Sewer System Management Plan

2025 Update

Westborough Water District

Waste Discharge ID (WDID): # 2SSO10665

Westborough Water District

REVIEWED AND APPROVED BY:

Patricia Mairena
Legally Responsible Official
Westborough Water District
Sanitary Sewer Collection System
(includes Element Development Plans & Schedules)

August 2, 2025
Date Signed

PREPARED BY:

FISCHER COMPLIANCE LLC
PRACTICES THAT COMPLY

THIS PAGE INTENTIONALLY LEFT BLANK

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

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

Westborough Water District**Error! Reference source not found.**
Attn: Patricia Mairena
General Manager
Legally Responsible Official (LRO)
2263 Westborough Blvd
South San Francisco, CA 94080

Dear Ms. Mairena,

We are pleased to present the new 2025 Sewer System Management Plan (SSMP) Update developed in partnership with District management. The 2025 Update meets and exceeds compliance with the Reissued 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 latest SSMP Audit findings.

The 2025 SSMP is a declaration of what the District is doing to demonstrate full compliance with the Reissued WDR. Attachment A of the Reissued 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." This requires the District to periodically review and update the SSMP as necessary until its next required 6-year SSMP Update is completed.

To support these ongoing review and update requirements, this document includes a sample change log that may be used as a reference if a system is not already in place. We encourage you to share this example with all relevant team members responsible for implementing or documenting SSMP revisions, to help ensure consistency, transparency, and continued compliance.

We look forward to assisting the District 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

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

Introduction

This Sewer System Management Plan (SSMP) or "Plan" has been prepared for the Westborough Water District (District) with technical assistance from Fischer Compliance LLC for meeting and exceeding compliance with the State Water Resources Control Board's 2022 General Waste Discharge Requirements, Order WQ 2022-0103-DWQ for Sanitary Sewer Systems (referred to throughout this document as the WDR). The District provided all details, information and institutional insights for preparation of the SSMP. The document has been developed to meet the size, scale, and complexity, serving as a "living document" used as a tool for managing and operating the District's sanitary sewer collection system. Additionally, the latest 2024 Sewer System Management Plan Guidance Manual published by the Bay Area Clean Water Agency (BACWA) was utilized as a model for development of the document to harmonize formatting/content and incorporate recommended suggested guidance wherever possible.

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

This SSMP reflects the ongoing day-to-day activities of the District for the management, operation, maintenance, and funding of the District's sanitary collection system. As such, this SSMP is a living document subject to constant review and revision as conditions and needs of the collection system change. This SSMP relies on numerous supporting documents, which are also subject to change, and which form the basis for how the District performs operation and maintenance of the collection system. The most current version of the SSMP, although it may be subject to update at any time, will be found at the District's Administrative Office. [1]

Collection System Spill Summary

Operational Indices: Westborough CS

Spill Rate Indice (spills/100mi/yr)							
	Category 1			Category 2		Category 3	
	Main System	Laterals	Other	Main System	Other	Main System	Other
Westborough CS	5.0	19.99	0.0	0.0	0.0	2.0	0.0
State Municipal(Public) Average	1.64	6.97	0.99	1.0	1.32	2.27	0.43
Region Municipal Average	2.87	3.11	0.72	0.82	0.07	3.14	0.51

Net Volume Spills Indice (gallons/1000 Capita/yr)							
	Category 1			Category 2		Category 3	
	Main System	Laterals	Other	Main System	Other	Main System	Other
Westborough CS	612.17	2.96	0.0	0.0	0.0	0.0	0.0
State Municipal(Public) Average	3376.98	129.21	2019.17	186.32	1106.7	46.38	15.5
Region Municipal Average	-2983.88	15.35	1690.97	138.64	0.63	86.84	51.46

Figure 1 – Collection System Operational Report – SWRCB CIWQS, 7-1-2020 to 7/1/2025.

[1] *Figure 1 is provided by the State Water Board, based on District data reported to the CIWQS database. It appears the information about laterals are erroneous and needs to be further investigated.*

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 District's approach to complying with the WDR requirements.
3. Effectiveness – As measured by Key Performance Indicators (KPIs.)
4. Implementation – Demonstrates how the District 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 District's collection system and procedures.
6. Appendix Inclusions – List the items included in the Appendix for each SSMP Element, if any.

Abbreviations and Acronyms[2]

BMP	Best Management Practices
CCTV	Closed Circuit Television
CIP	Capital Improvement Program
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
NPDES	National Pollutant Discharge Elimination System
NSMCSD	North San Mateo County Sanitation District
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)
WWD	Westborough Water District
SWRCB	State Water Resources Control Board
WDID	Waste Discharge ID Number (CIWQS)

Table 1 – Abbreviations and Acronyms

[2] *For a list of related WDR terms, see the WDR, Attachment A (page 32)*

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 District is committed to fully implementing the WDR[3] which includes addressing all requirements by integrating a wide range of programs specifically designed for ensuring the integrity and efficiency of the District's sanitary sewer collection system. Moreover, the District is dedicated to maintaining its collection system 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, root control, source control and pipe repair, just to name a few. Work programs are described in more detail in Section 4.2 "Specifications 5.19- Operation and Maintenance" of this SSMP.

The District does not employ collection system field staff. The District contracts with the City of Daly City (City) for operation and maintenance of the collection system. Source Control is contracted with North San Mateo County Sanitation District.

By prioritizing proactive measures and taking a comprehensive approach, the District 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

[3] *State Water Resources Control Board, Statewide Waster Discharge requirements, General Order for Sanitary Sewer Systems*

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 District 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 District'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*
Westborough CS	2SSO10665	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**
Westborough CS	2SSO10665	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 Date

EFFECTIVENESS

The District 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		
			GM		
1.2.1	Prepare for next SSMP Audit	Begin 8/2/2027	X		
1.2.2	Complete and Upload next SSMP Audit	By 2/2/2028	X		
1.2.3	Incorporate Audit Findings, update Change Log and Update SSMP	Begin after completion of SSMP Audit	X		
1.2.4	Prepare for next SSMP Audit	Begin 8/2/2030	X		
1.2.5	Complete and Upload next SSMP Audit	By 2/2/2031	X		
1.2.6	Incorporate Audit Findings, update Change Log and Update SSMP	Begin after completion of SSMP Audit	X		
1.2.7	Prepare for next SSMP Update	Begin 2/2/2031	X		
1.2.8	Board Approval deadline for SSMP Update[4].	By 8/2/2031	X		

[4] *The District should update this table after each deadline has passed.*

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 District provides sewer collection services to the community of Westborough (population approximately 13,486), with a service area of approximately one (1) square mile, located in San Mateo county (See figure 3.)

The District's collection system consists of approximately 19 miles of gravity mains, three (3) pump stations, and 0.97 miles of force mains and just less than one mile of force mains. The District's system does not include siphons or stormwater diversion structures. Service laterals are privately owned. For additional details about the District's collection system, see the most current Annual Report in the CIWQS database.

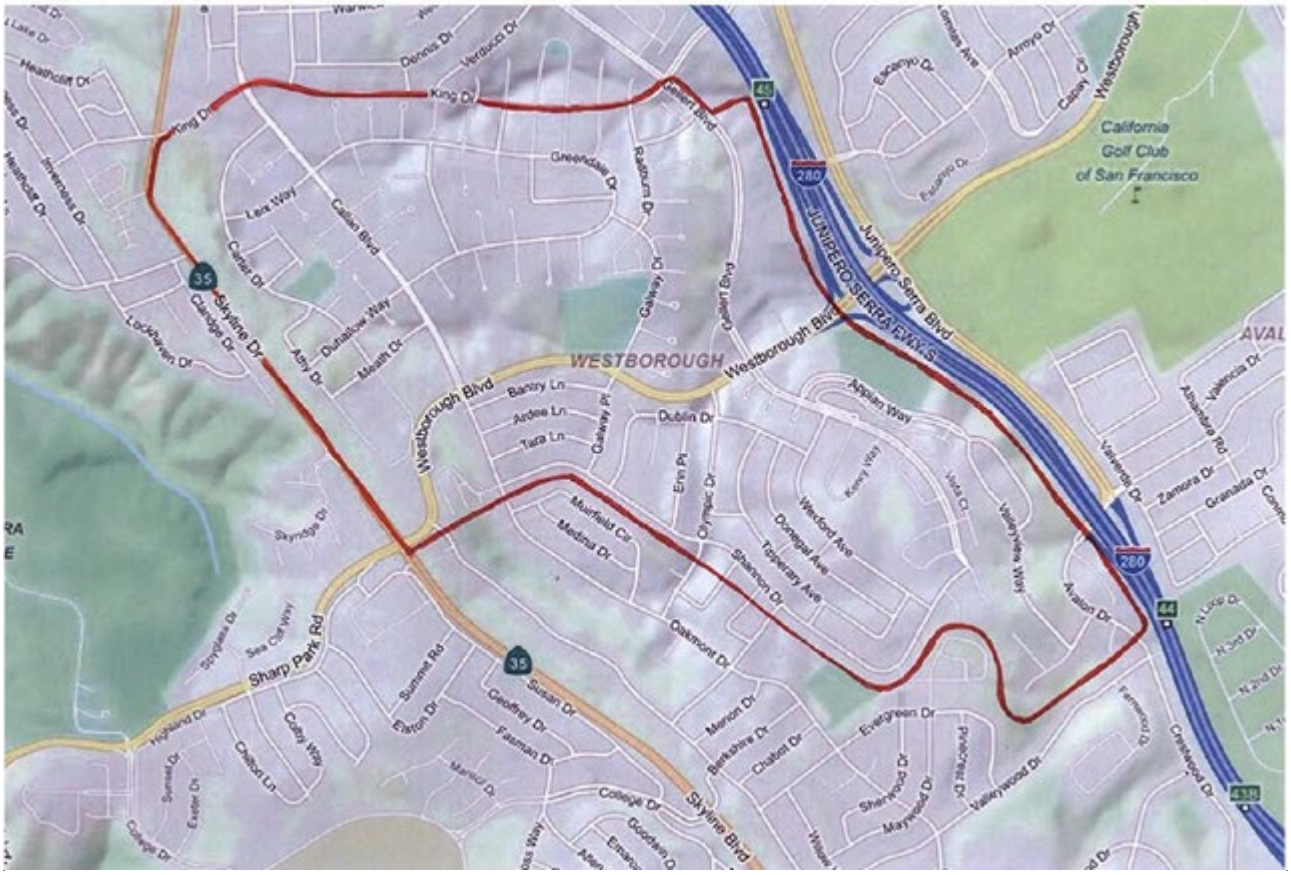

Figure 3 – District Vicinity Map and Service Area

The City of Daly City manages work orders and scheduling for the District's maintenance and inspection activities through its Lucity database. The District maintains its own mapping system in GIS. (Work orders and scheduling are discussed further in Element 4.2)

Estimated customer connection flow classifications and connection data are presented in table 2, below, for residential, commercial industrial, and institutional data.

Use Type	Number of Connections
Residential	3774
Commercial	42
Institutional	1

Table 2 – District Sewer Connection Flow Classifications and Connections Data

Overall, the District is in a good position to maintain its collection system and does not have operation and maintenance challenges due the service area conditions.

The District maintains up to date system maps. See Element 4.1 - Updated Map of Sanitary Sewer System for more detail.

EFFECTIVENESS

The District 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
			GM
1.3.1	Review District-owned asset statistics and element description; update as necessary	At the beginning of the audit cycle and when significant changes have been made.	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

- None

Specifications 5.2 – SSMP Development and Implementation

WDR REQUIREMENTS

Specification. 5.2 (pg. 18)

"To facilitate adequate local funding and management of its sanitary sewer system(s), the Enrollee shall develop and implement an updated Sewer System Management Plan. The scale and complexity of the Sewer System Management Plan, and specific elements of the Plan, must match the size, scale, and complexity of the Enrollee's sanitary sewer system(s). The Sewer System Management Plan must address, at minimum, the required Plan elements in Attachment D (Sewer System Management Plan – Required Elements) of this General Order. To be effective, the Sewer System Management Plan must include procedures for the management, operation, and maintenance of the sanitary sewer system(s). The procedures must: (1) incorporate the prioritization of system repairs and maintenance to proactively prevent spills, and (2) address the implementation of current standard industry practices through available equipment, technologies, and strategies."

COMPLIANCE

This SSMP has been completed updated to meet the requirements of Order WQ 2022-0103-DWQ and address all required Elements and Specifications required by the Order. The SSMP addresses management, operations and maintenance procedures specific to the District's collection system. The District 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 District and the staff of Daly City keep up with current industry standards, technology and best practices by reviewing industry periodicals, networking and attending industry conferences (CWEA and DKF Solutions Group) and workshops. The District and Daly City staff also continuously evaluate emerging practices, equipment and technologies for possible implementation to enhance 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 District maintains various revenue sources to maintain financial stability, meet its operational needs and manage all necessary expenditures to operate its sewer system. Sources of revenue include:

Sewer Service Charge

- Based on water consumption rates for January and February.
- Expended on treatment, operations, and a portion of capital projects.
- Some capital expenses are financed.

County Property Tax

- Can be expended without restriction.

The City of Daly City operates the collection system and has adequate staffing levels and the necessary equipment to properly manage the collection system.

Provisions 6.1 – Enforcement Provisions

WDR REQUIREMENTS

Provisions 6.1 (pg. 27)

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

COMPLIANCE

The Agency is aware of the consequences for noncompliance including associated penalties for violations. The Agency 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 Agency 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 District 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 District has uploaded this SSMP to the CIWQS database and published it on its website. In addition, the SSMP is available for public review at District offices, by appointment, 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 below:

District's Legally Responsible Officials (LRO) are listed below:

- Patricia Mairena, General Manager
- Carlos Arias, Field Supervisor

Both positions meet the requirements set forth in Specifications 5.1 of the WDR.

IMPLEMENTATION RESPONSIBILITIES

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

Table 3 – Implementation Responsibilities

RESPONSIBLE POSITION CONTACT INFORMATION

Name	Title	Phone	Email
Patricia Mairena	General Manager	650-589-1435	pmairena@westboroughwater.org
Carlos Arias	Field Supervisor	650-589-1435	carias@westboroughwater.org

Table 4 – Responsible Position Contact Information

2.1. District Organizational Chart

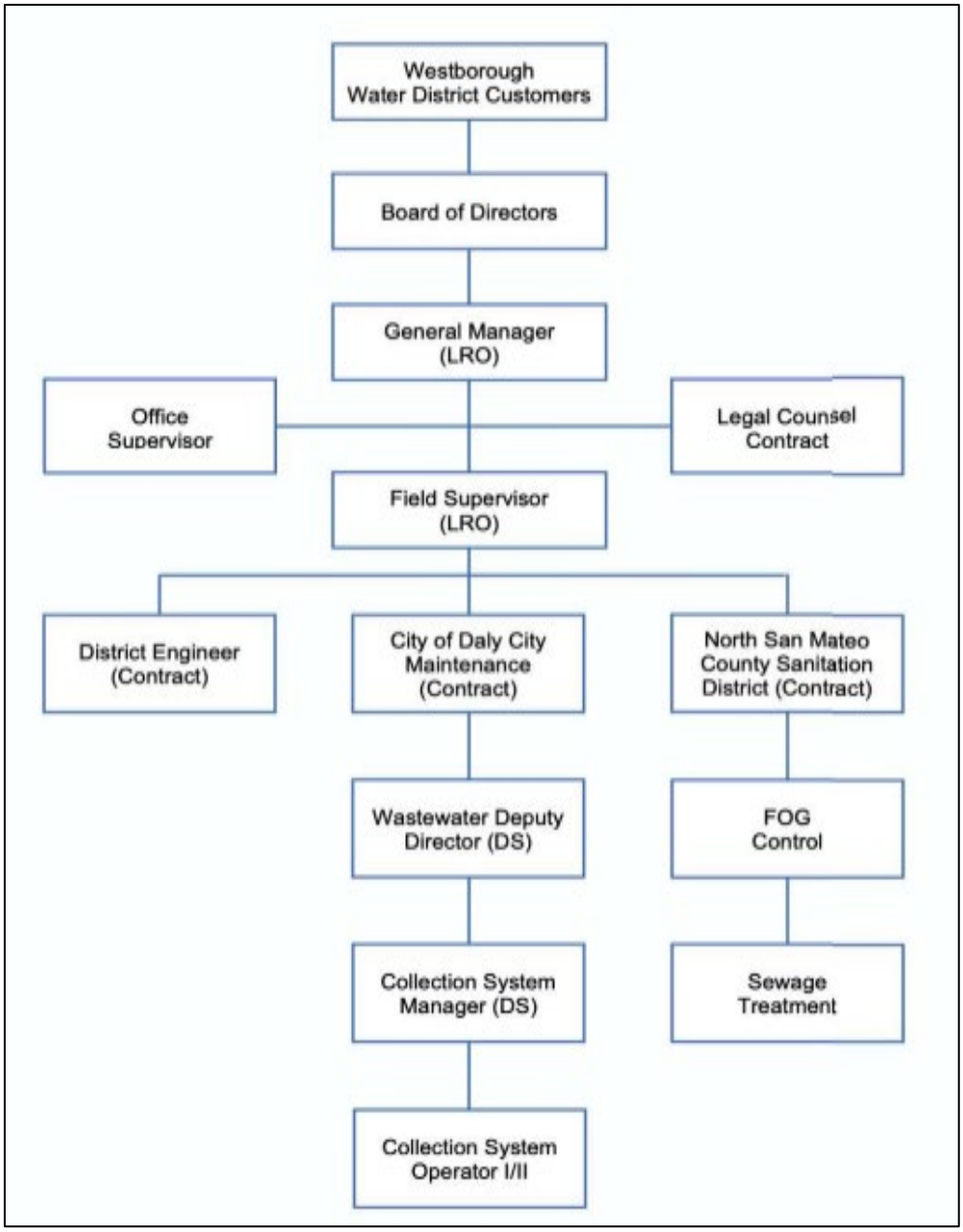

Figure 4 – District Organizational Chart

2.2. Organizational Staffing Responsibilities

General Manager (LRO)

Under policy direction, plans, organizes, and provides administrative direction and oversight for all District functions and activities; serves as the District Treasurer, District Secretary and Chief Engineer; provides policy guidance and program evaluation to the Board and management staff; ensures that all regulatory and contractual requirements are met; facilitates provision of services to District residents and businesses; fosters cooperative working relationships with other governmental and regulatory agencies and various public and private groups; and performs other duties as assigned.

Field Supervisor (LRO)

Manages field operations and maintenance activities. Trains field crews, provides relevant information to WWSD management, prepares and implements contingency plans, leads emergency response, investigates, complies data and reports General Manager. Mobilize and respond to notification of stoppages and SSOs. Initiate and complete corrective repairs as needed. Assumes duties of the General Manager when unavailable.

Office Supervisor

Under general supervision, manages, organizes, and evaluates the District's business operations; performs responsible administrative, financial, and general office work to ensure the proper functioning of the office; performs or supervises accounts receivable, accounts payable, and payroll; responds to customer complaints and concerns. Performs additional work as required.

Wastewater Deputy Director (DS) (Daly City)

Plans, organizes, directs, and supervises the public works activities of the District. Advises the District Board on collection system matters as requested by WWD. Prepares and submits maintenance reports and invoices and available to assist WWD emergency response activities and reporting. Reviews project plans and specifications for public works projects and performs technical engineering planning studies. Confers with engineering consultants and officials of WWD.

Collection System Manager (DS) (Daly City)

Supervises all activities of the Collection System Maintenance Division, including wastewater collection. Provides WWD with collection system plans and goals for operations and maintenance and emergency response. Reviews plans and specifications for sewer projects and makes recommendations regarding maintenance, construction, and operations aspects. Provide O&M reports and invoices and coordinates all overflow emergency response for WWD.

Collection System Operator II (Daly City)

Works independently under general supervision exercising judgment and initiative. Duties will normally require the ability to operate the full range of tools and mechanical equipment related to Collection System operations and maintenance (O&M). Leads and directly supervises crews on specific tasks and activities. Investigates sewer-related complaints from the general public. Reports to Field Supervisors any problems observed in the course of performing infrastructure maintenance. Makes repairs to mainlines and manholes. Enters work orders\data into asset management system, providing accurate recordkeeping and work history. Assists with WWD emergency response activities for sewage overflows.

Collection System Operator I (Daly City)

Works as a member of a field collection system maintenance crew. Cleans, unplugs, and repairs sewer lines and sewer laterals. Locates and raises manholes. Operates power equipment including combination flushing

truck, regular flushing truck, lateral flusher, rodder, and CCTV equipment. Assists with emergency response to sewage overflows in WWD service area.

Contracted Services

WWD has existing service contracts with the North San Mateo County Sanitation District for FOG control and sewage treatment and disposal. They also rely on professional engineering and capital planning services for the District Managers position and that is currently with Pakpour Engineering.

2.3. Chain of Communication for Reporting Spills

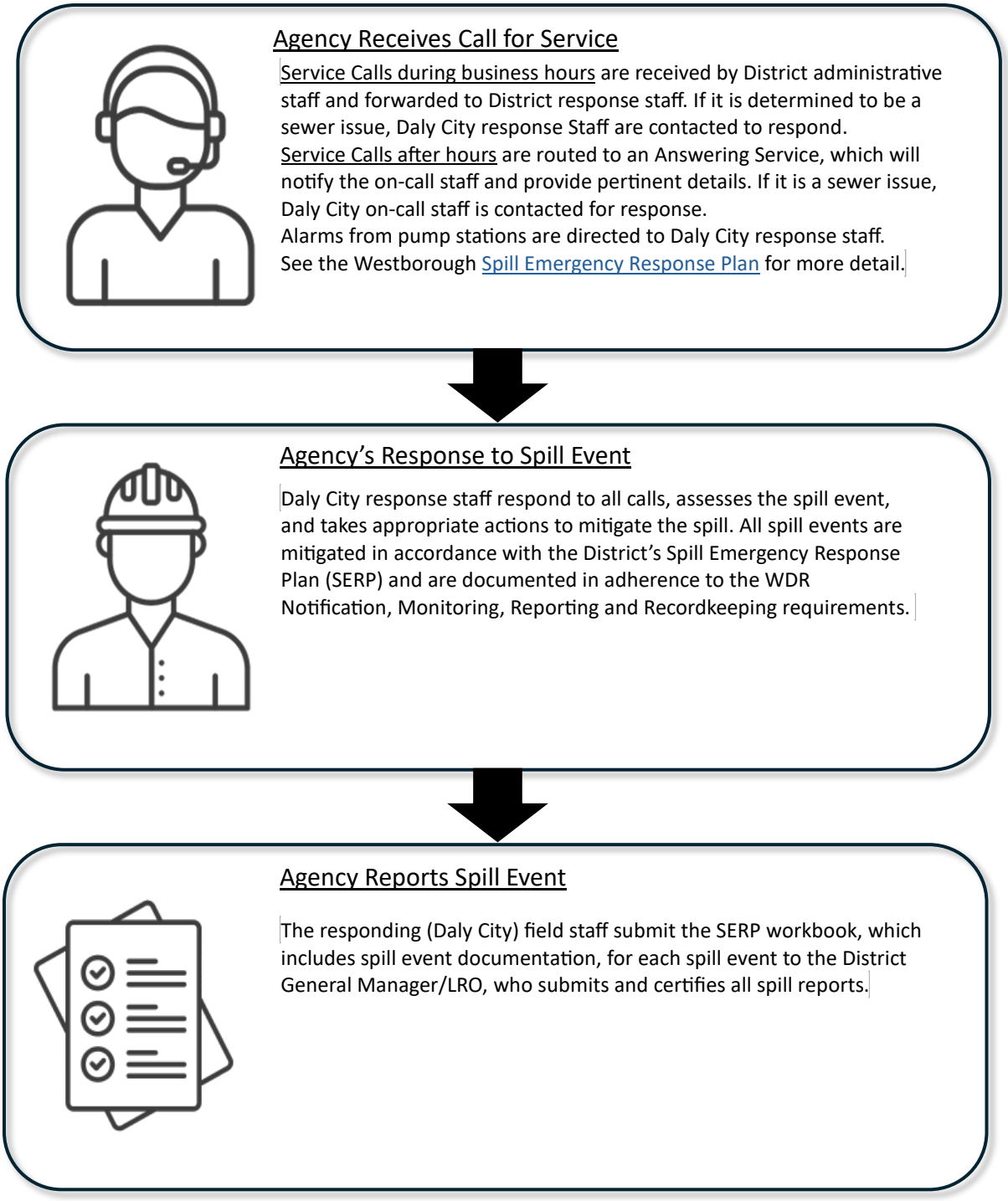

Figure 5 – Chain of Communication for Reporting Spills

EFFECTIVENESS

The District 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
			GM
2.1	Review names, contact information and position responsibilities. Update as necessary.	Semi-Annually	X
2.2	Review Chain of Communication outcomes for all spill responses	Each Spill Event	X
2.3	Review Organizational Chart for any changes. Update as necessary.	Semi-Annually	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

District Summary and Evaluation of Legal Authority

The District is regulated by several agencies of the United States Government and the State of California, pursuant to the provisions of Federal and State Law. Federal and State Laws including, but not limited to the following, grant to the District the authority to regulate and/or prohibit, by the adoption of an ordinance and by issuance of control mechanisms, the discharge of any waste, directly or indirectly, to the WWD sewerage facilities.

1. Federal Water Pollution Control Act, commonly known as the Clean Water Act (33 U.S.C. Section 1251 et seq.);
2. California Porter Cologne Water Quality Act (California Water Code Section 13000 et seq.);
3. California Health & Safety Code Sections 25100 to 25250; and
4. California Government Code, Sections 54739-54740.

Following the authorities provided by the documents described above, The District maintains a District Code that provides the necessary legal authority. The District's Code provisions are summarized below and are included in District Ordinance 61.

Authority to Prevent Illicit Discharges into District's Wastewater Collection System.

- North San Mateo County Sanitation District Code, Chapters 1.04, 1.16, 1.24, 1.44 and South San Francisco Code of Ordinances, Chapter 14.04; California Plumbing Code

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

- The City of South San Francisco owns and operates the storm drain system within the District service area. Historically, the District has accessed the storm drain system, as needed, when responding to a sewage spill events, block and retrieve sewage, clean the system and notify South San Francisco. The District endeavors to establish a more formal agreement and procedure for accessing storm drains.

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

- North San Mateo County Sanitation District Code, Chapters 1.12, 1.16, 1.20; Standard Specifications and Standard Drawings.

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

- Not Applicable. The District does not own any portion of the sewer service lateral.

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

- North San Mateo County Sanitation District Code, Chapter 1.44

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

- Existing sewer facilities are located in a public right of way or dedicated easement and are accessible. The District will ensure any new facilities will be legally and practically accessible.

EFFECTIVENESS

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

- Are the District ordinances and standards adequate for fulfilling the SSMP Plan legal requirements?
- Does the District 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
			GM
3.1	Review Ordinance(s) to confirm all documents provide necessary required legal authority.	Once per 6-year SSMP Update Cycle	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

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 District maintains current system maps that include gravity mains, force mains, manholes, pump stations, property boundaries, creek locations, and storm drain mapping, and pipe asset information (ID number, diameter, and flow direction). The District maps do not include the South San Francisco storm drain system.

The City of Daly City has the Westborough systems maps in paper form. Proposed updates are forwarded to the District and noted on the paper maps until the District provides an electronic update. The District is working to develop a map update procedure that provides timely updates to Daly City.

If a map error or omission is discovered, it is brought to the attention of the General Manager who forwards the correction to engineering for correction.

New development project record drawings are submitted to engineering upon completion/approval of projects and new facilities are included in the mapping system. Note: the District's service area is mostly built out and there are very few new development projects taking place.

The District's system maps are made available to the State and Regional Water Boards staff upon request.

EFFECTIVENESS

The District 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
			GM
4.1.1	Review map update procedures with all affected staff.	Annually	X
4.1.2	Review/ensure all newly installed facilities have been updated and included in the system maps	Annually	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; and*
- *Regular visual and closed-circuit television (CCTV) inspections of manholes and sewer pipes.*

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

COMPLIANCE

The purpose of a work order system is to program and track all required inspection and maintenance activities within the collection system to help proactively prevent blockages/operational problems or spills. The District's collection system is operated by the City of Daly City, under contract. The City utilizes the Lucity Computerized Maintenance Management System (CMMS), which allows the District to make informed decisions regarding its assets and infrastructure by using the collected data from field work orders and documented inspections.

The Lucity CMMS maintains historical data for all maintenance activities and 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 pipe cleaning, manhole inspections and pump station maintenance activities.

In addition, the Lucity CMMS is used to plan and schedule higher-frequency inspection and maintenance activities such as Hot Spot cleaning and root control activities. Emergency and other reactive activities are documented in work orders as well. Root intrusion is controlled with chemical root treatment (performed by Daly City Staff) and hydro-cleaning, utilizing root removal nozzles.

The City of Daly City cleans the identified high frequency lines every 4 months and cleans the rest of the system once every two years. These schedules are managed through the Lucity database. Manhole inspections are documented if an issue is discovered. Work orders are created to rectify the issue.

Pump stations are routinely inspected twice per week by field staff. In addition, plant mechanics visit each station once per month. All work is documented in the Lucity CMMS

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

EFFECTIVENESS

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

- Are the District's maintenance, operations, and engineering work orders periodically audited for accuracy and completeness?
- Does the District 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
			GM
4.2.1	Monitor "Past Due" work orders to ensure critical work is being completed	Quarterly	X
4.2.2	Review scheduled PMs to ensure the prescribed schedule remains appropriate.	Annually	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 of Daly City training program covers several areas involving or 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 (self-study, seminars, conferences, on-the-job, etc.) and begins from the first day on the job and continues regularly thereafter.

The City of Daly City staff involved in responding to customer service calls, including sewage spills, receive annual training on the City's Spill Emergency Response Plan. This training is part classroom and part hands-on exercises and drills for responding to spill events and includes containment, restoring flow, spill volume, volume recovered, and spill start time estimations, clean up and completing the spill event data collection forms.

District and City Data Submitters and LROs are trained on the District's procedures for submitting data to the CIWQS database. In addition, these staff attend classes covering CIWQS and spill reporting offered by CWEA and DKF Solutions Group.

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

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

EFFECTIVENESS

The District 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
			GM
4.3.1	Review training documentation to ensure all staff have received required training	Quarterly	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

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 of Daly City owns a variety of vehicles and equipment for both routine maintenance and for contingency or emergency operations and maintains spare parts, including critical spare parts, to facilitate corrective actions for the most common failure occurrences that might be encountered. Examples of critical parts maintained include valves, motor gaskets, electronic components.

EFFECTIVENESS

The District 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 District experienced any equipment failure that inhibited a spill response?

IMPLEMENTATION PLAN/SCHEDULE

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

- None

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 elements of WWD's sewer system O&M program include and are fully the responsibility of the Daly City collection staff:

- Proactive, preventive, and corrective maintenance of gravity sewers;
- Ongoing CCTV inspection program to determine the condition of the gravity sewers;
- Periodic inspection and preventive maintenance for the lift stations and force mains;
- Rehabilitation and replacement of sewers that are in poor condition; and
- Proper training for District employees and contractors to assure proper operations and maintenance of the collection system facilities.

Below are brief descriptions of work programs performed by the West Bay Sanitary District on behalf of District.

Gravity Sewer Maintenance

Daly City cleans the District gravity sewer mains on roughly a 2-year cleaning cycle. Pipes are cleaned by one of two larger combination hydro-vac vehicles, or a smaller jetter truck where access by the larger vehicle is not feasible.

Pipes with recurring maintenance issues are defined as potential "hot spots." Hot spot pipes are first cleaned on a 12- month cleaning schedule and moved to a 6-month or 3-month cleaning schedule if issues persist. The SSO hot spot list is developed based on one or more of the following criteria: cleaning history, CCTV inspection results, and/or the occurrence of SSOs. If the pipeline in question is rehabilitated, the pipe segment is moved from the hot spot list. The entire hot spot cleaning list is re-evaluated periodically.

Cleaning intervals depend on observed conditions documented during routine cleaning activities at each location. These hot spots are generally the result of two (2) contributing factors in the District's sewer system; root intrusion and Fats, Oils and Grease (FOG). The hot spot list is updated as necessary when Staff observes sewer line conditions that require an increased cleaning frequency because of a blockage or SSO.

Gravity Main Condition Assessment

The District conducts periodic CCTV inspections using outside contract services associated with master planning efforts or following sanitary sewer overflows. Pipeline condition is assessed using the National Association of Sewer Service Companies (NASSCO) Pipeline Assessment Certification Program (PACP). Lines are assigned structural and maintenance grades by the inspector. The system was last CCTV inspected between January and April 2017.

Manhole Inspection and Maintenance Program

Daly City has an active manhole inspection program conducted mostly as part of the cleaning operations or when customer complaints are received and investigated. These inspections if found concerning, result in immediate repairs or replacements by Daly City. District has not established a formal manhole inspection

program frequency for formal inspections however additionally the normal and high frequency cleaning efforts are also used to identify any condition issues with manholes.

Lift Station Maintenance

There are three (3) lift stations in the service area each operated by Daly City. Stations are monitored remotely through a Supervisory Control and Data Acquisition (SCADA) system with alarms and operating information transmitted to both the District and Daly City/NSMCSD. Daly City checks each station twice weekly and conducts regular maintenance on each station monthly. The station wet wells are maintained as needs based upon issues identified during the weekly checks.

Force Main Maintenance

There are a total of 5,103 linear feet of force mains immediately downstream of the three lift stations. The District owns, maintains and schedules replacement of these force mains. Each of the lift stations described above discharge to pressure force mains to the District gravity sewer collection system. The force main alignments are inspected annually and the discharge manholes into the collection system are inspected for concrete corrosion regularly. The District does not currently have a formal force main condition assessment and/or replacement program.

Chemical Root Control

The District has in the past, when root issues are found, utilized outside root foaming service contractor to treat the problem line segments. The District has not found it necessary to define a regular root foaming program nor have the causes of overflows shown the need for a defined program.

Service Laterals

The District has no responsibility for the private sewer laterals from the building to the WWD public sewer main. The entire lateral is the responsibility of the private property owner.

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

Design and construction standards and specifications for the installation of new sanitary sewer systems, pump stations and other appurtenances; and for the rehabilitation and repair of existing sanitary sewer systems are provided as part of the District Code, Chapter 7 and Appendices A-5 and A-6.

Construction standards and acceptance provisions for new and rehabilitated lift stations are established through the design process and are part of the approval of the plans and specifications for the new or rehabilitated lift station.

EFFECTIVENESS

The District 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
			GM
5.1.1	Ensure all project plans are approved in accordance with the District's Standard Specifications and Details.	Each Project	X
5.1.2	Verify design standards and hydraulic model previously completed are adequate and consistent with current standards of practice.	2025	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 District Standard Specifications and Standard Drawings, include procedures and standards for inspecting and testing criteria for new sewers and sewer appurtenances and for rehabilitation and repair work. The North San Mateo County Sanitation District, is a subsidiary district of the City of Daly City." The District's Ordinance no. 61 refers to the District and the NSMCSD.

EFFECTIVENESS

The District 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 District stay abreast of industry design standards and technical advances in the industry?

IMPLEMENTATION PLAN/SCHEDULE

No.	Plan	Schedule	Responsible Party
			GM
5.2.1	Verify inspection procedures are adequate and consistent with current standards of practice	2017 (10-year cycle)	X
5.2.2	Verify design standards and hydraulic model previously completed are adequate and consistent with current standards of practice.	2017 (10-year cycle)	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 District, with assistance from DKF Solutions Group, updated its Spill Emergency Response Plan to comply with the current WDR requirements. The City of Daly City's SERP was also developed with the assistance of DKF Solutions Group, and City staff respond to all sewer-related service calls on behalf of the District and in compliance with current WDR requirements. A copy of both the District SERP and Daly City SERP are available for viewing upon request.

EFFECTIVENESS

The District 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
			GM
6.1	Perform SERP training including practice drills.	Annually	X
6.2	Review Post Spill Assessments to ensure adherence with the SERP and to identify any trends that should be addressed.	Annually	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 District 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

In many sanitary sewer collection systems, Fats, Oils, and Grease (FOG) is known to be a significant cause, and or contributor, of sewer blockages in pipe and the cause of operational disruptions and damage to sewage pump stations. Although service areas that include commercial and institutional food service establishments (FSEs) are obvious sources of FOG, residential communities, especially those of medium and high-density multi-family residences, can also be a significant source of FOG. It is the purpose of the FOG Control Program to ensure all customers in our service area are following the District Ordinance, and state and federal requirements, to prevent sewage overflows caused by FOG related blockages in our sewer collection system.

Public Education and Outreach - The District has provided information on FOG control on the District website and works directly with NSMCSD on assuring that FOG problems are minimized and handled appropriately. Daly City staff perform targeted outreach via doorhangers when discoveries of grease or other pipe blocking substances are discovered during routine maintenance activities.

Plan and Schedule For Disposal of Pipe Blocking Substances - Currently, grease haulers dispose of grease pumped from interceptors at area rendering companies. At this time, there does not appear to be a need for additional grease disposal facilities to collect grease from the District's service area. However, the District

may choose to evaluate this need further, should the need for additional grease disposal facilities become an issue in the future.

Grease and other pipe blocking substances collected during the course of routine system maintenance is disposed of at the Daly City Wastewater Treatment Plant on an as-needed basis.

The legal authority to prevent discharges - Legal authority to prohibit FOG is provided through District Code Ordinance 61. Enforcement is addressed through District Code 1.44.

The legal authority to require grease removal devices – is provided in Chapter 1.24 of the District Code.

The Authority to inspect grease producing establishments - is provided in Chapter 12. Chapter 1.44 of the District Code provides the authority for enforcement.

Identification of system areas subject to FOG - The District has had an ongoing preventative maintenance program that includes regular cleaning and inspections of approximately 19 miles of collection system piping. The District has identified areas requiring more frequent cleaning based on past experience and upon data collected during CCTV inspections. These “Hot Spots” are cleaned on prescribed intervals.

Implementation of Source Control Measures – The Westborough Water District has twenty-five (25) food service establishments (FSEs) with grease traps and interceptors within its jurisdiction to minimize the risk of SSOs. However, in order to reduce maintenance needs for FOG-related hot spots WWD implemented a routine inspection program for the FSEs in its service area. The FOG inspection program consists of the following items:

- Inspection of grease traps
- Check grease trap maintenance log
- Provide educational materials on proper grease trap maintenance and grease waste disposal.

The maintenance log shall be maintained and posted in the restaurant available for review by District personnel. If during periodic inspections, the District determines that the FSE is in non- compliance with the District Code, enforcement action may be required. The program is developed to educate FSE owners and employees about minimizing FOG disposal to the sewer system and also information about best management practices for minimizing FOG.

EFFECTIVENESS

The District 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 District 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-disposable 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
			GM
7.1	Review/evaluate enforcement and inspection findings and implement changes as necessary.	Annually	X
7.2	Review spill rates and causes and make changes to maintenance programs, as necessary.	Annually	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:

The assessment of a collection system involves pipelines, manholes and pump stations. The assessment of pipeline condition is the most significant condition assessment responsibility the District has. It is of key importance to regularly perform pipeline condition assessments to initially establish a condition baseline and to monitor condition changes over time. Gravity mains are inspected utilizing CCTV inspection equipment. Manholes and pump stations are visually inspected.

The District completed CCTV inspection of the entire gravity main collection system in April 2017. This generated projects that are included in the current CIP. Based on the CCTV inspection findings, CIP schedule for project completion, current pipe performance and pipe cleaning data collected by Daly City, the District believes a 10-year return interval is appropriate for its collection system. In addition to these scheduled inspections, lines are inspected as needed based on findings from other maintenance operations. The District will continue to evaluate system performance and adjust this interval, as needed.

The District will use the findings from the condition assessment endeavor (mentioned above) to determine pipe performance and then identify portions of the sewer system that are close to sensitive areas, such as surface waters, schools, hospitals, and may place a higher priority on these assets for public health, safety and environmental reasons.

The District utilizes the NASSCO PACP defect coding system to rank defects found during CCTV inspections of gravity mains. Manholes are visually inspected and documented by CCTV crews, employing a top-down inspection method, during routine CCTV activities. Pump stations are inspected, and findings are documented and used when evaluating station life cycle status.

The District has not identified areas susceptible to erosion or landslides, as these are unlikely occurrences due to service area conditions.

The District is not aware of exfiltration from the system. Any discoveries of exfiltration would be considered high priority will be addresses accordingly.

The District maintains records and documentation of all system evaluation and condition assessment inspections and activities in its Lucity CMMS.

Generally, the District does not believe the system will be affected by climate change impacts. The District will continue to evaluate this, at a minimum, during each three-year audit cycle.

EFFECTIVENESS

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

- Has the District maintained its schedule for (information needed) 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
			GM
8.1.1	Review/evaluate enforcement and inspection findings and implement changes as necessary.	Annually	X
8.1.2	Review spill rates and causes and make changes to maintenance programs, as necessary.	Annually	X
8.1.3	Hold meeting to discuss any issues that may result from climate changes.	Annually	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 District's sewer system is designed to convey peak flows. Typically, peak flows related to wet weather do not exceed system design peak flows. Maintenance staff have found no indication of hydraulic deficiencies in the collection system and additional development projects are not anticipated.

EFFECTIVENESS

The District 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
			GM
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
8.2.2	Identify and monitor flood-prone areas susceptible to erosion from rain events	After each significant rain event	X
8.2.3	Monitor flows in each basin and update the hydraulic model	Per Engineering Department schedule	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 District ranks pipe defects using the NASSCO PACP pipe rating system. Priorities are established based on likelihood and consequence of failure, as determined by staff. In addition to these ratings, staff considers the potential public health and environmental consequence when prioritizing repair and rehabilitation projects.

EFFECTIVENESS

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

- Has the District adhered to its system evaluation/condition assessment schedule?
- Has the District 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
			GM
8.3.1	Utilize all available data for prioritizing corrective actions considering severity and consequences of potential spills.	Each CIP Update	X
8.3.2	Maintain documents and recordkeeping of system evaluation and condition assessment inspections and activities.	Continuously	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 District's current 2025 Capital Improvement Plan (CIP) was developed after condition assessment was performed on the gravity system in 2017. It includes a plan and schedule for completion of projects. The District has committed $1,000,000 per year to completing these prioritized projects.

EFFECTIVENESS

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

- Has the District's capital improvement plan schedule been adhered to?

IMPLEMENTATION PLAN/SCHEDULE

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

RESILIENCE

Resilience is addressed in Element 8 by:

- Conducting 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:

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

Monitoring of the District'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.

The District assesses the success of maintenance and operation activities by ensuing activities are being performed as expected, by monitoring actual outcomes compared to intended outcomes, as well as monitoring spill trends.

The District 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 should be 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.

The District 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 District to be adaptive and capitalize on lessons learned.

EFFECTIVENESS

The District 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
			GM
9.1	Assess work programs to ensure outcomes are as intended.	Annually	X
9.2	Prepare updates to work programs and the SSMP based on assessments.	As Needed	X
9.3	Monitor and evaluate spill trends. Document efforts.	Annually	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 District completed its last audit in August 2024 and will complete audits every three (3) years moving forward. The objective of the audit is to evaluate compliance, implementation and effectiveness of the SSMP. Additionally, the SSMP includes a description of how the District will comply with the requirements of each Element. The audit review includes an evaluation to determine if compliance has been met.

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

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

Resilience is addressed for each Element and is built-in to the District's collection system procedures and practices.

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

EFFECTIVENESS

The District 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
			GM
10.1	Schedule audits in advance of due dates to ensure adequate time to complete. District has 6 months to complete the audit from the end of the audit period.	Beginning at end of audit period	X
10.2	Ensure a plan and schedule is developed to address deficiencies.	Once the Audit is completed	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

When the District 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. The District will always follow San Mateo County Environmental Health recommendations.

The District communicates through its website and can push notifications to customers and additionally via texts and emails for those who have signed up.

There are opportunities for stakeholders and the public to participate and provide input on the development and update of the District's Sewer System Management Plan. The District posts the Sewer System Management Plan on their website, which includes a Contact Us feature, making it convenient for the public to communicate with the District. Every 6 years the SSMP is updated and approved by the Board of Directors. All Board agenda items are advertised to the public prior to the meetings and there is opportunity for comment from the public on each agenda item.

The District regularly communicates with the City of Daly City and NSMCSD on matters affecting and impacting the operations and maintenance of the sewers and sewer pumping facilities, FOG issues and treatment issues. All meetings and communications are documented and filed in the District's records.

The District receives sewage from one satellite system operated and maintained by the City and County of San Francisco at the San Bruno Jail and associated facilities.

EFFECTIVENESS

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

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

IMPLEMENTATION PLAN/SCHEDULE

No.	Plan	Schedule	Responsible Party
			GM
11.1	Ensure the Board of Directors approves the SSMP per schedule.	Every 6 years	X
11.2	Ensure the SSMP is posted on the District website and the link functions properly.	Annually	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:

- Using the SSMP as a tool to communicate to the public how the District 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 District.

APPENDIX 11 INCLUSIONS

- None

LIST OF APPENDICIES

APPENDIX 1	• None
APPENDIX 2	• None
APPENDIX 3	• None
APPENDIX 4	• None
APPENDIX 5	• None
APPENDIX 6	• None
APPENDIX 7	• None
APPENDIX 8	• None
APPENDIX 9	• None
APPENDIX 10	• None
APPENDIX 11	• None