Sewer System Management Plan (SSMP)

2025 Update

Sanitary Sewer Collection System for

Waste Discharge ID (WDID): # 2SSO10176

REVIEWED AND APPROVED BY:

Dennis Bosch, Deputy Director of Public Works
Legally Responsible Official
City of San Bruno
Sanitary Sewer Collection System
(includes Element Development Plans & Schedules)

PREPARED BY:

FISCHER COMPLIANCE LLC
PRACTICES THAT COMPLY

7/3/25
Date Signed

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

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City of San Bruno
Att: Dennis Bosch
Legally Responsible Official (LRO)
567 El Camino Real
San Bruno, CA 94066

Dear Mr. Bosch,

We are pleased to present the new 2025 Sewer System Management Plan (SSMP) Update developed in partnership with the City of San Bruno'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 for the City of San Bruno (City) with technical assistance from Fischer Compliance LLC with the goal of meeting and exceeding compliance with the State Water Resources Control Board 2022 General Waste Discharge Requirements, Order No. WQ 2022-0103-DWQ for Sanitary Sewer Systems (referred to throughout this document as the WDR). The City provided all details, information and institutional insights for preparation of the SSMP. The document has been developed to meet the size, scale, and complexity of the City, serving as a "living document" used as a tool for managing and operating the City's sanitary sewer collection system. Additionally, the latest 2024 Sewer System Management Plan Guidance Manual published by the Bay Area Clean Water Agencies (BACWA) was utilized as a model for development of the document to harmonize formatting/content and incorporate recommended suggested guidance wherever possible.

The City's commitment to meeting or exceeding regulatory requirements, along with its proactive approach to operation and management of the collection system, has served it well, as evidenced by the system's performance relative to other agencies in the region and the state.

Figure 1 provides key spill metrics, including data comparing the City's spill record with state and regional system data for the five-year period of May 2020 through May 2025. The City consistently performs better than both statewide and regional spill rate indices and net spill volumes for all categories of spills from its sanitary sewer collection system.

General Information

Region	Place ID	Place Name	CS Category	Place Address	Place County
2	630985	San Bruno City CS	Municipal(Public)	567 El Camino Real San Bruno CA 94066	San Mateo

Collection System Spill Summary

Operational Indices: San Bruno City CS

Spill Rate Index (spills/100mi/yr)							
	Category 1			Category 2		Category 3	
	Main System	Laterals	Other	Main System	Other	Main System	Other
San Bruno City CS	0.45	N/A	0.22	0.0	0.0	0.9	0.0
State Municipal(Public) Average	1.67	N/A	0.99	1.03	1.45	2.34	0.46
Region Municipal Average	2.95	N/A	0.75	0.84	0.02	3.27	0.52

Net Volume Spills Indice (gallons/1000 Capita/yr)							
	Category 1			Category 2		Category 3	
	Main System	Laterals	Other	Main System	Other	Main System	Other
San Bruno City CS	40.64	N/A	1.01	0.0	0.0	0.0	0.0
State Municipal(Public) Average	3465.65	N/A	2045.19	186.05	1227.91	47.38	16.38
Region Municipal Average	-3020.35	N/A	1751.94	144.3	1.88	87.08	51.86

Figure 1 -Collection Spill Summary: Operational Indices for San Bruno with State and Regional Data

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

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
I & I	Inflow and Infiltration
LRO	Legally Responsible Official
RWQCB	Regional Water Quality Control Board
SCADA	Supervisory Control and Data Acquisition
SERP	Spill Emergency Response Plan
SOP	Standard Operating Procedure
SSMP	Sewer System Management Plan
Spill	Sanitary Sewer Spill
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 by integrating a wide range of programs specifically designed for ensuring the integrity and efficiency of the City's sanitary sewer collection system. Moreover, the City is dedicated to maintaining its collection system in a systematic manner by implementing various work programs, with a focus on critical areas, to prevent spills, allowing for a comprehensive approach to maintenance. Work programs include CCTV inspections, pipe cleaning, manhole inspections, pump station maintenance, root control, source control and pipe repair, just to name a few. Work programs are described in more detail in Specifications 5.19 – Operation and Maintenance of this SSMP.

By prioritizing proactive measures and taking a comprehensive approach, the City is well-equipped with a proven track record of effectively operating its sanitary sewer collection system with the highest levels of service, complying with the WDR, and reducing/eliminating 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 to ensure compliance with all required due dates for updating its SSMP and completing its required SSMP Audits (see chart below). The City's most recent SSMP audit was completed for the period August 2021 through August 2024.

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*
San Bruno City CS	2SSO10176	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	Required Plan Audit Due Date	Required Plan Audit Due Date	Required Plan Audit Due Date	Required Plan Audit Due Date	End of Required 3-Year Audit Period**
San Bruno City CS	2SSO10176	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

EFFECTIVENESS

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

- Are SSMP Audits and SSMP Updates being performed as scheduled?
- Has the SSMP been approved by the governing board on the required schedule (i.e., every six years)?
- Are specific internally established sewer program milestones being monitored?

IMPLEMENTATION PLAN/SCHEDULE

No.	Plan	Schedule	Responsible Party		
			Dir	Eng	Sup
1.2.1	Prepare for next SSMP Audit	Begin 5/2/2027	X	X	X
1.2.2	Complete and Upload next SSMP Audit	By 11/2/2027	X		X
1.2.3	Incorporate Audit Findings, update Change Log and Update SSMP	Begin after completion of SSMP Audit		X	X
1.2.4	Prepare for next SSMP Audit	Begin 5/2/2030	X	X	X
1.2.5	Complete and Upload next SSMP Audit	By 11/2/2030	X		X
1.2.6	Incorporate Audit Findings, update Change Log and Update SSMP	Begin after completion of SSMP Audit		X	X
1.2.7	Prepare for next SSMP Update	Begin 2/2/2031	X	X	X
1.2.8	Board Approval deadline for next SSMP Update*	By 8/2/2031	X	X	X

* The City's timeline must incorporate adequate review time and City Council approval prior to the required submittal deadlines.

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

The City of San Bruno is in San Mateo County and encompasses approximately 5.5 square miles. The wastewater collection system serves a population of 42,550 people in a 4.9 square mile service area, as shown in Figure 3, below.

The sewer system consists of 87.81 miles of gravity sewers and 2.21 miles of force main, comprising 2,415-line segments. The system also includes 2,040 manholes, and six pump stations. The sewers range in size from four inches to 36 inches in diameter. Appendix 1 contains tables detailing (a) gravity mains by diameter, (b) gravity mains by material, and (c) approximate age of the gravity mains. Wastewater treatment is conducted under a Joint Powers Agreement with the City of South San Francisco. Approximately 3.4 million gallons of effluent per day is pumped from San Bruno through the Shaw Road Pump Station to be treated at the South San Francisco/San Bruno Water Quality Control Plant.

The City does not have any siphons or stormwater diversion structures.

The City currently manages its collection system data using the MaintStar software but anticipates migrating to SpryPoint in the second half of 2025. City staff currently use paper maps while in the field but once SpryPoint is in use, field staff will be able to access real-time maps using tablets. The City is currently using Geocortex for its GIS system but anticipates migrating to ESRI. The City's CCTV truck uses the ITpipes software.

The City does not own any laterals. The property owner is fully responsible for maintenance and repair of the private sewer laterals. If the property owner has an approved clean-out at the property line, then the City will provide courtesy inspection and cleaning.

The percentage of residential, commercial, and industrial service connections is shown in Table 2, below.

Overall, the City is in a good position to maintain its collection system. The only unusual challenge is that the low-lying portion of the collection system near Highway 101 does not have much slope or grade. However, the City is currently constructing larger diameter lines with steeper grades to mitigate this issue.

As described in the 2024 Audit, while the City has not identified any current challenges, it should be noted that that the City has made significant progress in improving its maintenance and operations work over the past 15-20 years. It also has been progressively implementing a Capital Improvement Program for finding, fixing, or replacing sanitary sewers to fix or replace sewers in bad shape and others that needed to be larger to convey more wastewater to the South San Francisco/San Bruno Water Quality Control Plant. The City has also upgraded five of its six pump stations and associated force mains and is in the process of replacing the sixth pump station and force main. As a result of these improvements, some of which required as part of a Cease-and-Desist Order and a Baykeeper Consent Decree, the City has reduced the number of sanitary sewer spills from an average of 31 spills/year for the period of 2006-2011 to 2 spills/year for the period of 2018-2024.

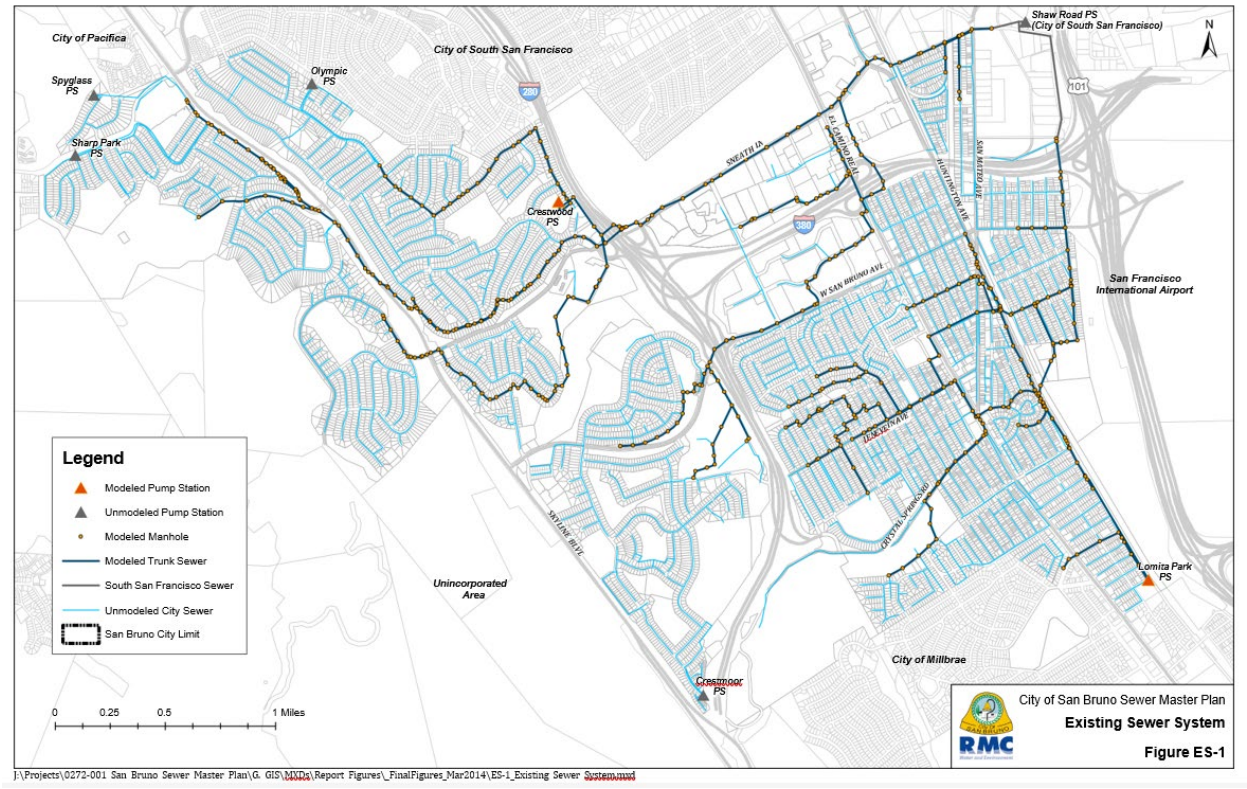

Figure 2 - City Vicinity Map and Service Area

Use Type	Number or % of Connections
Residential	13,090
Commercial, Industrial, Institutional	740

Table 2 - City sewer connection flow classifications and connections data

EFFECTIVENESS

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

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

IMPLEMENTATION PLAN/SCHEDULE

No.	Plan	Schedule	Responsible Party		
			Dir	Eng	Sup
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.		X	X
1.3.2	Update maps.	Within 30 Days of Submittal of Completion of Development Project		X	

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:

- 1.1 Gravity Main Details

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 specific to the City's collection system. The City maintains a proactive O&M program to operate its system and identify defects, which are then prioritized for repair, replacement, rehabilitation, or placed on modified maintenance schedules. (See Elements 4 and 8 and Specifications 5.19 of this SSMP for more detail.)

The City keeps up with current industry standards, technology and best practices by reviewing industry periodicals, networking, attending training classes, and attending industry conferences and workshops. The City continuously evaluates emerging practices, equipment and technologies for possible implementation to enhance sewer operations.

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's sewer utilities is a self-supporting enterprise that relies predominantly on revenues from water and sewer rates to fund the costs of providing service. The City maintains two revenue sources to maintain financial stability, meet its operational needs and manage all necessary expenditures to operate its sewer system. The primary source of revenue is the annual Sewer Service Rate Charge, which is collected from customers and used for:

a. The City's portion of the cost to operate and maintain the South San Francisco/San Bruno Water Quality Control Plant;

b. Capital improvements, maintenance and operation of City's wastewater collection and conveyance system; and

c. General administrative services.

The City Building Department collects an Impact Fee that funds the installation of facilities to areas not yet served and to upsize pipes to ensure adequate capacity.

The City is generally adequately staffed and owns and operates the necessary equipment to effectively maintain its collection system. Information regarding the City's current wastewater rates is found at How are Wastewater Rates Calculated? and at the Fiscal Year 2024/25 Levy Report.

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 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 for judicial civil enforcement.

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 Wastewater 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

Att. D-2 (pg. D-3)

"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 above items are addressed in order below:

The City has two Legally Responsible Officials: (a) the Wastewater Services Manager (currently Philip Woffenden) and (b) the Deputy Public Works Director (Dennis Bosch). Both people meet the requirements set forth in Specifications 5.1 of the WDR.

Responsible Position Contact Information

Responsible Person	Title	Phone	Email
Matt Lee	Public Works Director/ Legally Responsible Official	650-616-7059	mlee@sanbruno.ca.gov
Dennis Bosch	Deputy Public Works Director, Utilities	650-616-7179	dbosch@sanbruno.ca.gov
Philip Woffenden	Wastewater Services Manager	650-616-7172	pwoffednen@sanbruno.ca.gov
Angelica Ali	Management Analyst	650-825-6353	aali@sanbruno.ca.gov
Trisha Ortiz	City Attorney	650-616-7003	tortiz@sanbruno.ca.gov

Table 3 - Responsible Position Contact Information

Implementation Responsibilities

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

Table 4 - Implementation Responsibilities

2.1. Organizational Chart

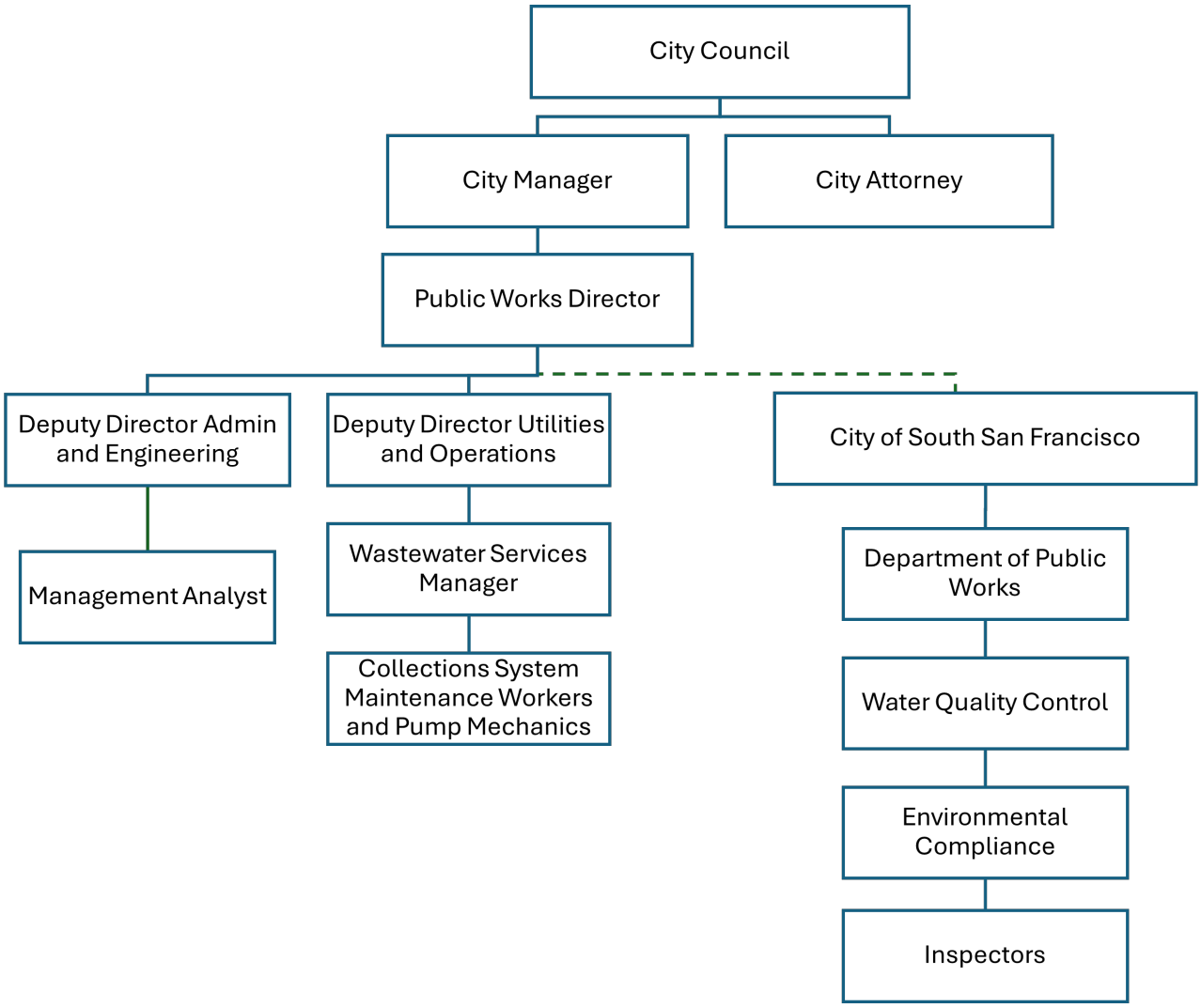

Figure 3 – City of San Bruno Organization Chart

2.2. Organizational Staffing Responsibilities

The City's organizational lines of authority and staffing are as follows:

City Council:

The City Council has the ultimate responsibility to the people of San Bruno and the implementation of all programs and City services. It approves all ordinances, resolutions, and major contracts, modifies and approves the budget, and has the responsibility of employing a City Manager and City Attorney.

City Attorney:

The City Council appoints the City Attorney to serve as "corporate" legal counsel to the City as an entity and advises the City Council and City staff on a broad range of municipal issues. These matters typically include open meeting laws, public record laws, conflicts of interests, land use and environmental laws, claims and litigation, municipal elections, employment and labor relations, municipal utilities, public services contracts, code enforcement, and resolutions, ordinances and other legal documents. The City Attorney receives policy direction from the City Council and acts as legal advisor and counsel to the City Council, City Boards and Commissions, City Manager, and City departments and represents the City in litigation against the City.

City Manager:

The City Manager is responsible for preparing, and upon City Council adoption, managing implementation of the City budget which outlines the City's annual work program, and which balances the cost of providing City services within the available financial resources. The City Manager serves as the Chief Executive Officer of the municipal corporation and as Executive Director of the San Bruno Redevelopment Agency. As such, the City Manager is responsible for the appointment and supervision of all City department heads and for oversight of all full-time employees and all City operations to ensure that City services are delivered in an economical and effective manner.

Public Works Director:

Legally Responsible Official. Has been assigned authority to plan, organize, direct, and review the activities and operations of the Public Works Department. This includes Wastewater, Water, Storm, Streets, and Engineering.

Deputy Public Works Director, Administration and Engineering (City Engineer):

Legally Responsible Official. Responsible for all municipal engineering. This includes the development and implementation of design and construction standards as well as inspection procedures

Deputy Public Works Director, Utilities & Operations:

- Legally Responsible Official. Under general direction, plans, organizes, coordinates and directs the activities of the various functional working units in the Utilities and Operations Divisions of the Public Works Department; supervises technical staff and subordinate personnel in the planning and implementation of division functions including water operations, wastewater operations, storm drainage systems, fleet and equipment maintenance, streets, sidewalks, signs, traffic signals and street lighting; and performs related work as required.
- Also has the overall task but not overall authority for the operation and maintenance of the wastewater collection system. The Deputy Director for Utilities & Operations is assigned and takes on the work associated with the preparation of the SSMP, for all audits, and for all monitoring and reporting under the SWRCB's WDR.

Wastewater Services Manager:

Legally Responsible Official: manages, supervises and participates in a wide range of maintenance and repair related projects involving the City's wastewater collection system.

Management Analyst I/II:

Assists with the following Wastewater programs and tasks: budget preparation, training programs, reports regarding Consent Decree and CDO, RFQ's, RFP's, contract creation, and any other wastewater related tasks requested by the Department. No CMMS entry tasks but does utilize CMMS for queries and budget extraction information.

Associate Engineer:

Performs complex engineering work in the provision of office and engineering support and field engineering support for environmental, water, sewer, street, and other Public Works projects and programs ensuring technical competence and compliance with all current codes and criteria; serves as a Project Manager.

Principal Engineer:

Plans, supervises and coordinates difficult, professional engineering work in support of a wide range of complex Public Works projects; directs the work of subordinate professional and technical engineering staff; assists in the administration and supervision of the Engineering Division.

Engineering Technician:

The class of Engineering Technician/Public Works Inspector performs a variety of sub-professional engineering work involving both office and field assignments. These include design detailing, surveying, right-of-way and public works inspection.

Executive Assistant:

Performs a variety of highly responsible, complex and confidential clerical, technical administrative and secretarial duties for a department or division. Employees perform the most difficult and responsible types of duties including providing administrative support to a department or division in areas such as budget, personnel or a department program or function, as well as providing responsible secretarial support to management and professional staff which requires frequent use of tact, discretion, initiative and independent judgment.

Secretary:

Assists with the following Wastewater tasks: CMMS information entry, invoice processing, customer service, inventory purchasing, scheduling and any other wastewater related tasks requested by the Department.

Lead Maintenance Worker:

Receives general supervision from the Wastewater Services Manager, performs a variety of semi-skilled and/or skilled tasks in wastewater operations, maintenance, repair and/or construction work including providing lead worker assistance to supervisory and/or management staff as appropriate to the Department. The Lead Maintenance Worker is responsible for day-to-day operation of the collection system and the Spill Emergency Response Plan under the SWRCB's WDR.

Pump Mechanic:

Under general supervision of the Wastewater Service Manager performs semi-skilled, skilled, and administrative work in the repair and maintenance of mechanical equipment at wastewater pump stations and storm water pumping stations operated by the City. A Flood Control District owns the storm water

stations, and the pump mechanics perform basic maintenance required and notify the Flood Control District of significant issues about the two storm water pumping stations.

Public Works Maintenance Worker II:

Receives general level supervision from higher-level staff such as Wastewater Services Manager. Duties include performing a variety of semi-skilled and skilled tasks in maintenance work, and operating equipment in the construction, operation, repair, maintenance, and replacement of the City's wastewater collection and conveyance facilities and systems. The Public Works Maintenance Worker IIs are also responsible for responding to and mitigating spills.

Public Works Maintenance Worker I:

Receives immediate supervision from higher level staff such as Wastewater Services Manager progressing to general supervision over time with training and demonstrated work performance. This is the entry level - journey level class in the Public Works Maintenance Worker series. Positions in this class usually perform most of the duties required of Maintenance Worker II's but are not expected to function at the same skill level and usually exercise less independent direction and judgment on matters related to work procedures and methods. The Public Works Maintenance Worker I's are also responsible for responding to and mitigating spills.

Building Inspectors:

Performs a variety of routine and complex technical work in building inspection to ensure that the Uniform Building Code and other related codes and standards are met. Performs inspections of all private sewer related improvements, rehabilitations and repairs on private sewer laterals.

The following position classifications at the South San Francisco Wastewater Treatment Plant provide support and compliance for the City fats, oils and grease program in the City of San Bruno as designated in the San Bruno Municipal Code.

Superintendent:

The South San Francisco Publicly Owned Treatment Plant Superintendent or the Superintendent’s authorized representative is an employee of the City of South San Francisco, and except as otherwise provided, has the authority to administer, implement and enforce the provisions of the San Bruno FOG Control Program on behalf of the City of San Bruno.

Environmental Compliance Director:

Designated representative for the permitting, inspection and enforcement of the San Bruno FOG Control Program.

2.3. Chain of Communication for Reporting Spills

The spill reporting chain of communication is described in the City's September 2023 Spill Emergency Response Plan as follows:

"Public observation is the most common way that the City is notified of blockages and spills. Contact numbers and information for reporting sewer spills and backups are on the City's website at the Wastewater page. The City's telephone number for reporting sewer problems is (650) 616-7160.

Normal Work Hours: The Executive Assistant will receive calls and logs the caller's contact information, address and nature of the service request. This information is forwarded to the Wastewater Services Manager or Wastewater Lead Worker, and they will dispatch available Collections Crew…

After Hours: This phone number rolls over to the City's answering service, and they will log the caller's contact information, address, and nature of the service request. They will notify an available Standby Worker…"

Contact	Telephone Number
Wastewater Division	650-616-7160
Stormwater Manager	650-616-7160

Table 5 - Spill Communication Contact Numbers

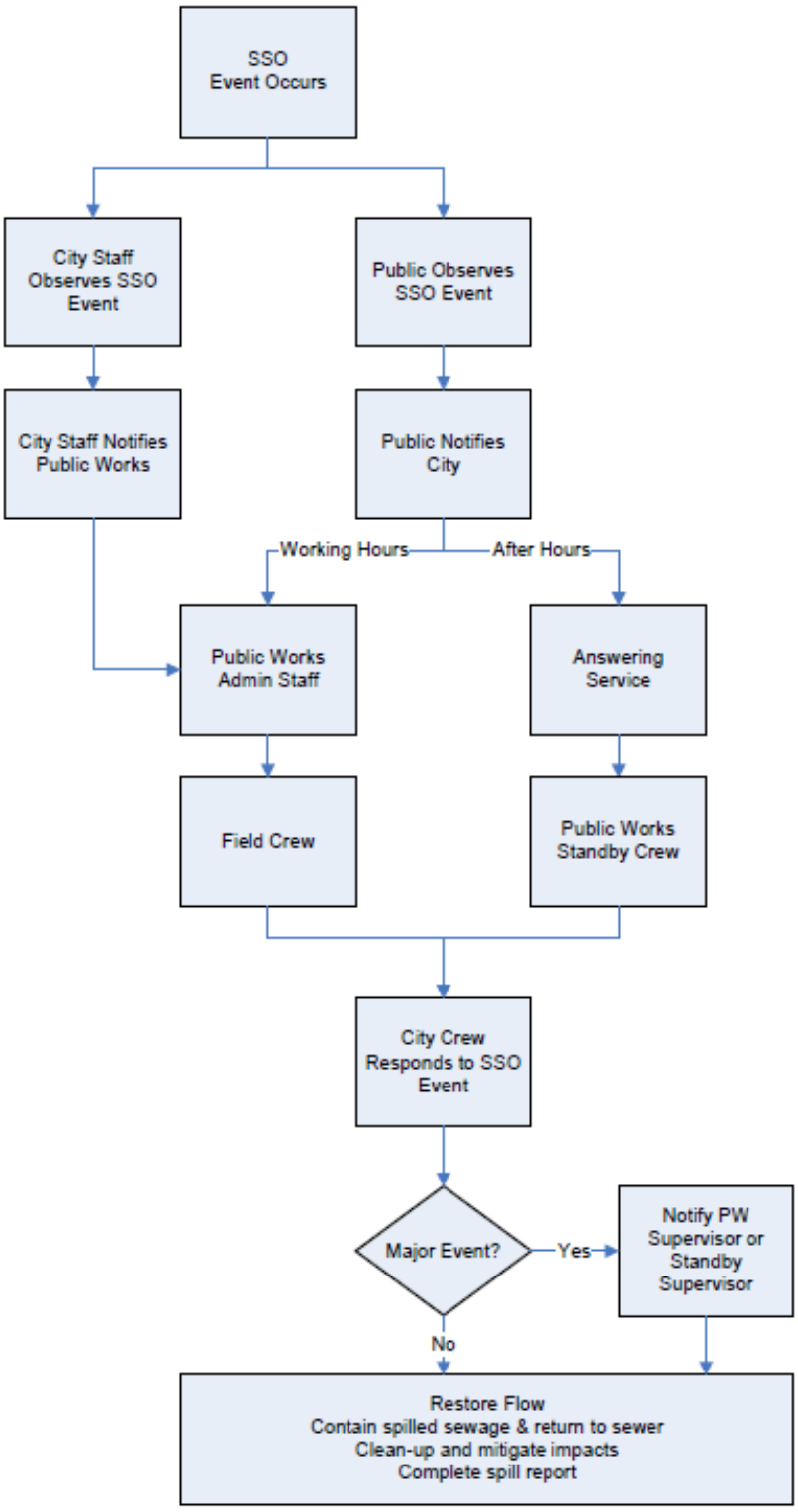

Figure 4 - Spill Reporting Chain of Communication

EFFECTIVENESS

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

- 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 SSMP?
- Is there a process in place to ensure all contact information remains up to date?

IMPLEMENTATION PLAN/SCHEDULE

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

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:

a. Authority to prevent illicit discharges into the City's wastewater collection system.

Chapter 10.12 of the City's Code of Ordinances, titled "Water Quality Control" regulates the disposal of sanitary sewage into the City's sanitary sewer system to protect the proper functioning of the collection system as well as the treatment plant. Chapter 12 includes, but is not limited to the following key provisions:

- §10.12.040: requires that significant industrial users obtain a wastewater discharge permit and that the permit application include extensive information regarding the type, quantity, and duration of the discharge and whether any of the pollutants are subject to pretreatment standards.
- §10.12.050: sewers and connections shall be designed and constructed to prevent inflow.
- §10.12.150(a): the discharge of trucked or hauled waste into sanitary sewers is prohibited, unless authorized by the superintendent.
- §10.12.150(b): it is unlawful to discharge or cause to be discharged directly or indirectly, any pollutant or wastewater into any storm sewer or into any sewage facility which will interfere with the operation or performance or pass through of the POTW. Additional paragraphs describe specific items which are prohibited from discharge (i.e., explosive material, grease, petroleum oil, garbage, rags, debris, acidic or basic, toxic pollutants, dyes, etc.)
- §10.12.150(c): specifically pertains to Fats, Oils and Grease and states that it is unlawful for any person to dispose of any grease, or cause any grease to be disposed, by discharge into any drainage piping, by discharge into any public or private sanitary sewer, by discharge into

any storm drainage system, or by discharge to any land, street, public way, river, stream or other waterway.

b. The City's pre-planned collaboration and coordination with storm drain agencies.

The City owns and operates most of the storm drains within its boundaries and has a de facto legal authority to ensure access to these storm drains in the event of a wastewater spill. Public Works vehicles have hard copy maps, and in field laptops that display utility layers and CMMS programs. The vehicles also have copies of the City's storm drainage system maps for determination of storm water inlets, piping, and facilities. This information is utilized and available for spill response. Both the Wastewater and Streets/Stormwater Divisions are located at the City's Water Corporation Yard on Huntington Ave. Having the personnel and equipment located at the same location allows easy coordination of emergency spill responses from wastewater crews with assistance from storm sewer maintenance when needed.

The County operates two stormwater pump stations within the City. The City has a mutual aid agreement with the County; if a spill were to occur into a County structure, the City will clean up the spill following its Spill Emergency Response Plan. In addition, Caltrans owns and operates some storm drains within the City boundary. If a spill were to occur into a Caltrans structure, the City will clean up the spill following its Spill Emergency Response Plan. The City intends contact Caltrans to discuss a mutual aid agreement relating to wastewater spills. The City's GIS mapping system includes reliable storm drain maps.

c. Require that sewer system components and connections be properly designed and constructed.

Chapter 10.12, Section 10.12.050 of the City's Code of Ordinances states that "All new sewers and connections to new and existing sewers shall be properly designed and constructed to prevent inflow and in accordance with …applicable city ordinances."

The City's Standard Specifications and Drawings include Part 3, Technical Specifications. Technical Specification 33 10 50 prescribes design and construction requirements for the separation of water and sewer lines. Technical Specification 33 30 00 prescribes design and construction requirements for sanitary sewer utilities. Technical Specification 33 39 17 prescribes design and construction requirements for manhole rehabilitation.

d. Ensure access for maintenance, inspection, and/or repairs for portions of the service lateral owned and/or operated by the Enrollee.

The City is not responsible for sewer laterals. Chapter 10.12, Section 10.13.080 of the City's Code of Ordinances states that "It is the exclusive responsibility of the property owner to maintain, repair, and/or replace the property sewer laterals from the building to the sewer collector mains up to and including the Y-connection. In circumstances where the private lateral is damaged, staff will direct homeowners to repair or replace the lateral at their expense."

Chapter 10.12, Section 10.08.100 of the City's Code of Ordinances states that "Access to the water meter or wastewater connection shall not be obstructed at any time by, among other things, landscaping, fences or other structures, motor vehicles, debris, or companion animals. The city is not liable for damages caused to the premises as a result of efforts to gain access to the service connection. If a service connection cannot be accessed, a fine as established by resolution of the city council shall be assessed to the customer of record."

Chapter 10.13 requires inspection of private sewer laterals and any necessary corrections upon the sale of a home.

e. Enforce any violation of its sewer ordinances, service agreements, or other legally binding procedures.

The authority to enforce the sewer ordinance is found in Chapter 10.12, Sections 10.12.260 through 10.12.420. The superintendent and deputy director have the authority to enforce compliance with the provisions of Chapter 12 and to promulgate regulations designed to assist in achieving compliance. Enforcement options include warning letters, notices of violation, a show cause hearing, an abatement order, a summary abatement, revocation or modification of a permit, criminal prosecution, and civil damages.

f. Obtain easement accessibility agreements for locations requiring sewer system operations and maintenance, as applicable.

The City has easement agreements in place for any locations requiring sewer system operations and maintenance. These agreements can be found online and requested through staff. City staff is aware of easements and has access to GIS maps for both sewer and storm water.

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 SSMP 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		
			Dir	Eng	Sup
3.1	Review Ordinance(s) to confirm all documents provide necessary required legal authority.	Once per 6-year SSMP Update Cycle	X	X	
3.2	Confer with storm drain owners to ensure current practices and contact information are up to date.	Annually		X	
3.3	Monitor and document occasions when Ordinance(s) failed to address issues as intended.	Continuously	X	X	X
3.4	Coordinate with Caltrans to prepare a mutual aid agreement to allow the City to respond to any wastewater spills which enter a Caltrans storm drain.	By 6/1/2026			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 of San Bruno Public Works Department is comprised of multiple Divisions, including Engineering, Water, Wastewater, and Streets/Stormwater. Division staff identify all City utilities and map the structures using a Geographic Information System (GIS) and associated databases, such as MaintStar and Geocortex. The City is in the process of migrating from MaintStar to SpryPoint, and from Geocortex to ESRI.

With respect to the wastewater collection system, the maps show locations and list attributes of gravity pipelines, manholes, pressure lines and valves, pumping facilities, and applicable stormwater conveyance systems.

City staff currently use hard copy maps while in the field but once SpryPoint is in use, field staff will be able to access real-time maps using tablets. If field staff find an error in a map, or a new project results in a change, then a redlined version will be given to GIS contractor who will make the correction within three weeks or less. The City is planning to hire an in-house GIS specialist in lieu of using a contractor; this will reduce the time needed to make corrections to maps. Field staff carry copies of the City storm water system maps for determination of possible storm water inlets and facilities. This information is utilized and available for spill response.

Upon request, the City will provide the system maps to State and Regional Water Board staff.

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.)

IMPLEMENTATION PLAN/SCHEDULE

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

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 City utilizes a computerized maintenance management (CMMS) to program and track all required inspection and maintenance activities within the collection system to help proactively prevent blockages/operational problems or spills. Use of the CMMS allows the City to make informed decisions regarding its assets and infrastructure by using the collected data from field work orders and documented inspections.

Historical data for all maintenance activities are maintained in the CMMS, which provides a basis for critical analysis and data-driven planning and decision-making today and into the future. This allows for prioritizing and planning routine activities such as CCTV inspections, pipe cleaning and manhole inspections. The City inspects its sewer lines with CCTV on a three-year cycle. If the CCTV results show that a line needs cleaning, then this information is entered into the CMMS and a work order is generated. While every line is CCTV inspected in a three-year period, only "dirty" lines, as identified by the CCTV operators, are cleaned. This reduces the need for excessive cleaning and the possibility of stressing joints, as well as conserves water. The City's six pump stations are inspected daily by the pump mechanic. Wet wells are cleaned quarterly, on a preventative maintenance schedule. Manholes are inspected on a five-year schedule.

In addition, the CMMS is used to plan and schedule higher-frequency inspection and maintenance activities such as Hot Spot cleaning and selective root control activities. Emergency and other reactive activities are documented in work orders as well. Root control treatment is budgeted and completed based on needs.

The scheduling system allows staff to put certain activities on a preventive schedule and rely on the CMMS to automatically create work orders on a prescribed interval. Work orders for other activities are generated by supervisory personnel on an as-needed basis.

EFFECTIVENESS

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

- Are the City's maintenance, operations, engineering work orders periodically audited for accuracy and completeness?
- Does the City monitor "open," "overdue," or "not yet completed" 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?

IMPLEMENTATION PLAN/SCHEDULE

No.	Plan	Schedule	Responsible Party		
			Dir	Eng	Sup
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's training program covers many areas associated with wastewater collection systems and serves to develop and maintain highly qualified, knowledgeable, and capable staff. This training is provided through a variety of modes and begins with the first day on the job and continues regularly thereafter.

- Staff attend trainings and industry conferences, subscribe to industry journals, and learn about new products from vendors.
- Staff who respond to sewage spills receive annual training from an outside vendor to review how to implement the SERP, including how to estimate spill volume, and the requirements of the WDR. The training includes an on-site practice drill with training on emergency response procedures with flow estimating from the holes in manhole covers. The training includes determining spill start times, volume estimation and recovery estimation. Spill response training is also conducted in-house on a quarterly basis and includes volume estimation. Staff also conduct spill training with their mutual aid partners (Pacifica, Millbrae, South San Francisco, and Daly City).
- Contractors who work on the sewer collection system, such as Duke's, are instructed by City staff on the process to follow in the event of a spill. Staff provide contractors with a spill response form such as the one found in Appendix 4.
- Staff designated as Data Submitters have been trained on the City's procedures for reporting spills, from receipt of call to submitting reports and certification.
- The Wastewater Division has SOPs for sewer system response and mitigation, sewer cleaning equipment, mainline repair, pump station emergency response plans, confined space entry, Class B license requirement, cell phone/two-way radio use, and locating and marking USA.
- With respect to employee safety, the City (a) holds weekly meetings that usually include safety tailgate meetings; (b) discusses safe practice reminders at all meetings, (c) maintains compliance of OSHA safety rules, and (d) reviews Material Safety Data Sheets for new chemical use. In addition, the Corporation Yard provides competent person training on trenching, shoring, excavation, and spill response/bypass pumping training.

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?

IMPLEMENTATION PLAN/SCHEDULE

No.	Plan	Schedule	Responsible Party		
			Dir	Eng	Sup
4.3.1	Review training documentation to ensure all staff have received required training.	Quarterly		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's fleet maintenance department maintains high velocity jetters, rodder vehicles, mechanical rodding equipment, pumps, generators and the video inspection vehicle. Critical pipeline and pump station parts and spare equipment inventory are maintained by the Collection System Section.

Critical equipment and miscellaneous spare parts inventory include:

- 6" trailer mounted bypass pump
- Sewer plugs
- 3" portable trash pump
- 6" lay flat bypass hose
- Containment waddles
- Flow through sewer plugs
- Pump station pumps
- 3" lay flat bypass hose
- Portable generators
- Station generator control boards

The major equipment that City uses in the operation and maintenance of its sewer system includes:

- Vactor 2100 Plus
- CCTV Truck
- Mechanical rodder
- Multiple Honda generators
- Service body repair truck
- Emergency light tower
- Multiple 3" trash pumps
- Pump maintenance truck
- Multiple laptops
- Vactor 2100
- Back hoe and front loader combo
- Lateral response maintenance truck
- Multiple lateral CCTV cameras
- 5-yard dump truck
- 6" emergency mobile pump
- Hose reel trailer
- Arrow board truck
- Top kick mechanical snake

The City has developed a Critical Replacement Parts List which is available upon request. It has also developed a Replacement Parts Inventory procedure that is included in Appendix IV-4: Critical Sewer System Replacement Parts Inventory.

The City also contracts with SMP Plumbing Contractors in South San Francisco and Peninsula Construction in San Carlos for sewer repairs and emergency support. The City has visited the contractor's warehouse to review their stockpile of equipment, supplies and replacement parts which may be used in an emergency.

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		X	X
4.4.2	Check with vendors to ensure lead times for critical parts are as expected.	Annually		X	X
4.2.3	Ensure contracts with emergency support services are current.	Annually			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 Sewer Cleaning Results Matrix
- 4.2 Pump Station and Force Main Locations and Descriptions
- 4.3 Contractor Spill Response Form

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 sewer system O&M program includes:

- Proactive, preventive, and corrective maintenance of gravity sewers;
- Ongoing CCTV inspection program to determine the condition of the gravity sewers;
- Cleaning of sewers identified as "dirty" by CCTV inspection;
- Rehabilitation and replacement of sewers that are in poor condition; and
- Periodic inspection and preventive maintenance for the pump stations and force mains.

The Wastewater Division consists of 12 Employees - one Manager, one Lead Worker, two Pump Mechanics, and eight collection system maintenance workers. The Lead Worker and Maintenance Workers are responsible for all maintenance/cleaning/repair of the gravity collection system. The Pump Mechanics are responsible for all pump station maintenance. When necessary, contractors may be used for specialized work such as major sewer repairs or pump station improvements, but all CCTV inspections are performed by trained City staff.

CCTV Inspection of Gravity Sewer

The City maintains a proactive Closed-Circuit Television (CCTV) inspection program as a critical component of its Sewer System Management Plan. CCTV inspections are conducted regularly and on a scheduled basis to assess the condition of the City's sewer mains. A primary use of CCTV is to determine whether sewer line cleaning is necessary, allowing the City to allocate resources efficiently and avoid unnecessary maintenance activities.

CCTV inspections are performed prior to routine cleaning to evaluate the presence of debris, roots, grease, or structural defects. Based on these inspections, cleaning crews can determine if cleaning is warranted or if the line is in satisfactory condition. This condition-based approach supports the City's efforts to reduce the risk of spills and prolong the service life of the infrastructure.

In addition to targeted inspections, the City's CCTV program operates on a three-year rotating schedule, ensuring that all sewer mains in the system are visually inspected at least once every three years. This systematic approach enhances asset management, supports risk-based prioritization of maintenance and capital improvements, and ensures compliance with regulatory expectations.

All CCTV inspection work is performed by trained City staff who are certified in Pipeline Assessment Certification Program (PACP) standards established by the National Association of Sewer Service Companies (NASSCO). PACP certification ensures that inspections are conducted according to nationally recognized standards, and that condition assessments are consistently coded, documented, and integrated into the City's asset management system.

This structured and professional CCTV inspection program enables the City to maintain a high level of service, optimize maintenance operations, and support data-driven decision-making for its sanitary sewer system.

Gravity Sewer Cleaning

The City maintains a comprehensive Gravity Main Line Cleaning Program as a key element of its preventative maintenance approach to managing the sanitary sewer system. Maintenance Workers are responsible for all maintenance, cleaning, and repair of the gravity collection system. The cleaning program includes frequencies of every three months, every six months, annually, and every three years. These cleaning cycles are tailored based on observed performance in the field and data gathered during inspections. The methods used—hydro jetting, mechanical rodding, and chemical root treatment—are selected based not only on maintenance history and debris type but also on CCTV evaluations performed by the City's NASCO PACP-certified CCTV operators. Video footage allows staff to assess structural conditions, root intrusion, and debris accumulation, enabling informed decisions about the appropriate cleaning method and frequency.

The line cleaning crew evaluates cleaning results based upon the Standard Sewer Cleaning Results, found as Appendix 4.1. Assessment criteria include (a) type and amount of debris removed, (b) evidence of grease, roots, or sediment buildup, (c) history of spills or blockages, (d) CCTV inspection findings and (e) field staff observations and professional judgement. Staff place line segments on the hot spot schedule based upon past cleaning results, history of spill events, history of cleaning results, video inspections and professional judgment. Cleaning frequencies are regularly reviewed and updated within the CMMS based on ongoing field data and inspection outcomes.

The wastewater collection system staff maintain a list of known structural deficiencies determined from the CCTV results. This list is maintained in priority order by structural rating. High priority structural deficiencies, PACP rating 5, if found to exist, will be repaired as soon as possible by outside contractors.

Gravity sewer maintenance is scheduled using work orders generated by the City’s Maintstar CMMS. Completed gravity sewer maintenance is recorded using work orders. The CMMS system is used for multiple programs, as well as maintenance control, historical information, and cost recording. The Manager, Lead Maintenance Worker, and all Maintenance Workers utilize the system. The following programs or tasks are housed or maintained within the CMMS:

- Programmed preventative maintenance cleaning program for hydro flushing;
- Programmed preventative maintenance cleaning program for mechanical rodding;
- Programmed preventative maintenance cleaning program for lower lateral maintenance;
- Manhole inspection program;
- Root Foaming program;
- Pump station maintenance program;
- All calls for service;
- All work orders;
- Manhole repair
- All sewer repairs;
- CCTV Inspection;
- Future force main inspections; and
- Future manhole at force main “daylight” gravity location point inspection.

The Wastewater Division Manager is responsible for the coordination of the CMMS and GIS systems. The Division Manager, City IT Department, and CMMS Provider maintain the CMMS system. At times, the

Division will hire outside computer program contractors to create new programs or tasks within the CMMS system to enhance collection system maintenance. The City IT Department, City GIS contractors, and Department Managers maintain the City GIS system.

To mitigate past odor complaints, the City increased its public education on odors, increased line cleaning in those areas and added oxygen injection at two of the largest pump stations. The City has spent over one million dollars to resolve these issues and is committed to exploring all options and opportunities to reduce or eliminate odor issues from the collection system and pump stations.

Hot Spots

The preventative (hot spot) cleaning maintenance program consists of four cleaning cycles for mains. Mains are either hydro jetted, mechanically rodded, or chemically root treated. Cleaning frequencies are adjusted based on what the crew notices when they clean. Changes in cleaning frequency are adjusted within the CMMS system.

Summary statistics for the high frequency lines are shown below.

Frequency	Number of Segments	Annual Cleaning, Linear Feet
3 months	24	19,356
6 months	74	28,280
12 months	402	70,300
Total:	500	117,936

Manholes

The City implements a comprehensive sewer Manhole Inspection Program, to ensure that all manholes are inspected and evaluated on a five-year rotating schedule. The purpose of the Manhole Inspection Program is to identify and address any existing or potential conditions that could compromise system performance or lead to spills. During inspections, trained City staff evaluate a wide range of conditions that may impact the structural integrity, accessibility, and hydraulic function of each manhole. These inspections are guided by best practices and field expertise, and include documentation of:

- Cracks, fractures, or signs of structural deterioration;
- Inflow and infiltration (I/I) indicators, such as standing water or staining;
- Lid and frame condition, fit, and accessibility;
- Evidence of blockages, debris, root intrusion, or grease accumulation;
- Corrosion, erosion, or material loss within the manhole structure;
- Alignment or connection issues with the sewer main; and
- Safety hazards or obstructions to maintenance access.

By proactively identifying issues through scheduled inspections, the City prioritizes repairs, enhances system reliability, and prevents service disruptions. Findings from manhole inspections are recorded and integrated into the City's asset management system, supporting long-term planning and compliance with regulatory requirements.

Pump Stations and Force Mains

The City operates and maintains six pump stations, each of which is inspected daily. The wet wells are cleaned quarterly, and the mechanical and electrical equipment preventive maintenance is scheduled annually for cleaning. The City has developed contingency plans for each of the pump stations. Pump station and force main locations and descriptions are found in Appendix 4.2.

Since 2017, the City has replaced or rehabbed five of the six pump stations and associated force mains. The sixth pump station replacement has been designed and will be constructed once an easement agreement has been secured. Force main alignments are inspected on an annual basis, and discharge locations surveyed for possible damage and corrosion from the release of hydrogen sulfide when the force mains discharge to the gravity collection system. The Wastewater Division does not currently conduct maintenance on force mains. This is due to recent rehabilitation, new HDPE pipe material, and no known maintenance needs.

The pump stations contain built-in emergency bypasses, allowing the City to bypass any of the force mains using lay flat hoses to pump around the force mains. In an emergency such as a plugged force main, the City can call on their emergency contractor for support, and the contractor can arrive at the scene as quickly as City crews.

Private Sewer Laterals

The City does not own or operate private laterals. The private property owner has responsibility for the entire lateral if there is no approved cleanout and has responsibility for the upper lateral if the approved cleanout has been installed.

The City provides maintenance for lower laterals if a City-approved cleanout has been installed at the property line. The City has a cleaning program for these City lower laterals. The maintenance frequencies are 3-month, 6- month, and 1-year based upon the condition of the lower lateral. As with sewer mains, cleaning frequencies are adjusted within the CMMS system based upon the historical results of each cleaning. In addition, the City will only provide lower lateral maintenance if the lower lateral does not require repair or replacement. If repair or replacement is needed, the property owner is notified and required to make the appropriate corrections. Once the work is completed and approved by the City then the lower lateral will again be placed into the maintenance program.

The City reports all private sewer lateral spills as they become aware of an overflow.

Chemical Root Treatment Program

Sewer lines are added to the chemical root treatment program based on operator assessment and decision. Once an operator notes that a line has a low to moderate number of roots or identifies a location that has a probability to cause a root blockage in the future, the line is placed on the chemical root program within the CMMS system. If the status of a specific line segment changes and there is no longer a threat from root intrusion, the line is removed from the root program within the CMMS.

The City utilizes a service contractor (Duke's) to apply chemical root foam to approximately 17,000 linear feet of sewer lines each year as determined by field crews based upon cleaning results, spills and other available maintenance data from collection system operations. Roots are foamed in April, June, and December at a different zone each time. Individual line segments are re-treated approximately every 18 months.

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

Chapter 12.44, Section 12.44.080, of the City Code of Ordinances addresses design criteria for vitrified clay pipe, slopes of collector lines, criteria for laterals, minimum size for mains, width of easements, manhole spacing, and other miscellaneous requirements.

The City's Public Works Department has published Standard Specifications and Drawings on the City website. Part 1 includes Standard Requirements for all public projects undertaken within the City. Part 2 defines General Requirements. Part 3 details Technical Specifications and Part 4 includes Standard Drawings that individual components must adhere to. Division 33 of the Technical Specifications covers the technical requirements for utility projects. Section 33 30 00 covers the requirements for sanitary sewer utilities. This section includes specifications for the design and construction for new sanitary sewer pipelines as well as specifications for slip lining and pipe bursting that are used for the rehabilitation of existing sanitary sewer pipelines.

The City does not have specific design standards for pump stations because there are too variables to consider; each pump station design must be site-specific. Instead, the Engineering Department works with the developer's designer to determine the appropriate design for the particular location that the pump station will be installed.

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?

IMPLEMENTATION PLAN/SCHEDULE

No.	Plan	Schedule	Responsible Party		
			Dir	Eng	Sup
5.1.1	Ensure all project plans are approved in accordance with the City's Standard Specifications and Details.	Each Project		X	

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 Standard Specifications and Drawings include Part 3, Technical Specifications. Technical Specification 33 30 00 prescribes design and construction requirements for sanitary sewer utilities. The section states, in part, "Any and all work to be performed on the Collection System shall be inspected and approved by City Staff." This same Specification includes testing and acceptance requirements for individual elements of projects and testing requirements for newly constructed or rehabilitated pipelines including hydrostatic testing, mandrel testing, air testing and closed-circuit television inspection of sewer lines.

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		
			Dir	Eng	Sup
5.2.1	Verify inspection procedures are adequate and consistent with current standards of practice	Assessed annually		x	
5.2.2	Verify design standards and hydraulic model previously completed are adequate and consistent with current standards of practice.	Annually		X	

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) is a stand-alone document that contains all the key elements necessary for an appropriate spill response: notification, emergency incident response, reporting, and impact mitigation. The current plan, prepared by DKF Solutions Group, LLC, meets the requirements of the WDR. Initial training has been provided to affected staff and refresher training is conducted annually. A copy of the SERP is available for viewing at the City office upon request and is found on the City's website at the Wastewater page.

The City's 2024 Audit states that the SERP should be updated in response to the Los Angeles wildfires, specifically to include any special equipment, procedures, and personal needed for wildfires or large residential or commercial fires in San Bruno.

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		
			Dir	Eng	Sup
6.1	Perform SERP training including practice drills.	Annually		X	X
6.2	Review Post Spill Assessments to ensure adherence with the SERP and to identify any trends that should be addressed.	Annually		X	X
6.3	Update SERP to reflect lessons learned from Los Angeles wildfires.	First half 2026			X

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:

- None

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

Background

The City has approximately 141 food service establishments (FSEs) that discharge to the City sewer system. Each of these FSEs has been issued a discharge permit. The permit outlines the FSE's roles and requirements and the proper handling and disposal of all FOG related wastes. Each FSE is inspected on a regular basis to assure compliance with the FOG requirements.

The City's FOG control program is a shared responsibility between San Bruno and the South San Francisco Water Quality Control Plant. The responsibility of each agency is as follows:

San Bruno:

- Develop common standards for grease removal
- Require installation of grease removal devices
- Inspect grease removal devices
- Outreach to business
- Provide information regarding FOG problems to City inspectors
- Issue Administrative Orders and water meter shut offs to commercial sources
- Optimize sewer cleaning

- Repair/replace problem sewers
- Take enforcement action on residential sources
- Gather information for SSMP audits and updates

City of South San Francisco

- Focused FSE program (permits, inspections)
- Inspect grease removal device maintenance
- Develop common standards for grease removal
- Require installation of grease removal devices
- Identify FOG disposal sites and distribute information to grease haulers
- Outreach to business
- Issue Administrative letter, NOV, monetary penalties to commercial sources
- Prepare outreach material for residential sources
- Gather information for SSMP audits and updates

The WDR's requirements above are addressed below:

a. Public Outreach. The two Cities jointly handle outreach and public communications through brochures and bulletins available at each City counter. South San Francisco provides FOG related information on its website for the public and commercial and industrial customers. In addition, the City, in conjunction with South San Francisco, has developed and supported the following outreach programs pursued in the San Bruno service area:

   Commercial and Industrial Component: A significant component of the FOG program involves educating sewer users about the importance of managing grease waste. FSEs are provided with informational pamphlets upon renewal of their wastewater discharge permits. Multi-lingual BMP posters are distributed during annual inspections, and inspectors demonstrate proper grease waste management techniques. The South San Francisco Environmental Compliance Program maintains a list of grease waste haulers that is provided to FSEs upon request. The City may, at its discretion, promote proper FOG management through partnerships with the Chamber of Commerce and other business organizations.

   Residential Component: A variety of FOG management outreach materials are available to the public. Grease scrapers and biodegradable waste containers are distributed to residents at community events and in public buildings throughout the service area, free of charge. These items are printed with FOG control BMPs for households. Advertising was purchased at the Tanforan Movie Theater in San Bruno in 2013 and 2014. Around the winter holidays, posters and stickers describing proper oil disposal are handed out to retailers of turkey fryers. Multi-lingual door hangers are delivered to large, multi-unit dwellings and residences in areas where grease blockages have occurred. Materials and FOG information was distributed to eight elementary schools in the area.

   The residential outreach commitments continued from the spring of 2012 included (a) publishing an article in the garbage collection service newsletters, (b) perform outreach at City sponsored events, (c) distribute brochures to residential customers, (d) distribute grease receptacles, and (e) distribute educational materials to public schools.

   The City provides information for customers regarding plumbers available to assist with the maintenance of the private sewer facilities. In addition, the City had developed a Plumbers Hot Line The City provides information to customers on available plumbers for maintaining private sewer facilities. Plumbers are encouraged to contact the City prior to performing maintenance or repairs on private sewer laterals to ensure proper disposal of debris, roots, and grease. This preventative measure helps protect the mainline sewer system from blockages and overflows caused by improper disposal during lateral maintenance.

In 2023 and 2024, spills occurred due to debris being discharged into a manhole by a private contractor. In response, the City is developing a Notice Regarding Sewer Lateral Work and Responsibility for Debris Prevention letter to remind permit applicants of their responsibilities. Additionally, the City includes informational inserts in utility bills and provides guidance with each contractor permit, reinforcing proper construction waste disposal practices for both residents and contractors.

City intends to update and expand its educational program, including posting information on its website and other social media outlets.

b. Disposal. FOG which is generated by FSEs is collected in grease interceptors or grease traps which are maintained by the FSEs. The City requires that grease be removed at least monthly (Title 10, Chapter 12.150(c)(5)). The accumulated FOG is pumped out by licensed haulers hired by the FSEs and taken to the haulers' own facilities. The City of South San Francisco has developed a list of grease waste and used cooking oil haulers; this list is available on its website at Grease and Cooking Oil Haulers. The City of South San Francisco's Compliance Inspectors inspect and evaluate FSE's best management practices, waste disposal programs and proper equipment operations and maintenance during their regular inspection.

   The City's Sewer maintenance crew removes FOG that is generated in the collection system during their routine maintenance of pipes and pump stations. The grease removed from the collection system is disposed of at the South San Francisco WWTF, on an as-needed basis.

c. Legal authority to prohibit discharges. Chapter 10.12 of the City's Code of Ordinances regulates the disposal of wastes into the City's sanitary sewer system. With respect to FOG, Section 10.12.150(c) states that it is unlawful for any person to dispose of any grease, or cause any grease to be disposed, by discharge into any drainage piping, by discharge into any public or private sanitary sewer, by discharge into any storm drainage system, or by discharge to any land, street, public way, river, stream or other waterway.

d. Requirement to install grease interceptors, design standards, etc. The City requires all new FSEs to obtain discharge permits from South San Francisco prior to discharging to the City sewer system. South San Francisco reviews these permit applications for the need for grease disposal devices or other grease limiting devices and will include permit requirements for equipment, BMPs, recordkeeping, and reporting. The requirement to install grease removal devices is found in the City's Code of Ordinances, Chapter 10, Section 12.150(c) as well as in South San Francisco's Municipal Code at Chapter 14, Section 08.210.

e. Authority to inspect and enforce. The City's Code of Ordinance, at Chapter 10, Section 10.12.130(a), states that "persons or occupants of premises where wastewater is generated or discharged shall allow the POTW or its representative ready access…for the purposes of inspection…" In prior years, inspections were performed on a three-year cycle. Beginning with calendar year 2011, FSEs are inspected every year. When violations are discovered, remediation is required within 30 days. Violations include failure to implement applicable BMPs, failure to keep records of grease removal device cleaning, utilization of enzymes or emulsifiers in grease removal devices, operating without a valid wastewater discharge permit, and being shown to be the cause of a spill. South San Francisco provides the City with quarterly reports detailing the inspections made and problems identified. The City's Code Enforcement staff are advised of repeat offenders.

   The two Cities follow a written FSE Enforcement Response Plan. In general, the Superintendent of the South San Francisco Water Quality Control Plant (or designee) is the authorized representative for all interactions with FSEs while the City is responsible for final FSE enforcement actions. The City's Code of Ordinance, beginning at Chapter 10, Section 12.260 provides enforcement authority,

including warning letters, notices of violation, show cause hearing, abatement orders, and revocation of permits.

f. FOG-related problem areas. The City has established a hot spot cleaning program for pipeline segments that evidence problems that could result in a spill or system failures. The pipes included in the hot spot program are identified from results of the regular line cleaning and from the knowledge of the field crews. The results of line cleaning are rated according to the PACP maintenance grading system. The City uses those ratings to determine an appropriate frequency of hot spot cleaning. The current hot spot frequencies are every three months, six months or one year. Pipeline segments are placed on or removed from the hot spot program based upon the results of the cleaning. A line segment is not removed from the hot spot program until at least three consecutive cleaning results show the line is clear. If City crews find an unexpected buildup of grease, the City will investigate the source and notify South San Francisco that an inspection or investigation is warranted.

g. Source control measures. The City requires all new FSEs to obtain discharge permits from South San Francisco prior to discharging to the City sewer system. South San Francisco reviews these permit applications for the need for grease removal devices or other grease limiting devices and will include permit conditions on the FSE for equipment, BMPs, recordkeeping and reporting. South San Francisco has adopted the following BMPs for the FOG Control Program:

- A properly sized grease removal device should be in use;
- Grease removal device maintenance should be performed at regular intervals by trained operators and verified by management;
- Used cooking oil should be collected for recycling by a licensed hauler;
- Dry cleanup methods should be used for dish pre-washing as well as equipment and floor cleaning;
- A spill control plan should be in place. Absorbent materials should be available to aid in spill cleanup;
- Food grinders should be removed or kept out of service;
- Greasy waste should not be poured down any drain;
- Mats, filters and floors should be cleaned such that all wash water drains through a grease removal device; and
- Employees should be trained on FOG handling BMPs.

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		
			Dir	Eng	Sup
7.1	Review/evaluate enforcement and inspection findings and implement changes as necessary.	Annually		X	X
7.2	Review spill rates and causes and make changes to maintenance programs, as necessary.	Annually		X	X
7.3	Update educational information about FOG and post on websites and other social media outlets.	Beginning second half 2025		X	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:

- None

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 above requirements are addressed below:

a. The City's collection system evaluation involves every component of the City collection system, including pipelines, manholes, and pump stations. The assessment of pipeline condition is the most significant condition assessment responsibility the City has. It is of key importance to regularly perform pipeline condition assessments to initially establish a baseline condition and to monitor changes over time. City staff complete CCTV inspections and rate the pipeline conditions according to the NASSCO PACP rating system for structural and maintenance defects. In addition, the City has a total of 18 Smart Covers for manholes within the sewer line and pump stations. 6 of which are installed in the wet wells of pump stations and the remainder at critical points within the system.

b. The City has historically CCTV inspected the entire collection system on a three-year interval and cleaned any segments deemed necessary. The City believes the three-year inspection interval to be appropriate because this drives other maintenance activities within the system. The City maintains a low spill rate, in part due to its aggressive CCTV inspection schedule. The City periodically reviews and evaluates its pipe performance and inspection intervals with the intent of establishing an optimal inspection interval and may adjust the schedule based on pipe performance. The combination of cleaning, CCTV inspections, and root control work has dramatically reduced the number of sewer system spills from over 50 in 2007 to fewer than three per year since 2020, with a significant reduction of the total spill volume as well. The sewer system performance metrics justify the percentage of the system to be assessed each year to determine the condition of the system.

c. Five of the six pump stations and associated force mains have recently been replaced, with the sixth pump station in the process of replacement. Force main performance and maintenance findings will be used to establish the appropriate maintenance intervals for each force main. It is anticipated this will take several years to determine.

d. The City does not currently prioritize condition assessments based on environmental consequences or proximity to surface waters. However, the City has hired a consultant to prepare a new Sewer Master Plan, expected to be delivered by December 2025, which will include a risk assessment. The City anticipates prioritizing condition assessments upon completion of the Sewer Master Plan.

e. The City assesses system conditions using visual observation, video surveillance, smart covers on manholes, pole cameras, and CCTV cameras. Routine preventative maintenance schedule and efforts performed on a three-year rotation via CCTV inspections and reporting. All data is maintained in the IT Pipes software. Reports are assessed daily, and problem spots are handled immediately depending on the gravity of the problem.

f. The City is currently not aware of any exiting of sewage from the collection system. The City actively inspects and maintains its collection system to prevent sewage from exiting and impacting the environment. If major defects were to be observed, including observations or evidence of system conditions that may contribute exfiltration, the defects would be addressed and repaired immediately by the City's contractors.

g. The City documents all inspections, maintenance, and evaluations of the sewer system using its CMMS (MaintStar) and GIS programs. Most hard copy documents are maintained at the City office, while pump station documentation is maintained at the pump station.

   The City has anticipated that power disruptions may occur because of climate change. Therefore, each pump station includes both a generator and a connection for a back-up portable generator. A portion of the City near Highway 101 is vulnerable to flooding when there is heavy precipitation in conjunction with King Tides. Because the flooding causes the sewer system to surcharge, the City is

currently increasing the capacity of the gravity mains in this area, with completion anticipated in October 2025.

The City notes that the January 2025 Los Angeles wildfires highlighted that the SERP should specifically include any special equipment, procedures, and personnel needed for wildfires or large residential/commercial fires in San Bruno.

EFFECTIVENESS

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

- Has the City maintained its schedule for inspecting the sewer assets listed below and is data being reviewed in a timely manner?
  - CCTV Gravity Mains
  - Laterals
  - Manholes
  - Pump Stations
- Are inspection efforts discovering deficiencies in a timely manner?
- Are maintenance and inspection activities being properly documented?

IMPLEMENTATION PLAN/SCHEDULE

No.	Plan	Schedule	Responsible Party		
			Dir	Eng	Sup
8.1.1	Review/evaluate enforcement and inspection findings and implement changes as necessary.	Annually		X	X
8.1.2	Review spill rates and causes and make changes to maintenance programs, as necessary.	Annually		X	X
8.1.3	Hold meetings to discuss any issues that may result from climate changes.	Annually	X	X	X
8.1.4	Update SERP to include consideration of large wildfires.	Begin first half 2026	x	x	x
8.1.5	Prioritize condition assessment based on environmental factors.	Upon completion of the Sewer Master Plan		x	x

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 has hired a contractor to prepare a new Sewer Master Plan which should be finalized by December 2025. The Sewer Master Plan will include the evaluation of system capacity as required by Attachment D, Section 8.2 of the WDR. The information in the Sewer Master Plan will be the foundation of new CIP projects to make the system more reliable and resilient, while also identifying where capacity enhancements are needed.

Upon finalization of the new Sewer Master Plan, the City will update its SSMP to specifically address the Capacity Assessment and Design Criteria requirements of the WDR.

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)?

IMPLEMENTATION PLAN/SCHEDULE

No	Plan	Schedule	Responsible Party		
			Dir	Eng	Sup
8.2.1	Monitor/evaluate significant rain events to see if they exceed the design storm in the hydraulic model.	Each significant rain evet		X	X
8.2.2	Identify and monitor flood-prone areas susceptible to erosion from rain events	After each significant rain event		X	X
8.2.3	Monitor flows in each basin and update the hydraulic model	Per Engineering Department schedule			X
8.2.4	Update the SSMP to include the information required by Attachment D, Section 8.2 of the WDR.	First half 2026		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

The City's 2019 SSMP includes a prioritization of corrective actions based on the 2014 Sewer Master Plan. Most of these actions have been completed and the prioritization is outdated. The City's contractor is in the process of preparing a new Sewer Master Plan which is expected to be finalized by December 2025.

The City will use the information in the new Sewer Master Plan to develop a prioritization matrix for the City's sewer management and capital improvement program. This matrix could incorporate priorities such as reliability, responsiveness, and environmental protection. Reliability would consider system capacity and condition concerns. Responsiveness would consider the City's plan of action to address system problems such as spills, while response actions would include repairs or spill containment and clean-up. Environmental protection would consider the City's plan for prevention of spills. The matrix will be used to help develop a plan based on the ranking of the priorities.

Upon finalization of the new Sewer Master Plan, the City will update its SSMP to specifically address the Prioritization of Corrective Action requirement of the WDR.

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?

IMPLEMENTATION PLAN/SCHEDULE

No.	Plan	Schedule	Responsible Party		
			Dir	Eng	Sup
8.3.1	Utilize all available data for prioritizing corrective actions considering severity and consequences of potential spills.	Each CIP Update		X	X
8.3.2	Maintain documents and recordkeeping of system evaluation and condition assessment inspections and activities.	Continuously		X	X
8.3.3	Update the SSMP to include the information required by Attachment D, Section 8.3 of the WDR.	First half 2026		x	x

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 2019 SSMP included a Capital Improvement Plan based on the City's 2014 Sewer Master Plan. The CIP included priorities for construction based on significant structural and maintenance issues, aging infrastructure, and pump station upgrades necessary to meet the current and future improvement needs. The table below documents the CIP projects recommended in the 2014 Sewer Master Plan which have been completed to date.

Sewer Improvement Projects Recommended in the 2014 Sewer Master Plan completed to date.

Project Name	Project ID	Location
Crestmoor Canyon Sewer Replacement	C-1	Easement along pedestrian trail through Crestmoor Canyon between Concord Way and Engvall Ct.
Jenevein Ave Water and Sewer Replacement Project	C-4	Jenevein Ave. from Cherry Ave. to Cypress Ave.
Kains Avenue and San Mateo Ave Sewer Bypass Improvement Project	C-5B	Kains Ave. from Hensley Ave. to San Mateo Ave.; San Mateo Ave. south of Kains Ave.
Crystal Springs Road Sewer Replacement Project	C-6	Easement through San Bruno City Park from City Park Way to Crystal Springs Ave.; Crystal Springs Ave. from Oak Ave. to El Camino Real; El Camino Real from Crystal Springs Ave. to Taylor Ave./San Mateo Ave. intersection
San Mateo Ave Water and Sewer Replacement Project	C-7	San Mateo Ave. from Taylor Ave. to Angus Ave.
Trenton Sewer Replacement	R-1	Sewer main behind homes on Trenton Ave. along San Bruno Ave.
Sharp Park Pump Station & Force Main		Sharp Park Pump Station facility. Highland Drive and Elston Drive.
Olympic Pump Station and Sewer Force Main	P-1	Olympic Pump Station facility, Olympic Drive and Oakmont Drive.
Spyglass Pump Station & Force Main	P-2	Spyglass Pump Station facility, Spyglass Drive and Pacific Heights Blvd.
Crestmoor Pump Station & Force Main		Crestmoor Pump Station facility. Crestmoor Drive.
Lomita Pump Station & Force Main		Lomita Pump Station facility. San Antonio Ave.
San Antonio Sewer Replacement	C-8	San Antonio Ave from Santa Inez Ave to Santa Helena Ave
Avenues Sewer and Water Replacement R1-1	R1-1	Area bound by San Mateo Ave, Angus Ave, Huntington Ave, and Sylvan Ave
Avenues Sewer and Water Replacement R1-2	R1-2	Area bound by San Mateo Ave, Sylvan Ave, Huntington Ave, and Florida Ave

Project Name	Project ID	Location
Avenues Sewer and Water Replacement R1-3	R1-3	Area bound by ECR, Florida Ave, Huntington Ave, and San Felipe Ave
Avenues Sewer and Water Replacement R3-1	R3-1	Area bound by ECR, Kains Ave, San Mateo Ave, and Sylvan Ave

The City has recently hired a contractor to prepare a new Sewer Master Plan which should be finalized by December 2025. The new Sewer Master Plan will include an updated Capital Improvement Plan which will be developed in coordination with City Engineering, Planning, and Wastewater staff.

Upon finalization of the new Sewer Master Plan, the City will update its SSMP to incorporate the new CIP, including the items listed in Attachment D, Section 8.4 of the WDR.

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?

IMPLEMENTATION PLAN/SCHEDULE

No.	Plan	Schedule	Responsible Party		
			Dir	Eng	Sup
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.	Quarterly		X	X
8.4.2	For schedules that are not followed, justify and document the reason.	Each Delayed Project		X	X
8.4.3	Update the SSMP to include the information required by Attachment D, Section 8.4 of the WDR.	First half 2026		x	x

RESILIENCE

Resilience is addressed in Element 8 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 above requirements are addressed below:

a. The City maintains accurate and relevant inspection and maintenance records for the collection system, including field data such as pipe cleaning and inspection frequencies, FSE inspections, and information regarding spills. Much of the documentation 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.

b. Monitoring of the City's SSMP focuses on each element in terms of its implementation and effectiveness. The SSMP has been designed to include key performance indicators for each element, which are used to measure effectiveness. In addition, implementation responsibilities are included for each element to help ensure the SSMP is being implemented as intended.

c. The City has selected certain performance indicators to assess the effectiveness of the SSMP. These indicators were selected because they are straightforward, quantitative, and focused on results. Changes in the indicators over time can be used to assess the overall success of the SSMP or, conversely, to identify underlying conditions that inhibit success and necessary program revisions and changes to fully implement the SSMP.

d. The City has established three categories of metrics to monitor and measure the effectiveness of the various elements of this SSMP and its success in terms of meeting its goals. Those metrics include the following categories of information:

    - Sewer Information
    - Sewer Maintenance
    - SSMP Performance Measures

e. The Sewer Information will be taken from field crew activities, results of FOG inspections by South San Francisco, engineering analysis of sewer system needs and priorities, industry information, and technology developments in the water sector. This type of information will inform future reviews of the effectiveness of the implementation of the SSMP and will be used along with the other two categories.

The Sewer Maintenance metrics are:

- Miles of sewer main cleaned per year (regular cleaning and hot spot cleaning)
- Miles of sewer main inspected with CCTV per year
- Miles of sewer main treated for root control per year
- Total miles of sewer main, updated annually
- Average feet of high velocity cleaning per crew per day
- Average feet of mechanical rodding per crew per day
- Number of planned work orders completed per year
- Number of unplanned work orders completed per year

The *SSMP Performance* metrics, which are a measure of the success of the preventative maintenance program, are: (a) total volume of spills per year (by number, volume, and cause) and (b) trend in spills by Category (1, 2, 3) per year. The City assesses the success of maintenance and operation activities by analyzing the monitoring data and trends to measure the effectiveness of each element of the SSMP. The City will maintain a priority list of improvement opportunities that the City believes will improve the success of the SSMP. The City will update this list every three years as part of the SSMP Audits Program or as the City becomes aware of possible improvements or deficiencies.

f. The City is committed to continuous improvement and monitors and evaluates performance of work programs and SSMP elements to ensure intended outcomes are achieved while looking for areas for improvement. Although the SWRCB requires that the SSMP be updated every six years, the SSMP is considered as a dynamic document and may require updating on a more frequent basis. Routine changes to administrative information, notwithstanding, minor changes will likely be required to address improvements identified through the SSMP Audit or through modifications required as conditions change.

g. The City monitors spill trends, at a minimum every three years during required audits, utilizing the CMMS database, inspection records and CIWQS data. These resources are helpful in planning and programing work, and adjusting as needed, enabling the City to be adaptive and capitalize on lessons learned. The table below shows the City's success in monitoring and implementing its SSMP. Spills have been reduced from over 1.5 million gallons entering surface water in 2008 to no sewage entering surface water in 2023 or 2024.

FY	Total Volume Spilled, gallons	Volume recovered, gallons	Volume Entering Surface Waters, gallons
2006	57,934	0	0
2007	18,496	6,972	11,530
2008	1,589,262	4,282	1,584,175
2009	93,740	90,098	2,452
2010	29,964	2,169	27,330
2011	8,393	353	7,635
2012	484	373	20
2013	2,248	1,382	800

FY	Total Volume Spilled, gallons	Volume recovered, gallons	Volume Entering Surface Waters, gallons
2014	7,879	1,269	6,610
2015	17,452	15,302	2,000
2016	248	248	0
2017	200	100	100
2018	835	135	700
2019	13,224	12,724	500
2020	175	175	0
2021	3,800	200	3,600
2022	5,316	50	5,266
2023	0	0	0
2024	134	134	0

Table 6 - Yearly Totals for Spills from Sewer Mains

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?

IMPLEMENTATION PLAN/SCHEDULE

No.	Plan	Schedule	Responsible Party		
			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		X	X
9.3	Monitor and evaluate spill trends. Document efforts.	Annually		X	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 most recent audit for the period ending August 2024; this document is found on the City's website at SSMP Audit. The City will complete audits every three years moving forward. The objective of the audit is to evaluate compliance, implementation and effectiveness of the SSMP. Additionally, 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. A list of priority improvement opportunities will be prepared and updated as part of the audit program. Improvement opportunities will be used to prioritize and develop program modifications and will be initiated based on the priority and the available funding. An overview of SSMP related work completed between audits will be included in the program audits.

The Sewer Collections Division will perform periodic internal audits to determine the effectiveness of each element of the SSMP and will generate system metrics on an annual basis for the purpose of tracking, monitoring and adjusting the performance of the SSMP activities. The primary focus in the evaluation of system metrics will be the elimination of preventable spills and reduction of the impact of those spills that do occur.

- Implementation is evaluated by determining if the City 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. These indicators 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 are 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?

IMPLEMENTATION PLAN/SCHEDULE

No.	Plan	Schedule	Responsible Party		
			Dir	Eng	Sup
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		X	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:

- None

11. Communication Program

WDR REQUIREMENTS

Attachment D-11 (pg. D-10)

"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

a. When the City experiences a spill, it is standard procedure to secure the affected area and keep the public away. This is generally done using barricades, cones and caution tape. 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. In all cases, the City will follow the advice of higher authorities, such as the local environmental health department and other regulatory authorities.

   There are several opportunities for stakeholders and the public to participate and provide input into the development and update of the City's SSMP. During its initial development stage, as with each SSMP Audit and update of the SSMP, the SSMP and related documents are presented to the City Council for review and acceptance. Prior to each City Council Meeting, these documents are included in Agenda packet which are readily available for review on the City's website.

   In addition, the City annually communicates with the City Council at public meetings that allow for input from the public with regard to the implementation and results of the collection system operations and effectiveness of the SSMP. The City's website includes a Wastewater page which, among other items, has links to the City's Sewer Master Plan, this SSMP, and the Spill Emergency Response Plan.

   The City previously developed a formal SSMP Communication Program, which is found as Appendix 11.1 to this SSMP. The City will continue to implement the broad outlines of this Program; however, because the number and volume of spills has decreased so dramatically in recent years, the City does not anticipate the need to fully implement this Program.

b. The City has no tributary or satellite systems and therefore has no communication program for them. However, the City sends all wastewater to the San Bruno-South San Francisco Wastewater Quality Control Plant and relies on South San Francisco for much of the FOG Control Program. City staff conducts at least annual meetings with the Superintendent and appropriate staff of the treatment plant and both Cities coordinate directly on enforcement activities.

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/board 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	Responsible Party		
			Dir	Eng	Sup
11.1	Ensure the Board of Directors approves the SSMP per schedule.	Every 6 years		X	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

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

- 11.1 SSMP Communication Program

LIST OF APPENDICES

APPENDIX 1	• 1.1 Gravity Main Details
APPENDIX 2	• None
APPENDIX 3	• None
APPENDIX 4	• 4.1 Sewer Cleaning Results Matrix • 4.2 Pump Station and Force Main Locations and Descriptions 4.3 Contractor Spill Response Form
APPENDIX 5	• None
APPENDIX 6	• None
APPENDIX 7	• None
APPENDIX 8	• None
APPENDIX 9	• None
APPENDIX 10	•
APPENDIX 11	• 11.1 SSMP Communication Program

