audit?
- Is Trend Analysis being performed on spill causes?
- Have work programs been assessed and updated as necessary?

# MONITORING, MEASUREMENT, AND PROGRAM MODIFICATIONS



Figure 7 - Agency, Region and State SSO Rate per 100 Miles by Year



Figure 8 - Spill Volume By Year/Spill Volume Per Capita by Year



Figure 9 - Spill Recovered Percent by Spill Type





Figure 10 - City Spills Causes by Volume of Spills (2007-2022)



City Spill Causes by <u># of Spills</u> (2007-2022)

\*Note – Spill Couse "Other" – This option was used when multiple factors were identified as the cause. Figure 11 - City Spills Causes by No. of Spills (2007-2022)

# MONITORING, MEASUREMENT, AND PROGRAM MODIFICATIONS

#### IMPLEMENTATION PLAN/SCHEDULE

No.	Plan	Schedule	Respon	sible Par	ty
			Dir	Eng	Sup
9.1	Assess work programs to ensure outcomes are as intended.	Annually		x	x
9.2	Ensure work programs and the SSMP are updated based on assessments.	As Needed		х	x
9.3	Monitor and evaluate spill trends. Document efforts.	Annually		х	x

#### RESILIENCE

Resilience is addressed in Element 9 by:

- Development of key performance indicators to measure effectiveness of the SSMP.
- Performing periodic reviews of the SSMP to help ensure it is being properly implemented.
- Developing and adhering to a timeline to correct deficiencies found during the audit process.
- Periodically evaluating work programs to help ensure effectiveness.

#### **APPENDIX 9 INCLUSIONS:**

None

# 10. Internal Audits

# WDR REQUIREMENTS

#### Attachment D-10 (pg. D-10)

"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."

# COMPLIANCE

The City completed its last audit on February 3, 2025, and will complete audits every three (3) years moving forward. The objective of the audit is to evaluate compliance, implementation and effectiveness of the SSMP.

The SSMP includes a description of how the City will comply with the requirements of each Element. The audit review includes an evaluation to determine if compliance has been met.

Implementation is evaluated by determining if the agency is executing the SSMP as stated.

Effectiveness is evaluated by using key performance indicators, which have been developed specifically for each element.

An additional evaluation is performed to comply with Specifications 5.6 addressing resilience. Resilience indicators have been developed for each element, and they serve to demonstrate how resilience is built into the SSMP and inspection, maintenance and spill response activities.

Any deficiencies discovered through the audit process are noted and a plan and schedule to implement corrective measures is established.

# **EFFECTIVENESS**

The City utilizes the following Key Performance Indicators for measuring effectiveness of this Element:

- Have audits been performed as required?
- Have the audits assessed compliance, implementation, and effectiveness?
- Have deficiencies been identified?
- Has a plan and schedule to rectify the deficiencies been established?

No.	Plan	Schedule	Respon	sible Part	ty
			Mgr.	Sup	Crew
10.1	Schedule audits in advance of due dates to ensure adequate time to complete. City has 6 months to complete the audit from the end of the audit period.	Beginning at end of audit period		х	x
10.2	Ensure a plan and schedule is developed to address deficiencies.	Once the Audit is completed		x	x

#### RESILIENCE

Resilience is addressed in Element 10 by:

- Periodically evaluating key performance indicators during the audit period to assess effectiveness and make corrections, if necessary, prior to the audit.
- Evaluating previous audits to ensure deficiencies have been rectified.
- Scheduling the audit due dates and completing the audit on time.

#### APPENDIX 10 INCLUSIONS:

• 10.1 2021-2024 SSMP Audit

# 11. Communication Program

# WDR REQUIREMENTS

#### <u>Attachment D-11 (pg. D-10)</u>

"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."

# COMPLIANCE

Should the City experience a spill that may require closure of public areas or enter a source drinking of water, signs will be immediately placed indicating the issue and providing contact information. Staff will remain on site to provide an additional safety factor until appropriate authorities respond and direct otherwise. The City also has an auto-dialer system through their Police Department that can alert the public. In addition, the City has a social media presence on Facebook, Instagram, X (formerly twitter), Nextdoor, and an e-newsletter that can be distributed in a timely manner.

The City's governing council will approve the SSMP every 6 years during a regular council meeting. As this will be an agenda item, the public will have the opportunity to comment.

The SSMP is posted on the City's website, which provides the public the opportunity to contact the City, via the "Contact Us" feature. The City lists current CIP projects.

The City communicates with satellite systems, Hillsborough and Burlingame Hills, via periodic meetings and on an as-needed basis to keep them abreast of City Ordinances, codes and any concerns that may arise. The City and its satellites have clearly defined the "hand-off" points between systems.

# EFFECTIVENESS

The City utilizes the following Key Performance Indicators for measuring effectiveness of this Element:

- Does the City place all SSMP action items on the agenda for regular Counsel meetings?
- Does the City have signage, or other means, readily available to notify the public of environmental or public risk factors related to a sewage spill?
- Does the City perform outreach to residential customers?

# IMPLEMENTATION PLAN/SCHEDULE

No.	Plan	Schedule	Respon	sible Par	ty
			Mgr.	Sup	Crew
11.1	Ensure the City Council approves the SSMP per schedule.	Every 6 years	x		
11.2	Ensure the SSMP is posted on the City website and the link functions properly.	Annually	x	x	
11.3	Ensure Sewage Spill Warning signs are readily available to communicate with the public when necessary	Annually		x	x

# RESILIENCE

Resilience is addressed in Element 11 by:

- Use the SSMP as a tool to communicate to the public how the City is managing the system.
- Maintain a consistent presence in the service area by attending community events or issuing periodic newsletters or other communications to the public.
- Make it clear and easy for the public to contact the City.

#### **APPENDIX 11 INCLUSIONS**

• None

# LIST OF APPENDICES

APPENDIX 1 - None

APPENDIX 2 - None

APPENDIX 3 - None

#### **APPENDIX 4**

4.1. Critical Spare Parts List

#### APPENDIX 5 - None

#### **APPENDIX 6**

City of Burlingame Spill Emergency Response - Plan available upon request.

#### **APPENDIX 7**

7.1 <u>FOG Ordinance § 15.10.038</u> Generally prohibited wastes and <u>§ 15.10.040</u> Specifically prohibited wastes (available online)

#### **APPENDIX 8**

8.1 <u>Adopted Operating and CIP Budget FY 2024-2025</u> (Public Works – Sewer Maintenance Division Excerpt pgs. 149 & 150)(available online)

### APPENDIX 9 - None

#### **APPENDIX 10**

10.1. Most Recent City SSMP Audit - available upon request.

#### APPENDIX 11 - None

# **Critical Equipment and Parts Inventory**

The City of Burlingame maintains its entire collection system to industry standards. All pump stations have built in redundancy to provide for routine pump maintenance and emergency backup in the event of power failure, pump failure, emergency or high flow. Emergency response equipment and parts include two (2) Vac-Con Combination Truck, a CCTV Van, Emergency Diesel Generators, Compressor, and four (4) diesel-driven Emergency Bypass Pumps, plugs, and spill containment kits. Replacement pump motors, impellers, mechanical seals and a variety of electrical parts are maintained and replaced as needed. The City of Burlingame also has numerous vendors who can be called upon to deliver necessary parts and equipment in case of an emergency. The City of Burlingame also owns a trailer-mounted backup generator that can be used to provide power should any of the on-site generators fail at Lift Stations.

- Pipelines/Manholes An inventory of plugs and bypass equipment are maintained to provide for stopping, diverting, or bypassing flows while emergency repairs are made. The City of Burlingame relies on staff to perform most emergency repairs. Burlingame staff also maintain a substantial inventory of critical parts including pipe, pipe fittings and repair couplings. In addition, the City of Burlingame stockpiles manhole frames and covers for emergency replacement by staff, or a contractor if needed.
- Sewer lift stations- An inventory of critical parts, such as; repair clamps for pressurized lines, portable backup generators, submersible pumps for lift station bypass procedures, and electrical supplies such as fuses, breakers, transducers and PLC's.

Part Description	Number in Inventory	Location
Transducer	4	Locker in S&S shop
Flygt pump 5 hp	1	S&S shop
Flygt pump 15 hp	2	S&S shop
Flygt pump 20 hp	2	S&S shop
Pump repair kits	11	S&S shop
Operator Interface Terminal (OIT)	4	S&S shop
Pumps	4 - Portable 6" Trash Pumps	Grove Pump Station and 1740 Rollins
Hoses	Various lengths	Grove Pump Station and Corporation Yard
Plugs	Various sizes	S&S shop
Pipe	Various sizes & Lengths	S&S shop
Fittings	Various sizes	S&S shop

# Critical Sewer System Replacement Parts Inventory