Sewer System Management Plan

2025 Update

East Palo Alto Sanitary District

(A Subsidiary District of the City of East Palo Alto)

Waste Discharge ID (WDID): # 2SSO10129

REVIEWED AND APPROVED BY:

Humza Javed, P.E.

Public Works Director/Dist. Engineer
Legally Responsible Official
East Palo Alto Sanitary District
Sanitary Sewer Collection System
(includes Element Development Plans & Schedules)

PREPARED BY:

FISCHER COMPLIANCE LLC
PRACTICES THAT COMPLY

July 15, 2025

Date Signed

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

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East Palo Alto Sanitary District
Attn: Humza Javed
Public Works Director Legally Responsible Official (LRO)
1960 Tate Street
East Palo Alto, CA 94303

Dear Mr Javed

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

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Introduction

This Sewer System Management Plan (SSMP) or “Plan” has been prepared for the East Palo Alto Sanitary 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.

Figure 1 provides key Agency spill metrics, including data comparing the District’s spill record with state and regional system data. The District consistently performs better than the statewide and regional spill rate indices and net spill volumes for all categories of spills from its sanitary sewer collection system.

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.

Collection System Spill Summary

Operational Indices: East Palo Alto Sanitary Dist. CS

Spill Rate Indice (spills/100mi/yr)							
	Category 1			Category 2		Category 3	
	Main System	Laterals	Other	Main System	Other	Main System	Other
East Palo Alto Sanitary Dist. CS	0.95	N/A	0.0	0.0	0.0	0.48	0.0
State Municipal(Public) Average	1.53	N/A	0.75	0.88	1.16	2.14	0.4
Region Municipal Average	2.73	N/A	0.62	0.71	0.06	3.27	0.63

Net Volume Spills Indice (gallons/1000 Capita/yr)							
	Category 1			Category 2		Category 3	
	Main System	Laterals	Other	Main System	Other	Main System	Other
East Palo Alto Sanitary Dist. CS	3.78	N/A	0.0	0.0	0.0	0.0	0.0
State Municipal(Public) Average	2990.68	N/A	1436.3	225.67	961.23	39.07	11.55
Region Municipal Average	-2385.95	N/A	1317.24	114.28	1.04	74.07	38.42

Figure 1 - Collection System Operational Report – SWRCB CIWQS, 7-1-2019 to 7/1/2025

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[1]

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
EPASD	East Palo Alto Sanitary District
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
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
WBSD	West Bay Sanitary District
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] *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[2] 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 field staff. The District contracts with the West Bay Sanitary District (WBSD) for operation and maintenance of the collection system. WBSD operates the East Palo Alto Sanitary District system in the same manner it operates its own.

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

[2] *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***
East Palo Alto Sanitary Dist. CS	2SSO10129	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****
East Palo Alto Sanitary Dist. CS	2SSO10129	8/2/2011	8/2/2013	8/2/2015	8/2/2017	8/2/2019	8/2/2021	8/2/2024

*** Per Section 5.5 and Attachment E1, Section 3.11 of the General Order, Plan updates are due within six years after the required due date of the Enrollee's last Plan Update.**

**** Per Section 5.4 and Attachment E1, Section 3.10 of the General Order, the Audit Report is due within six months after the end of the required 3-year audit period.**

Figure 2 - Sewer System Management Plan, Subsequent Update and Audit Due Date Agency to Update this table after each due dates

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	
			PWD	UM
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*	By 8/2/2031		X

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 is located in San Mateo county and provides wastewater collection services to the City of East Palo Alto and portions of Menlo Park. (See Figure 3 below), with an approximate (total) population of approximately 26,835. The District collection system consists of approximately 35 miles of gravity mains. The District's system does not have pump stations, force mains or stormwater diversion structures. 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 District uses the Lucity (CMMS) for work orders and asset management, Arc-GIS for mapping and GraniteNet for CCTV data capture. (Work orders and scheduling are discussed further in Element 4.2)

East Palo Alto Sanitary District does not own or operate any portion of the service lateral, as laterals are privately owned.

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	6639
Commercial	148
Industrial	20

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	
			PWD	UM
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 WBSD keep up with current industry standards, technology and best practices by reviewing industry periodicals, networking and attending industry conferences and workshops. The District and WBSD also continuously evaluates 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
  - Expended on Collection System Operations
- Nonoperating Revenue
  - Property Taxes
    - Expended on Collection System Operations and Capital Improvements
  - Connection Fees
    - Expended on Capital Improvements

The District's equipment inventory and staffing levels (Provided by WBSD under contract) are adequate to effectively implement this SSMP, properly manage the collection system, and respond to emergencies.

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:

- Humza Javed, Public Works Director

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

Table 3 - Implementation Responsibilities

RESPONSIBLE POSITION CONTACT INFORMATION

Name	Title	Phone	Email
Matthew Vining	Utility Manager (UM)	(650) 853-3117	mVining@cityofepa.org
Humza Javed	Public Works Director (PWD)	(650) 858-3130	hJaved@cityofepa.org

Table 4 - Responsible Position Contact Information

2.1. Organizational Chart

Figure 4 - Organization Chart

2.2. Organizational Staffing Responsibilities

Board of Directors
The EPASD is governed by a five-member Board of Directors, each elected to a four-year term. The EPASD is an independent and autonomous political entity that has no legal affiliation with any municipalities located within its service area boundaries. The Board meets monthly and special meetings are held as needed.

Public Works Director
The Public Works Director establishes policy, plans strategy, leads staff, allocates resources, delegates responsibility, authorizes outside contractors to perform services, and may serve as a public information officer.

Utility Manager
Designated as a Data Submitter. Manages and administers the capital improvement program (CIP). Inspects CIP projects and ensures that new and rehabilitated assets meet EPASD standards. Manages field operations and maintenance activities, provides relevant information to EPASD management, prepares and implements contingency plans, leads emergency response, and trains field crews.

Field Crews
Responds to emergencies. Performs preventive maintenance activities, mobilizes, and responds to notification of stoppages and spills.

***ECO Industrial Waste Investigator**
Conducts inspections, response, permitting and compliance for industrial and commercial facilities including restaurants.

***ECO Industrial Waste Inspector. Storm Water**
Conducts inspections, response and compliance for storm water issues including spills and prohibited facility discharges.

***ECO Industrial Waste Inspector, Sampling**
Collects samples and inspects discharge locations including creeks and grease removal devices.

***ECO Engineering Tech III**
Inspection for commercial facilities including restaurants.

Manager Communications (Utilities)
Disseminates urgent and pertinent information to the public in a timely manner. The responsibility of the General Manager unless specifically delegated to others.

* By Palo Alto Regional Water Quality Control Plant Personnel

Figure 5 - Organizational Staffing Responsibilities

2.3. Chain of Communication for Reporting Spills

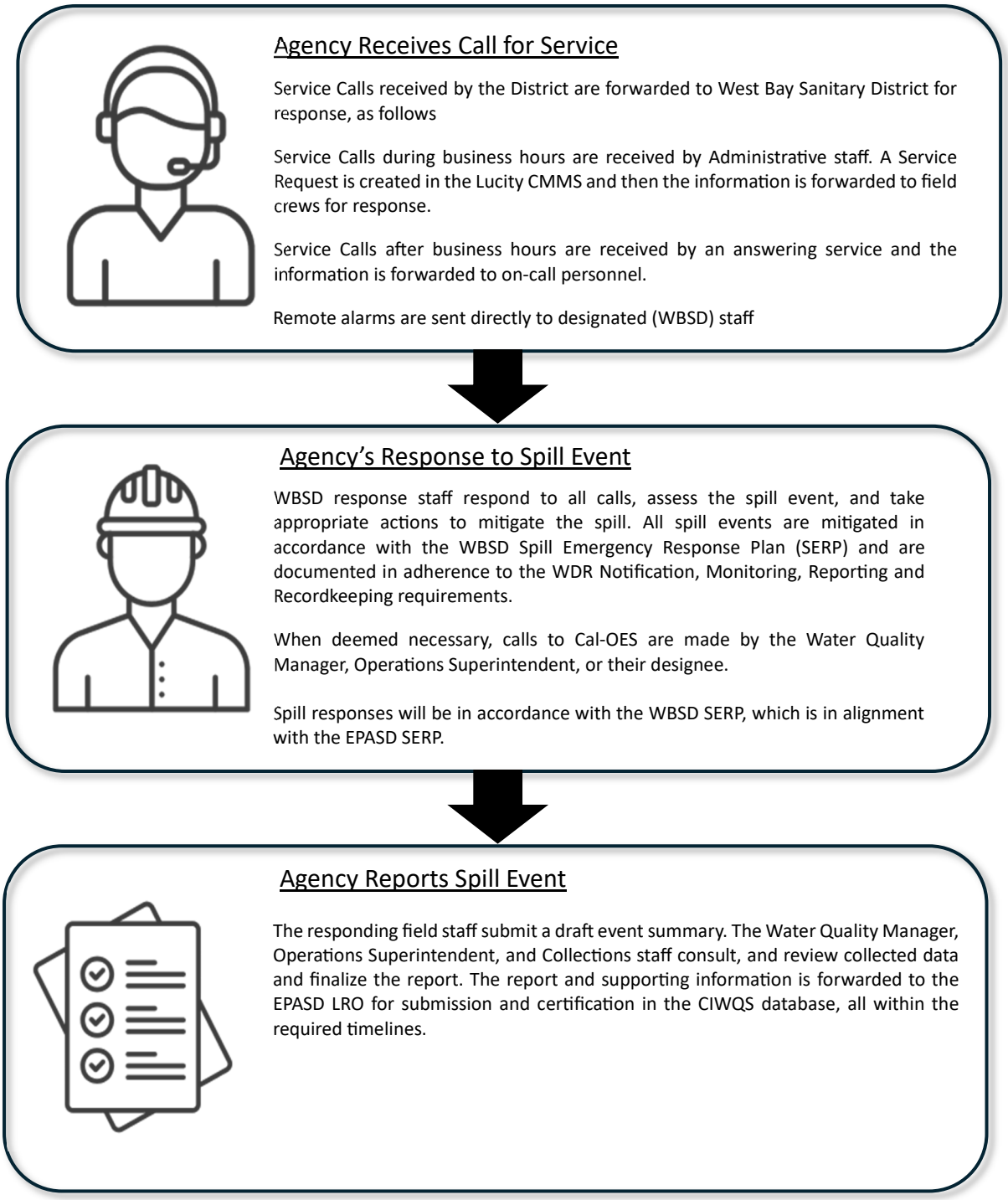

Figure 6 - Chain of Communication for Reporting Spills

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	
			PWD	UM
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.

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

- EPASD Sewer Use Ordinance 39 and City of Palo Alto Sewer Use Ordinance 16.09

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

- The City of East Palo Alto owns and operates the storm drain system within the service area. As such, the District has de facto authority to access the storm drain system as needed to retrieve spilled sewage and clean the drainage conveyance system.

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

- EPASD Sewer Use Ordinance 39 and City of Palo Alto Sewer Use Ordinance 16.09

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

- EPASD Sewer Use Ordinance 39 and City of Palo Alto Sewer Use Ordinance 16.09

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

- EPASD Sewer Use Ordinance 39 and City of Palo Alto Sewer Use Ordinance 16.09

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

- East Palo Alto Sanitary District's Standard Specifications for Construction of Sanitary Sewer Collection and Conveyance Facilities, Section C1.03, Existing Utilities, "The right is reserved by the State, the County, the City or District, and by owners of public utilities, to enter upon any street or road right-of-way, or easement for the purpose of maintaining their property and for making necessary repairs or changes caused by the work." By definition (Section A2.01) Public Sewer shall mean a sewer lying within a street or easement, and which is controlled by or under the jurisdiction of the District.

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	
			PWD	UM
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

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).

West Bay Sanitary District (WBSD) manages the sewer system maps. WBSD utilizes its Map Change Forms to facilitate map updates when errors or omissions are discovered in the field. Staff provides details of the map change and then submit the form to supervisory or managerial staff for verification and then it is forwarded to the WBSD engineering technician, who makes the correction(s).

Asset details of newly constructed and approved facilities are forwarded by engineering to the engineering technician for inclusion in the District's system maps.

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	
			PWD	UM
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 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 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. Note: The West Bay Sanitary District performs all maintenance and inspection activities and manages system assets and work orders on behalf of the District.

The WBSD employs a quality assurance procedure that utilizes a color-coded mapping system to track maintenance activities that have been completed and activities that were scheduled to be completed, to help ensure all work was completed as scheduled.

The 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 CCTV inspections, pipe cleaning and pump station maintenance activities.

In addition, the 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.

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, 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	
			PWD	UM
4.2.1	Monitor “Past Due” work orders to ensure critical work is being completed	Quarterly	X	X
4.2.2	Review scheduled PMs 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 West Bay Sanitary District (WBSD) 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.

WBSD staff involved in responding to customer service calls, including sewage spills, receive annual training on the District'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 Data Submitters and LROs are trained on the District's procedures for submitting data to the CIWQS database.

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	
			PWD	UM
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

West Bay Sanitary District (WBSD) 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.

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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	
			PWD	UM
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

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

Sewer Cleaning

The District's primary sewer maintenance activity is high pressure hydro-jetting. The District has established a "Regular" Preventative Maintenance (PM) applicable to every mainline pipe and a "High Frequency" PM cleaning program for pipes deemed to require a more frequent cleaning. These two cleaning programs are discussed below.

The Regular PM Cleaning consists of high-pressure hydro jet cleaning every gravity mainline pipe in the District ranging from 4" through 10" pipe, in 12–16-month intervals. Pipe sizes 12" to 21" are cleaned in 36-month intervals. Pipe sizes 24" to 54" are cleaned in 60-month (5 year) intervals. The District primary cleaning nozzle is the Worthog Nozzle for the ½ Inch Jetters and the Hydraulic Rootsaw or Warthog for the ¾ inch and 1-inch jetters; but for more aggressive root growth the Super Nova Chain Flail may be used. Where the root saws are deployed, a proofing tool is utilized to ensure a high-quality cleaning has been performed.

High Frequency PM consists of 1-, 3-, and 6-month high pressure hydro jet cleaning schedules for pipes needing more frequent cleaning. Mainline pipes deemed to require more frequent cleaning are cleaned on the High Frequency cleaning schedule. High Frequency schedules are determined by reviewing the history of mainline stoppages and overflows, and/or by CCTV assessment.

Post Spill Assessments (PSA) are performed on mainline sections where a spill has occurred. A mainline sewer pipe is televised within two (2) working days of an overflow or back up. Upon review of the CCTV assessment, a High Frequency schedule may be assigned to the mainline section, or a Point Repair may be scheduled.

Where necessary, a mainline is added to the CIP list for replacement/rehabilitation. In the event the mainline pipe section is added to the CIP list, the cleaning frequency will be increased, and that higher frequency cleaning schedule will be implemented until rehabilitation and/or replacement is completed.

The District's Siphons are on a 1-month cleaning schedule all other pipes are on a 3-, 6-, or 12-month schedules. Additionally, the schedules have been grouped by Basin so to reduce travel time and make cleaning processes more efficient.

Sewer Cleaning Results Matrix - The District collects all observations made by its sewer cleaning crews regarding the extent and nature of materials removed during the cleaning process. The observations are recorded in the District's computerized information management system. The District maintains or changes the frequency of its High Frequency PM Cleaning Program for a Sewer Line Segment based on the Sewer Cleaning Results and CCTV inspection. See Matrix below in accordance with the section labeled "Action." Changes in cleaning frequency based upon cleaning results and or CCTV data shall be determined by the

District Collection System Operations Superintendent or Assistant Superintendent and no reduction in cleaning frequency shall be made in a Sewer Line Segment with a previous history of spills without the approval of the District Collection System Assistant Operations Superintendent, or Operations Superintendent.

Root Control - Roots are removed mechanically, through high pressure hydro-jetting and chain flailing during regular cleaning. Every effort is made to trap roots physically at the downstream manhole to remove them from the collection system. In 2010, the District funded and implemented a chemical root control treatment system in areas of the District with a history of root intrusion and difficult access. The root control treatment reduces the need for frequent visits by the Hydro-jet crews and significantly reduces spills in these areas. This cost-effective approach, which allowed cleaning crews to be more productive in cleaning more pipeline in other areas of the District, will be continued in the future.

Odor Control - The District has few odor complaints – less than five per year. However, when odor complaints are received, District crews respond with an on-site investigation and improvements, if needed. For example, the District had been working with an isolated odor issue at the Corte Madera pump station emanating from the Village Square Lift Station. In late 2016 the flows from the (former) Corte Madera Pump Station were redirected to the new Sausal Vista Pump Station. The District currently treats the Village Square pump station with Helix-Commander odor control product to control the odors and H2S. Its effectiveness is measured regularly with the District's OdaLogger Unit.

Investigation of Customer Complaints - The District places high priority on responding to customer complaints about sewer service. Complaints are generally related to sewer stoppages, overflows, or, less frequently, odors. Detailed information about communication and the District's response procedures are included in the District's SERP, which is discussed further in Element 6. Response is performed by the field crews during work hours and the on-call staff member during nonworking hours. Response includes making a field assessment of the complaint and taking necessary action(s) required to resolve the problem. Increased preventative maintenance may be implemented if the problem is mainline related to minimize recurrence of the issue. The District maintains a customer service survey process and regularly reviews customer service comments so that employees know how the District's work is regarded by the public. Customer Survey forms are reviewed regularly in an effort to achieve continuous improvement in customer service.

Condition Assessment - The District conducts closed circuit television (CCTV) inspections of its sewer facilities to evaluate their condition and identify needed increased preventative maintenance, repairs and rehabilitation. This activity has been further augmented by the purchase of two (3) Pipe Hunter Jetter Unit that performs CCTV during preventative maintenance operations which ensures the line is cleaned properly.

CCTV inspections of the collection system are performed on a six (6) year cycle by District crews. In addition to inspection of existing pipelines, the District performs CCTV inspection on newly installed pipelines and inspects pipelines which have experienced spills to assess cause of the overflow and to determine the best method and frequency of cleaning or needed repair to prevent a repeat spill. The District's CCTV equipment records inspection information that is stored in CMMS software. CCTV data is then transferred to the District's CMMS database. The District assigns condition ratings as set forth by the Pipeline Assessment & Certification Program (PACP) to each of the inspected pipelines using the protocol established by the National Association of Sewer Service Companies (NASSCO). The District uploads pipeline condition ratings on an ongoing basis into Lucity.

CCTV reports and videos, together with field observations, form the basis for establishing needed system maintenance and repairs. Results are logged using fault (defect) codes and a numerical rating scale (with

weights assigned to each type of defect). The ratings reflect the relative severity of the observed defects. The table below is used as a guide for the selection of pipes for sewer repair or rehabilitation.

Pipe Repairs - Point repairs are completed by District crews. Larger repairs are designed and competitively bid for construction through the District's Capital Improvement Program. Other factors are considered for placing a pipe segment on the CIP such as:

- Maintenance history,
- Number of defects within a segment,
- Spills history if any,
- Impact should a spill occur, and
- Remaining useful life of pipeline.

Service Laterals - All side sewers, from the connection to the District public sewer to the property served, are the property of, solely owned by, and sole responsibility of the property owner. However, the District does, as a courtesy, provide blockage clearing services from a conforming property line cleanout to the mainline sewer when requested by the property owner.

WBSD participates in the Bay Area Clean Water Agency (BACWA) public outreach committee and, as a member of this group, has helped to develop a handout for plumbers that apply for permits to perform sewer lateral repairs and/or replacements. In addition, the District provides standard details for repair and replacement work that can be used by plumbers, contractors, or homeowners. This information is available on the District's website and at the District's front office counter.

5. Design and Performance Provisions

5.1. Updated Design Criteria/Construction Standards/Specifications

WDR REQUIREMENTS

Attachment D-5.1 (pg. D-5)

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

COMPLIANCE

The District's Standard Specifications include design and performance provisions in accordance with current WDR requirements, including:

- 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.

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	
			PWD	UM
5.1.1	Ensure all project plans are approved in accordance with the District's Standard Specifications and Details.	Each Project	X	X
5.1.2	Verify design standards and hydraulic model previously completed are adequate and consistent with current standards of practice.	2025	X	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 include procedures and standards for inspecting and testing the installation of new sewers and sewer appurtenances and for rehabilitation and repair work.

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	
			PWD	UM
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 West Bay Sanitary District responds to all sewer-related service calls on behalf of the District and responds in accordance with the WBSD Spill Emergency Response Plan (SERP), which is compliant with current WDR requirements. The District has contracted with Fischer Compliance LLC to develop a Spill Emergency Response Plan (SERP) that is in sync with the West Bay Sanitary District SERP, to meet the

requirements of the WDR, which became effective on June 5, 2023. It is anticipated to be completed prior to December 2025.

WBSD staff received initial training and subsequent SERP training. A copy of the WBSD SERP is 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	
			PWD	UM
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

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.

- Outreach and education are a significant component of the District's environmental programs. Newsletters with descriptions of BMPs for food facilities are distributed to educate the FSEs about minimizing the impact of FOG on the collection system.

  Outreach for residents has also been a component of the program. East Palo Alto residents have received inserts educating them on the problems caused by improper disposal of FOG to the sewer

system. Messages include simple BMPs such as disposing of used cooking oils and grease in the trash after placing them in sealed containers or absorbing them onto paper towels.

- The District's Ordinance dated December 2024 "Establishing Rules and Regulations that Apply to Discharges of Wastewater Containing Fats, Oils, and Grease (FOG) Conveyed to the Wastewater Facilities from any Commercial or Institutional Food Service Establishment", Section 05 Maintenance Requirements, (B) requires grease haulers be licensed and to dispose of accumulated grease at an approved recycling or disposal site. Pumping schedules are site specific and based on grease interceptor performance.

  Grease and other pipe blocking substances collected during the course of routine system maintenance is disposed of at the WBSD FERF facility, on an as-needed basis.

- The legal authority to prevent discharges to the collection system is provided in the District's Sewer Use Ordinance 39 and City of Palo Alto Sewer Use Ordinance 16.09.
- The requirement to install and maintain grease removal devices is provided in District Ordinance "Establishing Rules and Regulations that Apply to Discharges of Wastewater Containing Fats, Oils, and Grease (FOG) Conveyed to the Wastewater Facilities from any Commercial or Institutional Food Service Establishment", Section 04 Grease Control Device requirements, Section 05, Maintenance Requirements, Section 06, Kitchen BMPs, and Section 07, Recordkeeping Requirements.

- The Authority to inspect grease producing establishments is provided in the District Ordinance dated December 2024.

- Ethe District has had an ongoing preventative maintenance program that includes regular cleaning and inspections of more than 35 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.

- West Bay Sanitary District (WBSD) performs facility inspections for the District. WBSD, Water Quality Department, has two Source Control Inspectors who perform facility inspections of all commercial and industrial businesses within the District's sphere of influence, which includes East Palo Alto Sanitary District. One of the functions of this department is to ensure that FOG-related businesses (restaurants, food preparation facilities, vehicle service facilities, etc.) are inspected on a regular basis and maintain consistent compliance with the District's Code of General Regulations, and state and local ordinances related to FOG.

  The FSEs are categorized by their potential to contribute FOG to the collection system or cause other problems such as storm water violations. Facilities located in hot spots or that have been problematic will be addressed first and receive more frequent inspections. Bringing some facilities into compliance may be a lengthier process requiring multiple follow-up inspections. Some facilities

will frequently not meet all requirements and will need ongoing attention. These facilities will be re-visited as necessary. Facilities that demonstrate compliance will receive less attention.

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	
			PWD	UM
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

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 and manholes. 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.
- The District contracts maintenance activities to West Bay Sanitary District (WBSD). It is anticipated all gravity pipes will be inspected by Spring of 2026, as WBSD is pursuing an aggressive one year schedule to complete their initial baseline assessment. Upon completion, the CCTV findings will be evaluated to determine pipe performance for each manhole-to-manhole pipe segment. This evaluation will be used, along with historic performance data, cleaning intervals and findings, and repair and rehabilitation schedules to determine the optimal CCTV inspection return interval moving forward.
- 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.

  Areas identified as possibly susceptible to erosion or landslides and creek crossings pipes, including siphons are visually inspected after significant rain events.

  As a matter of practice, District crews are trained to monitor system assets for spills, sink holes, loose or ill-fitting lids, construction activities, etc., while driving and performing their work throughout the service area.
- 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.
- A rise in sea level could lead to flooding from King Tide events. This has been mostly mitigated by the raising of levees in the surrounding area. The potential for damage caused by wildfire is remote and related power outages would not affect District operations, as all flows are conveyed by a gravity system. The District will evaluate the potential impacts from climate change at least every three years during SSMP Audits.

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	
			PWD	UM
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 meeting to discuss any issues that may result from climate changes.	Annually	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 District updated its East Palo Alto Sanitary District Master Plan in 2015 AND issued the Addendum to Master Paster Plan in 2021. The master planning effort evaluated the capacity of the existing sanitary sewer system assets and provided capacity design criteria for future assets. Projects within the District's service area are primarily to serve future redevelopment. The District includes impact fees within the connection fees to help contribute to future downstream projects needed for extra pipe capacity.

By metering, the District periodically monitor's the flow in its sanitary sewer system to identify capacity deficiencies and to monitoring the quantity of inflow and infiltration present.

The capacity-related design criteria are included in the SSMP Design and Performance Provisions.

Not all of the requirements listed above were considered during this evaluation, as the evaluation was performed prior to the issuance of these regulations. Future capacity assessments will be in complete compliance.

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	
			PWD	UM
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	
			PWD	UM
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	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 includes publicly funded capacity enhancement projects in its Capital Improvement Program. The Capital Improvement Program includes recommended projects to address capacity deficiencies in the system. The capital improvement projects planned for the next 15 years are described within the Master Plan (Appendix M).

The schedule for the District's capacity enhancement projects is included in the District's CIP. The CIP in the 2021 Addendum identifies pipelines that require repair and replacement to prevent manhole surcharging and potential SSOs. It also identifies increases in capacity needed to account for future developments based on modified zoning designations. Pipeline improvements are identified, and the sequence of construction will be determined based on District's observations of existing pipe conditions and new development needs. It is anticipated that approximately $1.0M per year will be allocated to implementing the CIP independent of developer contributions to accelerate specific 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	
			PWD	UM
8.4.1	Hold regular coordination meetings, with all parties, to help keep the projects on track and resolve issues that may arise in a timely manner.	Annually	X	X
8.4.2	For schedules that are not followed, justify and document the reason.	Each Delayed Project		X

RESILIENCE

Resilience is addressed in Element 7 by:

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

APPENDIX 8 INCLUSIONS

- None

9. Monitoring, Measurement, and Program Modifications

WDR REQUIREMENTS

Attachment D-9 (pg. D-9)

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

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

COMPLIANCE

The 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	
			PWD	UM
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 addresses 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	
			PWD	UM
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.

  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 does not currently have satellite systems.

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	
			PWD	UM
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 District 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 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
APPENDIX 12	• None